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Annual
Report
2000



Board of Governors of the Federal Reserve System

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Letter of Transmittal

BOARD OF GOVERNORS OF THE
FEDERAL RESERVE SYSTEM
Washington, D.C., June 2001

THE SPEAKER OF
THE HOUSE OF REPRESENTATIVES

Pursuant to the requirements of section 10 of the Federal Reserve Act,
I am pleased to submit the eighty-seventh annual report of the Board of Governors
of the Federal Reserve System.

This report covers operations of the Board during calendar year 2000.

Sincerely,

A handwritten signature in black ink, appearing to read "Alan Greenspan". The signature is fluid and cursive, with a large, stylized "A" at the beginning.

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*Monetary Policy and
Economic Developments*

Monetary Policy and the Economy in 2000

Bolstered by the exceptional strength of domestic demand, the U.S. economy continued to expand at a rapid pace in the first half of 2000. The economy slowed appreciably thereafter, however, and growth eventually became quite sluggish as the year wound down. Overall rates of inflation were higher than in 1999, largely as a result of steep increases in energy prices.

The Federal Reserve adjusted its policy settings and its perceptions of risk as economic conditions changed. When the FOMC convened for its first two meetings of 2000, in February and March, economic indicators were pointing toward an increasingly taut labor market as a consequence of a persistent imbalance between the growth rates of aggregate demand and potential aggregate supply. Reflecting the underlying strength in spending and expectations of tighter monetary policy, market interest rates were rising, especially after the century date change passed without incident. But, at the same time, equity prices were still posting appreciable gains on net. Knowing that the two safety valves that had been keeping underlying inflation from picking up until then—the economy's ability to draw on the pool of available workers and to expand its trade deficit on reasonable terms—could not be counted on indefinitely, the FOMC voted for a further tightening in monetary policy at both its February and March meetings, raising the target for

the overnight federal funds rate $\frac{1}{4}$ percentage point on each occasion. In related actions, the Board of Governors also approved quarter-point increases in the discount rate in both February and March.

Between the March and May meetings of the FOMC some readings on labor costs and prices suggested a possible increase of inflation pressures. Moreover, aggregate demand had continued to grow at a fast clip, and markets for labor and other resources were showing signs of further tightening. Financial market conditions had firmed in response to these developments; the substantial rise in private borrowing rates between March and May had been influenced by the buildup in expectations of more policy tightening. Given all these circumstances, the FOMC decided in May to raise the target for the overnight federal funds rate $\frac{1}{2}$ percentage point, to $6\frac{1}{2}$ percent, and the Board of Governors approved an increase of the same size in the discount rate.

By the June FOMC meeting, the incoming data were suggesting that the expansion of aggregate demand might be starting to moderate toward a more sustainable pace: Consumers had increased their outlays for goods modestly during the spring; home purchases and starts appeared to have softened; and readings on the labor market suggested that the pace of hiring might be cooling off. Moreover, much of the effects on demand of previous policy firmings, including the $\frac{1}{2}$ percentage point tightening in May, had not yet been fully realized. Financial market participants interpreted signs of economic slowing as suggesting that the

NOTE. The discussions here and in the next section ("Economic and Financial Developments in 2000") are adapted mainly from *Monetary Policy Report to the Congress* (Board of Governors, February 2001). The data cited are those available as of mid-February 2001.

Federal Reserve probably would be able to hold inflation in check without much, if any, additional policy firming. However, whether aggregate demand had moved decisively onto a more moderate expansion track was not yet clear, and labor resource utilization remained unusually elevated. The FOMC decided to take no policy action in June, but it indicated that the balance of risks was still on the side of rising inflation in the foreseeable future.

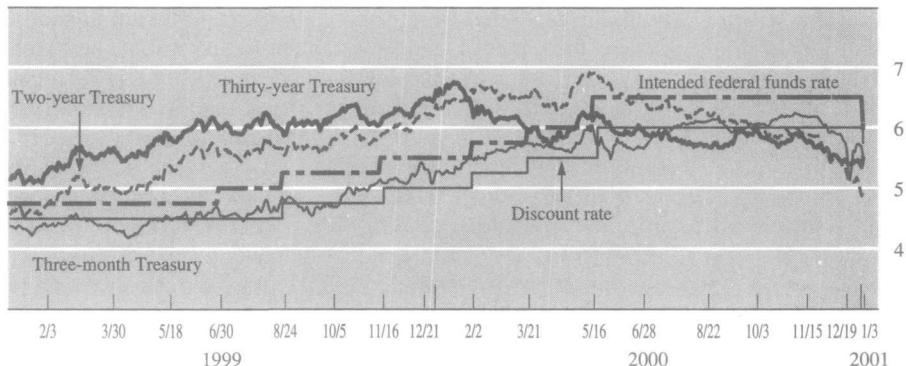
Further evidence accumulated over the summer and into the fall to indicate that demand growth was moderating to a pace around that of potential supply. Although consumer spending had picked up again during the summer, it did not regain the vigor it had displayed earlier in the year, and capital spending, while still growing briskly, had decelerated from its first-half pace. With increases in demand moderating, private employment gains slowed from the rates seen earlier in the year. However, labor markets remained exceptionally tight, and the hourly compensation of workers had accelerated to a point at which unit labor costs were edging up despite strong gains in productivity. In addition,

sizable increases in energy prices were pushing broad inflation measures above the levels of recent years. Although core inflation measures were at most only creeping up, the Committee felt that there was some risk that the increase in energy prices, which was lasting longer than had seemed likely earlier in the year, would start to leave an imprint on business costs and longer-run inflation expectations, posing the risk that core inflation rates could rise more substantially. Weighing these considerations, the FOMC decided to hold the federal funds rate unchanged at both its August and October meetings, and it indicated that the balance of risks still was weighted toward heightened inflation pressures.

By the time of the November FOMC meeting, conditions in the financial markets were becoming less accommodative in some ways, even as the Federal Reserve held the federal funds rate steady. Equity prices had declined considerably over the previous several months, resulting in an erosion of household wealth that seemed likely to restrain consumer spending going forward. Those price declines, along with

Selected Interest Rates

Percent



NOTE. The data are daily. The dates on the horizontal axis are those of scheduled FOMC meetings and of any intermeeting policy actions.

the elevated volatility of equity prices, also hampered the ability of firms to raise funds in equity markets and were likely discouraging business investment. Some firms faced more restrictive conditions in credit markets as well, as risk spreads in the corporate bond market widened significantly for firms with lower credit ratings and as banks tightened the standards and terms on their business loans. Meanwhile, incoming data indicated that the pace of economic activity had softened a bit further. Still, the growth of aggregate demand apparently had moved only modestly below that of potential supply. Moreover, while crude oil prices appeared to be topping out, additional inflationary pressures were arising in the energy sector in the form of surging prices for natural gas, and there had been no easing of the tightness in the labor market. In assessing the evidence, the members of the Committee felt that the risks to the outlook were coming into closer balance but had not yet shifted decisively. At the close of the meeting, the FOMC left the funds rate unchanged once again, and it stated that the balance of risks continued to point toward increased inflation. However, in the statement released after the meeting, the FOMC noted the possibility of subpar growth in the economy in the period ahead.

Toward the end of the year, the moderation of economic growth gave way, fairly abruptly, to more sluggish conditions. By the time of the December FOMC meeting, manufacturing activity had softened considerably, especially in motor vehicles and related industries, and a number of industries had accumulated excessive stocks of inventories. Across a broader set of firms, forecasts for corporate sales and profits in the fourth quarter and in 2001 were being slashed, contributing to a continued decline in equity prices and a further

widening of risk spreads on lower-rated corporate bonds. In this environment, growth in business fixed investment appeared to be slowing appreciably. Consumer spending showed signs of decelerating further, as falling stock prices eroded household wealth and consumer confidence weakened. Moreover, growth in foreign economies seemed to be slowing, on balance, and U.S. export performance began to deteriorate. Market interest rates had declined sharply in response to these developments. Against this backdrop, the FOMC at its December meeting decided that the risks to the outlook had swung considerably and now were weighted toward economic weakness, although it decided to wait for additional evidence on the extent and persistence of the slowdown before moving to an easier policy stance. Recognizing that the current position of the economy was difficult to discern because of lags in the data and that prospects for the near term were particularly uncertain, the Committee agreed at the meeting that it would be especially attentive over coming weeks to signs that an intermeeting policy action was called for.

Additional evidence that economic activity was slowing significantly emerged not long after the December meeting. New data indicated a marked weakening in business investment, and retail sales over the holiday season were appreciably lower than businesses had expected. To contain the resulting buildup in inventories, activity in the manufacturing sector continued to drop. In addition, forecasts of near-term corporate profits were being marked down further, resulting in additional declines in equity prices and in business confidence. Market interest rates continued to fall, as investors became more pessimistic about the economic outlook. On the basis of these developments, the Com-

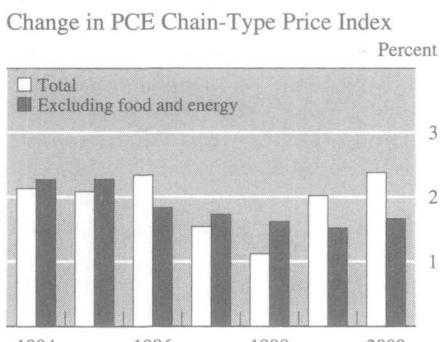
mittee held a telephone conference call on January 3, 2001, and decided to cut the intended federal funds rate $\frac{1}{2}$ percentage point. By the following day, the Board of Governors had approved decreases in the discount rate totaling $\frac{1}{2}$ percentage point. Equity

prices surged on the announcement of the federal funds rate cut, and the Treasury yield curve steepened considerably, apparently because market participants became more confident that a prolonged downturn in economic growth would likely be forestalled. ■

Economic and Financial Developments in 2000

The combination of exceptionally strong growth in the first half of 2000 and subdued growth in the second half resulted in a rise in real GDP of about 3½ percent for the year overall. Domestic demand started out the year with incredible vigor but decelerated thereafter and was sluggish by year-end. Exports surged for three quarters and then faltered. In the labor market, growth of employment slowed over the year but was sufficient to keep the unemployment rate around the lowest sustained level in more than thirty years.

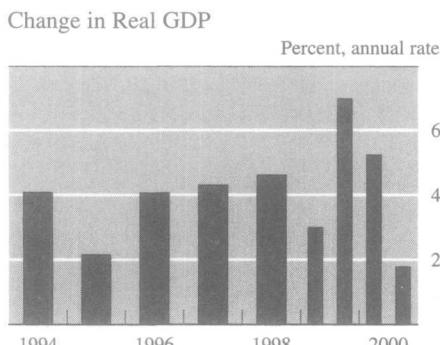
Core inflation remained low in 2000 in the face of sharp increases in energy prices. Although the chain-type price index for personal consumption expenditures (PCE) moved up faster than in 1999, it showed only a slight step-up in the rate of increase after excluding the prices of food and energy. Unit labor costs picked up moderately, adding to the cost pressures from energy, but the ability of businesses to raise prices was



NOTE. Data are for personal consumption expenditures (PCE).

restrained by the slowing of the economy and the persistence of competitive pricing conditions.

The economy continued to benefit in 2000 from the remarkable step-up in structural productivity growth since the mid-1990s, which seems to be closely related to the spread of new technologies. Even as the economy slowed in the latter half of the year, evidence of ongoing efficiency gains were apparent in the form of further appreciable advances in output per worker hour in the nonfarm business sector. The impressive performance of productivity and the accompanying environment of low and stable underlying inflation suggested that the longer-run outlook for the economy remained favorable at the end of 2000, despite the downside risks that were apparent in the near-term outlook.



NOTE. Here and in subsequent charts, except as noted, annual changes are measured from Q4 to Q4, and change for a half-year is measured between its final quarter and the final quarter of the preceding period.

The Household Sector

Personal consumption expenditures increased 4½ percent in real terms in 2000 after having advanced 5 percent in

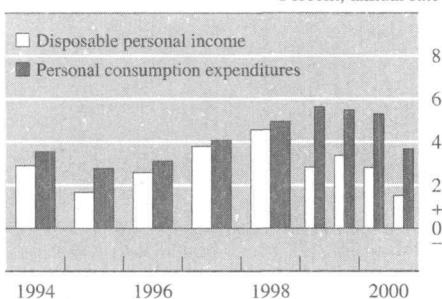
1998 and 5½ percent in 1999. A large portion of the gain in 2000 came in the first quarter, when consumption moved ahead at an unusually rapid pace. The increase in consumer spending over the remainder of the year was moderate, averaging about 3½ percent at an annual rate. Consumer outlays for motor vehicles and parts surged to a record high early in 2000 but reversed that gain over the remainder of the year; sales of vehicles tailed off especially sharply as the year drew to a close. Real consumer purchases of gasoline fell during the year in response to the steep run-up in gasoline prices. Most other broad categories of goods and services posted sizable gains over the year as a whole, but results late in the year were mixed: Real outlays for goods other than motor vehicles eked out only a small gain in the fourth quarter, while real outlays for consumer services rose very rapidly, not only because of higher outlays for home heating fuels during a spell of colder-than-usual weather but also because of continued strength in real outlays for other types of services.

Changes in income and wealth provided less support to consumption in 2000 than in other recent years. Real disposable personal income rose about 2¼ percent during the year after a gain of slightly more than 3 percent in 1999. Disposable income did not rise quite as much in nominal terms as it had in 1999, and rising prices eroded a larger portion of the nominal gain. Meanwhile, the net worth of households turned down in 2000 after having climbed rapidly for several years, as the effect of a decline in the stock market was only partially offset by a sizable increase in the value of residential real estate. With the peak in stock prices not coming until the year was well under way, and with valuations having previously been on a sharp upward course for an extended period,

stock market wealth may well have continued to exert a strong positive effect on consumer spending for several months after share values had topped out. As time passed, however, the impetus to consumption from this source most likely diminished. The personal saving rate, which had dropped sharply during the stock market surge of previous years, fell further in 2000, but the rate of decline slowed, on average, after the first quarter.

Even with real income growth slowing and the stock market turning down, consumers maintained a high degree of optimism through most of 2000 regarding the state of the economy and the economic outlook. Indexes of sentiment from both the University of Michigan Survey Research Center and the Conference Board rose to new peaks in the first quarter of the year, and the indexes remained close to those levels for several more months. Survey readings on personal finances, general business conditions, and the state of the labor market remained generally favorable through most of the year. As of late autumn, only mild softness could be detected. Toward year-end, however, confidence in the economy dropped sharply in response to a combination of developments, including the weakness in the stock market over the latter part of the year and more frequent reports of layoffs.

Change in Real Income and Consumption
Percent, annual rate



Real outlays for residential investment declined about 2½ percent, on net, over the course of 2000, as construction of new housing dropped back from the elevated level of the previous year. Investment in housing was influenced by a sizable swing in mortgage interest rates as well as by slower growth of employment and income and the downturn in the stock market. After having moved up appreciably in 1999, mortgage rates continued to advance through the first few months of 2000. By mid-May, the average commitment rate on conventional fixed-rate mortgages was above 8½ percent, up roughly 1½ percentage points from the level of a year earlier. New construction held up even as rates were rising in 1999 and early 2000, but it softened in the spring of the latter year. Starts and permits for single-family houses declined from the first quarter of 2000 to the third quarter.

But even as homebuilding activity was turning down, conditions in mortgage markets were moving back in a direction more favorable to housing. From the peak in May, mortgage interest rates fell substantially over the remainder of the year, reversing the earlier increases. Sales of new homes firmed as rates turned down, and prices of new houses continued to trend up faster than the general rate of inflation. Inventories of unsold new homes held fairly steady over the year and were up only moderately from the lows of 1997 and 1998. With demand well-maintained and inventories under control, activity stabilized. Starts and permits for single-family houses in the fourth quarter of 2000 were up from the average for the third quarter.

Households continued to borrow at a brisk pace in 2000, with household debt expanding an estimated 8¾ percent, well above the growth rate of dispos-

able personal income. Consumer credit increased rapidly early in the year, boosted by strong outlays on durable goods; but as consumer spending cooled later in the year, the expansion of consumer credit slowed. For the year as a whole, consumer credit is estimated to have advanced more than 8½ percent, up from the 7 percent pace of 1999. Households also took on large amounts of mortgage debt, which grew an estimated 9 percent in 2000, reflecting the solid pace of home sales.

With the rapid expansion of household debt in recent years, the household debt service burden has increased to levels not seen since the late 1980s. Even so, with unemployment low and household net worth still high by historical standards, the credit quality of the household sector appears to have deteriorated little in 2000. Personal bankruptcy filings held relatively steady and remained well below their peak from several years ago. Delinquency rates on home mortgages, credit cards, and auto loans edged up in 2000 but were at most only slightly above their levels of the fourth quarter of 1999. Lenders did not appear to be significantly concerned about the credit quality of the household sector for most of 2000, although some lenders eventually became more cautious. According to surveys of banks conducted by the Federal Reserve, few commercial banks tightened lending conditions on consumer installment loans and mortgage loans to households over the first three quarters of 2000. However, the survey that included the latter part of the year indicated that a number of banks tightened standards and terms on consumer loans, particularly non-credit-card loans, perhaps because of some uneasiness about how the financial position of households might hold up as the pace of economic activity slowed.

The Business Sector

Real business fixed investment rose 10 percent in 2000 according to the advance estimate from the Commerce Department. Investment spending shot ahead at an annual rate of 21 percent in the first quarter of the year; its strength in that period came, in part, from high-tech purchases that had been delayed from 1999 by companies that did not want their operating systems to be in a state of change at the onset of the new millennium. Expansion of investment was slower but still relatively brisk in the second and third quarters, at annual rates of about 15 percent and 8 percent respectively. In the fourth quarter, however, capital spending downshifted abruptly in response to the slowing economy, tightening financial conditions, and rising concern about the prospects for profits; the initial estimate for that period showed real investment outlays having fallen at an annual rate of 1½ percent.

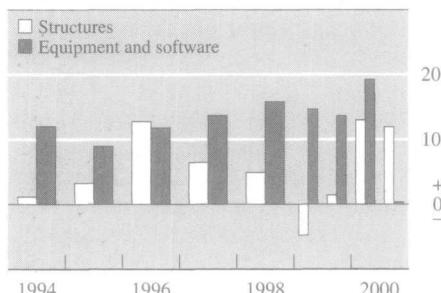
Fixed investment in equipment and software was up 9½ percent in 2000, with the bulk of the gain coming in the first half of the year. Spending slowed to a rate of growth of about 5½ percent in the third quarter and then declined in the fourth quarter. Business investment in motor vehicles fell roughly 15 percent, on net, during 2000, with the larg-

est portion of the drop coming in the fourth quarter; the declines in real outlays on larger types of trucks were particularly sizable. Investment in industrial equipment, tracking the changing conditions in manufacturing, also fell in the fourth quarter but was up appreciably for the year overall. Investment in high-tech equipment decelerated over the year but was still expanding in the fourth quarter. Real outlays for telecommunications equipment posted exceptionally large gains in the first half of the year, flattened out temporarily in the third quarter, and expanded again in the fourth. Spending on computers and peripherals increased, in real terms, at an average rate of about 45 percent over the first three quarters of the year but slowed abruptly to a 6 percent rate of expansion in the year's final quarter, the smallest quarterly advance in several years.

Investment in nonresidential structures rose substantially in 2000, about 12½ percent in all, after having declined 1¾ percent in 1999. Investment in factory buildings, which had fallen more than 20 percent in 1999 in an apparent reaction to the economic disruptions abroad and the associated softness in demand for U.S. exports, more than recouped that decline over the course of 2000. Real outlays for office construction, which had edged down in 1999 after several years of strong advance, got back on track in 2000, posting a gain of about 13½ percent. Real investment in commercial buildings other than offices was little changed after moderate gains in the two previous years. Spending on structures used in drilling for energy strengthened in response to the surge in energy prices.

Business inventory investment was subdued early in the year when final sales were surging; aggregate inventory-sales ratios, which have trended lower

Change in Real Business Fixed Investment
Percent, annual rate



in recent years as companies became more efficient at managing stocks, edged down further. As sales moderated in subsequent months, production growth did not decelerate quite as quickly, and inventories began to rise more rapidly. Incoming information through the summer suggested that some firms might be encountering a bit of backup in stocks but that the problems were not severe overall. In the latter part of the year, however, inventory-sales ratios turned up, indicating that more serious overhangs were developing. Responding to the slowing of demand and the increases in stocks, manufacturers reduced output in each of the last three months of the year. Businesses also began to clamp down on the flow of imports. Despite those adjustments, stocks in a number of domestic industries were likely well above desired levels as the year drew to a close.

Business profits followed a pattern much like that of other economic data. After having risen at an annual rate of more than 16 percent in the first half of the year, U.S. corporations' economic profits—that is, book profits with inventory and capital consumption adjustments—slowed to less than a 3 percent rate of growth in the third quarter. Profits from operations outside the United States continued to increase rapidly in the third quarter. However, economic profits from domestic operations edged down in that period, as solid gains for financial corporations were more than offset by a 4 percent rate of decline in the profits of nonfinancial corporations. Profits of nonfinancial corporations as a share of their gross nominal output rose about $\frac{1}{2}$ percentage point in the first half of 2000 but reversed part of that gain in the third quarter. Earnings reports for the fourth quarter indicated that corporate profits fell sharply in that period.

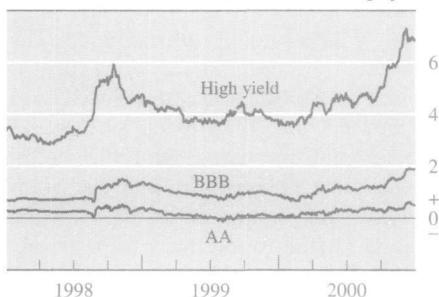
Business debt expanded strongly over the first half of 2000, propelled by robust capital spending as well as by share repurchases and cash-financed merger activity. The high level of capital expenditures outstripped internally generated funds by a considerable margin despite continued impressive profits. To meet their borrowing needs, firms tapped commercial paper, bank loans, and corporate bonds in volume in the first quarter. The rapid pace of borrowing continued in the second quarter, although borrowers relied more heavily on bank loans and commercial paper to meet their financing needs in response to a rise in longer-term interest rates.

Business borrowing slowed appreciably in the second half of the year. As economic growth moderated and profits weakened, capital spending decelerated sharply. In addition, firms held down their borrowing needs by curbing their buildup of liquid assets, which had been accumulating quite rapidly in previous quarters. Borrowing may have been deterred by a tightening of financial conditions for firms with lower credit ratings, as investors and lenders apparently became more concerned about credit risk. Those concerns likely were exacerbated by indications that credit quality had deteriorated at some businesses. The default rate on high-yield bonds continued to climb in 2000, reaching its highest level since 1991. Some broader measures of credit quality also slipped. The amount of nonfinancial debt downgraded by Moody's Investor Services in 2000 was more than twice as large as the amount upgraded, and the delinquency rate on business loans at commercial banks continued to rise over the year. But while some firms were clearly having financial difficulties, many other firms remained soundly positioned to service their debt. Indeed, the ratio of net interest payments to cash flow for all

nonfinancial firms moved only modestly above the relatively low levels of recent years.

As concerns about risk mounted, lenders became more cautious about extending credit to some borrowers. An increasingly large proportion of banks reported firming terms and standards on business loans over the course of the year. In the corporate bond market, yield spreads on high-yield and lower-rated investment-grade bonds, measured relative to the ten-year swap rate, began climbing sharply in September and by year-end were at levels well above those seen in the fall of 1998. Lower-rated commercial paper issuers also had to pay unusually large premiums late in the year, particularly on paper spanning the year-end. As financial conditions became more stringent, issuance of high-yield debt was cut back sharply in the fourth quarter, although investment-grade bond issuance remained strong. Bank lending to businesses was also light at that time, and net issuance of commercial paper came to a standstill. In total, the debt of nonfinancial businesses expanded at an estimated 5½ percent rate in the fourth quarter, less than half the pace of the first half of the year.

Spreads of Corporate Bond Yields over the Ten-Year Swap Rate
Percentage points



NOTE. The data are daily. The spreads compare the yields on the Merrill Lynch AA, BBB, and 175 indexes with the ten-year swap rate.

The slowdown in borrowing in the latter part of the year damped the growth of nonfinancial business debt over 2000, although it still expanded an estimated 8¾ percent.

Growth in commercial mortgage debt slowed in 2000 to an estimated rate of 9¼ percent, and issuance of commercial-mortgage-backed securities fell back from its 1999 pace. Spreads on lower-rated commercial-mortgage-backed securities over swap rates widened by a small amount late in the year, and banks on net reported tightening their standards on commercial real estate credit over the year. Nevertheless, fundamentals in the commercial real estate market remained solid, and delinquency rates on commercial mortgages stayed around their historic lows.

The Government Sector

Real consumption and investment expenditures of federal, state, and local governments, the part of government spending that is included in GDP, rose only 1¼ percent in the aggregate during 2000. The increase was small partly because the consumption and investment expenditures of the federal government had closed out 1999 with a large increase in advance of the century date change. Federal purchases in the fourth quarter of 2000 were about 1 percent below the elevated level at year-end 1999. Abstracting from the bumps in the spending data, the underlying trend in real federal consumption and investment outlays appears to have been mildly positive over the past couple of years. The consumption and investment expenditures of state and local governments rose about 2½ percent in 2000 after an unusually large increase of 4¼ percent in 1999. The slowdown in spending was mainly a reflection of a downshift in government investment in structures,

which can be volatile from year to year and had posted a large gain in 1999.

Total federal spending, as reported in the unified budget, rose 5 percent in fiscal year 2000, the largest increase in several years. A portion of the rise stemmed from shifts in the timing of some outlays in a way that tended to boost the tally for fiscal 2000. But even allowing for those shifts, the rise in spending would have exceeded the increases of other recent years. Outlays accelerated for most major functions, including defense, health, social security, and income security. Of these, spending on health—about three-fourths of which consists of outlays for Medicaid—recorded the biggest increase. Medicaid grants to the states were affected in the fiscal year by increased funding for the child health insurance initiative that was passed in 1997 and by a rise in the portion of Medicaid expenses picked up by the federal government. Spending on agriculture rose very sharply for a third year but not as rapidly as in fiscal 1999. The ongoing paydown of debt by the federal government led to a decline of nearly 3 percent in net interest payments in fiscal 2000 after a somewhat larger drop in these payments in fiscal 1999.

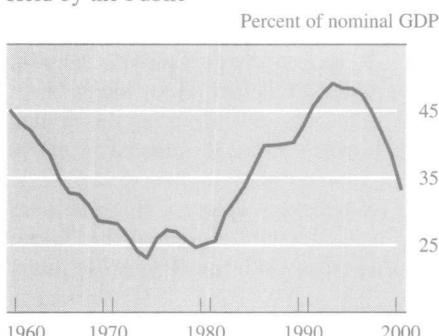
Federal receipts increased 10½ percent in fiscal year 2000, the largest advance in more than a decade. The increase in receipts from taxes on the income of individuals amounted to more than 14 percent. In most recent years, these receipts have grown much faster than nominal personal income as measured in the national income and product accounts. One important factor in the difference is that rising levels of income and a changing distribution have shifted more taxpayers into higher tax brackets; another is an increase in revenues from taxes on capital gains and other items that are not included in per-

sonal income. Receipts from the taxation of corporate profits also moved up sharply in fiscal 2000, rebounding from a small decline the previous fiscal year. With federal receipts rising much faster than spending, the surplus in the unified budget rose to \$236 billion in fiscal 2000, nearly double that of fiscal 1999. The on-budget surplus, which excludes surpluses accumulating in the social security trust fund, rose from essentially zero in fiscal 1999 to \$86 billion in fiscal 2000. Excluding net interest payments, a charge resulting from past deficits, the surplus in fiscal 2000 was about \$460 billion.

Federal saving, which is basically the federal budget surplus adjusted to conform to the accounting practices followed in the national income and product accounts, amounted to about 3½ percent of nominal GDP over the first three quarters of 2000. This figure has been rising roughly 1 percentage point a year over the past several years. Mainly because of that rise in federal saving, the national saving rate has been running at a higher level in recent years than was observed through most of the 1980s and first half of the 1990s, even as the personal saving rate has plunged. The rise in federal saving has kept interest rates lower than they otherwise would have been and has contributed, in turn, to the rapid growth of capital investment and the faster growth of the economy's productive potential.

The burgeoning federal budget surplus allowed the Treasury to pay down its debt in 2000 at an even faster pace than in previous years. As of the end of fiscal 2000, the stock of marketable Treasury debt outstanding had fallen about \$500 billion from its peak in 1997. The existing fiscal situation and the anticipation that budget surpluses would continue led the Treasury to implement a number of debt management changes

Federal Government Debt
Held by the Public



NOTE. The data are as of the end of the fiscal year. Excludes debt held in federal government accounts and by the Federal Reserve System.

during 2000, many designed to preserve the liquidity of its securities. In particular, the Treasury sought to maintain large and regular offerings of new securities at some key maturities, because such attributes are thought to importantly contribute to market liquidity. In part to make room for continued sizable auctions of new securities, the Treasury initiated a debt buyback program through which it can purchase debt that it previously issued. In total, the Treasury conducted twenty buyback operations in 2000, repurchasing a total of \$30 billion par value of securities with maturities ranging from twelve years to twenty-seven years. Those operations were generally well received and caused little disruption to the market.

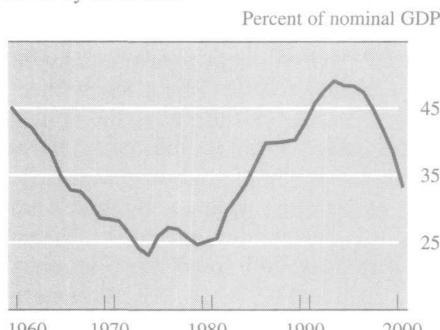
Despite conducting buybacks on that scale, the Treasury had to cut back considerably its issuance of new securities. To still achieve large sizes of individual issues at some maturities, the Treasury implemented a schedule of regular reopenings—in which it auctions additional amounts of a previously issued security instead of issuing a new one—for its five-, ten-, and thirty-year instruments. Under that schedule, every other auction of each of those securities is a

smaller reopening of the previously auctioned security. At other maturities, the Treasury reduced the sizes of its two-year notes and inflation-indexed securities and eliminated the April auction of the thirty-year inflation-indexed bond. In addition, the Treasury reduced the frequency of new offerings of one-year bills in 2000.

These reductions in the issuance of Treasury securities caused the Federal Reserve to modify some of its procedures for obtaining securities at Treasury auctions, as described in detail below. The Treasury also announced changes in the rules for auction participation by foreign and international monetary authority (FIMA) accounts, which primarily include foreign central banks and governmental monetary entities. The new rules, which were to go into effect on February 1, 2001, impose limits on the size of noncompetitive bids from individual FIMA accounts and on the total amount of such bids that will be awarded at each auction. These limits will leave a larger pool of securities available for competitive bidding at the auctions, helping to maintain the liquidity and efficiency of the market. Moreover, FIMA purchases will be subtracted from the total amount of securities offered, rather than being added on as they were in some previous instances, making the amount of funds raised at the auction more predictable.

State and local government debt increased little in 2000. Gross issuance of long-term municipal bonds was well below the robust pace of the past two years. Refunding offerings were held down by higher interest rates through much of the year, and the need to raise new capital was diminished by strong tax revenues. Net issuance was also damped by an increase in the retirement of bonds from previous refunding activity. Credit quality in the municipal mar-

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ket improved considerably in 2000, with credit upgrades outnumbering downgrades by a substantial margin. The only notable exception was in the not-for-profit health care sector, where downgrades predominated.

The External Sector

The current account deficit reached \$452 billion (annual rate) in the third quarter of 2000, or 4.5 percent of GDP, compared with \$331 billion and 3.6 percent for 1999. In the financial account, the counterpart to the increased U.S. current account deficit in 2000 was an increase in net capital inflows.

Trade and the Current Account

Most of the expansion in the current account deficit occurred in the balance of trade in goods and services. The deficit on trade in goods and services widened to \$383 billion (annual rate) in the third quarter from \$347 billion in the first half of the year. Data for trade in October and November suggested that the deficit may have increased further in the fourth quarter. Net payments on investments were a bit less during the first three quarters of 2000 than in the second half of 1999 owing to a sizable increase in income receipts from direct investment abroad.

U.S. exports of goods and services rose an estimated 7 percent in real terms during 2000. Exports surged during the first three quarters, supported by a pickup in economic activity abroad that began in 1999. By market destination, U.S. exports were strongest to Mexico and countries in Asia. About 45 percent of U.S. goods exports were capital equipment, 20 percent were industrial supplies, and roughly 10 percent each were agricultural, automotive, con-

sumer, and other goods. Based on data for October and November, real exports were estimated to have declined in the fourth quarter, reflecting in part a slowing of economic growth abroad. This decrease was particularly evident in exports of capital goods, automotive products, consumer goods, and agricultural products.

The quantity of imported goods and services expanded rapidly during the first three quarters of 2000, reflecting the continuing strength of U.S. domestic demand and the effects of past dollar appreciation on price competitiveness. Increases were widespread among trade categories. Based on data for October and November, real imports of goods and services were estimated to have risen only slightly in the fourth quarter. Moderate increases in imported consumer and capital goods were partly offset by declines in other categories of imports, particularly industrial supplies and automotive products, for which domestic demand had softened. The price of non-oil imports was estimated to have increased by less than 1 percent during 2000.

The price of imported oil rose nearly \$7 per barrel over the four quarters of 2000. During the year, oil prices generally remained high and volatile, with the spot price of West Texas intermediate (WTI) crude fluctuating between a low of \$24 per barrel in April and a high above \$37 per barrel in September. Strong demand—driven by robust world economic growth—kept upward pressure on oil prices even as world supply increased considerably. Over the course of 2000, OPEC raised its official production targets by 3.7 million barrels per day, reversing the production cuts made in the previous two years. Oil production from non-OPEC sources rebounded as well. During the last several weeks of 2000, oil prices fell sharply as market

participants became convinced that the U.S. economy was slowing.

The Financial Account

As in 1999, U.S. capital flows in 2000 reflected the relatively strong cyclical position of the U.S. economy for most of the year and the global wave of corporate mergers. Foreign private purchases of U.S. securities were exceptionally robust—well in excess of the record set in 1999. The composition of U.S. securities purchased by foreigners continued the shift away from Treasuries as the U.S. budget surplus, and the attendant decline in the supply of Treasuries, lowered their yield relative to other debt. Private foreigners sold, on net, about \$50 billion in Treasury securities in 2000, compared with net sales of \$20 billion in 1999. Although sizable, these sales were slightly less than what would have occurred had foreigners reduced their holdings in proportion to the reduction in Treasuries outstanding. The increased sale of Treasuries was fully offset by larger foreign purchases of U.S. securities issued by government-sponsored agencies. Net purchases of agency securities topped \$110 billion, compared with the previous record of \$72 billion set in 1999. In contrast to the shrinking supply of Treasury securities, U.S. government-sponsored agencies accelerated the pace of their debt issuance. Private foreign purchases of U.S. corporate debt grew to \$180 billion, while net purchases of U.S. equities ballooned to \$170 billion compared with \$108 billion in 1999.

The pace of foreign direct investment inflows in the first three quarters of 2000 also accelerated from the record pace of 1999. As in the previous two years, direct investment inflows were driven by foreign acquisition of U.S. firms, reflecting the global strength in merger

and acquisition activity. Of the roughly \$200 billion in direct investment inflows in the first three quarters, about \$100 billion was directly attributable to merger activity. Many of these mergers were financed, at least in part, by an exchange of equity, in which shares in the U.S. firm were swapped for equity in the acquiring firm. Although U.S. residents generally appear to have sold a portion of the equity acquired through these swaps, the swaps likely contributed significantly to the \$97 billion capital outflow attributed to U.S. acquisition of foreign securities. U.S. direct investment abroad was also boosted by merger activity and totaled \$117 billion in the first three quarters of 2000, a slightly faster pace than that of 1999.

Capital inflows from foreign official sources totaled \$38 billion in 2000—a slight increase from 1999. Nearly all of the official inflows were attributable to reinvested interest earnings. Modest official sales of dollar assets associated with foreign exchange intervention were offset by larger inflows from some non-OPEC oil exporting countries, which benefited from the elevated price of oil.

The Labor Market

Nonfarm payroll employment increased about 1½ percent in 2000, measured on a December-to-December basis. The job count had risen slightly more than 2 percent in 1999 and roughly 2½ percent a year over the 1996–98 period. Over the first few months of 2000, the expansion of jobs proceeded at a faster pace than in 1999, boosted both by the federal government's hiring for the decennial Census and by a somewhat faster rate of job creation in the private sector. Indications of a moderation in private hiring started to emerge toward midyear, but because of volatility of the incoming data a slowdown could not be identified with some

confidence until late summer. Over the remainder of the year monthly increases in private employment stepped down further.

Employment rose moderately in the private service-producing sector of the economy in 2000, about 2 percent overall after an increase of about 3 percent in 1999. In the fourth quarter, however, hiring in the services-producing sector was relatively slow, in large part because of a sizable decline in the number of jobs in personnel supply—a category that includes temporary help agencies. Employment in construction increased about 2½ percent in 2000 after several years of gains that were considerably larger. The number of jobs in manufacturing was down for a third year, owing to reductions in factory employment in the second half of the year, when manufacturers were adjusting to the slowing of demand. Those adjustments in manufacturing may also have involved some cutbacks in the employment of temporary hires, which would help to account for the sharp job losses in personnel supply. The average length of the workweek in manufactur-

ing was scaled back as well over the second half of the year.

The slowing of the economy did not lead to any meaningful easing in the tightness of the labor market in 2000. The household survey's measure of the number of persons employed rose 1 percent, about in line with the expansion of labor supply. On net, the unemployment rate changed little; its fourth-quarter average of 4.0 percent was down a tenth of a percentage point from the average unemployment rate in the fourth quarter of 1999. The flatness of the rate through the latter half of 2000, when the economy was slowing, may have partly reflected a desire of companies to hold on to labor resources that had been difficult to attract and retain in the tight labor market of recent years.

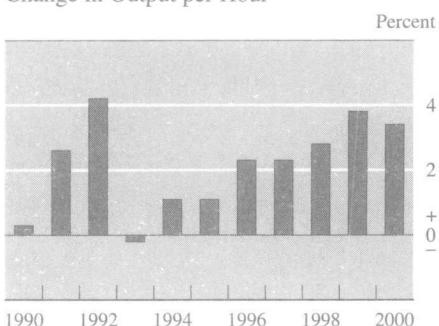
Productivity continued to rise rapidly in 2000. Output per hour in the nonfarm business sector was up about 3½ percent over the year as a whole. Sizable gains in efficiency continued to be evident even as the economy was slowing in the second half of the year. Except for 1999, when output per hour rose about 3¾ percent, the increase in 2000 was the largest since 1992, a year in which the economy was in cyclical recovery from the 1990–91 recession. Cutting through the year-to-year variations in measured productivity, the underlying

Measures of Labor Utilization



NOTE. The augmented unemployment rate is the number of unemployed plus those who are not in the labor force and want a job, divided by the civilian labor force plus those who are not in the labor force and want a job. The break in data at January 1994 marks the introduction of a redesigned survey; data from that point on are not directly comparable with those of earlier periods.

Change in Output per Hour



NOTE. Nonfarm business sector.

trend still appeared to be tracing out a pattern of strong acceleration since the middle part of the 1990s. Support for a step-up in the trend came from increases in the amount of capital per worker—especially high-tech capital—and from organizational efficiencies that resulted in output rising faster than the combined inputs of labor and capital.

Alternative measures of the hourly compensation of workers, while differing in their coverage and methods of construction, were consistent in showing some acceleration in 2000. The employment cost index for private industry (ECI), which attempts to measure changes in the labor costs of non-farm businesses in a way that is free from the effects of employment shifts among occupations and industries, rose nearly 4½ percent during 2000 after having increased about 3½ percent in 1999. Compensation per hour in the nonfarm business sector, a measure that picks up some forms of employee compensation that the ECI omits but that also is more subject to eventual revision than the ECI, showed hourly compensation advancing 5¾ percent in 2000, up from a 1999 increase of about 4½ percent. Tightness of the labor market was likely one factor underlying the acceleration of hourly compensation in 2000, with employers relying both on larger wage increases and more attractive benefit packages to attract and retain workers. Compensation gains may also have been influenced to some degree by the pickup of consumer price inflation since 1998. Rapid increases in the cost of health insurance contributed importantly to a sharp step-up in benefit costs.

Unit labor costs, the ratio of hourly compensation to output per hour, increased about 2¼ percent in the non-farm business sector in 2000 after having risen slightly more than ½ percent in 1999. Roughly three-fourths of the

acceleration was attributable to the faster rate of increase in compensation per hour noted above. The remainder stemmed from the small deceleration of measured productivity. The labor cost rise for the year was toward the high end of the range of the small to moderate increases that have prevailed over the past decade.

Prices

Led by the surge in energy prices, the aggregate price indexes showed some acceleration in 2000. The chain-type price index for real GDP, the broadest measure of goods and services produced domestically, rose 2¼ percent in 2000, roughly ¾ percentage point more than in 1999. The price index for gross domestic purchases, the broadest measure of prices for goods and services purchased by domestic buyers, posted a rise of almost 2½ percent in 2000 after having increased slightly less than 2 percent the previous year. Prices paid by consumers, as measured by the chain-type price index for personal consumption expenditures, picked up as well, about as much as the gross purchases index. The consumer price index (CPI) continued to move up at a faster pace than the PCE index in 2000, and it

Alternative Measures of Price Change
Percent

Price measure	1999	2000
<i>Chain-type</i>		
Gross domestic product	1.6	2.3
Gross domestic purchases	1.9	2.4
Personal consumption expenditures ...	2.0	2.4
Excluding food and energy	1.5	1.7
<i>Fixed-weight</i>		
Consumer price index	2.6	3.4
Excluding food and energy	2.1	2.6

NOTE. Changes are based on quarterly averages and are measured to the fourth quarter of the year indicated from the fourth quarter of the preceding year.

exhibited slightly more acceleration—an increase of nearly 3½ percent in 2000 was ¾ percentage point larger than the 1999 rise. Price indexes for fixed investment and government purchases also accelerated.

The prices of energy products purchased directly by consumers increased about 15 percent in 2000, a few percentage points more than in 1999. In response to the rise in world oil prices, consumer prices of motor fuels rose nearly 20 percent in 2000, bringing the cumulative price hike for those products over the past two years to roughly 45 percent. Prices also rose rapidly for home heating oil. Natural gas prices increased 30 percent, as demand for that fuel outpaced the growth of supply, pulling stocks down to low levels. Prices of natural gas were exceptionally high toward year-end because of the added demand for heating that resulted from unusually cold weather in November and December. Electricity costs jumped for some users, and prices nationally rose faster than in other recent years, about 2¼ percent at the consumer level.

Businesses had to cope with rising costs of energy in production, transportation, and temperature control. In some industries that depend particularly heavily on energy inputs, the rise in costs had a large effect on product prices. Producer prices of goods such as industrial chemicals posted increases that were well above the average rates of inflation in 2000, and rising prices for natural gas sparked especially steep price advances for nitrogen fertilizers used in farming. Prices of some services also exhibited apparent energy impacts: Producers paid sharply higher prices for transportation services via air and water, and consumer airfares moved up rapidly for a second year, although not nearly as much as in 1999.

Despite the spillover of energy effects into other markets, inflation outside the energy sector remained moderate overall. The ongoing rise in labor productivity helped to limit the step-up in labor costs, and the slow rate of rise in the prices of non-oil imports meant that domestic businesses had to remain cautious about raising their prices because of the potential loss of market share. Rapid expansion of capacity in manufacturing prevented bottlenecks from developing in the goods-producing sector of the economy when domestic demand was surging early in the year; later on, an easing of capacity utilization was accompanied by a softening of prices in a number of industries. Inflation expectations, which at times in the past have added to the momentum of rising inflation, remained quiescent in 2000.

Against this backdrop, core inflation remained low. Producer prices of intermediate materials excluding food and energy, after having accelerated through the first few months of 2000, slowed thereafter, and their four-quarter rise of 1¾ percent was only a bit larger than the increase during 1999. Prices of crude materials excluding food and energy fell moderately in 2000 after having risen about 10 percent a year earlier. At the consumer level, the CPI excluding food and energy moved up 2½ percent in 2000, an acceleration of slightly less than ½ percentage point from 1999 when put on a basis that maintains consistency of measurement. The rise in the chain-type price index for personal consumption expenditures excluding food and energy was 1¾ percent, just a bit above the increases recorded in each of the two previous years.

Consumer food prices rose 2½ percent in 2000 after an increase of about 2 percent in 1999. In large part, the moderate step-up in these prices prob-

ably reflected cost and price considerations similar to those at work elsewhere in the economy. Also, farm commodity prices moved up, on net, during 2000, after three years of sharp declines, and this turnabout likely showed through to the retail level to some extent. Meat prices, which are linked more closely to farm prices than is the case with many other foods, recorded increases that were appreciably larger than the increases for food prices overall.

The chain-type price index for private fixed investment rose about 1 $\frac{3}{4}$ percent in 2000, but that small increase amounted to a fairly sharp acceleration from the pace of the preceding few years, several of which had brought small declines in investment prices. Although the price index for investment in residential structures slowed a little, to about a 3 $\frac{1}{2}$ percent rise, the index for nonresidential structures sped up from a 2 $\frac{3}{4}$ percent increase in 1999 to one of 4 $\frac{1}{2}$ percent in 2000. Moreover, the price index for equipment and software ticked up slightly, after having declined 2 percent or more in each of the four preceding years. To a large extent, that turnabout was a reflection of a smaller rate of price decline for computers; they had dropped at an average rate of more than 20 percent through the second half of the 1990s but fell at roughly half that rate in 2000. Excluding computers, equipment prices increased slightly in 2000 after having declined a touch in 1999.

U.S. Financial Markets

Financial markets in 2000 were influenced by the changing outlook for the U.S. economy and monetary policy and by shifts in investors' perceptions of and attitudes toward risk. Private longer-term interest rates generally firmed in

the early part of the year as growth remained unsustainably strong and as market participants anticipated a further tightening of monetary policy by the Federal Reserve. Later in the year, as it became apparent that the pace of economic growth was slowing, market participants began to incorporate expectations of significant policy easing into asset prices, and most longer-term interest rates fell sharply over the last several months of 2000. Over the course of the year, investors became more concerned about credit risk and demanded larger yield spreads to hold lower-rated corporate bonds, especially once the growth of the economy slowed in the second half. Banks, apparently having similar concerns, reported widening credit spreads on business loans and tightening standards for lending to businesses. Weakening economic growth and tighter financial conditions in some sectors led to a slowing in the pace of debt growth over the course of the year.

Stock markets had another volatile year in 2000. After touching record highs in March, stock prices turned lower, declining considerably over the last four months of the year. Valuations in some sectors fell precipitously from high levels, and near-term earnings forecasts were revised down sharply late in the year. On balance, the broadest stock indexes fell more than 10 percent in 2000, and the tech-heavy Nasdaq was down nearly 40 percent.

Interest Rates

The economy continued to expand at an exceptionally strong and unsustainable pace in the early part of 2000, prompting the Federal Reserve to tighten its policy stance in several steps ending at its May meeting. Private interest rates and shorter-term Treasury yields rose considerably over that period, reaching

a peak just after the May FOMC meeting. Investors apparently became more concerned about credit risk as well; spreads between rates on lower-rated corporate bonds and swaps widened in the spring, adding to the upward pressure on private interest rates. Long-term Treasury yields, in contrast, remained below their levels from earlier in the year, as market participants became increasingly convinced that the supply of those securities would shrink considerably in coming years and incorporated a "scarcity premium" into their prices. With the rapid expansion of economic activity showing few signs of letting up, rates on federal funds and eurodollar futures, which can be used as a rough gauge of policy expectations, were indicating that market participants expected additional policy tightening going forward.

Signs of a slowdown in the growth of aggregate demand began to appear in the incoming data soon after the May FOMC meeting and continued to gradually accumulate over subsequent months. In response, market participants became increasingly convinced that the FOMC would not have to tighten its policy stance further, which was reflected in a flattening of the term structure of rates on federal funds and eurodollar futures. Interest rates on most corporate bonds declined gradually on the shifting outlook for the economy, and by the end of August had fallen more than $\frac{1}{2}$ percentage point from their peaks in May.

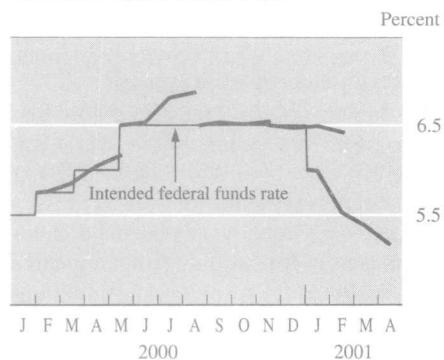
Most market interest rates continued to edge lower into the fall, as the growth of the economy seemed to moderate further. Over the last couple months of 2000, as it became apparent that economic growth was slowing more abruptly, market participants sharply revised down their expectations for future short-term interest rates. Treasury

yields plummeted over that period, particularly at shorter maturities: The two-year Treasury yield dropped more than $\frac{3}{4}$ percentage point from mid-November to the end of the year, moving below the thirty-year yield for the first time since early 2000. Yields on inflation-indexed securities also fell considerably, but by less than their nominal counterparts, suggesting that the weakening of economic growth lowered expectations of both real interest rates and inflation.

Although market participants had come to expect considerable policy easing over the first part of 2001, the timing and magnitude of the intermeeting cut in the federal funds rate in early January of that year was a surprise. In response, investors built into asset prices anticipations of a more rapid policy easing over the near term.

The prospect of a weakening in economic growth, along with sizable declines in equity prices and downward revisions to profit forecasts, apparently caused investors to reassess credit risks in the latter part of 2000. Spreads between rates on high-yield corporate

Federal Funds Futures Rates and the Intended Federal Funds Rate



NOTE. The thick line segments show the rates on federal funds futures contracts on the day after the scheduled FOMC meetings in February, May, August, and November 2000 and after the January 3, 2001 cut in the intended federal funds rate.

bonds and swaps soared beginning in September, pushing the yields on those bonds substantially higher. Concerns about credit risk also spilled over into the investment-grade sector, where yield spreads widened considerably for lower-rated securities. For most investment-grade issuers, though, the effects of the revised policy outlook more than offset any widening in risk spreads, resulting in a decline in private interest rates in the fourth quarter. By year-end, yields on higher-rated investment-grade corporate bonds had reached their lowest levels since the first half of 1999.

Although investors at times in late 2000 appeared more concerned about credit risk than they were in the fall of 1998, the financial environment during the more recent period, by most accounts, did not resemble the market turbulence and disruption of that earlier episode. The Treasury and investment-grade corporate bond markets remained relatively liquid, and the investment-grade market easily absorbed the high volume of bond issuance over 2000. Investors continued to show a heightened preference for larger, more liquid corporate issues, but they did not exhibit the extreme desire for liquidity that was apparent in the fall of 1998. For example, the liquidity premium for the on-the-run ten-year Treasury note remained well below the level of that fall.

Nonetheless, the Treasury market has become somewhat less liquid than it was several years ago. Moreover, in 2000, particular segments of the Treasury market occasionally experienced bouts of unusually low liquidity that appeared related to actual or potential reductions in the supply of individual securities. Given the possibility that liquidity could deteriorate further as the Treasury continues to pay down its debt, market participants reportedly increased their reliance on alternative instruments—

including interest rate swaps and debt securities issued by government-sponsored housing agencies and other corporations—for some of the hedging and pricing functions historically provided by Treasury securities. Fannie Mae and Freddie Mac continued to issue large amounts of debt under their Benchmark and Reference debt programs, which are designed to mimic characteristics of Treasury securities—such as large issue sizes and a regular calendar of issuance—that are believed to contribute to their liquidity. By the end of 2000, the two firms together had more than \$300 billion of notes and bonds and more than \$200 billion of bills outstanding under those programs. Trading volume and dealer positions in agency securities have risen considerably since 1998, and the market for repurchase agreements in those securities has reportedly become more active. Also, several exchanges listed options and futures on agency debt securities.

The shrinking supply of Treasury securities and the possibility of a consequent decline in market liquidity also pose challenges for the Federal Reserve. For many years, Treasury securities have provided the Federal Reserve with an effective asset for System portfolio holdings and the conduct of monetary policy. The remarkable liquidity of Treasury securities has allowed the System to conduct sizable policy operations quickly and with little disruption to markets, while the safety of Treasury securities has allowed the System to avoid credit risk in its portfolio. However, if Treasury debt continues to be paid down, at some point the amount outstanding will be insufficient to meet the Federal Reserve's portfolio needs. Well before that time, the proportion of Treasury securities held by the System could reach levels that would significantly disrupt the Treasury market and make

monetary policy operations increasingly difficult or costly. Recognizing this possibility, the FOMC initiated, in 2000, a study to consider alternative approaches to managing the Federal Reserve's portfolio, including expanding the use of the discount window and broadening the types of assets acquired in the open market. As it continues to study various alternatives, the FOMC will take into consideration the effect that such approaches might have on the liquidity and safety of its portfolio and the potential for distorting the allocation of credit to private entities.

Meanwhile, some measures were taken to prevent the System's holdings of individual Treasury securities from reaching possibly disruptive levels and to help curtail any further lengthening of the average maturity of the System's holdings. On July 5, 2000, the Federal Reserve Bank of New York announced guidelines limiting the System's holdings of individual Treasury securities to specified percentages of their outstanding amounts, depending on the remaining maturity of the issue. Those limits range from 35 percent for Treasury bills to 15 percent for longer-term bonds. As a result, the System redeemed some of its holdings of Treasury securities on occasions when the amount of maturing holdings exceeded the amount that could be rolled over into newly issued Treasury securities under these limits. Redemptions of Treasury holdings in 2000 exceeded \$28 billion, with more than \$24 billion of the redemptions in Treasury bills. In addition, the Federal Reserve accommodated a portion of the demand for reserves in 2000 by increasing its use of longer-term repurchase agreements rather than by purchasing Treasury securities outright. The System maintained an average of more than \$15 billion of longer-term repurchase agreements over 2000,

typically with maturities of twenty-eight days.

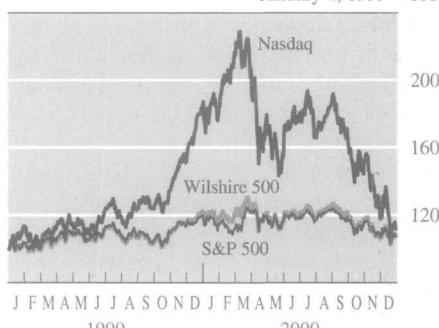
Equity Prices

After having moved higher in the first quarter of 2000, equity prices reversed course and finished the year with considerable declines. Early in the year, the rapid pace of economic activity lifted corporate profits, and stock analysts became even more optimistic about future earnings growth. In response, most major equity indexes reached record highs in March, with the Wilshire 5000 rising $6\frac{3}{4}$ percent above its 1999 year-end level and the Nasdaq soaring 24 percent, continuing its rapid run-up from the second half of 1999. Equity prices fell from these highs during the spring, with a particularly steep drop in the Nasdaq, as investors grew more concerned about the lofty valuations of some sectors and the prospect of higher interest rates.

Broader equity indexes recovered much of those losses through August, supported by the decline in market interest rates and the continued strength of earnings growth in the second quarter. But from early September through the end of the year, stock prices fell consid-

Major Stock Price Indexes

January 4, 1999 = 100



NOTE. The data are daily.

erably in response to the downshift in economic growth, a reassessment of the prospects for some high-tech industries, and disappointments in corporate earnings. Toward the end of 2000, equity analysts significantly reduced their forecasts for year-ahead earnings for companies in the S&P 500. However, analysts apparently viewed the slowdown in earnings as short-lived, as long-run earnings forecasts did not fall much and remained at very high levels, particularly for the technology sector.

On balance, the Wilshire 5000 index fell 12 percent over 2000—its first annual decline since 1994. The Nasdaq composite plunged 39 percent, leaving it at year-end more than 50 percent below its record high and erasing nearly all of its gains since the beginning of 1999. The broad decline in equity prices in 2000 is estimated to have lopped more than \$1 $\frac{1}{4}$ trillion from household wealth, or more than 4 percent of the total net worth of households. Nevertheless, the level of household net worth was still quite high—about 50 percent above its level at the end of 1995. Investors continued to accumulate considerable amounts of equity mutual funds over 2000, although they may have become increasingly discouraged by losses on their equity holdings toward the end of the year, when flows into equity funds slumped. At that time, money market mutual funds expanded sharply, as investors apparently sought a refuge for financial assets amid the heightened volatility and significant drops in equity prices.

Some of the most dramatic plunges in share prices in 2000 took place among technology, telecommunications, and Internet shares. While these declines partly stemmed from downward revisions to near-term earnings estimates, which were severe in some cases, they were also driven by a reassessment of

the elevated valuations of many companies in these sectors. The price-earnings ratio (calculated using operating earnings expected over the next year) for the technology component of the S&P 500 index fell substantially from its peak in early 2000, although it remained well above the ratio for the S&P 500 index as a whole. For the entire S&P 500 index, share prices fell a bit more in percentage terms than the downward revisions to year-ahead earnings forecasts, leaving the price-earnings ratio modestly below its historical high.

The volatility of equity price movements during 2000 was at the high end of the elevated levels observed in recent years. In the technology sector, the magnitudes of daily share price changes were at times remarkable. There were twenty-seven days during 2000 in which the Nasdaq composite index moved up or down by at least 5 percent; by comparison, such outsized movements were observed on a total of only seven days from 1990 to 1999.

Despite the volatility of share price movements and the large declines on balance over 2000, equity market conditions were fairly orderly, with few reports of difficulties meeting margin requirements or of large losses creating problems that might pose broader systemic concerns. The fall in share prices reined in some of the margin debt of equity investors. After having run up sharply through March, the amount of outstanding margin debt fell by about 30 percent over the remainder of the year. At year-end, the ratio of margin debt to total equity market capitalization was slightly below its level a year earlier.

The considerable drop in valuations in some sectors and the elevated volatility of equity price movements caused the pace of initial public offerings to slow markedly over the year, despite a

large number of companies waiting to go public. The slowdown was particularly pronounced for technology companies, which had been issuing new shares at a frantic pace early in the year. In total, the dollar amount of initial public offerings by domestic nonfinancial companies tapered off in the fourth quarter to its lowest level in two years.

Debt and the Monetary Aggregates

The aggregate debt of domestic non-financial sectors increased an estimated 5 1/4 percent over 2000, a considerable slowdown from the gains of almost 7 percent posted in 1998 and 1999. Growth of the monetary aggregates, particularly M3, continued at a strong rate.

Debt and Depository Intermediation

The expansion of nonfederal debt moderated to 8 1/2 percent in 2000 from 9 1/2 percent in 1999; the slowing owed primarily to a weakening of consumer and business borrowing in the second half of the year, as the growth of durables consumption and capital expenditures fell off and financial conditions tightened for some firms. Some of the slowdown in total nonfinancial debt was also attributable to the federal government, which paid down 6 3/4 percent of its debt in 2000, compared with 2 1/2 percent in 1999. In 1998 and 1999, domestic nonfinancial debt increased faster than nominal GDP, despite the reduction in federal debt over those years. The ratio of nonfinancial debt to GDP edged down in 2000, however, as the federal debt paydown accelerated and nonfederal borrowing slowed.

Depository institutions continued to play an important role in meeting the demand for credit by businesses and

households. Credit extended by commercial banks, after adjustment for mark-to-market accounting rules, increased 10 percent over 2000, well above the pace for total nonfinancial debt. Bank credit expanded at a particularly brisk rate through late summer, when banks, given their ample capital base and solid profits, were willing to meet strong loan demand by households and businesses. Over the remainder of the year, the growth of bank credit declined appreciably, as banks became more cautious lenders and as several banks shed large amounts of government securities.

Banks reported a deterioration of the quality of their business loan portfolios in 2000. Delinquency and charge-off rates on C&I loans, while low by historical standards, rose steadily, partly reflecting some repayment difficulties in banks' syndicated loan portfolios. Several large banks stated that the uptrend in delinquencies was expected to continue in 2001. Higher levels of provisioning for loan losses and some narrowing of net interest margins contributed to a fallback of bank profits from the record levels of 1999. In addition, capitalization measures slipped a bit in 2000. Nevertheless, by historical standards banks remained quite profitable overall and appeared to have ample capital. In the aggregate, total capital (the sum of tier 1 and tier 2 capital) remained above 12 percent of risk-weighted assets over the first three quarters of 2000, more than 2 percentage points above the minimum level required to be considered well-capitalized.

In response to greater uncertainty about the economic outlook and a reduced tolerance for risk, increasing proportions of banks reported tightening standards and terms on business loans during 2000, with the share reaching the

highest level since 1990. The tightening became widespread for loans to large and middle-market firms. A considerable portion of banks reported firming standards and terms on loans to small businesses as well, consistent with surveys of small businesses indicating that a larger share of those firms had difficulty obtaining credit in 2000 than in previous years. With delinquency rates for consumer and real estate loans having changed little, on net, in 2000, banks did not tighten credit conditions significantly for loans to households over the first three quarters of 2000. Later on, however, an increasing portion of banks increased standards and terms for consumer loans other than credit cards, and some of the banks surveyed anticipated a further tightening of conditions on consumer loans during 2001.

The Monetary Aggregates

The monetary aggregates grew rather briskly in 2000. The expansion of the broadest monetary aggregate, M3, was particularly strong over the first three quarters of 2000, as the robust growth in depository credit was partly funded through issuance of the managed liabilities included in this aggregate, such as large time deposits. M3 growth eased somewhat in the fourth quarter because the slowing of bank credit led depository institutions to reduce their reliance on managed liabilities. Institutional money funds increased rapidly throughout 2000, despite the tightening of policy early in the year, in part owing to continued growth in their provision of cash management services for businesses. For the year as a whole, M3

Growth of Money and Debt

Percent

Period	M1	M2	M3	Domestic nonfinancial debt
<i>Annual¹</i>				
1990	4.2	4.2	1.9	6.7
1991	7.9	3.1	1.2	4.5
1992	14.4	1.8	.6	4.5
1993	10.6	1.3	1.0	4.9
1994	2.5	.6	1.7	4.8
1995	-1.5	3.8	6.1	5.4
1996	-4.5	4.5	6.8	5.3
1997	-1.2	5.6	8.9	5.4
1998	2.2	8.4	10.9	6.9
1999	1.8	6.2	7.7	6.8
2000	-1.5	6.3	9.2	5.3
<i>Quarterly (annual rate)²</i>				
2000:1	2.0	5.8	10.6	5.6
2	-1.8	6.4	9.0	6.2
3	-3.7	5.8	8.9	4.7
4	-2.7	6.6	7.1	4.1

NOTE. M1 consists of currency, travelers checks, demand deposits, and other checkable deposits. M2 consists of M1 plus savings deposits (including money market deposit accounts), small-denomination time deposits, and balances in retail money market funds. M3 consists of M2 plus large-denomination time deposits, balances in institutional money market funds, RP liabilities (overnight and term), and eurodollars (overnight and term).

Debt consists of the outstanding credit market debt of the U.S. government, state and local governments, households and nonprofit organizations, nonfinancial businesses, and farms.

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.

expanded 9 1/4 percent, well above the 7 3/4 percent pace in 1999. This advance again outpaced that of nominal income, and M3 velocity—the ratio of nominal income to M3—declined for the sixth year in a row.

M2 increased 6 1/4 percent in 2000, about unchanged from its pace in 1999. Some slowing in M2 growth would have been expected based on the rise in short-term interest rates over the early part of the year, which pushed up the "opportunity cost" of holding M2, given that the interest rates on many components of M2 do not increase by the same amount or as quickly as market rates. However, with the level of long-term rates close to that of short-term rates, investors had much less incentive to shift funds out of M2 assets and into assets with longer maturities, which helped support M2 growth. M2 was also boosted at times by households' increased preference for safe and liquid assets during periods of heightened volatility in equity markets. On balance over the year, the growth of M2 slightly exceeded that of nominal income, and M2 velocity edged down.

The behavior of the components of M2 was influenced importantly by interest rate spreads. The depressing effect of higher short-term market interest rates was most apparent in the liquid deposit components, including checkable deposits and savings accounts, whose rates respond very sluggishly to movements in market rates. Small time deposits and retail money market mutual funds, whose rates do not lag market rates as much, expanded considerably faster than liquid deposits. Currency growth was held down early in the year by a runoff of the stockpile accumulated in advance of the century date change, and it remained surprisingly sluggish over the balance of the year given the rapid pace of income growth, with weakness appar-

ently in both domestic and foreign demand.

International Developments

In 2000, overall economic activity in foreign economies continued its strong performance of the previous year. However, in both industrial and developing countries, growth was strongest early, and clear signs of a general slowing emerged later in the year. Among industrial countries, growth in Japan in 2000 moved up to an estimated 2 percent, and growth in the euro area slowed slightly to 3 percent. Emerging market economies in both Asia and Latin America grew about 6 percent on average in 2000. For Asian developing economies, this represented a slowing from the torrid pace of the previous year, while growth in Latin America, especially Mexico, picked up from 1999.

Average foreign inflation edged up slightly to 3 percent, mainly reflecting higher oil prices. Over the first part of the year, monetary authorities moved to tighten conditions in many industrial countries, in reaction to continued strong growth in economic activity that was starting to impinge on capacity constraints, as well as some upward pressures on prices. Interest rates on long-term government securities declined on balance in most industrial countries, especially toward year-end, when evidence of a slowdown in global economic growth started to emerge.

Conditions in foreign financial markets were somewhat more unsettled than in the previous year. Overall stock indexes in the foreign industrial countries generally declined, most notably in Japan. As in the United States, technology-oriented stock indexes were extremely volatile during the year. After reaching peaks in the first quarter, they started down while experiencing great

Foreign Equity Indexes

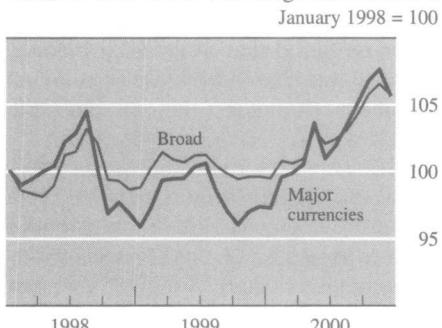


NOTE. The data are monthly.

swings toward midyear, then fell sharply in the final quarter, resulting in net declines for the year of one-third or more. Stock prices in emerging market economies were generally quite weak, especially in developing Asia, where growth in recent years has depended heavily on exports of high-tech goods. Although there was no major default or devaluation among emerging market economies, average risk spreads on developing country debt still moved higher on balance over the course of the year, as the threat of potential crises in several countries, most notably Argentina and Turkey, heightened investor concerns.

The dollar's average foreign exchange value increased over most of the year, supported by continued robust growth of U.S. activity, rising interest rates on dollar assets, and market perceptions that longer-term prospects for U.S. growth and rates of return were more favorable than in other industrial countries. Part of the rise in the dollar's average value was reversed late in the year when evidence emerged that the pace of U.S. activity was slowing much more sharply than had been expected. Despite this decline, the dollar's average foreign exchange value against the currencies of other major foreign industrial

Nominal U.S. Dollar Exchange Rate Indexes



NOTE. The data are monthly. Indexes are trade-weighted averages of the exchange value of the dollar against major currencies and against the currencies of a broader group of important U.S. trading partners.

countries recorded a net increase of over 7 percent for the year as a whole. The dollar also strengthened nearly as much on balance against the currencies of the most important developing country trading partners of the United States.

Industrial Economies

The dollar showed particular strength in 2000 against the euro, the common currency of much of Europe. During the first three quarters of the year, the euro continued to weaken, and by late October had fallen to a low of just above 82 cents, nearly one-third below its value when it was introduced in January 1999. The euro's decline against the dollar through most of 2000 appeared to be due mainly to the vigorous growth of real GDP and productivity in the United States contrasted with steady but less impressive improvements in Europe. In addition, investors may have perceived that Europe was slower to adopt "new economy" technologies, making it a relatively less attractive investment climate.

In September, a concerted intervention operation by the monetary authori-

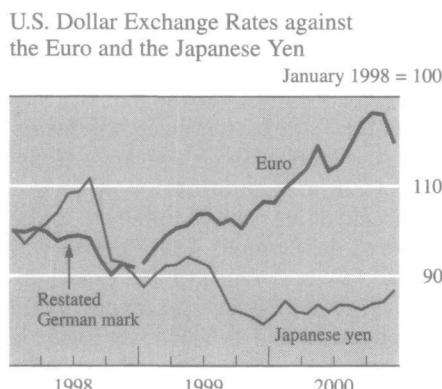
ties of G-7 countries, including the United States, was undertaken at the request of European authorities to provide support for the euro. The European Central Bank also made intervention purchases of euros on several occasions acting on its own. Late in the year, the euro abruptly changed course and started to move up strongly, reversing over half of its decline of earlier in the year. This recovery of the euro against the dollar appeared to reflect mainly a market perception that, while growth was slowing in both Europe and the United States, the slowdown was much sharper for the United States. For the year as a whole, the dollar appreciated, on net, about 7 percent against the euro.

The European Central Bank raised its policy interest rate target six times by a total of 175 basis points over the first ten months of the year. These increases reflected concerns that the euro's depreciation, tightening capacity constraints and higher oil prices would put upward pressure on inflation. While core inflation—*inflation excluding food and energy*—remained well below the 2 percent inflation target ceiling, higher oil prices pushed the headline rate above

the ceiling for most of the year. Real GDP in the euro area is estimated to have increased about 3 percent for 2000 as a whole, only slightly below the rate of the previous year, although activity slowed toward the end of the year. Growth was supported by continued strong increases in investment spending. Net exports made only a modest contribution to growth, as rapid increases in exports were nearly matched by robust imports. Overall activity was sufficiently strong to lead to a further decline in the average euro-area unemployment rate to below 9 percent, a nearly 1 percentage point reduction for the year.

The dollar rose about 12 percent against the Japanese yen over the course of 2000, roughly reversing the decline of the previous year. Early in the year, the yen experienced periods of upward pressure on evidence of a revival of activity in Japan. On several of these occasions, the Bank of Japan made substantial intervention sales of yen. By August, signs of recovery were strong enough to convince the Bank of Japan to end the zero interest rate policy that it had maintained for nearly a year and a half, and its target for the overnight rate was raised to 25 basis points. Later in the year, evidence emerged suggesting that the nascent recovery in economic activity was losing steam, and in response the yen started to depreciate sharply against the dollar.

For the year as a whole, Japanese real GDP is estimated to have increased about 2 percent, a substantial improvement from the very small increase of the previous year and the decline recorded in 1998. Growth, which was concentrated in the first part of the year, was led by private nonresidential investment. In contrast, residential investment slackened as the effect of tax incentives waned. Consumption rebounded early in the year from a sharp decline at the end



NOTE. Foreign currency units per dollar. The data are monthly. Restated German mark is the mark-dollar exchange rate rescaled by the official conversion factor between the mark and the euro.

of 1999 but then stagnated, depressed in part by record-high unemployment and concerns that ongoing corporate restructuring could lead to further job losses. Public investment, which gave a major boost to the economy in 1999, remained strong through the first half of 2000 but then fell off sharply, and for the year as a whole the fiscal stance is estimated to have been somewhat contractionary. Inflation was negative for the second consecutive year, with the prices of both consumer goods and real estate continuing to move lower.

The dollar appreciated 4 percent relative to the Canadian dollar in 2000. Among the factors that apparently contributed to the Canadian currency's weakness were declines in the prices of commodities that Canada exports, such as metals and lumber, and a perception by market participants of unfavorable differentials in rates of return and economic growth prospects in Canada relative to the United States. For the year as a whole, real GDP growth in Canada is estimated to have been only slightly below the strong 5 percent rate of 1999, although, as in most industrial countries, there were signs that the pace of growth was tailing off toward the end of the year. Domestic demand continued to be robust, led by surging business investment and solid personal consumption increases. In the first part of the year, the sustained rapid growth of the economy led Canadian monetary authorities to become increasingly concerned with a buildup of inflationary pressures, and the Bank of Canada matched all of the Federal Reserve's interest rate increases in 2000, raising its policy rate by a total of 100 basis points. By the end of the year, the core inflation rate had risen to near the middle of the Bank of Canada's 1 percent to 3 percent target range, while higher oil prices pushed the overall rate above the top of the range.

Emerging Market Economies

In emerging market economies, the average growth rate of economic activity in 2000 remained near the very strong 6 percent rate of the previous year. However, there was a notable and widespread slowing near the end of the year, and results in a few individual countries were much less favorable. Growth in developing Asian economies slowed on average from the torrid pace of the previous year, while average growth in Latin America picked up somewhat. No major developing country experienced default or devaluation in 2000, but nonetheless, financial markets did undergo several periods of heightened unrest during the year. In the spring, exchange rates and equity prices weakened and risk spreads widened in many emerging market economies at a time of a general heightening of financial market volatility and rising interest rates in industrial countries, as well as increased political uncertainty in several developing countries. After narrowing at midyear, risk spreads on emerging market economy debt again widened later in the year, reflecting a general movement on financial markets away from riskier assets, as well as concerns that Argentina and Turkey might be facing financial crises that could spread to other emerging market economies.

Among Latin American countries, Mexico's performance was noteworthy. Real GDP rose an estimated 7 percent, an acceleration from the already strong result of the previous year. Growth was boosted by booming exports, especially to the United States, favorable world oil prices, and a rebound in domestic demand. In order to keep inflation on a downward path in the face of surging domestic demand, the Bank of Mexico tightened monetary conditions six times in 2000, pushing up short-term interest

rates, and by the end of the year the rate of consumer price inflation had moved below the 10 percent inflation target. The run-up to the July presidential election generated some sporadic financial market pressures, but these subsided in reaction to the smooth transition to the new administration. Over the course of the year, the risk spread on Mexican debt declined on balance, probably reflecting a favorable assessment by market participants of macroeconomic developments and government policies, reinforced by rating upgrades of Mexican debt. During 2000, the peso depreciated slightly against the dollar, but by less than the excess of Mexican over U.S. inflation.

Argentina encountered considerable financial distress in 2000. Low tax revenues due to continued weak activity along with elevated political uncertainty greatly heightened market concerns about the ability of the country to fund its debt. Starting in October, domestic interest rates and debt risk spreads soared amid market speculation that the government might lose access to credit markets and be forced to abandon the exchange rate peg to the dollar. Financial markets began to recover after an announcement in mid-November that an IMF-led international financial support package was to be put in place. Further improvement came in the wake of an official announcement in December of a \$40 billion support package.

Late in the year, Brazilian financial markets received some negative spill-over from the financial unrest in Argentina, but conditions did not approach those prevailing during Brazil's financial crisis of early 1999. For 2000 as a whole, the Brazilian economy showed several favorable economic trends. Real GDP growth increased to an estimated 4 percent after being less than 1 percent the previous two years, inflation contin-

ued to move lower, and short-term interest rates declined.

Growth in Asian developing countries in 2000 slowed from the previous year, when they had still been experiencing an exceptionally rapid bounceback from the 1997-98 financial crises experienced by several countries in the region. In Korea, real GDP growth in 2000 is estimated to have been less than half of the blistering 14 percent rate of 1999. Korean exports, especially of high-tech products, started to fade toward the end of 2000. Rapid export growth had been a prominent feature of the recovery of Korea and other Asian developing economies following their financial crises. In addition, a sharp fall in Korean equity prices over the course of the year, as well as continued difficulties with the process of financial and corporate sector restructuring, tended to depress consumer and business confidence. These developments contributed to the downward pressure on the won seen near the end of the year.

Market concerns over heightened political instability were a major factor behind financial pressures in 2000 in Indonesia, Thailand, and the Philippines. In China, output continued to expand rapidly in 2000, driven by a combination of surging exports early in the year, sustained fiscal stimulus, and some recovery in private consumption. In contrast, growth in both Hong Kong and Taiwan slowed, especially in the latter part of the year. In Taiwan, the exchange rate and stock prices both came under downward pressure as a result of the slowdown in global electronics demand and apparent market concerns over revelations of possible weaknesses in the banking and corporate sectors.

Turkey's financial markets came under severe strain in late November as international investors withdrew capital amid market worries about the health of

Turkey's banks, the viability of the government's reform program and its crawling peg exchange rate regime, and the widening current account deficit. The resulting liquidity shortage caused short-term interest rates to spike up and led to a substantial decline in foreign exchange reserves held by the central bank. Markets stabilized somewhat after it was announced in December that Turkey had been able to reach loan agreements with the IMF, major international banks, and the World Bank in an effort to provide liquidity and restore confidence in the banking system.

Foreign Exchange Operations

On September 22 the U.S. monetary authorities sold \$1,339 million for euros as part of a coordinated intervention operation by G-7 members initiated by

the European Central Bank. The sales were evenly divided between the U.S. Treasury and the Federal Reserve System. No other intervention operations for the accounts of the System or of the Treasury were conducted during the year. Reported net purchases of dollars by major foreign central banks were \$22 billion in 2000, versus net purchases of \$67 billion in 1999.

At the end of the year, the Federal Reserve held the equivalent of \$15,670 million, valued at current exchange rates, in euros and yen. Taking into account the dollar's appreciation against both the euro and the yen in 2000, the cumulative valuation gains on System holdings of foreign currency decreased \$1,410 million, to \$258 million. The System sold no foreign currency in 2000 and thus realized no gains or losses on such sales. ■

Monetary Policy Reports to the Congress

Report submitted to the Congress on February 17, 2000, pursuant to the Full Employment and Balanced Growth Act of 1978

Report of February 17, 2000

Monetary Policy and the Economic Outlook

The U.S. economy posted another exceptional performance in 1999. The ongoing expansion appears to have maintained strength into early 2000 as it set a record for longevity, and—aside from the direct effects of higher crude oil prices—*inflation has remained subdued, in marked contrast to the typical experience during previous expansions.* The past year brought additional evidence that productivity growth has improved substantially since the mid-1990s, boosting living standards while helping to hold down increases in costs and prices despite very tight labor markets.

The Federal Open Market Committee's pursuit of financial conditions consistent with sustained expansion and low inflation has required some adjustments to the settings of monetary policy instruments over the past two years. In late 1998, to cushion the U.S. economy from the effects of disruptions in world financial markets and to ameliorate some of the resulting strains, money market conditions were eased. By the middle of last year, however, with financial markets resuming normal functioning, foreign economies recovering, and domestic demand continuing to outpace increases

in productive potential, the Committee began to reverse that easing.

As the year progressed, foreign economies, in general, recovered more quickly and displayed greater vigor than had seemed likely at the start of the year. Domestically, the rapid productivity growth raised expectations of future incomes and profits and thereby helped keep spending moving up at a faster clip than current productive capacity. Meanwhile, prices of most internationally traded materials rebounded from their earlier declines; this turnaround, together with a flattening of the exchange value of the dollar after its earlier appreciation, translated into an easing of downward pressure on the prices of imports in general. Core inflation measures generally remained low, but with the labor market at its tightest in three decades and becoming tighter, the risk that pressures on costs and prices would eventually emerge mounted over the course of the year. To maintain the low-inflation environment that has been so important to the sustained health of the current expansion, the FOMC ultimately implemented four quarter-point increases in the intended federal funds rate, the most recent of which came at the beginning of this month. In total, the federal funds rate has been raised 1 percentage point, although, at 5¾ percent, it stands only ¼ point above its level just before the autumn-1998 financial market turmoil. At its most recent meeting, the FOMC indicated that risks appear to remain on the side of heightened inflation pressures, so it will need to remain especially attentive to developments in this regard.

Monetary Policy, Financial Markets, and the Economy over 1999 and Early 2000

The first quarter of 1999 saw a further unwinding of the heightened levels of perceived risk and risk aversion that had afflicted financial markets in the autumn of 1998; investors became much more willing to advance funds, securities issuance picked up, and risk spreads fell further—though not back to the unusually low levels of the first half of 1998. At the same time, domestic demand remained quite strong, and foreign economies showed signs of rebounding. The FOMC concluded at its February and March meetings that, if these trends were to persist, the risks of the eventual emergence of somewhat greater inflation pressures would increase, and it noted that a case could be made for unwinding part of the easing actions of the preceding fall. However, the Committee hesitated to adjust policy before having greater assurance that the recoveries in domestic financial markets and foreign economies were on firm footing.

By the May meeting, these recoveries were solidifying, and the pace of domestic spending appeared to be outstripping the growth of the economy's potential, even allowing for an appreciable acceleration in productivity. The Committee still expected some slowing in the expansion of aggregate demand, but the timing and extent of any moderation remained uncertain. Against this backdrop, the FOMC maintained an unchanged policy stance but announced immediately after the meeting that it had chosen a directive tilted toward the possibility of a firming of rates. This announcement implemented the disclosure policy adopted in December 1998, whereby major shifts in the Committee's views about the balance of risks or the likely direction of future policy

would be made public immediately. Members expected that, by making the FOMC's concerns public earlier, such announcements would encourage financial market reactions to subsequent information that would help stabilize the economy. In practice, however, those reactions seemed to be exaggerated and to focus even more than usual on possible near-term Committee action.

Over subsequent weeks, economic activity continued to expand vigorously, labor markets remained very tight, and oil and other commodity prices rose further. In this environment, the FOMC saw an updrift in inflation as a significant risk in the absence of some policy firming, and at the June meeting it raised the intended level of the federal funds rate $\frac{1}{4}$ percentage point. The Committee also announced a symmetric directive, noting that the marked degree of uncertainty about the extent and timing of prospective inflationary pressures meant that further firming of policy might not be undertaken in the near term, but that the Committee would need to be especially alert to emerging inflation pressures. Markets rallied on the symmetric-directive announcement, and the strength of this response together with market commentary suggested uncertainty about the interpretation of the language used to characterize possible future developments and about the time period to which the directive applied.

In the period between the June and August meetings, the ongoing strength of domestic demand and further expansion abroad suggested that at least part of the remaining easing put in place the previous fall to deal with financial market stresses was no longer needed. Consequently, at the August meeting the FOMC raised the intended level of the federal funds rate a further $\frac{1}{4}$ percentage point, to $5\frac{1}{4}$ percent. The Committee agreed that this action, along

with that taken in June, would substantially reduce inflation risks and again announced a symmetric directive. In a related action, the Board of Governors approved an increase in the discount rate to 4 3/4 percent. At this meeting the Committee also established a working group to assess the FOMC's approach to disclosing its view about prospective developments and to propose procedural modifications.

At its August meeting, the FOMC took a number of actions that were aimed at enhancing the ability of the Manager of the System Open Market Account to counter potential liquidity strains in the period around the century date change and that would also help ensure the effective implementation of the Committee's monetary policy objectives. Although members believed that efforts to prepare computer systems for the century date change had made the probability of significant disruptions quite small, some aversion to Y2K risk exposure was already evident in the markets, and the costs that might stem from a dysfunctional financing market at year-end were deemed to be unacceptably high. The FOMC agreed to authorize, temporarily, (1) a widening of the pool of collateral that could be accepted in System open market transactions, (2) the use of reverse repurchase agreement accounting in addition to the currently available matched sale-purchase transactions to absorb reserves temporarily, and (3) the auction of options on repurchase agreements, reverse repurchase agreements, and matched sale-purchase transactions that could be exercised in the period around year-end. The Committee also authorized a permanent extension of the maximum maturity on regular repurchase and matched sale-purchase transactions from sixty to ninety days.

The broader range of collateral approved for repurchase transactions—mainly pass-through mortgage securities of government-sponsored enterprises and STRIP securities of the U.S. Treasury—would facilitate the Manager's task of addressing what could be very large needs to supply reserves in the succeeding months, primarily in response to rapid increases in the demand for currency, at a time of potentially heightened demand in various markets for U.S. government securities. The standby financing facility, authorizing the Federal Reserve Bank of New York to auction the above-mentioned options to the government securities dealers that are regular counterparties in the System's open market operations, would encourage market-making and the maintenance of liquid financing markets essential to effective open market operations. The standby facility was also viewed as a useful complement to the special liquidity facility, which was to provide sound depository institutions with unrestricted access to the discount window, at a penalty rate, between October 1999 and April 2000. Finally, the decision to extend the maximum maturity on repurchase and matched sale-purchase transactions was intended to bring the terms of such transactions into conformance with market practice and to enhance the Manager's ability over the following months to implement the unusually large reserve operations expected to be required around the turn of the year.

Incoming information during the period leading up to the FOMC's October meeting suggested that the growth of domestic economic activity had picked up from the second quarter's pace, and foreign economies appeared to be strengthening more than had been anticipated, potentially adding pressure to already-taut labor markets and possi-

bly creating inflationary imbalances that would undermine economic performance. But the FOMC viewed the risk of a significant increase in inflation in the near term as small and decided to await more evidence on how the economy was responding to its previous tightenings before changing its policy stance. However, the Committee anticipated that the evidence might well signal the need for additional tightening, and it again announced a directive that was biased toward restraint.

Information available through mid-November pointed toward robust growth in overall economic activity and a further depletion of the pool of unemployed workers willing to take a job. Although higher real interest rates appeared to have induced some softening in interest-sensitive sectors of the economy, the anticipated moderation in the growth of aggregate demand did not appear sufficient to avoid added pressures on resources, predominantly labor. These conditions, along with further increases in oil and other commodity prices, suggested a significant risk that inflation would pick up over time, given prevailing financial conditions. Against this backdrop, the FOMC raised the target for the federal funds rate an additional $\frac{1}{4}$ percentage point in November. At that time, a symmetric directive was adopted, consistent with the Committee's expectation that no further policy move was likely to be considered before the February meeting. In a related action, the Board of Governors approved an increase in the discount rate of $\frac{1}{4}$ percentage point, to 5 percent.

At the December meeting, FOMC members held the stance of policy unchanged and, to avoid any misinterpretation of policy intentions that might unsettle financial markets around the century date change, announced a symmetric directive. But the statement

issued after the meeting also highlighted members' continuing concern about inflation risks going forward and indicated the Committee's intention to evaluate, as soon as its next meeting, whether those risks suggested that further tightening was appropriate.

The FOMC also decided on some modifications to its disclosure procedures at the December meeting, at which the working group mentioned above transmitted its final report and proposals. These modifications, announced in January 2000, consisted primarily of a plan to issue a statement after every FOMC meeting that not only would convey the current stance of policy but also would categorize risks to the outlook as either weighted mainly toward conditions that may generate heightened inflation pressures, weighted mainly toward conditions that may generate economic weakness, or balanced with respect to the goals of maximum employment and stable prices over the foreseeable future. The changes eliminated uncertainty about the circumstances under which an announcement would be made; they clarified that the Committee's statement about future prospects extended beyond the inter-meeting period; and they characterized the Committee's views about future developments in a way that reflected policy discussions and that members hoped would be more helpful to the public and to financial markets.

Financial markets and the economy came through the century date change smoothly. By the February 2000 meeting, there was little evidence that demand was coming into line with potential supply, and the risks of inflationary imbalances appeared to have risen. At the meeting, the FOMC raised its target for the federal funds rate $\frac{1}{4}$ percentage point to $5\frac{3}{4}$ percent, and characterized the risks as remaining on

Economic Projections for 2000

Percent

Indicator	MEMO: 1999 actual	Federal Reserve governors and Reserve Bank presidents	
		Range	Central tendency
<i>Change, fourth quarter to fourth quarter¹</i>			
Nominal GDP	5.9	5-6	5½-5½
Real GDP ²	4.2	3½-4½	3½-3¾
Consumer price index	2.0	1½-2½	1¾-2
<i>Average level, fourth quarter</i>			
Civilian unemployment rate	4.1	4-4½	4-4½

1. Change from average for fourth quarter of 1999 to average for fourth quarter of 2000.

2. Chain-weighted.

the side of higher inflation pressures. In a related action, the Board of Governors approved a $\frac{1}{4}$ percentage point increase in the discount rate, to $5\frac{1}{4}$ percent.

Economic Projections for 2000

The members of the Board of Governors and the Federal Reserve Bank presidents, all of whom participate in the deliberations of the FOMC, expect to see another year of favorable economic performance in 2000, although the risk of higher inflation will need to be watched especially carefully. The central tendency of the FOMC participants' forecasts of real GDP growth from the fourth quarter of 1999 to the fourth quarter of 2000 is $3\frac{1}{2}$ percent to $3\frac{3}{4}$ percent. A substantial part of the gain in output will likely come from further increases in productivity. Nonetheless, economic expansion at the pace that is anticipated should create enough new jobs to keep the unemployment rate in a range of 4 percent to $4\frac{1}{4}$ percent, close to its recent average. The central tendency of the FOMC participants' inflation forecasts for 2000—as measured by the chain-type price index for personal consumption expenditures—is $1\frac{3}{4}$ percent to 2 percent, a range that runs a

little to the low side of the energy-led 2 percent rise posted in 1999.¹ Even though futures markets suggest that energy prices may turn down later this year, prices elsewhere in the economy could be pushed upward by a combination of factors, including reduced restraint from non-oil import prices, wage and price pressures associated with lagged effects of the past year's oil price rise, and larger increases in costs

1. In past Monetary Policy Reports to the Congress, the FOMC has framed its inflation forecasts in terms of the consumer price index. The chain-type price index for PCE draws extensively on data from the consumer price index but, while not entirely free of measurement problems, has several advantages relative to the CPI. The PCE chain-type index is constructed from a formula that reflects the changing composition of spending and thereby avoids some of the upward bias associated with the fixed-weight nature of the CPI. In addition, the weights are based on a more comprehensive measure of expenditures. Finally, historical data used in the PCE price index can be revised to account for newly available information and for improvements in measurement techniques, including those that affect source data from the CPI; the result is a more consistent series over time. This switch in presentation notwithstanding, the FOMC will continue to rely on a variety of aggregate price measures, as well as other information on prices and costs, in assessing the path of inflation.

that might be forthcoming in another year of tight labor markets.

The performance of the economy—both the rate of real growth and the rate of inflation—will depend importantly on the course of productivity. Typically, in past business expansions, gains in labor productivity eventually slowed as rising demand placed increased pressure on plant capacity and on the workforce, and a similar slowdown from the recent rapid pace of productivity gain cannot be ruled out. But with many firms still in the process of implementing technologies that have proved effective in reorganizing internal operations or in gaining speedier access to outside resources and markets, and with the technologies themselves still advancing rapidly, a further rise in productivity growth from the average pace of recent years also is possible. To the extent that rapid productivity growth can be maintained, aggregate supply can grow faster than would otherwise be possible.

However, the economic processes that are giving rise to faster productivity growth not only are lifting aggregate supply but also are influencing the growth of aggregate spending. With firms perceiving abundant profit opportunities in productivity-enhancing high-tech applications, investment in new equipment has been surging and could well continue to rise rapidly for some time. Moreover, expectations that the investment in new technologies will generate high returns have been lifting the stock market and, in turn, helping to maintain consumer spending at a pace in excess of the current growth of real disposable income. Impetus to demand from this source also could persist for a while longer, given the current high levels of consumer confidence and the likely lagged effects of the large increments to household wealth registered to date. The boost to aggregate demand

from the marked pickup in productivity growth implies that the level of interest rates needed to align demand with potential supply may have increased substantially. Although the recent rise in interest rates may lead to some slowing of spending, aggregate demand may well continue to outpace gains in potential output over the near term, an imbalance that contains the seeds of rising inflationary and financial pressures that could undermine the expansion.

In recent years, domestic spending has been able to grow faster than production without engendering inflation partly because the external sector has provided a safety valve, helping to relieve the pressures on domestic resources. In particular, the rapid growth of demand has been met in part by huge increases in imports of goods and services, and sluggishness in foreign economies has restrained the growth of exports. However, foreign economies have been firming, and if recovery of these economies stays on course, U.S. exports should increase faster than they have in the past couple of years. Moreover, the rapid rise of the real exchange value of the dollar through mid-1998 has since given way to greater stability, on average, and the tendency of the earlier appreciation to limit export growth and boost import growth is now diminishing. From one perspective, these external adjustments are welcome because they will help slow the recent rapid rates of decline in net exports and the current account. They also should give a boost to industries that have been hurt by the export slump, such as agriculture and some parts of manufacturing. At the same time, however, the adjustments are likely to add to the risk of an upturn in the inflation trend, because a strengthening of exports will add to the pressures on U.S. resources and a firming of the prices of non-oil imports will raise costs

directly and also reduce to some degree the competitive restraints on the prices of U.S. producers.

Domestically, substantial plant capacity is still available in some manufacturing industries and could continue to exert restraint on firms' pricing decisions, even with a diminution of competitive pressures from abroad. However, an already tight domestic labor market has tightened still further in recent months, and bidding for workers, together with further increases in health insurance costs that appear to be coming, seems likely to keep nominal hourly compensation costs moving up at a relatively brisk pace. To date, the increases in compensation have not had serious inflationary consequences because they have been offset by the advances in labor productivity, which have held unit labor costs in check. But the pool of available workers cannot continue to shrink without at some point touching off cost pressures that even a favorable productivity trend might not be able to counter. Although the governors and Reserve Bank presidents expect productivity gains to be substantial again this year, incoming data on costs, prices, and price expectations will be examined carefully to make sure a pickup of inflation does not start to become embedded in the economy.

The FOMC forecasts are more optimistic than the economic predictions that the Administration recently released, but the Administration has noted that it is being conservative in regard to its assumptions about productivity growth and the potential expansion of the economy. Relative to the Administration's forecast, the FOMC is predicting a somewhat larger rise in real GDP in 2000 and a slightly lower unemployment rate. The inflation forecasts are fairly similar, once account is taken of the tendency for the consumer price

index to rise more rapidly than the chain-type price index for personal consumption expenditures.

Money and Debt Ranges for 2000

At its most recent meeting, the FOMC reaffirmed the monetary growth ranges for 2000 that were chosen on a provisional basis last July: 1 percent to 5 percent for M2, and 2 percent to 6 percent for M3. As has been the case for some time, these ranges were chosen to encompass money growth under conditions of price stability and historical velocity relationships, rather than to center on the expected growth of money over the coming year or serve as guides to policy.

Given continued uncertainty about movements in the velocities of M2 and M3 (the ratios of nominal GDP to the aggregates), the Committee still has little confidence that money growth within any particular range selected for the year would be associated with the economic performance it expected or desired. Nonetheless, the Committee believes that money growth has some value as an economic indicator, and it will continue to monitor the monetary aggregates among a wide variety of economic and financial data to inform its policy deliberations.

M2 increased $6\frac{1}{4}$ percent last year. With nominal GDP rising 6 percent, M2

Ranges for Growth of Monetary and Debt Aggregates

Percent

Aggregate	1998	1999	2000
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.

velocity fell a bit overall, although it rose in the final two quarters of the year as market interest rates climbed relative to yields on M2 assets. Further increases in market interest rates early this year could continue to elevate M2 velocity. Nevertheless, given the Committee's expectations for nominal GDP growth, M2 could still be above the upper end of its range in 2000.

M3 expanded 7½ percent last year, and its velocity fell about 1¾ percent, a much smaller drop than in the previous year. Non-M2 components again exhibited double-digit growth, with some of the strength attributable to long-term trends and some to precautionary build-ups of liquidity in advance of the century date change. One important trend is the shift by nonfinancial businesses from direct holdings of money market instruments to indirect holdings through institution-only money funds; such shifts boost M3 at the same time they enhance liquidity for businesses. Money market funds and large certificates of deposit also ballooned late in the year as a result of a substantial demand for liquidity around the century date change. Adjustments from the temporarily elevated level of M3 at the end of 1999 are likely to trim that aggregate's fourth-quarter-to-fourth-quarter growth this year, but not sufficiently to offset the downward trend in velocity. That trend, together with the Committee's expectation for nominal GDP growth, will probably keep M3 above the top end of its range again this year.

Domestic nonfinancial debt grew 6½ percent in 1999, near the upper end of the 3 percent to 7 percent growth range the Committee established last February. This robust growth reflected large increases in the debt of businesses and households that were due to substantial advances in spending as well as to debt-financed mergers and acquisi-

tions. However, the increase in private-sector debt was partly offset by a substantial decline in federal debt. The Committee left the range for debt growth in 2000 unchanged at 3 percent to 7 percent. After an aberrant period in the 1980s during which debt expanded much more rapidly than nominal GDP, the growth of debt has returned to its historical pattern of about matching the growth of nominal GDP over the past decade, and the Committee members expect debt to remain within its range again this year.

Economic and Financial Developments in 1999 and Early 2000

The U.S. economy retained considerable strength in 1999. According to the Commerce Department's advance estimate, the rise in real gross domestic product over the four quarters of the year exceeded 4 percent for the fourth consecutive year. The growth of household expenditures was bolstered by further substantial gains in real income, favorable borrowing terms, and a soaring stock market. Businesses seeking to maintain their competitiveness and profitability continued to invest heavily in high-tech equipment; external financing conditions in both debt and equity markets were quite supportive. In the public sector, further strong growth of revenues was accompanied by a step-up in the growth of government consumption and investment expenditures, the part of government spending that enters directly into real GDP. The rapid growth of domestic demand gave rise to a further huge increase in real imports of goods and services in 1999. Exports picked up as foreign economies strengthened, but the gain fell short of that for imports by a large margin. Available economic indicators for January of this year show

the U.S. economy continuing to expand, with labor demand robust and the unemployment rate edging down to its lowest level in thirty years.

The combination of a strong U.S. economy and improving economic conditions abroad led to firmer prices in some markets this past year. Industrial commodity prices turned up—sharply in some cases—after having dropped appreciably in 1998. Oil prices, responding both to OPEC production restraint and to the growth of world demand, more than doubled over the course of the year, and the prices of non-oil imports declined less rapidly than in previous years, when a rising dollar, as well as sluggish conditions abroad, had pulled them lower. The higher oil prices of 1999 translated into sharp increases in retail energy prices and gave a noticeable boost to consumer prices overall; the chain-type price index for personal consumption expenditures rose 2 percent, double the increase of 1998. Outside the energy sector, however, consumer prices increased at about the same low rate as in the previous year, even as the unemployment rate continued to edge down. Rapid gains in productivity enabled businesses to offset a substantial portion of the increases in nominal compensation, thereby holding the rise of unit labor costs in check, and business pricing policies continued to be driven to a large extent by the desire to maintain or increase market share at the expense of some slippage in unit profits, albeit from a high level.

The Household Sector

Personal consumption expenditures increased about 5½ percent in real terms in 1999, a second year of exceptionally rapid advance. As in other recent years, the strength of consumption in

1999 reflected sustained increases in employment and real hourly pay, which bolstered the growth of real disposable personal income. Added impetus came from another year of rapid growth in net worth, which, coming on top of the big gains of previous years, led households in the aggregate to spend a larger portion of their current income than they would have otherwise. The personal saving rate, as measured in the national income and product accounts, dropped further, to an average of about 2 percent in the final quarter of 1999; it has fallen about 4½ percentage points over the past five years, a period during which yearly gains in household net worth have averaged more than 10 percent in nominal terms and the ratio of household wealth to disposable personal income has moved up sharply.

The strength of consumer spending this past year extended across a broad front. Appreciable gains were reported for most types of durable goods. Spending on motor vehicles, which had surged about 13½ percent in 1998, moved up another 5½ percent in 1999. The inflation-adjusted increases for furniture, appliances, electronic equipment, and other household durables also were quite large, supported in part by a strong housing market. Spending on services advanced about 4½ percent in real terms, led by sizable increases for recreation and personal business services. Outlays for nondurables, such as food and clothing, also rose rapidly. Exceptional strength in the purchases of some nondurables toward the end of the year may have reflected precautionary buying by consumers in anticipation of the century date change; it is notable in this regard that grocery store sales were up sharply in December and then fell back in January, according to the latest report on retail sales.

Households also continued to boost their expenditures on residential structures. After having surged 11 percent in 1998, residential investment rose about 3 1/4 percent over the four quarters of 1999, according to the advance estimate from the Commerce Department. Moderate declines in investment in the second half of the year offset only part of the increases recorded in the first half. As with consumption expenditures, investment in housing was supported by the sizable advances in real income and household net worth, but this spending category was also tempered a little by a rise in mortgage interest rates, which likely was an important factor in the second-half downturn.

Nearly all the indicators of housing activity showed upbeat results for the year. Annual sales of new and existing homes reached new peaks in 1999, surpassing the previous highs set in 1998. Although sales dropped back a touch in the second half of the year, their level through year-end remained quite high by historical standards. Builders' backlog also were at high levels and helped support new construction activity even as sales eased. Late in the year, reports that shortages of skilled workers were delaying construction became less frequent as building activity wound down seasonally, but builders also continued to express concern about potential worker shortages in 2000. For 1999 in total, construction began on more than 1.3 million single-family dwellings, the most since the late 1970s; approximately 330,000 multifamily units also were started, about the same number as in each of the two previous years. House prices rose appreciably and, together with the new investment, further boosted household net worth in residential real estate.

The increases in consumption and residential investment in 1999 were, in

part, financed by an expansion of household debt estimated at 9 1/2 percent, the largest increase in more than a decade. Mortgage debt, which includes the borrowing against owner equity that may be used for purposes other than residential investment, grew a whopping 10 1/4 percent. Higher interest rates led to a sharp drop in refinancing activity and prompted a shift toward the use of adjustable-rate mortgages, which over the year rose from 10 percent to 30 percent of originations. Consumer credit advanced 7 1/4 percent, boosted by heavy demand for consumer durables and other big-ticket purchases. Credit supply conditions were also favorable; commercial banks reported in Federal Reserve surveys that they were more willing than in the previous year or two to make consumer installment loans and that they remained quite willing to make mortgage loans.

The household sector's debt-service burden edged up to its highest level since the late 1980s; however, with employment rising rapidly and asset values escalating, measures of credit quality for household debt generally improved in 1999. Delinquency rates on home mortgages and credit cards declined a bit, and those on auto loans fell more noticeably. Personal bankruptcy filings fell sharply after having risen for several years to 1997 and remaining elevated in 1998.

The Business Sector

Private nonresidential fixed investment increased 7 percent during 1999, extending by another year a long run of rapid growth in real investment outlays. Strength in capital investment has been underpinned in recent years by the vigor of the business expansion, by the advance and spread of computer technologies, and by the ability of most busi-

nesses to readily obtain funding through the credit and equity markets.

Investment in high-tech equipment continued to soar in 1999. Outlays for communications equipment rose about 25 percent over the course of the year, boosted by a number of factors, including the expansion of wireless communications, competition in telephone markets, the continued spread of the Internet, and the demand of Internet users for faster access to it. Computer outlays rose nearly 40 percent in real terms, and the purchases of computer software, which in the national accounts are now counted as part of private fixed investment, rose about 13 percent; for both computers and software the increases were roughly in line with the annual average gains during previous years of the expansion.

The timing of investment in high-tech equipment over the past couple of years was likely affected to some degree by business preparations for the century date change. Many large businesses reportedly invested most heavily in new computer equipment before the start of 1999 to leave sufficient time for their systems to be tested well before the start of 2000; a very steep rise in computer investment in 1998—roughly 60 percent in real terms—is consistent with those reports. Some of the purchases in preparation for Y2K most likely spilled over into 1999, but the past year also brought numerous reports of businesses wanting to stand pat with existing systems until after the turn of the year. Growth in computer investment in the final quarter of 1999, just before the century rollover, was the smallest in several quarters.

Spending on other types of equipment rose moderately, on balance, in 1999. Outlays for transportation equipment increased substantially, led by advances in business purchases of motor vehicles

and aircraft. By contrast, a sharp decline in spending on industrial machinery early in the year held the yearly gain for that category to about 2 percent; over the final three quarters of the year, however, outlays picked up sharply as industrial production strengthened.

Private investment in nonresidential structures fell 5 percent in 1999 according to the advance estimate from the Commerce Department. Spending on structures had increased in each of the previous seven years, rather briskly at times, and the level of investment, though down this past year, remained relatively high and likely raised the real stock of capital invested in structures appreciably further. Real expenditures on office buildings, which have been climbing rapidly for several years, moved up further in 1999, to the highest level since the peak of the building boom of the 1980s. In contrast, investment in other types of commercial structures, which had already regained its earlier peak, slipped back a little, on net, this past year. Spending on industrial structures, which accounts for roughly 10 percent of total real outlays on structures, fell for a third consecutive year. Outlays for the main types of institutional structures also were down, according to the initial estimates. Revisions to the data on nonresidential structures often are sizable, and the estimates for each of the three years preceding 1999 have eventually shown a good bit more strength than was initially reported.

After increasing for two years at a rate of about 6 percent, nonfarm business inventories expanded more slowly this past year—about $3\frac{1}{4}$ percent according to the advance GDP report. During the year, some businesses indicated that they planned to carry heavier stocks toward year-end to protect themselves against possible Y2K disruptions,

and the rate of accumulation did in fact pick up appreciably in the fall. But business final sales remained strong, and the ratio of nonfarm stocks to final sales changed little, holding toward the lower end of the range of the past decade. With the ratio so low, businesses likely did not enter the new year with excess stocks.

After slowing to a 1 percent rise in 1998, the economic profits of U.S. corporations—that is, book profits with inventory valuation and capital consumption adjustments—picked up in 1999. Economic profits over the first three quarters of the year averaged about 3½ percent above the level of a year earlier. The earnings of corporations from their operations outside the United States rebounded in 1999 from a brief but steep decline in the second half of 1998, when financial market disruptions were affecting the world economy. The profits earned by financial corporations on their domestic operations also picked up after having been slowed in 1998 by the financial turmoil; growth of these profits in 1999 would have been greater but for a large payout by insurance companies to cover damage from Hurricane Floyd. The profits that nonfinancial corporations earned on their domestic operations in the first three quarters of 1999 were about 2½ percent above the level of a year earlier; growth of these earnings, which account for about two-thirds of all economic profits, had slowed to just over 2 percent in 1998 after averaging 13 percent at a compound annual rate in the previous six years. Nonfinancial corporations have boosted volume substantially further over the past two years, but profits per unit of output have dropped back somewhat from their 1997 peak. As of the third quarter of last year, economic profits of nonfinancial corporations amounted to slightly less than 11½ per-

cent of the nominal output of these companies, compared with a quarterly peak of about 12¾ percent two years earlier.

The borrowing needs of nonfinancial corporations remained sizable in 1999. Capital spending outstripped internal cash flow, and equity retirements that resulted from stock repurchases and a blockbuster pace of merger activity more than offset record volumes of both seasoned and initial public equity offerings. Overall, the debt of nonfinancial businesses grew 10½ percent, down only a touch from its decade-high 1998 pace.

The strength in business borrowing was widespread across funding sources. Corporate bond issuance was robust, particularly in the first half of the year, though the markets' increased preference for liquidity and quality, amid an appreciable rise in defaults on junk bonds, left issuance of below-investment-grade securities down more than a quarter from their record pace in 1998. The receptiveness of the capital markets helped firms to pay down loans at banks—which had been boosted to an 11¾ percent gain in 1998 by the financial market turmoil that year—and growth in these loans slowed to a more moderate 5¼ percent pace in 1999. The commercial paper market continued to expand rapidly, with domestic nonfinancial outstandings rising 18 percent on top of the 14 percent gain in 1998.

Commercial mortgage borrowing was strong again as well, as real estate prices generally continued to rise, albeit at a slower pace than in 1998, and vacancy rates generally remained near historical lows. The mix of lending shifted back to banks and life insurance companies from commercial mortgage-backed securities, as conditions in the CMBS market, especially investor appetites for lower-rated tranches, remained less favorable than they had been before the

credit market disruptions in the fall of 1998.

Risk spreads on corporate bonds seesawed during 1999. Over the early part of the year, spreads reversed part of the 1998 run-up as markets recovered. During the summer, they rose again in response to concerns about market liquidity, expectations of a surge in financing before the century date change, and anticipated firming of monetary policy. Swap spreads, in particular, exhibited upward pressure at this time. The likelihood of year-end difficulties seemed to diminish in the fall, and spreads again retreated, ending the year down on balance but generally above the levels that had prevailed over the several years up to mid-1998.

Federal Reserve surveys indicated that banks firmed terms and standards for commercial and industrial loans a bit further, on balance, in 1999. In the syndicated loan market, spreads for lower-rated borrowers also ended the year higher, on balance, after rising substantially in 1998. Spreads for higher-rated borrowers were fairly steady through 1998 and early 1999, widened a bit around midyear, and then fell back to end the year about where they had started.

The ratio of net interest payments to cash flow for nonfinancial firms remained in the low range it has occupied for the past few years, but many measures of credit quality nonetheless deteriorated in 1999. Moody's Investors Service downgraded more nonfinancial debt issuers than it upgraded over the year, affecting a net \$78 billion of debt. The problems that emerged in the bond market were concentrated mostly among borrowers in the junk sector, and partly reflected a fallout from the large volume of issuance and the generous terms available in 1997 and early 1998; default rates on junk bonds rose to levels

not seen since the recession of 1990-91. Delinquency rates on C&I loans at commercial banks ticked up in 1999, albeit from very low levels, while the charge-off rate for those loans continued on its upward trend of the past several years. Business failures edged up last year but remained in a historically low range.

The Government Sector

Buoyed by rapid increases in receipts and favorable budget balances, the combined real expenditures of federal, state, and local governments on consumption and investment rose about 4 3/4 percent from the fourth quarter of 1998 to the fourth quarter of 1999. Annual data, which smooth through some of the quarterly noise that is often evident in government outlays, showed a gain in real spending of more than 3 1/2 percent this past year, the largest increase of the expansion. Federal expenditures on consumption and investment were up nearly 3 percent in annual terms; real defense expenditures, which had trended lower through most of the 1990s, rose moderately, and outlays for nondefense consumption and investment increased sharply. Meanwhile, the consumption and investment expenditures of state and local governments rose more than 4 percent in annual terms; growth of these outlays has picked up appreciably as the expansion has lengthened.

At the federal level, expenditures in the unified budget rose 3 percent in fiscal 1999, just a touch less than the 3 1/4 percent rise of the preceding fiscal year. Faster growth of nominal spending on items that are included in consumption and investment was offset in the most recent fiscal year by a deceleration in other categories. Net interest outlays fell more than 5 percent—enough to trim total spending growth about 3/4 percentage point—and only small increases

were recorded in expenditures for social insurance and income security, categories that together account for nearly half of total federal outlays. In contrast, federal expenditures on Medicaid, after having slowed in 1996 and 1997, picked up again in the past two fiscal years. Spending on agriculture doubled in fiscal 1999; the increase resulted both from a step-up in payments under farm safety net programs that were retained in the "freedom to farm" legislation of 1996 and from more recent emergency farm legislation.

Federal receipts grew 6 percent in fiscal 1999 after increases that averaged close to 9 percent in the two previous fiscal years. Net receipts from taxes on individuals continued to outpace the growth of personal income, but by less than in other recent years, and receipts from corporate income taxes fell moderately. Nonetheless, with total receipts growing faster than spending, the surplus in the unified budget continued to rise, moving from \$69 billion in fiscal 1998 to \$124 billion this past fiscal year. Excluding net interest payments—a charge resulting from past deficits—the federal government recorded a surplus of more than \$350 billion in fiscal 1999.

Federal saving, a measure that results from a translation of the federal budget surplus into terms consistent with the national income and product accounts, amounted to 2 1/4 percent of nominal GDP in the first three quarters of 1999, up from 1 1/2 percent in 1998 and 1/2 percent in 1997. Before 1997, federal saving had been negative for seventeen consecutive years, by amounts exceeding 3 percent of nominal GDP in several years—most recently in 1992. The change in the federal government's saving position from 1992 to 1999 more than offset the sharp drop in the personal saving rate and helped lift national saving from less than 16 percent of nominal

GDP in 1992 and 1993 to a range of about 18 1/2 percent to 19 percent over the past several quarters.

Federal debt growth has mirrored the turnaround in the government's saving position. In the 1980s and early 1990s, borrowing resulted in large additions to the volume of outstanding government debt. In contrast, with the budget in surplus the past two years, the Treasury has been paying down debt. Without the rise in federal saving and the reversal in borrowing, interest rates in recent years likely would have been higher than they have been, and private capital formation, a key element in the vigorous economic expansion, would have been lower, perhaps appreciably.

The Treasury responded to its lower borrowing requirements in 1999 primarily by reducing the number of auctions of thirty-year bonds from three to two and by trimming auction sizes for notes and Treasury inflation-indexed securities (TIIS). Weekly bill volumes were increased from 1998 levels, however, to help build up cash holdings as a Y2K precaution. For 2000, the Treasury plans major changes in debt management in an attempt to keep down the average maturity of the debt and maintain sufficient auction sizes to support the liquidity and benchmark status of its most recently issued securities, while still retiring large volumes of debt. Alternate quarterly refunding auctions of five- and ten-year notes and semiannual auctions of thirty-year bonds will now be smaller re-openings of existing issues rather than new issues. Thirty-year TIIS will now be auctioned once a year rather than twice, and the two auctions of ten-year TIIS will be modestly reduced. Auctions of one-year Treasury bills will drop from thirteen a year to four, while weekly bill volumes will rise somewhat. Finally, the Treasury plans to enter the market to buy back in "reverse

auctions" as much as \$30 billion of outstanding securities this year, beginning in March or April.

State and local government debt expanded 4 1/4 percent in 1999, well off the previous year's elevated pace. Borrowing for new capital investment edged up, but the roughly full-percentage-point rise in municipal bond yields over the year led to a sharp drop in advance refundings, which in turn pulled gross issuance below the 1998 level. Tax revenues continued to grow at a robust rate, improving the financial condition of states and localities, as reflected in a ratio of debt rating upgrades to downgrades of more than three to one over the year. The surplus in the current account of state and local governments in the first three quarters of 1999 amounted to about 1/2 percent of nominal GDP, about the same as in 1998 but otherwise the largest of the past several years.

The External Sector

Trade and the Current Account

U.S. external balances deteriorated in 1999 largely because of continued declines in net exports of goods and services and some further weakening of net investment income. The nominal trade deficit for goods and services widened more than \$100 billion in 1999, to an estimated \$270 billion, as imports expanded faster than exports. For the first three quarters of the year, the current account deficit increased more than one-third, reaching \$320 billion at an annual rate, or 3 1/2 percent of GDP. In 1998, the current account deficit was 2 1/2 percent of GDP.

Real imports of goods and services expanded strongly in 1999—about 13 percent according to preliminary estimates—as the rapid import growth

during the first half of the year was extended through the second half. The expansion of real imports was fueled by the continued strong growth of U.S. domestic expenditures. Declines in non-oil import prices through most of the year, partly reflecting previous dollar appreciation, contributed as well. All major import categories other than aircraft and oil recorded strong increases. While U.S. consumption of oil rose about 4 percent in 1999, the quantity of oil imported was about unchanged, and inventories were drawn down.

Real exports of goods and services rose an estimated 4 percent in 1999, a somewhat faster pace than in 1998. Economic activity abroad picked up, particularly in Canada, Mexico, and Asian developing economies. However, the lagged effects of relative prices owing to past dollar appreciation held down exports. An upturn in U.S. exports to Canada, Mexico, and key Asian emerging markets contrasted with a much flatter pace of exports to Europe, Japan, and South America. Capital equipment composed about 45 percent of U.S. goods exports, industrial supplies were 20 percent, and agricultural, automotive, and consumer goods were each roughly 10 percent.

Capital Account

U.S. capital flows in 1999 reflected the relatively strong cyclical position of the U.S. economy and the global wave of corporate mergers. Foreign purchases of U.S. securities remained brisk—near the level of the previous two years, in which they had been elevated by the global financial unrest. The composition of foreign securities purchases in 1999 showed a continued shift away from Treasuries, in part because of the U.S. budget surplus and the decline in the supply of Treasuries relative to other

securities and, perhaps, to a general increased tolerance of foreign investors for risk as markets calmed after their turmoil of late 1998. Available data indicate that private foreigners sold on net about \$20 billion in Treasuries, compared with net purchases of \$50 billion in 1998 and \$150 billion in 1997. These sales of Treasuries were more than offset by a pickup in foreign purchases of their nearest substitute—government agency bonds—as well as corporate bonds and equities.

Foreign direct investment flows into the United States were also robust in 1999, with the pace of inflows in the first three quarters only slightly below the record inflow set in 1998. As in 1998, direct investment inflows last year were elevated by several large mergers, which left their imprint on other parts of the capital account as well. In the past two years, many of the largest mergers have been financed by a swap of equity in the foreign acquiring firm for equity in the U.S. firm being acquired. The Bureau of Economic Analysis estimates that U.S. residents acquired more than \$100 billion of foreign equity through this mechanism in the first three quarters of 1999. Separate data on market transactions indicate that U.S. residents made net purchases of Japanese equities. They also sold European equities, probably in an attempt to rebalance portfolios in light of the equity acquired through stock swaps. U.S. residents on net purchased a small volume of foreign bonds in 1999. U.S. direct investment in foreign economies also reflected the global wave of merger activity in 1999 and will likely total something near its record level of 1998.

Available data indicate a return to sizable capital inflows from foreign official sources in 1999, following a modest outflow in 1998. The decline in foreign official assets in the United States in

1998 was fairly widespread, as many countries found their currencies under unwanted downward pressure during the turmoil. By contrast, the increase in foreign official reserves in the United States in 1999 was fairly concentrated in a relatively few countries that experienced unwanted upward pressure on their currencies vis-à-vis the U.S. dollar.

The Labor Market

As in other recent years, the rapid growth of aggregate output in 1999 was associated with both strong growth of productivity and brisk gains in employment. According to the initial estimate for 1999, output per hour in the nonfarm business sector rose $3\frac{1}{4}$ percent over the four quarters of the year, and historical data were revised this past year to show stronger gains than previously reported in the years preceding 1999. As the data stand currently, the average rate of rise in output per hour over the past four years is about $2\frac{3}{4}$ percent—up from an average of $1\frac{1}{2}$ percent from the mid-1970s to the end of 1995. Some of the step-up in productivity growth since 1995 can be traced to high levels of capital spending and an accompanying faster rate of increase in the amount of capital per worker. Beyond that, the causes are more difficult to pin down quantitatively but are apparently related to increased technological and organizational efficiencies. Firms are not only expanding the stock of capital but are also discovering many new uses for the technologies embodied in that capital, and workers are becoming more skilled at employing the new technologies.

The number of jobs on nonfarm payrolls rose slightly more than 2 percent from the end of 1998 to the end of 1999, a net increase of 2.7 million. Annual job gains had ranged between $2\frac{1}{4}$ percent and $2\frac{3}{4}$ percent over the 1996–98

period. Once again in 1999, the private service-producing sector accounted for most of the total rise in payroll employment, led by many of the same categories that had been strong in previous years—transportation and communications, computer services, engineering and management, recreation, and personnel supply. In the construction sector, employment growth remained quite brisk—more than 4 percent from the final quarter of 1998 to the final quarter of 1999. Manufacturing employment, influenced by spillover from the disruptions in foreign economies, continued to decline sharply in the first half of the year, but losses thereafter were small as factory production strengthened. Since the start of the expansion in 1991, the job count in manufacturing has changed little, on net, but with factory productivity rising rapidly, manufacturing output has trended up at a brisk pace.

In 1999, employers continued to face a tight labor market. Some increase in the workforce came from the pool of the unemployed, and the jobless rate declined to an average of 4.1 percent in the fourth quarter. In January 2000, the rate edged down to 4.0 percent, the lowest monthly reading since the start of the 1970s. Because the unemployment rate is a reflection only of the number of persons who are available for work and actively looking, it does not capture potential labor supply that is one step removed—namely those individuals who are interested in working but are not actively seeking work at the current time. However, like the unemployment rate itself, an augmented rate that includes these interested nonparticipants also has declined to a low level, as more individuals have taken advantage of expanding opportunities to work.

Although the supply-demand balance in the labor market tightened further in 1999, the added pressure did not trans-

late into bigger increases in nominal hourly compensation. The employment cost index for hourly compensation of workers in private nonfarm industries rose 3.4 percent in nominal terms during 1999, little changed from the increase of the previous year, and an alternative measure of hourly compensation from the nonfarm productivity and cost data slowed from a 5 1/4 percent increase in 1998 to a 4 1/2 percent rise this past year. Compensation gains in 1999 probably were influenced, in part, by the very low inflation rate of 1998, which resulted in unexpectedly large increases in inflation-adjusted pay in that year and probably damped wage increments last year. According to the employment cost index, the hourly wages of workers in private industry rose 3 1/2 percent in nominal terms after having increased about 4 percent in each of the two previous years. The hourly cost to employers of the nonwage benefits provided to employees also rose 3 1/2 percent in 1999, but this increase was considerably larger than those of the past few years. Much of the pickup in benefit costs came from a faster rate of rise in the costs of health insurance, which were reportedly driven up by several factors: a moderate acceleration in the price of medical care, the efforts of some insurers to rebuild profit margins, and the recognition by employers that an attractive health benefits package was helpful in hiring and retaining workers in a tight labor market.

Because the employment cost index does not capture some forms of compensation that employers have been using more extensively—for example, stock options, signing bonuses, and employee price discounts on in-store purchases—it has likely been understating the true size of workers' gains. The productivity and cost measure of hourly compensation captures at least some of the labor costs that the employment cost index omits,

and this broader coverage may explain why the productivity and cost measure has been rising faster. However, it, too, is affected by problems of measurement, some of which would lead to overstatement of the rate of rise in hourly compensation.

With the rise in output per hour in the nonfarm business sector in 1999 offsetting about three-fourths of the rise in the productivity and cost measure of nominal hourly compensation, nonfarm unit labor costs were up just a shade more than 1 percent. Unit labor costs had increased slightly more than 2 percent in both 1997 and 1998 and less than 1 percent in 1996. Because labor costs are by far the most important item in total unit costs, these small increases have been crucial to keeping inflation low.

Prices

Rates of increase in the broader measures of aggregate prices in 1999 were somewhat larger than those of 1998. The chain-type price index for GDP—which measures inflation for goods and services *produced* domestically—moved up about 1½ percent, a pickup of ½ percentage point from the increase of 1998. In comparison, acceleration in various price measures for goods and services *purchased* amounted to 1 percentage point or more: The chain-type price index for personal consumption expenditures increased 2 percent, twice as much as in the previous year, and the chain-type price index for gross domestic purchases, which measures prices of the aggregate purchases of consumers, businesses, and governments, moved up close to 2 percent after an increase of just ¾ percent in 1998. The consumer price index rose more than 2½ percent over the four quarters of the year after having increased 1½ percent in 1998.

The acceleration in the prices of goods and services purchased was driven in part by a reversal in import prices. In 1998, the chain-type price index for imports of goods and services had fallen 5 percent, but it rose 3 percent in 1999. A big swing in oil prices—down in 1998 but up sharply in 1999—accounted for a large part of this turnaround. Excluding oil, the prices of imported goods continued to fall in 1999 but, according to the initial estimate, less rapidly than over the three previous years, when downward pressure from appreciation of the dollar had been considerable. The prices of imported materials and supplies rebounded, but the prices of imported capital goods fell sharply further. Meanwhile, the chain-type price index for exports increased 1 percent in the latest year, reversing a portion of the 2½ percent drop of 1998, when the sluggishness of foreign economies and the strength of the dollar had pressured U.S. producers to mark down the prices charged to foreign buyers.

Prices of domestically produced primary materials, which tend to be especially sensitive to developments in world markets, rebounded sharply in 1999. The producer price index for crude materials excluding food and energy advanced about 10 percent after having fallen about 15 percent in 1998, and the PPI for intermediate materials excluding food and energy increased about 1½ percent, reversing a 1998 decline of about that same size. But further along in the chain of processing and distribution, the effects of these increases were not very visible. The producer price index for finished goods excluding food and energy rose slightly less rapidly in 1999 than in 1998, and the consumer price index for goods excluding food and energy rose at about the same low rate that it had in 1998. Large gains in productivity and a mar-

gin of excess capacity in the industrial sector helped keep prices of goods in check, even as growth of domestic demand remained exceptionally strong.

“Core” inflation at the consumer level—which takes account of the prices of services as well as the prices of goods and excludes food and energy prices—changed little in 1999. The increase in the core index for personal consumption expenditures, 1½ percent over the four quarters of the year, was about the same as the increase in 1998. As measured by the CPI, core inflation was 2 percent this past year, about ¼ percentage point lower than in 1998, but the deceleration was a reflection of a change in CPI methodology that had taken place at the start of last year; on a methodologically consistent basis, the rise in the core CPI was about the same in both years.

In the national accounts, the chain-type price index for private fixed investment edged up ¼ percent in 1999 after having fallen about ¾ percent in 1998. With construction costs rising, the index for residential investment increased 3¾ percent, its largest advance in several years. By contrast, the price index for nonresidential investment declined moderately, as a result of another drop in the index for equipment and software.

Alternative Measures of Price Change

Percent

Price measure	1998	1999
<i>Chain-type</i>		
Gross domestic product	1.1	1.6
Gross domestic purchases .....	.7	1.9
Personal consumption		
expenditures	1.0	2.0
Excluding food and energy ...	1.4	1.5
<i>Fixed-weight</i>		
Consumer price index	1.5	2.6
Excluding food and energy ...	2.3	2.0

NOTE. Changes are based on quarterly averages and are measured to the fourth quarter of the year indicated from the fourth quarter of the preceding year.

Falling equipment prices are one channel through which faster productivity gains have been reshaping the economy in recent years; the drop in prices has contributed to high levels of investment, rapid expansion of the capital stock, and a step-up in the growth of potential output.

U.S. Financial Markets

Financial markets were somewhat unsettled as 1999 began, with the disruptions of the previous autumn still unwinding and the devaluation of the Brazilian *real* causing some jitters around mid-January. However, market conditions improved into the spring, evidenced in part by increased trading volumes and narrowed bid-asked and credit spreads, as it became increasingly evident that strong growth was continuing in the United States, and that economies abroad were rebounding. In this environment, market participants began to anticipate that the Federal Reserve would reverse the policy easings of the preceding fall, and interest rates rose. Nevertheless, improved profit expectations apparently more than offset the interest rate increases, and equity prices continued to climb until late spring. From May into the fall, both equity prices and longer-term interest rates moved in a choppy fashion, while short-term interest rates moved up with monetary policy tightenings in June, August, and November. Worries about Y2K became pronounced after midyear, and expectations of an acceleration of borrowing ahead of the fourth quarter prompted a resurgence in liquidity and credit premiums. In the closing months of the year, however, the likelihood of outsized demands for credit and liquidity over the year-end subsided, causing spreads to narrow, and stock prices surged once again. After the century

date change passed without disruptions, liquidity improved and trading volumes grew, although both bond and equity prices have remained quite volatile so far this year.

Interest Rates

Over the first few months of 1999, short-term Treasury rates moved in a narrow range, anchored by an unchanged stance of monetary policy. Yields on intermediate- and long-term Treasury securities rose, however, as the flight to quality and liquidity of the preceding fall unwound, and incoming data pointed to continued robust economic growth and likely Federal Reserve tightening. Over most of the rest of the year, short-term Treasury rates moved broadly in line with the three quarter-point increases in the target federal funds rate; longer-term yields rose less, as markets had already anticipated some of those policy actions.

Bond and note yields moved sharply higher from early November 1999 to mid-January 2000, as Y2K fears diminished, incoming data indicated surprising economic vitality, and the century date change was negotiated without significant technical problems. In recent weeks, long-term Treasury yields have retraced a good portion of that rise on expectations of reduced supply stemming from the Treasury's new buy-back program and reductions in the amount of bonds to be auctioned. This rally has been mostly confined to the long end of the Treasury market; long-term corporate bond yields have fallen only slightly, and yields are largely unchanged or have risen a little further at maturities of ten years or less, where most private borrowing is concentrated.

Concerns about liquidity and credit risk around the century date change led

to large premiums in private money market rates in the second half of 1999. During the summer, this "safe haven" demand held down rates on Treasury bills maturing early in the new year, until the announcement in August that the Treasury was targeting an unusually large year-end cash balance, implying that it would issue a substantial volume of January-dated cash management bills. Year-end premiums in eurodollar, commercial paper, term federal funds, and other money markets—measured as the implied forward rate for a monthlong period spanning the turn relative to the rate for a neighboring period—rose earlier and reached much higher levels than in recent years.

Those year-end premiums peaked in late October and then declined substantially, as markets reflected increased confidence in technical readiness and special assurances from central banks that sufficient liquidity would be available around the century date change. Important among these assurances were several of the Federal Reserve initiatives described in the first section of this report. Securities dealers took particular advantage of the widened pools of acceptable collateral for open market operations and used large volumes of federal agency debt and mortgage-backed securities in repurchase agreements with the Open Market Desk in the closing weeks of the year, which helped to relieve a potential scarcity of Treasury collateral over the turn. Market participants also purchased options on nearly \$500 billion worth of repurchase agreements under the standby financing facility and pledged more than \$650 billion of collateral for borrowing at the discount window. With the smooth roll-over, however, none of the RP options were exercised, and borrowing at the discount window turned out to be fairly light.

Equity Prices

Nearly all major stock indexes ended 1999 in record territory. The Nasdaq composite index paced the advance by soaring 86 percent over the year, and the S&P 500 and Dow Jones Industrial Average posted still-impressive gains of 20 percent and 25 percent. Last year was the fifth consecutive year that all three indexes posted double-digit returns. Most stock indexes moved up sharply over the first few months of the year and were about flat on net from May through August; they then declined into October before surging in the final months of the year. The Nasdaq index, in particular, achieved most of its annual gains in November and December. Stock price advances in 1999 were not very broad-based, however: More than half of the S&P 500 issues lost value over the year. So far in 2000, stock prices have been volatile and mixed; major indexes currently span a range from the Dow's nearly 10 percent drop to the Nasdaq's 8 percent advance.

Almost all key industry groups performed well. One exception was shares of financial firms, which were flat, on balance. Investor perceptions that rising interest rates would hurt earnings and, possibly, concern over loan quality apparently offset the boost resulting from passage in the fall of legislation reforming the depression-era Glass-Steagall constraints on combining commercial banking with insurance and investment banking. Small-cap stocks, which had lagged in 1998, also performed well; the Russell 2000 index climbed 20 percent over the year and finally surpassed its April 1998 peak in late December.

At large firms, stock price gains about kept pace with expected earnings growth in 1999, and the S&P 500 one-year-ahead earnings-price ratio fluctu-

ated around the historically low level of 4 percent even as real interest rates rose. Meanwhile, the Nasdaq composite index's earnings-price ratio (using actual twelve-month trailing earnings) plummeted from an already-slim 1 1/4 percent to 1/2 percent, suggesting that investors are pricing in expectations of tremendous earnings growth at technology firms relative to historical norms.

Debt and the Monetary Aggregates

Debt and Depository Intermediation

The debt of domestic nonfinancial sectors is estimated to have grown 6 1/2 percent in 1999 on a fourth-quarter-to-fourth-quarter basis, near the upper end of the FOMC's 3 percent to 7 percent range and about a percentage point faster than nominal GDP. As was the case in 1998, robust outlays on consumer durable goods, housing, and business investment, as well as substantial net equity retirements, helped sustain nonfederal sector debt growth at rates above 9 percent. Meanwhile, the dramatically increased federal budget surplus allowed the Treasury to reduce its outstanding debt about 2 percent. These movements follow the pattern of recent years whereby increases in the debt of households, businesses, and state and local governments relative to GDP have come close to matching declines in the federal government share, consistent with reduced pressure on available savings from the federal sector facilitating private borrowing.

After increasing for several years, the share of total credit accounted for by depository institutions leveled out in 1999. Growth in credit extended by those institutions edged down to 6 1/2 percent from 6 3/4 percent in 1998. Adjusted for mark-to-market accounting rules, bank credit growth retreated from

10 1/4 percent in 1998 to 5 1/2 percent last year, with a considerable portion of the slowdown attributable to an unwinding of the surge in holdings of non-U.S. government securities, business loans, and security loans that had been built up during the market disruptions in the fall of 1998. Real estate loans constituted one of the few categories of bank credit that accelerated in 1999. By contrast, thrift credit swelled 9 percent, up from a 4 1/2 percent gain in 1998, as rising mortgage interest rates led borrowers to opt more frequently for adjustable-rate mortgages, which thrifts tend to keep on their books. The trend toward securitization of consumer loans continued in 1999: Bank originations of consumer loans were up about 5 percent, while holdings ran off at a 1 3/4 percent pace.

The Monetary Aggregates

Growth of the broad monetary aggregates moderated significantly last year. Nevertheless, as was expected by the FOMC last February and July, both M2 and M3 finished the year above their annual price-stability ranges. M3 rose 7 1/2 percent in 1999, somewhat outside the Committee's range of 2 percent to 6 percent but far below the nearly 11 percent pace of 1998. M3 growth retreated early in 1999, as the surge in depository credit in the final quarter of 1998 unwound and depository institutions curbed their issuance of the managed liabilities included in that aggregate. At that time, the expansion of institution-only money funds also slowed with the ebbing of heightened preferences for liquid assets. However, M3 bulged again in the fourth quarter of 1999, as loan growth picked up and banks funded the increase mainly with large time deposits and other managed liabilities in M3. U.S. branches and

Growth of Money and Debt

Percent

Period	M1	M2	M3	Domestic non-financial debt
<i>Annual¹</i>				
1989 .....	.6	5.2	4.1	7.4
1990	4.2	4.2	1.9	6.7
1991	7.9	3.1	1.1	4.5
1992	14.4	1.8	.6	4.5
1993	10.6	1.4	1.0	4.9
1994	2.5	.6	1.7	4.9
1995	-1.5	3.9	6.1	5.5
1996	-4.5	4.5	6.8	5.4
1997	-1.2	5.6	8.9	5.2
1998	2.2	8.5	10.9	6.7
1999	1.9	6.2	7.5	6.6
<i>Quarterly (annual rate)²</i>				
1999:Q1	1.9	7.5	8.2	6.7
Q2	2.2	6.0	6.0	6.9
Q3	-2.0	5.5	5.1	6.0
Q4	5.3	5.4	10.0	6.2

NOTE. M1 consists of currency, travelers checks, demand deposits, and other checkable deposits. M2 consists of M1 plus savings deposits (including money market deposit accounts), small-denomination time deposits, and balances in retail money market funds. M3 consists of M2 plus large-denomination time deposits, balances in institutional money market funds, RP liabilities (overnight and term), and eurodollars (overnight and term). Debt consists of the outstanding credit market debt of the U.S. government, state and local governments, households and nonprofit organizations, nonfinancial businesses, and farms.

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.

agencies of foreign banks stepped up issuance of large certificates of deposit, in part to augment the liquidity of their head offices over the century date change, apparently because it was cheaper to fund in U.S. markets. Domestic banks needed the additional funding because of strong loan growth and a buildup in vault cash for Y2K contingencies. Corporations apparently built up year-end precautionary liquidity in institution-only money funds, which provided a further boost to M3 late in the year. Early in 2000, these effects began to unwind.

M2 increased $6\frac{1}{4}$ percent in 1999, somewhat above the FOMC's range of 1 percent to 5 percent. Both the easing of elevated demands for liquid assets that had boosted M2 in the fourth quarter of 1998 and a rise in its opportunity cost (the difference between interest rates on short-term market instruments and the rates available on M2 assets) tended to bring down M2 growth in 1999. That rise in opportunity cost also helped to halt the decline in M2 velocity that had begun in mid-1997, although the $1\frac{3}{4}$ percent (annual rate) rise in velocity over the second half of 1999 was not enough to offset the drop in the first half of the year. Within M2, currency demand grew briskly over the year as a whole, reflecting booming retail sales and, late in the year, some precautionary buildup for Y2K. Money stock currency grew at an annualized rate of 28 percent in December and then ran off in the weeks after the turn of the year.

In anticipation of a surge in the public's demand for currency, depository institutions vastly expanded their holdings of vault cash, beginning in the fall to avoid potential constraints in the ability of the armored car industry to accommodate large currency shipments late in the year. Depositories' cash drawings reduced their Federal Reserve balances and drained substantial volumes of reserves, and, in mid-December, large precautionary increases in the Treasury's cash balance and in foreign central banks' liquid investments at the Federal Reserve did as well. The magnitude of these flows was largely anticipated by the System, and, to replace the lost reserves, during the fourth quarter the Desk entered into a number of longer-maturity repurchase agreements timed to mature early in 2000. The Desk also executed a large number of short-term repurchase transactions for over the turn of the year, including some in the

forward market, to provide sufficient reserves and support market liquidity.

The public's demand for currency through year-end, though appreciable, remained well below the level for which the banking system was prepared, and vault cash at the beginning of January stood about \$38 billion above its year-ago level. This excess vault cash, and other century date change effects in money and reserve markets, unwound quickly after the smooth transition into the new year.

International Developments

Global economic conditions improved in 1999 after a year of depressed growth and heightened financial market instability. Financial markets in developing countries, which had been hit hard by crises in Asia and Russia in recent years, recovered last year. The pace of activity in developing countries increased, with Asian emerging-market economies in particular bouncing back strongly from the output declines of the preceding year. Real growth improved in almost all the major industrial economies as well. This strengthening of activity contributed to a general rise in equity prices and a widespread increase in interest rates. Despite stronger activity and higher prices for oil and other commodities, average foreign inflation was lower in 1999 than in 1998, as output remained below potential in most countries.

Although the general theme in emerging financial markets in 1999 was a return to stability, the year began with heightened tension as a result of a financial crisis in Brazil. With the effects of the August 1998 collapse of the ruble and the default on Russian government debt still reverberating, Brazil was forced to abandon its exchange-rate-based stabilization program in January

1999. The *real*, allowed to float, soon fell nearly 50 percent against the dollar, generating fears of a depreciation-inflation spiral that could return Brazil to its high-inflation past. In addition, there were concerns that the government might default on its domestic-currency and dollar-indexed debt, the latter totaling more than \$50 billion. In the event, these fears proved unfounded. The turning point appears to have come in March when a new central bank governor announced that fighting inflation was a top priority and interest rates were substantially raised to support the *real*. Over the remainder of the year, Brazilian financial markets stabilized on balance, despite continuing concerns about the government's ability to reduce the fiscal deficit. Inflation, although accelerating from the previous year, remained under 10 percent. Brazilian economic activity also recovered somewhat in 1999, after declining in 1998, as the return of confidence allowed officials to lower short-term interest rates substantially from their crisis-related peak levels of early in the year.

The Brazilian crisis triggered some renewed financial stress in other Latin American economies, and domestic interest rates and Brady bond yield spreads increased sharply from levels already elevated by the Russian crisis. However, as the situation in Brazil improved, financial conditions in the rest of the region stabilized relatively rapidly. Even so, the combination of elevated risk premiums and diminished access to international credit markets tended to depress activity in much of the region in the first half of 1999. Probably the most strongly affected was Argentina, where the exchange rate peg to the dollar was maintained only at the cost of continued high real interest rates that contributed to the decline in real GDP in 1999. In contrast, real

GDP in Mexico rose an estimated 6 percent in 1999, aided by higher oil prices and strong export growth to the United States. The peso appreciated against the dollar for the year as a whole, despite a Mexican inflation rate about 10 percentage points higher than in the United States.

The recovery of activity last year in Asian developing countries was earlier, more widespread, and sharper than in Latin America, just as the downturn had been the previous year. After a steep drop in activity in the immediate wake of the financial crises that hit several Asian emerging-market economies in late 1997, the preconditions for a revival in activity were set by measures initiated to stabilize shaky financial markets and banking sectors, often in conjunction with International Monetary Fund programs that provided financial support. Once financial conditions had been stabilized, monetary policies turned accommodative in 1998, and this stimulus, along with the shift toward fiscal deficits and an ongoing boost to net exports provided by the sharp depreciations of their currencies, laid the foundation for last year's strong revival in activity. Korea's recovery was the most robust, with real GDP estimated to have increased more than 10 percent in 1999 after falling 5 percent the previous year. The government continued to make progress toward needed financial and corporate sector reform. However, significant weaknesses remained, as evidenced by the near collapse of Daewoo, Korea's second largest conglomerate. Other Asian developing countries that experienced financial difficulties in late 1997 (Thailand, Malaysia, Indonesia, and the Philippines) also recorded increases in real GDP in 1999 after declines the previous year. Indonesian financial markets were buffeted severely at times during 1999

by concerns about political instability, but the rupiah ended the year with a modest net appreciation against the dollar. The other former crisis countries also saw their currencies stabilize or slightly appreciate against the dollar. Inflation rates in these countries generally declined, despite the pickup in activity and higher prices for oil and other commodities. Inflation was held down by the elevated, if diminishing, levels of excess capacity and unemployment and by a waning of the inflationary impact of previous exchange rate depreciations.

In China, real growth slowed moderately in 1999. Given China's exchange rate peg to the dollar, the sizable depreciations elsewhere in Asia in 1997 and 1998 led to a sharp appreciation of China's real effective exchange rate, and there was speculation last year that the renminbi might be devalued. However, with China's trade balance continuing in substantial, though reduced, surplus, Chinese officials maintained the exchange rate peg to the dollar last year and stated their intention of extending it through at least this year. After the onset of the Asian financial crisis, continuance of Hong Kong's currency-board-maintained peg to the U.S. dollar was also questioned. In the event, the tie to the dollar was sustained, but only at the cost of high real interest rates, which contributed to a decrease in output in Hong Kong in 1998 and early 1999 and a decline of consumer prices over this period. However, real GDP started to move up again later in the year, reflecting in part the strong revival of activity in the rest of Asia.

In Russia, economic activity increased last year despite persistent and severe structural problems. Real GDP, which had dropped nearly 10 percent in 1998 as a result of the domestic financial crisis, recovered about half the loss

last year. Net exports rose strongly, boosted by the lagged effect of the substantial real depreciation of the ruble in late 1998 and by higher oil prices. The inflation rate moderated to about 50 percent, somewhat greater than the depreciation of the ruble over the course of the year.

The dollar's average foreign exchange value, measured on a trade-weighted basis against the currencies of a broad group of important U.S. trading partners, ended 1999 little changed from its level at the beginning of the year. There appeared to be two main, roughly offsetting, pressures on the dollar last year. On the one hand, the continued very strong growth of the U.S. economy relative to foreign economies tended to support the dollar. On the other hand, the further rise in U.S. external deficits—with the U.S. current account deficit moving up toward 4 percent of GDP by the end of the year—may have tended to hold down the dollar because of investor concerns that the associated strong net demand for dollar assets might prove unsustainable. So far this year, the dollar's average exchange value has increased slightly, boosted by new evidence of strong U.S. growth. Against the currencies of the major foreign industrial countries, the dollar's most notable movements in 1999 were a substantial depreciation against the Japanese yen and a significant appreciation relative to the euro.

The dollar depreciated 10 percent on balance against the yen over the course of 1999. In the first half of the year, the dollar strengthened slightly relative to the yen, as growth in Japan appeared to remain sluggish and Japanese monetary authorities reduced short-term interest rates to near zero in an effort to jump-start the economy. However, around midyear, several signs of a revival of activity—particularly the announcement

of unanticipated strong growth in real GDP in the first quarter—triggered a depreciation of the dollar relative to the yen amid reports of large inflows of foreign capital into the Japanese stock market. Data releases showing that the U.S. current account deficit had reached record levels in both the second and third quarters of the year also appeared to be associated with depreciations of the dollar against the yen. Concerned that a stronger yen could harm the fledgling recovery, Japanese monetary authorities intervened heavily to weaken the yen on numerous occasions. So far this year, the dollar has firmed about 7 percent against the yen. Japanese real GDP increased somewhat in 1999, following two consecutive years of decline. Growth was concentrated in the first half of the year, when domestic demand surged, led by fiscal stimulus. Later in the year, domestic demand slumped, as the pace of fiscal expansion flagged. Net exports made virtually no contribution to growth for the year as a whole. Japanese consumer prices declined slightly on balance over the course of the year.

The new European currency, the euro, came into operation at the start of 1999, marking the beginning of stage three of European economic and monetary union. The rates of exchange between the euro and the currencies of the eleven countries adopting the new currency were set at the end of 1998; based on these rates, the value of the euro at its creation was just under \$1.17. From a technical perspective, the introduction of the euro went smoothly, and on its first day of trading its value moved higher. However, the euro soon started to weaken against the dollar, influenced by indications that euro-area growth would remain very slow. After approaching parity with the dollar in early July, the euro rebounded, partly on gathering signs of European recov-

ery. However, the currency weakened again in the fall, and in early December it reached parity with the dollar, about where it closed the year. The euro's weakness late in the year was attributed in part to concerns about the pace of market-oriented structural reforms in continental Europe and to a political wrangle over the proposed imposition of a withholding tax on investment income. On balance, the dollar appreciated 16 percent relative to the euro over 1999. So far this year, the dollar has strengthened 2 percent further against the euro. Although the euro's foreign exchange value weakened in its first year of operation, the volume of euro-denominated transactions—particularly the issuance of debt securities—expanded rapidly.

In the eleven European countries that now fix their currencies to the euro, real GDP growth remained weak early in 1999 but strengthened subsequently and averaged an estimated 3 percent rate for the year as a whole. Net exports made a significant positive contribution to growth, supported by a revival of demand in Asia and Eastern Europe and by the effects of the euro's depreciation. The areawide unemployment rate declined, albeit to a still-high rate of nearly 10 percent. In the spring, the European central bank lowered its policy rate 50 basis points, to 2½ percent. This decline was reversed later in the year in reaction to accumulating evidence of a pickup in activity, and the rate was raised an additional 25 basis points earlier this month. The euro-area inflation rate edged up in 1999, boosted by higher oil prices, but still remained below the 2 percent target ceiling.

Growth in the United Kingdom also moved higher on balance in 1999, with growth picking up over the course of the year. Along with the strengthening of global demand, the recovery was stimu-

lated by a series of official interest rate reductions, totaling 250 basis points, undertaken by the Bank of England over the last half of 1998 and the first half of 1999. Later in 1999 and early this year, the policy rate was raised four times for a total of 100 basis points, with officials citing the need to keep inflation below its 2½ percent target level in light of the strength of consumption and the housing market and continuing tight conditions in the labor market. On balance, the dollar appreciated slightly against the pound over the course of 1999.

In Canada, real growth recovered in 1999 after slumping the previous year in response to the global slowdown and the related drop in the prices of Canadian commodity exports. Last year, strong demand from the United States spurred Canadian exports while rising consumer and business confidence supported domestic demand. In the spring, the Bank of Canada lowered its official interest rate twice for a total of 50 basis points in an effort to stimulate activity in the context of a rising Canadian dollar. This decline was reversed by 25-basis-point increases near the end of the year and earlier this month, as Canadian inflation moved above the midpoint of its target range, the pace of output growth increased, and U.S. interest rates moved higher. Over the course of 1999, the U.S. dollar depreciated 6 percent on balance against the Canadian dollar.

Concerns about liquidity and credit risk related to the century date change generated a temporary bulge in year-end premiums in money market rates in the second half of the year in some countries. For the euro, borrowing costs for short-term interbank funding over the year changeover—as measured by the interest rate implied by the forward market for a one-month loan spanning the year-end relative to the rates for neighboring months—started to rise in late

summer but then reversed nearly all of this increase in late October and early November before moving up more moderately in December. The sharp October–November decline in the year-changeover funding premium came in response to a series of announcements by major central banks that outlined and clarified the measures these institutions were prepared to undertake to alleviate potential liquidity problems related to the century date change. For yen funding, the century date change premium moved in a different pattern, fluctuating around a relatively low level before spiking sharply for several days just before the year-end. The late-December jump in the yen funding premium was partly in response to date change-related illiquidity in the Japanese government bond repo market that emerged in early December and persisted into early January. To counter these conditions, toward the end of the year the Bank of Japan infused huge amounts of liquidity into its domestic banking system, which soon brought short-term yen funding costs back down to near zero.

Bond yields in the major foreign industrial countries generally moved higher on balance in 1999. Long-term interest rates were boosted by mounting evidence that economic recovery was taking hold abroad and by rising expectations of monetary tightening in the United States and, later, in other industrial countries. Over the course of the year, long-term interest rates increased on balance by more than 100 basis points in nearly all the major industrial countries. The notable exception was Japan, where long-term rates were little changed.

Equity prices showed strong and widespread increases in 1999, as the pace of global activity quickened and the threat from emerging-market financial crises appeared to recede. In the

industrial countries equity prices on average rose sharply, extending the general upward trend of recent years. The average percentage increase of equity prices in developing countries was even larger, as prices recovered from their crisis-related declines of the previous year. The fact that emerging Latin American and Asian equity markets outperformed those in industrial countries lends some support to the view that global investors increased their risk tolerance, especially during the last months of the year.

Oil prices increased dramatically during 1999, fully reversing the declines in the previous two years. The average spot price for West Texas intermediate, the U.S. benchmark crude, more than doubled, from around \$12 per barrel at the beginning of the year to more than \$26 per barrel in December. This rebound in oil prices was driven by a combination of strengthening world demand and constrained world supply. The strong U.S. economy, combined with a recovery of economic activity abroad and a somewhat more normal weather pattern, led to a 2 percent increase in world oil consumption. Oil production, on the other hand, declined 2 percent, primarily because of reduced supplies from OPEC and other key producers. Starting last spring, OPEC consistently held production near targeted levels, in marked contrast to the widespread lack of compliance that characterized earlier agreements. So far this year, oil prices have risen further on speculation over a possible extension of current OPEC production targets and the onset of unexpectedly cold weather in key consuming regions.

The price of gold fluctuated substantially in 1999. The price declined to near a twenty-year low of about \$250 per ounce at midyear as several central banks, including the Bank of

England and the Swiss National Bank, announced plans to sell a sizable portion of their reserves. The September announcement that fifteen European central banks, including the two just mentioned, would limit their aggregate sales of bullion and curtail leasing activities, saw the price of gold briefly rise above \$320 per ounce before turning down later in the year. Recently, the price has moved back up, to above \$300 per ounce.

Report forwarded to the Congress on July 20, 2000.

Report of July 20, 2000

Monetary Policy and the Economic Outlook

The impressive performance of the U.S. economy persisted in the first half of 2000 with economic activity expanding at a rapid pace. Overall rates of inflation were noticeably higher, largely as a result of steep increases in energy prices. The remarkable wave of new technologies and the associated surge in capital investment have continued to boost potential supply and to help contain price pressures at high levels of labor resource use. At the same time, rising productivity growth—working through its effects on wealth and consumption, as well as on investment spending—has been one of the important factors contributing to rapid increases in aggregate demand that have exceeded even the stepped-up increases in potential supply. Under such circumstances, and with the pool of available labor already at an unusually low level, the continued expansion of aggregate demand in excess of the growth in potential supply increasingly threatened to set off greater price pressures.

Because price stability is essential to achieving maximum sustainable economic growth, heading off these pressures has been critical to extending the extraordinary performance of the U.S. economy.

To promote balance between aggregate demand and potential supply and to contain inflation pressures, the Federal Open Market Committee (FOMC) took additional firming actions this year, raising the benchmark federal funds rate 1 percentage point between February and May. The tighter stance of monetary policy, along with the ongoing strength of credit demands, has led to less accommodative financial conditions: On balance, since the beginning of the year, real interest rates have increased, equity prices have changed little after a sizable run-up in 1999, and lenders have become more cautious about extending credit, especially to marginal borrowers. Still, households and businesses have continued to borrow at a rapid pace, and the growth of M2 remained relatively robust, despite the rise in market interest rates. The favorable outlook for the U.S. economy has contributed to a further strengthening of the dollar, despite tighter monetary policy and rising interest rates in most other industrial countries.

Perhaps partly reflecting firmer financial conditions, the incoming economic data since May have suggested some moderation in the growth of aggregate demand. Nonetheless, labor markets remained tight at the time of the FOMC meeting in June, and it was unclear whether the slowdown represented a decisive shift to more sustainable growth or just a pause. The Committee left the stance of policy unchanged but saw the balance of risks to the economic outlook as still weighted toward rising inflation.

Monetary Policy, Financial Markets, and the Economy over the First Half of 2000

When the FOMC convened for its first two meetings of the year, in February and March, economic conditions in the United States were pointing toward an increasingly taut labor market as a consequence of a persistent imbalance between the growth rates of aggregate demand and potential aggregate supply. Reflecting the underlying strength in spending and expectations of tighter monetary policy, market interest rates were rising, especially after the century date change passed without incident. But, at the same time, equity prices were still posting appreciable gains on net. Knowing that the two safety valves that had been keeping underlying inflation from picking up until then—the economy's ability to draw on the pool of available workers and to expand its trade deficit on reasonable terms—could not be counted on indefinitely, the FOMC voted for a further tightening in monetary policy at both its February and its March meetings, raising the target for the overnight federal funds rate 25 basis points on each occasion. In related actions, the Board of Governors also approved quarter-point increases in the discount rate in both February and March.

The FOMC considered larger policy moves at its first two meetings of 2000 but concluded that significant uncertainty about the outlook for the expansion of aggregate demand in relation to that of aggregate supply, including the timing and strength of the economy's response to earlier monetary policy tightenings, warranted a more limited policy action. Still, noting that there had been few signs that the rise in interest rates over recent quarters had begun to bring demand in line with potential

supply, the Committee decided in both instances that the balance of risks going forward was weighted mainly in the direction of rising inflation pressures. In particular, it was becoming increasingly clear that the Committee would need to move more aggressively at a later meeting if imbalances continued to build and inflation and inflation expectations, which had remained relatively subdued until then, began to pick up.¹

Some readings between the March and May meetings of the FOMC on labor costs and prices suggested a possible increase of inflation pressures. Moreover, aggregate demand had continued to grow at a fast clip, and markets for labor and other resources were showing signs of further tightening. Financial market conditions had firmed in response to these developments; the substantial rise in private borrowing rates between March and May had been influenced by the buildup in expectations of more policy tightening as market participants recognized the need for higher short-term interest rates. Given all these circumstances, the FOMC decided in May to raise the target for the overnight federal funds rate 50 basis points, to 6½ percent. The Committee saw little risk in the more forceful action given the strong momentum of the economic expansion and widespread market expectations of such an action. Even after taking into account its latest action, however, the FOMC saw the strength in spending and pressures in labor markets as indicating that the balance of risks remained tilted toward rising inflation.

1. At its March and May meetings, the FOMC took a number of actions that were aimed at adjusting the implementation of monetary policy to actual and prospective reductions in the stock of Treasury debt securities. These actions are described in the discussion of U.S. financial markets.

By the June FOMC meeting, the incoming data were suggesting that the expansion of aggregate demand might be moderating toward a more sustainable pace: Consumers had increased their outlays for goods modestly during the spring; home purchases and starts appeared to have softened; and readings on the labor market suggested that the pace of hiring might be cooling off. Moreover, much of the effects on demand of previous policy firmings, including the 50 basis point tightening in May, had not yet been fully realized. Financial market participants interpreted signs of economic slowing as suggesting that the Federal Reserve probably would be able to hold inflation in check without much additional policy firming. However, whether aggregate demand had moved decisively onto a more moderate expansion track was not yet clear, and labor resource utilization remained unusually elevated. Thus, although the FOMC decided to defer any policy action in June, it indicated that the balance of risks was still on the side of rising inflation in the foreseeable future.²

Economic Projections for 2000 and 2001

The members of the Board of Governors and the Federal Reserve Bank presidents expect the current economic

2. At its June meeting, the FOMC did not establish ranges for growth of money and debt in 2000 and 2001. The legal requirement to establish and to announce such ranges had expired, and owing to uncertainties about the behavior of the velocities of debt and money, these ranges for many years have not provided useful benchmarks for the conduct of monetary policy. Nevertheless, the FOMC believes that the behavior of money and credit will continue to have value for gauging economic and financial conditions, and this report discusses recent developments in money and credit in some detail.

Economic Projections for 2000 and 2001

Percent

Indicator	Federal Reserve governors and Reserve Bank presidents		Administration ¹	
	Range	Central tendency		
2000				
<i>Change, fourth quarter to fourth quarter¹</i>				
Nominal GDP	6-7½	6½-6¾	6.0	
Real GDP ²	3¾-5	4-4½	3.9	
PCE prices ³	2-2¾	2½-2¾	3.2 ³	
<i>Average level fourth quarter</i>				
Civilian unemployment rate	4-4½	About 4	4.1	
2001				
<i>Change, fourth quarter to fourth quarter¹</i>				
Nominal GDP	5-6½	5½-6	5.3	
Real GDP ²	2½-4	3¼-3¾	3.2	
PCE prices ³	1¾-3	2-2½	2.5 ³	
<i>Average level, fourth quarter</i>				
Civilian unemployment rate	4-4½	4-4½	4.2	

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

2. Chain-weighted.
3. Chain-type price index.

expansion to continue through next year, but at a more moderate pace than the average over recent quarters. For 2000 as a whole, the central tendency of their forecasts for the rate of increase in real gross domestic product (GDP) is 4 percent to 4½ percent, measured as the change between the fourth quarter of 1999 and the fourth quarter of 2000. Over the four quarters of 2001, the central tendency forecasts of real GDP are in the 3¼ percent to 3¾ percent range. With this pace of expansion, the civilian unemployment rate should remain near its recent level of 4 percent. Even with the moderation in the pace of economic activity, the Committee members and nonvoting Bank presidents expect that inflation may be higher in 2001 than in 1999, and the Committee will need to be alert to the possibility that financial con-

ditions may need to be adjusted further to balance aggregate demand and potential supply and to keep inflation low.

Considerable uncertainties attend estimates of potential supply—both the rate of growth and the level of the economy's ability to produce on a sustained non-inflationary basis. Business investment in new equipment and software has been exceptionally high, and given the rapid pace of technological change, firms will continue to exploit opportunities to implement more-efficient processes and to speed the flow of information across markets. In such an environment, a further pickup in productivity growth is a distinct possibility. However, a portion of the very rapid rise in measured productivity in recent quarters may be a result of the cyclical characteristics of this expansion rather

than an indication of structural rates of increase consistent with holding the level of resource utilization unchanged. Current levels of labor resource utilization are already unusually high. To date, this has not led to escalating unit labor costs, but whether such a favorable performance in the labor market can be sustained is one of the important uncertainties in the outlook.

On the demand side, the adjustments in financial markets that have accompanied expected and actual tighter monetary conditions may be beginning to moderate the rise in domestic demand. As that process evolves, the substantial impetus that household spending has received in recent years from rapid gains in equity wealth should subside. The higher cost of business borrowing and more-restrictive credit supply conditions probably will not exert substantial restraint on investment decisions, particularly as long as the costs and potential productivity payoffs of new equipment and software remain attractive. The slowing in domestic spending will not be fully reflected in a more moderate expansion of domestic production. Some of the slowing will be absorbed in smaller increases in imports of goods and services, and given continued recovery in economic activity abroad, domestic firms are expected to continue seeing a boost to demand and to production from rising exports.

Regarding inflation, FOMC participants believe that the rise in consumer prices will be noticeably larger this year than in 1999 and that inflation will then drop back somewhat in 2001. The central tendency of their forecasts for the increase in the chain-type index for personal consumption expenditures is $2\frac{1}{2}$ percent to $2\frac{3}{4}$ percent over the four quarters of 2000 and 2 percent to $2\frac{1}{2}$ percent during 2001. Shaping the contour of this inflation forecast is the

expectation that the direct and indirect effects of the boost to domestic inflation this year from the rise in the price of world crude oil will be partly reversed next year if, as futures markets suggest, crude oil prices retrace this year's run-up by next year. Nonetheless, these forecasts show consumer price inflation in 2001 to have moved above the rates that prevailed over the 1997-98 period. Such a trend, were it not to show signs of quickly stabilizing or reversing, would pose a considerable risk to the continuation of the extraordinary economic performance of recent years.

The economic forecasts of the FOMC are similar to those recently released by the Administration in its Mid-Session Review of the Budget. Compared with the forecasts available in February, the Administration raised its projections for the increase in real GDP in 2000 and 2001 to rates that lie at the low end of the current range of central tendencies of Federal Reserve policymakers. The Administration also expects that the unemployment rate will remain close to 4 percent. Like the FOMC, the Administration sees consumer price inflation rising this year and falling back in 2001. After accounting for the differences in the construction of the alternative measures of consumer prices, the Administration's projections of increases in the consumer price index (CPI) of 3.2 percent in 2000 and 2.5 percent in 2001 are broadly consistent with the Committee's expectations for the chain-type price index for personal consumption expenditures.

Economic and Financial Developments in 2000

The expansion of U.S. economic activity maintained considerable momentum through the early months of 2000 despite the firming in credit markets

that has occurred over the past year. Only recently has the pace of real activity shown signs of having moderated from the extremely rapid rate of increase that prevailed during the second half of 1999 and the first quarter of 2000. Real GDP increased at an annual rate of 5½ percent in the first quarter of 2000. Private domestic final sales, which had accelerated in the second half of 1999, were particularly robust, rising at an annual rate of almost 10 percent in the first quarter. Underlying that surge in domestic spending were many of the same factors that had contributed to the considerable strength of outlays in the second half of 1999. The ongoing influence of substantial increases in real income and wealth continued to fuel consumer spending, and business investment, which continues to be undergirded by the desire to take advantage of new, cost-saving technologies, was further buoyed by an acceleration in sales and profits late last year. Export demand posted a solid gain during the first quarter while imports rose even more rapidly to meet booming domestic demand. The available data, on balance, point to another solid increase in real GDP in the second quarter, although they suggest that private household and business fixed investment spending likely slowed noticeably from the extraordinary first-quarter pace. Through June, the expansion remained brisk enough to keep labor utilization near the very high levels reached at the end of 1999 and to raise the factory utilization rate to close to its long-run average by early spring.

Inflation rates over the first half of 2000 were elevated by an additional increase in the price of imported crude oil, which led to sharp hikes in retail energy prices early in the year and again around midyear. Apart from energy, consumer price inflation so far this year has been somewhat higher than during

1999, and some of that acceleration may be attributable to the indirect effects of higher energy costs on the prices of core goods and services. Sustained strong gains in worker productivity have kept increases in unit labor costs minimal despite the persistence of a historically low rate of unemployment.

The Household Sector

Consumer Spending

Consumer spending was exceptionally vigorous during the first quarter of 2000. Real personal consumption expenditures rose at an annual rate of 7¾ percent, the sharpest increase since early 1983. At that time, the economy was rebounding from a deep recession during which households had deferred discretionary purchases. In contrast, the first-quarter surge in consumption came on the heels of two years of very robust spending during which real outlays increased at an annual rate of more than 5 percent, and the personal saving rate dropped sharply.

Outlays for durable goods, which rose at a very fast pace in 1998 and 1999, accelerated during the first quarter to an annual rate of more than 24 percent. Most notably, spending on motor vehicles, which had climbed to a new high in 1999, jumped even further in the first quarter of 2000 as unit sales of light motor vehicles soared to a record rate of 18.1 million units. In addition, households' spending on computing equipment and software rebounded after the turn of the year; some consumers apparently had postponed their purchases of these goods in late 1999 before the century date change. Outlays for nondurable goods posted a solid increase of 5¾ percent in the first quarter, marked by a sharp upturn in spending on clothing and shoes. Spending for consumer

services also picked up in the first quarter, rising at an annual rate of 5½ percent. Spending was quite brisk for a number of non-energy consumer services, ranging from recreation and telephone use to brokerage fees. Also contributing to the acceleration was a rebound in outlays for energy services, which had declined in late 1999, when weather was unseasonably warm.

In recent months, the rise in consumer spending has moderated considerably from the phenomenal pace of the first quarter, with much of the slowdown in outlays for goods. At an annual rate of 17¼ million units in the second quarter, light motor vehicles sold at a rate well below their first-quarter pace. Nonetheless, that level of sales is still historically high, and with prices remaining damped and automakers continuing to use incentives, consumers' assessments of the motor vehicle market continue to be positive. The information on retail sales for the April-to-June period indicate that consumer expenditures for other goods rose markedly slower in the second quarter than in the first quarter, at a pace well below the average rate of increase during the preceding two years. In contrast, personal consumption expenditures for consumer services continued to rise relatively briskly in April and May.

Real disposable personal income increased at an annual rate of about 3 percent between December and May—slightly below the 1999 pace of 3¾ percent. However, the impetus to spending from the rapid rise in household net worth was still considerable, labor markets remained tight, and confidence was still high. As a result, households continued to allow their spending to outpace their flow of current income, and the personal saving rate, as measured in the national income and product accounts, dropped further, averaging

less than 1 percent during the first five months of the year.

After having boosted the ratio of household net worth to disposable income to a record high in the first quarter, stock prices have fallen back, suggesting less impetus to consumer spending going forward. In addition, smaller employment gains and the pickup in energy prices have moderated the rise in real income of late. Although these developments left some imprint on consumer attitudes in June, households remained relatively upbeat about their prospective financial situation, according to the results of the University of Michigan Survey Research Center (SRC) survey. However, they became a bit less positive about the outlook for business conditions and saw a somewhat greater likelihood of a rise in unemployment over the coming year.

Residential Investment

Housing activity stayed at a high level during the first half of this year. Home-builders began the year with a considerable backlog of projects that had developed as the exceptionally strong demand of the previous year strained capacity. As a result, they maintained starts of new single-family homes at an annual rate of 1.33 million units, on average, through April—matching 1999's robust pace. Households' demand for single-family homes was supported early in the year by ongoing gains in jobs and income and the earlier run-up in wealth; those forces apparently were sufficient to offset the effects that higher mortgage interest rates had on the affordability of new homes. Sales of new homes were particularly robust, setting a new record by March; but sales of existing units slipped below their 1999 high. As a result of the continued strength in sales, the homeownership

rate reached a new high in the first quarter.

By the spring, higher mortgage interest rates were leaving a clearer mark on the attitudes of both consumers and builders. The Michigan SRC survey reported that households' assessments of homebuying conditions dropped between April and June to the lowest level in more than nine years. Survey respondents noted that, besides higher financing costs, higher prices of homes were becoming a factor in their less positive assessment of market conditions. Purchases of existing homes were little changed, on balance, in April and May from the first-quarter average; however, because these sales are recorded at the time of closing, they tend to be a lagging indicator of demand. Sales of new homes—a more current indicator—fell back in April and May, and homebuilders reported that sales dropped further in June. Perhaps a sign that softer demand has begun to affect construction, starts of new single-family homes slipped to a rate of 1 1/4 million units in May. That level of new homebuilding, although noticeably slower than the robust pace that characterized the fall and winter period, is only a bit below the elevated level that prevailed throughout much of 1998, when single-family starts reached their highest level in twenty years. Starts of multifamily housing units, which also had stepped up sharply in the first quarter of the year, to an annual rate of 390,000 units, settled back to a 340,000 unit rate in April and May.

Household Finance

Fueled by robust spending, especially early in the year, the expansion of household debt remained brisk during the first half of 2000, although below the very strong 1999 growth rate.

Apparently, a favorable outlook for income and employment, along with rising wealth, made households feel confident enough to continue to spend and take on debt. Despite rising mortgage and consumer loan rates, household debt increased at an annual rate of nearly 8 percent in the first quarter, and preliminary data point to a similar increase in the second quarter.

Mortgage debt expanded at an annual rate of 7 percent in the first quarter, boosted by the high level of housing activity. Household debt not secured by real estate—including credit card balances and auto loans—posted an impressive 10 percent gain in the first quarter to help finance a large expansion in outlays for consumer durables, especially motor vehicles. The moderation in the growth of household debt this year has been driven primarily by its mortgage component: Preliminary data for the second quarter suggest that, although consumer credit likely decelerated from the first quarter, it still grew faster than in 1999.

Debt in margin accounts, which is largely a household liability and is not included in reported measures of credit market debt, has declined, on net, in recent months, following a surge from late in the third quarter of 1999 through the end of March 2000. There has been no evidence that recent downdrafts in share prices this year caused serious repayment problems at the aggregate level that might pose broader systemic concerns.

The combination of rapid debt growth and rising interest rates has pushed the household debt-service burden to levels not reached since the late 1980s. Nonetheless, with household income and net worth both having grown rapidly, and employment prospects favorable, very few signs of worsening credit problems in the household sector have emerged,

and commercial banks have reported in recent Federal Reserve surveys that they remain favorably disposed to make consumer installment and mortgage loans. Indeed, financial indicators of the household sector have remained mostly positive: The rate of personal bankruptcy filings fell in the first quarter to its lowest level since 1996; delinquency rates on home mortgages and auto loans remained low; and the delinquency rate on credit cards edged down further, although it remained in the higher range that has prevailed since the mid-1990s. However, delinquency rates may be held down, to some extent, by the surge in new loan originations in recent quarters because newly originated loans are less likely to be delinquent than seasoned ones.

The Business Sector

Fixed Investment

The boom in capital spending extended into the first half of 2000 with few indications that businesses' desire to take advantage of more-efficient technologies is diminishing. Real business fixed investment surged at an annual rate of almost 24 percent in the first quarter of the year, rebounding sharply from its lull at the end of 1999, when firms apparently postponed some projects because of the century date change. In recent months, the trends in new orders and shipments of non-defense capital goods suggest that demand has remained solid.

Sustained high rates of investment spending have been a key feature shaping the current economic expansion. Business spending on new equipment and software has been propelled importantly by ongoing advances in computer and information technologies that can be applied to a widening range of busi-

ness processes. The ability of firms to take advantage of these emerging developments has been supported by the strength of domestic demand and by generally favorable conditions in credit and equity markets. In addition, because these high-technology goods can be produced increasingly efficiently, their prices have continued to decline steeply, providing additional incentive for rapid investment. The result has been a significant rise in the stock of capital in use by businesses and an acceleration in the flow of services from that capital as more-advanced vintages of equipment replace older ones. The payoff from the prolonged period during which firms have upgraded their plant and equipment has increasingly shown through in the economy's improved productivity performance.

Real outlays for business equipment and software shot up at an annual rate of nearly 25 percent in the first quarter of this year. That jump followed a modest increase in the final quarter of 1999 and put spending for business equipment and software back on the double-digit uptrend that has prevailed throughout the current economic recovery. Concerns about potential problems with the century date change had the most noticeable effect on the patterns of spending for computers and peripherals and for communications equipment in the fourth and first quarters; expenditures for software were also affected, although less so. For these categories of goods overall, the impressive resurgence in business purchases early this year left little doubt that the underlying strength in demand for high-tech capital goods had been only temporarily interrupted by the century date change. Indeed, nominal shipments of office and computing equipment and of communication devices registered sizable increases over the April–May period.

In the first quarter, business spending on computers and peripheral equipment was up almost 40 percent from a year earlier—a pace in line with the trend of the current expansion. Outlays for communications equipment, however, accelerated; the first-quarter surge brought the year-over-year increase in spending to 35 percent, twice the pace that prevailed a year earlier. Expanding Internet usage has been driving the need for new network architectures. In addition, cable companies have been investing heavily in preparation for their planned entry into the markets for residential and commercial telephony and broad-band Internet services.

Demand for business equipment outside of the high-tech area was also strong at the beginning of the year. In the first quarter, outlays for industrial equipment rose at a brisk pace for a third consecutive quarter as the recovery of the manufacturing sector from the effects of the Asian crisis gained momentum. In addition, investment in farm and construction machinery, which had fallen steadily during most of 1999, turned up, and shipments of civilian aircraft to domestic customers increased. More recent data show a further rise in the backlog of unfilled orders placed with domestic firms for equipment and machinery (other than high-tech items and transportation equipment), suggesting that demand for these items has been well maintained. However, business purchases of motor vehicles are likely to drop back in the second quarter from the very high level recorded at the beginning of the year. In particular, demand for heavy trucks appears to have been adversely affected by higher costs of fuel and shortages of drivers.

Real investment in private non-residential structures jumped at an annual rate of more than 20 percent in the first quarter of the year after having

declined in 1999. Both last year's weakness and this year's sudden and widespread revival are difficult to explain fully. Nonetheless, the higher levels of spending on office buildings, other commercial facilities, and industrial buildings recorded early this year would seem to accord well with the overall strength in aggregate demand. However, the fundamentals in this sector of the economy are mixed. Available information suggests that property values for offices, retail space, and warehouses have been rising more slowly than they were several years ago. However, office vacancy rates have come down, which suggests that, at least at an aggregate level, the office sector is not overbuilt. The vacancy rate for industrial buildings has also fallen, but in only a few industries, such as semiconductors and other electronic components, are capacity pressures sufficiently intense to induce significant expansion of production facilities.

Inventory Investment

The ratio of inventories to sales in many nonfarm industries moved lower early this year. Those firms that had accumulated some additional stocks toward the end of 1999 as a precaution against disruptions related to the century date change seemed to have little difficulty working off those inventories after the smooth transition to the new year. Moreover, the first-quarter surge in final demand may have, to some extent, exceeded businesses' expectations. In current-cost terms, non-auto manufacturing and trade establishments built inventories in April and May at a somewhat faster rate than in the first quarter but still roughly in line with the rise in their sales. As a result, the ratio of inventories to sales, at current cost, for these businesses was roughly unchanged

from the first quarter. Overall, the ongoing downtrend in the ratios of inventories to sales during the past several years suggests that businesses increasingly are taking advantage of new technologies and software to implement better inventory management.

The swing in inventory investment in the motor vehicle industry has been more pronounced recently. Dealer stocks of new cars and light trucks were drawn down during the first quarter as sales climbed to record levels. Accordingly, auto and truck makers kept assemblies at a high level through June in order to maintain ready supplies of popular models. Even though demand appears to have softened and inventories of a few models have backed up, scheduled assemblies for the third quarter are above the elevated level of the first half.

Business Finance

The economic profits of nonfinancial U.S. corporations posted another solid increase in the first quarter. The profits that nonfinancial corporations earned on their domestic operations were 10 percent above the level of a year earlier; the rise lifted the share of profits in this sector's nominal output close to its 1997 peak. Nonetheless, with investment expanding rapidly, businesses' external financing requirements, measured as the difference between capital expenditures and internally generated funds, stayed at a high level in the first half of this year. Businesses' credit demands were also supported by cash-financed merger and acquisition activity. Total debt of nonfinancial businesses increased at a 10½ percent clip in the first quarter, close to the brisk pace of 1999, and available information suggests that borrowing remained strong into the second quarter.

On balance, businesses have altered the composition of their funding this year to rely more on shorter-term sources of credit and less on the bond market, although the funding mix has fluctuated widely in response to changing market conditions. After the passing of year-end, corporate borrowers returned to the bond market in volume in February and March, but subsequent volatility in the capital market in April and May prompted a pullback. In addition, corporate bond investors have been less receptive to smaller, less liquid offerings, as has been true for some time.

In the investment-grade market, bond issuers have responded to investors' concerns about the interest rate and credit outlook by shortening the maturities of their offerings and by issuing more floating-rate securities. In the below-investment-grade market, many of the borrowers who did tap the bond market in February and March did so by issuing convertible bonds and other equity-related debt instruments. Subsequently, amid increased equity market volatility and growing investor uncertainty about the outlook for prospective borrowers, credit spreads in the corporate bond market widened, and issuance in the below-investment-grade market dropped sharply in April and May. Conditions in the corporate bond market calmed in late May and June, and issuance recovered to close to its first-quarter pace.

As the bond market became less hospitable in the spring, many businesses evidently turned to banks and to the commercial paper market for financing. Partly as a result, commercial and industrial loans at banks have expanded briskly, even as a larger percentage of banks have reported in Federal Reserve surveys that they have been tightening standards and terms on such loans.

Underscoring lenders' concerns about the creditworthiness of borrowers, the ratio of liabilities of failed businesses to total liabilities has increased further so far this year, and the default rate on outstanding junk bonds has risen further from the relatively elevated level reached in 1999. Through mid-year, Moody's Investors Service has downgraded, on net, more debt in the nonfinancial business sector than it has upgraded, although it has placed more debt on watch for future upgrades than downgrades.

Commercial mortgage borrowing has also expanded at a robust pace over the first half of 2000, as investment in office and other commercial building strengthened. Extending last year's trend, borrowers have tapped banks and life insurance companies as the financing sources of choice. Banks, in particular, have reported stronger demand for commercial real estate loans this year even as they have tightened standards a bit for approving such loans. In the market for commercial mortgage-backed securities, yields have edged higher since the beginning of the year.

The Government Sector

Federal Government

The incoming information regarding the federal budget suggests that the surplus in the current fiscal year will surpass last year's by a considerable amount. Over the first eight months of fiscal year 2000—the period from October to May—the unified budget recorded a surplus of about \$120 billion, compared with \$41 billion during the comparable period of fiscal 1999. The Office of Management and Budget and the Congressional Budget Office are now forecasting that, when the fiscal year closes, the unified surplus will be around

\$225 billion to \$230 billion, \$100 billion higher than in the preceding year. That outcome would likely place the surplus at more than 2 1/4 percent of GDP, which would exceed the most recent high of 1.9 percent, which occurred in 1951.

The swing in the federal budget from deficit to surplus has been an important factor in maintaining national saving. The rise in federal saving as a percentage of gross national product from -3.5 percent in 1992 to 3.1 percent in the first quarter of this year has been sufficient to offset the drop in personal saving that occurred over the same period. As a result, gross saving by households, businesses, and governments has stayed above 18 percent of GNP since 1997, compared with 16 1/2 percent over the preceding seven years. The deeper pool of national saving, along with the continued willingness of foreign investors to finance our current account deficit, remains an important factor in containing increases in the cost of capital and sustaining the rapid expansion of domestic investment. With longer-run projections showing a rising federal government surplus over the next decade, this source of national saving could continue to expand.

The recent good news on the federal budget has been primarily on the receipts side of the ledger. Nonwithheld tax receipts were very robust this spring. Both final payments on personal income tax liabilities for 1999 and final corporate tax payments for 1999 were up substantially. So far this year, the withheld tax and social insurance contributions on this year's earnings of individuals have also been strong. As a result, federal receipts during the first eight months of the fiscal year were almost 12 percent higher than they were during the year-earlier period.

While receipts have accelerated, federal expenditures have been rising only a little faster than during fiscal 1999 and continue to decline as a share of nominal GDP. Nominal outlays for the first eight months of the current fiscal year were 5 1/4 percent above the year-earlier period. Increases in discretionary spending have picked up a bit so far this year. In particular, defense spending has been running higher in the wake of the increase in budget authority enacted last year. The Congress has also boosted agricultural subsidies in response to the weakness in farm income. While non-discretionary spending continues to be held down by declines in net interest payments, categories such as Medicaid and other health programs have been rising more rapidly of late.

As measured by the national income and product accounts, real federal expenditures for consumption and gross investment dropped sharply early this year after having surged in the fourth quarter of 1999. These wide quarter-to-quarter swings in federal spending appear to have occurred because the Department of Defense speeded up its payments to vendors before the century date change; actual deliveries of defense goods and services were likely smoother. On average, real defense spending in the fourth and first quarters was up moderately from the average level in fiscal 1999. Real nondefense outlays continued to rise slowly.

With current budget surpluses coming in above expectations and large surpluses projected to continue for the foreseeable future, the federal government has taken additional steps aimed at preserving a high level of liquidity in the market for its securities. Expanding on efforts to concentrate its declining debt issuance in fewer highly liquid securities, the Treasury announced in February its intention to issue only two

new five- and ten-year notes and only one new thirty-year bond each year. The auctions of five- and ten-year notes will remain quarterly, alternating between new issues and smaller reopenings, and the bond auctions will be semi-annual, also alternating between new and smaller reopened offerings. The Treasury also announced that it was reducing the frequency of its one-year bill auctions from monthly to quarterly and cutting the size of the monthly two-year note auctions. In addition, the Treasury eliminated the April auction of the thirty-year inflation-indexed bond and indicated that the size of the ten-year inflation-indexed note offerings would be modestly reduced. Meanwhile, anticipation of even larger surpluses in the wake of the surprising strength of incoming tax receipts so far in 2000 led the Treasury to announce, in May, that it was again cutting the size of the monthly two-year note auctions. The Treasury also noted that it is considering additional changes in its auction schedule, including the possible elimination of the one-year bill auctions and a reduction in the frequency of its two-year note auctions.

Early in the year, the Treasury unveiled the details of its previously announced reverse-auction, or debt buy-back, program, whereby it intends to retire seasoned, less liquid, debt securities with surplus cash, enabling it to issue more "on-the-run" securities. The Treasury noted that it would buy back as much as \$30 billion this year. The first operation took place in March, and in May the Treasury announced a schedule of two operations per month through the end of July of this year. Through midyear, the Treasury has conducted eight buyback operations, redeeming a total of \$15 billion. Because an important goal of the buyback program is to help forestall further increases in

the average maturity of the Treasury's publicly held debt, the entire amount redeemed so far has corresponded to securities with remaining maturities at the long end of the yield curve (at least fifteen years).

State and Local Governments

In the state and local sector, real consumption and investment expenditures registered another strong quarter at the beginning of this year. In part, the unseasonably good weather appears to have accommodated more construction spending than usually occurs over the winter. However, some of the recent rise is an extension of the step-up in spending that emerged last year, when real outlays rose 5 percent after having averaged around 3 percent for the preceding three years. Higher federal grants for highway construction have contributed to the pickup in spending. In addition, many of these jurisdictions have experienced solid improvements in their fiscal conditions, which may be allowing them to undertake new spending initiatives.

The improving fiscal outlook for state and local governments has affected both the issuance and the quality of state and local debt. Borrowing by states and municipalities expanded sluggishly in the first half of this year. In addition to the favorable budgetary picture, rising interest rates have reduced the demand for new capital financing and substantially limited refunding issuance. Credit upgrades have outnumbered downgrades by a substantial margin in the state and local sector.

The External Sector

Trade and Current Account

The deficits in U.S. external balances have continued to get even larger this

year. The current account deficit reached an annual rate of \$409 billion in the first quarter of 2000, or 4 1/4 percent of GDP, compared with \$372 billion and 4 percent in the second half of 1999. Net payments of investment income were a bit less in the first quarter than in the second half of last year owing to a sizable increase in income receipts from direct investment abroad. Most of the expansion in the current account deficit occurred in trade in goods and services. In the first quarter, the deficit in trade in goods and services widened to an annual rate of \$345 billion, a considerable expansion from the deficit of \$298 billion recorded in the second half of 1999. Trade data for April suggest that the deficit may have increased further in the second quarter.

U.S. exports of real goods and services rose at an annual rate of 6 1/4 percent in the first quarter, following a strong increase in exports in the second half of last year. The pickup in economic activity abroad that began in 1999 continued to support export demand and partly offset negative effects on price competitiveness of U.S. products from the dollar's past appreciation. By market destination, U.S. exports to Canada, Mexico, and Europe increased the most. By product group, export expansion was concentrated in capital equipment, industrial supplies, and consumer goods. Preliminary data for April suggest that growth of real exports remained strong.

The quantity of imported goods and services continued to expand rapidly in the first quarter. The increase in imports, at an annual rate of 11 3/4 percent, was the same in the first quarter as in the second half of 1999 and reflected both the continuing strength of U.S. domestic demand and the effects of past dollar appreciation on price competitiveness. Imports of consumer goods, automotive

products, semiconductors, telecommunications equipment, and other machinery were particularly robust. Data for April suggest that the second quarter got off to a strong start. The price of non-oil goods imports rose at an annual rate of 1 3/4 percent in the first quarter, the second consecutive quarter of sizable price increases following four years of price declines; non-oil import prices in the second quarter posted only moderate increases.

A number of developments affecting world oil demand and supply led to a further step-up in the spot price of West Texas intermediate (WTI) crude this year, along with considerable volatility. In the wake of the plunge of world oil prices during 1998, the Organization of Petroleum Exporting Countries (OPEC) agreed in early 1999 to production restraints that, by late in the year, restored prices to their 1997 level of about \$20 per barrel. Subsequently, continued recovery of world demand, combined with some supply disruptions, caused the WTI spot price to spike above \$34 per barrel during March of this year, the highest level since the Gulf War more than nine years earlier. Oil prices dropped back temporarily in April, but in May and June the price of crude oil moved back up again, as demand was boosted further by strong global economic activity and by rebuilding of oil stocks. In late June, despite an announcement by OPEC that it would boost production, the WTI spot price reached a new high of almost \$35 per barrel, but by early July the price had settled back to about \$30 per barrel.

Financial Account

Capital flows in the first quarter of 2000 continued to reflect the relatively strong performance of the U.S. economy and transactions associated with global

corporate mergers. Foreign private purchases of U.S. securities remained brisk—well above the record pace set last year. In addition, the mix of U.S. securities purchased by foreigners in the first quarter showed a continuation of last year's trend toward smaller holdings of U.S. Treasury securities and larger holdings of U.S. agency and corporate securities. Private-sector foreigners sold more than \$9 billion in Treasury securities in the first quarter while purchasing more than \$26 billion in agency bonds. Despite a mixed performance of U.S. stock prices, foreign portfolio purchases of U.S. equities exceeded \$60 billion in the first quarter, more than half of the record annual total set last year. U.S. purchases of foreign securities remained strong in the first quarter of 2000.

Foreign direct investment flows into the United States were robust in the first quarter of this year as well. As in the past two years, direct investment inflows have been elevated by the extraordinary level of cross-border merger and acquisition activity. Portfolio flows have also been affected by this activity. For example, in recent years, many of the largest acquisitions have been financed by swaps of equity in the foreign acquiring firm for equity in the U.S. firm being acquired. The Bureau of Economic Analysis estimates that U.S. residents acquired \$123 billion of foreign equities in this way last year. Separate data on market transactions indicate that U.S. residents made net purchases of Japanese equities but sold European equities. The latter sales likely reflect a rebalancing of portfolios after stock swaps. U.S. direct investment in foreign economies has also remained strong, exceeding \$30 billion in the first quarter of 2000. Again, a significant portion of this investment was associated with cross-border merger activity.

Capital inflows from foreign official sources in the first quarter of this year were sizable—\$20 billion, compared with \$43 billion for all of 1999. As was the case last year, the increase in foreign official reserves in the United States in the first quarter was concentrated in a relatively few countries. Partial data for the second quarter of 2000 show a small official outflow.

The Labor Market

Employment and Labor Supply

The labor market in early 2000 continued to be characterized by substantial job creation, a historically low level of unemployment, and sizable advances in productivity that have held labor costs in check. The rise in overall nonfarm payroll employment, which totaled more than 1½ million over the first half of the year, was swelled by the federal government's hiring of intermittent workers to conduct the decennial census. Apart from that temporary boost, which accounted for about one-fourth of the net gain in jobs between December and June, nonfarm payroll employment increased an average of 190,000 per month, somewhat below the robust pace of the preceding four years.

Monthly changes in private payrolls were uneven at times during the first half of the year, but, on balance, the pace of hiring, while still solid, appears to have moderated between the first and second quarters. In some industries, such as construction, the pattern appears to have been exaggerated by unseasonably high levels of activity during the winter that accelerated hiring that typically would have occurred in the spring. After a robust first quarter, construction employment declined between April and June; on average, hiring in this industry over the first half of the year was only

a bit slower than the rapid pace that prevailed from 1996 to 1999. However, employment gains in the services industry, particularly in business and health services, were smaller in the second quarter than in the first while job cutbacks occurred in finance, insurance, and real estate after four and one-half years of steady expansion. Nonetheless, strong domestic demand for consumer durables and business equipment, along with support for exports from the pickup in economic activity abroad, led to a leveling off in manufacturing employment over the first half of 2000 after almost two years of decline. And, with consumer spending brisk, employment at retail establishments, although fluctuating widely from month to month, remained generally on a solid uptrend over the first half.

The supply of labor increased slowly in recent years relative to the demand for workers. The labor force participation rate was unchanged, on average, at 67.1 percent from 1997 to 1999; that level was just 0.6 percentage point higher than at the beginning of the expansion in 1990. The stability of the participation rate over the 1997–99 period was somewhat surprising because the incentives to enter the workforce seemed powerful: Hiring was strong, real wages were rising more rapidly than earlier in the expansion, and individuals perceived that jobs were plentiful. However, the robust demand for new workers instead led to a substantial decline in unemployment, and the civilian jobless rate fell from 5¼ percent at the beginning of 1997 to just over 4 percent at the end of 1999.

This year, the labor force participation rate ratcheted up sharply over the first four months of the year before dropping back in recent months as employment slowed. The spike in participation early this year may have been

a response to ready availability of job opportunities, but Census hiring may also have temporarily attracted some individuals into the workforce. On net, growth of labor demand and supply have been more balanced so far this year, and the unemployment rate has held near its thirty-year low of 4 percent. At mid-year, very few signs of a significant easing in labor market pressures have surfaced. Employers responding to various private surveys of business conditions report that they have been unable to hire as many workers as they would like because skilled workers are in short supply and competition from other firms is keen. Those concerns about hiring have persisted even as new claims for unemployment insurance have drifted up from very low levels in the past several months, suggesting that some employers may be making workforce adjustments in response to slower economic activity.

Labor Costs and Productivity

Reports by businesses that workers are in short supply and that they are under pressure to increase compensation to be competitive in hiring and retaining employees became more intense early this year. However, the available statistical indicators are providing somewhat mixed and inconsistent signals of whether a broad acceleration in wage and benefit costs is emerging. Hourly compensation, as measured by the employment cost index (ECI) for private nonfarm businesses, increased sharply during the first quarter to a level more than 4½ percent above a year earlier. Before that jump, year-over-year changes in the ECI compensation series had remained close to 3½ percent for three years. However, an alternative measure of compensation per hour, calculated as part of the productivity and

cost series, which has shown higher rates of increase than the ECI in recent years, slowed in the first quarter of this year. For the nonfarm business sector, compensation per hour in the first quarter was 4¼ percent higher than a year earlier; in the first quarter of 1999, the four-quarter change was 5¼ percent.³

Part of the acceleration in the ECI in the first quarter was the result of a sharp step-up in the wage and salary component of compensation change. While higher rates of straight-time pay were widespread across industry and occupational groups, the most striking increase occurred in the finance, insurance, and real estate industry where the year-over-year change in wages and salaries jumped from about 4 percent for the period ending in December 1999 to almost 8½ percent for the period ending in March of this year. The sudden spike in wages in that sector could be related to commissions that are tied directly to activity levels in the industry and, thus, would not represent a lasting influence on wage inflation. For other industries, wages and salaries accelerated moderately, which might appear plausible in light of reports that employers are experiencing shortages of some types of skilled workers. However, the uptrend in wage inflation that surfaced in the first-quarter ECI has not been so readily apparent in the monthly data on average hourly earnings of production or non-supervisory workers, which are available through June. Although average hourly earnings increased at an annual rate of 4 percent between December and June, the June level of hourly wages

3. The figures for compensation per hour in the nonfinancial corporate sector are similar: an increase of about 4 percent for the year ending in the first quarter of this year compared with almost 5½ percent for the year ending in the first quarter of 1999.

stood 3 3/4 percent higher than a year earlier, the same as the increase between June 1998 and June 1999.

While employers in many industries appear to have kept wage increases moderate, they may be facing greater pressures from rising costs of employee benefits. The ECI measure of benefit costs rose close to 3 1/2 percent during 1999, a percentage point faster than during 1998; these costs accelerated sharply further in the first quarter of this year to a level 5 1/2 percent above a year earlier. Much of last year's pickup in benefit costs was associated with faster rates of increase in employer contributions to health insurance, and the first-quarter ECI figures indicated another step-up in this component of costs. Private survey information and available measures of prices in the health care industry suggest that the upturn in the employer costs of health care benefits is associated with both higher costs of health care and employers' willingness to offer attractive benefit packages in order to compete for workers in a tight labor market. Indeed, employers have been reporting that they are enhancing compensation packages with a variety of benefits in order to hire and retain employees. Some of these offerings are included in the ECI; for instance, the ECI report for the first quarter noted a pickup in supplemental forms of pay, such as overtime and nonproduction bonuses, and in paid leave. However, other benefits cited by employers, including stock options, hiring and retention bonuses, and discounts on store purchases, are not measured in the ECI.⁴ The productivity and costs measure of hourly

compensation may capture more of the non-wage costs that employers incur, but even for that series, the best estimates of employer compensation costs are available only after business reports for unemployment insurance and tax records are tabulated and folded into the annual revisions of the national income and product accounts.

Because businesses have realized sizable gains in worker productivity, compensation increases have not generated significant pressure on overall costs of production. Output per hour in the nonfarm business sector posted another solid advance in the first quarter, rising to a level 3 3/4 percent above a year earlier and offsetting much of the rise in hourly compensation over the period. For nonfinancial corporations, the subset of the nonfarm business sector that excludes types of businesses for which output is measured less directly, the 4 percent year-over-year increase in productivity held unit labor costs unchanged.

With the further robust increases in labor productivity recently, the average rise in output per hour in the nonfarm business sector since early 1997 has stepped up further to 3 percent from the 2 percent pace of the 1995-97 period. What has been particularly impressive is that the acceleration of productivity in the past several years has exceeded the pickup in output growth over the period and, thus, does not appear to be simply a cyclical response to more rapidly rising demand. Rather, businesses are likely realizing substantial and lasting payoffs from their investment in equipment and processes that embody the technological advances of the past several years.

4. Beginning with publication of the ECI for June 2000, the Bureau of Labor Statistics plans to expand the definition of nonproduction bonuses in the ECI to include hiring and retention bonuses. These payments are already included in the wage

and salary measure underlying the data on compensation per hour calculated for the productivity and cost series.

Prices

Rates of increase in the broader measures of prices moved up further in early 2000. After having accelerated from 1 percent during 1998 to 1½ percent last year, the chain-type price index for GDP—prices of goods and services that are *produced* domestically—increased at an annual rate of 3 percent in the first quarter of this year. The upswing in inflation for goods and services *purchased* by consumers, businesses, and governments has been somewhat greater: The chain-type price index for gross domestic purchases rose at an annual rate of 3½ percent in the first quarter after having increased about 2 percent during 1999 and just ¾ percent during 1998.

The pass-through of the steep rise in the cost of imported crude oil that began in early 1999 and continued into the first half of this year has been the principal factor in the acceleration of the prices of goods and services purchased. The effect of higher energy costs on domestic prices has been most apparent in indexes of prices paid by consumers. After having risen 12 percent during 1999, the chain-type price index for energy items in the price index for per-

sonal consumption expenditures (PCE) jumped at an annual rate of 35 percent in the first quarter of 2000; the first-quarter rise in the energy component of the CPI was similar.

Swings in energy prices continued to have a noticeable effect on overall measures of consumer prices in the second quarter. After world oil prices dropped back temporarily in the spring, the domestic price of motor fuel dropped in April and May, and consumer prices for energy, as measured by the CPI, retraced some of the first-quarter increase. As a result, the overall CPI was little changed over the two months. However, with prices of crude oil having climbed again, the bounceback in prices of motor fuel led to a sharp increase in the CPI for energy in June. In addition, with strong demand pressing against available supplies, consumer prices of natural gas continued to rise rapidly in the second quarter. In contrast to the steep rise in energy prices, the CPI for food has risen slightly less than other non-energy prices so far this year.

Higher petroleum costs also fed through into higher producer costs for a number of intermediate materials. Rising prices for inputs such as chemicals and paints contributed importantly to

Alternative Measures of Price Change

Percent, annual rate

Price measure	1997:Q4 to 1998:Q4	1998:Q4 to 1999:Q4	1999:Q4 to 2000:Q1
<i>Chain-type</i>			
Gross domestic product	1.0	1.6	3.0
Gross domestic purchases .....	.7	1.9	3.5
Personal consumption expenditures .....	.9	2.0	3.5
Excluding food and energy	1.3	1.5	2.2
<i>Fixed-weight</i>			
Consumer price index	1.5	2.6	4.0
Excluding food and energy	2.4	2.1	2.3

NOTE. A fixed-weight index uses quantity weights from the base year to aggregate prices from each distinct item category. A chain-type index is the geometric aver-

age of two fixed-weight indexes and allows the weights to change each year. Changes are based on quarterly averages.

the acceleration in the producer price index for intermediate materials excluding food and energy from about 1 3/4 percent during 1999 to an annual rate of 3 1/2 percent over the first half of this year. Upward pressure on input prices was also apparent for construction materials, although these have eased more recently. Prices of imported industrial supplies also picked up early this year owing to higher costs of petroleum inputs.

Core consumer price inflation has also been running a little higher so far this year. The chain-type price index for personal consumption expenditures other than food and energy increased at an annual rate of 2 1/4 percent in the first quarter compared with an increase of 1 1/2 percent during 1999. Based on the monthly estimates of PCE prices in April and May, core PCE price inflation looks to have been just a little below its first-quarter rate. After having risen just over 2 percent between the fourth quarter of 1998 and the fourth quarter of 1999, the CPI excluding food and energy increased at an annual rate of 2 1/4 percent in the first quarter of 2000 and at a 2 3/4 percent rate in the second quarter. In part, the rise in core inflation likely reflects the indirect effects of higher energy costs on the prices of a variety of goods and services, although these effects are difficult to quantify with precision. Moreover, prices of non-oil imported goods, which had been declining from late 1995 through the middle of last year, continued to trend up early this year.

The pickup in core inflation, as measured by the CPI, has occurred for both consumer goods and services. Although price increases for nondurable goods excluding food and energy moderated, prices of consumer durables, which had fallen between 1996 and 1999, were little changed, on balance, over the first

half of this year. The CPI continued to register steep declines for household electronic goods and computers, but prices of other types of consumer durables have increased, on net, so far this year. The rate of increase in the prices of non-energy consumer services has also been somewhat faster; the CPI for these items increased at an annual rate of 3 1/2 percent during the first two quarters of this year compared with a rise of 2 3/4 percent in 1999. Larger increases in the CPI measures of rent and of medical services have contributed importantly to this acceleration. Another factor has been a steeper rise in airfares, which have been boosted in part to cover the higher cost of fuel.

In addition to slightly higher core consumer price inflation, the national income and product accounts measure of prices for private fixed investment goods shows that the downtrend in prices for business fixed investment items has been interrupted. Most notably, declines in the prices of computing equipment became much smaller in the final quarter of last year and the first quarter of this year. A series of disruptions to the supply of component inputs to computing equipment has combined with exceptionally strong demand to cut the rate of price decline for computers, as measured by the chain-type price index, to an annual rate of 12 percent late last year and early this year—half the pace of the preceding three and one-half years. At the same time, prices of other types of equipment and software continued to be little changed, and the chain-type index for nonresidential structures investment remained on a moderate uptrend. In contrast, the further upward pressure on construction costs at the beginning of the year continued to push the price index for residential construction higher; after having accelerated from 3 percent to 3 1/2 per-

cent between 1998 and 1999, this index increased at an annual rate of 4 1/4 percent in the first quarter of 2000.

Although actual inflation moved a bit higher over the first half of 2000, inflation expectations have been little changed. Households responding to the Michigan SRC survey in June were sensitive to the adverse effect of higher energy prices on their real income but seemed to believe that the inflationary shock would be short-lived. The median of their expected change in CPI inflation over the coming twelve months was 2.9 percent. Moreover, they remained optimistic that inflation would remain at about that rate over the longer run, reporting a 2.8 percent median of expected inflation during the next five to ten years. In both instances, their expectations are essentially the same as at the end of 1999, although the year-ahead expectations are above the lower levels that had prevailed in 1997 and early 1998.

U.S. Financial Markets

Conditions in markets for private credit firmed on balance since the end of 1999. Against a backdrop of continued economic vitality in the United States and a tighter monetary policy stance, private borrowing rates are higher, on net, particularly those charged to riskier borrowers. In addition, banks have tightened terms and standards on most types of loans. Higher real interest rates—as measured based on inflation expectations derived from surveys and from yields on the Treasury's inflation-indexed securities—account for the bulk of the increase in interest rates this year, with short-term real rates having increased the most. Rising market interest rates and heightened uncertainties about corporate prospects, especially with regard to the high-tech sector,

have occasionally damped flows in the corporate bond market and have weighed on the equity market, which has, at times, experienced considerable volatility. Through mid-July, the broad-based Wilshire 5000 equity index was up approximately 3 percent for the year.

Interest Rates

As the year began, with worries related to the century date change out of the way, participants in the fixed-income market turned their attention to the signs of continued strength in domestic labor and product markets, and they quickly priced in the possibility of a more aggressive tightening of monetary policy. Both private and Treasury yields rose considerably. In the latter part of January, however, Treasury yields plummeted, especially those on longer-dated securities, as the announced details of the Treasury's debt buyback program and upwardly revised forecasts of federal budget surpluses led investors to focus increasingly on the prospects for a diminishing supply of Treasury securities. A rise in both nominal and inflation-indexed Treasury yields in response to strong economic data and tighter monetary policy in April and May was partly offset by supply factors and by occasional safe haven flows from the volatile equity market. Since late May, market interest rates have declined as market participants have interpreted the incoming economic data as evidence that monetary policy might not have to be tightened as much as had been previously expected. On balance, while Treasury bill rates and yields on shorter-dated notes have risen 15 to 80 basis points since the beginning of the year, intermediate- and long-term Treasury yields have declined 5 to 55 basis points. In the corporate debt market, by con-

trust, bond yields have risen 10 to 70 basis points so far this year.

Forecasts of steep declines in the supply of longer-dated Treasuries have combined with tighter monetary policy conditions to produce an inverted Treasury yield curve, starting with the two-year maturity. In contrast, yield curves elsewhere in the U.S. fixed-income market generally have not inverted. In the interest rate swap market, for instance, the yield curve has remained flat to upward sloping for maturities as long as ten years, and the same has been true for yield curves for the most actively traded corporate bonds.⁵ Nonetheless, private yield curves are flatter than usual, suggesting that, although supply considerations have played a potentially important role in the inversion of the Treasury yield curve this year, investors' forecasts of future economic conditions have also been a contributing factor. In particular, private yield curves are consistent with forecasts of a moderation in economic growth and expectations that the economy will be on a sustainable, non-inflationary track, with little further monetary policy tightening.

The disconnect between longer-term Treasury and private yields as a consequence of supply factors in the Treasury market is distorting readings from yield spreads. For instance, taken at face value, the spread of BBB corporate

yields over the yield on the ten-year Treasury note would suggest that conditions in the corporate bond market so far in 2000 are worse than those during the financial market turmoil of 1998. In contrast, the spread of the BBB yield over the ten-year swap rate paints a very different picture, with spreads up this year but below their peaks in 1998. Although the swap market is still not as liquid as the Treasury securities market, and swap rates are occasionally subject to supply-driven distortions, such distortions have been less pronounced and more short-lived than those affecting the Treasury securities market of late, making swap rates a better benchmark for judging the behavior of other corporate yields.

Aware that distortions to Treasury yields are likely to become more pronounced as more federal debt is paid down, market participants have had to look for alternatives to the pricing and hedging roles traditionally played by Treasuries in U.S. financial markets. In addition to interest rate swaps, which have featured prominently in the list of alternatives to Treasuries, debt securities issued by the three government-sponsored housing agencies—Fannie Mae, Freddie Mac, and the Federal Home Loan Banks—have been used in both pricing and hedging. The three housing agencies have continued to issue a substantial volume of debt this year in an attempt to capture benchmark status, and the introduction in March of futures and options contracts based on five- and ten-year notes issued by Fannie Mae and Freddie Mac may help enhance the liquidity of the agency securities market. Nonetheless, the market for agency debt has been affected by some uncertainty this year regarding the agencies' special relationship with the government. Both the Treasury and the Federal Reserve

5. A typical interest rate swap is an agreement between two parties to exchange fixed and variable interest rate payments on a notional principal amount over a predetermined period ranging from one to thirty years. The notional amount itself is never exchanged. Typically, the variable interest rate is the London Interbank Offered Rate (LIBOR), and the fixed interest rate—called the swap rate—is determined in the swap market. The overall credit quality of market participants is high, typically A or above; those entities with credit ratings of BBB or lower are generally either rejected or required to adopt credit-enhancing mechanisms, typically by posting collateral.

have suggested that it would be appropriate for the Congress to consider whether the special standing of these institutions continues to promote the public interest, and pending legislation would, among other things, restructure the oversight of these agencies and reexamine their lines of credit with the U.S. Treasury.

The implementation of monetary policy, too, has had to adapt to the anticipated paydowns of marketable federal debt. Recognizing that there may be limitations on its ability to rely as much as previously on transactions in Treasury securities to meet the reserve needs of depositories and to expand the supply of currency, the FOMC decided at its March 2000 meeting to facilitate until its first meeting in 2001 the Trading Desk's ability to continue to accept a broader range of collateral in its repurchase transactions. The initial approvals to help expand the collateral pool were granted in August 1999 as part of the Federal Reserve's efforts to better manage possible disruptions to financial markets related to the century date change.

At the March 2000 meeting, the Committee also initiated a study to consider alternative asset classes and selection criteria that could be appropriate for the System Open Market Account (SOMA) should the size of the Treasury securities market continue to decline. For the period before the completion and review of such a study, the Committee discussed, at its May meeting, some changes in the management of the System's portfolio of Treasury securities in an environment of decreasing Treasury debt. The changes aim to prevent the System from coming to hold high and rising proportions of new Treasury debt issues. They will also help the SOMA to limit any further lengthening of the aver-

age maturity of its portfolio while continuing to meet long-run reserve needs to the greatest extent possible through outright purchases of Treasury securities.⁶ The SOMA will cap the rollover of its existing holdings at Treasury auctions and will engage in secondary market purchases according to a schedule that effectively will result in a greater percentage of holdings of shorter-term security issues than of longer-dated ones. The schedule ranges from 35 percent of an individual issue for Treasury bills to 15 percent for longer-term bonds. These changes were announced to the public on July 5, replacing a procedure in which all maturing holdings were rolled over and in which coupon purchases were spread evenly across the yield curve.

Equity Prices

Major equity indexes have posted small gains so far this year amid considerable volatility. Fluctuations in technology stocks have been particularly pronounced: After having reached a record high in March—24 percent above its 1999 year-end value—the Nasdaq composite index, which is heavily weighted toward technology shares, swung widely and by mid-July was up 5 percent for the year. Given its surge in the second half of 1999, the mid-July level of the Nasdaq was about 60 percent above its mid-1999 reading. The broader S&P 500 and

6. The FOMC prefers a portfolio with a short average maturity because the higher turnover rate of such a portfolio gives it greater flexibility to redeem securities in times of financial market stress, which may require substantial decreases in the securities portfolio over a relatively short period, such as during an acute banking crisis that involves heavy lending through the discount window.

Wilshire 5000 indexes have risen close to 3 percent since the beginning of the year and are up about 10 percent and 13 percent, respectively, from mid-1999.

Corporate earnings reports have, for the most part, exceeded expectations, and projections of future earnings continue to be revised higher. However, the increase in interest rates since the beginning of the year likely has restrained the rise in equity prices. In addition, growing unease about the lofty valuations reached by technology shares and rising default rates in the corporate sector may have given some investors a better appreciation of the risks of holding stocks in general. Reflecting the uncertainty about the future course of the equity market, expected and actual volatilities of stock returns rose substantially in the spring. At that time, volatility implied by options on the Nasdaq 100 index surpassed even the elevated levels reached during the financial market turmoil of 1998.

Higher volatility and greater investor caution had a marked effect on public equity offerings. The pace of initial public offerings has fallen off considerably in recent months from its brisk first-quarter rate, with some offerings being canceled or postponed and others being priced well short of earlier expectations. On the other hand, households' enthusiasm for equity mutual funds, especially those funds that invest in the technology and international sectors, remains relatively high, although it appears to have faded some after the run-up in stock market volatility in the spring. Following a first-quarter surge, net inflows to stock funds moderated substantially in the second quarter but still were above last year's average pace.

Debt and the Monetary Aggregates

Debt and Depository Intermediation

The total debt of the U.S. household, government, and nonfinancial business sectors is estimated to have increased at close to a 5½ percent annual rate in the first half of 2000. Outside the federal government sector, debt expanded at an annual rate of roughly 9½ percent, buoyed by strength in household and business borrowing. Continued declines in federal debt have helped to ease the pressure on available savings and have facilitated the rapid expansion of non-federal debt outstanding: The federal government paid down \$218 billion of debt over the first half of 2000, compared with paydowns of \$56 billion and \$101 billion in the first six months of calendar years 1998 and 1999 respectively.

Depository institutions have continued to play an important role in meeting the strong demands for credit by businesses and households. Adjusted for mark-to-market accounting rules, credit extended by commercial banks rose 11½ percent in the first half of 2000. This advance was paced by a brisk expansion of loans, which grew at an annual rate of nearly 13 percent over this period. Bank credit increased in part because some businesses sought bank loans as an alternative to a less receptive corporate bond market. In addition, the underlying strength of household spending helped boost the demand for consumer and mortgage loans. Banks' holdings of consumer and mortgage loans were also supported by a slower pace of securitizations this year. In the housing sector, for instance, the rising interest rate environment has kept the demand for adjustable-rate mortgages relatively elevated, and banks tend to

hold these securities on their books rather than securitize them.

Banks have tightened terms and standards on loans further this year, especially in the business sector, where some lenders have expressed concerns about a more uncertain corporate outlook. Bank regulators have noted that depository institutions need to take particular care in evaluating lending risks to account for possible changes in the overall macroeconomic environment and in conditions in securities markets.

The Monetary Aggregates

Growth of the monetary aggregates over the first half of 2000 has been buffeted by several special factors. The unwinding of the buildups in liquidity that occurred in late 1999 before the century date change depressed growth in the aggregates early this year. Subsequently, M2 rebounded sharply in anticipation of outsized tax payments in the spring and then ran off as those payments cleared. On net, despite the cumulative firming of monetary policy since June 1999, M2 expanded at a relatively robust, 6 percent, annual rate during the first half of 2000—the same pace as in 1999—supported by the rapid expansion of nominal spending and income.

M2 velocity—the ratio of nominal income to M2—has increased over the first half of this year, consistent with its historical relationship with the interest forgone (“opportunity cost”) from holding M2. As usual, rates offered on many of the components of M2 have not tracked the upward movement in market interest rates, and the opportunity cost of holding M2 has risen. In response, investors have reallocated some of their funds within M2 toward those components whose rates adjust more quickly—such as small time deposits—

and have restrained flows into M2 in favor of longer-term mutual funds and direct holdings of market instruments.

M3 expanded at an annual rate of 9 percent in the first half of 2000, up from $7\frac{1}{2}$ percent for all of 1999. The robust expansion of bank credit underlies much of the acceleration in M3 this year. Depository institutions have issued large time deposits and other managed liabilities in volume to help fund the expansion of their loan and securities portfolios. In contrast, flows to institutional money funds slowed from the rapid pace of late 1999 after the heightened preference for liquid assets ahead of the century date change ebbed.

As has been the case since 1994, depository institutions have continued to implement new retail sweep programs over the first half of 2000 in order to avoid having to hold non-interest-bearing reserve balances with the Federal Reserve System. As a result, required reserve balances are still declining gradually, adding to concerns that, under current procedures, low balances might adversely affect the implementation of monetary policy by eventually leading to increased volatility in the federal funds market. The pending legislation that would allow the Federal Reserve to pay interest on balances held at Reserve Banks would likely lead to a partial unwinding over time of the ongoing trend in retail sweep programs.

International Developments

In the first half of 2000, economic activity in foreign economies continued the strong overall performance that was registered last year. With a few exceptions, most emerging-market countries continued to show signs of solid recoveries from earlier recessions, supported by favorable financial market conditions.

Average real GDP in the foreign industrial countries accelerated noticeably in the first half of this year after a mild slowdown in late 1999. The pickup reflected in large part better performance of Japanese domestic demand (although its sustainability has been questioned) and further robust increases in Europe and Canada. In many countries, economic slack diminished, heightening concern about inflation risks. Higher oil prices bumped up broad measures of inflation almost everywhere, but measures of core inflation edged up only modestly, if at all.

Monetary conditions generally were tightened in foreign industrial countries, as authorities removed stimulus by raising official rates. Yield curves in several key industrial countries tended to flatten, as interest rates on foreign long-term government securities declined on balance after January, reversing an upward trend seen since the second quarter of 1999. Yields on Japanese government long-term bonds edged upward slightly, but at midyear still were only about 1 3/4 percent.

Concerns in financial markets at the end of last year about potential disruptions during the century date change dissipated quickly, and global markets in the early months of this year returned to the comparatively placid conditions seen during most of 1999. Starting in mid-March, however, global financial markets were jolted by several episodes of increased volatility set off typically by sudden downdrafts in U.S. Nasdaq prices. At that time, measures of market risk for some emerging-market countries widened, but they later retraced most of these increases. The performances of broad stock market indexes in the industrial countries were mixed, but they generally tended to reflect their respective cyclical positions. Stocks in Canada, France, and Italy, for example,

continued to make good gains, German stocks did less well, and U.K. stocks slipped. Japanese shares also were down substantially, even though the domestic economy showed some signs of firmer activity. In general, price volatility of foreign high-tech stocks or stock indexes weighted toward technology-intensive sectors was quite high and exceeded that of corresponding broader indexes.

The dollar continued to strengthen during most of the first half of the year. It appeared to be supported mainly by continuing positive news on the performance of the U.S. economy, higher U.S. short-term interest rates, and for much of the first half, expectations of further tightening of monetary policy. Early in the year, the attraction of high rates of return on U.S. equities may have been an additional supporting factor, but the dollar maintained its upward trend even after U.S. stock prices leveled off near the end of the first quarter and then declined for a while. In June, the dollar eased back a bit against the currencies of some industrial countries amid signs that U.S. growth was slowing. Nevertheless, for the year so far, the dollar is up on balance about 5 3/4 percent against the major currencies; against a broader index of trading-partner currencies, the dollar has appreciated about 3 3/4 percent on balance.

The dollar has experienced a particularly large swing against the euro. The euro started this year already down more than 13 percent from its value against the dollar at the time when the new European currency was introduced in January 1999, and it continued to depreciate during most of the first half of 2000, reaching a record low in May. During this period, the euro seemed to be especially sensitive to news and public commentary by officials about the strength of the expansion in the

euro area, the pace of economic reform, and the appropriate macroeconomic policy mix. Despite a modest recovery in recent weeks, the euro still is down against the dollar almost 7 percent on balance for the year so far and about 3 3/4 percent on a trade-weighted basis.

The euro's persistent weakness posed a challenge for authorities at the European Central Bank as they sought to implement a policy stance consistent with their official inflation objective (2 percent or less for harmonized consumer prices) without threatening the euro area's economic expansion. Supported in part by euro depreciation, economic growth in the euro area in the first half of 2000 was somewhat stronger than the brisk 3 percent pace recorded last year. Investment was robust, and indexes of both business and consumer sentiment registered record highs. The average unemployment rate in the area continued to move down to nearly 9 percent, almost a full percentage point lower than a year earlier. At the end of the first half, the euro-area broad measure of inflation, partly affected by higher oil prices, was above 2 percent, while core inflation had edged up to 1 1/4 percent. Variations in the pace of economic expansion and the intensity of inflation pressures across the region added to the complexity of the situation confronting ECB policymakers even though Germany and Italy, two countries that had lagged the euro-area average expansion of activity in recent years, showed signs that they were beginning to move ahead more rapidly. After having raised its refinancing rate 50 basis points in November 1999, the ECB followed with three 25-point increases in the first quarter and another 50-point increase in June. The ECB pointed to price pressures and rapid expansion of monetary aggregates as important considerations behind the moves.

Compared with its fluctuations against the euro, the dollar's value was more stable against the Japanese yen during the first half of 2000. In late 1999, private domestic demand in Japan slumped badly, even though the Bank of Japan continued to hold its key policy rate at essentially zero. Several times during the first half of this year, the yen experienced strong upward pressure, often associated with market perceptions that activity was reviving and with speculation that the Bank of Japan soon might abandon its zero-interest-rate policy. This upward pressure was resisted vigorously by Japanese authorities on several occasions with sales of yen in foreign exchange markets. The Bank of Japan continued to hold overnight interest rates near zero through the first half of 2000.

The Japanese economy, in fact, did show signs of stronger performance in the first half. GDP rose at an annual rate of 10 percent in the first quarter, with particular strength in private consumption and investment. Industrial production, which had made solid gains last year, continued to expand at a healthy pace, and surveys indicated that business confidence had picked up. Demand from the household sector was less robust, however, as consumer confidence was held back by historically high unemployment. A large and growing outstanding stock of public debt (estimated at more than 110 percent of GDP) cast increasing doubt about the extent to which authorities might be willing to use additional fiscal stimulus to boost demand. Even though some additional government expenditure for coming quarters was approved in late 1999, government spending did not supply stimulus in the first quarter. With core consumer prices moving down at an annual rate that reached almost 1 per-

cent at midyear, deflation also remained a concern.

Economic activity in Canada so far this year slowed a bit from its very strong performance in the second half of 1999, but it still was quite robust, generating strong gains in employment and reducing the remaining slack in the economy. The expansion was supported by both domestic demand and spillovers from the U.S. economy. Higher energy prices pushed headline inflation to near the top of the Bank of Canada's 1 percent to 3 percent target range; core inflation remained just below 1½ percent. The Canadian dollar weakened somewhat against the U.S. dollar in the first half of the year even though the Bank of Canada raised policy interest rates 100 basis points, matching increases in U.S. rates. In the United Kingdom, the Bank of England continued a round of tightening that started in mid-1999 by raising official rates 25 basis points twice in the first quarter. After March, indications that the economy was slowing and that inflation pressures might be ebbing under the effect of the tighter monetary stance and strength of sterling—especially against the euro—allowed the Bank to hold rates constant. In recent months, sterling has depreciated on balance as official interest rates have been raised in other major industrial countries.

In developing countries, the strong recovery of economic activity last year in both developing Asia and Latin America generally continued into the first half of 2000. However, after a fairly placid period that extended into the first few months of this year, financial market conditions in some developing countries became more unsettled in the April–May period. In some countries, exchange rates and equity prices weakened and risk spreads widened, as increased political uncertainty interacted

with heightened financial market volatility and rising interest rates in the industrial countries. In general, financial markets now appear to be identifying and distinguishing those emerging-market countries with problems more effectively than they did several years ago.

In emerging Asia, the strong bounce-back of activity last year from the crisis-related declines of 1998 continued into the first half of this year. Korea, which recorded the strongest recovery in the region last year with real GDP rising at double-digit rates in every quarter, has seen some moderation so far in 2000. However, with inventories still being rebuilt, unemployment declining rapidly, and inflation showing no signs of accelerating, macroeconomic conditions remained generally favorable, and the won came under upward pressure periodically in the first half of this year. Nonetheless, the acute financial difficulties of Hyundai, Korea's largest industrial conglomerate, highlighted the lingering effect on the corporate and financial sectors of the earlier crisis and the need for further restructuring. Economic activity in other Asian developing countries that experienced difficulties in 1997 and 1998 (Thailand, Indonesia, Malaysia, Singapore, and the Philippines) also continued to firm this year, but at varying rates. Nonetheless, financial market conditions have deteriorated in recent months for some countries in the region. In Indonesia and the Philippines, declines in equity prices and weakness in exchange rates appear to have stemmed from heightened market concerns over political instability and prospects for economic reform. Output in China increased at near double-digit annual rates in the second half of last year and remained strong in the first half of this year, boosted mainly by surging exports. In Hong Kong, real

GDP rose at an annual rate of more than 20 percent in the first quarter of this year after a strong second half in 1999. Higher consumer confidence appears to have boosted private consumption, and trade flows through Hong Kong, especially to and from China, have increased.

The general recovery seen last year in Latin America from effects of the emerging-market financial crisis extended into the first part of this year. In Brazil, inflation was remarkably well contained, and interest rates were lowered, but unemployment has remained high. An improved financial situation allowed the Brazilian government to repay most of the funds obtained under its December 1998 international support package. However, Brazilian financial markets showed continued volatility this year, especially at times of heightened market concerns over the status of fiscal reforms, and risk premiums widened in the first half of 2000 on balance. In Mexico, activity has been strong so far this year. In the first quarter, real GDP surged at an annual rate of 11 per-

cent, boosted by strong exports to the United States, soaring private investment, and increased consumer spending. Mexican equity prices and the peso encountered some downward pressure in the approach of the July 2 national election, but once the election was perceived to be fair and the transition of power was under way, both recovered substantially. In Argentina, the pace of recovery appears to have slackened in the early part of this year, as the government's fiscal position and, in particular, its ability to meet the targets of its International Monetary Fund program remained a focus of market concern. Heightened political uncertainty in Venezuela, Peru, Colombia, and Ecuador sparked financial market pressures in recent months in those countries, too. In January, authorities in Ecuador announced a program of "dollarization," in which the domestic currency would be entirely replaced by U.S. dollars. The program, now in the process of implementation, appears to have helped stabilize financial conditions there. ■

Federal Reserve Operations

Consumer and Community Affairs

In 2000 the Board continued its work in several key areas of consumer and community affairs—preparing and interpreting consumer banking-related issues; providing information to audiences that include consumers, community groups, financial institutions, and small businesses; and supervising state member banks for compliance with the federal consumer banking and civil rights laws. In conjunction with these activities, the Board worked to implement various provisions of the Gramm-Leach-Bliley (GLB) Act.

Regulatory efforts to implement the GLB Act included issuing two new regulations and revising one. The new rules, Regulations P and G, deal respectively with the privacy of consumers' financial information and the reporting and disclosing of certain agreements under the legislation's Community Reinvestment Act (CRA) "sunshine" provision. Revisions to Regulation H target the adoption of consumer protection rules for the retail sale of insurance and annuities by state member banks. Non-regulatory efforts to implement the GLB Act included the extension of the CRA examination frequency for small banks.

The Board also engaged in significant efforts in other areas. One of these efforts was related to the predatory lending hearings the Board held in several cities around the country (see box). Another was a System initiative to help revitalize an important business corridor in the District of Columbia (see box).

Additionally, to promote consumer financial education, the Board created a computer-based program on vehicle leasing that may be downloaded from the Board's Internet web site

(www.federalreserve.gov/pubs/leasing). The program provides consumers with a basic understanding of how leasing works and a means for calculating how lease terms affect the cost of the monthly lease payment.

Regulatory Matters

The Board has responsibility for implementing federal laws concerning consumer financial services and fair lending. In addition to rulemakings involving Regulations C (Home Mortgage Disclosure) and Z (Truth in Lending), the Board issued new regulations implementing provisions of the GLB Act, in cooperation with other federal regulatory agencies.

In June the Board published Regulation P, which governs the privacy of consumer financial information under title V of the GLB Act.¹ Regulation P requires a financial institution to provide notice to customers about its privacy policies and practices and describes the conditions under which a financial institution may disclose nonpublic personal information about consumers to nonaffiliated third parties. Also, under the regulation, consumers may direct a financial institution not to disclose that information to most nonaffiliated third parties by "opting out," subject to certain exceptions.

In September the Board published revisions to Regulation Z to revise the

1. The other federal bank and thrift regulatory agencies—together with the Securities and Exchange Commission, the National Credit Union Administration, and the Federal Trade Commission—issued comparable rules.

Abusive Practices in Home Equity Lending

Abusive practices in home equity lending received significant attention from the Board and other regulatory agencies during the year. Information about abusive lending practices is essentially anecdotal, but the frequency of reports from a wide range of sources clearly suggests that a problem exists. The reports indicate that abusive practices are frequently targeted at elderly, female, or minority borrowers and can result in the consumer's losing much of the equity in the home or even the home itself.

"Predatory lending" consists of a variety of practices that typically involve at least one of the following abuses: (1) making loans based on the borrower's equity in the home rather than on the borrower's ability to repay the debt, (2) inducing a borrower to refinance a loan repeatedly, charging high fees each time, and (3) using fraud or deception to conceal the true nature of the loan obligation from an unsuspecting or unsophisticated borrower.

To address abusive practices in high-cost home equity loans, the Congress in 1994 enacted the Home Ownership and Equity Protection Act (HOEPA) as part of the Truth in Lending Act. HOEPA requires additional disclosures for home equity loans bearing rates or fees above a certain percentage or amount and also imposes limitations on certain terms (for example, restricting short-term balloon notes and

prepayment penalties). HOEPA also prohibits creditors from engaging in a pattern or practice of making high-cost loans without regard to the borrower's ability to make the scheduled payments.

The volume of home equity lending has increased significantly in the past few years. Much of this increased lending can be ascribed to the rapid growth of the subprime mortgage market, which provides access to credit to consumers who do not meet underwriting criteria for "prime" loans. Based on data reported under the Home Mortgage Disclosure Act, the number of loans made by lenders that specialize in subprime loans increased about six-fold between 1994 and 1999—from 138,000 to roughly 856,000. The greater availability of credit to subprime borrowers is a positive development, but continuing reports of abusive practices raise concerns that there has been a corresponding increase in predatory loans.

During the summer of 2000, the Board held public hearings in Charlotte, Boston, Chicago, and San Francisco to consider how it might use its regulatory authority to deter predatory practices in home equity lending. The hearings focused on expanding the scope of mortgage loans covered by HOEPA, prohibiting specific acts and practices that lead to abuses, improving consumer disclosures, and educating consum-

disclosure requirements for credit and charge cards. Under the Fair Credit and Charge Card Disclosure Act of 1988, direct mail and other solicitations and applications to open card accounts must disclose the annual percentage rate (APR) and other cost information, generally in the form of a table. Under the Board's revised rules, the APR for purchases must be in at least 18-point

type and must appear under a separate heading from other APRs that may apply, such as penalty rates. Disclosures must be in a reasonably understandable form readily noticeable to consumers, and they must include the APRs for cash advances and balance transfers as well as balance transfer fees.

In November the Board revised Regulation H to adopt consumer protec-

ers. The Board received testimony from invited panelists and comments from members of the public.

During the hearings and in the comment letters, most creditors and others involved in mortgage lending generally opposed expanding the scope of mortgage loans covered by HOEPA. They expressed concern about the potential for reducing the availability of credit in the subprime market if more loans become subject to HOEPA and to additional restrictions.

On the other hand, consumer representatives and community development organizations, supported a broadening of HOEPA's scope. These commenters recommended that the Board ban certain acts or practices associated with predatory loans, such as prepayment penalties and balloon payments, single premium credit insurance, and "loan flipping."

On December 26, 2000, the Board published proposed amendments to its Regulation Z to address high-cost loans. The amendments would (1) adjust the price triggers used to determine HOEPA coverage and thereby expand the number of mortgage loans subject to HOEPA, (2) prohibit certain acts and practices in home-secured loans—for example, creditors could not engage in repeated refinancings of their own HOEPA loans over a short time period unless the transactions are in the borrower's interest, (3) generally require creditors to document and verify a consumer's income for HOEPA-covered

loans to strengthen HOEPA's prohibition against loans made without regard to the consumer's ability to repay, and (4) enhance disclosures provided to consumers before closing certain HOEPA-covered loans.

Other initiatives are under way to address predatory lending:

- Bills have been introduced in the Congress, and several states have enacted or are considering legislation or regulations
- A federal task force of ten federal agencies and offices is working to establish a coordinated approach to deter abusive and predatory practices and to enforce existing laws that address such practices
- HUD and Treasury held five public forums on predatory lending and issued a report in June 2000. The report contained recommendations to the Congress for legislative action and to the Board for using its regulatory authority
- Fannie Mae and Freddie Mac developed guidelines to avoid purchasing predatory loans and are working to develop consumers' awareness of their credit options
- The Board is considering other strategies to address predatory lending concerns, such as community outreach and consumer education. The Federal Reserve has worked actively with financial institutions, consumer and community organizations, and other federal agencies to discuss issues and identify possible steps for mitigation of the problems.

tion rules for the retail sale of insurance and annuities by state member banks, thereby implementing section 305 of the GLB Act. The rules require depository institutions (and any person selling or offering insurance products or annuities to consumers at an office of, or on behalf of, a depository institution), to make certain disclosures before completing a sale. The disclosures inform consumers

that the insurance or annuity is not a deposit or obligation of the depository institution and is not FDIC insured and that the depository institution may not condition an extension of credit on the consumer's purchase of insurance or an annuity from the financial institution or any of its affiliates. The disclosure must also note any investment risk associated with the insurance product or annuity.

The Upper Georgia Avenue Corridor: Economic Gateway to the District

Let's not lose sight of the myriad of important activities of the vast majority of small businesses, especially in neighborhoods such as this [Georgia Avenue], where they provide vital services to help the community prosper and grow.

Alan Greenspan, Chairman, Board of Governors
at the Georgia Avenue Business Resource Center Grand Opening
August 10, 2000

Expanding the private sector ranks high among ways to stimulate economic growth in the District of Columbia. District officials recognize the importance of the private sector not only in the downtown centers but also in neighborhoods with small, community-based businesses that add stability to the local economy. Accordingly, the process of developing small businesses has brought new dimensions and new participants to revitalization efforts in District communities.

Meetings hosted in 1999 by the Federal Reserve laid the groundwork for a variety of public-private partnerships, the type of cooperative effort that is vital to attracting investment and development in target neighborhoods like the Georgia Avenue corridor. By the fall of 2000, collaboration among stakeholders produced the Georgia Avenue Business Resource Center; created technical-assistance partnerships with the District of Columbia, the U.S. Small Business Administration (SBA), and area universities including the masters in business administration (MBA) programs of George Washington University, the University of the District of Columbia, Howard University, and Southeastern University; and established lending relationships with Riggs Bank, City First Bank (a certified Community Development Financial Institution), and other local lenders.

Why Georgia Avenue?

The upper Georgia Avenue commercial corridor, in the Northwest quadrant of Washington, D.C., is one of the city's busi-

est north-south thoroughfares and a major link between the District of Columbia and Maryland. District and Maryland establishments with strong historical and employment ties to the region border the corridor; they include the Walter Reed Army Medical Center, a suburban Maryland central business district, sixty small businesses, and colleges and universities.

Over time, however, cross-border business issues, physical blight, and safety concerns had diminished the corridor's redevelopment potential. Not even the combination of favorable regional access, high transit volume, and a strong homeownership base could reverse or even stay the economic downturn of Georgia Avenue.

District officials studied the area's redevelopment needs and recommended that partnerships across jurisdictions, including cooperative agreements with area lenders, businesses, universities, and neighborhoods in Maryland and the District, were the key to successfully restoring upper Georgia Avenue's status as the gateway to the District.

A Meeting of the Minds

In 1999 the Federal Reserve System began participating in the District's planning for overall business development—before the planning focused specifically on Georgia Avenue—and brought other major stakeholders into the process.

Alice M. Rivlin, then Vice Chair of the Federal Reserve Board, and J. Alfred Broaddus, Jr., President of the Federal

Reserve Bank of Richmond, convened a meeting in June 1999 to encourage private-sector participation in the District's business development process. Among the participants were the chief executive officers and senior officials of local governmental, academic, community, and private-sector organizations integral to community development. At that meeting, Federal Reserve officials secured commitments from CEOs to take an active role in helping the District meet its business development and financing needs.

The CEOs and other supporters next attended a business forum hosted by the Federal Reserve in July 1999. The forum highlighted nationwide best practices and approaches to inner-city commercial redevelopment that could be adapted for use in the District, including the Access to Capital project in Cleveland. The Access to Capital project, facilitated by the Federal Reserve Bank of Cleveland, was undertaken to improve the success rate of the city's new and growing businesses by matching resource providers to business needs.

In the fall, Richmond Reserve Bank president Broaddus and Federal Reserve Board Member Edward Gramlich, who chairs the Federal Reserve Board's Oversight Committee on Consumer and Community Affairs, met with District leaders to discuss a project based on the Cleveland model. At this meeting, District officials and their partners decided to focus initial recovery efforts on Georgia Avenue, and all agreed to start with the small businesses that once contributed significantly to the economic health of the community.

The discussions were the catalyst that brought to life the small-business features of the District's economic resurgence plan. The resulting public-private partnerships helped the District identify ways to make capital available to community-based and emerging businesses in general and along the Georgia Avenue corridor in particular.

Let the Record Show

The business, government, and community linkages led relatively quickly to significant activity along the upper Georgia Avenue corridor. The Georgia Avenue Business Resource Center was launched in 2000, with Federal Reserve Board Chairman Alan Greenspan joining local officials at the opening ceremonies on August 10.

The resource center will be the first District satellite office of the U.S. Small Business Administration's One-Stop Capital Shop. Developed through a joint venture between the SBA and the District of Columbia, the One-Stop Capital Shop helps small businesses in the District obtain financial and technical assistance. The District contributed initial funding for the center's staff jointly with the District of Columbia Chamber of Commerce.

Volunteers and SBA representatives visit the center weekly to discuss SBA loan guarantee programs and support services for small businesses. Loan officers from local banks conduct seminars on financial services and meet with clients on bank products and programs. Clients that are initially unbankable receive assistance in business planning, marketing, grant writing, and other business development areas from MBA students at area universities.

By winter 2001 the DC Chamber of Commerce plans to launch a mentorship program that will match new, growing, or troubled businesses with established business members of the Chamber for ongoing technical assistance. The Georgia Avenue Business Resource Center also plans to partner with the Foundation for International Community Assistance, another Community Development Financial Institution, to provide micro-loan support and credit counseling.

The Upper Georgia Avenue project illustrates the extent to which local revitalization initiatives can benefit from efforts to mobilize all elements of the community.

In December the Board published Regulation G to implement the sunshine requirements; comparable rules were issued by the other federal bank and thrift regulatory agencies. The GLB Act established annual reporting and public disclosure requirements for certain written agreements that are made in connection with the CRA and that are entered into between insured depository institutions or their affiliates and nongovernmental entities or persons. Among other things, the regulation identifies the types of covered agreements and describes how the parties to those agreements will make them available to the public and the appropriate agencies.

In addition the Board took the following regulatory and interpretive actions during the year:

- Revised the official staff commentary to Regulation Z to clarify that short-term cash advances commonly called “payday loans” are credit transactions covered by the regulation
- Adjusted the dollar amount of points and fees that triggers additional requirements for certain mortgage loans under the Home Ownership and Equity Protection Act of 1994 (HOEPA)
- Increased to \$31 million the exemption threshold for depository institutions required to collect data in the year 2001 under the Home Mortgage Disclosure Act.

The Board also proposed amendments to Regulation C and to the HOEPA provisions of Regulation Z. The Regulation C proposal includes the following elements:

- Requiring lenders to report requests for preapprovals that meet certain conditions

- Requiring lenders to report home equity lines of credit
- Expanding coverage of nondepository lenders
- Requiring lenders to report additional data about loans and applications (such as the annual percentage rate and whether the application involves a manufactured home).

The proposed amendments to HOEPA include the following elements:

- Extending coverage to more loans in two ways: by lowering the APR threshold and by expanding the closing cost trigger
- Addressing “flipping” (frequent refinancings) by prohibiting certain refinancings unless the transaction is in the borrower’s interest
- Strengthening the rules regarding verification of a consumer’s ability to repay a loan.

Consumer Advisory Council

The Board’s Consumer Advisory Council convened in March, June, and October 2000 to advise the Board on matters concerning laws related to consumer financial services. The council’s members come from consumer and community organizations, the financial services industry, academic institutions, and state agencies. Council meetings are open to the public.

The CRA sunshine provisions of the GLB Act was a major topic at all three meetings. In March and June, council members discussed the language in the statute concerning what CRA agreements should be covered and how they should be reported to the federal banking agencies. Some members suggested that a CRA agreement should exist only when contacts had been made with executive management within a finan-

cial institution. In October members discussed actions regulators could take to clarify requirements in the proposed regulation.

The Board's proposed privacy regulation, Regulation P, was discussed at the March meeting. Council members commented on methods for handling opt-out notices, situations permitting financial institutions to share customer information with nonaffiliated third parties, and alternatives for defining "publicly available information." Members noted the complexity involved in preparing rules that cover a broad range of financial services and products.

Disclosure requirements for credit and charge card solicitations and applications were a key topic at the March and June meetings. Council members provided views on whether the cost disclosures in the required table were clear and conspicuous and whether the table was in a prominent location. In June, council members discussed the proposed amendments to Regulation Z, aimed at providing consumers with more noticeable and easier-to-understand cost information.

Predatory lending—and in particular, how the Board might use its rulewriting authority under HOEPA to help deter abusive practices in home equity lending—was addressed at the June and October meetings. In June, council members identified issues for the Board to raise in public hearings that were to be held that summer. At the October meeting, members discussed changes to Regulation Z to implement the HOEPA rules. These changes focused primarily on addressing concerns about loan flipping, foreclosure notices, and the points and fee triggers that define HOEPA loans.

In October the council discussed Regulation C, which implements the Home Mortgage Disclosure Act

(HMDA). The members discussed possible changes to the regulation intended to improve the usefulness of the data that mortgage lenders are required to disclose. Members expressed differing views on potential changes, such as modifying the definition of "refinancing," adding the collection of loan pricing information, and expanding coverage of nondepository lenders. Despite opposing viewpoints and recognition of some data limitations, members generally viewed the HMDA data as a valuable tool for both regulators and the public.

Applications

During 2000 the Board of Governors considered applications for several significant banking mergers.

- In May the Board approved an application by the Charles Schwab Corporation, San Francisco, to become a bank holding company by acquiring U.S. Trust Corporation, New York. The simultaneous declaration by Charles Schwab to become a financial holding company was the first application by a brokerage firm to acquire a banking company since the enactment of the GLB Act.
- In September the Board approved related applications by North Fork Bancorporation, Melville, New York, to acquire Dime Bancorp, Inc., New York, and by FleetBoston Financial Corporation, Boston, to acquire up to 9 percent of the voting shares of North Fork.
- In October the Board approved an application by Wells Fargo & Company, San Francisco, the seventh largest commercial banking organization in the United States, to acquire First Security Corporation, Salt Lake

City, the thirty-ninth largest banking organization.

Comments received on these applications raised a variety of concerns ranging from allegations of predatory lending to the inadequacy of banking credit and services provided in low- and moderate-income communities. In each of these applications, the Board found that the CRA records of the depository institutions involved were consistent with approval.

In addition, the Board in 2000 acted on twelve bank and bank holding company applications that involved protests by members of the public concerning the performance under the CRA of insured depository institutions. The Board also reviewed two applications that involved institutions having less than satisfactory CRA ratings and another thirty-seven applications involving other issues related to CRA, fair lending, or compliance with consumer credit protection laws.²

Fair Lending

Under the Equal Credit Opportunity Act, the Board refers to the Department of Justice all violations that it has reason to believe constitute a "pattern or practice" of discrimination. The Board referred two cases in 2000. One involved a policy and practice of unlawfully requiring the signatures of the spouses of loan applicants on debt instruments; the other involved a practice of discriminatory loan pricing on the prohibited basis of age.

During 2000 the Board continued to prepare examiners to conduct fair lending examinations by offering regular

sessions of a comprehensive two-week training course. In addition, the Board developed two specialized courses. The first of these is a week-long program that provides community affairs staff members, who are not examiners, with an overview of fair lending concepts. The second is a one-week course for fair lending examiners that concentrates on commercial lending concepts and practices.

The Federal Reserve uses a two-stage statistical regression analysis to help assess fair lending compliance by large-volume mortgage lenders. In the first stage, the program analyzes HMDA data to identify banks with loan denial rates for racial and ethnic minority applicants that are significantly different from those for nonminority applicants.³ In the second stage, the program is applied to extensive additional information taken from a sample of the loan files of the banks identified in the first stage.

In 2000 the Board again hosted a Systemwide conference to enable Reserve Bank users of the regression analysis program to discuss their accumulated experiences with Board staff members. Those discussions resulted in proposals to add gender-based analysis capabilities and to permit racial discrimination analyses even when the number of denied applicants is quite small.

HMDA Data and Mortgage Lending Patterns

The Home Mortgage Disclosure Act requires mortgage lenders covered by the act to collect and make public certain data about their home purchase, home improvement, and refinancing loan transactions. Depository institu-

2. In addition, two applications involving adverse CRA ratings and two involving other CRA or compliance issues were withdrawn in 2000.

3. See the next section for a discussion of the collection of HMDA data.

tions generally are covered if they were located in metropolitan areas and met the asset threshold at the end of the preceding year. For 1999, the asset threshold for depository institutions was \$29 million. Mortgage companies are covered if, at the end of the preceding year, they were located in or made loans in metropolitan areas and had assets of more than \$10 million (when combined with the assets of any parent company). They are also covered, regardless of asset size, if they originated 100 or more home purchase loans in the preceding year.

In 2000 a total of 6,730 depository institutions and affiliated mortgage companies and 1,103 independent mortgage companies reported HMDA data for calendar year 1999 to their supervisory agencies. These lenders submitted information about the geographic location of the properties related to their loans and applications, the disposition of loan applications, and, in most cases, the race or national origin, income, and sex of applicants and borrowers.

The Federal Financial Institutions Examination Council (FFIEC) processed the data and produced disclosure statements on behalf of the Department of Housing and Urban Development (HUD) and the FFIEC's member agencies.⁴ The FFIEC prepared individual disclosure statements for each lender that reported data—one statement for each metropolitan area in which the lender had offices and reported loan activity. For 1999 data, the FFIEC prepared 56,966 disclosure statements.

In July 2000 each institution made its disclosure statement public; and reports

containing aggregate data for all lenders in a given metropolitan area were made available at central depositories in the nation's approximately 330 metropolitan areas. These data are used by HUD and the Department of Justice as one component of their fair lending reviews, by the FFIEC's member agencies, the reporting institutions, and the public; HUD also uses the data in its oversight of Fannie Mae and Freddie Mac. In addition, the data assist HUD, the Department of Justice, and state and local agencies in responding to allegations of lending discrimination and in targeting lenders for further inquiry.⁵

The 1999 data that were reported in 2000 covered 22.9 million loans and applications, a decrease of about 7 percent from 1998 data. The decrease was due primarily to a decline of about 18 percent in refinancing activity. When compared with 1998, the number of home purchase loans extended in 1999 increased 44 percent for Native American applicants, 18 percent for Hispanic, 16 percent for Asian, 11 percent for black, and 2 percent for white applicants. Over the seven years from 1993 through 1999, the number of home purchase loans extended increased 121 percent for Hispanics, 119 percent for Native Americans, 91 percent for blacks, 70 percent for Asians, and 34 percent for whites.

The number of home purchase loans extended to applicants in all income categories increased in 1999 compared with the preceding year. The number of such loans extended to lower-income applicants increased 14 percent, while

4. The member agencies of the FFIEC are the Board, the Federal Deposit Insurance Corporation (FDIC), the National Credit Union Administration (NCUA), the Office of the Comptroller of the Currency (OCC), and the Office of Thrift Supervision (OTS).

5. On behalf of the nation's seven active private mortgage insurance (PMI) companies, the FFIEC also compiles information on applications for PMI similar to the information on home mortgage lending collected under HMDA. Lenders typically require PMI for conventional mortgages that involve small down payments.

the number extended to upper-income applicants increased 4 percent. Over the seven years from 1993 to 1999, the number of home purchase loans extended to lower-income applicants increased 86 percent, and the number extended to upper-income applicants increased 51 percent.

In 1999, 31 percent of Hispanic and 24 percent of black applicants for home purchase loans sought government-backed mortgages; the comparable figures for white, Native American, and Asian applicants were 14 percent, 12 percent, and 10 percent respectively. Twenty-four percent of lower-income applicants for home purchase loans applied for government-backed loans in 1999, compared with 10 percent of upper-income applicants.

Overall, the denial rate for conventional home purchase loans was 28 percent in 1999. The denial rate had been increasing over the past several years but fell slightly (about 1 percentage point) from 1998 to 1999. In 1999, denial rates for conventional home purchase loans (those not backed by a government guarantee of repayment) were 49.0 percent for black, 42.1 percent for Native American, 35.0 percent for Hispanic applicants, 25.5 percent for white, and 11.8 percent for Asian applicants. Except for Asian applicants, each of these rates was lower, by a small margin, than the comparable rate for 1998.

Consumer Policies

Through its consumer policies program, the Board conducts research and explores ways to protect consumers, other than by regulation, in the area of retail financial services. In 2000 the Board worked with other agencies and with public- and private-sector organizations to develop education materials

designed to increase consumers' financial literacy. Work is progressing on education resources to help consumers avoid abusive lending practices.

One significant education effort involved the development of a computer program on vehicle leasing that the public can download from the Board's Internet web site. This program answers three key questions:

- How is leasing different from buying?
- What are the upfront, ongoing, and end of lease costs?
- How do you compare lease offers and negotiate lease terms?

Included in the program are a checklist to use when shopping for a lease, information on how to read lease ads, sample leasing disclosure forms, and a calculator that can be used to show how changing a term in the lease agreement changes the cost of the monthly payment.

During 2000 the Board released the thirteenth edition of the *Consumer Handbook to Credit Protection Laws*. This publication provides consumers with information on the Truth in Lending Act, the Fair Credit Billing Act, the Fair Credit Reporting Act, the Equal Credit Opportunity Act, the Consumer Leasing Act, and the Electronic Fund Transfer Act.

The Board hosted a forum on "Best Practices in Consumer Credit Education," with participation from a wide range of public- and private-sector consumer educators. The goals of the forum were to develop a list of best practices, focusing on effective tools and techniques, and to identify strategies to foster effective credit education.

The Board's consumer policies program received an award from the College for Financial Planning for research

on how consumers search for information in mortgage shopping, as well as national recognition for research on banking relationships of underserved consumers. Electronic banking continued to be a topic for research by staff members, who use data from the University of Michigan Survey Research Center and from consumer focus groups.

Community Affairs

The Federal Reserve's Community Affairs Offices sponsor activities that communicate the availability of resources and strategies for community economic development. The twelve Reserve Banks target the information and development needs of their Districts. The Board's Community Affairs Office offers a national perspective, engaging in projects that have broad implications for public policy or that promote issues that are industrywide in scope. Through these programs, the Federal Reserve during 2000 provided technical assistance, conducted nearly 1,600 outreach meetings, sponsored 288 conferences and workshops, and distributed about 2000,000 publications related to community development.

In 2000 the System's community affairs function began planning—in collaboration with research colleagues at the Board and the Reserve Banks—a research conference for early 2001 devoted to the effect of changing financial markets on the delivery of financial services to low-income populations and communities. The agenda for the symposium, entitled "Changing Financial Markets and Community Development," will feature research that resulted from a call for papers. It will focus on the Community Reinvestment Act, predatory lending, credit scoring, wealth creation, and alternative financial services.

In 2000 the Board published a directory of the community development corporations owned by bank holding companies and state member banks throughout the country and sponsored a training program on fair lending for Reserve Bank staff members that was instrumental in developing and launching a national community affairs Internet site linking the web sites of the twelve Reserve Banks.

Concern for the relatively limited availability of technology to low-income inner city and rural households was the focus of a conference sponsored by the Federal Reserve Bank of New York. This issue was also discussed at a community reinvestment conference hosted by the Federal Reserve Bank of San Francisco.

The Federal Reserve Bank of Boston convened a meeting to present strategies and tools for faith-based groups that are working to address critical community development issues.

In response to concerns regarding the effect of credit scoring on the availability of credit to underserved populations, a collaboration of staff members from the Board and the Boston, Chicago, Cleveland, and San Francisco Reserve Banks initiated a five-part report exploring various aspects and effects of credit scoring.

During 2000, Community Affairs Program officers continued working on affordable housing. Board staff members advised a national community development organization on the issue as well as the Rural Home Loan Partnership (RHLP), an interagency partnership committed to providing affordable housing in rural communities. The Federal Reserve Bank of Dallas hosted a financing workshop for the RHLP, and community affairs staff members at the Atlanta Reserve Bank provided signifi-

cant assistance for an RHLP meeting in Orlando, Florida.

Given the many challenges in rural and Native American communities, public-private partnerships are critical to successful community development. To promote such collaborations in rural communities, the Federal Reserve Bank of Kansas City sponsored a series of roundtables in cooperation with the Atlanta, Chicago, Cleveland, Dallas, Minneapolis, and San Francisco Reserve Banks. These sessions focused on identifying the strengths and challenges unique to rural areas; findings of these meetings and resulting policy recommendations were published by the Kansas City Reserve Bank. Similarly, the Federal Reserve Bank of San Francisco convened task force meetings among various tribal leaders to explore ways of overcoming the barriers to credit faced by residents and business owners on Native American reservations.

Economic Effects of the Electronic Fund Transfer Act

As required by the Electronic Fund Transfer Act (EFTA), the Board monitors the effects of the act on the compliance costs and consumer benefits related to electronic fund transfer (EFT) services.

The proportion of U.S. households using EFT services has grown over the past decade at an annual rate of about 2 to 3 percent, according to consumer surveys (the most recent in 1998). Approximately 85 percent of households have one or more EFT features on their accounts at financial institutions.

Automated teller machines (ATMs) remain the most widely used EFT service. About two-thirds of U.S. households have an ATM card. During 2000

the average monthly number of ATM transactions increased to 1.1 billion, from 907.4 million for 1999, and the number of installed ATMs rose about 20 percent, to 273,000.

Direct deposit is another widely used EFT service. About 60 percent of U.S. households have funds deposited directly into their transaction accounts (checking or savings). Use of the service is particularly common in the public sector, accounting for 77 percent of social security payments, 92 percent of federal salary and retirement payments, and 29 percent of federal income tax refunds.

A less widely used EFT payment mechanism is direct bill paying. About 36 percent of U.S. households have payments automatically deducted from their accounts.

About one-third of U.S. households have debit cards, which consumers use at merchant terminals to debit their transaction accounts. These point-of-sale (POS) systems account for a fairly small share of electronic transactions, but their use continued to grow rapidly in 2000. The average monthly number of POS transactions rose about 28 percent, from 202.3 million in 1999 to 258.9 million in 2000, and the number of POS terminals rose about 19 percent to 2.8 million.

The incremental costs associated with the EFTA are difficult to quantify because no one knows how industry practices would have evolved in the absence of statutory requirements. The benefits of the EFTA are also difficult to measure because they cannot be isolated from consumer protections that would have been provided in the absence of regulation. The available evidence suggests no serious consumer problems with EFTA (see "Agency Reports on Compliance with Consumer Regulations" below).

Compliance

The Federal Reserve System's compliance activities in 2000 included conducting and overseeing examinations of state member banks; training System compliance examiners; and participating in the compliance activities of the Federal Financial Institutions Examination Council (FFIEC). The System also continued its implementation of risk-focused examination procedures, which enhance the efficiency and effectiveness of System compliance examinations.

Compliance Examinations

The Federal Reserve System's compliance examination program ensures that state member banks and foreign banking organizations subject to Federal Reserve examination comply with federal laws protecting consumers in the provision of financial services. During the 2000 reporting period (July 1, 1999, through June 30, 2000), the Federal Reserve conducted 526 examinations for compliance with consumer protection laws: 408 examinations of state member banks and 118 of foreign banking organizations.⁶

Examiner Training

Examiners who are well versed in the consumer protection laws, fair lending laws, and the Community Reinvestment Act (CRA) are critical to the success

of the Board's compliance program. Hence, the type and timeliness of training opportunities are important. Reserve Bank examiners with little or no field experience attend a two-week basic compliance course; and examiners with six to eighteen months of field experience attend a two-week advanced course, a two-week course in techniques for fair lending examinations, and a one-week course in CRA examination techniques.

In addition, in 2000 the System introduced a new course on commercial lending essentials for consumer affairs compliance examiners. The course is taught by safety and soundness examiners and by other Board staff members who have previous experience as commercial lenders.

During the 2000 reporting period, 204 individuals attended eleven compliance examination schools. The schools included two sessions of the System's basic compliance course, two of the advanced compliance course, three in fair lending examination techniques, and three in CRA examination techniques.

Participation in FFIEC Activities

Through the cooperation of its member agencies, the FFIEC develops uniform examination principles, standards, and report forms.⁷ In 2000 the member agencies continued working to improve coordination of consumer compliance and CRA examination activities. Actions to promote uniformity among the federal supervisors of financial institutions included issuing new interagency examination procedures for the Homeowners Protection Act of 1998, which requires lenders or servicers to provide information about private mortgage

6. The foreign banking organizations examined by the Federal Reserve are organizations operating under section 25 or 25(a) of the Federal Reserve Act (Edge Act and agreement corporations) and state-chartered commercial lending companies owned or controlled by foreign banks. These institutions are not subject to the Community Reinvestment Act and, in comparison with state member banks, they typically engage in relatively few activities that are covered by consumer protection laws.

7. For the member agencies of the FFIEC, see note 4.

insurance (PMI) on loans secured by the consumer's primary residence.

In addition, the FFIEC is currently developing interagency examination procedures for the agencies' privacy regulations. The privacy regulations contain notice requirements and place restrictions on a financial institution's disclosure of nonpublic personal information about consumers to nonaffiliated third parties. The FFIEC is also developing interagency examination procedures for the Children's Online Privacy Protection Act of 1998, which addresses the collection, disclosure, and use of personal information about children obtained through an Internet web site or other online service.

Community Reinvestment Act

The Federal Reserve assesses the CRA performance of state member banks through compliance examinations. In addition, the Board considers CRA ratings (as well as other factors) when acting on applications from state member banks and bank holding companies for mergers, acquisitions, and certain other actions. The Federal Reserve's program for fostering better bank performance under the CRA includes the following tasks:

- Examining institutions to assess compliance with the CRA
- Disseminating information on community development techniques to bankers and the public through community affairs offices at the Reserve Banks
- Performing CRA analyses in connection with applications from state member banks and bank holding companies.

During the 2000 reporting period, the Federal Reserve conducted 260 CRA

examinations. Of the banks examined, 52 were rated "outstanding" in meeting community credit needs, 202 were rated "satisfactory," 5 were rated "needs to improve," and 1 was rated as being in "substantial noncompliance."

Fewer banks were examined during the 2000 reporting period than during the 1999 reporting period because the GLB Act, which became law in November 1999, extended the length of time between CRA examinations for financial institutions with assets of less than \$250 million and a CRA rating of satisfactory or outstanding. With few exceptions, the law requires that banks rated satisfactory for CRA performance be examined no more than once every forty-eight months (up from once every twenty-four months) and that banks rated outstanding be examined no more than once every sixty months (up from once every thirty-six months).

Agency Reports on Compliance with Consumer Regulations

The Board reports annually on agency compliance with Regulation B (which implements the Equal Credit Opportunity Act); Regulation E (Electronic Fund Transfer Act); Regulation M (Consumer Leasing Act); Regulation Z (Truth in Lending Act); Regulation CC (Expedited Funds Availability Act); Regulation DD (Truth in Savings Act); and Regulation AA (Unfair or Deceptive Acts or Practices). The Board assembles compliance data from the Reserve Banks and also collects data from the FFIEC agencies and from other federal supervisory agencies.⁸

8. The agencies use different methods to compile compliance data. Accordingly, the data presented here regarding percentages of financial institutions supervised or examined support only general conclusions.

A summary of the reported compliance data for the 2000 reporting period (July 1, 1999 through June 30, 2000) follows. In general, the overall level of compliance in 2000 was similar to that in 1999. As in past years, the level of compliance varied considerably from regulation to regulation.

Regulation B (Equal Credit Opportunity)

The FFIEC agencies reported that 81 percent of the institutions examined during the 2000 reporting period were in compliance with Regulation B, compared with 78 percent for the 1999 reporting period. Of the institutions not in compliance, 68 percent had one to five violations. The most frequent violations involved the failure to take one or more of the following actions:

- Provide a written notice of credit denial or other adverse action containing a statement of the action taken, the name and address of the creditor, a Regulation B notice of rights, and the name and address of the federal agency that enforces compliance
- Provide a statement of reasons for credit denial or other adverse action that is specific and indicates the principal reasons for the credit denial or other adverse action
- Collect information for monitoring purposes about the race or national origin, sex, marital status, and age of applicants seeking credit primarily for the purchase or refinancing of a principal residence
- Notify the credit applicant of the action taken within the time frames specified in the regulation
- Refrain from requesting the race, national origin, or sex of an applicant in transactions not covered by the monitoring requirements.

The OTS issued four formal enforcement actions that contained provisions relating to Regulation B; the FDIC issued one.

In 2000 the Federal Trade Commission (FTC), in conjunction with various other agencies, obtained consent orders against a subprime mortgage lender and a subprime finance company for alleged violations of the Equal Credit Opportunity Act (ECOA). The alleged violations included, among others, failing to provide applicants with written notice of adverse action on credit applications and failing to provide adequate notices of adverse action to loan applicants. Under the consent decrees, the defendants agreed to the entry of a permanent injunction and agreed to pay civil money penalties.

The FTC also continued litigation against a mortgage lender for violations of the ECOA. The allegation included, among others, failure to take written applications for mortgage loans, failure to collect monitoring information on mortgage loan applicants, and providing inadequate notices of adverse action to loan applicants. The FTC is seeking civil money penalties and injunctive relief.

The other agencies that enforce the ECOA—the Farm Credit Administration (FCA); the Department of Transportation (DOT); the Securities and Exchange Commission (SEC); the Small Business Administration; and the Grain Inspection, Packers and Stockyards Administration of the Department of Agriculture—reported substantial compliance among the entities they supervise. The FCA's examination and enforcement activities revealed certain violations of ECOA, most of them due to creditors' failure to collect information for monitoring purposes and failure to comply with rules regarding adverse

action notices; however, no formal actions were initiated.

Regulation E (Electronic Fund Transfers)

The FFIEC agencies reported that approximately 94 percent of the institutions examined during the 2000 reporting period were in compliance with Regulation E, compared with 95 percent for the 1999 reporting period. Financial institutions most frequently failed to comply with the following requirements:

- Investigate an alleged error promptly after receiving a notice of the error
- Determine whether an error occurred and transmit the results of the investigation and determination to the consumer within ten business days
- Credit the customer's account in the amount of the alleged error within ten business days of receiving the error notice.

The OTS issued one formal enforcement action that contained provisions relating to Regulation E.

In 2000 the FTC continued its consumer and business education efforts. The SEC reported that no violations of Regulation E were detected in examinations of registered broker-dealers conducted by self-regulatory organizations.

Regulation M (Consumer Leasing Act)

The FFIEC agencies reported substantial compliance with Regulation M for the 2000 reporting period. As in 1999, more than 99 percent of the institutions examined were in compliance. The few violations noted involved fail-

ure to adhere to specific disclosure requirements.

The FTC issued final decisions and orders in two cases involving deceptive motor vehicle promotions on the Internet. The complaints in these cases charged two companies and their chief executive officers with running deceptive advertisements. The complaints alleged that the companies failed to disclose, or failed to disclose adequately, the additional costs in the lease offers and that a security deposit was required. Also, key cost terms were provided in inconspicuous or unreadable fine print in violation of the Consumer Leasing Act (CLA). The orders in these cases bar the companies and their chief executives from, among other things, misrepresenting the costs or terms of vehicle leasing.

In addition, the FTC issued final decisions and orders concerning deceptive vehicle lease advertisements in six cases involving dealerships in Pennsylvania. The orders in these six cases require the dealerships to make clear and accurate cost disclosures in lease and credit advertisements and to comply with all provisions of the CLA.

Regulation Z (Truth in Lending)

The FFIEC agencies reported that 77 percent of the institutions examined during the 2000 reporting period were in compliance with Regulation Z, compared with 74 percent for the 1999 reporting period. The Board, the OTS, the FDIC, and the NCUA reported an increase in compliance, while the OCC reported an unchanged level of compliance. The FFIEC agencies indicated that of the institutions not in compliance, 64 percent were in the lowest-frequency category (having one to five violations) compared with 63 percent in 1999.

The violations of Regulation Z most often observed were

- Inaccurate disclosure of the finance charge, payment schedule, annual percentage rate, security interest in collateral, and amount financed
- Failure to disclose the annual percentage rate on a periodic statement using the term "Annual Percentage Rate"
- Failure to provide disclosures within three business days of receiving a residential mortgage application covered under the Real Estate Settlement Procedures Act
- Failure to ensure that disclosures reflect the terms of the legal obligation between the parties.

The OTS issued five formal enforcement actions subject to provisions of Regulation Z; the FDIC and OCC each issued one.

With respect to disclosure of the annual percentage rate or finance charge, the statute requires reimbursement for certain inaccuracies. Altogether, a total of 137 institutions supervised by the Federal Reserve, the FDIC, or the OTS were required, under the Interagency Enforcement Policy on Regulation Z, to refund about \$784,000 to consumers in 2000 because of improper disclosures.

In 2000 the FTC obtained consent judgments against two mortgage companies for alleged violations of the Home Ownership and Equity Protection Act and the Truth in Lending Act (TILA). In other enforcement actions the FTC

- Obtained a consent judgment pertaining to credit accident and health insurance against a finance company and its owner
- Issued a final order against a finance company regarding debt consolidation

loans involving alleged violations of TILA

- Issued consent judgments against several companies and their principals in a case involving violations of TILA in connection with payday loans
- Continued to litigate a complaint the FTC had filed in federal district court in 1998. The complaint charged a mortgage lender in the Washington, D.C., area and its owner with violating TILA in connection with alleged deceptive and unfair practices in home mortgage lending. A trial date has not been set for this case
- Filed and amended a complaint in federal district court charging a company that sold vacation travel packages with violating TILA by failing to issue credits to consumers in credit card transactions after telling the consumers that the credit would be provided.

During 2000 the FTC issued a consumer publication *Payday Loans—Costly Cash* and updated various other publications. In addition, the FTC is reviewing the effect on TILA and the CLA of the Electronic Signatures in Global and National Commerce Act (the E-Sign Act) and has commenced a study in conjunction with the Department of Commerce regarding the consumer consent provisions of the E-Sign Act.

The DOT is currently investigating one potential TILA-related case involving an air carrier's timeliness in processing customer requests for credit card refunds. In 2000 the DOT continued to prosecute a cease-and-desist consent order issued in 1993 against a travel agency and a charter operator. The complaint alleged that the two organizations violated Regulation Z by routinely failing to send credit statements for refund requests to credit card issuers within seven days of receiving fully docu-

mented credit refund requests from customers.

Regulation AA (Unfair or Deceptive Acts or Practices)

The three bank regulators with responsibility for enforcing Regulation AA's Credit Practices Rule—the Federal Reserve, the FDIC, and the OCC—reported that 99 percent of the institutions examined during the 2000 reporting period were in compliance. The most frequent violations were

- Failure to provide a clear, conspicuous disclosure regarding a cosigner's liability for a debt
- Entering into a consumer credit contract that contains a nonpossessory security interest in household goods other than a purchase money security interest.

The FDIC issued one formal enforcement action that contained provisions relating to Regulation AA.

Regulation CC (Availability of Funds and Collection of Checks)

The FFIEC agencies reported that 90 percent of institutions examined during the 2000 reporting period were in compliance with Regulation CC, compared with 91 percent for the 1999 reporting period. Of the institutions not in compliance, 67 percent had one to five violations. Institutions most frequently failed to comply with the following requirements:

- Make funds from certain checks, both local and nonlocal, available for withdrawal within the times prescribed by the regulation

- Follow special procedures for exceptions for large dollar deposits
- Provide exception notices about funds availability, including all required information.

No formal enforcement actions for violations of the regulation were issued during the period.

Regulation DD (Truth in Savings)

The FFIEC agencies reported that 88 percent of institutions examined during the 2000 reporting period were in full compliance with Regulation DD. Institutions most frequently failed to comply with the following requirements:

- Use advertisements that are accurate and not misleading
- State the rate of return as an annual percentage yield in an advertisement
- State required additional information in advertisements containing the annual percentage yield
- Provide all applicable information on account disclosures.

Consumer Complaints

The Federal Reserve investigates complaints against state member banks and forwards to the appropriate enforcement agency complaints that involve other creditors and businesses (see table). The Federal Reserve also monitors and analyzes complaints about unregulated practices.

During 2000 the Board developed a letter-generating system that uses database information to produce uniform letters of acknowledgment to complainants. The system is a new component to Complaints Analysis Evaluation System

Consumer Complaints against State Member Banks and Other Institutions Received by the Federal Reserve System, 2000

Subject	State member banks	Other institutions ¹	Total
Regulation B (Equal Credit Opportunity)	57	45	102
Regulation E (Electronic Fund Transfers)	55	67	122
Regulation M (Consumer Leasing)	12	24	36
Regulation Q (Payment of Interest)	0	1	1
Regulation Z (Truth in Lending)	374	438	812
Regulation BB (Community Reinvestment)	0	1	1
Regulation CC (Expedited Funds Availability)	24	36	60
Regulation DD (Truth in Savings)	65	40	105
Fair Credit Reporting Act	144	286	430
Fair Debt Collection Practices Act	8	15	23
Fair Housing Act	5	2	7
Flood insurance	2	7	9
Regulations T, U, and X	0	1	1
Real Estate Settlement Procedures Act	7	41	48
Unregulated practices	1,659	1,539	3,198
Total	2,412	2,543	4,955

1. Complaints against these institutions were referred to the appropriate regulatory agencies.

and Reports (CAESAR), which tracks complaints and inquiries. The letters system was implemented at the Federal Reserve Bank of New York in December 2000 and is expected to be fully implemented at all the Reserve Banks by midyear 2001.

Throughout 2000 the Reserve Banks continued to send staff members to the Board for several weeks at a time to gain familiarity with operations in Washington for handling complaints.

Complaints against State Member Banks

In 2000 the Federal Reserve received about 5,000 complaints—by mail, by telephone, in person, and electronically via the Internet. About half of the complaints were against state member banks (see tables). Of these, almost 60 percent involved loan functions: 3 percent alleged discrimination on a prohibited basis; and 56 percent concerned a variety of credit practices, such as credit denial on a basis not prohibited by law (for example, credit history or length of

residence), or the release or use of consumers' credit information. Thirty percent of the complaints against state member banks involved disputes about interest on deposits and general deposit account practices; the remaining 11 percent concerned disputes about electronic fund transfers, trust services, or other practices.

During 2000 the System completed the investigation of about 200 complaints that were pending at year-end 1999 against state member banks, finding six violations of regulations. In most cases, Reserve Bank investigations found that banks had correctly handled customer accounts. Nonetheless, the banks chose to reimburse or otherwise accommodate the consumer in nearly half of these situations.

The Federal Reserve received approximately 1,900 inquiries about consumer credit and banking policies and practices. In responding to these inquiries, the Board and Federal Reserve Banks gave explanations of laws and banking practices and provided relevant publications.

Consumer Complaints Received by the Federal Reserve System,
by Subject of Complaint, 2000

Subject of complaint	Complaints against state member banks					
	Total		Not investigated		Investigated	
	Number	Percent	Unable to obtain sufficient information from consumer	Explanation of law provided to consumer	Bank legally correct	No reimbursement or other accommodation
Loans						
Discrimination alleged						
Real estate loans	21	1	0	6	2	0
Credit cards	21	1	0	1	11	3
Other loans	15	1	0	2	3	0
Other type of complaint						
Real estate loans	190	8	5	13	63	27
Credit cards	981	40	15	18	275	521
Other loans	184	8	3	19	80	20
Deposits	734	30	20	96	299	106
Electronic fund transfers	55	2	2	3	14	12
Trust services	42	2	3	17	12	2
Other	169	7	10	12	78	18
Total	2,412	100	58	187	837	709

Unregulated Practices

As required by section 18(f) of the Federal Trade Commission Act, the Board monitors complaints about banking practices that are not subject to existing regulations and identifies those that concern possible unfair or deceptive practices. In 2000 the Board received complaints about a wide range of unregulated practices. Three of the four categories that received the most com-

plaints involved credit cards: penalty charges (161), interest rates and terms (130), and varied other problems (158). The fourth category involved complaints about charges and procedures for checking accounts with insufficient funds (137). Among the wide range of other issues raised were check-cashing problems encountered by individuals who did not have an account at the institution and consumer dissatisfaction with fees for bank loans or deposit accounts.

Consumer Complaints Received—Continued

Complaints against state member banks					Pending, December 31	Referred to other agencies	Total complaints
Investigated							
Customer error	Bank error	Factual or contractual dispute— resolvable only by courts	Possible bank violation— bank took corrective action	Matter in litigation	Pending, December 31	Referred to other agencies	Total complaints
0	1	0	2	0	10	19	40
0	0	0	0	0	6	8	29
0	0	0	2	2	6	18	33
3	52	6	2	8	11	380	570
2	69	4	5	0	72	789	1,770
1	37	7	0	8	9	371	555
0	115	26	2	14	56	596	1,330
0	13	0	5	1	5	67	122
0	3	1	0	4	0	12	54
8	27	2	0	8	6	283	452
14	317	46	18	45	181	2,543	4,955

Complaint Referrals to HUD

In 2000 the Federal Reserve referred seventeen complaints to HUD that alleged state member bank violations of the Fair Housing Act. The referrals were made in accordance with a memorandum of understanding between HUD and the federal bank regulatory agen-

cies. Investigations were completed for nine of the seventeen complaints. Seven of the nine investigations revealed no evidence of illegal discrimination. In the other two cases, the parties were seeking resolution through the courts; the Federal Reserve does not intervene in such matters. ■

Banking Supervision and Regulation

U.S. bank earnings remained strong in 2000, although they were off slightly from the record performance in 1999. Credit weaknesses, revealed as the economy slowed, required slightly higher loss provisions, while continued price competition and slow deposit growth compressed net interest margins for many banks. Noninterest income, an important source of growth in industry revenue in recent years, also slipped as a result of reduced income from private equity investments, lower trading income, and reduced investment management fees, all of which mostly affected large banks. Nonperforming loans and foreclosed real estate increased 33 percent from historically low levels. The annual interagency review of large syndicated loans showed that most of the deterioration was in commercial loans, particularly in the financial services and manufacturing sectors. Nonetheless, the volume of nonperforming assets remained well below the heights (associated with problems in the commercial real estate market) that were reached in the early 1990s.

Although challenged by a slowing economy and changing business practices and conditions, the U.S. banking system remains sound. Problems with credit quality have increased, but the industry's overall portfolio quality, earnings, and capital levels remain strong by nearly any historical measure.

In 2000 the Federal Reserve implemented provisions of the Gramm-Leach-Bliley Act. The act, passed in November 1999, removed long-standing barriers between commercial banking and securities and insurance underwriting. Although relatively few institutions

had expanded into these newly authorized activities by year-end 2000, more than 480 bank holding companies had sought and received authority to do so by meeting the legal standards to be declared a financial holding company (FHC).

Although the future actions of FHCs may depend heavily on what specific opportunities banking organizations find in the years to come, this demonstrated interest in becoming an FHC suggests that many organizations, both large and small, are likely to expand into new areas of financial services. As the "umbrella supervisor" of all FHCs, the Federal Reserve must rely to the greatest extent possible on the supervisory efforts of an institution's primary supervisor and functional regulator to ensure that nonbank activities do not present an unacceptable risk to affiliated banks. Given the greater need for interagency work, the Federal Reserve has increased its coordination and information sharing with, among others, the Securities and Exchange Commission, which oversees activities of registered broker-dealers and other firms engaged in securities activities, and with the state insurance commissions.

In recent years, the Federal Reserve has actively sought to encourage banks to maintain strong underwriting standards and has warned them to improve their processes for measuring and managing credit risk. Despite such encouragement and warning, recently announced credit losses have been largely attributable to an undue relaxation of lending standards during the 1997-99 period. Banks have tightened their standards, but much work remains

to be done by them in evaluating exposures, not only when a loan is first approved but under a range of simulated stressful conditions. Under the terms of existing guidance for proper risk management, the Federal Reserve supervisory and examination staff has been looking more closely at banks' internal systems for rating loans and for evaluating capital adequacy.

The Federal Reserve's emphasis on advancing sound risk management practices has contributed to important initiatives being undertaken on an international scale by the Basel Committee on Banking Supervision, which operates under the auspices of the Bank for International Settlements, in Basel, Switzerland. The committee has been developing a new capital standard for internationally active banks that is far more risk sensitive than the current standard (see box). The new approach builds on an institution's internal credit risk models and its own calculations of how much capital it needs. The Federal Reserve staff assisted the committee in the development of the proposal, which was issued for public comment in January 2001. Although its implementation is several years away, this proposal and its accompanying risk management standards should improve the ability of supervisors and banking organizations to detect and control risks within the banking system.

Scope of Responsibilities for Supervision and Regulation

The Federal Reserve is the federal supervisor and regulator of all U.S. bank holding companies (including financial holding companies formed under the authority of the Gramm-Leach-Bliley Act) and of state-chartered commercial banks that are members of the Federal Reserve System. In overseeing these

organizations, the Federal Reserve primarily seeks to promote their safe and sound operation and their compliance with laws and regulations, including the Bank Secrecy Act and consumer and civil rights laws.¹

The Federal Reserve also has responsibility for the supervision of all Edge Act and agreement corporations; the international operations of state member banks and U.S. bank holding companies; and the operations of foreign banking companies in the United States.²

The Federal Reserve exercises important regulatory influence over entry into the U.S. banking system and the structure of the system through its administration of the Bank Holding Company Act, the Bank Merger Act (for state member banks), the Change in Bank Control Act (for bank holding companies and state member banks), and the International Banking Act. The Federal Reserve is also responsible for imposing margin requirements on securities transactions. In carrying out these responsibilities, the Federal Reserve coordinates its supervisory activities with other federal banking agencies, state agencies,

1. The Board's Division of Consumer and Community Affairs is responsible for coordinating the Federal Reserve's supervisory activities with regard to the compliance of banking organizations with consumer and civil rights laws. To carry out this responsibility, the Federal Reserve trains a number of its bank examiners to evaluate institutions with regard to such compliance. The chapter of this volume covering consumer and community affairs describes these regulatory responsibilities. Compliance with other banking statutes and regulations, which is treated in this chapter, is the responsibility of the Board's Division of Banking Supervision and Regulation and the Federal Reserve Banks, whose examiners also check for safety and soundness.

2. Edge Act corporations, chartered by the Federal Reserve, and agreement corporations, chartered by the states, provide all segments of the U.S. economy with a means of financing international trade, especially exports.

and the bank regulatory agencies of other nations.

Supervision for Safety and Soundness

To ensure the safety and soundness of banking organizations, the Federal Reserve conducts on-site examinations and inspections and off-site surveillance and monitoring. It also undertakes enforcement and other supervisory actions.

Examinations and Inspections

The Federal Reserve conducts examinations of state member banks, branches and agencies of foreign banks, Edge Act corporations, and agreement corporations; in a process distinct from examinations, it conducts inspections of holding companies and their nonbank subsidiaries. Pre-examination planning and on-site review of operations are integral parts of ensuring the safety and soundness of financial institutions. Whether an examination or an inspection, the review entails (1) an assessment of the quality of the processes in place to identify, measure, monitor, and control risks, (2) an appraisal of the quality of the institution's assets, (3) an evaluation of management, including an assessment of internal policies, procedures, controls, and operations, (4) an assessment of the key financial factors of capital, earnings, liquidity, and sensitivity to market risk, and (5) a review for compliance with applicable laws and regulations.

State Member Banks

At the end of 2000, 990 state-chartered banks (excluding nondepository trust companies and private banks) were members of the Federal Reserve Sys-

tem. These banks represented approximately 12.0 percent of all insured U.S. commercial banks and held approximately 26.7 percent of all insured commercial bank assets in the United States.

The guidelines for Federal Reserve examinations of state member banks are fully consistent with section 10 of the Federal Deposit Insurance Act, as amended by section 111 of the Federal Deposit Insurance Corporation Improvement Act of 1991 and by the Riegle Community Development and Regulatory Improvement Act of 1994. A full-scope, on-site examination of these banks is required at least once a year; certain well-capitalized, well-managed institutions having assets of less than \$250 million may be examined once every eighteen months.

During 2000 the Federal Reserve Banks conducted 589 examinations of state member banks (some of them jointly with state agencies), and state banking departments conducted 273 independent examinations of state member banks.

Bank Holding Companies

At year-end 2000 the number of top-tier U.S. bank holding companies totaled 5,109. These organizations had 6,483 subsidiary banks and held approximately 93 percent of all commercial bank assets.

Federal Reserve guidelines call for annual inspections of large bank holding companies as well as smaller companies that have significant nonbank assets. In judging the financial condition of subsidiary banks, Federal Reserve examiners consult the examination reports of the federal and state banking authorities that have primary responsibility for the supervision of these banks, thereby minimizing duplication of effort and reducing the burden on banking organi-

The New Basel Capital Accord

Getting the proposed risk-based capital numbers correct, both in science and as an art, is especially critical for most complex organizations. The current one-size-fits-all regulatory capital regime, as you know, has led increasingly to a gaming of the regulatory requirements.

Laurence H. Meyer, *Member, Board of Governors*
June 1, 2000

On January 16, 2001, the Basel Committee on Banking Supervision issued its second proposal on the New Basel Capital Accord. The proposal describes several methods by which banks could determine their minimum regulatory capital requirements.

The new accord has three mutually reinforcing "pillars" that make up the framework for assessing capital adequacy in a bank. Pillar 1 is the minimum regulatory capital charge. The pillar 1 capital requirement includes both a standardized approach, updated since the 1988 Basel Capital Accord, and the new, internal-risk-based (IRB) approach.

Pillar 2 is supervisory review. It is intended to ensure that banks have adequate capital to support all the risks in their business and to encourage banks to develop better techniques for monitoring and managing these risks. Pillar 2 encourages supervisors to assess banks' internal approaches to capital allocation and internal assessments of capital adequacy and, subject to national discretion, provides an opportunity for the supervisor to indicate where such approaches do not appear to be sufficient. Seen another way, pillar 2 helps focus supervisors on other means of addressing risks in a bank's portfolio, such as improving overall risk management techniques and internal controls.

Pillar 3 is market discipline. Market discipline has the potential to reinforce capital regulation and other supervisory efforts to ensure the safety and soundness of the banking system. Accordingly, the committee is proposing a wide range of disclosure initiatives designed to make the risk and capital positions of a bank more transparent. As a bank begins to use the more advanced methodologies, such as the IRB approach, the new accord will require a significant increase in the level of disclosure. In essence, the trade-off for greater reliance on a bank's own assessment of capital adequacy is greater transparency.

The revised standardized approach under pillar 1 enhances the "risk bucketing" approach of the 1988 accord by providing greater, though still limited, risk sensitivity. To create an even more risk-sensitive framework, the proposal includes additional features: the refinement and addition of risk buckets; the use of external credit ratings, where present, to determine risk weights for sovereigns, banks, and corporate exposures; and a broader recognition of types of financial collateral and guarantees. The proposal also removes the 50 percent cap on risk weights for derivatives contracts and increases to 20 percent the credit conversion factor for business commitments of less than one year.

To use the IRB approach, banks must meet an extensive set of eligibility standards. The standards embody sound risk management practices and are necessary to provide supervisors with adequate confidence in banks' internal risk estimates. Because the requirements are qualitative, national supervisors will need to evaluate compliance with them to determine which banks may apply the new framework. The requirements vary by type of exposure as well by whether the bank uses the "foundation" or "advanced" IRB framework.

To calculate the amount of capital necessary to support a bank's economic risks, the IRB approach builds on internal credit risk practices of banks and on the internal processes used by some leading institutions. For each credit exposure, the IRB approach requires the following information: the amount at risk in the event of default, the borrower's probability of default, the loss to the bank that would occur in the event of default, and the credit facility's remaining maturity.

The foundation IRB framework uses conservative supervisory judgments to specify the amount at risk and the loss in the event of default. In effect, in exchange for less detailed bank-specific information and burden, the capital charges are less bank-specific and more standardized.

The advanced IRB framework has been designed to provide banks with maximum flexibility in calculating their regulatory capital requirements, subject to the constraints of prudential regulation, current banking practices and capabilities, and the need for sufficiently compatible standards among countries to maintain competitive equity among banking organizations worldwide. The advanced framework would permit banks to apply their own data and judgments regarding most

key factors affecting credit risk, provided they meet the minimum requirements and receive supervisory approval to use their estimates in calculating regulatory capital requirements.

The new accord is intended to provide banks with incentives to evolve toward the advanced IRB framework while ensuring that banking organizations remain competitive and adequately capitalized, regardless of the technique used. Sophisticated methods of risk measurement and management are particularly important for large, complex banking organizations because such organizations, should they encounter difficulties, could pose systemic risk.

One of the most significant changes in the new accord is the proposal for an operational risk charge. The charge, which is expected to represent, on average, about 20 percent of the minimum regulatory capital charge, is based upon the following concept of operational risk: *the risk of direct or indirect loss to the institution resulting from shortcomings of internal processes, people, and systems or from external events*. Although the focus of operational risk is on the pillar 1 capital charge, it also brings in elements of pillar 2 (strong control environment), and pillar 3 (disclosure).

The deadline for comment on the New Basel Capital Accord is May 31, 2001, and the committee plans to release a final version by year-end 2001. On the basis of that release date, the implementation date has been set for 2004 to allow for domestic rulemaking processes and to allow banks and supervisors time to prepare.

The 1988 accord applied to all banks in the United States. The extent to which the new accord will be applied will be decided on the basis of public comment and further refinement of the proposal.

zations. In 2000, Federal Reserve examiners conducted 1,247 bank holding company inspections, of which 1,109 were on-site and 138 were off-site, and state examiners conducted 70 independent inspections.

Small, non-complex bank holding companies—those that have less than \$1 billion in consolidated assets, do not have debt outstanding to the public, and do not engage in significant nonbank activities—are subject to a special supervisory program that became effective in 1997. The program permits a more flexible approach to supervising those entities in a risk-focused environment. Each such holding company is subject to off-site review once during the examination cycle for the company's lead bank. In 2000 the Federal Reserve conducted 2,474 reviews of these companies.

Financial Holding Companies

As of year-end 2000, 463 domestic bank holding companies and 21 foreign banking organizations had received financial holding company status. Of the domestic institutions, 32 financial holding companies had consolidated assets of \$15 billion or more, 59 between \$1 billion and \$15 billion, 34 between \$500 million and \$1 billion, and 338 with less than \$500 million.

Specialized Examinations

The Federal Reserve conducts specialized examinations of banking organizations in the areas of information technology, fiduciary activities, transfer agent activities, and government and municipal securities dealing and brokering. The Federal Reserve also conducts specialized examinations of certain entities, other than banks, brokers, or dealers,

who extend credit subject to the Board's margin regulations.

With the passage of the Gramm-Leach-Bliley Act, the Federal Reserve ceased conducting routine annual examinations of securities underwriting and dealing activities through so-called section 20 subsidiaries of bank holding companies. Under the Gramm-Leach-Bliley Act, the Federal Reserve is generally required to rely upon the supervisory activities of the "functional regulator" for broker-dealer subsidiaries unless the Board has cause to believe that a broker-dealer poses a material risk to an insured depository affiliate. No such examinations were conducted for cause during 2000.

The Federal Reserve has developed a series of case studies to educate System supervisory personnel about communications with, and reliance on, the supervisory activities of functional regulators (for securities, commodities, and insurance regulators) for nonbank activities.

Information Technology

The Federal Reserve reviews the information technology activities of the banking institutions it examines, and it gives the same review to certain independent data centers that provide information technology services to these institutions. During 2000 the Federal Reserve was the lead agency in two examinations of large, multiregional data processing servicers examined in cooperation with the other federal banking agencies. These examinations are conducted in recognition of the importance of information technology to safe and sound operations in the financial industry.

During 2000, information technology reviews at banking organizations were integrated within the overall process of supervision, and thus all safety

and soundness examinations are now expected to include a review of information technology risks and activities.

Fiduciary Activities

The Federal Reserve has supervisory responsibility for institutions that together hold more than \$15 trillion of assets in various fiduciary capacities. During on-site examination of an institution's fiduciary activities, examiners review its compliance with laws, regulations, general fiduciary principles, and potential conflicts of interest; and they evaluate the institution's management and operations, including its asset and account management, risk management, and audit and control procedures. In 2000, Federal Reserve examiners conducted 141 on-site trust examinations.

Transfer Agents and Securities Clearing Agencies

As directed by the Securities Exchange Act of 1934, the Federal Reserve conducts specialized examinations of those state member banks and bank holding companies that are registered with the Board as transfer agents. Among other things, transfer agents countersign and monitor the issuance of securities, register the transfer of securities, and exchange or convert securities. On-site examinations focus on the effectiveness of operations and compliance with relevant securities regulations. During 2000, Federal Reserve examiners conducted on-site examinations at 32 of the 117 state member banks and bank holding companies that were registered as transfer agents. Also during the year the Federal Reserve examined one state member limited-purpose trust company that acted as a national securities depository.

Government and Municipal Securities Dealers and Brokers

The Federal Reserve is responsible for examining state member banks and foreign banks for compliance with the Government Securities Act of 1986 and with regulations of the Department of the Treasury governing dealing and broker-dealing in government securities. Thirty-nine state member banks and nine state branches of foreign banks have notified the Board that they are government securities dealers or brokers not exempt from Treasury's regulations. During 2000 the Federal Reserve conducted 7 examinations of broker-dealer activities in government securities at these institutions.

The Federal Reserve is also responsible for ensuring compliance with the Securities Act Amendments of 1975 by the thirty-two state member banks that acted as municipal securities dealers in 2000. Eight of these institutions were examined in 2000.

Securities Credit Lenders

Under the Securities Exchange Act of 1934, the Federal Reserve Board is responsible for regulating credit in certain transactions involving the purchase or carrying of securities. In addition to examining banks under its jurisdiction for compliance with the Board's margin regulations as part of its general examination program, the Federal Reserve maintains a registry of persons other than banks, brokers, and dealers who extend credit subject to the Board's margin regulations. The Federal Reserve may conduct specialized examinations of these lenders if they are not already subject to supervision by the Farm Credit Administration, the National Credit Union Administration, or the Office of Thrift Supervision.

At the end of 2000, 828 lenders other than banks, brokers, or dealers were registered with the Federal Reserve; of these, 640 were under the Federal Reserve's supervision. The Federal Reserve regularly inspects 219 of these lenders either biennially or triennially, according to the type of credit they extend; 112 of the 219 were inspected in 2000 for compliance with Regulation U. The remaining 421 lenders were exempt from periodic on-site inspections by the Federal Reserve but were monitored through the filing of periodic regulatory reports.

Enforcement Actions and Civil Money Penalties

In 2000 the Federal Reserve initiated 31 enforcement cases involving 44 separate actions, such as cease-and-desist orders, written agreements, removal and prohibition orders, and civil money penalties. The Board of Governors collected \$310,000 in civil money penalties.

All final enforcement orders issued by the Board of Governors and all written agreements executed by the Federal Reserve Banks in 2000 are available to the public and can be accessed from the Board's public web site (www.federalreserve.gov/boarddocs/enforcement).

In addition to formal enforcement actions, the Federal Reserve Banks and supervised institutions in 2000 completed 128 informal enforcement actions, such as resolutions by boards of directors and memorandums of understanding.

Risk-Focused Supervision

Over the past several years the Federal Reserve has created a number of programs aimed at enhancing the effectiveness of the supervisory process. The

main objective of these initiatives has been to sharpen the focus on (1) those business activities posing the greatest risk to banking organizations and (2) the organizations' management processes for identifying, measuring, monitoring, and controlling their risks.

Large and Regional Banking Organizations

The risk-focused supervision program for large and regional banking organizations applies to institutions with a functional management structure, a broad array of products, and operations that span multiple supervisory jurisdictions. The supervisory program for these institutions may be implemented with a point-in-time inspection for the smaller institutions and a series of targeted reviews for the larger institutions. For the largest, most complex institutions, the process is continuous, as described in the following section. To minimize the burden on the institution, work is performed off-site to the greatest extent possible. In addition, to reduce the number of requests made to the institution for information, examiners continually review public and regulatory financial reports, market data, information from surveillance screens, and internal management reports.

Large, Complex Banking Organizations

The Federal Reserve applies a risk-focused supervision program to large, complex banking organizations (LCBOs).³ The key features of the LCBO supervision program are (1) identifying those LCBOs that, based on their

3. For an overview of the Federal Reserve's LCBO program, see Lisa M. DeFerrari and David E. Palmer, "Supervision of Large Complex Banking Organizations," *Federal Reserve Bulletin*, vol. 97 (February 2001), pp. 47-57.

shared risk characteristics, present the highest level of supervisory risk to the Federal Reserve System, (2) maintaining continual supervision of these institutions to keep current the Federal Reserve's assessment of each organization's condition, (3) assigning to each LCBO a supervisory team composed of Reserve Bank staff members who have skills appropriate for the organization's risk profile (the team leader is the central point of contact, has responsibility for only one LCBO, and is supported by specialists skilled in evaluating the risks of LCBO business activities and functions), and (4) promoting Systemwide and interagency information-sharing through an automated system.

An important element of the program is the sharing of resources across the System. Several initiatives are under way to better deploy supervisory resources Systemwide and to develop risk assessments across groups of institutions to identify emerging trends.

In addition, work continued during 2000 on the first two stages of phase I of the Banking Organization National Desktop (BOND) application. BOND facilitates real-time, secure information sharing and collaboration across the Federal Reserve System and with certain other federal and state regulators to support the risk-focused supervision of domestic and foreign LCBOs. It also improves the Federal Reserve's ability to manage knowledge and data concerning these complex banking organizations. For example, BOND includes reports that address cross-border exposures of LCBOs.

The approach used by the Federal Reserve under the LCBO program is fully consistent with the process prescribed by the Gramm-Leach-Bliley Act for supervising financial holding companies. Umbrella supervision under the act reflects the reality that the

risks associated with financial activities generally cut across legal entities and business lines and that most large and sophisticated financial services companies take a consolidated, or organization-wide, approach to managing their risks.

Community Banks

The risk-focused supervision program for community banks emphasizes that certain elements are critical to the success of the risk-focused process. These elements include adequate planning time, completion of a pre-examination visit, preparation of a detailed scope-of-examination memorandum, thorough documentation of the work done, and preparation of an examination report tailored to the scope of the examination. The framework for risk-focused supervision of community banks was developed jointly with the Federal Deposit Insurance Corporation (FDIC) and has been adopted by the Conference of State Bank Supervisors.

Surveillance and Risk Assessment

To supplement on-site examinations, the Federal Reserve uses automated screening systems to monitor the financial condition and performance of banking organizations. The screening systems analyze supervisory data and regulatory financial reports to identify companies that appear to be weak or deteriorating. The analysis helps to direct examination resources to institutions exhibiting higher risk profiles. Screening systems also assist in the planning of examinations by identifying companies that are engaging in new or complex activities. Currently, separate surveillance programs are run quarterly for state member banks, small shell bank holding companies, and the large and

more complex bank holding companies. The Federal Reserve also produces and distributes a quarterly report, "The Bank Holding Company Performance Report," to assist supervisory staff in evaluating individual companies.

During 2000 the Federal Reserve implemented a watchlist program covering state member banks. This program refines the previous bank surveillance program and sets forth quarterly monitoring procedures for weak and potentially weak state member banks.

The Federal Reserve also works with the other federal banking agencies to enhance and coordinate surveillance activities through the Task Force on Surveillance Systems of the Federal Financial Institutions Examination Council (FFIEC).⁴

International Activities

The Federal Reserve supervises foreign branches of member banks; overseas investments by member banks, Edge Act and agreement corporations, and bank holding companies; and investments by bank holding companies in export trading companies. It also supervises the activities that foreign banking organizations conduct through entities in the United States, including branches, agencies, representative offices, and subsidiaries.

Foreign-Office Operations of U.S. Banking Organizations

The Federal Reserve examines the international operations of state member banks, Edge Act corporations, and bank

holding companies principally at the U.S. head offices of these organizations, where the ultimate responsibility for their foreign offices lies. In 2000 the Federal Reserve examined eight foreign branches of state member banks and eighteen foreign subsidiaries of Edge Act corporations and bank holding companies. The examinations abroad were conducted with the cooperation of the supervisory authorities of the countries in which they took place; when appropriate, the examinations were coordinated with the Office of the Comptroller of the Currency. Also, examiners made 13 visits to the overseas offices of U.S. banks to obtain financial and operating information and, in some instances, to evaluate their compliance with corrective measures or to test their adherence to safe and sound banking practices.

Foreign Branches of Member Banks

At the end of 2000, 70 member banks were operating 953 branches in foreign countries and overseas areas of the United States; 39 national banks were operating 741 of these branches, and 31 state member banks were operating the remaining 212 branches. In addition, 21 nonmember banks were operating 45 branches in foreign countries and overseas areas of the United States.

Edge Act and Agreement Corporations

Edge Act corporations are international banking organizations chartered by the Board to provide all segments of the U.S. economy with a means of financing international business, especially exports. Agreement corporations are similar organizations, state chartered or federally chartered, that enter into an agreement with the Board to refrain from exercising any power that is not permissible for an Edge Act corporation.

4. The member agencies of the FFIEC are the Board of Governors of the Federal Reserve System, the Federal Deposit Insurance Corporation, the National Credit Union Administration, the Office of the Comptroller of the Currency, and the Office of Thrift Supervision.

Under sections 25 and 25(A) of the Federal Reserve Act, Edge Act and agreement corporations may engage in international banking and foreign financial transactions. These corporations, which in most cases are subsidiaries of member banks, may (1) conduct a deposit and loan business in states other than that of the parent, provided that the business is strictly related to international transactions and (2) make foreign investments that are broader than those of member banks because they may invest in foreign financial organizations, such as finance companies and leasing companies, as well as in foreign banks.

Edge Act and agreement corporations numbered 76 and operated 24 branches at year-end 2000. These corporations are examined annually.

U.S. Activities of Foreign Banks

The Federal Reserve has broad authority to supervise and regulate the U.S. activities of foreign banks that engage in banking and related activities in the United States through branches, agencies, representative offices, commercial lending companies, Edge Act corporations, commercial banks, and certain nonbank companies. Foreign banks continue to be significant participants in the U.S. banking system.

As of year-end 2000, 220 foreign banks from 58 countries operated 295 state licensed branches and agencies (of which 13 were insured by the FDIC) as well as 53 branches licensed by the Office of the Comptroller of the Currency (of which 6 had FDIC insurance). These foreign banks also directly owned 18 Edge Act corporations and 3 commercial lending companies; in addition, they held an equity interest of at least 25 percent in 79 U.S. commercial banks. Further, 21 foreign banks and certain of their affiliates were

granted financial holding company status.

Altogether, these U.S. offices of foreign banks at the end of 2000 controlled approximately 19 percent of U.S. commercial banking assets. These foreign banks also operated 111 representative offices; an additional 94 foreign banks operated in the United States solely through a representative office.

State-licensed and federally licensed branches and agencies are examined on-site at least once every eighteen months, either by the Federal Reserve or by a state or other federal regulator; in most cases, on-site examinations are conducted at least once every twelve months, but the period may be extended to eighteen months if the branch or agency meets certain criteria. The Federal Reserve conducted or participated with state and federal regulatory authorities in 288 examinations during 2000.

Joint Program for Supervising the U.S. Operations of Foreign Banking Organizations

In 1995 the Federal Reserve, in cooperation with the other federal banking agencies and with state banking agencies, formally adopted a joint program for supervising the U.S. operations of foreign banking organizations. The program has two main parts. One part focuses on the examination process for those foreign banking organizations that have multiple U.S. operations and is intended to improve coordination among the various U.S. supervisory agencies. The other part is a review of the financial and operational profile of each organization to assess its general ability to support its U.S. operations and to determine what risks, if any, the organization poses through its U.S. operations. Together, these two pro-

cesses provide critical information to U.S. supervisors in a logical, uniform, and timely manner. During 2000 the program was refined further in light of experience in using it over the past five years.

Technical Assistance

In 2000 the Federal Reserve System continued to provide technical assistance on bank supervisory matters to foreign central banks and supervisory authorities. Technical assistance involves visits by System staff members to foreign authorities as well as consultations with foreign supervisors who visit the Board or the Reserve Banks. Technical assistance in 2000 was concentrated in Latin America, the Far East, and former Soviet bloc countries.

During the year, the Federal Reserve offered supervision training courses in Washington, D.C., and in a number of foreign jurisdictions exclusively for foreign supervisory authorities. System staff also took part in technical assistance and training missions led by the International Monetary Fund, the World Bank, the Inter-American Development Bank, the Asian Development Bank, the Basel Committee on Banking Supervision, and the Financial Stability Institute.

Supervisory Policy

Within the supervisory policy function, the Federal Reserve develops guidance for examiners and financial institutions as well as regulations for financial institutions under the supervision of the Federal Reserve. Staff members also participate in international supervisory forums and provide support for the work of the Federal Financial Institutions Examination Council.

Capital Adequacy Standards

During 2000 the Federal Reserve, together with the FDIC and the Office of the Comptroller of the Currency (OCC), issued an interim final rule that amended the capital standards for securities borrowing transactions. The federal banking agencies—the Federal Reserve, the FDIC, the OCC, and the Office of Thrift Supervision (OTS)—also issued three proposals to amend the capital standards for recourse and direct credit substitutes, residual interests, and securities firms. Furthermore, the agencies issued an advance notice of proposed rulemaking on the possible development of a simplified capital framework for non-complex banking organizations.

Securities Borrowing Transactions

On December 5 the Federal Reserve, together with the FDIC and the OCC, issued an interim rule to revise the capital treatment of cash collateral that is posted in connection with securities borrowing transactions. The effect of the rule is to more appropriately align the capital requirements for these transactions with the risk involved and to provide a capital treatment for U.S. banking organizations that is more in line with the capital treatment applied to their domestic and foreign competitors.⁵

Recourse and Direct Credit Substitutes

On February 17 the Federal Reserve issued a joint proposal with the FDIC, the OCC, and the OTS that would

5. Specifically, receivables arising from the posting of cash collateral associated with securities borrowing can be treated as collateralized by the market value of the securities borrowed; the rule permits banking organizations operating under the market risk rules to exclude such receivables from risk-weighted assets, subject to certain conditions.

amend the agencies' risk-based capital standards to address the regulatory capital treatment of recourse obligations and direct credit substitutes that expose banks, bank holding companies, and thrift institutions to credit risk. The proposed revisions would use credit ratings to match the risk-based capital assessment more closely to an institution's relative risk of loss in certain asset securitizations. The Basel Committee on Banking Supervision has requested comment on making some of the same revisions to the Basel Capital Accord.

Residual Interests

On September 27 the Federal Reserve, the FDIC, the OCC, and the OTS jointly issued a proposed rule to amend their respective risk-based and leverage capital standards for the treatment of certain residual interests in asset securitizations or other transfers of financial assets. The proposed rule would require that a banking organization hold risk-based capital in an amount equal to the amount of the residual interest that is retained on the balance sheet in a securitization or other transfer of financial assets. The proposal also would limit the amount of residual interests, together with nonmortgage servicing assets and purchased credit card relationships, that may be included in regulatory capital, to 25 percent of tier 1 capital.

Claims on Securities Firms

On December 6 the federal banking agencies proposed to reduce from 100 percent to 20 percent the risk weight accorded to claims on, and claims guaranteed by, qualifying securities firms in countries that are members of the Organisation for Economic Co-operation and Development (OECD). The proposal would bring the

risk weight in line with a 1998 revision to the Basel Capital Accord. Qualifying U.S. securities firms would be broker-dealers registered with the Securities and Exchange Commission (SEC); the firms must be subject to, and comply with, the SEC's net capital rules and be subject to the margin and other regulatory requirements applicable to registered broker-dealers.⁶

Simplified Capital Framework for Non-Complex Institutions

On November 3 the Federal Reserve, along with the other federal banking agencies, issued an advance notice of proposed rulemaking on the possible development of a simplified capital framework for non-complex banking organizations. The options outlined in the proposal include a simplified risk-based framework, a leverage-ratio-only approach, and a modified-leverage-ratio approach. The goal is to potentially relieve the regulatory burden associated with the existing capital rules for many non-complex domestic banking institutions.

Integration of Information Technology Examinations

In February the Federal Reserve issued a new policy governing information technology examinations and banking organizations. Previously, the Federal Reserve separately examined information technology systems of all institu-

6. Qualifying securities firms incorporated in other OECD countries would be those subject to consolidated supervision and regulation, including risk-based capital requirements, in a manner consistent with the Basel Capital Accord. All qualifying securities firms, or their consolidated parents, must have an issuer or debt rating in one of the three highest ratings from a nationally recognized statistical rating organization.

tions conducting in-house processing. In recognition of the importance of information technology to banking operations and to risk management, the new policy directs examiners to integrate the review of information technology activities within the safety and soundness examination process for all institutions. Separate information technology examinations will no longer be routinely conducted.

Outsourcing

In February the Federal Reserve issued guidance to banks on outsourcing of information and transaction processing activities. The guidance directs banks to establish a program for monitoring and managing risks in such outsourcing arrangements. This guidance formed the basis of interagency guidance on the same topic, which the federal banking agencies issued in November. The interagency guidance reinforces the Federal Reserve's outsourcing guidance and includes supplemental information that banks should consider in establishing and managing outsourcing relationships.

Development of International Guidance on Supervisory Policies

As a member of the Basel Committee on Banking Supervision, the Federal Reserve participated in negotiations to propose revisions to the international capital regime and aided the development of international supervisory guidance, including supervisory guidance on internal control, accounting, and disclosure practices among banking organizations. The objectives of this guidance are to promote market discipline through greater transparency in financial statements, to encourage sound risk management, and to improve disclosures of qualitative and quantitative information

on bank risk exposures and risk management practices.

The Federal Reserve's goals in these activities are to advance sound supervisory policies for banking institutions and to improve the stability of the international banking system.

Capital Adequacy

The Federal Reserve contributed to the consultative papers that constitute the proposed New Basel Capital Accord, issued for comment by the Basel committee in January 2001. The Federal Reserve also helped develop a number of supervisory policy papers, reports, and recommendations that were issued by the Basel committee:

- Two papers, released in January 2000, on the committee's proposed amendments to the 1988 Basel Capital Accord

The first, *A New Capital Adequacy Framework: Pillar 3, Market Discipline*, urges a larger role for market discipline in promoting bank capital adequacy by proposing guidelines for bank disclosures.⁷ The committee stated that supervisors have a strong interest in facilitating transparency as a lever to strengthen the safety and soundness of the banking system.

The second paper, *Range of Practice in Banks' Internal Rating Systems*, assesses the current state of practice in banks' internal rating systems and processes.

- A revision, issued in September, of the committee's guidance for super-

7. The title refers to the three pillars, or main sources, of safety and soundness that were articulated in a paper issued by the Basel committee in June 1999; the other two pillars are minimum capital requirements and supervisory review (see box "The New Basel Capital Accord").

visors on managing the settlement risk arising from foreign exchange transactions

The guidance stresses that foreign exchange settlement risk is a form of credit risk that banks should manage, like other credit risks of similar size and duration, through a formal process of measurement and control that includes active oversight by senior management. It also suggests that supervisors focus on whether a bank has evaluated netting and other private-sector initiatives for their potential to reduce settlement risk.

- A revision, also issued in September, of the committee's guidance on credit risk management and disclosure, *Principles for the Management of Credit Risk*

The guidance addresses four topics: (1) establishing an appropriate credit risk environment, (2) operating under a sound credit-granting process, (3) maintaining an appropriate system of credit administration, measurement, and monitoring, and (4) ensuring adequate controls over credit risk.

- The *Electronic Banking Group Initiatives and White Papers*, issued in October, which provides background information and an overview of supervisory and international issues relating to electronic banking.

Internal Control, Accounting, and Disclosure

The Federal Reserve maintains a direct dialogue with representatives of international banking associations on significant accounting policy issues. The Federal Reserve also participates in the Basel committee's Task Force on Accounting Issues and its Transparency Group and represents the Basel com-

mittee at international meetings on the issues addressed by these groups. In particular, the Federal Reserve in 2000 represented the Basel committee in meetings of the unit of the International Accounting Standards Committee (IASC) that works on improved accounting guidance for financial instruments. This effort resulted in four proposals and final implementation guidance for IAS 39, the IASC's comprehensive accounting standard for financial instruments.

During 2000 the Federal Reserve also contributed to several policy papers on control, accounting, and disclosure that were issued by the Basel committee:

- *Internal Audit in Banking Organizations and the Relationship of the Supervisory Authorities with Internal and External Auditors* (July)

The paper sets out objectives and principles for an effective bank internal audit function, the role of internal audit, and the banking supervisors' view on ways to strengthen the relationship between banking supervisors and internal and external auditors.

- *Best Practices for Credit Risk Disclosure* (September)

Encourages banks to provide market participants and the public with the information they need to make meaningful assessments of bank credit risk profiles.

- *Report to G7 Finance Ministers and Central Bank Governors on International Accounting Standards* (April)

The report's recipients had asked the Basel committee to review the standards of the IASC that have a significant effect on banks. Supportive, overall, of the IASC's standards, the report also summarizes supervisory concerns raised by certain

standards and recommends improvements based, in part, on the Basel committee's efforts to enhance bank transparency.

Gramm-Leach-Bliley Act

The Gramm-Leach-Bliley (GLB) Act repeals those provisions of the Glass-Steagall Act and the Bank Holding Company Act that restrict the ability of bank holding companies (BHCs) to affiliate with securities firms and insurance companies. The provisions of the GLB Act—and the Federal Reserve's final rule, published in December 2000—establish conditions that a BHC or a foreign bank must meet to be deemed a financial holding company (FHC) and to engage in expanded activities.

In addition to controlling depository institutions, permissible activities for FHCs include conducting securities underwriting and dealing, serving as an insurance agent and insurance underwriter, acting as a futures commission merchant, and engaging in merchant banking. Permissible activities also include those that the Board and the Secretary of the Treasury jointly determine to be financial in nature or incidental to financial activities; and they include those that the Federal Reserve determines are complementary to a financial activity and do not pose a substantial risk to the safety and soundness of depository institutions or the financial system generally.

Under the GLB Act, the Federal Reserve has supervisory oversight authority and responsibility for BHCs, including BHCs that operate as FHCs. The statute streamlines the Federal Reserve's supervision for all BHCs and sets forth parameters for the relationship between the Federal Reserve and other regulators. The statute differentiates

between the Federal Reserve's relations with regulators of depository institutions and functional regulators, which include those for insurance, securities, and commodities.

Umbrella Supervision of Financial Holding Companies

On August 15 the Federal Reserve issued a framework for its supervision of FHCs. The framework covers the purpose and scope of the Federal Reserve's supervision and the requirements of the GLB Act for working with the primary and functional regulators.

The Federal Reserve's role as the supervisor of FHCs is to concentrate on a consolidated or group-wide analysis of each organization to ensure that the holding company does not threaten the viability of its depository institution subsidiaries. Umbrella supervision should create minimal, if any, noticeable change in the well-established relationships between the Federal Reserve as BHC (including FHC) supervisor and bank and thrift supervisors (federal and state). The Federal Reserve's relationships with functional regulators will, in practice, depend upon the extent to which an FHC is engaged in functionally regulated activities and also will be influenced by already established arrangements for coordination and information sharing.

Merchant Banking Activities

On March 17 the Federal Reserve and the U.S. Department of the Treasury jointly issued for comment an interim rule implementing the merchant banking provisions of the GLB Act.⁸ At

8. In merchant banking, a financial institution invests in a corporation, taking up to a full ownership position and usually a seat on the board of directors, but does not engage in its day-to-day management.

the same time, the Federal Reserve also released a proposal to set minimum regulatory capital standards for the equity investments of BHCs and FHCs. The proposal, which was subject to public comment, applied to merchant banking activities as well as other equity investments made under authorization granted outside the GLB Act.⁹

On June 22 the Federal Reserve issued supervisory guidance on sound risk management practices for equity investments and merchant banking activities. To improve its allocation of supervisory resources, the Federal Reserve in 2000 established a "competency center" of examiners specializing in equity investments and merchant banking.

Information Security Standards

Under section 501(b) of the GLB Act, the federal banking agencies are required to issue information security standards. In December the agencies issued *Interagency Guidelines Establishing Standards for Safeguarding Customer Information* after soliciting public comment on a June 2000 proposal. The Board's guidelines are effective July 1, 2001, and require banks and holding companies to establish a written information security program and to control the risk of unauthorized access or other threats to the security and confidentiality of customer information.

Efforts to Enhance Transparency

The Federal Reserve has long supported sound accounting policies and meaningful public disclosure by banking and financial organizations to improve mar-

ket discipline and foster stable financial markets. Effective market discipline can provide an important complement to bank supervision and regulation. The more informative the information released by financial institutions, the better will be the evaluation of counterparty risks that market participants can make and the better will be their adjustments to the availability and pricing of funds. Thus, transparency can promote efficiency in financial markets and sound practices by banks. The Federal Reserve also seeks to strengthen audit and control standards for banks; the quality of management information and financial reporting is dramatically affected by internal control systems, including internal audit programs, and external audit programs.

To advance these objectives, the Federal Reserve works with other regulators, the accounting profession, and a wide variety of market participants, both domestically and (see above) internationally.

Interagency Guidance on the Allowance for Loan Losses

During 2000 the Federal Reserve, the SEC, and the other federal banking agencies continued to develop joint guidance regarding the allowance for loan losses. In September the Federal Reserve and the other federal banking agencies, under the auspices of the FFIEC, issued for public comment a proposed policy statement on appropriate methodologies and documentation for the allowance for loan and lease losses. The proposal reflects the agencies' view that the boards of directors and management of financial institutions are ultimately responsible for these matters. Institutions must have controls in place to maintain an appropriate allowance level and to ensure that

9. The interim rule was made final as of February 2, 2001. The capital proposal was substantially revised and repropose on February 14, 2001, with comment due by April 16, 2001.

the allowance process incorporates current judgments about the credit quality of the loan portfolio in a manner that is thorough, disciplined, and consistently applied.

The proposal also emphasizes that institutions should maintain and support the allowance with documentation that is consistent with their stated policies and procedures and appropriately tailored to the complexity of their loan portfolio. The SEC is planning to provide parallel guidance on this topic in a separate document.

Private-Sector Working Group on Public Disclosure

In April 2000 the Federal Reserve, with the participation of the OCC and the SEC, established the Working Group on Public Disclosure. The group was made up of senior executives from major domestic and foreign banking organizations and securities firms and was led by Walter Shipley, retired chairman of Chase Manhattan Bank. In January 2001 the working group released a report recommending enhanced and more frequent public disclosure of financial information by banking and securities firms. Private-sector efforts, such as those of the working group, and official regulatory initiatives can help foster a consensus and advance thinking on what constitutes sound or best practice regarding public disclosure.

Bank Holding Company Regulatory Financial Reports

The Federal Reserve requires periodic regulatory financial reports from U.S. bank holding companies. These reports, the FR Y-9 series and the FR Y-11 series, provide information essential to the supervision of the organizations and to the formulation of regulations

and supervisory policies. The Federal Reserve also uses the reports to respond to requests from the Congress and the public for information on bank holding companies and their nonbank subsidiaries.

The FR Y-9 series of reports provides standardized financial statements for the consolidated bank holding company and its parent. These reports are used to detect emerging financial problems, review performance and conduct pre-inspection analysis, monitor and evaluate risk profiles and capital adequacy, evaluate proposals for bank holding company mergers and acquisitions, and analyze the holding company's overall financial condition.

The FR Y-11 series of reports aids the Federal Reserve in determining the condition of bank holding companies that are engaged in nonbanking activities and in monitoring the volume, nature, and condition of their nonbanking subsidiaries.

The Federal Reserve made no revisions to the FR Y-9 and FR Y-11 series of reports for 2000 to allow the industry to focus on readying its computer systems for the century date change. The Federal Reserve did, however, implement an ad hoc supplement to the FR Y-9C and FR Y-9SP reports during the first quarter of 2000. The supplement, the FR Y-9CS, is being used to collect summary financial data from financial holding companies that are engaging in new activities permissible under the Gramm-Leach-Bliley Act. In addition, the Federal Reserve completely revised the FR Y-8 report, which governs certain transactions between an insured depository institution and its affiliates.

In light of the Gramm-Leach-Bliley Act and increased activity by banking organizations in merchant banking and equity investment in nonfinancial com-

panies, the Federal Reserve announced work on the FR Y-12 report, which will track these activities. The report is scheduled to be released for comment in mid-2001.

Federal Financial Institutions Examination Council

During the year, the Federal Financial Institutions Examination Council (FFIEC) issued major revisions to the Call Report and handled two issues regarding retail credit.¹⁰

Bank Call Reports

As the federal supervisor of state member banks, the Federal Reserve, acting in concert with the other federal banking agencies through the FFIEC, requires banks to submit quarterly Reports of Condition and Income (the Call Report). The Call Report is one of the primary sources of data for the supervision and regulation of banks and for the ongoing assessment of the overall soundness of the nation's financial structure. Call Report data, which also serve as benchmarks for the financial information required in many other Federal Reserve regulatory financial reports, are widely used by state and local governments, state banking supervisors, the banking industry, securities analysts, and the academic community. For the 2000 reporting period, the FFIEC deferred the implementation of changes to the Call Report and other supervisory reports to allow banks to focus their resources on Year 2000 readiness.

On November 2, 2000, after consideration of public comments, the FFIEC announced significant revisions designed to make the 2001 Call Report

more relevant to the evolving financial services environment; the new Call Report will also complement the agencies' emphasis on risk-focused supervision. The modifications include the collection of new data on asset securitizations and a new trust activities schedule. The revisions also address certain aspects of section 307 of the Riegle Community Development and Regulatory Improvement Act of 1994 by improving the uniformity of Call Report forms and instructions and by eliminating certain reporting requirements that are not warranted by safety and soundness or other public policy purposes.

Reporting to Credit Bureaus

On January 18 the federal banking agencies issued an advisory letter regarding the practice at some financial institutions of not reporting customer credit lines or high credit balances to credit bureaus. The agencies advised financial institutions that if they do not modify their management processes to compensate for data omitted in credit bureau reports, they could inadvertently expose themselves to increased credit risk.

Uniform Retail Credit Classification and Account Management Policy

On June 12 the FFIEC issued a revised Uniform Retail Credit Classification and Account Management Policy, which became effective on December 31, 2000. Among other things, the revised policy clarifies provisions regarding extensions, deferrals, renewals, and rewrites of closed-end loans and the re-aging of open-end accounts. The revisions also include additional examiner guidance in the classification of retail portfolios and modifications to the treatment of specific categories of loans, such as loans with collateral, loans secured

10. For the membership of the FFIEC, see note 4.

by residential real estate, and loans in bankruptcy.

Supervisory Information Technology

The Supervisory Information Technology (SIT) function within the Board's Division of Banking Supervision and Regulation facilitates management of information technology within the Federal Reserve's supervision function. Its goals are to ensure that

- IT initiatives support a broad range of supervisory activities without duplication or overlap
- The underlying IT architecture fully supports those initiatives
- The supervision function's use of technology takes advantage of the systems and expertise available more broadly within the Federal Reserve System.

SIT works through assigned staff at the Board of Governors and the Reserve Banks and through a committee structure that ensures that key staff members throughout the Federal Reserve System participate in identifying requirements and setting priorities for IT initiatives. SIT also houses the management of the National Information Center (NIC), a comprehensive repository for vital supervision information.

SIT Activities

In 2000 SIT developed an operating plan for the ongoing approval and reassessment of IT projects. In an effort to support a broad range of supervisory activities throughout the System without duplication or overlap, SIT is also assessing the costs and benefits of possible centralization of System products, projects, and support. It also is pre-

paring a project manager's handbook, which draws on the best practices in private industry and the government, as part of its project management training for Reserve Bank and Board staff.

Enhancements to the National Information Center

The National Information Center (NIC) is the Federal Reserve's comprehensive repository for supervisory, financial, and banking structure data. NIC also includes the National Examination Data (NED) system, software that provides supervisory personnel and state banking authorities with access to NIC data. A new version of NED is planned for mid-2001.

The proposed new reporting forms for collecting structure data for NIC, the Y-10 and Y-10f, are scheduled for release on June 1, 2001.

The process of transferring structure and financial data and supervisory information among the FFIEC agencies was automated in 2000 to cover the Federal Reserve, the FDIC, and the OCC. In 2001 this process will be expanded to include the OTS.

In 2000, NIC was enhanced with a repository for supervisory documents including examination and inspection documents, enforcement-event documents, and other products associated with a region of the United States or a Federal Reserve District (for domestic bank holding companies), a country (for foreign banking organizations), or risk profiles. Development of the repository for possible other uses is ongoing.

Staff Training

The System Staff Development Program trains staff members with supervisory and regulatory responsibilities at the Reserve Banks, at the Board of Gover-

Number of Sessions of Training Programs for Banking Supervision and Regulation, 2000

Program	Total	Regional
<i>Schools or seminars conducted by the Federal Reserve</i>		
Core schools		
Banking and supervision elements	7	5
Operations and analysis	6	5
Bank management	4	1
Report writing	17	17
Management skills	11	9
Conducting meetings with management	16	16
Other schools		
Loan analysis	7	5
Examination management	3	..
Real estate lending seminar	4	2
Specialized lending seminar	3	2
Senior forum for current banking and regulatory issues	4	4
Banking applications	1	..
Basic entry-level trust	2	..
Advanced trust	1	..
Commercial essentials for consumer affairs	1	1
Consumer compliance examinations I	2	..
Consumer compliance examinations II	2	1
CRA examination techniques	3	2
Fair lending examination techniques	3	2
Foreign banking organizations	5	3
Information systems continuing education	2	..
Capital markets seminars	10	6
Technology risk integration	5	5
Leadership dynamics	5	4
GLBA case studies	2	..
Seminar for senior supervisors of foreign central banks ¹	1	..
<i>Other agencies conducting courses²</i>		
Federal Financial Institutions Examination Council	43	4
The Options Institute	1	1

1. Conducted jointly with the World Bank.

... Not applicable.

2. Open to Federal Reserve employees.

nors, and at state banking departments. The program's goals are in part to provide a higher degree of cross-training in the agencies. Students from foreign supervisory authorities attend the training sessions on a space-available basis. The program provides training at the basic, intermediate, and advanced levels for the four disciplines of bank supervision: bank examinations, bank holding company inspections, surveillance and monitoring, and applications analysis. Classes are conducted in Washington, D.C., as well as at other locations and are sometimes held jointly with other regulators.

The Federal Reserve System also participates in training offered by the

FFIEC and by certain other regulatory agencies. The System's involvement includes developing and implementing basic and advanced training in various emerging issues as well as in specialized areas such as trust activities, international banking, information technology, municipal securities dealing, capital markets, payment systems risk, white collar crime, and real estate lending. In addition, the System co-hosts the World Bank Seminar for students from developing countries.

The Federal Reserve conducts a variety of schools and seminars, and staff members participate in courses offered by or cosponsored with other agencies, as shown in the accompanying table.

Student Examination Results, First Track, 2000

Result	Core proficiency	Specialty			
		Safety and soundness	Consumer affairs	Trust	Information technology
Passed	74	30	15	2	1
Failed	15	9	8	1	0
Total	89	39	23	3	1

Note. These examinations are for examiners hired before February 28, 1998.

In 2000 the Federal Reserve trained 2,890 students in System schools, 754 in schools sponsored by the FFIEC, and 32 in other schools, for a total of 3,676, including 314 representatives from foreign central banks. The number of training days in 2000 were 19,318.

The Federal Reserve System also gave scholarship assistance to the states for training their examiners in Federal Reserve and FFIEC schools. Through this program 449 state examiners were trained—286 in Federal Reserve courses, 160 in FFIEC programs, and 3 in other courses.

In 2000 the System completed the work begun in 1997 to revise the core training that leads to the commissioning of assistant examiners. The project was undertaken to ensure that course materials provide examiners with a greater understanding of risk-focused examination concepts, the components of sound internal controls, the importance of

management information systems, the concept of risk as it applies to banking, and the key supervisory issues related to integrated supervision.

A staff member seeking an examiner's commission follows one of two training tracks: The first track, for staff members hired before February 28, 1998, involves a "core proficiency examination" as well as a specialty examination of the student's choice—safety and soundness, consumer affairs, or information technology. Examiners on this track should complete their commissioning requirements by December 31, 2001. In 2000, 74 examiners passed the core proficiency examination (see table).

The second track, for examiners hired after February 27, 1998, involves a "first proficiency examination" as well as a "second proficiency examination" in one of the three specialty areas. In 2000, 159 examiners passed the first

Student Examination Results, Second Track, 2000

Result	First proficiency	Second proficiency			
		Safety and soundness	Consumer affairs	Trust	Information technology
Passed	159	11	14	1	0
Failed	1	1	2	0	0
Total	160	12	16	1	0

Note. These examinations are for examiners hired after February 27, 1998.

proficiency examination (see table). In the second proficiency examination, 11 examiners passed the safety and soundness examination, and 14 examiners passed the consumer affairs examination.

During 2000 the Federal Reserve eliminated the separate commission for trust examiners because of the small number of examiners choosing that specialty as well as the need for strong general training in banking supervision for all examiners, regardless of their ultimate specialty.

Regulation of the U.S. Banking Structure

The Board of Governors administers the Bank Holding Company Act, the Bank Merger Act, the Change in Bank Control Act, and the International Banking Act in relation to bank holding companies, financial holding companies, member banks, and foreign banking organizations. In doing so, the Federal Reserve acts on a variety of proposals that directly or indirectly affect the structure of U.S. banking at the local, regional, and national levels; the international operations of domestic banking organizations; and the U.S. banking operations of foreign banks.

Bank Holding Company Act

Under the Bank Holding Company Act, a corporation or similar organization must obtain the Federal Reserve's approval before becoming a bank holding company through the acquisition of one or more banks in the United States. Any holding company must receive Federal Reserve approval before acquiring or establishing additional banks. The act also identifies other activities permissible for a bank holding company; depending on the circumstances, these activities may or may not require Fed-

eral Reserve approval in advance of their commencement.

The Board has previously identified those nonbank activities that are closely related to banking and therefore generally permissible for bank holding companies. Since 1996 the act has permitted well-run bank holding companies that satisfy certain criteria to commence some of those nonbank activities on a *de novo* basis without first obtaining Federal Reserve approval; and since 1996 the act also has provided an expedited prior-notice procedure for the remaining permissible nonbank activities and for small bank and nonbank acquisitions. Other recent amendments to the act are discussed in the next section.

When reviewing an application or notice that requires advance approval, the Federal Reserve must consider the financial and managerial resources of the applicant, the future prospects of both the applicant and the firm to be acquired, the convenience and needs of the community to be served, the potential public benefits, the competitive effects of the proposal, and the applicant's ability to make available to the Board information deemed necessary to ensure compliance with applicable law. In the case of a foreign banking organization seeking to acquire control of a U.S. bank, the Federal Reserve also considers whether the foreign bank is subject to comprehensive supervision or regulation on a consolidated basis by its home country supervisor. Data on decisions regarding domestic and international applications in 2000 are shown in the accompanying table.

Recent Amendments to the Bank Holding Company Act

The Bank Holding Company Act (BHC Act) was significantly amended on

Decisions by the Federal Reserve on Domestic and International Applications, 2000

Proposal	Direct action by the Board of Governors			Action under authority delegated by the Board of Governors				Total	
				Director of the Division of Banking Supervision and Regulation		Office of the Secretary	Federal Reserve Banks		
	Approved	Denied	Permitted	Approved	Denied	Approved	Approved	Permitted	
Formation of bank holding company	18	0	0	0	0	1	165	77	261
Merger of bank holding company	7	0	0	0	0	9	44	24	84
Acquisition or retention of bank	18	0	0	0	0	6	128	55	207
Acquisition of nonbank	0	1	50	0	0	47	0	203	301
Merger of bank	6	0	0	0	0	11	131	0	148
Change in control	0	0	0	0	0	1	0	133	134
Establishment of a branch, agency, or representative office by a foreign bank	18	0	1	0	0	0	13	0	32
Other	243	0	29	23	0	129	1,475	166	2,065
Total	310	1	80	23	0	204	1,956	658	3,232

March 11, 2000, when certain provisions of the Gramm-Leach-Bliley Act became effective. Title I of the GLB Act repealed provisions of the BHC Act and of the Glass-Steagall Act that had previously restricted the ability of bank holding companies to engage in certain nonbanking activities. The GLB Act authorized the creation of a special type of bank holding company called a financial holding company. The law also made major changes in the list of activities in which financial organizations are permitted to engage, allowing the affiliation of banks with securities firms and insurance companies and authorizing certain merchant banking activities.

Bank holding companies that do not meet the eligibility criteria to become a financial holding company may engage only in those activities that the Board had previously determined to be closely

related to banking under section 4(c)(8) of the BHC Act. A bank holding company that is not a financial holding company remains subject to the restrictions that were in effect before the GLB Act's March 2000 amendments to the BHC Act.

Financial holding companies do not have to obtain the Board's advance approval to engage in or acquire a company engaged in new financial activities. Instead, the financial holding company must notify the Board within thirty days after commencing a new activity or acquiring a company engaged in a new activity. A financial holding company also may engage in certain other activities that have been determined to be financial in nature or incidental to a financial activity or that are determined to be complementary to a financial activity.

A bank holding company must file a written declaration with the Federal Reserve System to become a financial holding company. Such declarations are usually acted upon by a Reserve Bank or senior Board official under authority delegated by the Board, or by the Board itself. In 2000, 463 domestic financial holding company declarations and 21 foreign bank declarations were approved.

Bank Merger Act

The Bank Merger Act requires that all proposed mergers of insured depository institutions be acted on by the appropriate federal banking agency. If the institution surviving the merger is a state member bank, the Federal Reserve has primary jurisdiction. Before acting on a proposed merger, the Federal Reserve considers the financial and managerial resources of the applicant, the future prospects of the existing and combined institutions, the convenience and needs of the community to be served, and the competitive effects of the proposal. It also considers the views of certain other agencies regarding the competitive factors involved in the transaction. During 2000 the Federal Reserve approved 148 merger applications.

When the FDIC, the OCC, or the OTS has jurisdiction over a merger, the Federal Reserve is asked to comment on the competitive factors to ensure comparable enforcement of the antitrust provisions of the Bank Merger Act. The Federal Reserve and those agencies have adopted standard terminology for assessing competitive factors in merger cases to ensure consistency in administering the act. The Federal Reserve submitted 625 reports on competitive factors to the other federal banking agencies in 2000.

Change in Bank Control Act

The Change in Bank Control Act requires persons (including certain companies) seeking control of a U.S. bank or bank holding company to obtain approval from the appropriate federal banking agency before completing the transaction. The Federal Reserve is responsible for reviewing changes in the control of state member banks and bank holding companies. In doing so, the Federal Reserve reviews the financial position, competence, experience, and integrity of the acquiring person; considers the effect of the proposal on the financial condition of the bank or bank holding company to be acquired; determines the effect of the proposal on competition in any relevant market; assesses the completeness of information submitted by the acquiring person; and considers whether the proposal would have an adverse effect on the federal deposit insurance funds. As part of this process, the Federal Reserve may contact other regulatory or law enforcement agencies for information about each acquiring person.

The appropriate federal banking agencies are required to publish notice of each proposed change in control and to invite public comment, particularly from persons located in the markets served by the institution to be acquired.

In 2000 the Federal Reserve approved 134 proposed changes in control of state member banks and bank holding companies.

International Banking Act

The International Banking Act, as amended by the Foreign Bank Supervision Enhancement Act of 1991, requires foreign banks to obtain Federal Reserve approval before establishing branches, agencies, commercial lending company

subsidiaries, or representative offices in the United States.

In reviewing proposals, the Federal Reserve generally considers whether the foreign bank is subject to comprehensive supervision or regulation on a consolidated basis by its home country supervisor. The Federal Reserve may also consider whether the home country supervisor has consented to the establishment of the U.S. office; the financial condition and resources of the foreign bank and its existing U.S. operations; the managerial resources of the foreign bank; whether the home country supervisor shares information regarding the operations of the foreign bank with other supervisory authorities; whether the foreign bank has provided adequate assurances that information concerning its operations and activities will be made available to the Board, if deemed necessary to determine and enforce compliance with applicable law; and the record of the foreign bank with respect to compliance with U.S. law.

In 2000 the Federal Reserve approved thirty-two applications by foreign banks to establish branches, agencies, and representative offices in the United States.

Overseas Investments by U.S. Banking Organizations

With the authorization of the Federal Reserve, U.S. banking organizations may engage in a broad range of activities overseas. Most foreign investments may be made under general consent procedures that involve only an after-the-fact notification to the Board; significant investments must be reviewed in advance by the Board. Excluding proposals relating to recent large domestic mergers, the Board in 2000 approved forty-one proposals for significant overseas investments by U.S. banking organizations.

The Federal Reserve also has authority to act on proposals involving Edge Act and agreement corporations, which are established by banking organizations to provide a means of engaging in international business. In 2000 the Federal Reserve approved two applications to establish a new Edge Act corporation and three applications to establish a new agreement corporation.

Applications by Member Banks

State member banks must obtain Federal Reserve approval to establish domestic branches, and member banks (including national banks) must obtain Federal Reserve approval to establish foreign branches. When reviewing proposals for domestic branches, the Federal Reserve considers the scope and character of the proposed banking activities to be conducted. When reviewing proposals for foreign branches, the Federal Reserve considers, among other things, the condition of the bank and the bank's experience in international banking. Once a member bank has received authority to open a branch in a particular foreign country, the member bank may open additional branches in that country without prior approval from the Federal Reserve. Excluding proposals relating to recent large domestic mergers, the Federal Reserve in 2000 acted on new and merger-related branch proposals for 1,697 domestic branches and granted advance approval for the establishment of 14 foreign branches.

Stock Repurchases by Bank Holding Companies

A bank holding company may repurchase its own shares from its shareholders. When the company borrows money to buy the shares, the trans-

action increases the company's debt and decreases its equity. The Federal Reserve may object to stock repurchases by holding companies that fail to meet certain standards, including the Board's capital guidelines. In 2000 the Federal Reserve reviewed thirty-three proposed stock repurchases by bank holding companies, all of which were approved by a Reserve Bank under delegated authority.

Public Notice of Federal Reserve Decisions

Most decisions by the Federal Reserve that involve a bank holding company, a bank merger, a change in control, or the establishment of a new U.S. banking presence by a foreign bank are effected by an order or an announcement. Orders state the decision, the essential facts of the application or notice, and the basis for the decision; announcements state only the decision. All orders and announcements are made public immediately; they are subsequently reported in the Board's weekly H.2 statistical release and in the monthly *Federal Reserve Bulletin*. The H.2 release also contains announcements of applications and notices received by the Federal Reserve but not yet acted on. For each pending application and notice, the related H.2A contains the deadline for comments. The Board's public web site (www.federalreserve.gov) continued to be expanded in 2000 to include more information relevant to the applications process.

Timely Processing of Applications

The Federal Reserve maintains internal target dates and procedures for the processing of applications. The setting of target dates promotes efficiency at the Board and the Reserve Banks and reduces the burden on applicants. The

time period established for final action ranges from twelve days to sixty days, depending on the type of application or notice. In 2000, 89 percent of decisions were made within the established time period.¹¹

Delegation of Applications

Historically, the Board of Governors has delegated certain regulatory functions, including the authority to approve, but not to deny, certain types of applications, to the Reserve Banks, to the Director of the Board's Division of Banking Supervision and Regulation, and to the Secretary of the Board. In 2000, 88 percent of the applications processed were handled under delegated authority.

Enforcement of Other Laws and Regulations

The Board's enforcement responsibilities also cover financial disclosures of state member banks; securities credit; and efforts, under the Bank Secrecy Act, to counter money laundering.

Financial Disclosures of State Member Banks

State member banks that issue securities registered under the Securities Exchange Act of 1934 must disclose certain information of interest to investors, including annual and quarterly financial reports and proxy statements. By statute, the Board's financial disclosure rules must be substantially similar to those of the Securities and Exchange Commission. At the end of 2000, twenty-three state

11. If the data were adjusted for multiple related applications filed in connection with several larger merger proposals, the percentage would be 94 percent.

member banks, most of them small or medium sized, were registered with the Board under the Securities Exchange Act.

Securities Credit Regulations

Under the Securities Exchange Act of 1934, the Board is responsible for regulating credit in certain transactions involving the purchase or carrying of securities. The Board's Regulation T limits the amount of credit that may be provided by securities brokers and dealers when the credit is used to trade debt and equity securities. The Board's Regulation U limits the amount of credit that may be provided by lenders other than brokers and dealers when the credit is used to purchase or carry publicly held equity securities if the loan is secured by those or other publicly held equity securities. The Board's Regulation X applies these credit limitations, or margin requirements, to certain borrowers and to certain credit extensions, such as credit obtained from foreign lenders by U.S. citizens.

Several regulatory agencies enforce the Board's securities credit regulations. The SEC, the National Association of Securities Dealers, and the national securities exchanges examine brokers and dealers for compliance with Regulation T. The federal banking agencies examine banks under their respective jurisdictions for compliance with Regulation U. The Farm Credit Administration, the National Credit Union Administration, and the Office of Thrift Supervision examine lenders under their respective jurisdictions for compliance with Regulation U; the Federal Reserve examines other Regulation U lenders.

Since 1990 the Board has published a list of foreign stocks that are eligible for margin treatment at broker-dealers on the same basis as domestic margin

securities. In 2000 the foreign list was revised in March and September (see www.federalreserve.gov/boarddocs/foreignmargin).

Deterring Money Laundering

The Department of the Treasury's regulation (31 CFR 103) implementing the Currency and Foreign Transactions Reporting Act (the Bank Secrecy Act), requires banks and other types of financial institutions to file certain reports and maintain certain records. The act is a primary tool in the fight against money laundering, and its requirements inhibit money laundering by creating a paper trail of financial transactions that helps law enforcement and regulators identify and trace the proceeds of illegal activity.

The Federal Reserve monitors compliance with the Bank Secrecy Act and related Federal Reserve regulations (in the Board's Regulation H) by the banking organizations under its supervision. Pursuant to section 208.62 of Regulation H, banking organizations are required to report suspicious activity related to possible violations of federal law, including money laundering and other financial crimes. In addition, pursuant to section 208.63 of Regulation H, each banking organization supervised by the Federal Reserve must develop a written program for compliance with the Bank Secrecy Act that is formally approved by the institution's board of directors. The compliance program must (1) establish a system of internal controls to ensure compliance with the act, (2) provide for independent compliance testing, (3) identify individuals responsible for coordinating and monitoring day-to-day compliance, and (4) provide training for appropriate personnel.

In 2000 the Federal Reserve continued to provide expertise and guidance to the Bank Secrecy Act Advisory Group,

a committee of government and industry representatives that the Congress established at the Department of the Treasury to seek measures to reduce unnecessary burdens created by the act and to increase the utility of data gathered under the act to aid regulators and law enforcement. As part of that effort, an interagency group led by the Federal Reserve issued a revised Suspicious Activity Report in June 2000.

In a related project during 2000, the Federal Reserve chaired a working group on improving the reporting of suspicious activity; the group consisted of federal law enforcement and regulatory personnel as well as financial services representatives. The result was a mechanism for providing feedback to financial institutions on suspicious activity reporting (SAR). A document released by the group in October, *The SAR Activity Review: Trends, Tips, and Issues*, presents SAR statistics, patterns and trends of suspicious activity, and tips and guidance for financial institutions on the preparation and filing of the SAR form.

In addition, the Federal Reserve participates in the effort to deter money laundering announced by the Department of Treasury in the "National Money Laundering Strategy for 2000–2001." For that program, the Federal Reserve developed guidance on enhanced scrutiny for transactions that

may involve the proceeds of foreign official corruption.

Through the Special Investigations Section of the Division of Banking Supervision and Regulation, the Federal Reserve has assisted in the investigation of money laundering activities involving a number of foreign banking organizations. The section has also provided anti-money-laundering training to staff members at Reserve Banks, to the domestic banking sector through trade association conferences and seminars, and to representatives of law enforcement agencies.

Internationally, the section has assisted the State Department by providing anti-money-laundering training and technical assistance to countries in Asia; in eastern Europe, including the newly independent states; in South and Central America; and in the Caribbean. Federal Reserve staff members have also participated in numerous multilateral anti-money-laundering initiatives sponsored by the Group of 7, the Financial Action Task Force, and the Asia Pacific Working Group on Money Laundering.

Loans to Executive Officers

Under section 22(g) of the Federal Reserve Act, a state member bank must include in its quarterly Call Report information on all extensions of credit

Loans by State Member Banks to their Executive Officers, 1999 and 2000

Period	Number	Amount (dollars)	Range of interest rates charged (percent)
1999 October 1–December 31	695	82,050,000	3.0–18.0
2000 January 1–March 31	696	53,011,000	2.0–21.0
April 1–June 30	755	52,119,000	6.0–20.8
July 1–September 30	739	62,815,000	3.9–20.8

SOURCE. Call Reports.

by the bank to its executive officers since the date of the preceding report. The accompanying table summarizes this information.

Federal Reserve Membership

At the end of 2000, 3,164 banks were members of the Federal Reserve System and were operating 47,722 offices. At year-end, member banks accounted for about 38 percent of all commercial banks in the United States and approximately 70 percent of all commercial banking offices. ■

Federal Reserve Banks

The Federal Reserve Banks devoted significant attention in 2000 to standardizing hardware and software platforms for check processing and adjustments, instituting check imaging and a check image archive, and developing an Internet delivery platform for check services. This chapter describes those efforts, known collectively as "check modernization," as well as other activities affecting the Reserve Banks.

Check Modernization Project

The Federal Reserve Banks began a five-year check modernization initiative to install uniform software and hardware for check processing, imaging, and adjustments in forty-five Reserve Bank offices, and to provide web access to check services. The project's operating expenses of approximately \$250 million are expected to be recovered, over the long run, by enabling more efficient operations and additional service offerings to depository institutions.

The check modernization project is one of the most significant operational efforts the Federal Reserve Banks have ever undertaken. It will directly affect about 5,500 Federal Reserve employees and 8,000 depository institutions and will substantially alter the infrastructure of the Reserve Banks' check service. The schedule calls for implementing new technology and retraining the entire check services staff in less than four years.

The check modernization effort consists of four interrelated projects. A central management team under the Reserve Banks' Retail Payments Office is lead-

ing the entire initiative, with oversight by the Board of Governors. Teams consisting of staff members from several Reserve Banks oversee each of the four projects.

The largest of the four projects, at 80 percent of the budget, is check standardization, which will provide common check-processing software at all forty-five processing sites (see box). Currently, check-processing services throughout the System run on two different software platforms, and each District has further customized its software to offer additional services. These variations reduce the ability of the Reserve Banks to provide uniform services nationwide at a time when depository institutions increasingly expect uniform services across Districts, especially as banks consolidate across state lines. After completing the check standardization project, the Reserve Banks will use a new, centrally managed check-processing software platform that will enable the Reserve Banks to offer a uniform set of services nationwide and to add new uniform services more efficiently.

The second project, enterprise-wide adjustments, will result in a uniform, nationally linked platform for researching and resolving bank adjustment requests. Such requests arise because of exceptions discovered through bank reconciliation processes—such as missing or extra checks or checks processed for the wrong dollar amount. The new system will streamline the adjustments process and will allow backlogged adjustment cases in any Reserve Bank office to be processed at any other Reserve Bank office.

Check Standardization

The Federal Reserve Banks process checks using multiple hardware and software platforms. Currently, seven Reserve Banks use a Unisys check-processing platform at twenty-six sites, and five Reserve Banks use an IBM check-processing platform at nineteen sites. As check-processing technology has advanced, vendors have begun to discontinue support for older equipment and software that some of the Reserve Banks use. At the same time, as the market has changed, depository institutions have demanded greater uniformity in Reserve Bank products and services. The Reserve Banks' current check-processing infrastructure, however, hampers their ability to implement new technologies rapidly and roll out new national products to meet customer demand. In addition, the historical

independence of each Reserve Bank has resulted in a large number of software applications, each with District-specific variations, which make providing uniform services even more difficult. These many challenges make the effort to implement a standard check-processing platform the most significant component of the check modernization initiative.

The check standardization project will replace the current network of twelve relatively independent check-processing systems with a standard platform in all twelve Banks. The key to accomplishing this goal lies in the check-processing software. The core components of a check-processing system are check sorters, which electronically capture data from checks as the checks are physically sorted, and software,

The third project, the image services system, will integrate current image production from many nonstandard hardware and software platforms into a consistent production environment for the capture and archiving of check images. Banks use check images for a variety of applications, including creating image statements, researching exceptions, and providing account holders access to their check images via CD-ROM or the Internet. When completed, this project will allow Reserve Banks to offer depository institutions check images and image retrieval services in a standard format nationwide. This project is also designed to facilitate electronic check presentment by providing access to images of checks and reducing reliance on paper checks.

The fourth project, electronic access and delivery, will convert the current DOS-based FedLine service to web-based applications. FedLine provides

banks a secure connection to Reserve Bank computer networks for services such as wire transfers, automated clearinghouse transactions, and access to electronic check presentment files and account balance information. With the new platform, banks will have the option of using "FedLine for the Web," a collection of services providing electronic access to and delivery of check services from almost any location, and Reserve Banks will be able to provide new services over the Internet.

The Reserve Banks' Retail Payments Office manages this multiyear initiative for the System. In addition, each of the Reserve Banks has appointed a District transition manager, who is responsible for coordinating interdependencies among the four projects within that District. This structure is designed to provide consistent communication of key issues and to mitigate some of the risks in managing such a large initiative.

which drives the sorters and manages the captured data. The software is the primary driver of a platform's functionality and its ability to interface with other applications. Although the Reserve Banks currently use only two basic types of check-processing system, each Reserve Bank uses a variety of software packages to enhance the functionality of these systems.

In the check standardization project, standard check-processing software will be installed at all forty-five processing sites. The check-processing system used at these sites will be centrally managed and will support a uniform set of products nationwide. Once they have converted to the standard platform, the Reserve Banks will be able to operate multiple types of check-sorting hardware using the same software.

The check standardization project is the most complex of the four check modern-

ization projects and is expected to take nearly four years to complete, with the last site converting to the standard platform in 2003. Capital outlays for the project are expected to total approximately \$60 million, and expenses are expected to total slightly more than \$200 million through the end of the project in 2004. Concurrent with the project, the Reserve Banks will be required to upgrade many of their high-speed check sorters as vendors discontinue support for older models. Although these upgrades will be coordinated with the check standardization project, they are not included in the project budget because the upgrades would have been necessary even without the check modernization initiative. For several Reserve Banks, these upgrades will constitute a significant portion of their 2001 capital expenditures.

Developments in Federal Reserve Priced Services

The Monetary Control Act of 1980 requires that the Federal Reserve set fees for providing "priced services" to depository institutions that, over the long run, recover all the direct and indirect costs of providing the services as well as the imputed costs, such as the income taxes that would have been paid and the pretax return on equity that would have been earned had the services been provided by a private firm. The imputed costs and imputed profit are collectively referred to as the private-sector adjustment factor (PSAF).¹ Over the past ten years, the

Federal Reserve Banks have recovered 100.8 percent of their priced services costs, including the PSAF (see table).

Overall, fees charged in 2000 for priced services increased approximately 5.0 percent from 1999.² Revenue from priced services was \$881.5 million, other income related to priced services was \$41.3 million, and costs related to priced services were \$814.5 million, resulting in net revenue of \$108.3 million and a recovery rate of 101.1 percent of costs, including the PSAF.³

the Board of Governors that are related to priced services; in the pro forma statements at the end of this chapter, Board expenses are included in operating expenses, and Board assets are part of long-term assets.

2. Based on a chained Fisher ideal price index not adjusted for quality changes.

3. Financial data reported throughout this chapter—revenue, other income, cost, net revenue, and income before taxes—can be linked to the pro forma statements at the end of this chapter. *Other income* is revenue from investment of clear-

1. In addition to income taxes and the return on equity, the PSAF is made up of three imputed costs: interest on debt, sales taxes, and assessments for deposit insurance from the Federal Deposit Insurance Corporation. Also allocated to priced services are assets and personnel costs of

Priced Services Cost Recovery, 1991–2000

Millions of dollars except as noted

Year	Revenue from services ¹	Operating expenses and imputed costs ²	Targeted return on equity	Total expenses	Cost recovery (percent) ³
1991	750.2	692.0	32.5	724.5	103.5
1992	760.8	710.7	24.9	735.6	103.4
1993	774.5	820.4	17.5	837.9	92.4
1994	767.2	760.2	21.0	781.2	98.2
1995	765.2	752.7	31.5	784.2	97.6
1996	815.9	746.4	42.9	789.3	103.4
1997	818.8	752.8	54.3	807.1	101.5
1998	839.8	743.2	66.8	809.9	103.7
1999	867.6	775.7	57.2	833.0	104.2
2000	922.8	814.5	98.4	912.9	101.1
1991–2000	8,082.8	7,568.6	447.0	8,015.6	100.8

NOTE. In this and the following tables, components may not sum to totals or yield percentages shown because of rounding.

1. Includes revenue from services of \$7,836.2 million and other income and expense (net) of \$246.6 million for the ten-year period.

2. Includes operating expenses of \$6,652.9 million, imputed costs of \$546.9 million, and imputed income

taxes of \$275.3 million for the ten-year period. Also, the effect of one-time accounting changes of \$74.1 million and \$19.4 million is included for 1993 and 1995 respectively.

3. Revenue from services divided by total expenses.

Check Collection

Federal Reserve Bank operating expenses and imputed costs for commercial check services in 2000 totaled \$675.9 million, compared with \$649.8 million in 1999. Revenue from check operations totaled \$728.6 million, and other income amounted to \$34.7 million. Net income from check services was \$87.4 million in 2000, a \$29.9 million or 52.0 percent increase compared with 1999 income.

The Reserve Banks handled 17.0 billion checks in 2000, a decrease of 0.5 percent from 1999 (see table). The volume of fine-sort checks—checks that are presorted by the depositing banks

according to paying bank—declined 10.7 percent, compared with a 6.3 percent decrease in 1999. The volume of checks deposited that required processing by the Reserve Banks increased 1.1 percent.

The Reserve Banks continued to encourage the use of electronic check products that make the collection system more efficient. In 2000 the percentage of all checks presented electronically by the Reserve Banks to paying banks was 20.4 percent (approximately 3.5 billion checks), compared with 18.9 percent in 1999. The Reserve Banks captured images of 7.2 percent of the checks they collected, compared with 5.2 percent in 1999. The New York Reserve Bank's Utica office continued a pilot project to assess the operational implications of capturing check images on high-speed sorters, while the Minneapolis Bank's Helena Branch continued to evaluate the cost savings and operational implications of using check images to expedite check returns.

ing balances, net of earnings credits, an amount termed net income on clearing balances. *Total cost* is the sum of operating expenses, imputed costs (interest on debt, interest on float, sales taxes, and the Federal Deposit Insurance Corporation assessment), imputed income taxes, and the targeted return on equity. *Net revenue* is revenue plus other income minus total cost.

Activity in Federal Reserve Priced Services, 2000, 1999, and 1998

Thousands of items

Service	2000	1999	1998	Percent change	
				1999 to 2000	1998 to 1999
Commercial checks	16,993,800	17,075,008	16,573,463	-.5	3.0
Funds transfers	111,175	105,408	100,609	5.5	4.8
Securities transfers	5,666	5,147	5,115	10.1	.6
Commercial ACH	3,812,191	3,343,615	2,965,739	14.0	12.7
Noncash collection	519	613	755	-15.3	-18.8
Cash transportation	19	18	18	5.6	1.0

NOTE. Activity in *commercial checks* is the total number of commercial checks collected, including processed and fine-sort items; in *funds transfers* and *securities transfers*, the number of transactions originated on line and off line; in *commercial ACH*, the total number of commercial

items processed; in *noncash collection*, the number of items on which fees are assessed; and in *cash transportation*, the number of registered mail shipments and FRB-arranged armored carrier stops.

Fedwire Funds Transfer and Net Settlement

Reserve Bank operating expenses and imputed costs for Fedwire funds transfer and net settlement services totaled \$56.8 million in 2000. Revenue from these operations totaled \$61.9 million, and other income amounted to \$2.7 million, resulting in net income of \$7.7 million.

Funds Transfer

The Fedwire funds transfer system allows depository institutions to draw on their reserve or clearing balances at the Reserve Banks and transfer funds to other institutions in the United States. The number of Fedwire funds transfers originated by depository institutions increased 5.5 percent in 2000, to 111.2 million. In April 2000 the Reserve Banks reduced the transfer fees for all volume tiers (table).

Depository institutions that do not have an electronic connection to the Fedwire funds transfer system can originate transfers via "off-line" telephone instructions. Off-line Fedwire operations are consolidated at the Federal Reserve Banks of Boston and Kansas City. In

2000 the off-line funds transaction surcharge increased from \$13.00 to \$15.00 to reflect more accurately the costs of off-line processing.

Net Settlement

The Federal Reserve allows participants in private clearing arrangements to exchange and settle transactions on a net basis through reserve- or clearing-account balances. Users of net settlement services include check clearinghouse associations, automated clearinghouse networks, credit card processors, automated teller machine networks, and funds transfer and securities transfer networks. The Federal Reserve offers three types of settlement service: the settlement sheet service, the Fedwire-based settlement service, and the enhanced net settlement service.⁴

The Reserve Banks provide settlement services to approximately ninety local and national private-sector clearing and settlement arrangements. In

4. The settlement sheet service is being phased out, and all participating arrangements will be required to move to the enhanced service by year-end 2001.

Fees Paid by Depository Institutions for Selected Federal Reserve Priced Services, 1999–2000

Dollars

Item	1999	2000
FEDWIRE FUNDS TRANSFERS, BY VOLUME TIER¹		
Tier (number of transfers per month) ²		
1 (1 to 2,500) .....	.34	.33
2 (2,501 to 80,000) .....	.27	.24
3 (80,001 and more) .....	.21	.17
NET SETTLEMENT, BY TYPE OF SERVICE		
<i>Settlement sheet</i>		
Entries, each .....	.95	.95
Files, each	12.00	12.00
Minimum per month	60–175	60–175
<i>Fedwire-based</i>		
Entries, each .....	.95	.95
Files, each	12.00	12.00
Minimum per month	100–175	100–175
<i>Enhanced</i>		
Entries, each .....	.95	.95
Files, each	12.00	12.00
Minimum per month	60	60
BOOK-ENTRY SECURITIES		
<i>Account maintenance</i>		
Per issue .....	.45	.45
Per account	15.00	15.00
Transfers, each ² .....	.85	.70
NONCASH COLLECTION		
<i>Bonds, each</i>		
Bonds, each	50.00	40.00
<i>Deposit envelopes (per envelope of coupons)³</i>		
1–5	4.75	4.75
6–50	3.00	2.50
<i>Cash letters (flat fee, by number of envelopes of coupons)³</i>		
1–5	7.50	7.50
6–50	15.00	15.00
Return items, each	15.00	15.00

NOTE. Rates for 2000 are as of April 3.

1. Rates apply only to their specified volume tiers.

2. Originated and received.

3. Deposits and cash letters may contain no more than 50 envelopes of coupons.

2000 the Reserve Banks processed more than 424,000 settlement entries for these arrangements, and fees were held steady (table). The off-line settlement surcharge, however, was increased from

\$13.00 to \$15.00 to reflect more accurately the costs of off-line processing.

Fedwire Book-Entry Securities

The Fedwire book-entry securities transfer system allows depository institutions to transfer Treasury and agency securities electronically to other institutions in the United States. Reserve Bank operating expenses and imputed costs for the Fedwire book-entry securities service totaled \$15.9 million in 2000. Revenue from these operations totaled \$17.8 million, and other income amounted to \$0.8 million, resulting in net income of \$2.6 million. The Reserve Banks processed 5.7 million transfers of government agency securities on the Fedwire book-entry securities transfer system during the year, an increase of 10.1 percent from 1999.⁵

Although the monthly account-maintenance fees were held steady in 2000, the basic per-transfer fee for book-entry securities transfers originated and received by a depository institution was reduced in April (table). As it was for funds transfers, the surcharge for off-line securities transactions was increased. The Federal Reserve operates a service at the Federal Reserve Bank of Chicago to facilitate the purchase and sale of Treasury and government agency securities by depository institutions in

5. The revenues, expenses, and volumes reported here are for transfers of securities issued by federal government agencies, government-sponsored enterprises, and international institutions such as the World Bank. The Fedwire book-entry securities service also provides custody, transfer, and settlement services for U.S. Treasury securities. The Reserve Banks act as fiscal agents of the United States when they provide transfer and safekeeping of U.S. Treasury securities, and the Treasury Department assesses fees on depository institutions for some of these services. For more detail, see the section "Fiscal Agency Services" later in this chapter.

the secondary market. The transaction fee for this service was held steady in 2000.

Automated Clearinghouse

Reserve Bank operating expenses and imputed costs for commercial automated clearinghouse (ACH) services totaled \$61.6 million in 2000. Revenue from ACH operations totaled \$68.8 million, and other income amounted to \$2.9 million, resulting in net income of \$10.2 million, a \$1.7 million or 14.3 percent decrease compared with 1999. The Reserve Banks processed 3.8 billion commercial ACH transactions, an increase of 14.0 percent from 1999.

In 2000 the Board approved a new approach to pricing ACH transactions that the Federal Reserve Banks exchange with intermediaries that are defined as operators under the operating rules of the National Automated Clearing House Association. As part of that approach, the Board authorized the Reserve Banks to initiate discussions with the private-sector ACH operators (PSOs) to negotiate the structure and level of fees that the Reserve Banks will charge for processing interoperator transactions as well as the fees that the Reserve Banks will pay the PSOs.

Noncash Collection

The Federal Reserve provides a service for the collection and processing of municipal bearer bonds and coupons. These securities, issued by local governments and states, are referred to as "noncash" items. Customer service for the noncash program has been centralized at the Federal Reserve Bank of Atlanta's Jacksonville Branch, which maintains a database of more than 3,500 paying agents. In 2000 the Jacksonville

Branch processed 519,000 noncash collection transactions.

Reserve Bank operating expenses and imputed costs for noncash collection services totaled \$2.0 million in 2000. Revenue from noncash operations totaled \$2.3 million, and other income amounted to \$0.1 million, resulting in net income of \$0.4 million. Two noncash collection fees were reduced in 2000, and the others remained the same.

Special Cash Services

The Reserve Banks charge fees for special cash services and nonstandard access.⁶ Special cash services represent a very small portion (less than 1 percent) of the cost of overall cash services provided by the Reserve Banks to depository institutions. The Helena Branch of the Minneapolis Reserve Bank provides wrapped coin and coin in nonstandard packages; the Chicago District provides currency in nonstandard packages; and the El Paso Branch of the Dallas Reserve Bank provides nonstandard packaging of same-day express cash orders. In addition, the Boston, Kansas City, and San Francisco Districts and the Helena and El Paso Branches provide cash transportation by registered mail.

Reserve Bank operating expenses and imputed costs for special cash services totaled \$2.1 million in 2000. Revenue from cash operations totaled \$2.1 million, and other income amounted to \$0.1 million, resulting in net income of \$0.1 million.

6. Nonstandard access refers to provisions of the Uniform Cash Access Policy that authorize Reserve Banks to charge fees to financial institutions when the number of weekly orders for currency or deposits of currency exceeds a uniform standard. Because nonstandard access is not considered a priced service, the fees are treated as a recovery of expenses rather than as revenue.

Float

Federal Reserve float increased in 2000 to a daily average of \$774.2 million, from a daily average of \$584.4 million in 1999. The Federal Reserve recovers the cost of float associated with priced services as part of the fees for those services.

Developments in Currency and Coin

Depository institutions held larger-than-normal amounts of vault cash in preparation for the public's potential need for additional cash during the period around the year 2000 (Y2K) date change. Because the Y2K event went smoothly, banks were eager to return the extra vault cash to the Reserve Banks in January 2000. To accommodate this large flowback of currency, Reserve Banks extended dock hours to receive currency deposits and worked extra shifts to process deposits. In January 2000, Reserve Banks received 4.0 billion notes, 61 percent more than the 2.5 billion notes received in January 1999 and 12 percent of the entire year's receipts. These extraordinary cash flows surrounding Y2K required close coordination among cash operations staff and economists responsible for open market operations to ensure that the large volume of currency in circulation was appropriately collateralized.

In January 2000 the U.S. Mint issued a new Golden Dollar, promoting the coin as a convenient alternative to the \$1 note. The Mint distributed Golden Dollars directly to selected retailers and through the Federal Reserve to the banking industry. Initially, the banking industry's demand for Golden Dollars exceeded the Mint's production capacity and the Federal Reserve's inventories. By midyear, after the Mint had

increased production, the Reserve Banks had enhanced their management of inventory, and banks had reduced their orders for Golden Dollars, the Federal Reserve's supply of the new coins was more than adequate to meet demand. Early evidence suggests that the Golden Dollars are not widely circulated but are collected by the public as commemorative coins.

In May the Department of the Treasury introduced the new-design \$5 and \$10 notes, thereby concluding the redesign that began in 1996 with the introduction of the new-design \$100 note. The new-design \$5 and \$10 notes contain the same features as the other 1996 Series notes, except that the \$5 note does not include color-shifting ink. There are no plans to redesign the \$1 note.

Developments in Fiscal Agency and Government Depository Services

The Federal Reserve Act provides that, when required by the Secretary of the Treasury, Reserve Banks will act as fiscal agents and depositories of the United States. In this capacity, Reserve Banks provide debt-related services, collect and disburse funds on behalf of the federal government, and provide similar services for several domestic and international government agencies.

For example, as fiscal agents and depositories of the United States, Reserve Banks collect federal taxes for the Treasury, maintain a cash account for the Treasury to meet its immediate cash needs, and invest excess Treasury balances with depository institutions. The Federal Reserve adjusts the total Treasury balances at depository institutions according to the Treasury's cash needs and depository institutions' willingness and ability to collateralize Treas-

Expenses of Federal Reserve Banks for Fiscal Agency and Depository Services,
2000, 1999, and 1998

Thousands of dollars

Agency and service	2000	1999	1998
DEPARTMENT OF THE TREASURY			
<i>Bureau of the Public Debt</i>			
Savings bonds	70,786.7	70,285.8	71,401.8
Treasury Direct	41,259.3	40,446.2	35,859.1
Commercial book entry	13,924.6	15,744.2	17,880.4
Marketable Treasury issues	14,224.3	13,715.1	15,530.5
Definitive securities and Treasury coupons	1,069.3	4,886.7	3,734.2
Other services	132.5	100.4	83.7
Total	141,404.7	145,178.4	144,489.7
<i>Financial Management Service</i>			
Treasury tax and loan and Treasury general account	38,649.0	34,971.0	35,428.2
Government check processing	31,866.9	33,365.4	34,096.4
Automated clearinghouse	10,799.1	11,263.4	11,716.0
Government agency check deposits	2,218.8	2,422.7	2,731.0
Fedwire funds transfers	182.9	187.7	186.3
Other services	27,015.4	20,423.5	16,045.2
Total	110,732.2	102,633.7	100,203.1
<i>Other Treasury</i>			
Total	10,362.8	7,786.8	6,237.6
Total, Treasury	262,499.7	255,598.9	250,930.4
OTHER FEDERAL AGENCIES			
Department of Agriculture			
Food coupons	16,463.7	18,643.9	24,452.4
U.S. Postal Service			
Postal money orders	9,213.5	6,623.3	5,275.3
Miscellaneous agencies			
Other services	13,747.1	13,983.0	16,850.6
Total, other agencies	39,424.3	39,250.2	46,578.3
Total reimbursable expenses	301,924.0	294,849.1	297,508.7

sury investments. Since October 2000 the Federal Reserve has been conducting these activities under the new, centralized Treasury Investment Program (TIP).

In 2000 the Reserve Banks focused on the consolidation of several fiscal agency and depository operations to improve the efficiency and quality of service provided to the Treasury and its customers. In addition to the implementation of TIP (see the discussion below, under "Federal Tax Payments"), the Reserve Banks completed the consolidation of Treasury Direct customer service operations and improved telephone service. The Reserve Banks and the Treasury's Bureau of the Public Debt

reduced the number of Treasury auction review sites as well.

The total cost of providing fiscal agency and depository services to the Treasury amounted to \$262.5 million, compared with \$255.6 million in 1999 (table). The cost of providing services to other government agencies was \$39.4 million, compared with \$39.3 million in 1999. The Reserve Banks establish uniform and consistent practices for accounting for, reporting of, and billing for the full costs of providing fiscal agency and depository services to the U.S. government. In 2000 the Reserve Banks requested reimbursement by the Treasury and other government agencies of \$301.9 million in fiscal agency

and depository expenses, an increase of \$7.1 million from 1999.

Fiscal Agency Services

As fiscal agents, Reserve Banks provide the Department of the Treasury with services related to the federal debt. For example, they issue, transfer, reissue, exchange, and redeem marketable Treasury securities and savings bonds; they also process secondary market transfers initiated by depository institutions. The approximately 10,000 depository institutions that handle Treasury deposits are required to pledge to the Treasury collateral sufficient to protect the uninsured portion of Treasury tax proceeds and the full value of Treasury investments held. The Reserve Banks monitor the collateral pledged by depository institutions to the federal government. If the value of collateral is insufficient, the Federal Reserve removes the unprotected Treasury funds from that institution and invests them elsewhere.

Marketable Treasury Securities

Reserve Bank operating expenses for activities related to marketable Treasury securities in 2000 (Treasury Direct, commercial book entry, marketable issues, definitive securities, and Treasury coupons) totaled \$70.5 million, a 5.8 percent decrease from 1999. Banks processed nearly 220,000 commercial tenders for government securities in Treasury auctions, a 13.0 percent decline from 1999. The New York Reserve Bank handles commercial tenders that come from within its District for government securities in Treasury auctions, including those from all primary dealers. The Bureau of the Public Debt assumed the processing of all other commercial tenders.

The Reserve Banks operate two book-entry securities systems for Treasury securities: the Fedwire system, which provides custody and transfer, and Treasury Direct, which provides custody services only.⁷ Almost all book-entry Treasury securities, 97.2 percent of the total par value outstanding at year-end 2000, were maintained on Fedwire; the remainder were maintained on Treasury Direct.

The Reserve Banks in 2000 processed 7.7 million Fedwire transfers of Treasury securities, a 5.0 percent decline from 1999. They also processed 27.6 million interest and principal payments for Treasury and government agency securities, an increase of 3.9 percent from 1999.

Treasury Direct, operated by the Philadelphia Reserve Bank, is a system of book-entry securities accounts for institutions and individuals planning to hold their Treasury securities to maturity. The Treasury Direct system holds more than 669,000 accounts. During 2000 the Reserve Banks processed nearly 190,000 tenders for Treasury Direct customers seeking to purchase Treasury securities at Treasury auctions and handled 0.7 million reinvestment requests. The number of tenders was 20.5 percent lower than in 1999, and the number of reinvestment requests was 11.0 percent higher. The Philadelphia Reserve Bank issued 6.0 million payments for discounts, interest, and redemption proceeds; the Treasury Direct facility was also used to originate 2.7 million payments for savings bonds and more than 36,000 interest

7. The Fedwire book-entry securities mechanism is also used for safekeeping and transfer of securities issued by federal government agencies, government-sponsored enterprises, and international institutions. For more details, see the section "Fedwire Book-Entry Securities" earlier in this chapter.

payments for definitive (paper) Treasury issues.

The Reserve Banks completed the consolidation of Treasury Direct customer service activities on schedule. All individual applications to purchase, reinvest, and redeem matured Treasury securities are handled by one of three Reserve Banks: Boston, Minneapolis, or Dallas. As part of the consolidation, the Reserve Banks implemented a toll-free customer contact center for Treasury Direct customers. The center routes calls to a variety of electronic services available from the Treasury and connects the call to the next available agent at one of the three Reserve Banks, regardless of the caller's location.

As a service to Treasury Direct investors, the Chicago Reserve Bank, through the Sell Direct program, continued to sell investors' Treasury securities on the secondary market for a fee. In 2000 the Bank sold more than 16,000 securities worth \$655.8 million, compared with more than 16,000 securities worth \$581.2 million in 1999. The Bank collected almost \$557,000 in fees on behalf of the Treasury, an increase of 4.1 percent from the almost \$535,000 in fees collected in 1999.

Savings Bonds

Reserve Bank operating expenses for savings bond activities totaled \$70.8 million in 2000, an increase of 0.7 percent from 1999. The Banks printed and mailed 36.6 million savings bonds on behalf of the Treasury's Bureau of the Public Debt, a 9.6 percent decline from 1999. The Reserve Banks processed 2.3 million original-issue transactions for the Series I (inflation indexed) savings bond and 27.9 million original-issue transactions for the Series EE savings bond. They also processed approximately 568,000 redemp-

tion, reissue, and exchange transactions, a 3.0 percent increase from 1999. The Reserve Banks responded to 1.6 million service calls from owners of savings bonds, approximately the same number as in 1999.

The Reserve Banks continued to enhance the automation aspects of savings bond processing. All savings bond processing sites have implemented electronic scanning of paper applications submitted by banks. Work also continued on plans to replace several mainframe computer programs with distributed (personal computer) programs.

Savings bond operations are conducted at five Reserve Bank offices: Buffalo (New York District), Pittsburgh (Cleveland District), Richmond, Minneapolis, and Kansas City. All five offices process transactions, but only the Pittsburgh and Kansas City offices print and mail savings bonds.

Depository Services

The Reserve Banks maintain the Treasury's funds account, accept deposits of federal taxes and fees, pay checks drawn on the Treasury's account, and make electronic payments on behalf of the Treasury.

Federal Tax Payments

Reserve Bank operating expenses related to federal tax payment activities in 2000 totaled \$38.6 million. The Banks processed approximately 3.8 million electronic and 16,000 paper advices of credit from depository institutions handling tax payments for businesses and individuals. Advices of credit are notices from depository institutions to the Federal Reserve and the Treasury that summarize taxes collected on a given day. From 1999 to 2000 the volume of tax payments submitted elec-

trically decreased 20.0 percent, and the volume of paper advices of credit declined 64.0 percent. The Reserve Banks also received a small number of tax payments directly.

Depository institutions that receive tax payments remit the funds to the Reserve Banks electronically through the Treasury's Electronic Federal Tax Payment System (EFTPS). Businesses that know their tax liability in advance of the tax due date authorize their depository institutions to debit their accounts for the tax they owe. On the due date, the depository institution sends tax payment information to one of two commercial banks that serve as the Treasury's EFTPS financial agents. The financial agents assemble the tax-payment information received and forward it to the Federal Reserve, which debits the taxpayer's depository institution account and places the money in the Treasury's account. Because some business taxpayers cannot determine their tax liability until the day their taxes are due, the Minneapolis Reserve Bank operates another automated system that allows depository institutions to make same-day tax payments on behalf of taxpayers directly to the Federal Reserve; in 2000, the Minneapolis Bank's same-day electronic system processed approximately 247,000 tax payments, totaling \$262.8 billion, from 9.4 million taxpayers.

The Reserve Banks made significant improvements to the electronic tax payments process in 2000. They worked during the year to implement TIP, which replaced the Treasury tax and loan (TT&L) system in October. The Reserve Banks moved from twelve TT&L applications to one centralized TIP application and database, which offers several advantages. Unlike TT&L, which held all transactions and processed them at the end of each day, TIP operates in real

time to invest Treasury funds, monitor the value of collateral pledged, and withdraw invested balances that are not fully collateralized. TIP, which is operated by the St. Louis Reserve Bank, also improves upon the investment capabilities that had been available to the Treasury under the TT&L system. Along with TIP, the St. Louis Reserve Bank implemented a separate application, the paper tax processing system, that converts paper tax payments to electronic form and truncates the paper tax coupons.

In a related matter, the Board modified its policy statement on payments system risk by establishing posting times for TIP transactions.

Payments Processed for the Treasury

Reserve Bank operating expenses related to government payment operations in 2000 (check processing, ACH, agency check deposits, and Fedwire) amounted to \$45.1 million. The Treasury continued to encourage electronic payments: ACH transactions processed for the Treasury amounted to 853.3 million, an increase of 3.6 percent from 1999. Most government ACH transactions are payments for social security, pensions, and salaries; some are payments to vendors. All recurring Treasury Direct payments and many definitive securities interest payments are ACH transactions.

In support of the Treasury's effort to make payments electronically, the Federal Reserve Bank of Dallas continued to operate the Electronic Transfer Accounts program. This program helps individuals who do not have bank accounts find low-cost transaction accounts at federally insured depository institutions so that they can receive their federal benefit payments electronically. The Dallas Bank enrolls depository

institutions that want to provide these accounts and helps payment recipients and others locate these institutions.

The Treasury continues to reduce the number of payments it makes by paper check. The Reserve Banks processed 262.0 million paper government checks in 2000, a decrease of 9.0 percent from 1999. The Banks also issued nearly 524,000 paper fiscal agency checks, a decrease of 14.0 percent from 1999. Fiscal agency checks are used primarily to pay semiannual interest on registered, definitive Treasury notes and bonds and on Series H and HH savings bonds; some were used to pay the principal of matured securities and coupons and to make discount payments to first-time purchasers of government securities through Treasury Direct.

Services Provided to Other Entities

The Reserve Banks provide fiscal agency and depository services to other domestic and international agencies when they are required to do so by the Secretary of the Treasury or when they are required or permitted to do so by federal statute. Depending on the authority under which the services are provided, the Reserve Banks may (1) maintain book-entry accounts of government agency securities and handle their transfer,⁸ (2) provide custody for the stock of unissued definitive securities, (3) maintain and update balances of outstanding book-entry and definitive securities for issuers, (4) perform various other securities-servicing activities, (5) maintain funds

accounts for some government agencies, and (6) provide various payment services.

One such service is the provision of food coupon services for the U.S. Department of Agriculture. Reserve Bank operating expenses for food coupon services in 2000 totaled \$16.5 million, 11.7 percent lower than in 1999. The Banks redeemed 685.7 billion food coupons, a decrease of 40.8 percent from 1999. The Department of Agriculture's program to provide benefits electronically is expected to continue reducing the volume of paper food coupons redeemed by the Reserve Banks.

As fiscal agents of the United States, the Reserve Banks also process all postal money orders deposited by banks for collection. The Reserve Banks processed 230.1 million postal money orders in 2000, 1.9 percent more than in 1999. Much of this work is centralized at the St. Louis Reserve Bank. In mid-2000 the St. Louis Reserve Bank implemented an image-capture service for paid postal money orders (similar to the service provided for Treasury checks) to facilitate the U.S. Postal Service's accounting, reconciliation, and claims processes.

Information Technology

In 2000 the Federal Reserve made significant progress on its strategic initiative to implement frame relay technology on Fednet, the telecommunications network that supports both external electronic connections between the Federal Reserve and depository institutions and internal communications among Reserve Banks. Once complete, the new network will provide improved speed, reliability, and performance for depository institutions' electronic connections during contingencies and the capacity

8. The Federal Reserve tracks the transfer and account maintenance of agency securities as a priced service to depository institutions. The agencies are not charged for the Federal Reserve's expenses in providing these services to depository institutions.

and flexibility to support new electronic services using web-based technologies. The Federal Reserve completed equipment installation at the three automated operations centers supporting national network services and began installing both internal and external frame relay connections. Approximately 1,500 telecommunications connections will be converted to frame relay technology through 2002.

Improvements in the security of the new FedLine for Windows platform continued in 2000. The security enhancements authenticate FedLine for Windows operators, encrypt information, and facilitate the connection of the FedLine for Windows terminal with the administrative systems of depository institutions. In 2000 the vendors building the enhancements completed the software development and integrated the Fedline for Windows security components. A complete Fedline for Windows package for depository institutions was prepared and tested in anticipation of converting dial customers from the Federal Reserve's current DOS FedLine platform to the new FedLine for Windows platform in 2001. Conversion will continue through the end of 2002.

Reserve Banks continue to make significant progress in using the World Wide Web as a delivery channel for financial services. In 2000 the Federal Reserve successfully implemented a public-key infrastructure to enable secure access to certain services through web browsers; collectively, these services are known as FedLine for the Web. The Federal Reserve currently offers web-based applications for check imaging, cash ordering, and savings bonds, and plans to launch other new services on FedLine for the Web over the next several years.

The Reserve Banks charge fees for the electronic connections depository

institutions use to access priced services; the Banks allocate costs and revenue associated with electronic access to the various priced services. The monthly cost of a Fednet connection ranged from \$75 to \$2,000, depending on the type and speed of the connection.

Financial Examinations of Federal Reserve Banks

Section 21 of the Federal Reserve Act requires the Board of Governors to order an examination of each Federal Reserve Bank at least once a year. The Board engages a public accounting firm to perform an annual audit of the combined financial statements of the Reserve Banks (see the chapter later in this volume, "Federal Reserve Bank Combined Financial Statements"). The public accounting firm also audits the annual financial statements of each of the twelve Banks. The Reserve Banks use the framework established by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in assessing their internal controls over financial reporting, including the safeguarding of assets. Within this framework, each Reserve Bank provides an assertion letter to its board of directors annually confirming adherence to the COSO standards, and a public accounting firm certifies management's assertion and issues an attestation report to the Bank's board of directors and to the Board of Governors.

In 2000 the Congress amended the Federal Reserve Act to codify the practice of engaging an external accounting firm. The new Federal Reserve Act section 11B states, "The Board shall order an annual independent audit of each Federal Reserve Bank and the Board."

In 2000 the attention of the Board's Division of Reserve Bank Operations and Payment Systems at the Reserve

Banks focused on assessing the adequacy of internal controls at each Bank, using a format consistent with the integrated COSO framework. The scope of these examinations included comprehensive reviews of each Bank's internal control system in terms of the five COSO control components: control environment, risk assessment, control activities, information and communication, and monitoring.

The firm engaged for the audits of the individual and combined financial statements of the Reserve Banks for 2000 was PricewaterhouseCoopers LLP (PwC). Fees for these services totaled \$1.4 million. PwC also audited the Federal Reserve System's pension plan and thrift savings plan, the fees for which totaled \$0.2 million. In addition, the Board and the Reserve Banks engaged PwC for management consulting services. Fees for these services, totaling \$1.5 million in 2000, are not considered incompatible with the services provided by PwC as an independent auditor.

Each year, to assess compliance with the policies established by the Federal

Reserve's Federal Open Market Committee (FOMC), the division examines the accounts and holdings of the System Open Market Account at the Federal Reserve Bank of New York and the foreign currency operations conducted by that Bank. In addition, a public accounting firm certifies the schedule of participated asset and liability accounts and the related schedule of participated income accounts at year-end. Division personnel follow up on the results of these audits. The FOMC receives the external audit reports and the report on the division's follow-up.

Income and Expenses

The accompanying table summarizes the income, expenses, and distributions of net earnings of the Federal Reserve Banks for 1999 and 2000.

Income in 2000 was \$33,964 million, compared with \$29,347 million in 1999. Total expenses were \$2,595 million (\$1,586 million in operating expenses, \$385 million in earnings credits granted to depository institutions, and \$188 mil-

Income, Expenses, and Distribution of Net Earnings of Federal Reserve Banks, 2000 and 1999

Millions of dollars

Item	2000	1999
Current income	33,964	29,347
Current expenses	1,972	1,852
Operating expenses ¹	1,586	1,532
Earnings credits granted	385	321
Current net income	31,992	27,495
Net additions to (deductions from, -) current net income	-1,492	-526
Cost of unreimbursed services to Treasury	8	8
Assessments by the Board of Governors	624	699
For expenditures of Board	188	214
For cost of currency	436	485
Net income before payments to Treasury	29,868	26,262
Dividends paid	410	374
Transferred to surplus	4,115	479
Payments to Treasury ²	25,344	25,410

1. Includes a net periodic credit for pension costs of \$393 million in 2000 and \$367 million in 1999.

2. Interest on Federal Reserve notes.

lion in assessments for expenditures by the Board of Governors). The cost of new currency was \$436 million. Revenue from priced services was \$881.5 million. Unreimbursed expenses for services provided to the Treasury and other government entities amounted to \$8 million.⁹

The profit and loss account showed a net loss of \$1,492 million. The loss was due primarily to unrealized losses on assets denominated in foreign currencies revalued to reflect current market exchange rates. Statutory dividends paid to member banks totaled \$410 million, \$36 million more than in 1999; the rise reflects an increase in the capital and surplus of member banks and a consequent increase in the paid-in capital stock of the Reserve Banks.

Payments to the Treasury in the form of interest on Federal Reserve notes totaled \$25,344 million in 2000, down

9. The Reserve Banks bill the Treasury and other government entities for the cost of certain services, and the portions of the bills that are not paid are reported as unreimbursed expenses.

from \$25,410 million in 1999; the payments equal net income after the deduction of dividends paid and of the amount necessary to bring the surplus of the Reserve Banks to the level of capital paid in.

In the "Statistical Tables" chapter of this volume, table 5 details the income and expenses of each Federal Reserve Bank for 2000, and table 6 shows a condensed statement for each Bank for the years 1914 through 2000. A detailed account of the assessments and expenditures of the Board of Governors appears in the chapter "Board of Governors Financial Statements."

Holdings of Securities and Loans

The Reserve Banks' average daily holdings of securities and loans during 2000 amounted to \$528,139 million, an increase of \$32,533 million from 1999 (see table). Holdings of U.S. government securities increased \$32,390 million, and holdings of loans increased \$144 million.

Securities and Loans of Federal Reserve Banks, 1998–2000

Millions of dollars except as noted

Item and year	Total	U.S. government securities ¹	Loans ²
<i>Average daily holdings³</i>			
1998	447,095	446,933	161
1999	495,606	495,384	221
2000	528,139	527,774	365
<i>Earnings</i>			
1998	26,851	26,842	9
1999	28,227	28,216	11
2000	32,760	32,737	23
<i>Average interest rate (percent)</i>			
1998	6.01	6.01	5.44
1999	5.70	5.70	5.02
2000	6.20	6.20	6.27

1. Includes federal agency obligations.

2. Does not include indebtedness assumed by the Federal Deposit Insurance Corporation.

3. Based on holdings at opening of business.

The average rate of interest earned on the Reserve Banks' holdings of government securities rose to 6.20 percent, from 5.7 percent in 1999, and the average rate of interest earned on loans rose to 6.27 percent from 5.02 percent.

Volume of Operations

Table 8 in the "Statistical Tables" chapter shows the volume of operations in the principal departments of the Federal Reserve Banks for the years 1997 through 2000.

Federal Reserve Bank Premises

In 2000 the construction of the Atlanta Bank's new headquarters building continued and the construction of its new Birmingham Branch building was completed. Construction began on the San Francisco Bank's new Phoenix cash-processing center.

The Board approved the Chicago Bank's request to move its check-processing function from its headquarters building to leased space near

Chicago's Midway Airport. Leasehold improvements to prepare the space for the Bank's operations continued.

Leases were renewed for check-processing centers in Charleston, West Virginia, for the Richmond Bank, and Peoria, Illinois, for the Chicago Bank.

In the New York District, the multi-year program of improvements to the new leased offices in New York City continued. Work also continued on the multiyear renovation of the interior of the headquarters building and on the cleaning and repair of the building's exterior stonework; in addition, work began on improvements to the building's main chiller plant.

Development of a project program and analysis of site development options for the Dallas Bank's new Houston Branch building continued.

The Kansas City Bank analyzed expansion options for its headquarters facility, and the Chicago Bank analyzed long-term planning options for its Detroit Branch.

The Richmond Bank continued the installation of exterior security enhancements to its headquarters building. ■

Pro Forma Financial Statements for Federal Reserve Priced Services**Pro Forma Balance Sheet for Priced Services, December 31, 2000 and 1999**

Millions of dollars

Item	2000	1999
<i>Short-term assets (Note 1)</i>		
Imputed reserve requirements		
on clearing balances	667.0	777.2
Investment in marketable securities	6,002.6	6,994.8
Receivables	74.9	78.2
Materials and supplies	3.2	4.2
Prepaid expenses	35.2	24.4
Items in process of collection	<u>4,094.6</u>	<u>3,747.8</u>
Total short-term assets	10,877.4	11,626.5
<i>Long-term assets (Note 2)</i>		
Premises	471.9	431.7
Furniture and equipment	171.2	146.5
Leases and leasehold improvements	65.3	59.5
Prepaid pension costs	<u>659.9</u>	<u>542.8</u>
Total long-term assets	<u>1,368.3</u>	<u>1,180.5</u>
Total assets	12,245.7	12,807.0
<i>Short-term liabilities</i>		
Clearing balances and balances arising from early credit of uncollected items	6,891.2	7,996.3
Deferred-availability items	<u>3,872.9</u>	<u>3,523.5</u>
Short-term debt	<u>113.2</u>	<u>106.7</u>
Total short-term liabilities	10,877.4	11,626.5
<i>Long-term liabilities</i>		
Obligations under capital leases .....	.0	.0
Long-term debt	443.0	237.2
Postretirement/postemployment benefits obligation	<u>243.9</u>	<u>231.2</u>
Total long-term liabilities	<u>686.9</u>	<u>468.5</u>
Total liabilities	11,564.3	12,095.0
Equity	<u>681.4</u>	<u>712.0</u>
Total liabilities and equity (Note 3)	12,245.7	12,807.0

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

The accompanying notes are an integral part of these pro forma priced services financial statements.

Pro Forma Income Statement for Federal Reserve Priced Services, 2000 and 1999

Millions of dollars

Item	2000	1999
Revenue from services provided to depository institutions (Note 4)	881.5	835.9
Operating expenses (Note 5)	<u>711.1</u>	<u>692.7</u>
Income from operations	170.5	143.2
Imputed costs (Note 6)		
Interest on float	12.8	8.7
Interest on debt	31.5	18.5
Sales taxes	9.3	9.8
FDIC insurance	<u>.0</u>	<u>2.7</u>
	<u>53.6</u>	<u>39.7</u>
Income from operations after imputed costs	116.8	103.5
Other income and expenses (Note 7)		
Investment income	411.8	337.3
Earnings credits	<u>-370.5</u>	<u>41.3</u>
	<u>41.3</u>	<u>-305.5</u>
Income before income taxes	158.1	135.3
Imputed income taxes (Note 8)	49.8	43.3
Net income	<u>108.3</u>	<u>92.0</u>
MEMO: Targeted return on equity (Note 9) ...	98.4	57.2

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

The accompanying notes are an integral part of these pro forma priced services financial statements.

Pro Forma Income Statement for Federal Reserve Priced Services, by Service, 2000

Millions of dollars

Item	Total	Commercial check collection	Funds transfer and net settlement	Book-entry securities	Commercial ACH	Noncash collection	Cash services
Revenue from services (Note 4)	881.5	728.6	61.9	17.8	68.8	2.3	2.1
Operating expenses (Note 5)	<u>711.1</u>	<u>590.0</u>	<u>49.6</u>	<u>14.0</u>	<u>53.6</u>	<u>1.7</u>	<u>2.1</u>
Income from operations	170.5	138.6	12.3	3.8	15.2	.6	.0
Imputed costs (Note 6)	<u>53.6</u>	<u>45.7</u>	<u>3.7</u>	<u>.7</u>	<u>3.3</u>	<u>.2</u>	<u>.0</u>
Income from operations after imputed costs	116.9	92.9	8.6	3.0	11.9	.4	.0
Other income and expenses, net (Note 7)	<u>41.3</u>	<u>34.7</u>	<u>2.7</u>	<u>.8</u>	<u>2.9</u>	<u>.1</u>	<u>.1</u>
Income before income taxes	158.1	127.6	11.3	3.8	14.8	.5	.1
Imputed income taxes (Note 8)	<u>49.8</u>	<u>40.2</u>	<u>3.5</u>	<u>1.2</u>	<u>4.7</u>	<u>.2</u>	<u>.0</u>
Net income	<u>108.3</u>	<u>87.4</u>	<u>7.7</u>	<u>2.6</u>	<u>10.2</u>	<u>.4</u>	<u>.1</u>
MEMO: Targeted return on equity (Note 9)	98.4	80.8	7.5	1.9	8.0	.2	.1

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

The accompanying notes are an integral part of these pro forma priced services financial statements.

FEDERAL RESERVE BANKS

NOTES TO PRO FORMA FINANCIAL STATEMENTS FOR PRICED SERVICES

(1) SHORT-TERM ASSETS

The imputed reserve requirement on clearing balances held at Reserve Banks by depository institutions reflects a treatment comparable to that of compensating balances held at correspondent banks by respondent institutions. The reserve requirement imposed on respondent balances must be held as vault cash or as non-earning balances maintained at a Reserve Bank; thus, a portion of priced services clearing balances held with the Federal Reserve is shown as required reserves on the asset side of the balance sheet. The remainder of clearing balances is assumed to be invested in three-month Treasury bills, shown as investment in marketable securities.

Receivables are (1) amounts due the Reserve Banks for priced services and (2) the share of suspense-account and difference-account balances related to priced services.

Materials and supplies are the inventory value of short-term assets.

Prepaid expenses include salary advances and travel advances for priced-service personnel.

Items in process of collection is gross Federal Reserve cash items in process of collection (CIPC) stated on a basis comparable to that of a commercial bank. It reflects adjustments for intra-System items that would otherwise be double-counted on a consolidated Federal Reserve balance sheet; adjustments for items associated with non-priced items, such as those collected for government agencies; and adjustments for items associated with providing fixed availability or credit before items are received and processed. Among the costs to be recovered under the Monetary Control Act is the cost of float, or net CIPC during the period (the difference between gross CIPC and deferred-availability items, which is the portion of gross CIPC that involves a financing cost), valued at the federal funds rate.

(2) LONG-TERM ASSETS

Consists of long-term assets used solely in priced services, the priced-services portion of long-term assets shared with nonpriced services, and an estimate of the assets of the Board of Governors used in the development of priced services. Effective Jan. 1, 1987, the Reserve Banks implemented the Financial Accounting Standards Board's Statement of Financial Accounting Standards No. 87, *Employers' Accounting for Pensions* (SFAS 87). Accordingly, the Reserve Banks recognized credits to expenses of \$115.5 million in 2000 and \$105.5 million in 1999 and corresponding increases in this asset account.

(3) LIABILITIES AND EQUITY

Under the matched-book capital structure for assets that are not "self-financing," short-term assets are financed with short-term debt. Long-term assets are financed with long-term debt and equity in a proportion equal to the ratio of long-term debt to equity for the fifty largest bank holding companies, which are used in the model for the private-sector adjustment factor (PSAF). The PSAF consists of the taxes that would have been paid and the return on capital that would have been provided had priced services been furnished by a private-sector firm. Other

short-term liabilities include clearing balances maintained at Reserve Banks and deposit balances arising from float. Other long-term liabilities consist of accrued postemployment and postretirement benefits costs and obligations on capital leases.

(4) REVENUE

Revenue represents charges to depository institutions for priced services and is realized from each institution through one of two methods: direct charges to an institution's account or charges against its accumulated earnings credits.

(5) OPERATING EXPENSES

Operating expenses consist of the direct, indirect, and other general administrative expenses of the Reserve Banks for priced services plus the expenses for staff members of the Board of Governors working directly on the development of priced services. The expenses for Board staff members were \$4.2 million in 2000 and \$3.4 million in 1999. The credit to expenses under SFAS 87 (see note 2) is reflected in operating expenses.

The income statement by service reflects revenue, operating expenses, and imputed costs. Certain corporate overhead costs not closely related to any particular priced service are allocated to priced services in total based on an expense-ratio method, but are allocated among priced services based on management decision. Corporate overhead was allocated among the priced services during 2000 and 1999 as follows (in millions):

	2000	1999
Check	40.3	38.7
ACH	3.7	3.6
Funds transfer	4.3	4.7
Book entry	1.1	1.0
Noncash collection .....	.1	.0
Special cash services .....	.1	.0
Total	49.6	48.0

Total operating expense on the income statement by service does not equal the sum of operating expenses for each service because of the effect of SFAS 87. Although the portion of the SFAS 87 credit related to the current year is allocated to individual services, the amortization of the initial effect of implementation is reflected only at the System level.

(6) IMPUTED COSTS

Imputed costs consist of interest on float, interest on debt, sales taxes, and the FDIC assessment. Interest on float is derived from the value of float to be recovered, either explicitly or through per-item fees, during the period. Float costs include costs for checks, book-entry securities, noncash collection, ACH, and funds transfers.

Interest is imputed on the debt assumed necessary to finance priced-service assets. The sales taxes and FDIC assessment that the Federal Reserve would have paid had it been a private-sector firm are among the components of the PSAF (see note 3).

Float costs are based on the actual float incurred for each priced service. Other imputed costs are allocated among priced services according to the ratio of operating expenses less shipping expenses for each service to the total expenses for all services less the total shipping expenses for all services.

The following list shows the daily average recovery of actual float by the Reserve Banks for 2000 in millions of dollars:

Total float	774.2
Unrecovered float	100.5
Float subject to recovery	673.7
Sources of recovery of float	
Income on clearing balances	67.5
As-of adjustments	470.8
Direct charges	322.7
Per-item fees	(187.3)

Unrecovered float includes float generated by services to government agencies and by other central bank services. Float recovered through income on clearing balances is the result of the increase in investable clearing balances; the increase is produced by a deduction for float for cash items in process of collection, which reduces imputed reserve requirements. The income on clearing balances reduces the float to be recovered through other means. As-of adjustments and direct charges refer to float that is created by interterritory check transportation and the observance of non-standard holidays by some depository institutions. Such float may be recovered from the depository institutions through adjustments to institution reserve or clearing balances or by billing institutions directly. Float recovered through direct charges and per-item fees is valued at the federal funds rate; credit float recovered through per-item fees has been subtracted from the cost base subject to recovery in 2000.

(7) OTHER INCOME AND EXPENSES

Consists of investment income on clearing balances and the cost of earnings credits. Investment income on clearing balances represents the average coupon-equivalent yield on three-month Treasury bills applied to the *total* clearing balance maintained, adjusted for the effect of reserve requirements on clearing balances. Expenses for earnings credits granted to depository institutions on their clearing balances are derived by applying the average federal funds rate to the *required* portion of the clearing balances, adjusted for the net effect of reserve requirements on clearing balances.

Because clearing balances relate directly to the Federal Reserve's offering of priced services, the income and cost associated with these balances are allocated to each service based on each service's ratio of income to total income.

(8) INCOME TAXES

Imputed income taxes are calculated at the effective tax rate derived from the PSAF model (see note 3).

(9) RETURN ON EQUITY

The after-tax rate of return on equity that the Federal Reserve would have earned had it been a private business firm, as derived from the PSAF model (see note 3). This amount is adjusted to reflect the recovery of \$1.2 million of automation consolidation costs for 1999. The Reserve Banks had recovered these amounts, along with a finance charge, by the end of 1999.

The Board of Governors and the Government Performance and Results Act

Under the Government Performance and Results Act of 1993, federal agencies are required, in consultation with the Congress and outside stakeholders, to prepare a strategic plan covering a multiyear period and to submit annual performance plans and performance reports. Though not required to do so, the Board of Governors is voluntarily complying with the act's requirements.

Strategic and Performance Plans

The Board sent its strategic plan for the period 1997–2002 to the Congress in October 1997. The document states the Board's mission, articulates major goals for the period, outlines strategies for achieving those goals, and discusses the environment and other factors that could affect their achievement. It also addresses issues that cut across agency jurisdictional lines, identifies key quantitative measures of performance, and discusses performance evaluation. The strategic plan for the period 2002–05 is being prepared; the mission, goals, and other elements of the plan will remain essentially unchanged.

In September 1998 the Board sent to the Congress a performance plan for its 1998–99 budget.¹ Except for the monetary policy function, the plan set forth

specific targets for some of the performance measures identified in the strategic plan. It also described the operational processes and resources needed to meet those targets and discussed validation and verification of results.

The strategic and performance plans are available on the Board's public web site (www.federalreserve.gov/boarddocs/rptcongress). The mission statement of the Federal Reserve Board and a summary of the goals and objectives set forth in the strategic and performance plans are given below.

Mission

The mission of the Federal Reserve Board is to foster the stability, integrity, and efficiency of the nation's monetary, financial, and payment systems so as to promote optimal macroeconomic performance.

Goals and Objectives

The Federal Reserve has three primary goals with interrelated and mutually reinforcing elements:

Goal

To conduct monetary policy toward the achievement of maximum sustainable long-term growth and stable prices

Objectives

- Stay abreast of recent developments and prospects in the U.S. economy and financial markets and in those

1. The act requires that a performance plan be submitted for each fiscal year beginning with fiscal 1999. The Board budget covers two calendar years. The budget for 2000–01 was approved in September 1999. The budget and the informal performance plan for the 2000–01 period focused on management and human resource issues.

abroad, so that monetary policy decisions will be well informed

- Enhance our knowledge of the structural and behavioral relationships in the macroeconomic and financial markets, and improve the quality of the data used to gauge economic performance, through developmental research activities
- Implement monetary policy effectively in rapidly changing economic circumstances and in an evolving financial market structure
- Contribute to the development of U.S. international policies and procedures, in cooperation with the Department of the Treasury and other agencies
- Promote understanding of Federal Reserve policy among other government policy officials and the general public.

Goal

To promote a safe, sound, competitive, and accessible banking system and stable financial markets

Objectives

- Provide comprehensive and effective supervision of U.S. banks, bank and financial holding companies, U.S. operations of foreign banking organizations, and related entities
- Promote overall financial stability, management, and containment of systemic risk and ensure that emerging financial crises are identified early and successfully resolved by focusing supervisory efforts and resources on areas of highest risk to individual organizations and the financial system as a whole, and by developing effective regulations to promote a safe and sound banking environment
- Promote sound practices for managing risk at banking organizations to provide for strong internal controls, active boards of directors, and senior management oversight and accountability
- Promote sound banking and effective supervisory practices among developed and emerging countries through ongoing coordination with international supervisory bodies and through training programs for international supervisors and bankers
- Heighten the positive effect of market discipline on banking organizations by encouraging improved disclosures, accounting standards, risk measurement, and overall market transparency
- Harness benefits of technology in carrying out responsibilities to improve supervisory efficiency and to reduce burden on banking organizations
- Maintain an understanding of the effect of financial innovation and technology (for example, new powers and products, new risk management and measurement methodologies, and electronic banking) on the operations and risk profile of banking organizations and the payment system; ensure that supervisory programs accommodate prudent advances that benefit consumers and businesses or improve risk management
- Remove unnecessary banking restrictions and refine or eliminate unnecessary or ineffective policies, procedures, regulations, or restrictions to ensure that reforms are effectively implemented, all in a manner consistent with the safety and soundness of banking organizations
- Assure fair access to financial services for all Americans through vigorous enforcement of the Equal Credit Opportunity, Fair Housing, Commu-

nity Reinvestment, and Home Mortgage Disclosure Acts and by encouraging state member bank involvement in community development activities

- Administer and ensure compliance with consumer protection statutes relating to consumer financial transactions (such as the Truth in Lending, Truth in Savings, Consumer Leasing, and Electronic Fund Transfer Acts) to carry out congressional intent, striking the proper balance between protection of consumers and regulatory burden to the industry
- Implement appropriate rules, regulations, and policies to comply with the Gramm-Leach-Bliley Act, which was enacted in November 1999.

Goal

Provide high-quality professional support to the Board in overseeing Reserve Bank operations and in fostering the integrity, efficiency, and accessibility of U.S. payment and settlement systems.

Objectives

- Develop sound, effective policies and regulations that foster payment system integrity, efficiency, and accessibility
- Produce high-quality assessments of Federal Reserve operations, projects, and initiatives that assist Federal Reserve management to foster and strengthen sound internal control systems and efficient and effective performance
- Conduct research and analysis that contribute to policy development and/or increase the Board's and others' understanding of payment system dynamics and risk.

Interagency Coordination

Interagency coordination helps focus efforts to eliminate redundancy and lower costs. As required by the Government Performance and Results Act and in conformance with past practice, the Board has worked closely with other federal agencies to consider plans and strategies for programs, such as bank supervision, that cross jurisdictional lines. In particular, coordination with the Department of the Treasury and other agencies is evident throughout both the strategic and performance plans.

Much of the Board's formal effort to plan jointly has been made through the Federal Financial Institutions Examination Council (FFIEC), a group made up of the five federal agencies that regulate depository institutions.² In addition, a coordinating committee of representatives of the chief financial officers of the five agencies has been created to address and report on strategic planning issues of mutual concern. This working group has been meeting since June 1997. These and similar planning efforts can significantly lower the government's

2. The FFIEC consists of the Board of Governors of the Federal Reserve System, the Federal Deposit Insurance Corporation, the National Credit Union Administration, the Office of the Comptroller of the Currency, and the Office of Thrift Supervision. It was established in 1979 pursuant to title X of the Financial Institutions Regulatory and Interest Rate Control Act of 1978. The FFIEC is a formal interagency body empowered to prescribe uniform principles, standards, and report forms for the federal examination of financial institutions and to make recommendations to promote uniformity in the supervision of financial institutions. The FFIEC also provides uniform examiner training and has taken a lead in developing standardized software needed for major data collection programs to support the requirements of the Home Mortgage Disclosure Act and the Community Reinvestment Act.

costs for data processing and other institution costs for complying with federal activities as well as lower depository regulations. ■

Federal Legislative Developments

The following federal laws enacted during 2000 affect the Federal Reserve System and the institutions it regulates: the American Homeownership and Economic Opportunity Act of 2000; the Commodity Futures Modernization Act of 2000; and the Electronic Signatures in Global and National Commerce Act.

American Homeownership and Economic Opportunity Act of 2000

The American Homeownership and Economic Opportunity Act of 2000, Public Law 106-569, enacted on December 27, 2000, amends the Federal Reserve Act to reinstate and make permanent certain economic reports from the Board of Governors to the Congress. Under these amendments, the Chairman of the Board of Governors is required to appear semiannually before the Congress to report on the activities of the Federal Open Market Committee (FOMC), the Board's conduct of monetary policy, and the status of economic development. Furthermore, the act preserves the Board's obligation under section 10 of the Federal Reserve Act to annually provide the Congress with a written report on the activities and records of the FOMC. In addition, the act amends the Federal Reserve Act to permit the Board to acquire an additional site or building that will support the performance of the functions of the Board, and raises the Chairman's position of Board Chairman to Level I in the federal Executive Schedule and raises the position of Governor to Level II.

Commodity Futures Modernization Act of 2000

The Commodity Futures Modernization Act of 2000, Public Law 106-102, enacted on December 21, 2000, amends the Commodity Exchange Act, as well as other federal banking and securities laws, to reform the regulatory framework for both over-the-counter (OTC) and exchange-traded derivatives. The act resolves issues about the enforceability of OTC derivatives transactions, including those that involve commercial banks, by excluding most of such transactions from the coverage of the Commodity Exchange Act.

In addition, two parts of the act specifically affect the Board's authority to regulate derivatives transactions. First, multilateral clearing organizations for derivatives transactions must be regulated either as federally regulated financial institutions, such as state member banks, or as clearing organizations registered with the Securities and Exchange Commission (SEC) or the Commodity Futures Trading Commission. Second, the act amends the Commodity Exchange Act and the federal securities laws to permit trading of "security futures products." The act requires the Board to prescribe margin requirements for security futures products or to delegate this authority to the CFTC and the SEC jointly.

Electronic Signatures in Global and National Commerce Act

The Electronic Signatures in Global and National Commerce Act, Public Law

106-229, was enacted on June 30, 2000. The act generally provides that a contract or other record relating to a transaction may be provided in electronic form and may not be denied legal effect or validity solely because it is in electronic form. For cases where information is required to be provided to consumers in writing, however, the act authorizes the use of electronic records only if the con-

sumer affirmatively consents to receive such records in electronic form and does not withdraw that consent. This legislation applies to consumer disclosures and transactional records, such as monthly account activity statements, that financial institutions provide. The act preserves certain other legal requirements such as those governing the content and timing of consumer disclosures. ■

Regulatory Simplification

In 1978 the Board of Governors established a program of regulatory review to help minimize the burden of regulation on banking organizations. The objectives of the program are to ensure that all regulations, existing and proposed, represent the best course of action; to afford interested parties the opportunity to participate in the design of regulations and to comment on them; and to ensure that regulations are written in simple, clear language. Staff members regularly review Federal Reserve regulations for their adherence to these objectives and their consistency with the Regulatory Flexibility Act, which also requires that consideration be given to the economic consequences of regulation on small business. In its review process, the Board also follows the mandates of section 303 of the Riegle Community Development and Regulatory Improvement Act.

In 2000 the Board, as part of this review process, proposed revisions to Regulation C. It also issued an advance notice of rulemaking regarding capital for small banks.

Revisions Proposed to Regulation C

In November the Federal Reserve requested comment on proposed revisions to Regulation C, which implements the Home Mortgage Disclosure Act (HMDA). The purposes of HMDA include helping determine whether financial institutions are serving the housing needs of their communities and assisting in fair lending enforcement.

The act requires depository institutions and certain for-profit nondeposi-

tory institutions to collect, report, and disclose data about applications for home mortgage and home improvement loans and about originations and purchases of such loans. Data reported include the type, purpose, and amount of the loan; the race or national origin, sex, and income of the loan applicant; and the location of the property.

The Board began the process of reviewing the regulation by issuing an advance notice of proposed rulemaking in 1998. The proposed revisions take into account comments received at that time as well as a wide range of discussions and special hearings held in 2000 on possible changes in the enforcement of the Home Ownership and Equity Protection Act (HOEPA).

In proposing changes to the HMDA reporting requirements, the Board aimed to improve the quality and utility of the resulting data. The Board also hoped the changes would enhance public understanding of the home mortgage market generally, and the subprime market in particular, and would improve fair lending analysis. At the same time, the Board attempted to minimize the increase in the data collection and reporting burden by limiting proposed changes to those likely to have significant benefit.

The proposed changes to Regulation C would

- Expand coverage of nondepository lenders by adding a dollar-volume threshold of \$50 million to the current loan-percentage test
- Simplify the definitions of “refinancing” and “home improvement loan” to generate more consistent and accurate data

- Require lenders to report home equity lines of credit (such reporting is now optional)
- Require lenders to report certain applications for credit received through preapproval programs
- Require lenders to report the annual percentage rate of the loan, whether the loan is subject to HOEPA, and whether the loan involves a manufactured home.

Simplified Capital Framework for Non-Complex Institutions

In November the federal bank regulatory agencies requested public comment on an advance notice of proposed rulemaking that considers the establishment of a simplified regulatory capital framework for non-complex banking organizations.

Banking organizations are required to maintain minimum levels of capital set by U.S. regulators under an international framework established by the 1988 Basel Capital Accord. Regulatory agencies in the United States and other

nations are revising the accord to provide a more refined assessment of the capital requirements for large, complex, internationally active banks.

As part of the revision process, agencies are considering simplified capital frameworks for non-complex banking organizations. The simplified framework would conform to the underlying principles of a revised Basel accord and maintain the principles of prudential supervision while relieving unnecessary regulatory burden, particularly that associated with regulatory capital calculations. The agencies have suggested criteria that could be used to determine eligibility for a simplified capital framework, such as the nature of a bank's activities, its asset size, and its risk profile. In the advance notice, the agencies sought comment on possible minimum regulatory capital requirements for non-complex institutions, including a simplified risk-based ratio, a simple leverage ratio, or a leverage ratio modified to incorporate certain off-balance-sheet exposures. ■

Records

Record of Policy Actions of the Board of Governors

Regulation D

Reserve Requirements of Depository Institutions

November 16, 2000—Amendments

The Board amended Regulation D to decrease the amount of net transaction accounts at depository institutions to which a lower reserve requirement applies (low reserve tranche), and to increase the amount of reservable liabilities that is exempt from reserve requirements (reserve exemption level) for 2001, effective for the reserve computation period beginning November 28, 2000, for institutions reporting weekly.

Votes for this action: Messrs. Greenspan, Ferguson, Kelley, Meyer, and Gramlich.

Under the Monetary Control Act of 1980, depository institutions, Edge Act corporations, agreement corporations, and U.S. agencies and branches of foreign banks are subject to reserve requirements set by the Board. The act directs the Board to adjust annually the amount of the low reserve tranche to reflect changes in net transaction accounts at depository institutions. Recent declines in net transaction accounts warranted a decrease in the low reserve tranche to \$42.8 million, and the Board amended Regulation D accordingly.

The Garn-St Germain Depository Institutions Act of 1982 establishes a

zero percent reserve requirement on the first \$2 million of an institution's reservable liabilities. The act also provides for annual adjustments to that exemption amount based on increases in reservable liabilities at depository institutions. Recent growth in reservable liabilities warranted an increase in the amount exempted from reserve requirements to \$5.5 million, and the Board amended Regulation D accordingly.

For institutions reporting weekly, the amendments are effective with the reserve computation period beginning November 28, 2000, and the corresponding reserve maintenance period beginning December 28, 2000. For institutions reporting quarterly, the amendments are effective with the reserve computation period beginning December 19, 2000, and the corresponding reserve maintenance period beginning January 18, 2001.

To reduce the reporting burden on small institutions, depository institutions having total deposits below specified levels are required to report their deposits and reservable liabilities quarterly or less frequently, while larger institutions must report weekly. To reflect increases in the growth rate of total deposits at all depository institutions, the Board increased the deposit cutoff levels used in determining the frequency and detail of depository reporting to \$101 million for nonexempt depository institutions, beginning in September 2001.

In July 2000 the Board eliminated the exempt deposit cutoff and discontinued the quarterly report associated with that cutoff. Exempt institutions (those with

NOTE. In voting records throughout this chapter, Board members, except the Chairman and Vice Chairman, are listed in order of seniority.

total reservable liabilities equal to or less than the exemption level of \$5.5 million) with at least \$5.5 million in total deposits may report annually, and exempt institutions with less than \$5.5 million in total deposits are not required to file deposit reports.

Regulation G Disclosure and Reporting of CRA-Related Agreements

December 21, 2000—Adoption of
New Regulation

The Board adopted a new Regulation G to implement the CRA sunshine provisions of the Gramm-Leach-Bliley Act. Those provisions establish annual reporting and public disclosure requirements for certain written agreements that relate to the Community Reinvestment Act of 1977 (CRA) and are entered into between insured depository institutions or their affiliates and non-governmental entities or persons. The new Regulation G is effective April 1, 2001.

Votes for this action: Messrs. Greenspan, Ferguson, Meyer, and Gramlich. Absent and not voting: Mr. Kelley.

The Board, jointly with the Federal Deposit Insurance Corporation, the Office of the Comptroller of the Currency, and the Office of Thrift Supervision, approved new rules to implement the CRA sunshine provisions of the Gramm-Leach-Bliley Act. The rules require that insured depository institutions, their affiliates, and other entities and persons that are parties to certain written agreements that are in fulfillment of the CRA make the agreements available to the public and the appropri-

ate federal financial supervisory agency and file annual reports concerning the agreements with the appropriate supervisory agency. The rules also identify the types of agreements covered, describe how parties to covered agreements must make the agreements available to the public and the appropriate supervisory agency, explain the type of information required to be included in the annual report to the appropriate supervisory agency, and define terms used in the act.

Regulation H Membership of State Banking Institutions in the Federal Reserve System

March 10, 2000—Interim
Amendment

The Board approved an interim amendment to Regulation H to permit qualifying state member banks to establish financial subsidiaries that engage in activities that are financial in nature or incidental to financial activities, effective March 11, 2000.

Votes for this action: Messrs. Greenspan, Ferguson, Kelley, Meyer, and Gramlich.

The Gramm-Leach-Bliley Act authorizes qualifying banks to control or hold an interest in a financial subsidiary. A financial subsidiary may engage in activities that have been determined under the act to be financial in nature or incidental to financial activities and in activities that the parent bank is permitted to conduct directly. The interim amendment to Regulation H is substantially similar to the interim rule adopted for financial subsidiaries of national banks and provides a streamlined notice

procedure for state member banks with guidance on the qualifying criteria. State member banks may continue to retain and establish operations subsidiaries that engage only in activities that the parent bank may conduct directly and that are conducted on the same terms and conditions applicable to the bank. The Board also published the interim amendment for comment.

March 13, 2000—Interim Amendment

The Board approved an interim amendment to Regulation H to provide an alternative standard for debt ratings that certain large state member banks may satisfy to establish a financial subsidiary, effective March 14, 2000.

Votes for this action: Messrs. Greenspan, Ferguson, Kelley, Meyer, and Gramlich.

The Board and the Department of the Treasury jointly approved an interim rule under the Gramm-Leach-Bliley Act to permit certain large state member and national banks to establish a financial subsidiary by qualifying under an alternative requirement for rated debt. The act provides that a state member or national bank that is ranked among the largest fifty insured banks may control a financial subsidiary only if the bank meets certain criteria, which include having an issue of highly rated debt outstanding. State member or national banks that are among the second fifty largest insured banks may control a financial subsidiary if they meet this debt rating criterion or an alternative criterion established by the Board and the Department of the Treasury. The interim rule, which is incorporated in Regulation H for state member banks,

provides that a bank in the second fifty largest grouping meets this alternative requirement if it has a current long-term issuer credit rating from a nationally recognized statistical rating organization that is in the three highest investment-grade rating categories used by the rating organization. The Board and the Department of the Treasury also published the interim rule for comment.

November 14, 2000—Amendments

The Board amended Regulation H to provide consumer protection rules for the sale of insurance products by depository institutions, effective October 1, 2001.

Votes for this action: Messrs. Greenspan, Ferguson, Kelley, Meyer, and Gramlich.

The Board, jointly with the Federal Deposit Insurance Corporation, the Office of the Comptroller of the Currency, and the Office of Thrift Supervision, approved new rules to implement provisions of the Gramm-Leach-Bliley Act that provide consumer protections applicable to retail sales, solicitations, advertising, or offers of insurance by a depository institution or by any person who is engaged in such activities at an office of the institution or on behalf of the institution.¹ The rules prohibit certain practices, require certain disclosures to prospective buyers and qualifications for persons selling insurance, prescribe areas in the depository institution for insurance sales activities, and limit referral fees for bank employees.

1. The agencies extended the original April 1 effective date on March 14, 2001.

Regulation H

Membership of State Banking Institutions in the Federal Reserve System

Regulation Y

Bank Holding Companies and Change in Bank Control

November 8, 2000—Interim Amendments

The Board approved interim amendments to Regulations H and Y to revise the capital treatment under its market risk rules for cash collateral that is posted in connection with certain securities borrowing transactions, effective January 4, 2001, and available to U.S. banking organizations beginning December 5, 2000.

Votes for this action: Messrs. Greenspan, Ferguson, Kelley, Meyer, and Gramlich.

The Board, jointly with the Federal Deposit Insurance Corporation and the Office of the Comptroller of the Currency, approved an interim rule that effectively lowers the capital requirement when cash collateral is posted for certain securities borrowing transactions. The interim rule applies only to banking organizations with significant trading activities that are subject to capital treatment under the agencies' market risk rules. It is intended to align the capital requirements for these transactions more appropriately with the risk involved and to align the capital treatment for U.S. banking organizations with the capital treatment applied to their domestic and foreign competitors. The Board also published the interim rule for comment and sought comment

on the capital treatment of securities borrowing transactions when securities are posted as collateral.

Regulation P

Privacy of Consumer Financial Information

May 10, 2000—Adoption of New Regulation

The Board adopted a new Regulation P to provide notice requirements and restrictions on a financial institution's ability to disclose nonpublic personal information about consumers to unaffiliated third parties. The new Regulation P is effective November 13, 2000, and compliance is optional until July 1, 2001, to allow sufficient time for financial institutions to develop policies, procedures, and systems to implement the rule.

Votes for this action: Messrs. Greenspan, Ferguson, Meyer, and Gramlich. Absent and not voting: Mr. Kelley.

The Board, jointly with the Federal Deposit Insurance Corporation, the Office of the Comptroller of the Currency, and the Office of Thrift Supervision, approved new rules to implement the consumer privacy provisions of the Gramm-Leach-Bliley Act. Under the rules, a financial institution is required to provide customers with a notice of its privacy policies and practices. The rules also prohibit a financial institution from disclosing nonpublic personal information about a customer to unaffiliated third parties unless the institution satisfies certain notice and opt-out requirements and the customer has not elected to opt out of the disclosure.

Regulation Y**Bank Holding Companies and
Change in Bank Control****January 18, 2000—Interim
Amendment**

The Board approved an interim amendment to Regulation Y to provide procedures for bank holding companies and foreign banks with U.S. offices that meet certain criteria to elect to be treated as financial holding companies, effective March 11, 2000.

Votes for this action: Messrs. Greenspan, Ferguson, Kelley, Meyer, and Gramlich.

The interim amendment, which implements the financial holding company provisions of the Gramm-Leach-Bliley Act, enables qualified organizations to engage in a broad range of securities, insurance, and other financial activities. The Board adopted an interim amendment with an effective date that coincided with the effective date of the act to allow organizations to qualify as financial holding companies as soon as authorized by law. The Board also published the interim amendment for comment.

**March 10, 2000—Interim
Amendment**

The Board approved an interim amendment to Regulation Y to apply two of the eight operating standards currently applicable to so-called section 20 affiliates of bank holding companies to financial holding companies engaged in certain securities activities, effective March 11, 2000.

Votes for this action: Messrs. Greenspan, Ferguson, Kelley, Meyer, and Gramlich.

Bank holding companies may underwrite, deal in, and make a market in securities to a limited extent through section 20 subsidiaries. These subsidiaries are subject to eight operating standards that address potential risks and conflicts associated with the affiliation of a bank and a securities firm. The Gramm-Leach-Bliley Act authorizes financial holding companies to engage in these securities activities. The act also authorizes the Board to impose prudential limitations on relationships or transactions between a depository institution and any affiliate, including a securities affiliate.

After considering the overall regulatory approach reflected in the Gramm-Leach-Bliley Act, the Board applied two of the eight operating standards as prudential limitations on transactions involving securities affiliates of financial holding companies. These limitations require that when a domestic bank or thrift institution, or a U.S. branch or agency of a foreign bank, makes intraday extensions of credit to an affiliated securities firm, it does so on market terms consistent with section 23B of the Federal Reserve Act. The limitations also apply sections 23A and 23B of the Federal Reserve Act to certain covered transactions between a U.S. branch or agency of a foreign bank and its U.S. securities affiliate. The limitations on bank holding companies that conduct securities activities through section 20 subsidiaries are not affected by the interim rule. The Board also published the interim amendment for comment.

March 10, 2000—Interim Amendments

The Board approved interim amendments to Regulation Y to provide a list of financial activities that are permissible for financial holding companies and to implement certain procedures for conducting financial activities, effective March 11, 2000.

Votes for this action: Messrs. Greenspan, Ferguson, Kelley, Meyer, and Gramlich.

The Gramm-Leach-Bliley Act authorizes a bank holding company or foreign bank with U.S. offices that qualifies as a financial holding company to engage in a broad range of activities that the statute defines as being financial in nature. The act also authorizes the Board, in consultation with the Secretary of the Treasury, to determine that additional activities are financial in nature or incidental to a financial activity. In addition, the act authorizes the Board to allow a financial holding company to engage in activities that are complementary to a financial activity.

The interim rule provides a consolidated list of all activities that the act defines as financial in nature and establishes procedures that are required for a financial holding company to engage in those activities. In most cases, a financial holding company is only required to notify the Board in writing within 30 days of commencing, or acquiring a company that is engaged in, a financial activity. The interim rule also establishes a procedure for requesting that the Board, in consultation with the Secretary of the Treasury, determine that an activity is financial in nature or incidental to a financial activity. In addition, the interim rule provides a procedure for a financial holding company to request the Board's prior approval to engage in an

activity that is complementary to a financial activity engaged in by the company. The Board also published the interim rule for comment.

March 10, 2000—Interim Amendments

The Board approved amendments to its interim rule on procedures for bank holding companies and foreign banks with U.S. offices that meet certain criteria to elect to become or be treated as financial holding companies, effective March 15, 2000.

Votes for this action: Messrs. Greenspan, Ferguson, Kelley, Meyer, and Gramlich.

In light of its experience in processing financial holding company elections under an interim rule issued in January 2000, the Board approved changes in the interim rule's procedures for foreign banks. These amendments provide that an election by a foreign bank that meets the well-managed and well-capitalized standards will become effective on the thirty-first day after the election is filed unless the election is determined to be ineffective or the review period is extended by agreement with the bank. All U.S. depository institution subsidiaries of electing foreign banks, including savings associations and nonbank trust companies, must meet the same requirements as depository institution subsidiaries of bank holding companies. Foreign banks in countries that have not been reviewed by the Board for comprehensive consolidated supervision were encouraged to use the pre-clearance process, which allows a foreign bank to request a determination of its qualifications before it files an election to be treated as a financial holding company. In addition, the interim amendments remove the compliance rating compo-

ment from the definition of well managed when applying this standard to depository institution subsidiaries of a bank holding company that is electing to become a financial holding company. The Board also published the amendments to the interim rule for comment.

March 16, 2000—Interim Amendments

The Board approved interim amendments to Regulation Y governing the merchant banking activities of financial holding companies, effective March 17, 2000.

Votes for this action: Messrs. Greenspan, Ferguson, Kelley, Meyer, and Gramlich.

The Board and the Department of the Treasury jointly approved an interim rule incorporated in Regulation Y to implement the merchant banking provisions of the Gramm-Leach-Bliley Act. The provisions authorize financial holding companies to make investments as part of a bona fide securities underwriting, merchant banking, or investment banking activity. The interim rule permits a financial holding company to make investments in any amount of shares, assets, or ownership interests of any type of nonfinancial company. Merchant banking investments may not be made by or on behalf of depository institutions or any subsidiary of a depository institution. In addition, the rule includes provisions on record keeping and reporting, risk management practices, holding periods for merchant banking investments, limits on involvement in the management or operation of portfolio companies, and cross-marketing and lending restrictions on activities between depository institution subsidiaries and portfolio companies. The rule also requires Board review of the risk

management policies of financial holding companies that have significant exposure to merchant banking investments. The Board and the Department of the Treasury also published the interim rule for comment.

At the same time, the Board published for comment a proposed rule governing the regulatory capital treatment of nonfinancial equity investments held directly or indirectly by bank holding companies. The proposed rule, developed in consultation with the Department of the Treasury, would generally impose a 50 percent capital charge on nonfinancial investments made under the merchant banking authority of the Gramm-Leach-Bliley Act and certain other legal authorities.

December 13, 2000—Amendments

The Board amended Regulation Y to provide that acting as a "finder" in transactions is incidental to a financial activity and, therefore, permissible for financial holding companies, effective January 22, 2001.

Votes for this action: Messrs. Greenspan, Ferguson, Kelley, Meyer, and Gramlich.

The Board, in consultation with the Secretary of the Treasury, authorized financial holding companies to act as a finder by bringing together buyers and sellers of products and services for transactions that the buyers and sellers themselves negotiate and consummate. The amendment adds acting as a finder to the list of activities in Regulation Y that are permissible for financial holding companies, provides specific examples of permissible and impermissible services, and requires financial holding companies to provide appropriate disclosures to distinguish the products and services that are offered or sold by the

company from those offered by a third party through the company's finder services.

December 21, 2000—Amendments

The Board made final an interim rule amending Regulation Y to provide procedures for bank holding companies and foreign banks with U.S. offices that meet certain criteria to qualify as financial holding companies, effective February 2, 2001.

Votes for this action: Messrs. Greenspan, Ferguson, Meyer, and Gramlich. Absent and not voting: Mr. Kelley.

The Board made final an interim rule issued in January 2000 that implements the financial holding company provisions of the Gramm-Leach-Bliley Act. The final rule sets forth the capital, management, and Community Reinvestment Act requirements that bank holding companies and foreign banking organizations must meet to qualify as financial holding companies and contains provisions that apply when a financial holding company ceases to meet the prescribed requirements. In addition to listing activities that are financial in nature, and thus permissible for financial holding companies, the final rule provides a procedure for requesting that the Board, in consultation with the Secretary of the Treasury, determine that additional activities are financial in nature or incidental to a financial activity; the rule also provides a procedure for requesting that the Board determine that an activity is complementary to a financial activity and thus permissible.

In the final rule, the Board made several changes to provisions regarding foreign bank financial holding companies that had been included in the interim rule. Among other changes, the leverage

ratio was removed from the screening test in the definition of well capitalized for foreign banks, but it was added to the list of factors that the Board can consider for purposes of the comparability review of foreign bank capital required by the final rule. In addition, the Board revised the definition of well managed applicable to foreign bank financial holding companies to require that a foreign bank's U.S. branches, agencies, and commercial lending companies have a satisfactory composite rating, rather than satisfactory individual ratings as required by the interim rule.

December 21, 2000—Interim Amendment

The Board approved an interim amendment to Regulation Y that defines three categories of activities as being financial in nature or incidental to a financial activity and, therefore, permissible for financial holding companies, effective January 2, 2001.

Votes for this action: Messrs. Greenspan, Ferguson, Meyer, and Gramlich. Absent and not voting: Mr. Kelley.

The Board, jointly with the Secretary of the Treasury, issued interim rules to implement provisions of the Gramm-Leach-Bliley Act that identify the following categories of activities as being financial in nature or incidental to a financial activity and, therefore, permissible for financial holding companies and financial subsidiaries of national banks: (1) lending, exchanging, transferring, investing for others, or safeguarding financial assets other than money or securities, (2) providing any device or other instrumentality for transferring money or other financial assets, and (3) arranging, effecting, or facilitating transactions for the account of third

parties. The interim rules provide procedures for financial holding companies, financial subsidiaries of national banks, or others to request that the Board or the Secretary of the Treasury, as appropriate, designate particular activities as included in one of the three categories. The Board and the Secretary also published the interim rules for comment.

Regulation Z Truth in Lending

September 19, 2000—Amendments

The Board amended Regulation Z and its commentary to revise the disclosure requirements for credit and charge card applications and solicitations, effective September 27, 2000, with mandatory compliance as of October 1, 2001.

Votes for this action: Messrs. Greenspan, Ferguson, Kelley, Meyer, and Gramlich.

The Truth in Lending Act, as implemented by Regulation Z, promotes the informed use of consumer credit by requiring disclosures about its terms and costs. The annual percentage rate (APR) and other cost information generally must be disclosed in tabular form in credit and charge card solicitations and applications. The amendments require that disclosures be readily noticeable to consumers as well as in a reasonably understandable form, and that the APR for purchase transactions be in 18-point type. APRs for cash advances and balance transfers must be included in the table, and balance transfer fees also must be disclosed. Regarding cost information, the amendments provide additional guidance on the level of detail required or permitted to be in the table and on the requirement that the table be prominently located.

Rules of Practice for Hearings

October 2, 2000—Amendment

The Board amended its rules of practice for hearings to increase the maximum amounts of its civil money penalties to account for inflation, effective October 12, 2000.

Votes for this action: Messrs. Greenspan, Ferguson, Kelley, Meyer, and Gramlich.

The Federal Civil Penalties Inflation Adjustment Act of 1990, as amended, requires federal agencies to adjust their civil money penalties under a prescribed cost-of-living adjustment at least once every four years. The amendment implements the mandatory numerical adjustments required by the act and covers violations occurring after October 12, 2000.

Policy Statements and Other Actions

April 27, 2000—Policy Statement on Payments System Risk

The Board approved modifications to its daylight overdraft posting rules to reflect the enhanced capabilities of the new Treasury Investment Program (TIP), effective July 10, 2000, but subsequently postponed the modifications in its July 6 policy action, discussed below.

Votes for this action: Messrs. Greenspan, Ferguson, Kelley, Meyer, and Gramlich.

The Federal Reserve System implemented TIP to replace the Treasury tax and loan system (TT&L), and the Board changed its posting rules to account for TIP transactions. The posting rules pro-

vide a schedule for posting debits and credits to institutions' Federal Reserve accounts so that the intraday account balances can be measured for compliance with the Federal Reserve's Policy Statement on Payments System Risk. Before TIP's implementation, most TT&L debit transactions were posted to institutions' Federal Reserve accounts after the close of Fedwire. TIP transactions, however, are processed and posted on a flow basis throughout the day. The Board provided a transition period during which most TIP transactions that resulted in debits to depository institutions' accounts were posted after the close of Fedwire.

July 6, 2000—Policy Statement on Payments System Risk

The Board approved minor corrections to its daylight overdraft posting rules, which had been modified in light of the new Treasury Investment Program (TIP) by the Board's policy action on April 27, discussed above. The Board also postponed the original July 10, 2000, effective date for the modified rules because of the delay in implementing TIP.

Votes for this action: Messrs. Greenspan, Ferguson, Kelley, Meyer, and Gramlich.

Minor corrections were made to the posting times for transactions involving same-day Treasury withdrawals, main account administrative withdrawals, and special direct-investment withdrawals. TIP implementation and the modified rules subsequently took effect on October 23, 2000.

October 30, 2000—Federal Reserve ACH Deposit Deadlines and Pricing Practices for Transactions Involving Private-Sector ACH Operators

The Board approved a new approach to pricing automated clearinghouse (ACH) transactions by Federal Reserve Banks to enhance competition for services to depository institutions, effective in 2001.

Votes for this action: Messrs. Greenspan, Ferguson, Kelley, Meyer, and Gramlich.

Federal Reserve Banks and private-sector ACH operators (PSOs) rely on each other to process some transactions in which the originating depository institution or receiving depository institution is not a customer of theirs (interoperator transactions). The new pricing procedures permit Reserve Banks and PSOs to negotiate deposit deadlines and fees for their interoperator transactions. Only PSOs qualifying as operators under the rules of the National Automated Clearing House Association are eligible for the new procedures. New interoperator deadlines will be implemented not later than June 2001, and new fees will be established not later than September 2001.

Discount Rates in 2000

During 2000, the Board of Governors approved three increases, totaling one percentage point, in the basic discount rate charged by the Federal Reserve Banks. These actions, taken in February, March, and May, raised the basic rate from 5 percent to 6 percent. The rates

for seasonal and extended credit, which are set on the basis of market-related formulas, were changed more frequently, and they exceeded the basic rate by varying amounts during the year. Rates charged under the temporary Century Date Change Special Liquidity Facility (SLF), which was available through April 7, continued to be set at 150 basis points above the intended federal funds rate established by the Federal Open Market Committee (FOMC).

Basic Discount Rate

The Board's decisions on the basic discount rate were made against the background of the policy actions of the FOMC and related economic and financial developments. These developments are reviewed more fully in other parts of this Report, including the minutes of the FOMC meetings in 2000.

January through Mid-May: Three Increases in the Basic Rate

During the closing weeks of 1999 and the early weeks of 2000, monetary policy was directed toward promoting stable conditions in financial markets to help avert or minimize potential disruptions during the period surrounding the century date change. Recently available information provided little evidence that the expansion in economic activity might be moderating from the vigorous pace of the past year, notably during the second half of 1999. While inflation had remained largely contained, there were mounting concerns that persisting growth in aggregate demand at a pace in excess of the rise in potential supply would foster a buildup of inflationary pressures that would undermine the economy's long-lasting expansion.

Against this background, an increasing number of Federal Reserve Banks proposed a $\frac{1}{4}$ percentage point rise in the basic discount rate during January 2000, and on February 2 the Board approved outstanding requests from ten Banks for such an increase. This increase occurred in concert with a similar policy tightening move by the FOMC.

In subsequent weeks, incoming economic information continued to point to vigorous growth in aggregate demand, but inflationary pressures were still being held down by equally impressive gains in aggregate supply, abetted by further apparent acceleration in labor productivity. While the extent to which prospective growth in demand might exceed further expansion in the economy's output potential and the implications for inflation were subject to a considerable range of uncertainty, by late February concerns about the risks of rising inflation led three Federal Reserve Banks to request a further $\frac{1}{4}$ percentage point increase in the discount rate and nearly all the Banks had joined in submitting that request by the third week of March. The pending actions to raise the basic discount rate to $5\frac{1}{2}$ percent were approved by the Board on March 21 in conjunction with another $\frac{1}{4}$ percentage point increase by the FOMC in the intended federal funds rate, to 6 percent.

The final changes for the year in both the basic discount rate and the intended federal funds rate—increases of $\frac{1}{2}$ percentage point—were approved on May 16, 2000. A more forceful policy move of $\frac{1}{2}$ percentage point, after a series of $\frac{1}{4}$ percentage point increases initiated in August 1999, was deemed

desirable to contain what were seen as rising inflation pressures in the economy. In particular, the extraordinary and persisting strength of overall demand continued to exceed the rapid productivity-enhanced growth of potential supply, and there were attendant indications of growing pressures in already tight markets for labor and other resources. By early May, most of the Reserve Banks had pending proposals calling for increases of $\frac{1}{4}$ percentage point in the basic rate, and by mid-May all the Banks had outstanding requests for a higher rate, including four Banks that were proposing $\frac{1}{2}$ percentage point increases. The Banks with proposed increases of $\frac{1}{4}$ percentage point revised them to $\frac{1}{2}$ percentage point within a few days after the Board's decision on May 16.

Mid-May through Year-End: No Further Changes in the Basic Rate

In mid-June, one Federal Reserve Bank requested a further increase of $\frac{1}{4}$ percentage point in the basic rate. After the latter was withdrawn in mid-July, there were no further proposals to change the rate until December, when seven Banks requested a $\frac{1}{4}$ percentage point reduction. By around midyear, economic growth had begun to exhibit signs of some moderation from its exceptionally rapid and unsustainable pace of the previous year. Indications that the expansion was moderating accumulated gradually during the summer and into the autumn. Over the last few months of the year, the growing effects on business and consumer spending of tightening credit conditions, declining stock market prices, and rising energy costs, among other factors, led to substantial slowing in the expansion of aggregate final sales, including weakness in consumer purchases of durable goods and

business investment in capital equipment. Business efforts to pare inventories as sales slowed induced related cutbacks in manufacturing activity. Shortly after the turn of the year, on January 3, 2001, the Board and the FOMC approved $\frac{1}{2}$ percentage point reductions in the basic discount rate and the intended level of the federal funds rate.

Structure of Discount Rates

The basic discount rate is the rate normally charged on loans to depository institutions for short-term adjustment credit, while flexible, market-related rates generally apply on seasonal and extended credit. The flexible rates are calculated every two weeks in accordance with formulas that are approved by the Board. The rate on loans from the Special Liquidity Facility during the century date rollover period was 150 basis points above the target federal funds rate established by the FOMC.

The objective of the seasonal program is to help smaller institutions meet liquidity needs arising from a clear pattern of intra-yearly movements in their deposits and loans. Funds may be provided for periods longer than those permitted under adjustment credit. Since its introduction in early 1992, the flexible rate charged on seasonal credit has been closely aligned with short-term market rates; it is never less than the basic rate applicable to adjustment credit.

The purpose of extended credit is to assist depository institutions that are under sustained liquidity pressure and are not able to obtain funds from other sources. The rate for extended credit is 50 basis points higher than the rate for seasonal credit and is at least 50 basis points above the basic rate. In appropriate circumstances, the basic rate may be applied to extended-credit loans for up

to thirty days, but any further borrowings would be charged the flexible, market-related rate.

Exceptionally large adjustment-credit loans that arise from computer breakdowns or other operating problems not clearly beyond the reasonable control of the borrowing institution are assessed the highest rate applicable to any credit extended to depository institutions. No loans of this type were made during 2000.

The Special Liquidity Facility was established as a temporary program for lending to depository institutions during the period October 1, 1999, through April 7, 2000. This facility was intended to help ensure that depository institutions would have adequate liquidity in the period surrounding the century date change.

At the end of 2000 the structure of discount rates was as follows: a basic rate of 6 percent for short-term adjustment credit and rates of 6.45 percent for seasonal credit and 6.95 percent for extended credit. During 2000 the rate for seasonal credit ranged from a low of 5.55 percent to a high of 6.65 percent, that for extended credit from a low of 6.05 percent to a high of 7.15 percent, and that for SLF credit from a low of 6.50 percent to a high of 7 percent.

Board Votes

Under the Federal Reserve Act, the boards of directors of the Federal Reserve Banks must establish rates on loans to depository institutions at least every fourteen days and must submit such rates to the Board of Governors for review and determination. The Reserve Banks also are required to submit requests on the same schedule to renew the formulas for calculating the rates on seasonal, extended, and SLF credit. Votes on the reestablishment of the for-

mulas for these flexible rates are not shown in this summary. All votes taken by the Board of Governors during 2000 were unanimous.

Votes on the Basic Discount Rate

February 2, 2000. Effective this date, the Board approved actions taken by the directors of the Federal Reserve Banks of Boston, New York, Philadelphia, Cleveland, Richmond, Atlanta, Chicago, St. Louis, Kansas City, and San Francisco to increase the basic discount rate $\frac{1}{4}$ percentage point, to $5\frac{1}{4}$ percent.

Votes for this action: Messrs. Greenspan, Ferguson, Kelley, Meyer, and Gramlich. Votes against this action: None.

The Board subsequently approved similar actions taken by the directors of the Federal Reserve Banks of Minneapolis and Dallas, effective February 3 and 4, 2000, respectively.

March 21, 2000. Effective this date, the Board approved actions taken by the directors of the Federal Reserve Banks of Boston, New York, Philadelphia, Cleveland, Richmond, Atlanta, Chicago, Minneapolis, Kansas City, and San Francisco to increase the basic discount rate $\frac{1}{4}$ percentage point, to $5\frac{1}{2}$ percent.

Votes for this action: Messrs. Greenspan, Ferguson, Kelley, Meyer, and Gramlich. Votes against this action: None.

The Board approved similar actions taken by the directors of the Federal Reserve Banks of St. Louis and Dallas, effective March 22 and 23, 2000, respectively.

May 16, 2000. Effective this date, the Board approved actions taken by the directors of the Federal Reserve Banks

of Boston, Cleveland, Richmond, and San Francisco to increase the basic discount rate $\frac{1}{2}$ percentage point, to 6 percent.

Votes for this action: Messrs. Greenspan, Ferguson, Kelley, Meyer, and Gramlich. Votes against this action: None.

The Board subsequently approved similar actions taken by the directors of

the Federal Reserve Banks of Atlanta, Chicago, Kansas City, and Dallas, effective May 17; by the directors of the Federal Reserve Bank of St. Louis, effective May 18; and by the directors of the Federal Reserve Banks of New York, Philadelphia, and Minneapolis, effective May 19, 2000. ■

Minutes of Federal Open Market Committee Meetings

The policy actions of the Federal Open Market Committee, contained in the minutes of its meetings, are presented in the ANNUAL REPORT of the Board of Governors pursuant to the requirements of section 10 of the Federal Reserve Act. That section provides that the Board shall keep a complete record of the actions taken by the Board and by the Federal Open Market Committee on all questions of policy relating to open market operations, that it shall record therein the votes taken in connection with the determination of open market policies and the reasons underlying each policy action, and that it shall include in its annual report to the Congress a full account of such actions.

The minutes of the meetings contain the votes on the policy decisions made at those meetings as well as a résumé of the discussions that led to the decisions. The summary descriptions of economic and financial conditions are based on the information that was available to the Committee at the time of the meetings rather than on data as they may have been revised later.

Members of the Committee voting for a particular action may differ among themselves as to the reasons for their votes; in such cases, the range of their views is noted in the minutes. When members dissent from a decision, they are identified in the minutes along with a summary of the reasons for their dissent.

Policy directives of the Federal Open Market Committee are issued to the Federal Reserve Bank of New York as

the Bank selected by the Committee to execute transactions for the System Open Market Account. In the area of domestic open market operations, the Federal Reserve Bank of New York operates under two sets of instructions from the Federal Open Market Committee: an Authorization for Domestic Open Market Operations and a Domestic Policy Directive. (A new Domestic Policy Directive is adopted at each regularly scheduled meeting.) In the foreign currency area, the Committee operates under an Authorization for Foreign Currency Operations, a Foreign Currency Directive, and Procedural Instructions with Respect to Foreign Currency Operations. These policy instruments are shown below in the form in which they were in effect at the beginning of 2000. Changes in the instruments during the year are reported in the minutes for the individual meetings.

Authorization for Domestic Open Market Operations

In Effect January 1, 2000

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

(a) To buy or sell U.S. Government securities, including securities of the Federal Financing Bank, and securities that are direct obligations of, or fully guaranteed as to principal and interest by, any agency of the United States in the open market, from or to

securities dealers and foreign and international accounts maintained at the Federal Reserve Bank of New York, on a cash, regular, or deferred delivery basis, for the System Open Market Account at market prices, and, for such Account, to exchange maturing U.S. Government and Federal agency securities with the Treasury or the individual agencies or to allow them to mature without replacement; provided that the aggregate amount of U.S. Government and Federal agency securities held in such Account (including forward commitments) at the close of business on the day of a meeting of the Committee at which action is taken with respect to a domestic policy directive shall not be increased or decreased by more than \$12.0 billion during the period commencing with the opening of business on the day following such meeting and ending with the close of business on the day of the next such meeting;

(b) To buy U.S. Government securities, obligations that are direct obligations of, or fully guaranteed as to principal and interest by, any agency of the United States, from dealers for the account of the Federal Reserve Bank of New York under agreements for repurchase of such securities or obligations in 90 calendar days or less, at rates that, unless otherwise expressly authorized by the Committee, shall be determined by competitive bidding, after applying reasonable limitations on the volume of agreements with individual dealers; provided that in the event Government securities or agency issues covered by any such agreement are not repurchased by the dealer pursuant to the agreement or a renewal thereof, they shall be sold in the market or transferred to the System Open Market Account.

(c) To sell U.S. Government securities that are direct obligations of, or fully guaranteed as to principal and interest by, any agency of the United States to dealers for System Open Market Account under agreements for the resale by dealers of such securities or obligations in 90 calendar days or less, at rates that, unless otherwise expressly authorized by the Committee, shall be determined by competitive bidding, after applying reasonable limitations on the volume of agreements with individual dealers.

2. In order to ensure the effective conduct of open market operations, the Federal Open Market Committee authorizes the Federal Reserve Bank of New York to lend on an overnight basis U.S. Government securities held in the System Open Market Account to dealers at rates that shall be determined by competitive bidding but that in no event shall be less than 1.0 percent per annum of the market value of the securities lent. The Federal Reserve Bank of New York shall apply reasonable limitations on the total amount of a specific issue that may be auctioned and on the amount of securities that each dealer may borrow. The Federal Reserve Bank of New York may reject bids which could facilitate a dealer's ability to control a single issue as determined solely by the Federal Reserve Bank of New York.

3. In order to ensure the effective conduct of open market operations, while assisting in the provision of short-term investments for foreign and international accounts maintained at the Federal Reserve Bank of New York, the Federal Open Market Committee authorizes and directs the Federal Reserve Bank of New York (a) for System Open Market Account, to sell U.S. Government securities to such foreign and international accounts on the bases set forth in paragraph 1(a) under agreements providing for the resale by such accounts of those securities within 90 calendar days on terms comparable to those available on such transactions in the market; and (b) for New York Bank account, when appropriate, to undertake with dealers, subject to the conditions imposed on purchases and sales of securities in paragraph 1(b), repurchase agreements in U.S. Government and agency securities, and to arrange corresponding sale and repurchase agreements between its own account and foreign and international accounts maintained at the Bank. Transactions undertaken with such accounts under the provisions of this paragraph may provide for a service fee when appropriate.

4. In order to help ensure the effective conduct of open market operations during the transition period surrounding the century date change, the Committee authorizes the Federal Reserve Bank of New York to sell options on repurchase agreements, reverse

repurchase agreements, and matched sale purchase transactions for exercise no later than January 2000.

Domestic Policy Directive

In Effect January 1, 2000¹

The information reviewed at this meeting suggests continued strong expansion of economic activity. Nonfarm payroll employment increased substantially further in October and November, and the civilian unemployment rate stayed at 4.1 percent in November, its low for the year. Manufacturing output recorded sizable gains in October and November. Total retail sales rose appreciably over the two months. Housing activity has softened somewhat over recent months but has remained at a high level. Trends in orders suggest that business spending on capital equipment has increased further. The U.S. nominal trade deficit in goods and services rose in October from its average in the third quarter. Aggregate price increases have been smaller in the past two months, reflecting a flattening in energy prices; labor compensation rates have been rising more slowly than last year.

Most market interest rates are up somewhat since the meeting on November 16, 1999. Measures of share prices in equity markets have risen further over the intermeeting period. In foreign exchange markets, the trade-weighted value of the dollar has changed little over the period in relation to the currencies of a broad group of important U.S. trading partners.

M2 continued to grow at a moderate pace in November while M3 surged. For the year through November, M2 and M3 are estimated to have increased at rates somewhat above the Committee's annual ranges for 1999. Total domestic nonfinancial debt has expanded at a pace in the upper end of its range.

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

at its meeting in June the ranges it had established in February for growth of M2 and M3 of 1 to 5 percent and 2 to 6 percent respectively, measured from the fourth quarter of 1998 to the fourth quarter of 1999. The range for growth of total domestic nonfinancial debt was maintained at 3 to 7 percent for the year. For 2000, the Committee agreed on a tentative basis in June to retain the same ranges for growth of the monetary aggregates and debt, measured from the fourth quarter of 1999 to the fourth quarter of 2000. The behavior of the monetary aggregates will continue to be evaluated in the light of progress toward price level stability, movements in their velocities, and developments in the economy and financial markets.

To promote the Committee's long-run objectives of price stability and sustainable economic growth, the Committee in the immediate future seeks conditions in reserve markets consistent with maintaining the federal funds rate at an average of around 5½ percent. In view of the evidence currently available, the Committee believes that prospective developments are equally likely to warrant an increase or a decrease in the federal funds rate operating objective during the intermeeting period.

Authorization for Foreign Currency Operations

In Effect January 1, 2000

1. The Federal Open Market Committee authorizes and directs the Federal Reserve Bank of New York, for System Open Market Account, to the extent necessary to carry out the Committee's foreign currency directive and express authorizations by the Committee pursuant thereto, and in conformity with such procedural instructions as the Committee may issue from time to time:

A. To purchase and sell the following foreign currencies in the form of cable transfers through spot or forward transactions on the open market at home and abroad, including transactions with the U.S. Treasury, with the U.S. Exchange Stabilization Fund established by Section 10 of the Gold Reserve Act of 1934, with foreign monetary authorities, with the Bank for International Settlements, and with other international financial institutions:

1. Adopted by the Committee at its meeting on December 21, 1999.

Canadian dollars
Danish kroner
euro
Pounds sterling
Japanese yen

Mexican pesos
Norwegian kroner
Swedish kronor
Swiss francs

new arrangements that may be authorized, shall be referred for review and approval to the Committee.

B. To hold balances of, and to have outstanding forward contracts to receive or to deliver, the foreign currencies listed in paragraph A above.

C. To draw foreign currencies and to permit foreign banks to draw dollars under the reciprocal currency arrangements listed in paragraph 2 below, provided that drawings by either party to any such arrangement shall be fully liquidated within 12 months after any amount outstanding at that time was first drawn, unless the Committee, because of exceptional circumstances, specifically authorizes a delay.

D. To maintain an overall open position in all foreign currencies not exceeding \$25.0 billion. For this purpose, the overall open position in all foreign currencies is defined as the sum (disregarding signs) of net positions in individual currencies. The net position in a single foreign currency is defined as holdings of balances in that currency, plus outstanding contracts for future receipt, minus outstanding contracts for future delivery of that currency, i.e., as the sum of these elements with due regard to sign.

2. The Federal Open Market Committee directs the Federal Reserve Bank of New York to maintain reciprocal currency arrangements ("swap" arrangements) for the System Open Market Account for periods up to a maximum of 12 months with the following foreign banks, which are among those designated by the Board of Governors of the Federal Reserve System under Section 214.5 of Regulation N, *Relations with Foreign Banks and Bankers*, and with the approval of the Committee to renew such arrangements on maturity:

Foreign bank	Amount (millions of dollars equivalent)
Bank of Canada	2,000
Bank of Mexico	3,000

Any changes in the terms of existing swap arrangements, and the proposed terms of any

3. All transactions in foreign currencies undertaken under paragraph 1(A) above shall, unless otherwise expressly authorized by the Committee, be at prevailing market rates. For the purpose of providing an investment return on System holdings of foreign currencies, or for the purpose of adjusting interest rates paid or received in connection with swap drawings, transactions with foreign central banks may be undertaken at non-market exchange rates.

4. It shall be the normal practice to arrange with foreign central banks for the coordination of foreign currency transactions. In making operating arrangements with foreign central banks on System holdings of foreign currencies, the Federal Reserve Bank of New York shall not commit itself to maintain any specific balance, unless authorized by the Federal Open Market Committee. Any agreements or understandings concerning the administration of the accounts maintained by the Federal Reserve Bank of New York with the foreign banks designated by the Board of Governors under Section 214.5 of Regulation N shall be referred for review and approval to the Committee.

5. Foreign currency holdings shall be invested to ensure that adequate liquidity is maintained to meet anticipated needs and so that each currency portfolio shall generally have an average duration of no more than 18 months (calculated as Macaulay duration). When appropriate in connection with arrangements to provide investment facilities for foreign currency holdings, U.S. Government securities may be purchased from foreign central banks under agreements for repurchase of such securities within 30 calendar days.

6. All operations undertaken pursuant to the preceding paragraphs shall be reported promptly to the Foreign Currency Subcommittee and the Committee. The Foreign Currency Subcommittee consists of the Chairman and Vice Chairman of the Committee, the Vice Chairman of the Board of Governors, and such other member of the Board as the Chairman may designate (or in

the absence of members of the Board serving on the Subcommittee, other Board Members designated by the Chairman as alternates, and in the absence of the Vice Chairman of the Committee, his alternate). Meetings of the Subcommittee shall be called at the request of any member, or at the request of the Manager, System Open Market Account ("Manager"), for the purposes of reviewing recent or contemplated operations and of consulting with the Manager on other matters relating to his responsibilities. At the request of any member of the Subcommittee, questions arising from such reviews and consultations shall be referred for determination to the Federal Open Market Committee.

7. The Chairman is authorized:

A. With the approval of the Committee, to enter into any needed agreement or understanding with the Secretary of the Treasury about the division of responsibility for foreign currency operations between the System and the Treasury;

B. To keep the Secretary of the Treasury fully advised concerning System foreign currency operations, and to consult with the Secretary on policy matters relating to foreign currency operations;

C. From time to time, to transmit appropriate reports and information to the National Advisory Council on International Monetary and Financial Policies.

8. Staff officers of the Committee are authorized to transmit pertinent information on System foreign currency operations to appropriate officials of the Treasury Department.

9. All Federal Reserve Banks shall participate in the foreign currency operations for System Account in accordance with paragraph 3 G(1) of the Board of Governors' Statement of Procedure with Respect to Foreign Relationships of Federal Reserve Banks dated January 1, 1944.

orderly market conditions, provided that market exchange rates for the U.S. dollar reflect actions and behavior consistent with the IMF Article IV, Section 1.

2. To achieve this end the System shall:

A. Undertake spot and forward purchases and sales of foreign exchange.

B. Maintain reciprocal currency ("swap") arrangements with selected foreign central banks.

C. Cooperate in other respects with central banks of other countries and with international monetary institutions.

3. Transactions may also be undertaken:

A. To adjust System balances in light of probable future needs for currencies.

B. To provide means for meeting System and Treasury commitments in particular currencies, and to facilitate operations of the Exchange Stabilization Fund.

C. For such other purposes as may be expressly authorized by the Committee.

4. System foreign currency operations shall be conducted:

A. In close and continuous consultation and cooperation with the United States Treasury;

B. In cooperation, as appropriate, with foreign monetary authorities; and

C. In a manner consistent with the obligations of the United States in the International Monetary Fund regarding exchange arrangements under the IMF Article IV.

Procedural Instructions with Respect to Foreign Currency Operations

In Effect January 1, 2000

In conducting operations pursuant to the authorization and direction of the Federal Open Market Committee as set forth in the

Foreign Currency Directive

In Effect January 1, 2000

1. System operations in foreign currencies shall generally be directed at countering dis-

Authorization for Foreign Currency Operations and the Foreign Currency Directive, the Federal Reserve Bank of New York, through the Manager, System Open Market Account ("Manager"), shall be guided by the following procedural understandings with respect to consultations and clearances with the Committee, the Foreign Currency Subcommittee, and the Chairman of the Committee. All operations undertaken pursuant to such clearances shall be reported promptly to the Committee.

1. The Manager shall clear with the Subcommittee (or with the Chairman, if the Chairman believes that consultation with the Subcommittee is not feasible in the time available):

A. Any operation that would result in a change in the System's overall open position in foreign currencies exceeding \$300 million on any day or \$600 million since the most recent regular meeting of the Committee.

B. Any operation that would result in a change on any day in the System's net position in a single foreign currency exceeding \$150 million, or \$300 million when the operation is associated with repayment of swap drawings.

C. Any operation that might generate a substantial volume of trading in a particular currency by the System, even though the change in the System's net position in that currency might be less than the limits specified in 1.B.

D. Any swap drawing proposed by a foreign bank not exceeding the larger of (i) \$200 million or (ii) 15 percent of the size of the swap arrangement.

2. The Manager shall clear with the Committee (or with the Subcommittee, if the Subcommittee believes that consultation with the full Committee is not feasible in the time available, or with the Chairman, if the Chairman believes that consultation with the Subcommittee is not feasible in the time available):

A. Any operation that would result in a change in the System's overall open position in foreign currencies exceeding \$1.5 billion

since the most recent regular meeting of the Committee.

B. Any swap drawing proposed by a foreign bank exceeding the larger of (i) \$200 million or (ii) 15 percent of the size of the swap arrangement.

3. The Manager shall also consult with the Subcommittee or the Chairman about proposed swap drawings by the System, and about any operations that are not of a routine character.

Meeting Held on February 1-2, 2000

A meeting of the Federal Open Market Committee was held in the offices of the Board of Governors of the Federal Reserve System in Washington, D.C., on Tuesday, February 1, 2000, at 2:30 p.m. and continued on Wednesday, February 2, 2000, at 9:00 a.m.

Present:

Mr. Greenspan, Chairman
 Mr. McDonough, Vice Chairman
 Mr. Broadbush
 Mr. Ferguson
 Mr. Gramlich
 Mr. Gwynn
 Mr. Jordan
 Mr. Kelley
 Mr. Meyer
 Mr. Parry

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

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

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

Mr. Prell, Economist

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

Mr. Fisher, Manager, System Open
Market Account

Mr. Winn,² Assistant to the Board,
Office of Board Members,
Board of Governors

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

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

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

Mr. Small,³ Section Chief, Division
of Monetary Affairs, Board of
Governors

Messrs. Brayton,³ Morton,⁴ and
Rosine,⁴ Senior Economists,
Divisions of Research and
Statistics, International Finance,
and Research and Statistics
respectively, Board of Governors

Ms. Garrett and Mr. Hooker,⁴
Economists, Division
of Monetary Affairs, Board
of Governors

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

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

In the agenda for this meeting, it was reported that advices of the election of the following members and alternate members of the Federal Open Market Committee for the period commencing January 1, 2000, and ending December 31, 2000, had been received and that these individuals had executed their oaths of office.

The elected members and alternate members were as follows:

William J. McDonough, President of the Federal Reserve Bank of New York, with Jamie B. Stewart, Jr., First Vice President of the Federal Reserve Bank of New York, as alternate

J. Alfred Broaddus, Jr., President of the Federal Reserve Bank of Richmond, with Cathy E. Minehan, President of the Federal Reserve Bank of Boston, as alternate

Jerry L. Jordan, President of the Federal Reserve Bank of Cleveland, with Michael H. Moskow, President of the Federal Reserve Bank of Chicago, as alternate

Jack Guynn, President of the Federal Reserve Bank of Atlanta, with William Poole, President of the Federal Reserve Bank of St. Louis, as alternate

Robert T. Parry, President of the Federal Reserve Bank of San Francisco, with Thomas M. Hoenig, President of the Federal Reserve Bank of Kansas City, as alternate

By unanimous vote, the following officers of the Federal Open Market

2. Attended Tuesday's session only.
3. Attended portion of meeting relating to the staff presentation of policy alternatives.
4. Attended portion of meeting relating to the Committee's review of the economic outlook and consideration of its money and debt ranges for 2000.

Committee were elected to serve until the election of their successors at the first meeting of the Committee after December 31, 2000, with the understanding that in the event of the discontinuance of their official connection with the Board of Governors or with a Federal Reserve Bank they would cease to have any official connection with the Federal Open Market Committee:

Alan Greenspan	Chairman
William J. McDonough	Vice Chairman
Donald L. Kohn	Secretary and Economist
Normand R.V. Bernard	Deputy Secretary
Lynn S. Fox	Assistant Secretary
Gary P. Gillum	Assistant Secretary
J. Virgil Mattingly, Jr.	General Counsel
Thomas C. Baxter, Jr.	Deputy General Counsel
Karen H. Johnson	Economist
Michael J. Prell	Economist
Jack H. Beebe, Christine Cumming, Robert A. Eisenbeis, Marvin S. Goodfriend, David H. Howard, David E. Lindsey, Vincent R. Reinhart, Thomas D. Simpson, Mark S. Sniderman, and David J. Stockton, Associate Economists	

By unanimous vote, the Federal Reserve Bank of New York was selected to execute transactions for the System Open Market Account until the adjournment of the first meeting of the Committee after December 31, 2000.

By unanimous vote, Peter R. Fisher was selected to serve at the pleasure of the Committee as Manager, System Open Market Account, on the understanding that his selection was subject to being satisfactory to the Federal Reserve Bank of New York.

Secretary's note: Advice subsequently was received that the selection of Mr. Fisher as Manager was satisfactory to the board

of directors of the Federal Reserve Bank of New York.

By unanimous vote, the Committee approved an addition to the Authorization for Domestic Open Market Operations regarding adjustments to the stance of monetary policy during intermeeting periods. As had previously been agreed, the temporary authority given to the Federal Reserve Bank of New York to sell options to counter potential century-data-change pressures in financial markets was allowed to lapse. Accordingly, the Authorization was adopted, effective February 1, 2000, as shown below.

Authorization For Domestic Open Market Operations

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

(a) To buy or sell U.S. Government securities, including securities of the Federal Financing Bank, and securities that are direct obligations of, or fully guaranteed as to principal and interest by, any agency of the United States in the open market, from or to securities dealers and foreign and international accounts maintained at the Federal Reserve Bank of New York, on a cash, regular, or deferred delivery basis, for the System Open Market Account at market prices, and, for such Account, to exchange maturing U.S. Government and Federal agency securities with the Treasury or the individual agencies or to allow them to mature without replacement; provided that the aggregate amount of U.S. Government and Federal agency securities held in such Account (including forward commitments) at the close of business on the day of a meeting of the Committee at which action is taken with respect to a domestic policy directive shall not be increased or decreased by more than \$12.0 billion during the period commencing with the opening of business on the day following such meeting and ending with the close of business on the day of the next such meeting;

(b) To buy U.S. Government securities and obligations that are direct obligations of, or fully guaranteed as to principal and interest by, any agency of the United States, from dealers for the account of the Federal Reserve Bank of New York under agreements for repurchase of such securities or obligations in 90 calendar days or less, at rates that, unless otherwise expressly authorized by the Committee, shall be determined by competitive bidding, after applying reasonable limitations on the volume of agreements with individual dealers; provided that in the event Government securities or agency issues covered by any such agreement are not repurchased by the dealer pursuant to the agreement or a renewal thereof, they shall be sold in the market or transferred to the System Open Market Account.

(c) To sell U.S. Government securities and obligations that are direct obligations of, or fully guaranteed as to principal and interest by, any agency of the United States to dealers for System Open Market Account under agreements for the resale by dealers of such securities or obligations in 90 calendar days or less, at rates that, unless otherwise expressly authorized by the Committee, shall be determined by competitive bidding, after applying reasonable limitations on the volume of agreements with individual dealers.

2. In order to ensure the effective conduct of open market operations, the Federal Open Market Committee authorizes the Federal Reserve Bank of New York to lend on an overnight basis U.S. Government securities held in the System Open Market Account to dealers at rates that shall be determined by competitive bidding but that in no event shall be less than 1.0 percent per annum of the market value of the securities lent. The Federal Reserve Bank of New York shall apply reasonable limitations on the total amount of a specific issue that may be auctioned, and on the amount of securities that each dealer may borrow. The Federal Reserve Bank of New York may reject bids which could facilitate a dealer's ability to control a single issue as determined solely by the Federal Reserve Bank of New York.

3. In order to ensure the effective conduct of open market operations, while assisting in the provision of short-term investments for foreign and international accounts maintained at the Federal Reserve Bank of New York, the Federal Open Market Committee authorizes and directs the Federal Reserve

Bank of New York (a) for System Open Market Account, to sell U.S. Government securities to such foreign and international accounts on the bases set forth in paragraph 1(a) under agreements providing for the resale by such accounts of those securities within 90 calendar days on terms comparable to those available on such transactions in the market; and (b) for New York Bank account, when appropriate, to undertake with dealers, subject to the conditions imposed on purchases and sales of securities in paragraph 1(b), repurchase agreements in U.S. Government and agency securities, and to arrange corresponding sale and repurchase agreements between its own account and foreign and international accounts maintained at the Bank. Transactions undertaken with such accounts under the provisions of this paragraph may provide for a service fee when appropriate.

4. In the execution of the Committee's decision regarding policy during any intermeeting period, the Committee authorizes and directs the Federal Reserve Bank of New York, upon the instruction of the Chairman of the Committee, to adjust somewhat in exceptional circumstances the degree of pressure on reserve positions and hence the intended federal funds rate. Any such adjustment shall be made in the context of the Committee's discussion and decision at its most recent meeting and the Committee's long-run objectives for price stability and sustainable economic growth, and shall be based on economic, financial, and monetary developments during the intermeeting period. Consistent with Committee practice, the Chairman, if feasible, will consult with the Committee before making any adjustment.

With Mr. Broaddus dissenting, the Authorization for Foreign Currency Operations and the Foreign Currency Directive were reaffirmed in the forms shown below.

Authorization For Foreign Currency Operations

1. The Federal Open Market Committee authorizes and directs the Federal Reserve Bank of New York, for System Open Market

Account, to the extent necessary to carry out the Committee's foreign currency directive and express authorizations by the Committee pursuant thereto, and in conformity with such procedural instructions as the Committee may issue from time to time:

A. To purchase and sell the following foreign currencies in the form of cable transfers through spot or forward transactions on the open market at home and abroad, including transactions with the U.S. Treasury, with the U.S. Exchange Stabilization Fund established by Section 10 of the Gold Reserve Act of 1934, with foreign monetary authorities, with the Bank for International Settlements, and with other international financial institutions:

Canadian dollars	Mexican pesos
Danish kroner	Norwegian kroner
Euro	Swedish kronor
Pounds sterling	Swiss francs
Japanese yen	

B. To hold balances of, and to have outstanding forward contracts to receive or to deliver, the foreign currencies listed in paragraph A above.

C. To draw foreign currencies and to permit foreign banks to draw dollars under the reciprocal currency arrangements listed in paragraph 2 below, provided that drawings by either party to any such arrangement shall be fully liquidated within 12 months after any amount outstanding at that time was first drawn, unless the Committee, because of exceptional circumstances, specifically authorizes a delay.

D. To maintain an overall open position in all foreign currencies not exceeding \$25.0 billion. For this purpose, the overall open position in all foreign currencies is defined as the sum (disregarding signs) of net positions in individual currencies. The net position in a single foreign currency is defined as holdings of balances in that currency, plus outstanding contracts for future receipt, minus outstanding contracts for future delivery of that currency, i.e., as the sum of these elements with due regard to sign.

2. The Federal Open Market Committee directs the Federal Reserve Bank of New York to maintain reciprocal currency arrangements ("swap" arrangements) for the System Open Market Account for periods up to a maximum of 12 months with the following foreign banks, which are among those

designated by the Board of Governors of the Federal Reserve System under Section 214.5 of Regulation N, Relations with Foreign Banks and Bankers, and with the approval of the Committee to renew such arrangements on maturity:

Foreign bank	Amount of arrangement (millions of dollars equivalent)
Bank of Canada	2,000
Bank of Mexico	3,000

Any changes in the terms of existing swap arrangements, and the proposed terms of any new arrangements that may be authorized, shall be referred for review and approval to the Committee.

3. All transactions in foreign currencies undertaken under paragraph 1A. above shall, unless otherwise expressly authorized by the Committee, be at prevailing market rates. For the purpose of providing an investment return on System holdings of foreign currencies, or for the purpose of adjusting interest rates paid or received in connection with swap drawings, transactions with foreign central banks may be undertaken at non-market exchange rates.

4. It shall be the normal practice to arrange with foreign central banks for the coordination of foreign currency transactions. In making operating arrangements with foreign central banks on System holdings of foreign currencies, the Federal Reserve Bank of New York shall not commit itself to maintain any specific balance, unless authorized by the Federal Open Market Committee. Any agreements or understandings concerning the administration of the accounts maintained by the Federal Reserve Bank of New York with the foreign banks designated by the Board of Governors under Section 214.5 of Regulation N shall be referred for review and approval to the Committee.

5. Foreign currency holdings shall be invested to ensure that adequate liquidity is maintained to meet anticipated needs and so that each currency portfolio shall generally have an average duration of no more than 18 months (calculated as Macaulay duration). When appropriate in connection with arrangements to provide investment facil-

ties for foreign currency holdings, U.S. Government securities may be purchased from foreign central banks under agreements for repurchase of such securities within 30 calendar days.

6. All operations undertaken pursuant to the preceding paragraphs shall be reported promptly to the Foreign Currency Subcommittee and the Committee. The Foreign Currency Subcommittee consists of the Chairman and Vice Chairman of the Committee, the Vice Chairman of the Board of Governors, and such other member of the Board as the Chairman may designate (or in the absence of members of the Board serving on the Subcommittee, other Board members designated by the Chairman as alternates, and in the absence of the Vice Chairman of the Committee, his alternate). Meetings of the Subcommittee shall be called at the request of any member, or at the request of the Manager, System Open Market Account ("Manager"), for the purposes of reviewing recent or contemplated operations and of consulting with the Manager on other matters relating to his responsibilities. At the request of any member of the Subcommittee, questions arising from such reviews and consultations shall be referred for determination to the Federal Open Market Committee.

7. The Chairman is authorized:

A. With the approval of the Committee, to enter into any needed agreement or understanding with the Secretary of the Treasury about the division of responsibility for foreign currency operations between the System and the Treasury;

B. To keep the Secretary of the Treasury fully advised concerning System foreign currency operations, and to consult with the Secretary on policy matters relating to foreign currency operations;

C. From time to time, to transmit appropriate reports and information to the National Advisory Council on International Monetary and Financial Policies.

8. Staff officers of the Committee are authorized to transmit pertinent information on System foreign currency operations to appropriate officials of the Treasury Department.

9. All Federal Reserve Banks shall participate in the foreign currency operations for System Account in accordance with paragraph 3 G(1) of the Board of Governors' Statement of Procedure with Respect to For-

ign Relationships of Federal Reserve Banks dated January 1, 1944.

Foreign Currency Directive

1. System operations in foreign currencies shall generally be directed at countering disorderly market conditions, provided that market exchange rates for the U.S. dollar reflect actions and behavior consistent with the IMF Article IV, Section 1.

2. To achieve this end the System shall:

A. Undertake spot and forward purchases and sales of foreign exchange.

B. Maintain reciprocal currency ("swap") arrangements with selected foreign central banks.

C. Cooperate in other respects with central banks of other countries and with international monetary institutions.

3. Transactions may also be undertaken:

A. To adjust System balances in light of probable future needs for currencies.

B. To provide means for meeting System and Treasury commitments in particular currencies and to facilitate operations of the Exchange Stabilization Fund.

C. For such other purposes as may be expressly authorized by the Committee.

4. System foreign currency operations shall be conducted:

A. In close and continuous consultation and cooperation with the United States Treasury;

B. In cooperation, as appropriate, with foreign monetary authorities; and

C. In a manner consistent with the obligations of the United States in the International Monetary Fund regarding exchange arrangements under the IMF Article IV.

Mr. Broaddus dissented in the votes on the Authorization and the Directive because they provide the foundation for foreign exchange market intervention. He continued to believe that the Federal Reserve's participation in foreign exchange market intervention compromises its ability to conduct monetary policy effectively. Because sterilized intervention cannot have sustained effects in the absence of conforming monetary policy actions, Federal Reserve partici-

pation in foreign exchange operations in his view risks one of two undesirable outcomes. First, the independence of monetary policy is jeopardized if the System adjusts its policy actions to support short-term foreign exchange objectives set by the U.S. Treasury. Alternatively, the credibility of monetary policy is damaged if the System does not follow interventions with compatible policy actions, the interventions consequently fail to achieve their objectives, and the System is associated in the mind of the public with the failed operations.

By unanimous vote, the Procedural Instructions with Respect to Foreign Currency Operations, in the form shown below, were reaffirmed.

Procedural Instructions with Respect to Foreign Currency Operations

In conducting operations pursuant to the authorization and direction of the Federal Open Market Committee as set forth in the Authorization for Foreign Currency Operations and the Foreign Currency Directive, the Federal Reserve Bank of New York, through the Manager, System Open Market Account ("Manager"), shall be guided by the following procedural understandings with respect to consultations and clearances with the Committee, the Foreign Currency Subcommittee, and the Chairman of the Committee. All operations undertaken pursuant to such clearances shall be reported promptly to the Committee.

1. The Manager shall clear with the Subcommittee (or with the Chairman, if the Chairman believes that consultation with the Subcommittee is not feasible in the time available):

A. Any operation that would result in a change in the System's overall open position in foreign currencies exceeding \$300 million on any day or \$600 million since the most recent regular meeting of the Committee.

B. Any operation that would result in a change on any day in the System's net position in a single foreign currency exceeding \$150 million, or \$300 million when the

operation is associated with repayment of swap drawings.

C. Any operation that might generate a substantial volume of trading in a particular currency by the System, even though the change in the System's net position in that currency might be less than the limits specified in 1.B.

D. Any swap drawing proposed by a foreign bank not exceeding the larger of (i) \$200 million or (ii) 15 percent of the size of the swap arrangement.

2. The Manager shall clear with the Committee (or with the Subcommittee, if the Subcommittee believes that consultation with the full Committee is not feasible in the time available, or with the Chairman, if the Chairman believes that consultation with the Subcommittee is not feasible in the time available):

A. Any operation that would result in a change in the System's overall open position in foreign currencies exceeding \$1.5 billion since the most recent regular meeting of the Committee.

B. Any swap drawing proposed by a foreign bank exceeding the larger of (i) \$200 million or (ii) 15 percent of the size of the swap arrangement.

3. The Manager shall also consult with the Subcommittee or the Chairman about proposed swap drawings by the System and about any operations that are not of a routine character.

On January 19, 2000, the continuing rules, regulations, and other instructions of the Committee were distributed with the advice that, in accordance with procedures approved by the Committee, they were being called to the Committee's attention before the February 1-2 organization meeting to give members an opportunity to raise any questions they might have concerning them. Members were asked to indicate if they wished to have any of the instruments in question placed on the agenda for consideration at this meeting.

The Rules of Procedure were placed on the agenda and by unanimous vote the Committee approved updating changes, effective upon publication

in the *Federal Register*. The changes relate to electronic and telephone communications.

Secretary's note: The revised Rules of Procedure were published in the *Federal Register* on February 9, 2000.

By unanimous vote, the Program for Security of FOMC Information was amended with regard to certain security classifications and staff access to confidential FOMC information.

By unanimous vote, the minutes of the meeting of the Federal Open Market Committee held on December 21, 1999, were approved.

The Manager of the System Open Market Account reported on recent developments in foreign exchange markets. There were no open market operations in foreign currencies for the System's account in the period since the previous meeting, and thus no vote was required of the Committee.

The Manager also reported on developments in domestic financial markets and on System open market transactions in government securities and federal agency obligations during the period December 21, 1999, to February 1, 2000. By unanimous vote, the Committee ratified these transactions.

The Committee then turned to a discussion of the economic and financial outlook, the ranges for the growth of money and debt in 2000, and the implementation of monetary policy over the intermeeting period ahead.

The information reviewed at this meeting suggested that economic activity had expanded rapidly in recent months. Consumer spending had remained very brisk, business fixed investment had continued on a strong upward trend, and housing demand was still at a relatively high level despite some slippage recently. The growth of

domestic demand had been met in part through further advances in imports. Domestically, industrial production and nonfarm payrolls had continued to increase briskly. Despite very tight labor markets, labor costs had been climbing more slowly than in 1998. Consumer price inflation had stayed moderate over the past few months, despite a recent resurgence in energy prices.

Labor demand remained robust through year-end, as nonfarm payroll employment posted a further large increase in December. Job growth in the services industry was brisk, construction hiring rose somewhat further against a backdrop of good weather and project backlogs, and manufacturing employment was essentially unchanged. The civilian unemployment rate held at 4.1 percent in December, its low for the year, and initial claims for unemployment insurance persisted at a very low level through late January.

Industrial production recorded a sharp advance in the fourth quarter. Manufacturing and mining output rose briskly, but utilities output was held down by lackluster demand during a period of unseasonably warm weather in several parts of the country. Output gains in manufacturing were widespread and the factory operating rate rose further, though capacity utilization was still a little below its long-term average.

Consumer spending apparently was very robust in the fourth quarter. Total nominal retail sales rose sharply further in December, with outlets for durable and nondurable goods recording substantial gains in sales. Expenditures related to Y2K concerns appeared to have been relatively limited. Outlays for services in October and November (latest data) were strong, even though spending for heating was down in response to the unseasonably warm weather.

Housing activity was still at a relatively high level at year-end, buoyed by continuing strong gains in jobs and incomes despite the rise that had occurred in mortgage interest rates. Total private housing starts rebounded sharply in December from a decline in November, although part of the December pickup might have been associated with favorable weather patterns. Sales of new homes fell in November (latest data), reversing much of the sizable October rise, but average sales for the two-month period were only slightly below their strong rate of the first half of the year. Sales of existing homes were down in December, but they also were only a little below their elevated first-half pace.

The available information suggested that growth of business spending for durable equipment slowed abruptly in the fourth quarter and that investment in nonresidential structures fell further. At least some of the deceleration in spending for capital equipment reflected a hesitancy to spend on computers and other high-tech equipment just in advance of the century rollover. The weakness in the nonresidential sector was evidenced by further declines in construction outlays and new building contracts in October and November. Office construction appeared to be leveling off in response to the higher cost of financing and to perceptions that the office space currently coming on line would be sufficient to meet demand.

The book value of manufacturing and trade inventories surged in November after having climbed moderately on balance earlier in the year. Even though the rise might have been related to concerns about supply disruptions around year-end, inventory-sales ratios generally declined a little in association with very strong increases in sales, and the ratios were at or near the bottom of their ranges for the previous twelve months.

The U.S. trade deficit in goods and services widened significantly over the October–November period from its average for the third quarter. The value of exports rose appreciably over the two months, largely reflecting growth in industrial supplies and service receipts, but the value of imports increased noticeably more, with some of the rise reflecting increases in import prices. The available information suggested that economic expansion remained robust in most foreign industrial nations. In Japan, however, economic activity was sluggish, with a seemingly small rise in the fourth quarter following a third-quarter decline. Economic activity in the developing countries apparently continued to pick up in recent months, although the pace of recovery varied widely. Economic growth appeared to have been brisk in Mexico, Korea, China, Hong Kong, and Taiwan but was mixed among the ASEAN countries and slower in Brazil.

Price inflation had remained moderate in recent months. Consumer price inflation was subdued in December in spite of a sizable increase in energy prices; however, for the year as a whole, sharp increases in energy prices noticeably boosted overall consumer inflation. Excluding the volatile energy component, consumer price inflation slowed somewhat in 1999. By contrast, the subdued rise in the core PCE chain price index in 1999 was essentially the same as in 1998. At the producer level, prices of finished goods other than food and energy changed little in December and registered a considerably reduced increase in 1999. At earlier stages of processing, however, core producer prices recorded somewhat larger advances than those for finished goods in December and for the year. With regard to labor costs, average hourly earnings rose by a larger amount in

December than in November, but the increase in this measure in 1999 was about the same as for 1998.

At its meeting on December 21, the Committee adopted a directive that called for maintaining conditions in reserve markets consistent with an unchanged federal funds rate of about 5½ percent and that did not contain any bias relating to the direction of possible adjustments to policy during the intermeeting period. The members noted that such a directive, which suggested that they did not expect a further change in policy before the February meeting, should foster steady conditions in financial markets during the sensitive century-date-change period. The Committee also agreed, however, that the statement accompanying the announcement of its decision would note that the Committee was especially concerned about the potential for inflation pressures to increase and would want to consider at its February meeting whether policy action would be needed to contain such pressures.

Open market operations during the intermeeting period were directed toward maintaining the federal funds rate at around 5½ percent. The funds rate averaged close to the Committee's target over the intermeeting interval despite very strong demands for additional currency and market liquidity through the year-end and a rapid unwinding thereafter. Against the background of the Committee's announced concern about the inflationary implications of unsustainably rapid economic growth, incoming information suggesting that aggregate demand retained considerable momentum led to upward pressure on market interest rates once the century-date-change period had passed without incident. The effects of higher interest rates apparently offset those of unexpectedly high corporate

earnings, and most broad stock market indexes fell slightly on balance over the intermeeting period.

In foreign exchange markets, the trade-weighted value of the dollar was up on balance over the intermeeting interval in relation to indexes of major foreign currencies and those of other important U.S. trading partners. Reflecting market expectations of substantial Federal Reserve tightening, the dollar appreciated considerably against the yen and the euro while depreciating somewhat against the Canadian dollar.

M2 growth picked up appreciably during December and January, evidently reflecting extra demands for liquidity and safety during the century-date-change period. M3 accelerated by even more than M2 in December. Its non-M2 component ballooned as banks issued substantial volumes of large time deposits to meet very high credit demands and as institutional money market funds became recipients of some of their customers' precautionary liquid balances. From the fourth quarter of 1998 through the fourth quarter of 1999, M2 and M3 increased at rates somewhat above the Committee's annual ranges for 1999. Total domestic nonfinancial debt expanded in 1999 at a pace in the upper portion of its range.

The staff forecast prepared for this meeting suggested that the expansion would gradually moderate from its currently elevated pace to a rate around or perhaps a little below the growth of the economy's estimated potential. The expansion of domestic final demand increasingly would be held back by the anticipated waning of positive wealth effects associated with earlier large gains in equity prices and by higher interest rates. As a result, growth of spending on consumer durables and houses was expected to slow; in contrast, however, overall business invest-

ment in equipment and software was projected to strengthen in response to the upward trend in replacement demand, especially for computers and software; also, continued solid economic growth abroad was expected to boost the growth of U.S. exports for some period ahead. Core price inflation was projected to rise somewhat over the forecast horizon, partly as a result of higher import prices and some firming of gains in nominal labor compensation in persistently tight labor markets that would not be fully offset by productivity growth.

In the Committee's review of current and prospective economic developments, members commented that the economy still seemed to be growing very vigorously as it entered the new year, while core inflation remained subdued. The members were concerned, however, that recent trends in economic activity, if they continued, might undermine the economy's remarkable performance. The economy's potential to produce goods and services had been accelerating over time, but the demand for output had been growing even more strongly. If this imbalance continued, inflationary pressures were likely to build that would interfere with the economy's performance and could lead to a disruptive adjustment in economic activity. Accelerating productivity, although adding to the growth of the economy's potential output, also had induced expectations of rapidly accelerating business earnings that in turn had generated sharp increases in stock market wealth and lifted the growth of purchasing power and spending above that in incomes. Relatively high real interest rates that reflected the increased productivity and damped the rise in asset values would be needed to help restore balance. In that regard, members questioned whether rates

would be high enough without policy tightening to bring the growth of demand in line with that of supply and contain pressures in labor markets. In the view of some members, taut labor markets together with a turnaround in some of the factors that had been temporarily damping inflation, such as oil and import prices, already lent an upward bias to the inflation outlook, and all agreed that a significant further tightening of labor resource utilization would appreciably raise the risk of deterioration in the underlying inflation picture over time.

In keeping with the practice at meetings preceding the Federal Reserve's semiannual report to Congress on the economy and monetary policy and the Chairman's associated testimony, the members of the Committee and the Federal Reserve Bank presidents not currently serving as members had prepared individual projections of the growth in nominal and real GDP, the rate of unemployment, and the rate of inflation for the year 2000. The forecasts of the growth of nominal GDP were concentrated in a range of $5\frac{1}{4}$ to $5\frac{1}{2}$ percent, and for the rate of expansion in real GDP they had a central tendency of $3\frac{1}{2}$ to $3\frac{3}{4}$ percent. Growth at these rates was expected to hold the civilian unemployment rate in a range of 4 to $4\frac{1}{4}$ percent in the fourth quarter of 2000. The central tendency of the projections of inflation for 2000—as measured by the chain price index for personal consumption expenditures—encompassed a range of $1\frac{3}{4}$ to 2 percent, on the low side of the 2 percent rise in this index experienced in 1999 when energy prices had surged.

Mirroring developments in the overall economy, reports of economic conditions in the individual Federal Reserve districts continued to display broad-based strength, apart from softness in

construction activity in some areas and weakness in agriculture. Retail sales appeared to have strengthened further during the opening weeks of the new year after a surge during the holiday season. Motor vehicle sales in particular had continued to hold up at a remarkably high level. Consumption was being supported by robust growth in jobs and incomes, very high levels of consumer confidence, and the lagged wealth effects from earlier advances in stock market prices. Even so, growth in consumer spending was thought likely to moderate over time to a pace more in line with the expansion in consumer incomes, unless the stock market posted large further increases from current levels. As the experience of recent years had amply demonstrated, however, the future course of stock market prices was highly uncertain, and equity markets had shown a remarkable resilience to higher interest rates as earning prospects continued to be marked up in association with the acceleration in productivity.

Opportunities to enhance profits by using new technology were likely to lead to robust further growth in business fixed investment, boosted mainly by spending for equipment and software over the year ahead. While the huge amount of capital deepening already accomplished in recent years and the projected deceleration in aggregate demand were negative factors in the outlook for business capital spending, they were likely to be overridden by persisting declines in the prices of high-tech equipment and the rising importance of replacement demand that was associated with relatively short-lived investments in high-tech equipment and computer software that had tended to characterize the buildup in business equipment in recent years. With regard to other types of investment, spending on nonresidential business structures appeared to be

softening in many areas and would tend to hold down the growth in overall business expenditures for capital. However, spending by state and local governments on roadbuilding and other projects appeared to be on a robust uptrend.

Housing construction was expected to remain at a relatively elevated level, albeit below recent peaks, as a consequence of moderating demand stemming from higher mortgage interest rates and indications of overbuilding in some areas. Members also noted, however, that building activity in some parts of the country was still being held back by shortages of skilled construction workers and scarcities of some building supplies. The resulting backlogs along with low inventories of houses in some areas were factors that should limit the expected decline in residential construction this year. Moreover, many homebuyers were shifting from fixed-rate long-term mortgages to currently lower-cost adjustable rate mortgages. More fundamentally, however, the income and wealth effects that were boosting household expenditures generally should help to sustain a perhaps somewhat diminished but still high level of homebuilding activity for a while, despite higher mortgage financing costs.

Rapid increases in U.S. exports in conjunction with the strengthening of foreign economies were likely to add to demands on domestic producers. Consistent with this outlook, several members cited anecdotal reports of improving foreign markets, notably in East Asian countries. At the same time, despite some expected deceleration in imports as domestic demand moderated, the nation's trade deficit was projected to increase somewhat further over the year ahead. There was a risk that, as global portfolios came to be increasingly weighted toward dollar assets, expected returns on those assets would

need to rise to attract world savings, with much of the adjustment potentially occurring through a decline in the exchange rate of the dollar that would add to pressures on U.S. prices.

Concerning the outlook for inflation, the members continued to see the risks as primarily tilted toward rising inflationary pressures, though they anticipated that further gains in productivity would hold down increases in unit labor costs and prices, at least over the nearer term. A key issue was whether growth in aggregate demand would moderate sufficiently to at least avoid greater pressures on what were already very tight labor markets. In this regard, several cited recent statistical and anecdotal evidence of larger increases in labor compensation, although unit labor costs did not appear to be trending higher at this point. However, some nonlabor input prices already were rising faster. The prospects for energy prices were very difficult to predict, but even if such prices were to stabilize, the passthrough of the large earlier increases into inflation and wage expectations, as well as into the prices of products that were heavily energy dependent, was likely to exert some upward pressure on prices throughout the economy.

On the positive side for the near-term inflation outlook, there was no evidence that the acceleration in productivity was coming to an end. Members commented in this regard that business firms across the country were continuing to improve the efficiency of their operations in a variety of ways in order to hold down costs. These efforts included persistently large investments in new equipment, rationalization of business organizations, and training or retraining existing workers for more demanding or new tasks. Members also noted that longer-run inflation expectations generally did not appear to be worsening, though there

had been a slight widening of the spread between nominal and inflation-indexed Treasury bond yields. While there seemed to be an increasing number of exceptions, business contacts continued to report that raising their prices was very difficult to carry out successfully and often impossible. On balance, the outlook for inflation remained subject to a marked degree of uncertainty. Given current levels of resource use and the strength of the economic expansion relative to the growth of the economy's long-run potential, however, the members expected that inflation pressures would gather some momentum over time unless financial conditions became tighter.

In keeping with the requirements of the Full Employment and Balanced Growth Act of 1978 (the Humphrey-Hawkins Act), the Committee reviewed at this meeting the ranges for growth of the monetary and debt ranges that it had established on a tentative basis in June 1999. The tentative ranges approved in June for the period from the fourth quarter of 1999 to the fourth quarter of 2000 included growth of 1 to 5 percent for M2, 2 to 6 percent for M3, and 3 to 7 percent for total domestic nonfinancial debt.

All but one of the members favored the adoption of the ranges that had been selected on a tentative basis at the meeting in June. They noted that for some years the ranges for monetary growth had been chosen to encompass rates of increase that would be expected under conditions of price stability, assuming historical velocity relationships. This approach had been adopted partly as a result of the substantial unreliability of the linkage between the growth of the broad monetary aggregates and economic performance. Since the current benchmark ranges had first been adopted in the mid-1990s, however, structural

productivity growth had increased substantially, raising the expected rate of growth of money at price stability, other things equal. One member supported a proposal to adjust the monetary growth ranges upward by at least enough to reflect this development. However, other members emphasized the uncertainties about the dimensions of this new trend in productivity growth, the measured rate of increase in prices that would be consistent with reasonable price stability, and the long-run behavior of velocity. They felt that raising the benchmark ranges risked misleading the public about the Committee's confidence in the implied values for these variables going forward, about the Committee's determination to pursue its fundamental objectives of price stability and sustainable economic expansion, and about the very low weight most Committee members continued to place on the monetary aggregates in policy deliberations owing to the uncertainties surrounding them.

At the conclusion of this discussion, the Committee voted to approve without change the ranges for 2000 that it had established on a tentative basis on June 30, 1999. With Mr. Meyer dissenting, the following statement of longer-run policy and growth ranges for 2000 was approved for inclusion in the domestic policy directive:

The Federal Open Market Committee seeks monetary and financial conditions that will foster price stability and promote sustainable growth in output. In furtherance of these objectives, the Committee at this meeting established ranges for growth of M2 and M3 of 1 to 5 percent and 2 to 6 percent respectively, measured from the fourth quarter of 1999 to the fourth quarter of 2000. The range for growth of total domestic nonfinancial debt was set at 3 to 7 percent for the year. The behavior of the monetary aggregates will continue to be evaluated in the light of movements in their velocities and

developments in prices, the economy, and financial markets.

Votes for this action: Messrs. Greenspan, McDonough, Broaddus, Ferguson, Gramlich, Guynn, Jordan, Kelley, and Parry. Vote against this action: Mr. Meyer.

In dissenting, Mr. Meyer noted that although the money growth ranges do not play an important role in the conduct of monetary policy today, the Congress has mandated that the FOMC set and report ranges for money and credit growth. In recent years, the money ranges have been set to be consistent with price stability and normal velocity behavior. The rate of money growth consistent with price stability depends on the average growth of real GDP. Therefore, when there is a significant increase in the projected average growth rate in real GDP, money growth ranges should be adjusted upward so that they remain consistent with price stability. While considerable uncertainty remains about the average rate of growth in real GDP, there is a strong consensus that it is significantly higher today than when the target ranges were set at their current values. The failure to adjust monetary aggregate ranges makes them less useful signals of Federal Reserve intentions. As long as the Federal Reserve is required to set and report ranges for money and debt growth, it should update them as appropriate.

In the Committee's discussion of policy for the upcoming intermeeting period, all the members supported a proposal to tighten reserve conditions by a modest amount consistent with an increase in the federal funds rate of $\frac{1}{4}$ percentage point to a level of $5\frac{3}{4}$ percent. The Committee's decision to tighten its policy stance was intended to help bring the growth of aggregate demand into better alignment with the expansion of sustainable aggregate sup-

ply in an effort to avert rising inflationary pressures in the economy. Relatively high real interest rates would be required to accomplish this objective, given the effects of increasing productivity and profits on the demand for capital goods and, through the wealth effect, on consumption spending. Private long-term rates already had risen considerably, but whether they had reached a level that would lead to a rebalancing of demand and supply was an open question. Moreover, these rates already encompassed expectations of a tightening of monetary policy at this and several subsequent meetings. For a number of reasons, including uncertainties about the outlook for the expansion of aggregate demand in relation to that of potential supply, the economy's response to the Committee's earlier policy actions, and the recently somewhat unsettled conditions in financial markets, a majority of the members expressed a preference for a limited policy move at this time. As long as inflation and inflation expectations remained damped, these members saw little risk in a gradual approach to policy tightening and considerable advantage to preserving the possibility of calibrating those actions to the emerging situation. A few members expressed a preference for an increase of 50 basis points in the federal funds rate in order to provide greater assurance against a buildup of inflationary expectations and inflation over coming months. Other members acknowledged that the Committee might need to move more aggressively at a later meeting should imbalances continue to build and inflation and inflation expectations clearly begin to pick up.

The members agreed that the statement to be issued after this meeting should highlight their view that even

after their firming today the risks remained weighted mainly in the direction of rising inflation pressures. There were few signs thus far that the rise in interest rates over recent quarters was restraining demand in line with potential supply, and the members generally agreed that further tightening actions might well be needed to ensure that financial conditions had adjusted sufficiently to rising productivity growth to forestall escalating pressures on labor costs and prices. With the cushion of unutilized labor resources having dwindled over recent years and with the willingness of global investors to continue to acquire dollar assets to finance major further increases in imports at current interest and exchange rates in question, the need to achieve the appropriate financial and economic balance had become more pressing. In the circumstances, it was important for the public to understand that the Committee saw inflation risks as persisting even after today's action. At the conclusion of this discussion, members who favored a 50 basis point increase indicated that, in light of the clear intention of the Committee to act, if necessary, in a timely manner to contain inflation, the contemplated inclusion of a statement about the risks of higher inflation in the press release for this meeting, and the likelihood that the Board of Governors would approve a 25 basis point increase in the discount rate later in the day, they could accept a 25 basis point rise in the federal funds rate.

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

To further the Committee's long-run objectives of price stability and sustainable economic growth, the Committee in the immediate future seeks conditions in reserve markets consistent with increasing the federal funds rate to an average of around 5 3/4 percent.

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

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

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

The meeting was recessed briefly after this vote, and the members of the Board of Governors left the room to vote on pending increases in the discount rate at several Federal Reserve Banks. On the Board members' return, Chairman Greenspan announced that the Board had approved a 1/4 percentage point increase in the discount rate. The Committee concluded its meeting with a review of the press release announcing the joint policy action.

The members noted with deep regret the recent death of Frank E. Morris, former president of the Federal Reserve Bank of Boston and a member of the Committee over the course of twenty years before his retirement at the end of 1988. Mr. Morris is remembered as a highly respected colleague and friend who made outstanding contributions to the work of the Committee, the Federal Reserve Bank of Boston, and the Federal Reserve System more generally.

It was agreed that the next meeting of the Committee would be held on Tuesday, March 21, 2000.

The meeting adjourned at 11:50 a.m. on February 2, 2000.

Donald L. Kohn
Secretary

Meeting Held on March 21, 2000

A meeting of the Federal Open Market Committee was held in the offices of the Board of Governors of the Federal Reserve System in Washington, D.C., on Tuesday, March 21, 2000, at 9:00 a.m.

Present:

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

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

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

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

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

Mr. Fisher, Manager, System Open Market Account

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

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

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

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

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

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

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

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

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

By unanimous vote, the minutes of the meeting of the Federal Open Market Committee held on February 1-2, 2000, were approved.

The Manager of the System Open Market Account reported on recent

developments in foreign exchange markets. There were no open market operations in foreign currencies for the System's account in the period since the previous meeting, and thus no vote was required of the Committee.

The Manager also reported on developments in domestic financial markets and on System open market transactions in government securities and federal agency obligations during the period February 2, 2000, through March 20, 2000. By unanimous vote, the Committee ratified these transactions.

At its meeting in August 1999, the Committee had voted to expand the collateral that could be accepted in System repurchase transactions and had authorized the use of reverse repurchase agreements. These authorizations were scheduled to expire at the end of April 2000. At this meeting the Manager proposed that the authority to use the broader range of collateral be extended until the first meeting in 2001 and that the authority to engage in reverse repurchase agreements be made permanent.

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

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

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

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

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

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

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

The Committee also accepted a proposal by the Manager to make permanent the authority to use reverse repurchase agreements in the conduct of open market operations. Such agreements are equivalent to matched sale–purchase transactions, which the Manager has long been authorized to use, but reverse RPs have the advantage of much greater flexibility because they are the common practice in financial markets. The Manager indicated that he did not expect to use reverse RPs on a regular basis until the System's new trading system became operational, but in conjunction with existing triparty arrangements there

might be occasions in the interim when the timing of open market operations would make it desirable to use them instead of matched sale-purchase transactions. The members voted unanimously to adopt on a permanent basis, subject to the annual review required for all the Committee's instruments, paragraph 1(c) of the Authorization for Domestic Open Market Operations in the form reproduced below.

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

(c) To sell U.S. Government securities and securities that are direct obligations of, or fully guaranteed as to principal and interest by, any agency of the United States to dealers for System Open Market Account under agreements for the resale by dealers of such securities or obligations in 90 calendar days or less, at rates that, unless otherwise expressly authorized by the Committee, shall be determined by competitive bidding, after applying reasonable limitations on the volume of agreements with individual dealers.

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

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

except for the upturn in energy prices in recent months.

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

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

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

Residential housing activity remained strong in the first two months of the year. Total private housing starts in January and February held at the high

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

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

The pace of accumulation of manufacturing and trade inventories slowed somewhat in January from the elevated rate in the fourth quarter; however, sales grew briskly and the aggregate inventory-sales ratio edged down from an already very low level. In manufacturing, stocks increased moderately further in January; however, shipments grew more, and the aggregate stock-shipments ratio for the sector declined to a new low. Both wholesale and retail inventories increased in line with sales, and inventory-sales ratios

for these sectors stayed at the bottom of their respective ranges over the past twelve months.

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

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

slightly faster rate in January and February than they had in the fourth quarter of last year. However, the advance in this earnings measure in the twelve months ended in February was about the same as that in the previous twelve-month period.

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

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

longer-term Treasury securities declined significantly. Most major indexes of equity prices moved up appreciably on net over the intermeeting period.

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

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

The staff forecast prepared for this meeting suggested that the economic expansion would moderate gradually from its currently elevated pace to a rate around, or perhaps a little below, the growth of the economy's estimated potential. The expansion of domestic final demand increasingly would be held back by the anticipated waning of positive wealth effects associated with large earlier gains in equity prices and by higher interest rates. As a result, the growth of spending on consumer durables and houses was expected to slow; in addition, business investment in equipment and software was projected to decelerate following a first-quarter

surge that partly reflected information technology expenditures that had been postponed until after the century roll-over. In addition, solid economic expansion abroad was expected to boost the growth of U.S. exports for some period ahead. Core price inflation was projected to increase somewhat over the forecast horizon, partly as a result of rising import prices and some firming of gains in nominal labor compensation in persistently tight labor markets that would not be fully offset by productivity growth.

In the Committee's discussion of current and prospective economic developments, members commented, as they had at earlier meetings, that they saw little evidence of any slowing in the rapid expansion of domestic economic activity, but they also saw few signs to date of significant acceleration in inflation. The growth in aggregate demand continued to display remarkable vigor, evidently driven by high levels of consumer and business confidence and accommodative financial markets. Large increases in imports were helping to satisfy the impressive growth in demand. At the same time, aggregate supply also continued to record strong gains amid indications of further acceleration in productivity. Looking ahead, however, members reiterated earlier concerns that aggregate demand could continue to grow faster than potential aggregate supply, even under optimistic assumptions regarding future productivity gains. Contributing to that continuing imbalance, the strengthening of most foreign industrial economies and the diminishing effects of the earlier appreciation of the dollar were likely to boost further foreign demand for U.S. output. The experience of recent years amply demonstrated, however, that the extent to which prospective growth in demand might exceed further expansion in the

economy's potential and the implications for inflation were subject to a wide range of uncertainty as to both degree and timing. Nonetheless, given the persistence of rapid growth in aggregate demand beyond growth in aggregate supply and very tight conditions in labor markets, the members continued to be concerned about the risks of rising inflation.

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

advances in stock market prices seemed likely to sustain relatively strong consumer spending for some period of time.

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

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

The improved economic outlook for most of the nation's important trading partners, in association with the fading effects of the dollar's earlier apprecia-

tion, pointed to faster expansion in exports, and recent anecdotal reports were broadly consistent with such a development. Growth in imports was expected to moderate over time, though imports currently were still rising rapidly. Even so, prospective developments in the foreign trade sector were not likely to provide much relief to demand pressures on the U.S. economy.

With regard to the outlook for inflation, members saw little evidence to date of any acceleration in core inflation, and unit costs for nonfinancial corporations were unchanged in the fourth quarter. Despite such welcome developments, members expressed concern about indications of a less benign inflation climate. The direct and indirect effects of higher fuel prices, the rise in other import prices, increasing medical costs, and some deterioration in surveys of inflation expectations could begin to show through to higher underlying inflation. More fundamentally, however, the members believed that current growth in aggregate demand, should it persist, would continue to exceed the expansion of potential output and, by putting added pressure on already tight labor markets, would at some point foster inflationary imbalances that would undermine the economic expansion.

In the Committee's discussion of policy for the intermeeting period ahead, all the members endorsed a proposal to tighten reserve conditions by a slight amount consistent with an increase in the federal funds rate to a level of 6 percent. Persisting strength in aggregate domestic demand had been accommodated thus far without a pickup in underlying inflation because of the remarkable acceleration in productivity and because of two safety valves—the economy's ability to draw on the pool of available workers and to finance the rapid growth in imports relative to

exports. However, a further acceleration in productivity was unlikely to boost the economy's growth potential sufficiently to satisfy the expansion in aggregate demand without some slowing in the latter. In addition, the two safety valves could not be counted on to work indefinitely. In these circumstances, the members saw substantial risks of rising pressures on labor and other resources and of higher inflation that called for some further firming of monetary policy at this meeting. They agreed, though, that because a significant acceleration in inflation did not appear to be imminent and because uncertainties continued to surround the economic outlook, a gradual approach to policy adjustments was warranted. Some members commented that, although a more forceful policy move of 50 basis points might be needed at some point, measured and predictable policy tightening moves, such as the one contemplated today, still were desirable in current circumstances, which included somewhat unsettled financial markets.

Looking ahead, the Committee would continue to assess the need for further tightening to contain inflation. Even after taking account of the lagged effects of the considerable tightening that already had been implemented since mid-1999, additional tightening might well be needed to ensure that financial conditions would adjust sufficiently to bring aggregate demand into better balance with potential supply and thereby counter a possible escalation of pressures on labor costs and prices. The members agreed that the press statement to be issued shortly after this meeting should continue to highlight their view that even after today's tightening move the risks would remain tilted toward heightened inflation pressures.

At the conclusion of this discussion, the Committee voted to authorize and

direct the Federal Reserve Bank of New York, until it was instructed otherwise, to execute transactions in the System account in accordance with the following policy directive:

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

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

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

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

The meeting was recessed briefly after this vote, and the members of the Board of Governors left the room to vote on increases in the discount rate that were pending at several Federal Reserve Banks. On the Board members' return, Chairman Greenspan announced that the Board had approved a $\frac{1}{4}$ percentage point increase in the discount rate to a level of $5\frac{1}{2}$ percent. The Committee concluded its meeting with a review of the press release announcing the joint policy action.

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

The meeting adjourned at 12:50 p.m.

Donald L. Kohn
Secretary

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

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

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

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

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

Messrs. Rives and Stone, First Vice
Presidents, Federal Reserve Banks
of St. Louis and Philadelphia
respectively

Messrs. Hakkio, Hunter, Lacker, Lang,
Rasche, Rolnick, and Rosenblum,
Senior Vice Presidents, Federal
Reserve Banks of Kansas City,
Chicago, Richmond, Philadelphia,
St. Louis, Minneapolis, and Dallas
respectively

Messrs. Bentley and Kopcke,
Vice Presidents, Federal Reserve
Banks of New York and
Boston respectively

By unanimous vote, the minutes of
the meeting of the Federal Open Market
Committee held on March 21, 2000,
were approved.

The Manager of the System Open
Market Account reported on recent
developments in foreign exchange mar-
kets. There were no open market opera-
tions in foreign currencies for the Sys-
tem's account in the period since the
previous meeting, and thus no vote was
required of the Committee.

Mr. Beebe, Ms. Cumming,
Messrs. Eisenbeis, Howard,
Lindsey, Reinhart, Simpson,
Sniderman, and Stockton,
Associate Economists

Mr. Fisher, Manager, System Open
Market Account

The Manager also reported on developments in domestic financial markets and on System open market transactions in government securities and federal agency obligations during the period March 21, 2000, through May 15, 2000. The Committee ratified these transactions by unanimous vote.

With Mr. Broaddus dissenting, the Committee voted to extend for one year beginning in mid-December 2000 the reciprocal currency ("swap") arrangements with the Bank of Canada and the Bank of Mexico. The arrangement with the Bank of Canada is in the amount of \$2 billion equivalent and that with the Bank of Mexico in the amount of \$3 billion equivalent. Both arrangements are associated with the Federal Reserve's participation in the North American Framework Agreement, which was established in 1994. Mr. Broaddus dissented because he believed that the swap lines existed primarily to facilitate foreign exchange market intervention, and he was opposed to such intervention for the reasons he had expressed at the February meeting.

The Manager discussed some aspects of a suggested approach to the management of the System's portfolio over coming quarters prior to the Committee's receipt and review of an ongoing study relating to the conduct of open market operations in a period of substantial declines in outstanding Treasury debt. During that interim, the management of the System portfolio should try to satisfy a number of objectives: keeping the maturity of the portfolio from lengthening materially; meeting long-run reserve needs to the extent possible through outright purchases of Treasury securities without distorting the yield curve or impairing the liquidity of the market; and concentrating expansion of the System portfolio in "off-the-run"

securities in the secondary market to help to maintain liquid markets in benchmark securities. It was important to announce a strategy that would allow market participants to take the System's operations into account as they adapted to the declining Treasury debt levels. While no specific blueprint could be given at this point regarding future Desk operations, the members encouraged the Manager to discuss his plans with Treasury officials.

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

The information reviewed at this meeting suggested that economic growth had remained rapid through early spring. Consumer spending and business fixed investment were still trending upward strongly, and housing demand was holding at a high level. Industrial production and nonfarm payrolls were expanding briskly in response to burgeoning domestic demand, but the strength of demand was also showing through in the form of rising imports. Labor markets continued to be very tight, and some measures of labor costs and price inflation showed signs that they might be picking up.

Employment surged in March and April. Part of the pickup resulted from a step-up in government hiring of census workers, but gains in private employment were very large over the two months. Job growth in retail trade and services was robust, and employment in manufacturing and construction trended higher. The civilian unemployment rate dropped in April to 3.9 percent, a thirty-year low.

Industrial production accelerated in April after a strong gain in the first quarter. Manufacturing, notably in high-tech industries, led the way, but growth

in mining and utilities also was sizable. The pickup in manufacturing lifted the factory operating rate further, and capacity utilization in April was about equal to its long-term average.

Consumer spending increased very rapidly in the first quarter but apparently decelerated early in the second quarter. Nominal retail sales were down slightly in April after brisk gains in February and March. Sales slumped at durable goods stores and changed little at nondurable goods outlets. However, the underlying trend in spending remained strong as a result of robust expansion of disposable incomes, the large accumulated gains in household wealth, and very positive consumer sentiment.

Residential housing activity stayed at an elevated level in April; total private housing starts edged higher while starts of multifamily units partially reversed a sharp drop in March. Sales of both new and existing single-family homes rose in March (latest data). The persisting strong demand for housing during a period of rising mortgage rates apparently was being underpinned by the rapid growth of jobs and the accumulated gains in stock market wealth.

Business fixed investment was up sharply in the first quarter after a sluggish performance late last year. The pickup encompassed both durable equipment and software and nonresidential structures. Shipments of computing and communications equipment surged following the century rollover, and shipments of other non-aircraft capital goods recorded an unusually large rise as well. Moreover, the recent strength in orders for many types of equipment pointed to further advances in capital spending in coming months. Expenditures for nonresidential structures, which had turned up last autumn, rose rapidly in the first quarter; unusually favorable weather over the two quarters likely was a con-

tributing factor. The upturn in nonresidential building activity was spread broadly across the major types of structures.

The pace of accumulation of manufacturing and trade inventories slowed somewhat in the first quarter following a sizable buildup in late 1999, and the aggregate inventory-sales ratio edged down from an already very low level. Stockbuilding by manufacturers and merchant wholesalers picked up slightly in the first quarter, but stocks remained at low levels in relation to sales. By contrast, inventory investment slowed among retailers. Part of this slowdown might have involved a liquidation of precautionary stocks built up in anticipation of the century date change. The inventory-sales ratio in this sector was at a historically lean level.

The U.S. trade deficit in goods and services reached another new high in February as the value of imports rose sharply further and the value of exports changed little. For the January–February period, the moderate rise in exports and the sharp increase in imports from fourth-quarter levels were spread across most major trade categories. The available information suggested that economic expansion remained robust in most foreign industrial economies. The recent decline in the exchange value of the euro was spurring economic activity in the euro area, and Canada was benefiting from spillovers from the U.S. economy. For the Japanese economy, which had been the notable exception among the foreign industrial economies, there were indications of some strengthening of aggregate demand during the first five months of the year. Economic activity in the developing countries also continued to pick up. Key South American countries were recovering from recent recessions, while several Asian emerging-market coun-

tries were settling into growth at more sustainable rates.

Recent information suggested that price inflation might be picking up slightly and only partly as a direct result of increases in energy prices. Although consumer prices were unchanged in April, they recorded sizable step-ups in February and March; moreover, while the rise in core consumer prices over the twelve months ended in April was the same as the change in the year-earlier twelve-month period, core consumer price inflation was up slightly in the March–April period compared with other recent months. At the producer level, prices of finished goods other than food and energy edged higher in March and April, but the increase over the twelve months ended in February was a little smaller than the rise over the preceding twelve months. With regard to labor costs, the employment cost index for hourly compensation of private industry workers registered a larger advance in the first quarter than in previous quarters, and the rate of increase in compensation over the year ended in March was substantially larger than the rise over the year-earlier period. Faster growth in benefits accounted for more than half of the acceleration. Average hourly earnings of production or non-supervisory workers grew at a slightly faster rate in April than in March, and the increase for the twelve months ended in April was larger than for the previous twelve-month period.

At its meeting on March 21, 2000, the Committee adopted a directive that called for a slight tightening of conditions in reserve markets consistent with an increase of $\frac{1}{4}$ percentage point in the federal funds rate to an average of about 6 percent. The members saw substantial risks of rising pressures on labor and other resources and of higher inflation, and they agreed that the tightening

action would help bring the growth of aggregate demand into better alignment with the sustainable expansion of aggregate supply. They also noted that even with this additional firming the risks were still weighted mainly in the direction of rising inflation pressures and that more tightening might be needed.

Open market operations during the intermeeting period were directed toward implementing the desired slightly tighter pressure on reserve positions, and the federal funds rate averaged very close to the Committee's 6 percent target. The Committee's action and its announcement were widely anticipated and had little initial effect on financial markets. Later in the week, however, market interest rates moved up in response to the release of the minutes of the February meeting and the mention therein of some sentiment for a larger policy tightening than had been undertaken. Subsequently, interest rates fell as stock prices tumbled over the first half of April, when investors seemed to revise downward their assessments of equity valuations, especially those of more speculative technology shares that previously had risen considerably. Interest rates more than reversed those declines, however, when stock prices began to level out and incoming data suggested that aggregate demand continued to expand faster than potential supply and that wage and price developments were becoming more worrisome. On balance over the intermeeting period, private interest rates moved up appreciably while Treasury yields increased somewhat less. Most major indexes of equity prices declined significantly over the intermeeting period.

In foreign exchange markets, the trade-weighted value of the dollar appreciated considerably over the intermeeting period against a basket of major currencies, reflecting in part the larger

intermeeting increase in U.S. long-term yields relative to rates in most foreign industrial countries. The dollar's rise against the euro was sizable, but the dollar also made moderate gains against the British pound, the Japanese yen, and the Canadian dollar. The dollar also appreciated somewhat against the currencies of a group of other important trading partners, notably the Mexican peso and the Brazilian *real*.

Growth of M2 picked up further in April from its already strong pace in March, as households boosted their liquid balances to meet higher-than-usual levels of final payments on 1999 taxes. In contrast, M3 growth slowed considerably in April after a robust March advance. From the fourth quarter of 1999 through April, M2 and M3 expanded at rates well above the upper ends of their annual ranges for 2000. Total domestic nonfinancial debt continued to expand at a pace in the upper portion of its range.

The staff forecast prepared for this meeting continued to suggest that the expansion would gradually moderate from its currently elevated pace to a rate around, or perhaps a little below, the growth of the economy's estimated potential. The expansion of domestic final demand increasingly would be held back by the anticipated waning of positive wealth effects associated with earlier large gains in equity prices and by higher interest rates. As a result, the growth of spending on consumer durables and houses was expected to slow; in contrast, however, overall business investment in equipment and software was projected to remain robust, partly because of the upward trend in replacement demand, especially for computers and software. In addition, continued solid economic growth abroad was expected to boost the growth of U.S. exports for some period ahead. Core

price inflation was projected to rise noticeably over the forecast horizon, partly as a result of higher import prices and some firming of gains in nominal labor compensation in persistently tight labor markets that would not be fully offset by productivity growth.

In the Committee's review of current and prospective economic and financial developments, members focused on persisting indications that aggregate demand was expanding more rapidly than potential supply and that pressures on labor and other producer resources were continuing to increase. While there were tentative signs that the growth of demand might be moderating in some key sectors of the economy, such as retail sales and housing, clear-cut evidence of any significant deceleration in the rapid growth of aggregate demand was lacking. Bond yields and other financial conditions had firmed to some extent recently, but those adjustments had been influenced by the buildup in market expectations of more monetary policy tightening. In the absence of further monetary restraint, any slowing over coming quarters was not viewed as likely to be sufficient to avert increasing pressures on the economy's already strained resources and rising inflation rates that would undermine the economy's remarkable performance. Adding to concerns about heightened inflation pressures was statistical and anecdotal evidence that could be read as suggesting that underlying inflation already was beginning to pick up. Unit costs, however, were still remarkably subdued, and members saw no developments at this stage that might augur a sharp near-term deterioration in price inflation.

In their assessment of business conditions across the country, members commented on continuing indications of robust economic activity in all regions and widely increasing pressures on labor

and other resources. Indeed, economic activity appeared to have grown appreciably further from already elevated levels in numerous parts of the country, although the latest regional data and anecdotal reports provided scattered indications that business conditions might be starting to soften in some areas. In this regard, members referred to the emergence of slightly more cautious attitudes on the part of some business executives concerning the prospects for their industries.

With respect to developments in key expenditure sectors of the economy, growth in consumer spending was expected to slow from the exceptional pace of the first quarter, though still likely to be relatively robust. Retail sales had edged lower in April, but members commented that it was too early to gauge whether this softening was a harbinger of a more moderate trend. Consumer sentiment had remained upbeat in the context of an extended period of sizable expansion in employment and incomes and the sharp rise in stock market prices over the course of recent years. Some members observed that the slightly less ebullient consumer behavior recently might have been influenced to some extent by the volatility and downward movement in the stock market over the course of the past several weeks. Higher financing costs probably were also beginning to play a role. Looking ahead, the experience of recent years amply demonstrated the difficulty of forecasting the performance of the stock market. The failure of further large increases to materialize, should that occur, would over time imply a more neutral or even a negative net impact from wealth once the positive effects of the earlier advance had played themselves out, but the latter would take some time.

The same background factors were likely to govern the prospective behavior of housing activity. The evidence of a downturn in homebuilding was still quite marginal, but some anecdotal reports suggested that higher mortgage rates were starting to exert a retarding influence on housing demand. Even so, members continued to identify areas of remarkable strength across the nation, and overall housing construction remained at an elevated level. On the assumption of further growth in jobs and incomes in line with current forecasts and absent markedly higher mortgage financing costs, housing activity might reasonably be expected to settle at a level a bit below recent highs.

Business investment spending retained strong upward momentum, though it had exhibited an uneven growth pattern in recent quarters that importantly reflected Y2K effects. Looking ahead, further rapid growth was expected in spending for business equipment and software in light of likely ongoing efforts to hold down costs by substituting capital embodying advanced technology for scarce labor resources. Recent order trends and rising capacity utilization rates were consistent with this expectation. Expenditures on nonresidential structures and other construction generally had strengthened in recent months, and members expected them to be well maintained in part because of heavy spending on roads and other public projects by state and local governments.

The foreign trade sector of the economy was projected to provide less of a safety valve for the accommodation of domestic demand going forward. Although a number of foreign nations continued to face political and economic problems, the strengthening economies of many U.S. trading partners would tend to limit the availability of excess

foreign production capacity to help meet the growth in U.S. demand. At the same time, foreign demand for U.S. goods and services would be expanding, thereby adding to demand pressures on U.S. producer resources, other things equal. In the latter regard, several members mentioned anecdotal evidence of growing export demand for a variety of domestic products.

In their discussion of the outlook for inflation, the members focused on statistical and anecdotal indications of further tightening of labor resources, acceleration in some measures of labor compensation, and early signs of a possible upturn in underlying price inflation. Data on employment, reinforced by anecdotal commentary from around the country, continued to provide evidence of extremely tight labor markets, which at least in some parts of the country appeared to have tightened further since early in the year. Business contacts spoke of spending a great deal of time and expense to attract and retain workers while concomitantly persisting in efforts to improve the productivity of their operations to accommodate burgeoning growth in demand in the face of labor force constraints. There were more reports that rising wages and benefits and increasing costs of nonlabor inputs could no longer be fully offset by improvements in productivity, and more business firms appeared to be attempting or considering increases in their selling prices to maintain or improve their profit margins. However, their ability to set higher prices, or at least to raise them significantly, continued to be severely constrained by the persistence of strong competition across much of the economy. Indeed, examples of successful efforts to mark up prices, which tended to be concentrated in products using oil-related inputs, were still the exception. Even so, the members

believed that the risks of acceleration in core prices were now appreciably higher given current trends in aggregate demand, pressures on resources, and developments in foreign economies.

In the Committee's discussion of policy for the intermeeting period ahead, all the members endorsed a proposal to tighten reserve conditions sufficiently to raise the federal funds rate by $\frac{1}{2}$ percentage point to a level of $6\frac{1}{2}$ percent. A more forceful policy move than the 25 basis point increases that had been implemented since mid-1999 was desirable in light of the extraordinary and persisting strength of overall demand, exceeding even the increasingly rapid growth of potential supply, and the attendant indications of growing pressures in already tight markets for labor and other resources. The strength in demand might itself be, at least in part, the result of the ongoing acceleration of productivity, with the latter feeding back on demand through higher equity prices and profitable investment opportunities. Financial markets seemed to have recognized the need for real interest rates to rise further under these circumstances, and while market assessments were not always correct, the evidence suggested that a more substantial tightening at this meeting was needed to limit inflation pressures. The members saw little risk in a relatively aggressive policy move, given the strong momentum of the expansion and widespread market expectations of such a move. The greater risk to the economic expansion at this point was for policy to be too sluggish in adjusting, thereby allowing inflationary disturbances and dislocations to build. A 50 basis point adjustment was more likely to help forestall a rise in inflationary expectations that, at least in the opinion of some members, already showed signs of worsening. A widespread view that the Federal

Reserve would take whatever steps were needed to hold down inflation over time probably had contributed to the persistence of subdued long-run inflation expectations during an extended period when rapidly rising demand was pressing on limited supply resources. Today's policy move would undergird such relatively benign expectations and help ensure the success of the Committee's policy.

The members agreed that the balance of risks sentence that would be included in the press statement to be released shortly after this meeting should indicate, as it had for other recent meetings, that even after today's tightening action the members believed the risks would remain tilted toward rising inflation. This view of the risks was based primarily on the persisting momentum of aggregate demand growth and the unusually high level of labor resource utilization. At the same time, a number of the members commented that they did not want to prejudge the potential extent or pace of future policy tightening and that the Committee should continue to assess the need for further policy moves in the light of evolving economic conditions to be reviewed on a meeting-by-meeting basis.

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

The Federal Open Market Committee seeks monetary and financial conditions that will foster price stability and promote sustainable growth in output. To further its long-run objectives, the Committee in the immediate future seeks conditions in reserve markets consistent with increasing the federal funds rate to an average of around 6½ percent.

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

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

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

It was agreed that the next meeting of the Committee would be held on Tuesday–Wednesday, June 27–28, 2000.

The meeting adjourned at 1:05 p.m.

Donald L. Kohn
Secretary

Meeting Held on June 27–28, 2000

A meeting of the Federal Open Market Committee was held in the offices of the Board of Governors of the Federal Reserve System in Washington, D.C., on Tuesday, June 27, 2000, at 2:30 p.m. and continued on Wednesday, June 28, 2000, at 9:00 a.m.

Present:

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

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

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

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

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

Mr. Fisher, Manager, System Open Market Account

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

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

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

Mr. Porter,⁵ Deputy Associate Director, Division of Monetary Affairs, Board of Governors

Messrs. Freeman,⁶ Oliner,⁷ Struckmeyer, Whitesell, and Ms. Zickler,⁶ Assistant Directors, Divisions of International Finance, Research and Statistics, Research and Statistics, Monetary Affairs, and Research and Statistics respectively, Board of Governors

Mr. Reischneider,⁵ Section Chief, Division of Research and Statistics, Board of Governors

Mr. Bomfim⁶ and Ms. Garrett, Economists, Division of Monetary Affairs, Board of Governors

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

Ms. Pianalto and Mr. Stone, First Vice Presidents, Federal Reserve Banks of Cleveland and Philadelphia respectively

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

Messrs. Altig, Fuhrer, Judd, Ms. Perelmuter, and Mr. Weber, Vice Presidents, Federal Reserve Banks of Cleveland, Boston, San Francisco, New York, and Minneapolis respectively

By unanimous vote, the minutes of the meeting of the Federal Open Market Committee held on May 16, 2000, were approved.

By unanimous vote, David J. Stockton was elected to serve as economist until the election of his successor at the first meeting of the Committee after December 31, 2000, with the understanding that in the event of the discontinuance of his official connection with the Board of Governors he would cease to have any official connection with the Federal Open Market Committee.

The Manager of the System Open Market Account reported on recent developments in foreign exchange markets. There were no open market operations in foreign currencies for the Sys-

5. Attended portion of meeting relating to the Committee's discussion of the economic outlook.

6. Attended portion of meeting relating to the Committee's longrun policy.

7. Attended Wednesday session only.

tem's account in the period since the previous meeting, and thus no vote was required of the Committee.

The Manager also reported on developments in domestic financial markets and on System open market transactions in government securities and federal agency obligations during the period May 16, 2000, through June 27, 2000. By unanimous vote, the Committee ratified these transactions.

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

The information reviewed at this meeting suggested that the economic expansion was moderating somewhat from a very rapid pace in the first quarter. Consumer spending was increasing only modestly after large gains earlier, housing activity was down somewhat, and growth of business spending on capital equipment, while still quite vigorous, was slowing a little after a first-quarter surge. As a consequence, industrial production and employment were rising at somewhat reduced rates. Core consumer prices continued to evidence some acceleration, to an important extent reflecting some indirect effects of the sharp increase in oil prices over the past year.

Nonfarm payroll employment increased further in May, although the rise was associated with a surge in government hiring of census workers that more than offset a considerable contraction in private payrolls. The drop in private employment following very large gains in March and April seemed, in the absence of other signs of weakening labor demand, to be attributable at least to some extent to statistical noise and seasonal adjustment problems. Averaging over the three months, private nonfarm employment advanced at about the rate of the previous twelve

months. The civilian unemployment rate averaged 4.0 percent over April and May.

Industrial production continued to rise in May after a brisk increase in April, but the average gain for April and May was somewhat below the average monthly advance during the two previous quarters. Manufacturing output climbed at a slower rate in the April-May period, reflecting less rapid growth in the production of high-tech equipment and sluggish output of other non-automotive equipment. The further step-up in manufacturing activity lifted capacity utilization a little further, bringing it still closer to its long-term average.

Growth of consumer spending apparently slowed considerably in the second quarter after outsized gains in several previous quarters. Nominal retail sales declined in both April and May; outlays fell at durable goods outlets and edged up at nondurable goods stores. Despite the recent weakness, however, continued solid expansion of disposable incomes, the large accumulated gains in household wealth, and very positive consumer sentiment suggested that underlying fundamentals behind household spending remained favorable.

Higher mortgage rates apparently were exerting a restraining effect on residential housing activity. Total private housing starts fell in May to their lowest level since the middle of last year. Moreover, while sales of new single-family homes had not yet slackened appreciably through April (latest data), sales of existing homes through May were running below their 1999 average. In addition, consumers' assessments of homebuying conditions and builders' ratings of new home sales had weakened significantly.

Business fixed investment appeared to be on track for another rapid increase

in the second quarter. Shipments of non-defense capital goods, notably computing and communications equipment, continued on a strong uptrend in May, and the persisting strength in orders for many types of equipment pointed to further advances in coming months. Outlays for nonresidential structures, which had been weak in 1999, rose sharply in the first quarter and recorded a further appreciable gain in April.

The book value of manufacturing and trade inventories increased in April at about the first-quarter pace. Stockbuilding was generally in line with sales, and aggregate inventory-sales ratios for the manufacturing, wholesale, and retail sectors remained near the bottom of their ranges for the preceding twelve months. There were few indications across industries of significant inventory imbalances.

The U.S. trade deficit in goods and services for April was very close to its March level. However, the deficit was up appreciably from its average for the first quarter, with the value of imports increasing substantially more than the value of exports. The available information indicated robust economic growth in all major regions of the world thus far this year. Economic activity in the foreign industrial countries expanded vigorously in the first quarter, and growth generally appeared to be continuing at a strong pace in the second quarter. In addition, the available information suggested that a number of emerging-market economies had registered very rapid expansion thus far this year.

Recent information continued to indicate that consumer price inflation had picked up, while producer price inflation was essentially unchanged. Consumer prices edged up in May after having been unchanged in April; excluding the food and energy components, consumer prices rose moderately further in May.

For the twelve months ended in May, both total and core consumer prices increased somewhat more than in the previous twelve-month period. At the producer level, prices of finished goods other than food and energy edged higher in April and May and rose during the twelve months ended in May by the same moderate amount recorded for the previous twelve-month period. With regard to labor costs, average hourly earnings of production or nonsupervisory workers registered only a slight increase in May after a somewhat larger rise in April. The advance for the twelve months ended in April was about the same as that for the previous twelve-month period.

At its meeting on May 16, 2000, the Committee adopted a directive that called for a tightening of conditions in reserve markets sufficient to raise the federal funds rate $\frac{1}{2}$ percentage point, to a level of $6\frac{1}{2}$ percent. The members noted that the relatively forceful move was necessary given the persisting growth of aggregate demand in excess of the expansion of potential supply, which was creating rising pressures in already tight markets for labor and other resources. In their view, this action would help bring aggregate demand into better alignment over time with potential supply and thereby work to forestall the emergence of inflationary expectations and the buildup of inflationary pressures. They also noted that even with this additional firming, the risks were still weighted mainly in the direction of rising inflationary pressures.

Open market operations during the intermeeting period were directed toward implementing the desired increased pressure on reserve positions, and the federal funds rate averaged very close to the Committee's $6\frac{1}{2}$ percent target. The Committee's action and its announcement surprised markets only a

little, and bond and stock prices edged a bit lower. Markets grew increasingly uneasy over the next few weeks as incoming data suggested the possible need for further substantial policy tightening, which could have adverse effects on corporate earnings. These concerns apparently contributed to sharp further declines in equity prices and to widening risk spreads on corporate bonds. Subsequently, debt and equity markets rebounded in response to a series of U.S. economic data releases that were viewed as signaling a moderation in aggregate demand and a continuation of limited cost and price pressures, and thus a reduced probability of additional monetary tightening. On balance over the intermeeting interval, yields on longer-term Treasury securities and investment-grade corporate bonds declined appreciably, and most broad stock price indexes ended the period little changed.

In foreign exchange markets, the trade-weighted value of the dollar depreciated somewhat over the intermeeting period against an index of major currencies. Decreases in longer-term U.S. interest rates weighed on the dollar, and the dollar's decline against the euro also occurred against the background of indicators of accelerating activity in the euro area and possible further monetary tightening. Frequent hints that the Bank of Japan might abandon its zero policy rate might have contributed to the dollar's weakness against the yen. By contrast, the dollar strengthened a little against the currencies of a group of other important trading partners, notably the currencies of Mexico, Indonesia, and the Philippines.

M2 and M3 appeared to have rebounded in June following the clearing in May of unusually large final personal tax payments for 1999. The expansion of these aggregates likely had been held down somewhat this year by slug-

gish currency growth in the aftermath of the century date change and by the increase in the opportunity cost of their liquid components associated with rising market interest rates. Nevertheless, supported by rapid growth in nominal spending and income, M2 evidently had expanded over the first half of the year at a rate close to that in 1999, and M3 had expanded at a faster rate than last year. Strong demands for bank credit, funded by the issuance of large time deposits and other liabilities not included in M2, underlaid the acceleration in M3.

The staff forecast prepared for this meeting continued to suggest that the economic expansion would moderate gradually from its currently elevated pace to a rate around or perhaps a little below the growth of the economy's estimated potential. The expansion of domestic final demand increasingly would be held back by the anticipated waning of positive wealth effects associated with earlier large gains in equity prices and by higher interest rates; as a result, growth of spending on consumer durables and houses was expected to slow further. By contrast, business fixed investment, notably purchases of equipment and software, was projected to remain robust, and continued solid economic growth abroad would boost the growth of U.S. exports for some period ahead. Core price inflation was projected to rise noticeably over the forecast horizon, partly as a result of higher import prices and some firming of gains in nominal labor compensation in persistently tight labor markets that would not be fully offset by productivity growth.

In the Committee's discussion of current and prospective economic developments, members cited evidence of slower expansion in economic activity in recent months. In particular, consumer spending had decelerated notice-

ably, especially for housing and motor vehicles, but the members agreed that the eventual extent and duration of the slowing in overall economic growth were subject to substantial uncertainty. A number of factors supported a projection of considerably more moderate expansion going forward in relation to the overly rapid pace in the second half of 1999 and early 2000, including the likelihood that much of the effect on spending of the rise in interest rates and leveling out in equity prices this year had not yet been felt. Nevertheless, the indications of slowing economic expansion were still tentative. Some sectors of the economy, such as business fixed investment, continued to display substantial vigor, and the members could not be confident that growth would not rebound to a clearly unsustainable pace, as had occurred previously in this expansion. With regard to inflation, members observed that steep increases in energy prices had boosted overall rates of inflation somewhat, and in addition the higher energy prices likely had contributed indirectly to the rise in core measures of inflation. A number of members also were concerned that rising core inflation could be generated increasingly from unsustainably tight labor markets, and they noted that labor costs would need to be monitored closely even if growth in demand slowed sufficiently to keep levels of resource utilization about unchanged. To date, however, rising productivity growth had contained labor cost pressures, and despite the moderation in the expansion of activity, there were no early signs of any slowing in the growth of productivity.

In preparation for a report to Congress, the members of the Board of Governors and the presidents of the Federal Reserve Banks provided individual projections of the growth of nominal and

real GDP, the rate of unemployment, and the rate of inflation for the years 2000 and 2001. With regard to the growth of nominal GDP, most of the forecasts were in ranges of $6\frac{1}{4}$ to $6\frac{3}{4}$ percent for 2000 as a whole and $5\frac{1}{2}$ to 6 percent for 2001. The forecasts of the rate of expansion in real GDP had a central tendency of 4 to $4\frac{1}{2}$ percent for 2000, suggesting a noticeable deceleration in the second half of the year, and were centered on a range of $3\frac{1}{4}$ to $3\frac{3}{4}$ percent for 2001. The civilian rates of unemployment associated with these forecasts had central tendencies of about 4 percent in the fourth quarter of 2000 and 4 to $4\frac{1}{4}$ percent in the fourth quarter of 2001. Forecasts of the rate of inflation were shaped importantly by the projected pattern of energy prices; for this year the forecasts, as measured by the chain-type price index for personal consumption expenditures, were centered on a range of $2\frac{1}{2}$ to $2\frac{3}{4}$ percent before dropping back to a range of 2 to $2\frac{1}{2}$ percent in 2001.

In their assessment of business conditions in different parts of the country, the presidents of the Federal Reserve Banks commented on indications of some slowing in the expansion of regional economic activity in a majority of the districts, though several emphasized that the available information pointed to only slight moderation to date. This slowing and the cumulative effects of the firming in financial conditions this year had been accompanied by an increasing number of anecdotal reports of more cautious business sentiment.

In their comments on developments in key sectors of the economy nationwide, the members reported on statistical and anecdotal indications that growth in consumer spending had slowed appreciably in recent months from the unusually robust pace seen in

late 1999 and early this year. A number of factors that might account for the moderation could also point to the possible extension of the less robust trend. Those factors included gradually waning wealth effects associated with the absence of further large gains in stock market prices; rising levels of consumer debt; the loss of consumer purchasing power stemming from higher energy prices; and the large cumulative buildup of consumer stocks of motor vehicles and other durables. Still, the data on retail sales were volatile and often revised significantly; some of the recent moderation in spending might have reflected a pause following the surge in demand during atypically favorable weather conditions over the winter months; and the pace of purchases could pick up again. While the course of consumer spending remained uncertain, members concluded that, in the context of relatively high levels of consumer confidence and sizable projected gains in jobs and incomes, slower but still solid expansion in consumer expenditures was most likely to occur over coming quarters.

The housing market also provided clear evidence of weakening demand. The slowdown evidently reflected the effects of higher mortgage interest rates on a growing number of homebuyers and probably also the diminishing wealth effects of the earlier run-up in stock prices and the cumulatively large additions to the stock of housing in the economy. The sluggish tone of the housing data was confirmed by anecdotal reports of slowing residential sales and building activity in most parts of the country. Despite these developments, sizable building backlogs in many areas, the outlook for continuing growth in consumer incomes, and still favorable consumer sentiment were likely to support substantial homebuilding activity,

albeit at a reduced level. At least in some parts of the country, firms supplying building materials and home furnishings were beginning to feel the retarding effects of the slowdown in the housing market.

After a surge early in the year that evidently reflected in part investment spending delayed by Y2K concerns, growth in business fixed investment had moderated in recent months but was expected to remain quite robust over the next several quarters. New orders for many types of business equipment had remained strong, order backlogs had continued to build, and it was clear that business executives still anticipated high rates of return on their new investments. As a result, business investment spending could be expected to remain elevated, at least over the nearer term and especially for high-tech equipment and software. At the same time, members cited anecdotal indications of the emergence of a more cautious tone in the business community, evidently associated in part with less favorable financial conditions in debt and equity markets and possibly auguring more substantial cutbacks in business investment over time should growth in personal consumption outlays be sustained on a considerably slower trend.

Strengthening economic activity in many of the nations that are important U.S. trading partners was reflected in expanding exports, and several members provided anecdotal confirmation of growing foreign markets for many U.S. goods and services. While expanding export markets were a welcome development from the perspective of many domestic businesses, they would add to overall demand pressures on U.S. producer resources at a time when the latter were already operating at very high levels.

With regard to the outlook for inflation, members gave considerable attention to the somewhat faster increases in broad price measures over the past year, but they differed to some extent regarding the prospects for further increases in inflation. It was generally agreed that developments relating to energy would continue to exert upward pressure on prices over the near term, including the pass-through or indirect effects of higher oil prices on core measures of inflation. Looking beyond the near term, a number of members, noting that core measures of consumer prices had been rising more rapidly this year, were concerned that these prices might well continue to accelerate gradually, even assuming that economic expansion would be sustained at a pace close to the economy's potential. In this view, labor markets were already operating at levels of utilization that were likely eventually to produce rising labor costs that would be passed through to market prices even if productivity growth remained high or rose somewhat further. Other members were more optimistic that core inflation might be contained near current levels. The recent increase in core inflation could largely reflect the indirect effects of the rise in energy prices. To date, unit labor costs had been quite subdued, leaving open the question of what was a sustainable level of labor resource use. Rising productivity was likely to continue to restrain unit labor costs to a degree, and product markets remained highly competitive. However, even these members saw considerable inflation risks should the slowdown in aggregate demand fail to be sustained, and the members generally agreed that for the foreseeable future possible increases in underlying inflation remained the principal risk to the continued good performance of the U.S. economy.

In contrast to its earlier practice, the Committee at this meeting did not establish ranges for growth of money and debt in 2000 and 2001. The legal requirement to set and announce such ranges recently had expired, and the members did not view the ranges as currently serving a useful role in the formulation of monetary policy. Owing to uncertainties about the behavior of the velocities of money and debt, these ranges had not provided reliable benchmarks for the conduct of monetary policy for some years. Nevertheless, the Committee believed that the behavior of these aggregates retained value for gauging economic and financial conditions and that such behavior should continue to be monitored. Moreover, Committee members emphasized that they would continue to consider periodically issues related to their long-run strategy for monetary policy, even if they were no longer setting ranges for the money and debt aggregates.

In the Committee's discussion of policy for the intermeeting period ahead, all the members supported a proposal to maintain an unchanged policy stance consistent with a federal funds rate averaging about 6½ percent. The increasing though still tentative indications of some slowing in aggregate demand, together with the likelihood that the earlier policy tightening actions had not yet exerted their full retarding effects on spending, were key factors in this decision. The uncertainties surrounding the outlook for the economy, notably the extent and duration of the recent moderation in spending and the effects of the appreciable tightening over the past year, including the ½ percentage point increase in the intended federal funds rate at the May meeting, reinforced the argument for leaving the stance of policy unchanged at this meeting and weighing incoming data carefully. Sev-

eral members commented that a considerable amount of new information bearing on the prospective strength of the economy and the outlook for inflation would become available during the relatively long interval before the next meeting in August. Members generally saw little risk in deferring any further policy tightening move, particularly since the possibility that underlying inflation would worsen appreciably seemed remote under prevailing circumstances. Among other factors, inflation expectations had been remarkably stable despite rising energy prices, and real interest rates were already relatively elevated.

In their discussion of the balance-of-risks sentence in the press statement to be issued shortly after this meeting, all the members agreed that the latter should continue to express, as it had for every meeting earlier this year, their belief that the risks remained weighted toward rising inflation. Indications that growth in aggregate demand was moderating to a pace closer to that of potential supply were still partial and tentative, and labor markets remained unusually tight. Many Committee members noted that, based on the currently available information, additional firming of policy could well be needed at some point in the future, though a number also expressed the opinion that less tightening probably would be required than they had thought at the time of the May meeting. Several emphasized that the press release should not convey the impression that the Committee now viewed further policy tightening moves as an unlikely prospect.

At the conclusion of this discussion, the Committee voted to authorize and direct the Federal Reserve Bank of New York, until it was instructed otherwise, to execute transactions in the Sys-

tem Account in accordance with the following domestic policy directive:

The Federal Open Market Committee seeks monetary and financial conditions that will foster price stability and promote sustainable growth in output. To further its long-run objectives, the Committee in the immediate future seeks conditions in reserve markets consistent with maintaining the federal funds rate at an average of around 6½ percent.

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

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

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

It was agreed that the next meeting of the Committee would be held on Tuesday, August 22, 2000.

The meeting adjourned at 10:35 a.m.

Notation Vote

By notation vote completed on July 18, 2000, the Committee authorized Vice Chairman McDonough to accept the Legion of Honor to be awarded by the French government pursuant to a decision by the President of the French Republic.

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

In conformance with regulations of the Board of Governors of the Federal Reserve System pertaining to foreign decorations, the Board's Vice Chairman, Mr. Ferguson, authorized Chairman Greenspan to accept the same award from the French government.

Donald L. Kohn
Secretary

Meeting Held on August 22, 2000

A meeting of the Federal Open Market Committee was held in the offices of the Board of Governors of the Federal Reserve System in Washington, D.C., on Tuesday, August 22, 2000, at 9:00 a.m.

Present:

Mr. Greenspan, Chairman
Mr. McDonough, Vice Chairman
Mr. Broadbudd
Mr. Ferguson
Mr. Gramlich
Mr. Guynn
Mr. Jordan
Mr. Kelley
Mr. Meyer
Mr. Parry

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

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

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

Mr. Beebe, Ms. Cumming,
Messrs. Goodfriend, Howard,
Lindsey, Reinhart, Simpson, and
Sniderman, Associate Economists

Mr. Fisher, Manager, System Open
Market Account

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

Mr. Whitesell, Assistant Director,
Division of Monetary Affairs,
Board of Governors

Mr. Reischneider, Section Chief,
Division of Research and
Statistics, Board of Governors

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

Mr. Kumasaka, Assistant Economist,
Division of Monetary Affairs,
Board of Governors

Mr. Connolly, First Vice President,
Federal Reserve Bank of Boston

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

Mr. Sullivan, Vice President, Federal
Reserve Bank of Chicago

Mr. Tallman, Assistant Vice President,
Federal Reserve Bank of Atlanta

By unanimous vote, the minutes of
the meeting of the Federal Open Market
Committee held on June 27–28, 2000,
were approved.

The Manager of the System Open
Market Account reported on recent
developments in foreign exchange mar-
kets. There were no open market trans-
actions in foreign currencies for the Sys-
tem's account in the period since the

previous meeting, and thus no vote was required of the Committee.

The Manager also reported on developments in domestic financial markets and on System open market transactions in government securities and federal agency obligations during the period June 28, 2000, through August 21, 2000. By unanimous vote, the Committee ratified these transactions.

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

The information reviewed at this meeting suggested that economic activity was expanding at a more moderate pace than earlier in the year. Growth in consumer spending had slowed from the outsized gains seen earlier, and sales of new homes and motor vehicles were down appreciably from their earlier highs. However, business spending on equipment and software had continued to surge, and industrial production was still trending upward. Even though expansion in employment had slowed considerably in recent months, labor markets remained extremely tight by historical standards, and some measures of labor compensation had accelerated. With productivity also continuing to accelerate, unit labor costs had changed little and measures of core price inflation had increased only mildly.

Total nonfarm payroll employment dropped appreciably in July after a small increase in June. Much of the weakness over the two months reflected substantial declines in the number of temporary Census workers. In the private sector, payroll gains had diminished somewhat on balance since the first quarter. The slowdown was particularly large in the usually robust services sector. Manufacturing employment, by contrast, had risen on net since the early spring after a lengthy decline. The civilian unemploy-

ment rate remained at 4.0 percent in July.

Industrial production registered further gains in June and July. Persisting strength in manufacturing output was accompanied by brisk increases in mining activity and sizable declines in utilities services associated with cooler-than-normal temperatures. In manufacturing, production of high-tech equipment and most other types of business equipment remained robust, but the manufacture of motor vehicles and parts dropped substantially in July after a small June decline. The further step-up in overall manufacturing activity lifted capacity utilization to a rate around its long-term average.

Growth of nominal retail sales picked up appreciably in July after having slowed noticeably in the second quarter. Sales rose sharply at general merchandisers, furniture and appliance stores, and outlets for other durable goods. However, outlays at automotive dealers declined substantially. Growth in household expenditures for services eased somewhat in the second quarter (latest available data), with a drop in spending for brokerage services more than accounting for the slowdown. The recent deceleration in consumer spending occurred against the background of moderate growth of real disposable income in recent quarters and little net change in stock market valuations thus far this year. Nevertheless, consumer sentiment continued to be very buoyant.

With mortgage rates at levels well above their average for last year, total private housing starts fell further in June and July, reaching their lowest level since late 1997. Sales of new single-family homes also were weaker in June (latest data). By contrast, sales of existing homes picked up somewhat in June. Consumers' assessments of homebuying

conditions and builders' ratings of new home sales remained soft.

Growth of business fixed investment, while still robust, slowed considerably in the second quarter after having surged in the first quarter. Business spending on equipment and software continued to expand at its very rapid first-quarter pace; investment in high-tech equipment (notably computers and communications equipment), software, and industrial machinery was particularly strong. By contrast, outlays for nonresidential structures weakened in the second quarter after a first-quarter burst.

The book value of manufacturing and trade inventories jumped in the second quarter. Part of the pickup reflected large increases in stocks of motor vehicles at wholesalers and automotive dealerships that left inventory-sales ratios in the motor vehicle sector at relatively high levels. Elsewhere, stockbuilding was only a bit stronger than sales, and inventory-sales ratios generally remained within their relatively low ranges for the preceding twelve months.

The U.S. trade deficit in goods and services changed little in June from its May level, but the deficit for the second quarter as a whole was appreciably larger than its average for the first quarter. Both exports and imports grew rapidly last quarter, though the dollar value of imports increased significantly more than the value of exports. The available information indicated that economic expansion was vigorous in both foreign industrial countries and major developing countries in the second quarter, but recent information pointed to some slowing of growth in these countries.

Recent data suggested that price inflation had picked up slightly. Consumer prices, as measured in the CPI, jumped in June in response to a surge in energy prices but climbed only modestly further in July, when energy prices changed

little. Excluding the food and energy components, consumer prices rose moderately in both months. For the twelve months ended in July, core CPI prices increased somewhat more than in the previous twelve-month period. When measured by the PCE chain-price index, however, the acceleration in core consumer prices during the last four quarters was very small. Producer prices exhibited a pattern that was generally similar to that of consumer prices. Prices of all finished goods jumped in June and were unchanged in July, and core producer prices were unchanged on balance in the June-July period. For the twelve months ended in July, core producer prices rose slightly more than in the previous twelve-month period. With regard to labor compensation, recent data suggested an acceleration, on balance, over the past year. Growth in hourly compensation for private industry workers slowed somewhat in the second quarter after having risen sharply in the first quarter. Over the four quarters ended in June, however, the change in compensation rates was substantially larger than the change over the previous four-quarter period. By contrast, the advance of average hourly earnings of production or nonsupervisory workers for the twelve months ended in July was about the same as that for the previous twelve-month period.

At its meeting on June 27-28, 2000, the Committee adopted a directive that called for maintaining conditions in reserve markets consistent with an unchanged federal funds rate of about 6½ percent. In reaching this decision, the members cited increasing though still tentative indications of some slowing in aggregate demand from an unsustainably elevated pace and the likelihood that the policy tightening actions implemented earlier had not yet exerted their full retarding effects on spending.

The members agreed, however, that the statement accompanying the announcement of their decision should continue to underscore their view that the risks remained weighted mainly in the direction of rising inflation.

Open market operations were directed throughout the intermeeting period toward maintaining the federal funds rate at the Committee's target level of 6½ percent, and the rate averaged close to the intended level. Other interest rates generally moved lower over the period, extending declines that had begun during the spring. Factors contributing to the most recent reductions included economic data releases that were viewed, on balance, as confirming earlier indications that demand growth was slowing to a more sustainable pace and that price pressures would remain damped, thereby lessening or potentially obviating further tightening of monetary policy. Most broad indexes of stock market prices rose somewhat over the period since the June meeting.

In foreign exchange markets, the trade-weighted value of the dollar increased on net against an index of major currencies, even though interest rate differentials moved against assets denominated in dollars relative to those of other industrial countries. At least in part, the dollar's appreciation reflected heightened market perceptions that economic growth in the United States, though evidently moderating from its rapid pace in recent quarters, was likely to continue to exceed that in most other industrial nations. The foreign exchange value of the dollar dropped slightly against the currencies of other important trading partners, paced by a substantial rise in the value of the Mexican peso in response to brightening political and economic prospects in Mexico.

The growth of domestic nonfinancial debt moderated slightly in the second

quarter as a result of an accelerated pay-down in federal debt, while private borrowing remained brisk. However, partial data for the period since midyear suggested that the overall growth in household and business borrowing might also be slowing somewhat. The expansion of M2 had declined substantially since late spring, apparently in part as a result of the widening opportunity costs of holding assets in M2 stemming from higher market interest rates and possibly also from slackening growth in household incomes. Sluggish currency flows were another contributing factor. At the same time, M3 accelerated in July and partial data pointed to further robust growth in August. The advance in this broader aggregate seemed to be driven by interest-sensitive inflows to M3's institutional money fund component.

The staff forecast prepared for this meeting suggested that the economic expansion, after slowing appreciably from its elevated pace of recent quarters, would be sustained at a rate a little below that of the staff's upwardly revised estimate of the economy's potential output. The forecast anticipated that the expansion of domestic final demand would be held back to some extent by the waning and eventual disappearance of positive wealth effects associated with outsized earlier gains in equity prices and by higher interest rates. As a result, growth of spending on consumer durables was expected to stay well below that in recent quarters and housing demand to stabilize at a level below recent highs. By contrast, the expansion of business fixed investment, notably in equipment and software, was projected to remain robust, and further solid economic growth abroad was expected to boost the expansion of U.S. exports for some period ahead. Core consumer price inflation was projected to rise somewhat over the forecast

horizon, in part as a result of higher import prices but largely as a consequence of some further increases in nominal labor compensation gains that would not be fully offset by growth in productivity.

In the Committee's discussion of current and prospective economic conditions, the members agreed that the information available since midyear provided increased evidence that the growth of aggregate demand and that of aggregate supply were coming into closer balance. The statistical evidence reviewed by the Committee, which was supported by widespread anecdotal reports, pointed to a noticeable slowing in the expansion of demand and economic activity. The slowdown was led by a moderation in consumer spending and some decline in housing expenditures that were occurring even before the full effects of earlier tightening in financial conditions had been felt. At the same time, an apparent continued acceleration in underlying productivity was boosting the economy's potential output growth and, in the context of the leveling out of the broadest measures of equity prices this year, was doing so without the full feedback on demand of previous such accelerations. While prices were rising somewhat more than a year ago, most of this pickup seemed to reflect the direct and indirect effects of higher energy prices, and the increase in productivity growth had kept unit labor costs well contained despite more rapid gains in compensation. These developments had much improved the prospects for a sustainable economic expansion at the prevailing stance of monetary policy. Even so, the members anticipated that labor markets would remain exceptionally tight, and with labor compensation already accelerating and higher energy prices potentially raising inflation expectations, they

agreed that the risks remained weighted toward rising inflation.

In the Committee's discussion of the outlook for the economy, members focused considerable attention on the growth rate of the economy's supply potential—its ability to satisfy further growth in demand on a sustainable basis. The widespread application of technological advances and the associated surge in outlays for capital equipment had been fostering an acceleration in labor productivity that seemed to be ongoing. Data on productivity and capital accumulation that had become available in recent months had tended to confirm these trends, and the statistical evidence was reinforced by comments from many business executives and by persistent upward revisions to long-term profit forecasts, which had yet to suggest a leveling out of productivity growth.

Quickening productivity had been the fundamental factor behind the economy's remarkable performance in recent years. Members noted, however, that historical episodes involving major changes in productivity trends had been rare, and the past therefore provided a limited basis for evaluating the course of future productivity developments. Accordingly, considerable caution needed to be exercised in assessing the outlook for productivity and in relying on projections of the economy and prices, which necessarily embodied judgments about this outlook, in making monetary policy. Another source of uncertainty related to the interactions of rising productivity and aggregate demand. Over the course of recent years, accelerating productivity gains had tended to boost aggregate demand by even more than potential aggregate supply owing to the effects of stronger profits on investment spending and, through the rising stock market, on consumption

as well. However, the leveling out in stock prices this year suggested that recent increases in productivity growth had been built into market expectations and prices some time ago and were not likely to provide the same impetus to demand going forward as had past productivity acceleration. Members cautioned nonetheless that the possibility that long-term interest rates and equity prices did not yet adequately reflect ongoing productivity gains could not be ruled out, with attendant effects boosting demand. Finally, rising productivity clearly had been a major force in containing inflation in a period of unusually low unemployment rates, and while some of the interactions between productivity growth and wages and prices could be adduced, these interactions involved complex processes that were very difficult to assess given the paucity of prior experience. As a consequence, judgments about labor market pressures, productivity, and inflation had to be viewed with care on the basis of evolving developments.

In their review of the outlook for expenditures in key sectors of the economy, members observed that growth in consumer spending had moderated substantially after a period of exceptional gains in late 1999 and early 2000. The clearest evidence of softening consumer demand tended to be concentrated in sales of motor vehicles and in housing-related durable goods. Available data on reduced growth in consumer spending were supported by anecdotal reports of some slippage in retail sales below expectations in several parts of the country. Factors underlying these developments included diminishing wealth effects after several months of limited changes in equity prices, the cumulative buildup in the stock of motor vehicles and other consumer durables owned by the public, and the constraining effects

of higher energy prices on incomes available to be spent on other goods and services. While these factors might well continue to damp the growth of consumer spending going forward, members noted that consumer confidence remained at a high level, consumer incomes were rising, and no anecdotal or other evidence pointed to any marked deterioration in consumer spending that would pose a potential threat to the sustainability of the economic expansion.

The housing sector provided the clearest indication of a response of aggregate demand to firming interest rates, affecting industries producing construction materials and household furnishings. Anecdotal reports from much of the country tended to confirm the statistical evidence of a downward trend in housing starts and home sales. Factors helping to explain the softness in housing, which included the rise that had occurred in mortgage interest rates and reported overbuilding in some metropolitan areas, were expected to continue to exert some downward pressure on housing activity. However, reference also was made to indications that wealth effects were continuing to boost housing demand and prices in parts of the country.

In sharp contrast to developments in the consumer and housing sectors, business outlays for capital equipment and software had continued to rise at exceptional rates, even after several years of rapid growth. The persistence of dramatic expansion evidently reflected expectations that such capital investments would continue to earn very high rates of return. Although the extraordinary rates of increase in investment outlays currently displayed little or no sign of abating, historical patterns indicated that even dramatic surges or shifts in technology invariably lost momen-

tum once the new technology was widely adopted, and rates of return on further investments tended to diminish. There was no reliable way to anticipate the timing of such a downturn and indeed little reason to expect a turnaround over the nearer term in the current investment boom. Members noted, however, that the investment outlook for the nonresidential construction sector presented a much more mixed picture. While such business investment continued to exhibit considerable vigor in many areas, it clearly had weakened in others and for the nation as a whole seemed poised for a relatively subdued advance in coming quarters. One factor pointing in the latter direction was evidence of more cautious attitudes on the part of many business executives and especially their lending institutions.

The strengthening economies of many U.S. trading partners were fostering rising demand for U.S. exports, a trend that seemed likely to persist according to reports from many domestic business contacts. Nonetheless, the nation's current account deficit apparently continued to increase, a development about which members expressed concern in view of the risks that it posed for the foreign exchange value of the dollar and domestic inflation over time. Still, the experience of the past few years clearly demonstrated that the dollar was likely to remain strong as long as foreign investors continued to see attractive investment opportunities in the United States. Past experience also suggested that international capital flows can quickly reverse themselves, but the timing of a major turnaround in the dollar, if any, could not be predicted with any degree of confidence.

In the Committee's discussion of the outlook for inflation, members noted that overall measures of price inflation had picked up to fairly high levels by

the standards of recent years, largely as a result of higher energy costs. Moreover, supply factors in major energy markets—petroleum, gas, and electricity generating capacity—did not point to significant relief for some considerable period of time. Still, core consumer price indexes remained relatively damped and had risen only a little over the past year, especially when measured by the PCE chain price index, and that suggested underlying price pressures remained largely contained. Nonetheless, a number of members were concerned that unusually taut labor markets could begin at some point to show through to increases in labor compensation in excess of productivity gains, pressuring unit costs and prices. Evidence of this had yet to emerge, perhaps because productivity continued to accelerate, but a flattening out of the rate of increase in productivity, even at a high level, could well pose at some point a risk to continued favorable inflation performance. To be sure, there were a number of positive factors in the outlook for inflation, including highly competitive conditions in many markets, stable and relatively favorable expectations with regard to the longer-run inflation outlook, and signs that the remarkable acceleration in productivity was continuing. On balance, however, the members saw a mild upward trend in key measures of inflation as a distinct possibility, albeit one that was subject to considerable uncertainty.

In the Committee's discussion of policy for the intermeeting period ahead, all the members endorsed a proposal to retain the current stance of policy, consistent with a federal funds rate continuing to average about $6\frac{1}{2}$ percent. In their assessment of factors leading to this decision, the members focused on the further evidence that moderating demand and accelerating productivity

were closing the gap between the growth of aggregate demand and potential supply, even before earlier Committee tightening actions had exerted their full restraining effects. While the recent rally in domestic financial markets could be viewed as having partially eroded the degree of monetary restraint implemented earlier, real interest rates for private borrowers were still at relatively elevated levels, banking institutions were continuing to report further tightening of their standards and terms for business loans, equity prices had risen only modestly, and the dollar had firmed over recent months. In addition, the last few readings on core inflation had not suggested a further upward drift, unit labor costs were not increasing, and longer-term inflation expectations had been stable for some time. Accordingly, the Committee incurred little risk in leaving the stance of policy unchanged at this meeting and waiting to see how the various factors affecting both supply and demand in the economy unfolded and influenced the prospects for economic activity and prices.

At the same time, many members emphasized that the Committee needed to be prepared to act promptly should inflationary pressures appear to be intensifying, and in the Committee's discussion of the balance-of-risks sentence to be included in the press statement that would be issued after this meeting, all the members agreed that the sentence should continue to indicate that the risks to the economy remained weighted toward higher inflation in the foreseeable future. While the members did not expect underlying inflation to intensify materially, especially over the nearer term, the statement was intended to express their views about the longer term, and over that horizon they agreed that the risks lay in the direction of price acceleration. The risks of higher infla-

tion over time were seen importantly to stem from the unusually taut conditions in labor markets, which could place upward pressures on unit costs and prices, especially once productivity growth leveled out in the future. But members also cited the potential for persistently higher energy prices to affect longer-run inflation expectations, and the possibility that, taking into consideration recent declines in long-term interest rates, financial conditions might not yet be tight enough to balance aggregate demand and potential supply in the face of optimism about the growth of labor and capital income in association with accelerating productivity.

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

The Federal Open Market Committee seeks monetary and financial conditions that will foster price stability and promote sustainable growth in output. To further its long-run objectives, the Committee in the immediate future seeks conditions in reserve markets consistent with maintaining the federal funds rate at an average of around 6½ percent.

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

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

Votes for this action: Messrs. Greenspan, McDonough, Broaddus, Ferguson,

Gramlich, Guynn, Jordan, Kelley, Meyer, and Parry. Votes against this action: None.

It was agreed that the next meeting of the Committee would be held on Tuesday, October 3, 2000.

The meeting adjourned at 12:50 p.m.

Donald L. Kohn
Secretary

Meeting Held on October 3, 2000

A meeting of the Federal Open Market Committee was held in the offices of the Board of Governors of the Federal Reserve System in Washington, D.C., on Tuesday, October 3, 2000, at 9:00 a.m.

Present:

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

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

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

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

Mr. Beebe, Ms. Cumming,
Messrs. Eisenbeis, Howard,
Lindsey, Reinhart, Simpson, and
Sniderman, Associate Economists

Mr. Fisher, Manager, System Open
Market Account

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

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

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

Messrs. Oliner and Struckmeyer,
Associate Directors, Division
of Research and Statistics,
Board of Governors

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

Mr. Whitesell, Assistant Director,
Division of Monetary Affairs,
Board of Governors

Mr. Ramm, Section Chief, Division
of Research and Statistics,
Board of Governors

Messrs. Reeve and Sack, Economists,
Divisions of International Finance
and Monetary Affairs respectively,
Board of Governors

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

Mr. Kumasaka, Assistant Economist,
Division of Monetary Affairs,
Board of Governors

Messrs. Hakkio, Kos, Lacker,
Ms. Mester, Messrs. Rasche,
Rolnick, and Rosenblum,
Senior Vice Presidents, Federal
Reserve Banks of Kansas City,
New York, Richmond,
Philadelphia, St. Louis,
Minneapolis, and Dallas
respectively

Messrs. Evans and Rosengren,
Vice Presidents, Federal Reserve
Banks of Chicago and Boston
respectively

Mr. Tallman, Senior Economist,
Federal Reserve Bank of Atlanta

By unanimous vote, the minutes of
the meeting of the Federal Open Market
Committee held on August 22, 2000,
were approved.

The Manager of the System Open
Market Account reported on recent
developments in foreign exchange markets
and on System transactions in
those markets during the period
August 22, 2000, through October 2,
2000. By unanimous vote, the Committee
ratified these transactions.

In ratifying these transactions, members
emphasized that the action was not
intended to signal an increased willingness
by the Committee to intervene in
foreign exchange markets. In the current
instance, the intervention transactions
were undertaken in a spirit of cooperation
with the international financial
community and at the express request
of the European Central Bank (ECB).
Members commented that historical
experience suggested that foreign
exchange market interventions generally
had not had lasting effects when not
accompanied by supporting changes in
macroeconomic policies.

The Manager also reported on develop-
ments in domestic financial markets
and on System open market transactions
in government securities and federal

agency obligations during the period
August 22, 2000, through October 2,
2000. By unanimous vote, the Committee
ratified these transactions.

The Committee then turned to a dis-
cussion of the economic outlook and the
implementation of monetary policy over
the intermeeting period ahead.

The information reviewed at this
meeting suggested that economic activ-
ity was expanding at a more moderate
pace than in the first half of the year.
The moderation reflected lower growth
in most major expenditure sectors. As a
result of the deceleration in aggregate
demand, expansion of employment and
industrial production had slowed. Rising
energy prices had boosted overall
price inflation considerably, but core
measures of consumer inflation had
increased substantially less.

Total nonfarm payroll employment
dropped further in August, in part
reflecting additional large declines in the
number of temporary Census workers.
In the private sector, a labor strike held
down the August rise in payroll employ-
ment, but even after adjusting for the
effects of the strike, the pace of private
job gains in the July–August period fell
considerably from the rate for the first
half of the year. The slowdown was
particularly pronounced in the construc-
tion, manufacturing, and services sec-
tors. The civilian unemployment rate
edged up to 4.1 percent in August.

Total industrial production rose only
slightly on balance during July and
August after having registered strong
gains earlier in the year. The growth
in production of high-tech equipment
remained rapid, though not at the
extraordinary rates posted earlier in the
year, and softer conditions had emerged
in a number of manufacturing indus-
tries, including steel, trucks, motor vehi-
cles, and construction supplies. Because
of the weakness in production, the rate

of capacity utilization in manufacturing edged down to a level slightly below its long-term average.

Consumer spending picked up somewhat in July and August from a moderate rate of increase in the second quarter. Real personal consumption expenditures on durable goods surged in the July-August period, spending on nondurable goods picked up somewhat less, and consumption of services decelerated a little. The recent strengthening of consumer spending occurred against the background of moderate growth of real disposable income in recent quarters but generally buoyant consumer sentiment.

With interest rates on fixed-rate mortgages having fallen significantly since mid-May and consumers' assessments of homebuying conditions having risen recently, single-family housing starts picked up somewhat in August. However, such starts were still sharply below their levels of early in the year, likely reflecting in part the recent smaller gains in income and employment and the flattening out of equity prices thus far this year. New home sales picked up in July (latest data), though that gain might have been overstated as a result of problems with estimation procedures, and existing home sales bounced back in August, roughly offsetting a drop in July. Multifamily starts, by contrast, declined further in August even though vacancy rates remained low and apartment rents continued to rise.

The available information suggested that business investment in durable equipment and software increased substantially further in the third quarter. Data on shipments of nondefense capital goods in July and August indicated that outlays for high-tech equipment, notably computing and communications equipment, remained quite strong. For other types of equipment, spending growth seemed to have moderated

somewhat after the substantial gains of the first half of the year. Information on orders for nondefense capital goods pointed to further slowing in the pace of spending increases in coming months. Nonresidential construction activity fell in July but market fundamentals, including rising property values and lower vacancy rates, suggested the likelihood of further expansion in nonresidential investment, particularly in office buildings.

Business inventory investment decreased sharply in July after a large second-quarter advance. Much of the slowdown was associated with a runoff of stocks of motor vehicles at wholesalers and automotive dealerships. Elsewhere, stockbuilding eased a little and sales decelerated somewhat. Inventory-sales ratios generally were within their ranges for the preceding twelve months, and there seemed to be only a few scattered indications of inventory imbalances at the industry level.

The U.S. trade deficit in goods and services widened considerably in July from its June level, with the dollar value of exports retracing part of its extraordinary June increase and the value of imports rising further. The drop in exports was concentrated in aircraft and automotive products, while the advance in imports was largely in industrial supplies, automotive products, and services. The available information indicated that economic expansion in the foreign industrial countries had slowed somewhat in the third quarter from the robust growth during the first half of the year, primarily reflecting reduced economic expansion in Japan. Growth appeared to be somewhat uneven among the developing countries in the third quarter but remained solid on balance.

Recent information continued to indicate a slight pickup in price inflation.

Consumer prices edged up on balance over July and August, despite a net drop in energy prices; excluding the food and energy components, consumer price inflation remained moderate in both months. On a year-over-year basis, however, core consumer prices increased somewhat more in the twelve months ended in August than in the previous twelve-month period. Core producer prices edged up over the July–August period and decelerated a little on a year-over-year basis. With regard to labor costs, average hourly earnings of production or nonsupervisory workers rose moderately in July and August. The advance for the twelve months ended in August was slightly larger than that for the previous twelve-month period.

At its meeting on August 22, 2000, the Committee adopted a directive that called for maintaining conditions in reserve markets consistent with an unchanged federal funds rate of about 6½ percent. In reaching their decision, the members noted that decelerating demand and surging productivity seemed to have narrowed the gap between the growth rates of aggregate demand and potential supply, even though previous policy tightening actions had not yet exerted their full restraining effects. The members emphasized, however, that unusually taut labor markets could result in greater upward pressures on unit costs and prices, especially if productivity growth were to level out or edge lower in the future, and they agreed that the statement accompanying the announcement of their decision should continue to indicate that the risks remained weighted mainly in the direction of rising inflation.

Open market operations throughout the intermeeting period were directed toward maintaining the federal funds rate at the Committee's targeted level of 6½ percent, and the average rate was

close to the intended level. Most short- and intermediate-term interest rates moved lower over the interval, though long-term yields changed little or drifted slightly higher. Market expectations about the near-term prospects for interest rates were revised downward in response to both the Committee's statement after the August meeting, which was interpreted as expressing greater confidence that growth rates of aggregate demand and aggregate supply were coming into better alignment, and to subsequent data releases, which were seen as confirming earlier indications of some slowing in the economic expansion. Against a background of some upward pressure on long-term Treasury yields and of growing concerns about corporate earnings, most broad indexes of stock market prices declined somewhat over the intermeeting period.

In foreign exchange markets, the trade-weighted value of the dollar increased somewhat further on balance in terms of an index of major foreign currencies. The dollar's net appreciation against the euro occurred despite a small policy tightening by the ECB on August 31 as sentiment toward that currency remained negative, in part because of concerns about capital flows out of the euro area. The major industrial countries undertook joint foreign exchange intervention late in the period, on September 22, to stem the euro's slide. The intervention was at the initiative of the ECB and was joined by the United States and other nations because of shared concern about the potential implications of recent movements in the euro. The dollar also posted gains against the currencies of a number of other important trading partners, notably the Brazilian *real* and the Mexican peso.

The broad monetary aggregates had expanded relatively briskly in recent

months. The growth of M2, perhaps reflecting the recent vigor of consumer spending, picked up considerably in August and September after having increased slowly in June and July. Averaged across the past four months, however, M2 increased at a pace noticeably below that of earlier in the year, with the slowdown partly reflecting a lagged response to a widening, during the first half of the year, of the opportunity costs of holding M2 assets. M3 expansion remained robust in August and September, though somewhat below the pace in the first half of the year. The growth of domestic nonfinancial debt slowed somewhat in July and August in association with some moderation in the brisk pace of private borrowing that was offset in part by a less rapid paydown of federal debt.

The staff forecast prepared for this meeting suggested that the economic expansion, after slowing considerably from its elevated pace of recent quarters, would be sustained at a rate a little below the staff's current estimate of the economy's potential output. The forecast anticipated that the expansion of domestic final demand would be held back to some extent by the eventual disappearance of positive wealth effects associated with outsized earlier gains in equity prices and by higher interest rates. As a result, growth of spending on consumer durables was expected to remain appreciably below that in recent quarters, and housing demand would trend slightly downward. By contrast, business fixed investment, notably outlays for equipment and software, was projected to remain robust, and brisk growth abroad would boost the expansion of U.S. exports for some period ahead. Core consumer price inflation was projected to rise a little over the forecast horizon, in part as a result of higher import prices but largely as a

consequence of further increases in nominal labor compensation gains that would not be fully offset by growth in productivity.

In the Committee's discussion of current and prospective economic developments, members referred to recent statistical and anecdotal information that tended to confirm earlier indications of appreciable slowing in the pace of the expansion from the outsized increases experienced in the latter part of 1999 and the first half of this year. Several commented that growth of aggregate demand now appeared to be closer to, and perhaps slightly below, the rate of expansion in the nation's output potential. Looking ahead, they generally anticipated that the softening in equity prices and the rise in interest rates that had occurred earlier in the year would contribute to keeping growth in demand at a more subdued but still relatively robust pace. The members recognized that marked uncertainties surrounded any forecast in present circumstances. Those uncertainties had been augmented by recent developments in world oil markets and continued to include questions about the extent of further gains in productivity, the effects of such gains on the growth of aggregate demand as well as supply, and the associated degree of prospective pressures on resources and inflation. In the latter regard, members anticipated that even assuming reduced economic growth in line with their forecasts and further impressive gains in productivity, conditions in labor markets were likely to remain relatively tight, and risks persisted that at some point such tightness could exert upward pressures on labor costs and prices.

Developments in world oil markets also might exert continued upward pressure on inflation, while at the same time posing a downward risk to economic activity. Uncertainties relating to politi-

cal events in the Middle East, superimposed on limited available inventories of oil products held by producers and refiners, had fostered recent "spikes" in oil prices. While price quotations in futures markets pointed to a decline in oil prices over time, such prices might well remain relatively elevated for an extended period, with negative effects on spending and inflation. There already were scattered signs that higher energy prices, by reducing income available for discretionary purchases, might be damping retail sales. Moreover, to the extent that relatively high oil prices persisted, they were likely to have increasing pass-through effects on core measures of inflation as well as on "headline" inflation, especially if the energy price increases began to affect inflation expectations. However, the course of oil prices was very difficult to predict not only because of political and market uncertainties but in part also because of the lack of information about the extent of what appeared to be a precautionary buildup of fuel supplies by households and retail businesses.

In their review of the outlook for household spending, members cited a number of developments that pointed to slower but continuing growth. With some exceptions, anecdotal reports from various parts of the country suggested a recent softening in retail sales, and some industry contacts indicated that they were marking down their forecasts of retail sales. A flat and volatile stock market and the rise in energy costs appeared to be key factors currently tending to inhibit growth in consumer spending at least to some extent. On the positive side, continuing gains in consumer incomes and a high level of consumer confidence could be expected to foster sustained growth in such spending, albeit probably at a pace below recent trends.

With regard to the outlook for residential construction, anecdotal reports indicated some softening in housing activity in many parts of the country, though some members cited regional evidence of a partial rebound recently that was attributed to declines in mortgage interest rates. However, financial factors, including mortgage interest rates at levels still appreciably above earlier lows and the sideways performance of the stock market, were expected to constrain housing activity somewhat over coming quarters, though such activity likely would remain on a relatively high plateau.

In their comments about the prospects for business fixed investment, members cited some indications that the expansion in business spending for equipment and software might be moderating from the extraordinary pace of recent years, though growth in such expenditures probably would remain robust. Retarding influences bearing on the outlook for investment expenditures included forecasts of slower growth in final demand and less favorable financial conditions, notably weakness in the equity prices of numerous "new economy" firms and tightening credit availability for business firms that did not enjoy investment-grade credit ratings or favorable earnings prospects. Evidence of overbuilding in some areas of commercial and other nonresidential real estate also was mentioned. Against this background, some members referred to a growing sense of caution among business- and financial-sector executives about undertaking or financing business investments. At the same time, the incentive to take advantage of increasingly efficient high-tech equipment and software, typically available at declining prices, would continue to provide an important underpinning for further large gains in investment spending, with favorable impli-

cations for continued rapid growth in productivity.

In their assessment of the outlook for inflation, members agreed that although forecasts of more moderate growth in aggregate demand at a pace around potential output had substantially reduced the odds of rising inflation, the risks still were pointed in that direction on balance. Even so, any increase in inflation was likely to be modest and gradual and was subject to substantial uncertainty for a variety of reasons. As noted previously, the behavior of oil prices was one highly uncertain source of potentially greater inflation pressures. Another major source of uncertainty was the prospective performance of productivity. Largely as a consequence of rapidly expanding "new economy" investments, gains in productivity had occurred at remarkable rates in recent years. However, the anticipated moderation in the expansion of economic activity and the related softening in expected returns on such investments might well restrain the further expansion of investment spending and limit the associated pickup in productivity. Once productivity growth tended to level out, employers would find it more difficult to offset the rise in their costs that might occur should tight labor markets persist. Finally, a decline in the dollar from its current level, should that happen, might add to inflation pressures going forward. On the more positive side, there were no signs that the pace of productivity gains was currently leveling out and no evidence of rising longer-term inflation expectations. Moreover, cost pressures and price inflation had remained subdued for an extended period despite low rates of unemployment that in the past had been associated with increasing inflation.

Against the backdrop of these uncertainties and the current performance of

the economy, all the Committee members indicated that they favored an unchanged policy stance for the inter-meeting period ahead. In support of this view, they placed considerable weight on widespread indications, reinforced by developments since the August meeting, that growth in aggregate demand had moderated appreciably to a pace that improved the prospects for containing pressures on resources. Moreover, the tightening that had occurred in financial conditions through the spring and the rise in energy prices since the fall of 1998 had not yet exerted their full effects on aggregate demand, and members expected these effects to contribute to a more sustainable rate of growth in aggregate spending. Although inflation had picked up, a decline in energy prices, should it materialize in line with market expectations, clearly would have favorable implications for inflation expectations and cost pressures in the economy. Questions nonetheless remained regarding the extent and duration of the slowdown in the economic expansion and the other factors bearing on the outlook for inflation, especially against the backdrop of substantial pressures on labor resources.

All the members agreed that their views regarding the outlook for inflation were consistent with retaining the press release sentence indicating that the risks remained weighted toward higher inflation over time. Some expressed the opinion that those risks were now less decidedly tilted to the upside and that a reconsideration of the sentence might be warranted over the next several months, but they believed that a change at this point would be premature. While the prospects of a significant rise in inflation seemed quite limited for the nearer term, the members agreed on the need to remain especially

vigilant for signs of potentially rising inflation over the intermediate term, particularly since any increase in inflation would occur from a level that in the view of many members was already on the high side of an acceptable range.

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

The Federal Open Market Committee seeks monetary and financial conditions that will foster price stability and promote sustainable growth in output. To further its long-run objectives, the Committee in the immediate future seeks conditions in reserve markets consistent with maintaining the federal funds rate at an average of around 6½ percent.

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

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

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

It was agreed that the next meeting of the Committee would be held on Wednesday, November 15, 2000.

The meeting adjourned at 12:05 p.m.

Donald L. Kohn
Secretary

Meeting Held on November 15, 2000

A meeting of the Federal Open Market Committee was held in the offices of the Board of Governors of the Federal Reserve System in Washington, D.C., on Wednesday, November 15, 2000, at 9:00 a.m.

Present:

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

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

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

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

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

Mr. Fisher, Manager, System Open
Market Account

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

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

Mr. Madigan, Associate Director,
Division of Monetary Affairs,
Board of Governors

Messrs. Oliner, Slifman, and
Struckmeyer, Associate
Directors, Division of Research
and Statistics, Board of Governors

Mr. Whitesell, Assistant Director,
Division of Monetary Affairs,
Board of Governors

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

Mr. Barron and Ms. Pianalto, First
Vice Presidents, Federal Reserve
Banks of Atlanta and Cleveland
respectively

Messrs. Hakkio, Hunter, Ms. Mester,
Messrs. Rasche, Rosnick, and
Rosenblum, Senior Vice
Presidents, Federal Reserve
Banks of Kansas City, Chicago,
Philadelphia, St. Louis,
Minneapolis, and Dallas
respectively

Messrs. Fuhrer, Judd, and
Ms. Perelmuter, Vice Presidents,
Federal Reserve Banks of Boston,
San Francisco, and New York
respectively

By unanimous vote, the minutes of
the meeting of the Federal Open Market
Committee held on October 3, 2000,
were approved.

The Manager of the System Open
Market Account reported on recent
developments in foreign exchange
markets. There were no open market operations
in foreign currencies for the System's account in the period since the
previous meeting.

The Manager also reported on developments in domestic financial markets and on System open market transactions in government securities and federal agency obligations during the period

October 3, 2000, through November 14, 2000. By unanimous vote, the Committee ratified these transactions.

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

The information reviewed at this meeting suggested that economic growth had slowed appreciably from the rapid pace in the first half of the year. The slowdown was most apparent in housing construction and business investment in equipment and software, while consumer spending remained on a relatively solid upward trend. With expansion of aggregate demand less robust, industrial production and employment were rising at appreciably slower rates, though unemployment remained very low. Core inflation appeared to be increasing, but very gradually and in part reflecting the indirect effects of higher energy costs.

Growth in private nonfarm payroll employment slowed in October from the moderate September rate; since mid-year, employment growth had been considerably lower than earlier in the year. The falloff in growth was concentrated in the manufacturing, retail trade, and temporary help services industries. By contrast, the pace of hiring was brisk in real estate and construction and slowed only slightly in services industries other than temporary help. The civilian unemployment rate held at its current cyclical low of 3.9 percent in October.

Industrial production edged down in October, after its growth had dropped abruptly in the third quarter to a pace well below that recorded during the first half of the year. Manufacturing output was unchanged in October; a further sharp decline in production of motor vehicles followed on the heels of a third-quarter slump, and the manufacture of

other durables also fell. Expansion of output of high-tech equipment, which had been extraordinarily rapid earlier in the year, slowed somewhat in October. With production unchanged in October, the rate of capacity utilization in manufacturing fell to a level slightly below its long-term average.

Nominal retail sales edged up in October after rising substantially in the third quarter. Nondurable goods stores, notably apparel, registered a sizable increase in October sales, but that gain was more than offset by declines in outlays for durable goods, particularly motor vehicles. Consumer spending for services continued to grow at a moderate rate through September (latest data). Recent consumer buying patterns seemed to reflect moderate growth of real disposable income in recent quarters and still generally buoyant consumer sentiment.

Single-family housing starts declined further in the third quarter as a whole. Nevertheless, the drop in interest rates on fixed-rate mortgages since mid-May might have sparked the slight increase, on balance, in single-family housing starts in August and September and the upturn in new home sales in the third quarter. After a strong first half, multi-family starts dropped in the third quarter despite low vacancy rates and rising apartment rents.

Business investment in durable equipment and software decelerated sharply in the third quarter. In the high-tech area, spending on computers and related equipment as well as software recorded further robust gains. However, expenditures on communications equipment declined after a half-year of very strong increases, and outlays for other types of equipment also softened; investment in aircraft, autos, trucks, and construction and mining equipment fell, while growth of spending on agricultural and

industrial equipment slowed. Despite the third-quarter weakness in expenditures, recent data on orders for nondefense capital goods suggested that spending for many types of equipment remained on an upward trend. Data on construction put in place indicated that nonresidential building activity picked up considerably in the third quarter, with the institutional, industrial, and office categories recording solid gains. Market fundamentals, including rising property values and low vacancy rates, suggested that further expansion of office building was likely. Other commercial construction, by contrast, remained weak, partly reflecting the already substantial stock of large retail stores and regional malls.

The pace of inventory investment slowed considerably in the third quarter. However, for a second consecutive quarter, the book value of inventories rose faster than sales, and inventory overhangs were evident in some industries. In manufacturing, stock accumulation edged up and the aggregate stock-shipments ratio in September, though still quite low by historic norms, was just above the middle of its range over the preceding twelve months. In the wholesale sector, inventory accumulation dropped in the third quarter; however, sales declined and the aggregate inventory-sales ratio for the sector was at the top of its narrow range over the past year. Retail stockbuilding also slowed in the third quarter, with much of the drop reflecting reductions in motor vehicle inventories at auto dealers. The aggregate inventory-sales ratio for this sector edged lower and was near the middle of its range over the past year.

The U.S. trade deficit in goods and services narrowed in August after having widened considerably in July; on balance, the trade deficit increased somewhat from its second-quarter level.

The value of exports grew in the July-August period at about the same strong pace as that recorded for the second quarter. The value of imports also rose briskly over the two months, but at a slightly lower rate than that of the second quarter. The available information indicated that, on average, economic expansion in the foreign industrial countries slowed appreciably in the third quarter from the elevated pace during the first half of the year and that the slowdown importantly reflected little or no growth in Japan. In addition, economic activity appeared to have decelerated in many developing countries in the third quarter but remained solid in most of those nations.

Incoming data continued to indicate that price inflation had picked up somewhat. Consumer prices, as measured by the consumer price index (CPI), rose considerably in September (latest data) after having edged down in August; a sizable step-up in energy prices and a noticeable increase in core inflation contributed about equally to the acceleration. Although the core measure of CPI prices accelerated noticeably in the twelve months ended in September compared with the previous twelve-month period, personal consumption expenditure (PCE) price inflation had been about steady. By contrast, core producer prices dropped a little in October and decelerated somewhat on a year-over-year basis, though the deceleration was more than accounted for by a surge in tobacco prices during the year ended in October 1999. With regard to labor costs, the third-quarter rise in the employment cost index (ECI) for hourly compensation of private industry workers was smaller than the elevated increase of the previous quarter. However, ECI compensation advanced considerably more during the year ended in September than in the previous year,

with larger increases in benefits accounting for much of the rise. Average hourly earnings of production or nonsupervisory workers increased at a slightly higher rate in both October and the twelve months ended in October.

At its meeting on October 3, 2000, the Committee adopted a directive that called for maintaining conditions in reserve markets consistent with an unchanged federal funds rate of about 6½ percent. In taking that action, the members noted that the growth of aggregate demand had moderated appreciably, the prospects for a significant rise in inflation seemed quite limited for the near term, and previous policy tightening actions and the earlier rise in energy prices had not yet exerted their full restraining effects on demand. Nevertheless, in the context of continuing substantial pressures on labor resources and the potential effects of the previous rise in energy prices on inflation expectations, members believed it was necessary to remain on guard for signs of rising inflation over the intermediate term. As a result, they agreed that the statement accompanying the announcement of their decision should continue to indicate that the risks remained weighted mainly in the direction of rising inflation.

Open market operations were directed throughout the intermeeting period toward maintaining the federal funds rate at the Committee's targeted level of 6½ percent, and the average rate remained close to the intended level. Short- and intermediate-term market interest rates registered small mixed changes over the intermeeting interval. At longer maturities, Treasury coupon yields drifted slightly lower, and rates on high-grade corporate securities changed little. However, growing market concerns about the outlook for corporate earnings led to substantial

increases in interest rates on lower-rated investment-grade and high-yield bonds, and the early November survey of senior loan officers indicated that banks had tightened further their standards and terms for business loans. The mixed reports on corporate earnings, incoming information indicating slower growth in economic activity in the United States, and wide swings in and uncertainty about the price of oil contributed to a sharp drop in broad indexes of stock market prices over the period in volatile trading.

In foreign exchange markets, the trade-weighted value of the dollar increased slightly further on balance over the intermeeting interval in terms of the currencies of a broad group of U.S. trading partners. Among the major foreign currencies, the dollar moved up against the euro and the Canadian and Australian dollars but edged down a bit in terms of the yen. The dollar rose to a record level against the euro in the weeks following the FOMC meeting, but the release of weaker-than-expected U.S. economic growth data in late October was seen as possibly marking a shift in the relative growth rates, and the dollar subsequently gave up much of its intermeeting gains in terms of the euro. The dollar also posted gains against an index of the currencies of other important trading partners, largely reflecting conditions in some emerging economies. Concerns about Argentina's recent economic and fiscal performance and its external financing situation spilled over to other Latin American countries, notably Brazil and Mexico, and political developments in Indonesia and the Philippines depressed the currencies of those countries.

The broad monetary aggregates decelerated in October. The slower growth of M2 followed strong expansion in August and September, however, and

growth since midyear was at about the same pace as in the first half of the year. M3 also increased at a slower rate in October, partly reflecting weakness in bank lending and declines in bank holdings of securities. The growth of domestic nonfinancial debt picked up in September in association with an increase in the pace of private borrowing and a less rapid paydown of federal debt.

The staff forecast prepared for this meeting suggested that the economic expansion, having slowed considerably, would be sustained over the forecast horizon at a rate a little below the staff's current estimate of the economy's potential output. The forecast anticipated that the expansion of domestic final demand would be held back to some extent by the waning influence of the positive wealth effects associated with past outsized gains in equity prices but also by some firming of conditions in credit markets. As a result, growth of spending on consumer durables was expected to be appreciably below that in recent quarters and housing demand to trend slightly downward. By contrast, business fixed investment—notably, outlays for equipment and software—was projected to remain relatively robust, and brisk growth abroad would undergird the expansion of U.S. exports. Core price inflation was projected to rise a little over the forecast horizon, in part as a result of higher import prices but largely as a consequence of further increases in nominal labor compensation gains that would not be fully offset by growth in productivity.

In the Committee's discussion of current and prospective economic conditions, members commented that the information that had become available since the previous meeting had reinforced earlier indications of appreciable slowing in the expansion of

economic activity. The cumulating evidence of moderating expansion seemed especially clear in the information on employment growth and manufacturing output. Aggregate demand currently appeared to be growing at a pace a little below the rate of increase in the economy's output potential, a configuration that could well persist in coming quarters. Actual and expected shortfalls in business profitability had led to tighter credit conditions for many borrowers and lower equity prices, which would continue to restrain spending; moreover, further pressure on profit margins, with adverse effects on financial markets, business investment, and consumer spending, was a distinct possibility. Members observed, however, that economic growth had rebounded sharply from temporary slowdowns previously in the current expansion, and several noted the possibility that a less restrictive fiscal policy stance would be bolstering demand in the years ahead.

Although the softening in aggregate demand moved in the direction of containing potential inflation pressures, the members continued to be concerned about the possibility that inflation would edge higher. Even with demand growth slower, labor markets were likely to remain unusually tight for some time, and in such circumstances labor costs could begin to rise increasingly in excess of even elevated gains in productivity. Some members also commented that energy prices might not trend lower as soon as, or to the extent, now expected by market analysts, and a few raised the prospect that the dollar might depreciate from its currently elevated level and add to potential upward pressures on domestic prices over the forecast horizon.

A key factor underlying the economic outlook was the emergence in recent months of less accommodative financial

conditions for many businesses, including some further tightening since the meeting in early October, and decreases in the wealth of households. The slowdown in the pace of the expansion and disappointing business earnings had fostered more cautious attitudes on the part of lending institutions and investors. Anecdotal comments from around the country supported the indications from surveys of tightening terms and standards at banks for business borrowers. At the same time, spreads in securities markets had widened, most sharply on obligations of borrowers rated below investment grade, and as a result those borrowers faced higher credit costs. Lender caution and less receptive markets probably had contributed to considerable weakening recently in overall growth of credit to nonfinancial businesses. Rising interest and energy costs in conjunction with restraint on the prices of final output had depressed the earnings and stock market valuations of many firms, notably in the high-tech area, with adverse repercussions on their ability to borrow and willingness to invest and on the financial position of the households holding their equity shares.

Less hospitable conditions in financial markets for a number of borrowers and deteriorating profit margins had contributed to a substantial moderation in the growth of business fixed investment in recent months, and anecdotal reports of reductions in capital spending plans were consistent with continued more moderate expansion in such outlays. The recent deceleration was especially pronounced in expenditures for high-tech equipment and software, though such spending was still growing at a robust pace. It was suggested that the weakening expansion of expenditures in these capital goods might reflect a surfeit in capacity following a period

of extraordinary growth in many industries—for example, those related to fiber optics. The available evidence did not indicate any material decrease in the optimism of equity market analysts as a group regarding the outlook for earnings over the long term. This suggested that their contacts among business executives remained fundamentally upbeat about the long-term prospects for productivity and earnings. In these circumstances, appreciable further growth in investment spending seemed to be in prospect for coming quarters, though undoubtedly at a slower pace than had been experienced on average in recent quarters.

Even limited slowing in the expansion of investment expenditures could be expected to have retarding effects on the growth of consumer income and spending. While such spending had held up well in the third quarter, the limited information available on more recent developments suggested some softening, though the data were not conclusive. Factors cited in support of a somewhat weaker trajectory in consumer spending included the impact of elevated energy costs, the high debt burdens of many households, and the ebbing of the wealth effects from strong earlier gains in stock market prices. Even so, anticipated increases in employment and income and still relatively high levels of consumer confidence were likely to support appreciable further growth in consumer spending, albeit probably at a rate somewhat below the brisk pace of the past few years.

Key indicators of housing activity had fluctuated considerably this year, but the evidence of recent months pointed on balance to a mild softening in such activity, a perception that was supported by anecdotal reports from several areas around the country. In general, housing

demand was expected to edge lower in response to the same income and wealth effects that were influencing consumer durables expenditures and to the increase in mortgage interest rates that had occurred on net over the past year.

Current forecasts of appreciable growth in foreign economic activity had favorable implications for U.S. exports and the nation's trade balance, but some members expressed concern about financial and economic weakness in a number of foreign economies. Failure to remedy structural and other problems in some countries incurred the risk of economic and financial distress, with possible spillover effects on other economies and financial markets. While those risks seemed small, they might be difficult to contain. The exchange value of the dollar was another source of uncertainty for the outlook. In the view of some members, the dollar could well come under downward pressure as the nation's current account deficits continued to cumulate. A lower dollar would tend to have a favorable effect on the trade deficit but also would add to inflationary pressures in the domestic economy.

Members continued to be concerned about the outlook for inflation. Measured increases in "headline" consumer prices could be explained mostly as a result of sharp advances in energy prices, which many observers expected to be reversed at some point. However, core consumer price measures also displayed a gradual uptrend, perhaps only in part as a consequence of the pass-through effects of persistently high energy prices. Measures of labor compensation appeared to be accelerating, partly as a result of sharply rising health benefit costs. To be sure, unit labor costs in the nonfinancial corporate sector had changed little over the past year, undoubtedly reflecting impressive

further gains in productivity. Even so, higher interest rates and increased energy and other input costs were adding to overall production expenses. To date, competitive pressures were continuing to inhibit the ability of many firms to pass on those costs, although a significant exception was a number of successful efforts to impose energy surcharges.

Looking to the future, however, the members generally agreed that the risks were in the direction of a heightening in inflation pressures despite their belief that growth in overall demand now seemed to have declined to a more sustainable pace and probably would continue to expand for a time at a rate below that of the economy's output potential. The members believed that growth in labor compensation was likely to remain under upward pressure from the anticipated persistence of very tight conditions in labor markets that would enable wages to catch up to earlier gains in labor productivity. Whether offsetting increases in the growth of labor productivity would materialize was open to question, in part because productivity growth might tend to level out in the context of less ebullient expansion in business investment. Another key factor in the outlook for inflation was the course of oil and other energy prices. Thus far, increases in energy costs had been reflected only marginally in core consumer prices, and while there were widespread market expectations of declining oil prices in coming quarters, a great deal of uncertainty, including the potential for more difficulties in the Middle East, surrounded the timing and extent of such an outcome. The longer relatively high energy prices persisted, of course, the greater might be their imprint on both inflation expectations and core prices. In sum, the moderation in economic expansion, the persistence

of highly competitive conditions in most domestic markets, the outlook for continued robust gains in productivity, and relatively subdued inflation expectations were favorable factors in the inflation outlook, but the members continued to view the prospects as weighted on balance in the direction of a gradual uptrend in core inflation.

In the Committee's discussion of policy for the intermeeting period ahead, all the members supported a proposal to maintain an unchanged policy stance consistent with the federal funds rate continuing to average about 6½ percent. Despite clear indications of a more moderate expansion in economic activity, persisting risks of heightened inflation pressures remained a policy concern, particularly in the context of an evident, if gradual, uptrend in key measures of core inflation. Indeed, a few members commented that measures of core inflation already were near or slightly above levels that they viewed as acceptable for the longer run. Although overall financial conditions had tightened during the course of recent months and currently appeared to be holding down the growth in spending, this added restraint was likely to be necessary to contain inflation pressures. In these circumstances, all the members saw the maintenance of a steady policy as the best course at this juncture to promote the Committee's longer-run objectives of price stability and sustainable economic expansion.

Still, growth had slowed more quickly than many members had anticipated, and financial market and other developments now seemed more likely to keep pressures on resources from mounting over coming quarters. Under the circumstances, the members focused at this meeting on the potential desirability of moving from a statement of risks weighted toward rising inflation to one that indicated a balanced view of the

risks to the Committee's goals of price stability and sustainable economic growth. The members agreed that a stronger case could be made for a shift to a balanced risk statement than at the previous meeting. A few indicated that the decision was a close call for them, and several commented that developments might be moving in a direction that would make a shift advisable in the relatively near future. Even so, they were unanimous in concluding that such a change would be premature at this time. Concerns about the possibility of rising inflation persisted. And while the members could see an increased risk of a marked slowing of growth relative to the rapid rate of expansion of the economy's potential, the degree to which growth in demand might remain sufficiently damped to contain and offset those inflation pressures was quite uncertain. Moreover, a shift in the Committee's published views might induce an undesirable softening in overall financial market conditions, which in itself would tend to add to inflation pressures. The members concluded that retaining a risk statement weighted toward more inflation pressures would best represent their current thinking, but they believed it was desirable to provide some recognition of the emergence of increased downside risks to the economic expansion in the statement to be released after this meeting.

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

The Federal Open Market Committee seeks monetary and financial conditions that will foster price stability and promote sustainable growth in output. To further its long-

run objectives, the Committee in the immediate future seeks conditions in reserve markets consistent with maintaining the federal funds rate at an average of around 6½ percent.

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

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

Votes for this action: Messrs. Greenspan, McDonough, Broaddus, Ferguson, Gramlich, Guynn, Kelley, Meyer, Moskow, and Parry. Votes against this action: None. Mr. Moskow voted as alternate member for Mr. Jordan.

It was agreed that the next meeting of the Committee would be held on Tuesday, December 19, 2000.

The meeting adjourned at 1:00 p.m.

Donald L. Kohn
Secretary

Meeting Held on December 19, 2000

A meeting of the Federal Open Market Committee was held in the offices of the Board of Governors of the Federal Reserve System in Washington, D.C., on Tuesday, December 19, 2000, at 9:00 a.m.

Present:

Mr. Greenspan, Chairman
Mr. McDonough, Vice Chairman
Mr. Broaddus
Mr. Ferguson
Mr. Gramlich
Mr. Guynn
Mr. Jordan

Mr. Kelley
Mr. Meyer
Mr. Parry

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

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

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

Mr. Beebe, Ms. Cumming,
Messrs. Goodfriend, Howard,
Lindsey, Reinhart, Simpson, and
Sniderman, Associate Economists

Mr. Fisher, Manager, System Open
Market Account

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

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

Mr. Madigan, Associate Director,
Division of Monetary Affairs,
Board of Governors

Messrs. Oliner, Slifman, and
Struckmeyer, Associate Directors,
Division of Research and
Statistics, Board of Governors

Mr. Whitesell, Assistant Director,
Division of Monetary Affairs,
Board of Governors

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

Mr. Lyon, First Vice President, Federal
Reserve Bank of Minneapolis

Ms. Browne, Messrs. Hakkio, Hunter,
Kos, Ms. Mester, Messrs. Rohnick
and Rosenblum, Senior Vice
Presidents, Federal Reserve Banks
of Boston, Kansas City, Chicago,
New York, Philadelphia,
Minneapolis, and Dallas
respectively

Messrs. Cunningham and Gavin,
Vice Presidents, Federal Reserve
Banks of Atlanta and St. Louis
respectively

By unanimous vote, the minutes of
the meeting of the Federal Open Market
Committee held on November 15, 2000,
were approved.

The Manager reported on developments
in domestic financial markets and
on System open market transactions
in government securities and federal
agency obligations during the period
November 15, 2000, through December
18, 2000. By unanimous vote, the
Committee ratified these transactions.

The Manager of the System Open
Market Account also reported on recent
developments in foreign exchange markets.
There were no open market operations
in foreign currencies for the System's
account in the period since the
previous meeting.

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

The information reviewed at this
meeting provided evidence that economic
activity, which had expanded at an
appreciably lower pace since mid-year,
might have slowed further in recent months.
Consumer spending and business purchases of equipment and
software had decelerated markedly after
having registered extraordinary gains in

the first half of the year. Housing construction, though still relatively firm, was noticeably below its robust pace of earlier in the year. With final spending rising at a reduced rate, inventory overhangs had emerged in a number of goods-producing industries, most visibly in the motor vehicle sector. Manufacturing production had declined as a consequence, and the rate of expansion in employment had moderated further. Evidence on core price inflation was mixed; by one measure, it appeared to be increasing very gradually, in part reflecting the indirect effects of higher energy costs, but by another it had remained at a relatively subdued level.

Growth in private nonfarm payroll employment moderated a little further on balance in October and November. Manufacturing payrolls changed little over the two months, and job gains in the construction, retail trade, and services industries were smaller than those of earlier in the year. By contrast, the pace of hiring remained relatively brisk in the finance, insurance, and real estate sectors. With growth in the demand for labor slowing, initial claims for unemployment insurance continued to trend upward, and the civilian unemployment rate edged up to 4 percent in November, its average thus far this year.

Industrial production declined slightly in October and November following a moderate third-quarter increase that was well below the pace of expansion recorded during the first half of the year. Utilities output surged in November in response to unseasonably cold weather across much of the country while mining activity changed little. In manufacturing, motor vehicle output was scaled back further in November, and there also were widespread declines in industries not directly affected by conditions in the motor vehicle sector. Although the production of high-tech equipment was still

trending up, growth continued to slow from the extraordinarily rapid increases of earlier in the year. The weakening of factory output in November was reflected in a further decline in the rate of capacity utilization in manufacturing to a point somewhat below its long-term average.

Consumer spending appeared to be decelerating noticeably further in the fourth quarter in an environment of diminished consumer confidence, smaller job gains, and lower stock prices. Retail sales were down somewhat on balance in October and November after a substantial third-quarter increase; sales of light vehicles dropped over the two months, and growth in expenditures on other consumer goods slowed. Outlays on services continued to grow at a moderate rate through October (latest data).

Against the backdrop of declining interest rates on fixed-rate mortgages, residential building activity had leveled out since midyear, and October starts remained at the third-quarter level. Sales of new homes edged down in October, though they were still slightly above their third-quarter level; sales of existing homes slipped somewhat in October but were near the middle of their range over the past year. In the multifamily sector, starts moved up slightly further in October, though they remained appreciably below their elevated level during the first half of the year. Continuing relatively low vacancy rates for multifamily units suggested that the prospects for additional construction were favorable.

Business investment in equipment and software increased at a sharply lower, though still relatively robust, rate in the third quarter, and information on shipments of nondefense capital goods indicated another moderate increase in business investment in October. Ship-

ments of communications, computing, and office equipment were well above their third-quarter averages, and shipments of non-high-tech equipment turned up in October after having fallen appreciably in earlier months. On the downside, sales of medium and heavy trucks declined further over October and November, and new orders for such trucks remained weak. Investment in nonresidential structures continued to rise briskly in October, and all the major subcategories of construction put in place were up substantially on a year-over-year basis. Market fundamentals, including rising property values and low vacancy rates, suggested that further expansion of nonresidential building activity, particularly office construction, was likely.

Inventory investment on a book-value basis picked up in October from the third-quarter pace, and the aggregate inventory-sales ratio edged up to its highest level in the past twelve months. In manufacturing, sizable increases in stocks were led by large accumulations at producers of industrial and electrical machinery. As a result, the stock-sales ratio for manufacturing reached its highest level in a year; advances in stock-sales ratios were widespread among makers of durable goods while ratios remained high for a number of categories of nondurable products. At the wholesale level, inventory accumulation inched up from its third-quarter rate, and the sector's inventory-sales ratio was at the top of its range for the past twelve months. Total retail stocks rose in line with sales in October, and the inventory-sales ratio for this sector also remained at the upper end of its range over the past year.

The U.S. trade deficit in goods and services reached a new record high in September and on a quarterly average basis was up appreciably further in the

third quarter. The value of exports continued to grow strongly in the latest quarter, led by advances in exported machinery and industrial supplies. The value of imports rose at an even faster rate than exports, with increases in all major trade categories, especially industrial supplies, semiconductors, and services. Economic growth in the foreign industrial countries slowed moderately in the third quarter, and the available information suggested a further reduction in the fourth quarter. Economic expansion eased in the euro area despite continued strong growth of investment and exports, as consumer spending appeared to be damped by earlier interest rate increases and by the drain on spendable income of higher prices for oil and imported goods more generally. In addition, weak consumption appeared to be an important factor in continued sluggish economic growth in Japan. Economic activity also decelerated in some developing countries in the third quarter, with recent indicators suggesting a slowdown in expansion in many parts of East Asia.

Incoming data indicated that, on balance, price inflation had picked up only a little, if at all. Consumer prices, as measured by the consumer price index (CPI) on a total and a core basis, rose mildly in October and November after a sizable September increase, but on a year-over-year basis core CPI prices increased noticeably more in the twelve months ended in November than in the previous twelve-month period. When measured by the personal consumption expenditure (PCE) chain-type index, however, consumer price inflation was modest in both October (latest data) and the twelve months ended in October, with little change year over year. At the producer level, core prices edged down on balance in October and November; moreover, producer inflation eased

somewhat on a year-over-year basis, though the deceleration was more than accounted for by an earlier surge in tobacco prices during the year ended in November 1999. With regard to labor costs, average hourly earnings of production or nonsupervisory workers increased in November at the slightly higher rate recorded in October. For the twelve months ended in October, average hourly earnings rose somewhat more than in the previous twelve months.

At its meeting on November 15, 2000, the Committee adopted a directive that called for maintaining conditions in reserve markets consistent with an unchanged federal funds rate of about 6½ percent. In taking that action, the members noted that despite clear indications of a more moderate expansion in economic activity, persisting risks of heightened inflation pressures remained a concern, particularly in the context of a gradual upward trend in core inflation. In these circumstances, a steady monetary policy was the best means to promote price stability and sustainable economic expansion. While recognizing that growth was slowing more than had been anticipated and that developments might be moving in a direction that would require a shift to a balanced risk statement, members agreed that such a change would be premature. As a result, they agreed that the statement accompanying the announcement of their decision should continue to indicate that the risks remained weighted mainly in the direction of rising inflation.

Open market operations throughout the intermeeting period were directed toward maintaining the federal funds rate at the Committee's targeted level of 6½ percent, and the average rate remained close to the intended level. Against the background of deteriorating

conditions in some segments of financial markets, slower economic expansion, and public comments by Federal Reserve officials about the implications of those developments, market expectations about the future course of the federal funds rate were revised down appreciably over the intermeeting period, and market interest rates on Treasury and private investment-grade securities declined somewhat over the intermeeting interval. The weaker outlook for economic growth, coupled with growing market concerns about corporate earnings, weighed down equity prices and boosted risk spreads on lower-rated investment-grade and high-yield bonds. Equity prices were quite volatile during the intermeeting period, and reflecting numerous dour reports on corporate earnings and incoming information indicating slower growth in economic activity in the United States, broad indexes of stock market prices dropped considerably on balance over the intermeeting period.

In foreign exchange markets, the trade-weighted value of the dollar edged lower on balance over the intermeeting interval in terms of the currencies of a broad group of U.S. trading partners. Among the major foreign currencies, the dollar fell moderately against the euro but moved up by a roughly comparable extent in terms of the yen. The dollar's decline against the euro reflected a growing perception that economic expansion in the euro area would cool comparatively less than in the United States. Correspondingly, the slide of the yen seemed to be related to weak economic data, stagnant business sentiment, and political uncertainties in Japan. The dollar posted a small gain against an index of the currencies of other important trading partners, largely reflecting weaker financial conditions in some emerging economies.

The broad monetary aggregates decelerated further in November. The slowing growth of M2 in October and November following strong expansion in August and September apparently reflected the moderating rates of increase in nominal income and spending in recent months and perhaps some persisting effects of the rise in opportunity costs earlier in the year. M3 growth slowed less than that of M2 in November, in part because of stepped-up issuance of large time deposits as banks reduced their reliance on funding from overseas offices. The growth of domestic nonfinancial debt slowed in October (latest data), reflecting a larger further paydown of federal debt and a reduced pace of private borrowing.

The staff forecast prepared for this meeting suggested that the economic expansion had slowed considerably, to a rate somewhat below the staff's current estimate of the growth of the economy's potential output, but that it would gradually gain strength over the next two years. The forecast anticipated that the expansion of domestic final demand would be held back to some extent by the diminishing influence of the wealth effects associated with past outsized gains in equity prices but also by the relatively high interest rates and the somewhat stringent credit terms and conditions on some types of loans by financial institutions. As a result, growth of spending on consumer durables was expected to be appreciably below that in recent quarters, and housing demand to be slightly weaker. Business fixed investment, notably outlays for equipment and software, was projected to remain relatively robust; growth abroad would support the expansion of U.S. exports; and fiscal policy was assumed to continue its moderate expansionary trend. Core price inflation was projected to rise only slightly over the forecast

horizon, partly as a result of higher import prices but also as a consequence of some further increases in nominal labor compensation gains that would not be fully offset by the expected growth of productivity.

In the Committee's discussion of current and prospective economic developments, members commented that recent statistical and anecdotal information provided clear indications of significant slowing in the expansion of business activity and also pointed to appreciable erosion in business and consumer confidence. The deceleration in the economy had occurred from an unsustainably high growth rate in the first half of the year, and the resulting containment in demand pressures on resources already had improved the outlook for inflation. The question at this juncture was whether the expansion would remain near its recent pace or continue to moderate. While the former still seemed to be the most likely outcome, the very recent information on labor markets, sales and production, business and consumer confidence, developments in financial markets, and growth in foreign economies suggested that the risks to the economy had shifted rapidly and perceptibly to the downside. Concerning the outlook for inflation, members commented that the upside risks clearly had diminished in the wake of recent developments and that, with pressures on resources likely to abate at least a little, subdued inflation was a reasonable prospect.

Weakening trends in production and employment were most apparent in the manufacturing sector. There were widespread anecdotal reports of production cutbacks, notably in industries related to motor vehicles, and of associated declines in manufacturing employment. However, many of the factory workers losing their jobs were readily finding

employment elsewhere in what generally continued to be characterized as very tight labor markets across the country. The softening in manufacturing reflected weak sales and prompt efforts to limit unwanted buildups in inventories. Even so, business contacts reported currently undesired levels of inventories in a range of industries, not only in motor vehicles. In the aggregate, cutbacks in inventory investment or run-offs of existing inventories accounted for a significant part of the recent moderation in the growth of the overall economy.

The slowing in the growth of consumer spending that had prompted much of the backup in inventories was evident from a wide variety of information, including anecdotal reports from various parts of the country. Consumer sentiment seemed to have deteriorated appreciably in recent weeks, though from a very high level, and retail sales were widely indicated to have softened after a promising spurt early in the holiday season. Factors cited to account for the relatively sudden emergence of this weakness, and also as possible harbingers of developments in coming quarters, were the negative wealth effects of further declines in stock market prices, the impact of very high energy costs on disposable incomes, and some increase in caution about the outlook for employment opportunities and incomes. The extent to which such developments would persist and perhaps foster more aggressive retrenchment in consumer spending clearly was uncertain, but the members nonetheless anticipated that over time underlying employment and income trends would be consistent with further expansion in consumer expenditures, though at a pace well below that of earlier in the year.

Growth in business expenditures for equipment and software had moderated

substantially in recent months from very high rates of increase over an extended period. The slowdown reflected a mix of interrelated developments including flagging growth in demand and tightening financial conditions in the form of declining equity prices and stricter credit terms for many business borrowers. The re-evaluation of prospects was most pronounced in the high-tech industries. The profitability of using and producing such software and equipment had been overestimated to a degree, and disappointing sales and a better appreciation of risks had resulted in much slower growth in production of such equipment and sharp deterioration in the equity prices of high-tech companies. At the same time, nonresidential construction activity appeared to have been well maintained in many parts of the country, though there were reports of softening in some regions and of some reductions or delays in planned projects. Against this background, risks of further retrenchment in capital spending persisted, but to date there was no evidence to suggest that the underlying pace of advances in technology and related productivity growth had abated. Over time, further increases in productivity would undergird continuing growth in demand for high-tech equipment. In the nonresidential construction area, members noted that high occupancy rates and high rents were supportive elements in the construction outlook.

With regard to the prospects for housing activity, members provided anecdotal reports of some weakening in a number of regions, though homebuilding was holding up well in others. Housing demand was, of course, responding to many of the same factors that were affecting consumer spending, including the negative wealth effects of declining stock market prices. On the positive side, further growth in incomes and

declines in mortgage rates were key elements of underlying strength for the housing sector. On balance, housing construction at a pace near current levels appeared to be a reasonable prospect in association with forecasts of moderate growth in the overall economy.

Growth in foreign economic activity likely would continue to foster expansion in U.S. exports, though members noted that there were signs of softer business conditions in some foreign nations. In addition, members referred to some anecdotal evidence of increasing concern among business contacts about future prospects for exports of manufactured goods. On the other hand, any depreciation in the foreign exchange value of the dollar as the economy slowed would help to bolster exports.

Against the backdrop of slowing economic growth, core inflation had remained quiescent. Views regarding the outlook for inflation were somewhat mixed, though all the members agreed that the risks of higher inflation had diminished materially. Nonetheless, some members noted that while recent anecdotal reports pointed to a modest reduction in labor market strains in some areas and industries, labor markets in general were still very tight and likely would remain taut relative to historical experience. In such circumstances, if structural productivity growth leveled out, worker efforts to catch up to past increases in productivity could put pressures on labor compensation costs. The latter could well be augmented by sharply rising medical costs and by attempts to protect the purchasing power of wages from the erosion caused by the rise in energy prices. Further depreciation of the dollar in relation to major foreign currencies would add to import prices and domestic inflation pressures. But there were also a number of reasons for optimism about the outlook for con-

sumer prices over coming quarters. Growth in economic activity at a pace somewhat below that of the economy's output potential would lessen pressures on labor and other resources from levels that had, in the past few years, been associated with at most a small uptick in core inflation. Indications that rapid growth in structural productivity would persist and widespread reports that strong competitive pressures in most markets continued to inhibit business efforts to increase prices in the face of rising costs also were favorable factors in the outlook. Further declines in oil prices, as evidenced by quotations in futures markets, would if realized have effects not only on so-called headline inflation but would help hold down core prices over time. Despite previous increases in headline inflation, survey and other measures of inflation expectations continued to suggest that long-run inflation expectations had not risen and might even have fallen a bit of late as the economy softened.

In the Committee's discussion of policy for the intermeeting period ahead, all the members indicated that they could support an unchanged policy stance, consistent with a federal funds rate averaging about 6½ percent. However, they also endorsed a proposal calling for a shift in the balance of risks statement to be issued after this meeting to express the view that most members believed the risks were now weighted toward conditions that could generate economic weakness in the foreseeable future. In their evaluation of the appropriate policy for these changing circumstances, the members agreed that the critical issue was whether the expansion would stabilize near its recent growth rate or was continuing to slow. In the view of almost all the members, the currently available information bearing on this issue was not sufficient to warrant an

easing at this point. Much of the usual aggregative data on spending and employment, although to be sure available only with a lag, continued to suggest moderate economic expansion. The information pointing to further weakness was very recent and to an important extent anecdotal. As a consequence, most of the members were persuaded that a prudent policy course would be to await further confirmation of a weakening expansion before easing, particularly in light of the high level of resource utilization and the experience of recent years when several lulls in the growth of the economy had been followed by a resumption of very robust economic expansion. Additional evidence of slowing economic growth might well materialize in the weeks immediately ahead—from the regular aggregated monthly data releases, but also from weekly readings on the labor market and reports from businesses on the strength of sales and production—and the members agreed that the Committee should be prepared to respond promptly to indications of further weakness in the economy. Those few members who expressed a preference for easing at this meeting believed that, with unit labor costs and inflation expectations contained, enough evidence of further weakness already existed to warrant an immediate action. Nonetheless, they could accept a delay in light of prevailing uncertainties about the prospective performance of the economy and the intention of the Committee to act promptly in coming weeks, including the possibility of an easing move early in the intermeeting period, should confirming information on weakening trends in the economy emerge.

With regard to the consensus in favor of moving from an assessment of risks weighted toward rising inflation to one that was weighted toward economic

weakness, with no intermediate issuance of a balanced risks assessment, some members observed that such a change was likely to be viewed as a relatively rapid shift by some observers. The revised statement of risks, even though it would not be associated with an easing move, could strengthen expectations regarding future monetary policy easing to an extent that was difficult to predict and could generate sizable reactions in financial markets. At the same time, it might raise questions about why the Committee did not alter the stance of policy. Nonetheless, the Committee's reasons for not easing today were deemed persuasive by most members, while shifting its statement about economic risks seemed clearly justified by recent developments. In one view, even though the risks of a weakening economy had increased, a statement of balanced risks would be preferable because further moderation in the expansion might well fail to materialize.

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

The Federal Open Market Committee seeks monetary and financial conditions that will foster price stability and promote sustainable growth in output. To further its long-run objectives, the Committee in the immediate future seeks conditions in reserve markets consistent with maintaining the federal funds rate at an average of around 6½ percent.

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

Against the background of its long-run goals of price stability and sustainable eco-

nomic growth and of the information currently available, the Committee believes that the risks are weighted mainly toward conditions that may generate economic weakness in the foreseeable future.

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

This meeting adjourned at 1:35 p.m. with the understanding that the next regularly scheduled meeting of the Committee would be held on Tuesday-Wednesday, January 30-31, 2001.

Telephone Conference Meeting

A telephone conference meeting was held on January 3, 2001, for the purpose of considering a policy easing action. In keeping with the Committee's Rules of Organization, the members at the start of the meeting unanimously re-elected Alan Greenspan as Chairman of the Federal Open Market Committee and William J. McDonough as Vice Chairman. Their terms of office were extended for one year until the first meeting of the Committee after December 31, 2001. By unanimous vote, the Federal Reserve Bank of New York was selected to execute transactions for the System Open Market Account until the adjournment of the first meeting of the Committee after December 31, 2001.

At its meeting on December 19, 2000, the Committee had contemplated the possibility that ongoing economic and financial developments might warrant a reassessment of the stance of monetary policy before the next scheduled meeting in late January. Information that had become available since the December meeting tended to confirm that the economic expansion had continued to weaken. The manufacturing sector was especially soft, reflecting apparent

efforts in a number of industries to readjust inventories that were now deemed to be too high, notably those related to motor vehicles. Retail sales were appreciably below business expectations for the holiday season despite some pickup in the latter half of December, apparently largely induced by price discounting, and sales of motor vehicles evidenced significant further weakness as the month progressed. Business confidence appeared to have deteriorated further since the December meeting amid widespread reports of reductions in planned production and capital spending. Elevated energy costs were continuing to drain consumer purchasing power and were adding to the costs of many business firms, with adverse effects on profits and stock market valuations. Interacting with these developments were forecasts of further declines in business profits over coming quarters. On the more positive side, housing activity appeared to be responding to lower mortgage interest rates, and on the whole nonresidential construction activity seemed to be reasonably well maintained. Moreover, while the expansion had weakened and economic activity might remain soft in the near term, the longer-term outlook for reasonably sustained economic expansion, supported by easier financial conditions and the response of investment and consumption to rising productivity and living standards, was still quite good. Inflation expectations appeared to be declining, with businesses continuing to encounter marked and even increased resistance to their efforts to raise prices. On balance, the information already in hand indicated that the expansion clearly was weakening and by more than had been anticipated. In the circumstances, prompt and forceful policy action sooner and larger than expected by financial markets seemed called for.

Against this background, all the members supported a proposal for an easing of reserve conditions consistent with a reduction of 50 basis points in the federal funds rate to a level of 6 percent. The Committee voted to authorize and direct the Federal Reserve Bank of New York, until it was instructed otherwise, to execute transactions in the System Account in accordance with the following domestic policy directive:

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

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

Against the background of its long-run goals of price stability and sustainable eco-

nomic growth and of the information currently available, the Committee believes that the risks are weighted mainly toward conditions that may generate economic weakness in the foreseeable future.

Votes for this action: Messrs. Greenspan, McDonough, Ferguson, Gramlich, Hoenig, Kelley, Meyer, Minehan, Moskow, and Poole. Votes against this action: None.

Chairman Greenspan indicated that shortly after this meeting the Board of Governors would consider pending requests by several Federal Reserve Banks to reduce the discount rate by 25 basis points. At the time of this conference call meeting, no pending requests for a 50 basis point reduction were outstanding, but the press release would indicate that the Board would be prepared to consider requests for further reductions of 25 basis points if they were received.

Donald L. Kohn
Secretary

Litigation

During 2000 the Board of Governors was a party in eighteen lawsuits or appeals filed that year and was a party in nine other cases pending from previous years, for a total of twenty-seven cases; in 1999, the Board had been a party in a total of twenty-three cases. One of the actions filed in 2000 raised questions under the Bank Holding Company Act. As of December 31, 2000, sixteen cases were pending.

Judicial Review of Board Orders under the Bank Holding Company Act

Dime Bancorp, Inc. v. Board of Governors, No. 00-4249 (2nd Circuit, filed December 11, 2000), is a petition for review of a Board order dated September 27, 2000, approving the applications of North Fork Corporation, Inc., Melville, New York, to acquire control of Dime Bancorp, Inc. and to thereby acquire its wholly owned subsidiary, The Dime Savings Bank of New York, FSB, both of New York, New York (86 *Federal Reserve Bulletin* 767).

Irontown Housing Corp. v. Board of Governors, No. 99-9549 (10th Circuit, filed December 27, 1999), was a petition for review of a Board order dated December 13, 1999, approving the merger of First Security Corporation and Zions Bancorporation, both of Salt Lake City, Utah (86 *Federal Reserve Bulletin* 122). On June 28, 2000, the court dismissed the petition for review.

Litigation under the Financial Institutions Supervisory Act

In *Board of Governors v. Interfinancial Services, Ltd.*, No. 00-5233 (D.C. Cir-

cuit, filed June 27, 2000), appellant sought review of a district court order enforcing an administrative subpoena issued by the Board. On June 30, 2000, the court of appeals denied the appellant's motion for a stay of the district court order, and on December 1, 2000, the court dismissed the case on appellant's motion.

Board of Governors v. Pharaon, No. 91-CIV-6250 (S.D. New York, filed September 17, 1991), is an action brought to recover assets of an individual subject to a civil money penalty imposed by the Board. The case was remanded from the U.S. Court of Appeals for the Second Circuit for determination of the penalty amount following the court of appeals' determination requiring a 10 percent surcharge and prejudgment interest on the penalty imposed.

Other Actions

Howe v. Bank for International Settlements, No. 00CV12485 RCL (D. Massachusetts, filed December 7, 2000), is an action seeking damages in connection with gold market activities and the repurchase of privately owned shares of the Bank for International Settlements.

Barnes v. Reno, No. 1:00CV02900 (D. District of Columbia, filed December 4, 2000), is a civil rights action naming a Federal Reserve employee as a defendant.

Guerrero v. United States, No. 99-6771 (E.D. California, service effected November 21, 2000), is a prisoner suit naming the Federal Reserve as a defendant.

El Bey v. United States, No. 00-5293 (D.C. Circuit, filed August 31, 2000), is

an appeal from a district court order dismissing a pro se action against the Federal Reserve and other defendants as lacking an arguable basis in law.

Sedgwick v. Board of Governors, No. 00-16525 (9th Circuit, filed August 16, 2000), is an appeal of the district court's dismissal of an action under the Federal Tort Claims Act alleging violation of bank supervision requirements.

Individual Reference Services Group, Inc. v. Board of Governors et al., No. 00-CV-1828 (ESH) (D. District of Columbia, filed July 28, 2000), is an action under the Administrative Procedure Act challenging a portion of an interagency rule regarding privacy of consumer financial information. The action has been consolidated with a separate action, *Trans Union LLC v. Board of Governors et al.*, No. 00-CV-2087 (ESH) (D. District of Columbia, filed August 30, 2000), challenging the same rule.

Reed Elsevier Inc. v. Board of Governors, No. 00-1289 (D.C. Circuit, filed June 30, 2000), is a petition for review of an interagency rule regarding privacy of consumer financial information.

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

Buttersworth v. Board of Governors, No. 00-50262 (5th Circuit, filed April 14, 2000), is an appeal of the district court's February 17, 2000, dismissal of appellant's Privacy Act claims.

Hunter v. Board of Governors, No. 00-CV-735 (D. District of Columbia, filed April 5, 2000), was an action claiming retaliation for alleged whistle-

blowing. The action was dismissed on December 15, 2000.

Bennett v. Federal Bureau of Investigation et al., No. H-00-0707 (S.D. Texas, filed March 1, 2000), was an action alleging Board interference with a private investment. On October 20, 2000, the district court dismissed the action.

Albrecht v. Board of Governors, No. 00-CV-317 (CKK) (D. District of Columbia, filed February 18, 2000), is an action challenging the method of funding of the retirement plan for certain Board employees.

Folstad v. Board of Governors, No. 00-1056 (6th Circuit, filed January 15, 2000), was an appeal of a district court order granting summary judgment to the Board on a Freedom of Information Act case. On October 26, 2000, the court of appeals affirmed the district court order.

Toland v. Internal Revenue Service, Federal Reserve System, et al., No. CV-S-99-1769-JBR-RJJ (D. Nevada, filed December 29, 1999), was a challenge to income taxation and Federal Reserve notes. On May 1, 2000, the court granted the government's motion to dismiss the action.

Wasserman v. Board of Governors, No. 99-6290 (2nd Circuit, filed October 27, 1999), was an appeal of the denial of various post-dismissal motions following the voluntary dismissal of the appellant's district court action. On January 19, 2000, the court of appeals dismissed the case.

Artis v. Greenspan, No. 1:99CV02073 (EGS) (D. District of Columbia, filed August 3, 1999), is an employment discrimination action.

Sheriff Gerry Ali v. U.S. State Department, No. 99-7438 (C.D. California, filed July 21, 1999), was an action relating to impounded bank drafts. On

December 23, 1999, the court stayed the action pending plaintiff's retaining counsel or returning to the United States.

Kerr v. Department of the Treasury, No. 99-16263 (9th Circuit, filed April 28, 1999), was an appeal of the district court's dismissal of an action challenging income taxation and Federal Reserve notes. The district court's dismissal was affirmed on July 13, 2000.

Nelson v. Greenspan, No. 1:99-CV00215 (EGS) (D. District of Columbia, filed January 28, 1999), is an employment discrimination complaint.

In *Fraternal Order of Police v. Board of Governors*, No. 98-3116 (D. District of Columbia, filed December 22, 1998), plaintiff seeks a declaratory judgment regarding the Board's labor practices.

Hunter v. Board of Governors, No. 1:98CV02994 (TFH) (D. District of Columbia, filed December 9, 1998), was an action under the Freedom of Information Act, the Privacy Act, and the First Amendment. On May 10, 2000, the district court granted the Board's motion for summary judgment, and on August 25, 2000, it denied plaintiff's request for attorney fees. ■

Federal Reserve System Organization

Board of Governors of the Federal Reserve System

December 31, 2000

Members

	<i>Term expires January 31,</i>
ALAN GREENSPAN, of New York, <i>Chairman</i> ¹	2006
ROGER W. FERGUSON, JR., of Massachusetts, <i>Vice Chairman</i> ¹	2000
LAURENCE H. MEYER, of Missouri	2002
EDWARD W. KELLEY, JR., of Texas	2004
EDWARD M. GRALICH, of Virginia	2008
VACANCY	2010
VACANCY	2012

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 Normand R.V. Bernard, *Special Assistant to the Board*

1. The designations as Chairman and Vice Chairman expire on June 20, 2004, and October 5, 2003, respectively, unless the service of these members of the Board shall have terminated sooner.

*Board of Governors—Continued***DIVISION OF RESEARCH
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Board of Governors—Continued

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Barry R. Snyder, *Inspector General*

Donald L. Robinson, *Deputy Inspector General*

Federal Open Market Committee

December 31, 2000

Members

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WILLIAM J. McDONOUGH, *Vice Chairman*, President, Federal Reserve Bank of New York

J. ALFRED BROADDUS, JR., President, Federal Reserve Bank of Richmond

ROGER W. FERGUSON, JR., Board of Governors

EDWARD M. GRAMLICH, Board of Governors

JACK GUYNN, President, Federal Reserve Bank of Atlanta

JERRY L. JORDAN, President, Federal Reserve Bank of Cleveland

EDWARD W. KELLEY, JR., Board of Governors

LAURENCE H. MEYER, Board of Governors

ROBERT T. PARRY, President, Federal Reserve Bank of San Francisco

Alternate Members

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JAMIE B. STEWART, JR., First Vice President, Federal Reserve Bank of New York

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Assistant Secretary

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Assistant Secretary

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General Counsel

THOMAS C. BAXTER, JR.,
Deputy General Counsel

KAREN H. JOHNSON,
Economist

DAVID J. STOCKTON,
Economist

Federal Open Market Committee—Continued

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Associate Economist

CHRISTINE M. CUMMING,
Associate Economist

ROBERT A. EISENBEIS,
Associate Economist

MARVIN S. GOODFRIEND,
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DAVID E. LINDSEY,
Associate Economist

THOMAS D. SIMPSON,
Associate Economist

MARK S. SNIDERMAN,
Associate Economist

PETER R. FISHER, *Manager, System Open Market Account*

During 2000 the Federal Open Market Committee held eight regularly scheduled meetings (see Minutes of Federal Open Market Committee Meetings in this REPORT.)

Federal Advisory Council

December 31, 2000

Members

District 1—LAWRENCE K. FISH, *Chairman, President, and Chief Executive Officer*, Citizens Financial Group, Inc., Providence, Rhode Island

District 2—DOUGLAS A. WARNER III, *Chairman, President, and Chief Executive Officer*, J.P. Morgan Chase & Co., Incorporated, New York, New York

District 3—RONALD L. HANKEY, *President and Chief Executive Officer*, Adams County National Bank, Gettysburg, Pennsylvania

District 4—DAVID A. DABERKO, *Chairman and Chief Executive Officer*, National City Corporation, Cleveland, Ohio

District 5—L.M. BAKER, JR., *Chairman and Chief Executive Officer*, Wachovia Corporation, Winston Salem, North Carolina

District 6—WILLIAM G. SMITH, JR., *President and Chief Executive Officer*, Capital City Bank Group, Tallahassee, Florida

District 7—NORMAN R. BOBINS, *President and Chief Executive Officer*, LaSalle National Bank and LaSalle National Corporation, Chicago, Illinois

District 8—KATIE S. WINCHESTER, *President and Chief Executive Officer*, First Citizens National Bank, Dyersburg, Tennessee

District 9—R. SCOTT JONES, *President and Chief Executive Officer*, Signal Financial Corporation, Mendota Heights, Minnesota

District 10—C.Q. CHANDLER, *Chairman and Chief Executive Officer*, INTRUST Financial Corporation, Wichita, Kansas

District 11—RICHARD W. EVANS, JR., *Chairman and Chief Executive Officer*, Frost National Bank, San Antonio, Texas

District 12—WALTER A. DODS, JR., *Chairman and Chief Executive Officer*, BancWest Corporation, Honolulu, Hawaii

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NORMAN R. BOBINS, *Vice President*

JAMES E. ANNABLE, *Co-Secretary*

WILLIAM J. KORSVIK, *Co-Secretary*

Federal Advisory Council—Continued

The Federal Advisory Council met on February 3–4, May 4–5, September 7–8, and November 2–3, 2000. The Board of Governors met with the council on February 4, May 5, September 8, and November 3, 2000. The council, which is composed of one representative of the banking industry

from each of the twelve Federal Reserve Districts, is required by the Federal Reserve Act to meet in Washington at least four times each year and is authorized by the Act to consult with, and advise, the Board on all matters within the jurisdiction of the Board.

Consumer Advisory Council

December 31, 2000

Members

WALTER J. BOYER, *Chairman*, The Diamond Group, Dallas, Texas

DOROTHY BROADMAN, *Senior Vice President*, Cal Fed Bank, San Francisco, California

TERESA A. BRYCE, *General Counsel*, Nexstar, St. Louis, Missouri

MALCOLM BUSH, *President*, Woodstock Institute, Chicago, Illinois

ROBERT M. CHEADLE, *Chief Executive Officer*, Indian Territory Development, Ada, Oklahoma

MARY ELLEN DOMEIER, *President*, State Bank and Trust Company of New Ulm, New Ulm, Minnesota

JEREMY D. EISLER, *Director of Litigation*, South Mississippi Legal Services Corp., Biloxi, Mississippi

ROBERT F. ELLIOTT, *Retired Vice Chairman*, Household International, Prospect Heights, Illinois

LESTER WM. FIRSTENBERGER, *Deputy General Counsel*, American General Finance, Evansville, Indiana

JOHN C. GAMBOA, *Executive Director*, The Greenlining Institute, San Francisco, California

KARLA S. IRVINE, *Executive Director*, Housing Opportunities Made Equal of Greater Cincinnati, Inc., Cincinnati, Ohio

WILLIE M. JONES, *Senior Vice President*, The Community Builders, Inc., Boston, Massachusetts

M. DEAN KEYES, *Senior Vice President*, Firststar, St. Louis, Missouri

GWENN S. KYZER, *Vice President*, Experian, Inc., Allen, Texas

JOHN C. LAMB, *Senior Staff Counsel*, Department of Consumer Affairs, Sacramento, California

ANNE S. LI, *Executive Director*, New Jersey Community Loan Fund, Trenton, New Jersey

MARTHA W. MILLER, *President*, Choice Federal Credit Union, Greensboro, North Carolina

DANIEL W. MORTON, *Vice President and Senior Counsel*, The Huntington National Bank, Columbus, Ohio

JEREMY NOWAK, *Chief Executive Officer*, The Reinvestment Fund, Philadelphia, Pennsylvania

MARTA RAMOS, *Vice President and Community Reinvestment Act Officer*, Banco Popular de Puerto Rico, San Juan, Puerto Rico

Consumer Advisory Council—Continued

DAVID L. RAMP, *Assistant Attorney General*, State of Minnesota, St. Paul, Minnesota

RUSSELL W. SCHRADER, *Senior Vice President and Assistant General Counsel*,
Visa U.S.A., San Francisco, California

ROBERT G. SCHWEMM, *Ashland Professor of Law*, University of Kentucky, Lexington,
Kentucky

DAVID J. SHIRK, *Senior Manager*, Lending Systems Framework, Inc.,
Tarrytown, New York

GARY S. WASHINGTON, *Senior Vice President*, ABN AMRO, Chicago, Illinois

ROBERT L. WYNN II, *Financial Education Officer*, Wisconsin Department of Financial
Institutions, Madison, Wisconsin

Officers

DWIGHT GOLANN, *Chair*
Professor of Law,
Suffolk University Law School,
Boston, Massachusetts

LAUREN ANDERSON, *Vice Chair*
Executive Director,
Neighborhood Housing Services
of New Orleans, Inc.,
New Orleans, Louisiana

The Consumer Advisory Council met with members of the Board of Governors on March 30, June 22, and October 26, 2000. The council is composed of academics, state and local government officials, representatives of the financial industry, and represen-

tatives of consumer and community interests. It was established pursuant to the 1976 amendments to the Equal Credit Opportunity Act to advise the Board on consumer financial services.

Thrift Institutions Advisory Council

December 31, 2000

Members

JAMES C. BLAINE, *President*, State Employees' Credit Union, Raleigh, North Carolina

LAWRENCE L. BOUDREAU III, *President and Chief Executive Officer*, Fidelity Homestead
Association, New Orleans, Louisiana

TONY R. DORETY, *President and Chief Executive Officer*, Suncoast Schools Federal Credit
Union, Tampa, Florida

BABETTE E. HEIMBUCH, *President and Chief Executive Officer*, First Federal Bank of
California, FSB, Santa Monica, California

THOMAS S. JOHNSON, *Chairman and Chief Executive Officer*, GreenPoint Bank,
Manhattan, New York

WILLIAM A. LONGBRAKE, *Vice Chair and Chief Financial Officer*, Washington Mutual
Bank, Seattle, Washington

CORNELIUS D. MAHONEY, *Chairman, President, and Chief Executive Officer*, Woronoco
Savings Bank, Westfield, Massachusetts

KATHLEEN E. MARINANGEL, *Chair, President, and Chief Executive Officer*, McHenry
Savings Bank, McHenry, Illinois

Thrift Institutions Advisory Council—Continued

F. WELLER MEYER, *President and Chief Executive Officer*, Acacia Federal Savings Bank, Falls Church, Virginia

ANTHONY J. POPP, *President and Chief Executive Officer*, Marietta Savings Bank, Marietta, Ohio

MARK H. WRIGHT, *President and Chief Executive Officer*, USAA Federal Savings Bank, San Antonio, Texas

CLARENCE ZUGELTER, *President, Chief Executive Officer, and Chairman*, First Federal Bank, Kansas City, Missouri

Officers

F. WELLER MEYER, *President*

THOMAS S. JOHNSON, *Vice President*

The members of the Thrift Institutions Advisory Council met with the Board of Governors on February 11, July 14, and December 1, 2000. The council, which is composed of representatives from credit

unions, savings and loan associations, and savings banks, consults with, and advises, the Board on issues pertaining to the thrift industry and on various other matters within the Board's jurisdiction.

Officers of Federal Reserve Banks and Branches

December 31, 2000

BANK or Branch	Chairman ¹ Deputy Chairman	President First Vice President	Vice President in charge of Branch
BOSTON ²	William C. Brainard William O. Taylor	Cathy E. Minehan Paul M. Connolly	
NEW YORK ²	Peter G. Peterson Charles A. Heimbold, Jr. Bal Dixit	William J. McDonough Jamie B. Stewart, Jr.	
Buffalo			Barbara L. Walter ³
PHILADELPHIA	Joan Carter Charisse R. Lillie	Anthony M. Santomero William H. Stone, Jr.	
CLEVELAND ²	David H. Hoag Robert W. Mahoney	Jerry L. Jordan Sandra Pianalto	
Cincinnati	George C. Juilfs		Barbara B. Henshaw
Pittsburgh	John T. Ryan III		Robert B. Schaub
RICHMOND ²	Jeremiah J. Sheehan Wesley S. Williams, Jr.	J. Alfred Broadbust, Jr. Walter A. Varvel	
Baltimore	George L. Russell, Jr.		William J. Tignanelli ³
Charlotte	Joan H. Zimmerman		Dan M. Bechter ³

Officers of Federal Reserve Banks and Branches— Continued

BANK or Branch	Chairman ¹ Deputy Chairman	President First Vice President	Vice President in charge of Branch
ATLANTA.....	John F. Wieland Paula Lovell	Jack Guynn Patrick K. Barron	James M. McKee
Birmingham.....	D. Bruce Carr		Andre T. Anderson
Jacksonville.....	William E. Flaherty		Robert J. Slack
Miami.....	Kaaren Johnson-Street		James T. Curry III
Nashville.....	Frances F. Marcum		Melvyn K. Purcell ³
New Orleans.....	Dwight H. Evans		Robert J. Musso ³
CHICAGO ²	Arthur C. Martinez Robert J. Darnall	Michael H. Moskow William C. Conrad	David R. Allardice ³
Detroit.....	Timothy D. Leuliette		
ST. LOUIS.....	Susan S. Elliott Charles W. Mueller	William Poole W. LeGrande Rives	Robert A. Hopkins
Little Rock.....	Vick M. Crawley		Thomas A. Boone
Louisville.....	J. Stephen Barger		Martha Perine Beard
Memphis.....	Mike P. Sturdivant, Jr.		
MINNEAPOLIS.....	James J. Howard Ronald N. Zwig	Gary H. Stern James M. Lyon	Samuel H. Gane
Helena.....	William P. Underriner		
KANSAS CITY.....	Jo Marie Dancik Terrence P. Dunn	Thomas M. Hoenig Richard K. Rasdall	Carl M. Gambs ³
Denver.....	Kathryn A. Paul		Kelly J. Dubbert
Oklahoma City.....	Patricia B. Fennell		Steven D. Evans
Omaha.....	Gladys Styles Johnston		
DALLAS.....	Roger R. Hemminghaus H.B. Zachry, Jr.	Robert D. McTeer, Jr. Helen E. Holcomb	
El Paso.....	Beauregard Brite White		Sammie C. Clay
Houston.....	Edward O. Gaylord		Robert Smith III ³
San Antonio.....	Patty Puig Mueller		James L. Stull ³
SAN FRANCISCO.....	Gary G. Michael Nelson C. Rising	Robert T. Parry John F. Moore	Mark L. Mullinix ⁴
Los Angeles.....	Lonnie Kane		Raymond H. Laurence ³
Portland.....	Nancy Wilgenbusch		Andrea P. Wolcott
Salt Lake City.....	Barbara L. Wilson		Gordon R.G.
Seattle.....	Richard R. Sonstelie		Werkema ⁴

NOTE. A current list of these officers appears each month in the *Federal Reserve Bulletin*.

1. The Chairman of a Federal Reserve Bank serves, by statute, as Federal Reserve Agent.

2. Additional offices of these Banks are located at Windsor Locks, Connecticut; Utica at Oriskany, New

York; East Rutherford, New Jersey; Columbus, Ohio; Charleston, West Virginia; Columbia, South Carolina; Indianapolis, Indiana; Milwaukee, Wisconsin; Des Moines, Iowa; and Peoria, Illinois.

3. Senior Vice President

4. Executive Vice President

Conference of Chairmen

The chairmen of the Federal Reserve Banks are organized into the Conference of Chairmen, which meets to consider matters of common interest and to consult with, and advise, the Board of Governors. Such meetings, attended also by the deputy chairmen, were held in Washington on May 31 and June 1, and on November 29 and 30, 2000.

The members of the Executive Committee of the Conference of Chairmen during 2000 were Jo Marie Dancik, chair; John F. Wieland, vice chair; and Peter G. Peterson, member.

On November 30, 2000, the conference elected its Executive Committee for 2001; it named John F. Wieland as chair, Peter G. Peterson as vice chair, and Charisse R. Lillie as the third member.

Conference of Presidents

The presidents of the Federal Reserve Banks are organized into the Conference of Presidents, which meets periodically to consider matters of common interest and to consult with, and advise, the Board of Governors.

Jerry L. Jordan, President of the Federal Reserve Bank of Cleveland, served as chair of the conference in 2000, and J. Alfred Broaddus, Jr., President of the Federal Reserve Bank of Richmond, served as its vice chair. Stephen J. Ong, of the Federal Reserve Bank of Cleveland, served as its secretary, and Betty M. Fahed, of the Federal Reserve Bank of Richmond, served as its assistant secretary.

On October 31, 2000, the conference elected J. Alfred Broaddus, Jr., as its chair for 2001–02, and Michael H. Moskow, President of the Federal Reserve Bank of Chicago, as its vice chair.

Conference of First Vice Presidents

The Conference of First Vice Presidents of the Federal Reserve Banks was organized in 1969 to meet periodically for the consideration of operations and other matters.

Richard K. Rasdall, Jr., First Vice President of the Federal Reserve Bank of Kansas City, served as chair of the conference in 2000, and Paul M. Connolly, First Vice President of the Federal Reserve Bank of Boston, served as its vice chair. Leesa M. Guyton, of the Federal Reserve Bank of Kansas City, served as its secretary, and David Park, of the Federal Reserve Bank of Boston, served as its assistant secretary.

Directors

The following list of directors of Federal Reserve Banks and Branches, current as of December 31, 2000, shows for each director the class of directorship, the director's principal organizational affiliation, and the date the director's term expires. Each Federal Reserve Bank has a nine-member board: three Class A and three Class B directors, who are elected by the stockholding member banks, and three Class C directors, who are appointed by the Board of Governors of the Federal Reserve System.

Class A directors represent the stockholding member banks in each Federal Reserve District. Class B and Class C directors represent the public and are chosen with due, but not exclusive, consideration to the interests of agriculture, commerce, industry, services, labor, and consumers; they may not be officers, directors, or employees of any bank or bank holding company. In addition, Class C directors may not be stockholders of any bank or bank holding company.

For the election of Class A and Class B directors, the Board of Governors classifies the member banks of each Federal Reserve District into three groups. Each group, which comprises banks with similar capitalization, elects one Class A director and one Class B director. Annually, the Board of Governors designates one of the Class C directors as chair of the board of each District Bank, and it designates another Class C director as deputy chair.

Federal Reserve Branches have either five or seven directors, a majority of whom are appointed by the parent Federal Reserve

Bank; the others are appointed by the Board of Governors. One of the directors appointed by the Board is designated annually as chair of the board of that Branch in a manner prescribed by the parent Federal Reserve Bank.

For the name of the chair and deputy chair of the board of directors of each Reserve Bank and of the chair of each Branch, see the preceding table, "Officers of Federal Reserve Banks and Branches."

Directors of Federal Reserve Banks and Branches

*Term expires
Dec. 31*

DISTRICT 1—BOSTON

Class A

Edwin N. Clift	President and Chief Executive Officer, Merrill Merchants Bank, Bangor, Maine	2000
Terrence Murray	Chairman and Chief Executive Officer, FleetBoston Financial Corporation, Boston, Massachusetts	2001
Paul M. Ferguson	President and Chief Executive Officer, Pemigewasset National Bank, Plymouth, New Hampshire	2002

Class B

Edward Dugger III	President and Chief Executive Officer, UNC Partners, Inc., Boston, Massachusetts	2000
Robert R. Glauber	Chief Executive Officer, National Association of Securities Dealers, Inc., Washington, D.C.	2001
Orit Gadiesh	Chairman, Bain & Company, Boston, Massachusetts	2002

Class C

James J. Norton	Vice President, AFL-CIO, Washington, D.C.	2000
William C. Brainard	Professor of Economics, Yale University, New Haven, Connecticut	2001
William O. Taylor	Chairman Emeritus, The Boston Globe, Boston, Massachusetts	2002

DISTRICT 2—NEW YORK

Class A

Walter V. Shipley	Retired Chairman, The Chase Manhattan Corporation, New York, New York	2000
T. Joseph Semrod	Chairman and Chief Executive Officer, Summit Bancorp, Princeton, New Jersey	2001
George W. Hamlin IV	President and Chief Executive Officer, The Canandaigua National Bank and Trust Company, Canandaigua, New York	2002

Term expires
Dec. 31

DISTRICT 2, NEW YORK—Continued

Class B

Eugene R. McGrath	Chairman, President, and Chief Executive Officer, Consolidated Edison Company of New York, Inc., New York, New York	2000
Ronay Menschel	President, Phipps Houses, New York, New York	2001
Ann M. Fudge	Executive Vice President, Kraft Foods, Inc., and President, Coffee & Cereals Division, Tarrytown, New York	2002

Class C

Charles A. Heimbold, Jr.	Chairman and Chief Executive Officer, Bristol-Myers Squibb Co., New York, New York	2000
Peter G. Peterson	Chairman, The Blackstone Group, New York, New York	2001
Albert J. Simone	President, Rochester Institute of Technology, Rochester, New York	2002

BUFFALO BRANCH

Appointed by the Federal Reserve Bank

William E. Swan	President and Chief Executive Officer, First Niagara Bank, Lockport, New York	2000
Maureen Torrey Marshall ...	Co-Owner, Torrey Farms, Inc., Elba, New York	2000
Kathleen R. Whelehan	Executive Vice President, Consumer Finance Division, HSBC, Buffalo, New York	2001
Geraldine C. Ochocinska	Director, Region 9, UAW, Buffalo, New York	2002

Appointed by the Board of Governors

John E. Friedlander	President and Chief Executive Officer, Kaleida Health, Buffalo, New York	2000
Bal Dixit	President and Chief Executive Officer, Newtex Industries, Inc., Victor, New York	2001
Patrick P. Lee	Chairman and Chief Executive Officer, International Motion Control, Inc., Buffalo, New York	2002

DISTRICT 3—PHILADELPHIA

Class A

Harry Elwell III	President and Chief Executive Officer, First National Bank of Absecon, Absecon, New Jersey	2000
Rufus A. Fulton, Jr.	Chairman, President, and Chief Executive Officer, Fulton Financial Corporation, Lancaster, Pennsylvania	2001

Term expires
Dec. 31DISTRICT 3, *Class A*—Continued

Frank Kaminski, Jr.	Chairman, President, and Chief Executive Officer, Atlantic Central Bankers Bank, Camp Hill, Pennsylvania	2002
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Class B

Robert D. Burris	President and Chief Executive Officer, Burris Foods, Inc., Milford, Delaware	2000
Howard E. Cosgrove	Chairman and Chief Executive Officer, Conectiv, Wilmington, Delaware	2001
Robert E. Chappell	Chairman and Chief Executive Officer, Penn Mutual Life Insurance Co., Philadelphia, Pennsylvania	2002

Class C

Glenn A. Schaeffer	President, Pennsylvania Building and Construction Trades Council, Harrisburg, Pennsylvania	2000
Charisse R. Lillie	Partner, Ballard Spahr Andrews & Ingersoll, Philadelphia, Pennsylvania	2001
Joan Carter	President and Chief Operating Officer, UM Holdings Ltd., Haddonfield, New Jersey	2002

DISTRICT 4—CLEVELAND

Class A

David S. Dahlmann	President and Chief Executive Officer, Southwest Bank, Greensburg, Pennsylvania	2000
John R. Cochran	Chairman and Chief Executive Officer, FirstMerit Corporation, Akron, Ohio	2001
Tiney M. McComb	Chairman and President, Heartland BancCorp, Gahanna, Ohio	2002

Class B

Cheryl L. Krueger-Horn	President and Chief Executive Officer, Cheryl&Co., Westerville, Ohio	2000
Wayne R. Embry	President and Chief Operating Officer, Cleveland Cavaliers, Cleveland, Ohio	2001
David L. Nichols	Chairman, Flooring America, Inc., Kennesaw, Georgia	2002

Term expires
Dec. 31

DISTRICT 4, CLEVELAND—Continued

Class C

Robert W. Mahoney	Former Chairman, Diebold, Incorporated, Uniontown, Ohio	2000
David H. Hoag	Former Chairman, The LTV Corporation, Cleveland, Ohio	2001
Phillip R. Cox	President and Chief Executive Officer, Cox Financial Corporation, Cincinnati, Ohio	2002

CINCINNATI BRANCH

Appointed by the Federal Reserve Bank

Stephen P. Wilson	President and Chief Executive Officer, Lebanon Citizens National Bank, Lebanon, Ohio	2000
Jean R. Hale	President and Chief Executive Officer, Community Trust Bancorp, Inc., Pikeville, Kentucky	2001
Judith G. Clabes	President and Chief Executive Officer, Scripps Howard Foundation, Cincinnati, Ohio	2002
V. Daniel Radford	Executive Secretary-Treasurer, Cincinnati AFL-CIO Labor Council, Cincinnati, Ohio	2002

Appointed by the Board of Governors

Wayne Shumate	Chairman and Chief Executive Officer, Kentucky Textiles, Inc., Paris, Kentucky	2000
Thomas Revely III	President and Chief Executive Officer, Cincinnati Bell Supply Co., Cincinnati, Ohio	2001
George C. Juilfs	President and Chief Executive Officer, SENCORP, Newport, Kentucky	2002

PITTSBURGH BRANCH

Appointed by the Federal Reserve Bank

Thomas J. O'Shane	President and Chief Executive Officer, Mid Am Bank, Toledo, Ohio	2000
Edward V. Randall, Jr.	Management Consultant, Babst Calland Clements & Zommir, Pittsburgh, Pennsylvania	2001
Georgia Berner	President, Berner International Corp., New Castle, Pennsylvania	2002
Peter N. Stephans	Chairman and Chief Executive Officer, Trigon Incorporated, McMurray, Pennsylvania	2002

Term expires
Dec. 31

DISTRICT 4, PITTSBURGH BRANCH—Continued

Appointed by the Board of Governors

John T. Ryan III	Chairman and Chief Executive Officer, Mine Safety Appliances Company, Pittsburgh, Pennsylvania	2000
Gretchen R. Haggerty	Vice President—Accounting and Finance, U.S. Steel Group, Pittsburgh, Pennsylvania	2001
Charles E. Bunch	Senior Vice President, Strategic Planning and Corporate Services, PPG Industries, Inc., Pittsburgh, Pennsylvania	2002

DISTRICT 5—RICHMOND

Class A

Elizabeth A. Duke	President and Chief Executive Officer, The Bank of Tidewater, Virginia Beach, Virginia	2000
James M. Culberson, Jr.	Chairman Emeritus, First National Bank and Trust Company, Asheboro, North Carolina	2001
Fred L. Green III	President and Chief Executive Officer, The National Bank of South Carolina, Columbia, South Carolina	2002

Class B

James E. Haden	President and Chief Executive Officer, Martha Jefferson Hospital, Charlottesville, Virginia	2000
Craig A. Ruppert	President, Ruppert Nurseries, Inc., Laytonsville, Maryland	2001
W. Henry Harmon	President and Chief Executive Officer, Columbia Energy Resources, Charleston, West Virginia	2002

Class C

Wesley S. Williams, Jr.	Partner, Covington & Burling, Washington, D.C.	2000
Irwin Zazulia	Retired President and Chief Executive Officer, Hecht's, Arlington, Virginia	2001
Jeremiah J. Sheehan	Retired Chairman and Chief Executive Officer, Reynolds Metals Company, Richmond, Virginia	2002

BALTIMORE BRANCH

Appointed by the Federal Reserve Bank

William L. Jews	President and Chief Executive Officer, Blue Cross and Blue Shield of Maryland, Owings Mills, Maryland	2000
Virginia W. Smith	Retired President and Chief Executive Officer, Union National Bank, Westminster, Maryland	2000

Term expires
Dec. 31**DISTRICT 5, BALTIMORE BRANCH***Appointed by the Federal Reserve Bank*—Continued

Jeremiah E. Casey	Director and Former Chairman, Allfirst Financial, Inc., Baltimore, Maryland	2001
Dyan Brasington	President, High Technology Council of Maryland, Rockville, Maryland	2002
<i>Appointed by the Board of Governors</i>		
Vacancy		2000
Owen E. Herrnstadt	Director, International Department, International Association of Machinists and Aerospace Workers, AFL-CIO, Upper Marlboro, Maryland	2001
George L. Russell, Jr.	Law Offices of Peter G. Angelos, Baltimore, Maryland	2002

CHARLOTTE BRANCH*Appointed by the Federal Reserve Bank*

Elleveen T. Poston	President, Quality Transport, Inc., Lake City, South Carolina	2000
Cecil W. Sewell, Jr.	Chief Executive Officer, Centura Banks, Inc., Rocky Mount, North Carolina	2000
William H. Nock	President and Chief Executive Officer, Sumter National Bank, Sumter, South Carolina	2001
Lucy J. Reuben	Dean, School of Business, South Carolina State University, Orangeburg, South Carolina	2002

Appointed by the Board of Governors

Joan H. Zimmerman	President, Southern Shows, Inc., Charlotte, North Carolina	2000
James F. Goodman	President and Chief Executive Officer, Capitol Broadcasting Company, Inc., Raleigh, North Carolina	2001
Michael A. Almond	President and Chief Executive Officer, Charlotte Regional Partnership, Charlotte, North Carolina	2002

DISTRICT 6—ATLANTA*Class A*

D. Paul Jones, Jr.	Chairman and Chief Executive Officer, Compass Bancshares, Inc., Birmingham, Alabama	2000
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Term expires
Dec. 31DISTRICT 6, *Class A*—Continued

Waymon L. Hickman	Chairman and Chief Executive Officer, First Farmers and Merchants National Bank, Columbia, Tennessee	2001
Richard G. Hickson	President and Chief Executive Officer, Trustmark Corporation, Jackson, Mississippi	2002

Class B

John Dane III	President and Chief Executive Officer, Trinity Yachts, Inc., New Orleans, Louisiana	2000
Suzanne E. Boas	President, Consumer Credit Counseling Service, Inc., Atlanta, Georgia	2001
Juanita P. Baranco	Executive Vice President, Baranco Automotive Group, Morrow, Georgia	2002

Class C

Paula Lovell	President, Lovell Communications, Inc., Nashville, Tennessee	2000
Maria Camila Leiva	Executive Vice President, Miami Free Zone Corporation, Miami, Florida	2001
John F. Wieland	Chief Executive Officer and Chairman, John Wieland Homes and Neighborhoods, Inc., Atlanta, Georgia	2002

BIRMINGHAM BRANCH

Appointed by the Federal Reserve Bank

Roland Pugh	Chairman, Roland Pugh Construction, Inc., Northport, Alabama	2000
Hundley Batts, Sr.	Owner and Managing Agent, Hundley Batts & Associates, Huntsville, Alabama	2000
Robert M. Barrett	Past President, Union Planters National Bank, Deatsville, Alabama	2001
W. Charles Mayer III	President, Alabama Banking Group, AmSouth Bank, Birmingham, Alabama	2002

Appointed by the Board of Governors

D. Bruce Carr	Labor-Relations Liaison, Laborers' District Council of Alabama, Gadsden, Alabama	2000
Catherine Sloss Crenshaw	President, Sloss Real Estate Group, Birmingham, Alabama	2001
V. Larkin Martin	Managing Partner, Martin Farm, Courtland, Alabama	2002

Term expires
Dec. 31

DISTRICT 6, ATLANTA—Continued

JACKSONVILLE BRANCH

Appointed by the Federal Reserve Bank

Terry R. West	President and Chief Executive Officer, Jax Navy Federal Credit Union, Jacksonville, Florida	2000
Michael W. Poole	Principal, Poole Carbone Capital Partners, Inc., Winter Park, Florida	2000
Harvey R. Heller	President, Heller Bros. Packing Corp., Winter Garden, Florida	2001
Jerry M. Smith	Chairman and President, First National Bank of Alachua, Alachua, Florida	2002

Appointed by the Board of Governors

William E. Flaherty	Chairman, Blue Cross and Blue Shield of Florida, Inc., Jacksonville, Florida	2000
Julie K. Hilton	Vice President & Partner, Paradise Found Resorts & Hotels, Panama City Beach, Florida	2001
Marsha G. Rydberg	Partner, Rydberg & Petitt, P.A., Tampa, Florida	2002

MIAMI BRANCH

Appointed by the Federal Reserve Bank

Carlos A. Migoya	Regional President, Dade/Monroe Counties, First Union National Bank of Florida, Miami, Florida	2000
Rudy Everett Schupp	Chairman and Chief Executive Officer, Republic Security Bank, West Palm Beach, Florida	2001
D. Keith Cobb	Chairman, Laundromax, Inc., Ft. Lauderdale, Florida	2002
James W. Moore	Managing Partner, Riverside Capital, LLC, Fort Myers, Florida	2002

Appointed by the Board of Governors

Kaaren Johnson-Street	President, Kaaren Street Associates, Inc., Miami, Florida	2000
Rosa Sugranes	Chairman and Founder, Iberia Tiles, Miami, Florida	2001
Mark T. Sodders	President, Lakeview Farms, Inc., Pahokee, Florida	2002

Term expires
Dec. 31**DISTRICT 6, NASHVILLE BRANCH***Appointed by the Federal Reserve Bank*

James E. Dalton, Jr.	President and Chief Executive Officer, Quorum Health Group, Inc., Brentwood, Tennessee	2000
John E. Seward, Jr.	Managing Director, Allied Jet International, Piney Flats, Tennessee	2000
Dale W. Polley	Past President, First American Corporation, Nashville, Tennessee	2001
Leonard A. Walker, Jr.	Chairman and Chief Executive Officer, First National Bank and Trust Company, Athens, Tennessee	2002

Appointed by the Board of Governors

Whitney Johns Martin	Chairman and Chief Executive Officer, Capital Across America, Nashville, Tennessee	2000
Frances F. Marcum	Partner, Marcum Capital, L.L.C., Tullahoma, Tennessee	2001
Beth Dortch Franklin	President and Chief Executive Officer, Star Transportation, Inc., Nashville, Tennessee	2002

NEW ORLEANS BRANCH*Appointed by the Federal Reserve Bank*

Teri G. Fontenot	President and Chief Executive Officer, Woman's Health Foundation, Baton Rouge, Louisiana	2000
David Guidry	President and Chief Executive Officer, Guico Machine Works, Inc., Harvey, Louisiana	2000
Howell N. Gage	Chairman, Vicksburg Advisory Group, BankCorp South, Vicksburg, Mississippi	2001
C.R. Cloutier	President and Chief Executive Officer, MidSouth National Bank, Lafayette, Louisiana	2002

Appointed by the Board of Governors

Ben Tom Roberts	Senior Executive Vice President/Owner, Roberts Brothers, Inc., Mobile, Alabama	2000
Dwight H. Evans	President and Chief Executive Officer, Mississippi Power Company, Gulfport, Mississippi	2001
R. Glenn Pumpelly	President and Chief Executive Officer, Pumpelly Oil, Inc., Sulphur, Louisiana	2002

Term expires
Dec. 31

DISTRICT 7—CHICAGO

Class A

Robert R. Yohanan	Managing Director and Chief Executive Officer, First Bank & Trust, Evanston, Illinois	2000
Alan R. Tubbs	President, Maquoketa State Bank and Ohnward Banchshares, Inc., Maquoketa, Iowa	2001
Verne G. Istock	Retired President, BANK ONE Corporation, Chicago, Illinois	2002

Class B

Jack B. Evans	President, The Hall-Perrine Foundation, Cedar Rapids, Iowa	2000
James H. Keyes	Chairman and Chief Executive Officer, Johnson Controls, Inc., Milwaukee, Wisconsin	2001
Connie E. Evans	President, Women's Self-Employment Project, Chicago, Illinois	2002

Class C

Lester H. McKeever, Jr.	Managing Principal, Washington, Pittman & McKeever, Chicago, Illinois	2000
Arthur C. Martinez	Retired Chairman and Chief Executive Officer, Sears, Roebuck and Co., Chicago, Illinois	2001
Robert J. Darnall	Chairman and Chief Executive Officer, Prime Advantage Chicago, Chicago, Illinois	2002

DETROIT BRANCH

Appointed by the Federal Reserve Bank

David J. Wagner	Chairman, President, and Chief Executive Officer, Old Kent Financial Corporation, Grand Rapids, Michigan	2000
Richard M. Bell	President and Chief Executive Officer, The First National Bank of Three Rivers, Three Rivers, Michigan	2001
Mark T. Gaffney	President, Michigan State AFL-CIO, Lansing, Michigan	2002
Irma B. Elder	President, Elder Ford, Troy, Michigan	2002

Appointed by the Board of Governors

Timothy D. Leuliette	Senior Managing Director and Chief Executive Officer, Heartland Industrial Partners, Bloomfield Hills, Michigan	2000
Stephen R. Polk	Chairman and Chief Executive Officer, R.L. Polk & Co., Southfield, Michigan	2001
Edsel B. Ford II	Board Director, Ford Motor Company, Dearborn, Michigan	2002

Term expires
Dec. 31

DISTRICT 8—ST. LOUIS

Class A

Michael A. Alexander	Chairman and President, First National Bank, Mt. Vernon, Illinois	2000
Thomas H. Jacobsen	Chairman, Firstar Corporation, St. Louis, Missouri	2001
Lunsford W. Bridges	President and Chief Executive Officer, Metropolitan National Bank, Little Rock, Arkansas	2002

Class B

Robert L. Johnson	Chairman and Chief Executive Officer, Johnson Bryce, Inc., Memphis, Tennessee	2000
Bert Greenwalt	Partner, Greenwalt Company, Hazen, Arkansas	2001
Joe Gliessner	Executive Director, New Directions Housing Corp., Louisville, Kentucky	2002

Class C

Susan S. Elliott	Chairman and Chief Executive Officer, Systems Service Enterprises, Inc., St. Louis, Missouri	2000
Charles W. Mueller	Chairman, President, and Chief Executive Officer, Ameren Corporation, St. Louis, Missouri	2001
Gayle P.W. Jackson	Managing Director, Lange, Mullen & Bohn, L.L.C., Global Financial Solutions, St. Louis, Missouri	2002

LITTLE ROCK BRANCH

Appointed by the Federal Reserve Bank

Raymond E. Skelton	Chief Executive Officer, Firstar Bank of Arkansas, Little Rock, Arkansas	2000
Lawrence A. Davis, Jr.	Chancellor, University of Arkansas at Pine Bluff, Pine Bluff, Arkansas	2001
Everett Tucker III	Moses Nosari Tucker Real Estate, Little Rock, Arkansas	2002
Vacancy		2002

Appointed by the Board of Governors

Vacancy		2000
Vick M. Crawley	Plant Manager, Baxter Healthcare Corporation, Mountain Home, Arkansas	2001
A. Rogers Yarnell II	President, Yarnell Ice Cream Co., Inc., Searcy, Arkansas	2002

Term expires
Dec. 31

DISTRICT 8, LOUISVILLE BRANCH

Appointed by the Federal Reserve Bank

Frank J. Nichols	Chairman, President, and Chief Executive Officer, Community Financial Services, Inc., Benton, Kentucky	2000
Orson Oliver	President, Mid-America Bank of Louisville, Louisville, Kentucky	2001
Larry E. Dunigan	Chairman and Chief Executive Officer, Holiday Management Corp., Evansville, Indiana	2002
Edwin K. Page	Vice President, External Affairs, AP Technoglass Co., Elizabethtown, Kentucky	2002

Appointed by the Board of Governors

Debbie Scoppechio	Chairman and Chief Executive Officer, Creative Alliance, Inc., Louisville, Kentucky	2000
Roger Reynolds	Reynolds Group, L.I.C., Louisville, Kentucky	2001
J. Stephen Barger	Executive Secretary-Treasurer, Kentucky State District Council of Carpenters, AFL-CIO, Frankfort, Kentucky	2002

MEMPHIS BRANCH

Appointed by the Federal Reserve Bank

E.C. Neelly III	Management Consultant, First American National Bank, Tupelo, Mississippi	2000
Walter L. Morris, Jr.	President, H&M Lumber Co., Inc., West Helena, Arkansas	2001
James A. England	Chairman, President, and Chief Executive Officer, Decatur County Bank, Decaturville, Tennessee	2002
John C. Kelley, Jr.	President, Business Financial Services, First Tennessee Bank, Memphis, Tennessee	2002

Appointed by the Board of Governors

Carol G. Crawley	Senior Vice President, Memphis Area Chamber of Commerce, Memphis, Tennessee	2000
Gregory M. Duckett	Senior Vice President and Corporate Counsel, Baptist Memorial Health Care Corporation, Memphis, Tennessee	2001
Mike P. Sturdivant, Jr.	Partner, Due West, Glendora, Mississippi	2002

Term expires
Dec. 31

DISTRICT 9—MINNEAPOLIS

Class A

Bruce Parker	President, Norwest Bank Montana, Billings, Montana	2000
W.W. LaJoie	Chief Executive Officer and Chairman, Central Savings Bank, Sault Ste. Marie, Michigan	2001
Roger N. Berglund	Chairman and President, Dakota Western Bank, Bowman, North Dakota	2002

Class B

Kathryn L. Ogren	Owner, Bitterroot Motors, Missoula, Montana	2000
Jay F. Hoeschler	President and Owner, Hoeschler Corporation, La Crosse, Wisconsin	2001
Rob L. Wheeler	Vice President, Wheeler Manufacturing Co., Inc., Lemmon, South Dakota	2002

Class C

Ronald N. Zwig	President, United Food & Commercial Workers, Local 653, Plymouth, Minnesota	2000
James J. Howard	Chairman, Xcel Energy, Inc., Minneapolis, Minnesota	2001
Linda Hall Whitman	President, Ceridian, Maple Plain, Minnesota	2002

HELENA BRANCH

Appointed by the Federal Reserve Bank

Emil W. Erhardt	Chairman and President, Citizens State Bank, Hamilton, Montana	2000
Sandra M. Stash, P.E.	General Manager, Chemicals, OBC and Upstream Operations, ARCO Environmental Remediation, L.L.C., Anaconda, Montana	2000
Richard E. Hart	President, Mountain West Bank, Great Falls, Montana	2001

Appointed by the Board of Governors

William P. Underriner	General Manager, Selover Buick Inc., Billings, Montana	2000
Thomas O. Markle	President and Chief Executive Officer, Markle's, Inc., Glasgow, Montana	2001

Term expires
Dec. 31

DISTRICT 10—KANSAS CITY

Class A

Bruce A. Schriefer	President, Bankers' Bank of Kansas, Wichita, Kansas	2000
Jeffrey L. Gerhart	President and Chief Executive Officer, First National Bank, Newman Grove, Nebraska	2001
Dennis E. Barrett	Vice Chairman, FirstBank Holding Company of Colorado, Lakewood, Colorado	2002

Class B

Hans Helmerich	President and Chief Executive Officer, Helmerich & Payne, Inc., Tulsa, Oklahoma	2000
Frank A. Potenzianni	M&T Trust, Albuquerque, New Mexico	2001
Paula Marshall-Chapman	Chief Executive Officer, The Bama Companies, Inc., Tulsa, Oklahoma	2002

Class C

Terrence P. Dunn	President and Chief Executive Officer, J.E. Dunn Construction Company, Kansas City, Missouri	2000
Jo Marie Dancik	Area Managing Partner, Ernst & Young, L.L.P., Denver, Colorado	2001
Rhonda Holman	Vice President, Kauffman Center for Entrepreneurial Leadership at the Ewing Marion Kauffman Foundation, Kansas City, Missouri	2002

DENVER BRANCH

Appointed by the Federal Reserve Bank

Robert M. Murphy	President, Sandia Properties, Ltd., Co., Albuquerque, New Mexico	2000
John W. Hay III	President, Rock Springs National Bank, Rock Springs, Wyoming	2000
Albert C. Yates	President, Colorado State University, Ft. Collins, Colorado	2001
Vacancy		2002

Appointed by the Board of Governors

Kathryn A. Paul	President, Western Operations (Retired), Kaiser Permanente, Denver, Colorado	2000
James A. King	Chief Executive Officer, BT, Inc., Riverton, Wyoming	2001
Kathleen Avila	Partner and Chief Executive Officer, Avila Retail, Albuquerque, New Mexico	2002

Term expires
Dec. 31

DISTRICT 10, OKLAHOMA CITY BRANCH

Appointed by the Federal Reserve Bank

Michael S. Samis	President and Chief Executive Officer, Macklanburg-Duncan Co., Oklahoma City, Oklahoma	2000
Betty Bryant Shaull	President-Elect and Director, Bank of Cushing and Trust Company, Cushing, Oklahoma	2001
W. Carlisle Mabrey III	President and Chief Executive Officer, Citizens Bank & Trust Co., Oklmulgee, Oklahoma	2001
Robert A. Funk	Chairman and Chief Executive Officer, Express Personnel Services, Oklahoma City, Oklahoma	2002

Appointed by the Board of Governors

Patricia B. Fennell	Executive Director, Latino Community Development Agency, Oklahoma City, Oklahoma	2000
David L. Kruse II	Senior Vice President, American Airlines, Inc., Tulsa, Oklahoma	2001
Vacancy		2002

OMAHA BRANCH

Appointed by the Federal Reserve Bank

Frank L. Hayes	President, Hayes & Associates, L.L.C., Omaha, Nebraska	2000
H.H. Kosman	Chairman, President, and Chief Executive Officer, Platte Valley National Bank, Scottsbluff, Nebraska	2000
Bill L. Fairfield	Omaha, Nebraska	2001
Judith A. Owen	President and Chief Executive Officer, Norwest Bank Nebraska, N.A., Omaha, Nebraska	2002

Appointed by the Board of Governors

A.F. Raimondo	Chairman and Chief Executive Officer, Behlen Manufacturing Co., Columbus, Nebraska	2000
Gladys Styles Johnston	Chancellor, University of Nebraska at Kearney, Kearney, Nebraska	2001
Bob L. Gottsch	Vice President, Gottsch Feeding Corporation, Hastings, Nebraska	2002

Term expires
Dec. 31

DISTRICT 11—DALLAS

Class A

Kirk A. McLaughlin	President and Chief Executive Officer, Security Bank, Ralls, Texas	2000
Dudley K. Montgomery	President and Chief Executive Officer, The Security State Bank of Pecos, Pecos, Texas	2001
Kenneth T. Murphy	Chairman, President, and Chief Executive Officer, First Financial Bankshares, Inc., Abilene, Texas	2002

Class B

Judy Ley Allen	Co-Manager and Partner, The Fairways at Pole Creek Development, L.L.C., Houston, Texas	2000
Julie S. England	Vice President, Texas Instruments, Dallas, Texas	2001
Malcolm Gillis	President, Rice University, Houston, Texas	2002

Class C

H.B. Zachry, Jr.	Chairman and Chief Executive Officer, H.B. Zachry Company, San Antonio, Texas	2000
Roger R. Hemminghaus	Chairman Emeritus, Ultramar Diamond Shamrock Corp., San Antonio, Texas	2001
Patricia M. Patterson	President, Patterson Investments, Inc., Dallas, Texas	2002

EL PASO BRANCH

Appointed by the Federal Reserve Bank

Cecil E. Nix	Member, International Brotherhood of Electrical Workers, Local 460, Midland, Texas	2000
Lester L. Parker	President and Chief Executive Officer, United Bank of El Paso, El Paso, Texas	2001
James D. Renfrow	President and Chief Executive Officer, The Carlsbad National Bank, Carlsbad, New Mexico	2002
Melissa W. O'Rourke	President, Charlotte's, Inc., El Paso, Texas	2002

Appointed by the Board of Governors

Gail S. Darling	President, Gail Darling, Inc., El Paso, Texas	2000
Beauregard Brite White	Rancher, J.E. White, Jr. & Sons, Marfa, Texas	2001
James Haines	Chief Executive Officer and President, El Paso Electric Company, El Paso, Texas	2002

*Term expires
Dec. 31*

DISTRICT 11, HOUSTON BRANCH*Appointed by the Federal Reserve Bank*

Alan R. Buckwalter III	Chairman and Chief Executive Officer, Chase Bank of Texas, N.A., Houston, Texas	2000
Richard W. Weekley	Chairman, Weekley Development Company, Houston, Texas	2001
Priscilla D. Slade	President, Texas Southern University, Houston, Texas	2002
Ray B. Nesbitt	President (Retired), Exxon Chemical Company, Houston, Texas	2002

Appointed by the Board of Governors

Jeffrey K. Skilling	President and Chief Operating Officer, Enron Corp., Houston, Texas	2000
Edward O. Gaylord	Chairman, Jacintoport Terminal Company, Houston, Texas	2001
Vacancy		2002

SAN ANTONIO BRANCH*Appointed by the Federal Reserve Bank*

Arthur R. Emerson	Groves, Rojas, Emerson, San Antonio, Texas	2000
R. Tom Roddy	Chairman, CaminoReal Bank, San Antonio, Texas	2001
Mary Rose Cardenas	Vice President, Cardenas Motors, Inc., Brownsville, Texas	2002
Daniel B. Hastings, Jr.	President and Owner, Daniel B. Hastings, Inc., Laredo, Texas	2002

Appointed by the Board of Governors

Marvin L. Ragsdale	President, Iron Workers District Council of the State of Texas, Austin, Texas	2000
Ron R. Harris	President and Chief Executive Officer, Pervasive Software, Austin, Texas	2001
Patty P. Mueller	Vice President, Mueller Energetics Corp., Corpus Christi, Texas	2002

Term expires
Dec. 31

DISTRICT 12—SAN FRANCISCO

Class A

John V. Rindlaub	President, Northwest Banking, Bank of America, Seattle, Washington	2000
Warren K.K. Luke	Chairman and Chief Executive Officer, Hawaii National Bank, Honolulu, Hawaii	2001
E. Lynn Caswell	Vice Chairman and Chief Executive Officer, EarthOne Capital Group.com, Laguna Hills, California	2002

Class B

Krestine Corbin	President and Chief Executive Officer, Sierra Machinery, Inc., Sparks, Nevada	2000
George M. Scalise	President, Semiconductor Industry Association, San Jose, California	2001
Robert S. Attiyeh	Senior Vice President and Chief Financial Officer (Retired), Consultant, Amgen, Inc., Los Angeles, California	2002

Class C

Nelson C. Rising	Chairman and Chief Executive Officer, Catellus Development Corporation, San Francisco, California	2000
Sheila D. Harris	Consultant, Harris Consulting, Litchfield Park, Arizona	2001
Gary G. Michael	Chairman and Chief Executive Officer, Albertson's, Inc., Boise, Idaho	2002

LOS ANGELES BRANCH

Appointed by the Federal Reserve Bank

Liam E. McGee	President, Bank of America California, Los Angeles, California	2000
Linda Griego	Managing Partner, Engine Co. No. 28, Los Angeles, California	2000
Russell Goldsmith	Chairman and Chief Executive Officer, City National Bank, Beverly Hills, California	2001
John H. Gleason	Executive Vice President, Del Webb Corporation, Phoenix, Arizona	2002

Appointed by the Board of Governors

Lonnie Kane	President, Karen Kane, Inc., Los Angeles, California	2000
William D. Jones	Chairman, President, and Chief Executive Officer, CityLink Investment Corporation, San Diego, California	2001
Lori R. Gay	President, Los Angeles Neighborhood Housing Service, Los Angeles, California	2002

*Term expires
Dec. 31***DISTRICT 12, PORTLAND BRANCH***Appointed by the Federal Reserve Bank*

Guy L. Williams	President and Chief Executive Officer, Security Bank, Coos Bay, Oregon	2000
Vacancy		2001
Phyllis A. Bell	President, Oregon Coast Aquarium, Newport, Oregon	2002
Martin Brantley	President and General Manager, Oregon's 12-KPTV, Portland, Oregon	2002

Appointed by the Board of Governors

Patrick Borunda	Director, Oweesta Fund, First Nations Development Institute, Vancouver, Washington	2000
Karla S. Chambers	Vice President, Stahlbush Island Farms, Inc., Corvallis, Oregon	2001
Nancy Wilgenbusch	President, Marylhurst University, Marylhurst, Oregon	2002

SALT LAKE CITY BRANCH*Appointed by the Federal Reserve Bank*

R.D. Cash	Chairman, President, and Chief Executive Officer, Qwestar Corporation, Salt Lake City, Utah	2000
Curtis H. Harris	Chairman, President, and Chief Executive Officer, Barnes Banking Company, Kaysville, Utah	2001
J. Pat McMurray	President, First Security Bank, N.A., Boise, Idaho	2002
Maria Garciaz	Executive Director, Salt Lake Neighborhood Housing Services, Salt Lake City, Utah	2002

Appointed by the Board of Governors

Barbara L. Wilson	Idaho and Regional Vice President, Qwest Communications International, Inc., Boise, Idaho	2000
Gary L. Crocker	Chairman, ARUP Laboratories, Salt Lake City, Utah	2001
H. Roger Boyer	Chairman, The Boyer Company, Salt Lake City, Utah	2002

*Term expires
Dec. 31*

DISTRICT 12, SEATTLE BRANCH

Appointed by the Federal Reserve Bank

Betsy Lawer	Vice Chair and Chief Operating Officer, First National Bank of Anchorage, Anchorage, Alaska	2000
Peter H. van Oppen	Chairman and Chief Executive Officer, Advanced Digital Information Corp., Redmond, Washington	2001
Mary E. Pugh	President, Pugh Capital Management, Inc., Seattle, Washington	2002
James C. Hawkanson	Managing Director and Chief Executive Officer, The Commerce Bank of Washington, N.A., Seattle, Washington	2002

Appointed by the Board of Governors

Richard R. Sonstelie	Chairman (Retired), Puget Sound Energy, Inc., Bellevue, Washington	2000
Helen M. Rockey	Chief Executive Officer and President (Retired), Just for Feet, Inc., Seattle, Washington	2001
Boyd E. Givan	Senior Vice President and Chief Financial Officer (Retired), The Boeing Company, Seattle, Washington	2002

*Membership of the Board of Governors, 1913–2000***Appointed Members**

Name	Federal Reserve District	Date initially took oath of office	Other dates ¹
Charles S. Hamlin	Boston	Aug. 10, 1914	Reappointed in 1916 and 1926. Served until Feb. 3, 1936. ²
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. ²
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. ³
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. ²
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. ²
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. ²
Rudolph M. Evans	Richmond	Mar. 14, 1942	Served until Aug. 13, 1954. ²
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.

Appointed Members—Continued

Name	Federal Reserve District	Date initially took oath of office	Other dates ¹
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. ²
J. Dewey Daane	Richmond	Nov. 29, 1963	Served until Mar. 8, 1974. ²
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.
Philip C. Jackson, Jr.	Atlanta	July 14, 1975	Resigned Nov. 17, 1978.
J. Charles Partee	Richmond	Jan. 5, 1976	Served until Feb. 7, 1986. ²
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	Resigned July 16, 1999.

NOTE. Under the original Federal Reserve Act, the Federal Reserve Board was composed of five appointed members, the Secretary of the Treasury (ex-officio chairman of the Board), and the Comptroller of the Currency. The original term of office was ten years; the five original appointed members had terms of two, four, six, eight, and ten years. In 1922 the number of appointed members was increased to six, and in 1933 the term of office was raised

to twelve years. The Banking Act of 1935 changed the name to the Board of Governors of the Federal Reserve System and provided that the Board be composed of seven appointed members; that the Secretary of the Treasury and the Comptroller of the Currency continue to serve until Feb. 1, 1936; that the appointed members in office on Aug. 23, 1935, continue to serve until Feb. 1, 1936, or until their successors were appointed and had

CHAIRMEN³

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 ⁴
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– ⁵

VICE CHAIRMEN³

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–July 16, 1999
Roger W. Ferguson, Jr.	Oct. 5, 1999–

Ex-Officio Members**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

qualified; and that thereafter the terms of members be fourteen years and that the designation of Chairman and Vice Chairman of the Board be for four years.

1. Date following "Resigned" and "Retired" denotes final day of service.

2. Successor took office on this date.

3. Before Aug. 23, 1935, Chairmen and Vice Chairmen were designated Governor and Vice Governor.

4. Served as Chairman Pro Tempore from February 3, 1948, to April 15, 1948.

5. Served as Chairman Pro Tempore from March 3, 1996, to June 20, 1996.

*Financial Statements and
Statistical Tables*

Board of Governors Financial Statements

The financial statements of the Board for 2000 and 1999 were audited by Deloitte & Touche LLP, independent auditors.

**Deloitte
& Touche**

INDEPENDENT AUDITORS' REPORT

To the Board of Governors of the
Federal Reserve System

We have audited the accompanying balance sheets of the Board of Governors of the Federal Reserve System (the Board) as of December 31, 2000 and 1999, and the related statements of revenues and expenses and fund balance, and of cash flows for the years then ended. These financial statements are the responsibility of the Board's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the accompanying financial statements present fairly, in all material respects, the financial position of the Board as of December 31, 2000 and 1999, and the results of its operations and its cash flows for the years then ended in conformity with accounting principles generally accepted in the United States of America.

As discussed in Note 5 to the financial statements, in 1999 the Board changed its method of accounting for the costs of software obtained for internal use.

In accordance with *Government Auditing Standards*, we have also issued our report dated February 21, 2001, on our consideration of the Board's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grants. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* and should be read in conjunction with this report in considering the results of our audit.

Deloitte & Touche LLP

McLean, Virginia
February 21, 2001

**Deloitte
Touche
Tohmatsu**

BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM
BALANCE SHEETS

	As of December 31,	
	2000	1999
ASSETS		
CURRENT ASSETS		
Cash	\$22,842,252	\$31,072,908
Accounts receivable	1,057,901	873,148
Prepaid expenses and other assets	<u>1,108,766</u>	<u>794,000</u>
 Total current assets	 25,008,919	 32,740,056
PROPERTY, BUILDINGS, AND EQUIPMENT, NET (Note 5)	<u>68,521,774</u>	<u>63,928,406</u>
 Total assets	 <u>\$93,530,693</u>	 <u>\$96,668,462</u>
 LIABILITIES AND FUND BALANCE		
CURRENT LIABILITIES		
Accounts payable and accrued liabilities	\$10,702,740	\$12,360,089
Accrued payroll and related taxes	6,040,961	7,090,754
Accrued annual leave	8,492,728	8,063,655
Capital lease payable (current portion)	180,340	172,058
Unearned revenues and other liabilities	<u>2,044,160</u>	<u>2,347,303</u>
 Total current liabilities	 27,460,929	 30,033,859
CAPITAL LEASE PAYABLE (non-current portion)	280,683	366,464
ACCUMULATED RETIREMENT BENEFIT OBLIGATION (Note 2)	694,782	747,717
ACCUMULATED POSTRETIREMENT BENEFIT OBLIGATION (Note 3)	4,065,704	3,614,828
ACCUMULATED POSTEMPLOYMENT BENEFIT OBLIGATION (Note 4)	<u>3,109,456</u>	<u>2,581,079</u>
 Total liabilities	 <u>35,611,554</u>	 <u>37,343,947</u>
FUND BALANCE	<u>57,919,139</u>	<u>59,324,515</u>
 Total liabilities and fund balance	 <u>\$93,530,693</u>	 <u>\$96,668,462</u>

See notes to financial statements.

BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM
STATEMENTS OF REVENUES AND EXPENSES
AND FUND BALANCE

	<u>For the years ended December 31,</u>	
	<u>2000</u>	<u>1999</u>
BOARD OPERATING REVENUES		
Assessments levied on Federal Reserve Banks for Board operating expenses and capital expenditures.....	\$ 188,067,200	\$213,789,510
Other revenues (Note 6).....	<u>9,645,279</u>	<u>8,661,435</u>
Total operating revenues	<u>197,712,479</u>	<u>222,450,945</u>
BOARD OPERATING EXPENSES		
Salaries	118,376,878	115,618,738
Retirement and insurance contributions.....	19,889,451	16,012,513
Contractual services and professional fees	13,860,641	15,642,464
Depreciation and net losses on disposals.....	8,855,763	8,124,505
Utilities	6,249,503	6,109,935
Travel	5,769,788	5,970,437
Postage and supplies	5,536,156	6,879,584
Equipment and facilities rental.....	5,075,502	4,761,618
Software	4,192,658	4,189,644
Repairs and maintenance.....	3,373,654	3,662,547
Printing and binding	2,047,590	2,387,568
Other expenses (Note 6).....	<u>5,890,271</u>	<u>4,717,322</u>
Total operating expenses	<u>199,117,855</u>	<u>194,076,875</u>
BOARD OPERATING REVENUES OVER (UNDER) EXPENSES	<u>(1,405,376)</u>	<u>28,374,070</u>
ISSUANCE AND REDEMPTION OF FEDERAL RESERVE NOTES		
Assessments levied on Federal Reserve Banks for currency costs	435,837,762	484,959,221
Expenses for currency printing, issuance, retirement, and shipping	<u>435,837,762</u>	<u>484,959,221</u>
CURRENCY ASSESSMENTS OVER (UNDER) EXPENSES	<u>0</u>	<u>0</u>
TOTAL REVENUE OVER (UNDER) EXPENSES	<u>(1,405,376)</u>	<u>28,374,070</u>
FUND BALANCE, Beginning of year	<u>59,324,515</u>	<u>30,950,445</u>
TRANSFERS TO THE U.S. TREASURY		
Transfers and accrued transfers from surplus Federal Reserve Bank earnings (Note 1)	3,752,000,000	0
Transfers and accrued transfers to the U.S. Treasury (Note 1)	<u>(3,752,000,000)</u>	<u>0</u>
FUND BALANCE, End of year	<u>\$ 57,919,139</u>	<u>\$ 59,324,515</u>

See notes to financial statements.

BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM
STATEMENTS OF CASH FLOWS

	<u>For the years ended December 31,</u>	
	<u>2000</u>	<u>1999</u>
CASH FLOWS FROM OPERATING ACTIVITIES		
Board operating revenues over (under) expenses	\$(1,405,376)	\$28,374,070
Adjustments to reconcile operating revenue over (under) expenses to net cash provided by operating activities:		
Depreciation and net losses on disposals	8,855,763	8,124,505
(Increase) decrease in accounts receivable, prepaid expenses and other assets	(499,519)	458,411
Increase (decrease) in accounts payable and accrued liabilities	(1,657,349)	4,128,902
Increase (decrease) in accrued payroll and related taxes	(1,049,793)	(654,870)
Increase (decrease) in accrued annual leave	429,073	570,122
Increase (decrease) in capital lease payable	(77,499)	(3,456)
Increase (decrease) in unearned revenues and other liabilities	(303,143)	313,174
Increase (decrease) in accumulated retirement benefit obligation	(52,935)	(25,460)
Increase (decrease) in accumulated postretirement benefit obligation	450,876	(17,107,041)
Increase (decrease) in accumulated postemployment benefit obligation	<u>528,377</u>	<u>397,477</u>
Net cash provided by operating activities	5,218,475	24,575,834
CASH FLOWS FROM INVESTING ACTIVITIES		
Proceeds from disposals	44,400	88,292
Capital expenditures	<u>(13,493,531)</u>	<u>(13,702,648)</u>
Net cash used in investing activities	<u>(13,449,131)</u>	<u>(13,614,356)</u>
NET INCREASE (DECREASE) IN CASH	(8,230,656)	10,961,478
CASH BALANCE, Beginning of year	<u>31,072,908</u>	<u>20,111,430</u>
CASH BALANCE, End of year	<u>\$22,842,252</u>	<u>\$31,072,908</u>
SUPPLEMENTAL DISCLOSURE OF CASH FLOW INFORMATION		
Capital lease obligations incurred	<u>\$ 116,340</u>	<u>\$ 123,020</u>

See notes to financial statements.

BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM

NOTES TO FINANCIAL STATEMENTS FOR THE YEARS ENDED DECEMBER 31, 2000 AND 1999

(1) SIGNIFICANT ACCOUNTING POLICIES

Organization—The Federal Reserve System was founded by Congress in 1913 and consists of the Board of Governors (Board) and twelve regional Reserve Banks. The Board was established as a federal government agency and is supported by Washington staff numbering about 1,700, as it carries out its responsibilities in conjunction with other components of the Federal Reserve System. The accompanying financial statements include only the operations and activities for the Board and are prepared in accordance with accounting principles generally accepted in the United States of America.

Board Operating Revenues and Expenses—Assessments made on the Federal Reserve Banks for Board operating expenses and capital expenditures are calculated based on expected cash needs. These assessments, other operating revenues, and operating expenses are recorded on the accrual basis of accounting.

Issuance and Redemption of Federal Reserve Notes—The Board incurs expenses and assesses the Federal Reserve Banks for the costs of printing, issuing, shipping, and retiring Federal Reserve Notes. These assessments and expenses are separately reported in the statements of revenues and expenses because they are not Board operating transactions.

Property, Buildings and Equipment—The Board's property, buildings and equipment are stated at cost less accumulated depreciation. Depreciation is calculated on a straight-line basis over the estimated useful lives of the assets, which range from 4 to 10 years for furniture and equipment and from 10 to 50 years for building equipment and structures. Upon the sale or other disposition of a depreciable asset, the cost and related accumulated depreciation are removed from the accounts and any gain or loss is recognized.

Federal Reserve Bank Surplus Earnings—The Federal Reserve Act, as amended, required that \$3,752,000,000 of surplus Federal Reserve Bank earnings be transferred from the Banks to the Board and then to the U.S. Treasury in 2000.

Estimates—The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

(2) RETIREMENT BENEFITS

Substantially all of the Board's employees participate in the Retirement Plan for Employees of the Federal Reserve System (System Plan). The System Plan is a multiemployer plan which covers employees of the Federal Reserve Banks, the Board, and the Plan Administrative Office. Employees of the Board who entered on duty prior to 1984 are covered by a contributory defined benefits program under the System Plan. Employees of the

Board who entered on duty after 1983 are covered by a non-contributory defined benefits program under the System Plan. Contributions to the System Plan are actuarially determined and funded by participating employers at amounts prescribed by the System Plan's administrator. Based on actuarial calculations, it was determined that employer funding contributions were not required for the years 2000 and 1999, and the Board was not assessed a contribution for these years. Excess Plan assets will continue to fund future years' contributions. The Board is not accountable for the assets of this plan.

A relatively small number of Board employees participate in the Civil Service Retirement System (CSRS) or the Federal Employees' Retirement System (FERS). The Board matches employee contributions to these plans. These defined benefit plans are administered by the Office of Personnel Management. The Board's contributions to these plans totaled \$266,000 and \$244,000 in 2000 and 1999, respectively. The Board has no liability for future payments to retirees under these programs, and it is not accountable for the assets of the plans.

Employees of the Board may also participate in the Federal Reserve System's Thrift Plan. Under the Thrift Plan, members may contribute up to a fixed percentage of their salary. Board contributions are based upon a fixed percentage of each member's basic contribution and were \$5,133,000 and \$4,966,000 in 2000 and 1999, respectively.

Effective January 1, 1996, Board employees covered under the System Plan are also covered under a Benefits Equalization Plan (BEP). Benefits paid under the BEP are limited to those benefits that cannot be paid from the System Plan due to limitations imposed by Sections 401(a)(17), 415(b) and 415(e) of the Internal Revenue Code of 1986. Section 401(a) of the Code was amended to increase the contribution limitation for highly paid employees to \$170,000 from \$160,000 effective in 2000. This increase resulted in a reduction in the benefit obligation of the BEP for 2000. Pension costs attributed to the BEP reduce the pension costs of the System Plan. Activity for 2000 and 1999 is summarized in the following table:

	2000	1999
<i>Change in benefit obligation</i>		
Benefit obligation at beginning of year	\$ 631,264	\$ 897,822
Service cost	544	12,206
Interest cost	99	37,840
Plan participants' contributions	0	0
Plan amendments	(552,770)	0
Actuarial (gain)/loss	(69,229)	(234,999)
Benefits paid	<u>(8,104)</u>	<u>(81,605)</u>
 Benefit obligation at end of year		
	<u>\$ 1,804</u>	<u>\$ 631,264</u>

	2000	1999
<i>Change in plan assets</i>		
Fair value of plan assets at beginning of year	\$ 0	\$ 0
Actual return on plan assets	0	0
Employer contributions	8,104	81,605
Plan participants' contributions	0	0
Benefits paid	(8,104)	(81,605)
Fair value of plan assets at end of year	<u>\$ 0</u>	<u>\$ 0</u>
<i>Reconciliation of funded status at end of year</i>		
Funded status	\$ (1,804)	\$ (631,264)
Unrecognized net actuarial (gain)/loss	(358,390)	(320,381)
Unrecognized prior service cost	(1,287,253)	(851,331)
Unrecognized net transition obligation	<u>952,665</u>	<u>1,055,259</u>
Prepaid/(accrued) postretirement benefit cost	<u>\$ (694,782)</u>	<u>\$ (747,717)</u>
<i>Amounts recognized in the Statement of Financial Position consist of:</i>		
Prepaid benefit cost	\$ 0	\$ 0
Accrued benefit liability	(694,782)	(747,717)
Intangible asset	0	0
Accumulated other comprehensive income	0	0
Net amount recognized	<u>\$ (694,782)</u>	<u>\$ (747,717)</u>
<i>Weighted-average assumptions as of December 31</i>		
Discount rate	7.50%	7.50%
Expected asset return	N/A	N/A
Salary scale	5.00%	5.00%
Corridor	10.00%	10.00%
<i>Components of net periodic expense for year</i>		
Service cost	\$ 544	\$ 12,206
Interest cost	99	37,840
Expected return on plan assets	0	0
Amortization of prior service cost	(116,848)	(72,520)
Recognized net actuarial gain	(31,220)	(23,975)
Amortization of net liability	<u>102,594</u>	<u>102,594</u>
Net periodic benefit expense	<u>\$ (44,831)</u>	<u>\$ 56,145</u>

(3) POSTRETIREMENT BENEFITS

The Board provides certain life insurance programs for its active employees and retirees. Activity for 2000 and 1999 is summarized in the following table:

	2000	1999
<i>Change in benefit obligation</i>		
Benefit obligation at beginning of year	\$ 4,096,411	\$ 22,946,312
Service cost	126,076	162,487
Interest cost	312,298	265,565
Plan participants' contributions	0	0
Plan amendments	0	(1,384,322)
Actuarial (gain)/loss	(278,501)	(1,703,601)
Benefits paid	(994)	(16,190,030)
Benefit obligation at end of year	<u>\$ 4,255,290</u>	<u>\$ 4,096,411</u>
<i>Change in plan assets</i>		
Fair value of plan assets at beginning of year	\$ 0	\$ 0
Actual return on plan assets	0	0
Employer contributions	994	16,190,030
Plan participants' contributions	0	0
Benefits paid	(994)	(16,190,030)
Fair value of plan assets at end of year	<u>\$ 0</u>	<u>\$ 0</u>
<i>Reconciliation of funded status at end of year</i>		
Funded status	\$ (4,255,290)	\$ (4,096,411)
Unrecognized net actuarial (gain)/loss	189,586	481,583
Unrecognized prior service cost	0	0
Unrecognized net transition obligation	0	0
Prepaid/(accrued) postretirement benefit cost	<u>\$ (4,065,704)</u>	<u>\$ (3,614,828)</u>
<i>Components of net periodic expense for year</i>		
Service cost	\$ 126,076	\$ 162,487
Interest cost	312,298	265,565
Amortization of prior service cost	0	0
Amortization of (gains)/losses	13,497	39,259
Total net periodic expense	<u>451,871</u>	<u>467,311</u>
Other credit	0	(1,384,322)
Total expense	<u>\$ 451,871</u>	<u>\$ 917,011</u>

The liability and costs for the postretirement benefit plan were determined using discount rates of 7.50 percent as of December 31, 2000 and December 31, 1999. Unrecognized losses of \$189,586 and \$481,583 as of December 31, 2000 and 1999, respectively, result from changes in the discount rate used to measure the liabilities. Under Statement of Financial Accounting Standards No. 106, *Employers' Accounting for Postretirement Benefits Other Than Pensions*, the Board may have to record some of these unrecognized losses in operations in future years. The assumed salary trend rate for measuring the increase in postretirement benefits related to life insurance was an average of 6 percent.

The above accumulated postretirement benefit obligation is related to the Board sponsored life insurance programs. The Board has no liability for future payments to employees who continue coverage under the federally sponsored programs upon retiring. Contributions for active employees participating in federally sponsored programs totaled \$4,792,000 and \$4,482,000 in 2000 and 1999, respectively.

(4) POSTEMPLOYMENT BENEFIT PLAN

The Board provides certain postemployment benefits to eligible employees after employment but before retirement. Effective January 1, 1994, the Board adopted Statement of Financial Accounting Standards No. 112, *Employers' Accounting for Postemployment Benefits*, which requires that employers providing postemployment benefits to their employees accrue the cost of such benefits. Prior to January 1994, postemployment benefit expenses were recognized on a pay-as-you-go basis. The postemployment benefit expense was \$851,000 and \$628,000 for 2000 and 1999, respectively.

(5) PROPERTY, BUILDINGS AND EQUIPMENT

The following is a summary of the components of the Board's property, buildings and equipment, at cost, net of accumulated depreciation.

	As of December 31,	
	2000	1999
Land and improvements	\$ 1,301,314	\$ 1,301,314
Buildings	44,978,514	43,661,936
Furniture and equipment	49,090,528	49,187,837
Software	7,883,210	5,047,293
Construction in process	9,980,880	4,699,571
	<u>113,234,446</u>	<u>103,897,951</u>
Less accumulated depreciation	(44,712,672)	(39,969,545)
Property, buildings, and equipment, net	<u>\$ 68,521,774</u>	<u>\$ 63,928,406</u>

Furniture and equipment and accumulated depreciation include \$864,000 and \$366,000, and \$738,000 and \$225,000 as of December 31, 2000 and 1999, respectively, for capitalized leases.

The Board began the Eccles Building Infrastructure Enhancement Project in July 1999. This \$12.5 million project, scheduled for nineteen phases over three and a half years, includes asbestos removal, lighting and plumbing improvements, cabling and other enhancements. Multiple phases will be in process at the same time.

Effective January 1, 1999, in accordance with AICPA Statement of Position 98-1, *Accounting for the Costs of Computer Software Developed or Obtained for Internal Use*, the Board began to capitalize the costs of computer software developed or obtained for internal use. Prior to 1999, the Board capitalized purchased software only. These changes increased software assets and decreased expenses by \$1,691,000 in 1999. These changes did not affect accumulated depreciation in 1999.

(6) OTHER REVENUES AND OTHER EXPENSES

The following are summaries of the components of Other Revenues and Other Expenses.

	2000	1999
<i>Other revenues</i>		
Data processing revenue	\$ 4,817,207	\$ 4,073,910
National Information Center revenue	2,606,998	1,937,206
Subscription revenue	1,079,822	1,240,032
Reimbursable services to other agencies	607,716	609,442
Miscellaneous	<u>533,536</u>	<u>800,845</u>
Total Other Revenues	<u>\$9,645,279</u>	<u>\$8,661,435</u>

	2000	1999
<i>Other expenses</i>		
Tuition, registration, and membership fees	\$ 1,429,231	\$ 1,352,849
Cafeteria operations, net	821,817	857,435
Subsidies and contributions	837,071	856,893
Miscellaneous	<u>2,802,152</u>	<u>1,650,145</u>
Total Other Expenses	<u>\$5,890,271</u>	<u>\$4,717,322</u>

(7) COMMITMENTS

The Board has entered into several operating leases to secure office, training and warehouse space for periods ranging from one to ten years. Minimum future commitments under those leases having an initial or remaining noncancelable lease term in excess of one year at December 31, 2000, are as follows:

2001	\$ 4,926,000
2002	4,967,000
2003	4,729,000
2004	5,089,000
2005	2,833,000
After 2005	<u>3,649,000</u>
	<u>\$26,193,000</u>

Rental expenses under the operating leases were \$4,687,000 and \$4,334,000 in 2000 and 1999, respectively.

(8) FEDERAL FINANCIAL INSTITUTIONS EXAMINATION COUNCIL

The Board is one of the five member agencies of the Federal Financial Institutions Examination Council (the "Council"). During 2000 and 1999, the Board paid \$256,000 and \$327,000, respectively, in assessments for operating expenses of the Council. These amounts are included in other expenses for 2000 and 1999. ■

**Deloitte
& Touche**

**INDEPENDENT AUDITORS' REPORT ON INTERNAL CONTROL OVER
FINANCIAL REPORTING AND COMPLIANCE BASED UPON THE AUDIT
PERFORMED IN ACCORDANCE WITH GOVERNMENT AUDITING STANDARDS**

To the Board of Governors of the
Federal Reserve System

We have audited the financial statements of the Board of Governors of the Federal Reserve System (the Board) as of and for the year ended December 31, 2000, and have issued our report thereon dated February 21, 2001. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States.

Internal Control over Financial Reporting

In planning and performing our audit, we considered the Board's internal control over financial reporting in order to determine our auditing procedures for the purpose of expressing our opinion on the financial statements and not to provide assurance on the internal control over financial reporting. Our consideration of the internal control over financial reporting would not necessarily disclose all matters in the internal control over financial reporting that might be material weaknesses. A material weakness is a condition in which the design or operation of one or more of the internal control components does not reduce to a relatively low level the risk that misstatements in amounts that would be material in relation to the financial statements being audited may occur and not be detected within a timely period by employees in the normal course of performing their assigned functions. We noted no matters involving the internal control over financial reporting and its operation that we consider to be material weaknesses.

However, we noted other matters involving the internal control over financial reporting that we have reported to the management of the Board in a separate letter dated February 21, 2001.

Compliance

As part of obtaining reasonable assurance about whether the Board's financial statements are free of material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grants, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance that are required to be reported under *Government Auditing Standards*.

This report is intended solely for the information and use of the Members and management of the Board and the Inspector General of the Board of Governors of the Federal Reserve System, and is not intended to be and should not be used by anyone other than these specified parties.

Deloitte & Touche LLP

McLean, Virginia
February 21, 2001

**Deloitte
Touche
Tohmatsu**

Federal Reserve Banks Combined Financial Statements

The combined financial statements of the Federal Reserve Banks were audited by PricewaterhouseCoopers LLP, independent accountants, for the years ended December 31, 2000 and 1999.

PRICEWATERHOUSECOOPERS 

REPORT OF INDEPENDENT ACCOUNTANTS

To the Board of Governors of The Federal Reserve System
and the Board of Directors of each of The Federal Reserve Banks:

We have audited the accompanying combined statements of condition of The Federal Reserve Banks (the "Reserve Banks") as of December 31, 2000 and 1999 and the related combined statements of income and changes in capital for the years then ended. These financial statements are the responsibility of the Reserve Banks' management. Our responsibility is to express an opinion on the financial statements based on our audits.

We conducted our audits in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

As discussed in Note 3, the combined financial statements were prepared in conformity with the accounting principles, policies, and practices established by the Board of Governors of The Federal Reserve System. These principles, policies, and practices, which were designed to meet the specialized accounting and reporting needs of The Federal Reserve System, are set forth in the *Financial Accounting Manual for Federal Reserve Banks* and constitute a comprehensive basis of accounting other than accounting standards generally accepted in the United States of America.

In our opinion, the financial statements referred to above present fairly, in all material respects, the combined financial position of the Reserve Banks as of December 31, 2000 and 1999, and the combined results of their operations for the years then ended, on the basis of accounting described in Note 3.

Baltimore, Md.
March 2, 2001

PricewaterhouseCoopers LLP

**THE FEDERAL RESERVE BANKS
COMBINED STATEMENTS OF CONDITION**
December 31, 2000 and 1999

(in millions)

ASSETS	2000	1999
Gold certificates	\$ 11,045	\$ 11,048
Special drawing rights certificates	2,200	6,200
Coin	949	207
Items in process of collection	7,152	6,524
Loans to depository institutions	110	233
Securities purchased under agreements to resell (tri-party)	43,375	140,640
U.S. government and federal agency securities, net	518,501	483,902
Investments denominated in foreign currencies	15,670	16,140
Accrued interest receivable	6,111	5,314
Bank premises and equipment, net	1,949	1,861
Other assets	2,815	2,391
Total assets	<u>\$609,877</u>	<u>\$674,460</u>
LIABILITIES AND CAPITAL		
LIABILITIES		
Federal Reserve notes outstanding, net	\$563,450	\$600,662
Deposits		
Depository institutions	19,046	24,027
U.S. Treasury, general account	5,149	28,402
Other deposits	426	274
Deferred credit items	6,357	6,117
Interest on Federal Reserve notes due U.S. Treasury	560	1,066
Accrued benefit costs	848	816
Other liabilities	250	234
Total liabilities	<u>596,086</u>	<u>661,598</u>
CAPITAL		
Capital paid-in	6,997	6,431
Surplus	6,794	6,431
Total capital	<u>13,791</u>	<u>12,862</u>
Total liabilities and capital	<u>\$609,877</u>	<u>\$674,460</u>

The accompanying notes are an integral part of these combined financial statements.

**THE FEDERAL RESERVE BANKS
COMBINED STATEMENTS OF INCOME**
for the years ended December 31, 2000 and 1999

(in millions)

	<u>2000</u>	<u>1999</u>
Interest income		
Interest on U.S. government and federal agency securities	\$32,737	\$28,216
Interest on investments denominated in foreign currencies	269	225
Interest on loans to depository institutions	23	11
Total interest income	<u>33,029</u>	<u>28,452</u>
 Other operating income (loss)		
Income from services	882	836
Reimbursable services to government agencies	302	295
Foreign currency losses, net	(1,410)	(504)
Government securities losses, net	(82)	(22)
Other income	82	83
Total other operating income (loss)	<u>(226)</u>	<u>688</u>
 Operating expenses		
Salaries and other benefits	1,507	1,446
Occupancy expense	196	189
Equipment expense	243	242
Cost of unreimbursed Treasury services	8	8
Assessments by Board of Governors	624	699
Other expenses	357	294
Total operating expenses	<u>2,935</u>	<u>2,878</u>
 Net income prior to distribution	<u>\$29,868</u>	<u>\$26,262</u>
 Distribution of net income		
Dividends paid to member banks	\$ 410	\$ 374
Transferred to surplus	4,115	479
Payments to U.S. Treasury as interest on Federal Reserve notes	25,343	25,409
 Total distribution	<u>\$29,868</u>	<u>\$26,262</u>

The accompanying notes are an integral part of these combined financial statements.

THE FEDERAL RESERVE BANKS
COMBINED STATEMENTS OF CHANGES IN CAPITAL
for the years ended December 31, 2000 and 1999

(in millions)

	Capital paid-in	Surplus	Total capital
Balance at January 1, 1999 (119 million shares)	\$5,952	\$5,952	\$11,904
Net income transferred to surplus	479	479	479
Net change in capital stock issued (9 million shares)	<u>479</u>	<u>...</u>	<u>479</u>
Balance at December 31, 1999 (128 million shares)	\$6,431	\$6,431	\$12,862
Net income transferred to surplus	4,115	4,115	4,115
Surplus transfer to the U.S. Treasury	(3,752)	(3,752)	(3,752)
Net change in capital stock issued (11 million shares)	<u>566</u>	<u>...</u>	<u>566</u>
Balance at December 31, 2000 (139 million shares)	<u>\$6,997</u>	<u>\$6,794</u>	<u>\$13,791</u>

The accompanying notes are an integral part of these combined financial statements.

NOTES TO THE COMBINED FINANCIAL STATEMENTS OF THE FEDERAL RESERVE BANKS

(1) ORGANIZATION AND BASIS OF PRESENTATION

Board of Directors

The twelve Federal Reserve Banks (Reserve Banks) are part of the Federal Reserve System (System) created by Congress under the Federal Reserve Act of 1913 (Federal Reserve Act) which established the central bank of the United States. The Reserve Banks are chartered by the federal government and possess a unique set of governmental, corporate, and central bank characteristics. Other major elements of the System are the Board of Governors of the Federal Reserve System (Board of Governors), the Federal Open Market Committee (FOMC) and the Federal Advisory Council. The FOMC is composed of members of the Board of Governors, the president of the Federal Reserve Bank of New York (FRBNY) and, on a rotating basis, four other Reserve Bank presidents.

Although the Reserve Banks are chartered as independent organizations overseen by the Board of Governors, the Reserve Banks work jointly to carry out their statutory responsibilities. The majority of the assets, liabilities, and income of the Reserve Banks is derived from central bank activities and responsibilities with regard to monetary policy and currency. For this reason, the accompanying combined set of financial statements for the twelve independent Reserve Banks is prepared with adjustments to eliminate interdistrict accounts and transactions.

Structure

The Reserve Banks serve twelve Federal Reserve Districts nationwide. In accordance with the Federal Reserve Act, supervision and control of each Reserve Bank is exercised by a Board of Directors. Banks that are members of the System include all national banks and any state chartered bank that applies and is approved for membership in the System.

The Federal Reserve Act specifies the composition of the Board of Directors for each of the Reserve Banks. Each board is composed of nine members serving three-year terms: three directors, including those designated as Chairman and Deputy Chairman, are appointed by the Board of Governors, and six directors are elected by member banks. Of the six elected by member banks, three represent the public and three represent member banks. Member banks are divided into three classes according to size. Member banks in each class elect one director representing member banks and one representing the public. In any election of directors, each member bank receives one vote, regardless of the number of shares of Reserve Bank stock it holds.

(2) OPERATIONS AND SERVICES

The System performs a variety of services and operations. Functions include: formulating and conducting monetary policy; participating actively in the payments mechanism, including large-dollar transfers of funds, automated clearinghouse operations and check processing; distribution of coin and currency; fiscal agency functions for the U.S. Treasury and certain federal agencies; serving as the federal government's bank; providing short-term loans to depository institutions; serving the consumer and the community by providing educational materials and information regarding consumer laws; supervising bank holding companies, state member banks and U.S. offices of foreign banking organizations; and administering other regulations of the Board of Governors. The Board of Governors' operating costs are funded through assessments on the Reserve Banks.

NOTES TO THE COMBINED FINANCIAL STATEMENTS OF THE FEDERAL RESERVE BANKS—CONTINUED

The FOMC establishes policy regarding open market operations, oversees these operations, and issues authorizations and directives to the FRBNY for its execution of transactions. Authorized transaction types include direct purchase and sale of U.S. government and federal agency securities, matched sale-purchase transactions, the purchase of securities under agreements to resell, and the lending of U.S. government securities. In August 1999, the FOMC provided temporary authorization for FRBNY to expand the collateral that can be accepted for repurchase agreements. To facilitate the acceptance of expanded collateral FRBNY began entering into tri-party repurchase agreements ("tri-party agreements") beginning October 1999. Since then this authorization has been extended to allow the auctioning of options on repurchase agreements that could be exercised in the period surrounding the 1999 year-end. FRBNY is also authorized by the FOMC to hold balances of and to execute spot and forward foreign exchange and securities contracts in nine foreign currencies, maintain reciprocal currency arrangements (F/X swaps) with various central banks, and "warehouse" foreign currencies for the U.S. Treasury and Exchange Stabilization Fund (ESF) through the Reserve Banks.

(3) SIGNIFICANT ACCOUNTING POLICIES

Accounting principles for entities with the unique powers and responsibilities of the nation's central bank have not been formulated by the Financial Accounting Standards Board. The Board of Governors has developed specialized accounting principles and practices that it believes are appropriate for the significantly different nature and function of a central bank as compared to the private sector. These accounting principles and practices are documented in the *Financial Accounting Manual for Federal Reserve Banks* (*Financial Accounting Manual*), which is issued by the Board of Governors. All Reserve Banks are required to adopt and apply accounting policies and practices that are consistent with the *Financial Accounting Manual*.

These combined financial statements have been prepared in accordance with the *Financial Accounting Manual*. Differences exist between the accounting principles and practices of the System and accounting principles generally accepted in the United States of America (GAAP). The primary differences are the presentation of all security holdings at amortized cost, rather than at the fair value presentation requirements of GAAP, and the accounting for matched sale-purchase transactions as separate sales and purchases, rather than secured borrowings with pledged collateral, as is generally required by GAAP. In addition, the Board of Governors and the Reserve Banks have elected not to present a Statement of Cash Flows. The Statement of Cash Flows has not been included as the liquidity and cash position of the Reserve Banks are not of primary concern to users of these combined financial statements. Other information regarding the Reserve Banks' activities is provided in, or may be derived from, the Statements of Condition, Income, and Changes in Capital. Therefore, a Statement of Cash Flows would not provide any additional useful information. There are no other significant differences between

the policies outlined in the *Financial Accounting Manual* and GAAP.

The preparation of the combined financial statements in conformity with the *Financial Accounting Manual* requires management to make certain estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the combined financial statements and the reported amounts of income and expenses during the reporting period. Actual results could differ from those estimates. Unique accounts and significant accounting policies are explained below.

(A) Gold Certificates

The Secretary of the Treasury is authorized to issue gold certificates to the Reserve Banks to monetize gold held by the U.S. Treasury. Payment for the gold certificates by the Reserve Banks is made by crediting equivalent amounts in dollars into the account established for the U.S. Treasury. These gold certificates held by the Reserve Banks are required to be backed by the gold of the U.S. Treasury. The U.S. Treasury may reacquire the gold certificates at any time and the Reserve Banks must deliver them to the U.S. Treasury. At such time, the U.S. Treasury's account is charged and the Reserve Banks' gold certificate account is lowered. The value of gold for purposes of backing the gold certificates is set by law at \$42 1/4 a fine troy ounce.

(B) Special Drawing Rights Certificates

Special drawing rights (SDRs) are issued by the International Monetary Fund (Fund) to its members in proportion to each member's quota in the Fund at the time of issuance. SDRs serve as a supplement to international monetary reserves and may be transferred from one national monetary authority to another. Under the law providing for United States participation in the SDR system, the Secretary of the U.S. Treasury is authorized to issue SDR certificates, somewhat like gold certificates, to the Reserve Banks. At such time, equivalent amounts in dollars are credited to the account established for the U.S. Treasury, and the Reserve Banks' SDR certificate account is increased. The Reserve Banks are required to purchase SDRs, at the direction of the U.S. Treasury, for the purpose of financing SDR certificate acquisitions or for financing exchange stabilization operations.

(C) Loans to Depository Institutions

The Depository Institutions Deregulation and Monetary Control Act of 1980 provides that all depository institutions that maintain reservable transaction accounts or nonpersonal time deposits, as defined in Regulation D issued by the Board of Governors, have borrowing privileges at the discretion of the Reserve Banks. Borrowers execute certain lending agreements and deposit sufficient collateral before credit is extended. Loans are evaluated for collectibility, and currently all are considered collectible and fully collateralized. If any loans were deemed to be uncollectible, an appropriate reserve would be established. Interest is recorded on the accrual basis and is charged at the applicable discount rate established

NOTES TO THE COMBINED FINANCIAL STATEMENTS OF THE FEDERAL RESERVE BANKS—CONTINUED

at least every fourteen days by the Board of Directors of the Reserve Banks, subject to review by the Board of Governors. However, Reserve Banks retain the option to impose a surcharge above the basic rate in certain circumstances.

(D) U.S. Government and Federal Agency Securities and Investments Denominated in Foreign Currencies

The FOMC has designated the FRBNY to execute open market transactions on its behalf and to hold the resulting securities in the portfolio known as the System Open Market Account (SOMA). In addition to authorizing and directing operations in the domestic securities market, the FOMC authorizes and directs the FRBNY to execute operations in foreign markets for major currencies in order to counter disorderly conditions in exchange markets or to meet other needs specified by the FOMC in carrying out the System's central bank responsibilities.

Purchases of securities under agreements to resell and matched sale-purchase transactions are accounted for as separate sale and purchase transactions. Purchases under agreements to resell are transactions in which the FRBNY purchases a security and sells it back at the rate specified at the commencement of the transaction. Matched sale-purchase transactions are transactions in which the FRBNY sells a security and buys it back at the rate specified at the commencement of the transaction.

In addition to the aforementioned purchases of securities under agreements to resell and matched sale-purchase transactions, the FRBNY engages in tri-party agreements. Tri-party agreements are conducted with two custodial banks that manage the clearing and settlement of collateral. Acceptable collateral under tri-party repurchase agreements primarily includes U.S. Government and agency securities, pass-through mortgage securities of GNMA, FHLMC, and FNMA. STRIP securities of the U.S. Government and "stripped" securities of other government agencies. The tri-party repurchase and reverse repurchase transactions are accounted for as financing transactions with the associated interest income and interest expense recorded over the period of the agreement.

Another tool employed by the FRBNY to address potential reserve shortages was the ability to sell options on overnight repurchase agreements. In 1999 the FRBNY had temporary authority to sell European options to primary dealers that give the dealers the right to enter into repurchase agreements with the FRBNY on the specified exercise date. The options were auctioned in three week long "strips" with each strip consisting of the right to exercise overnight repurchase agreements for up to five consecutive business days. In general, the options could only be exercised at strike price of 150 or 250 basis points above the most recently announced FOMC Federal funds target rate.

Effective April 26, 1999, the FRBNY was given the sole authorization by the FOMC to lend U.S. government securities held in the SOMA to U.S. government securities dealers and to banks participating in U.S. government securities clearing arrangements, in order to facilitate the effective functioning of the domestic securities market. These securities-lending transactions are fully collateralized by other U.S. government securities. FOMC policy requires FRBNY to take possession of collateral in excess

of the market values of the securities loaned. The market values of the collateral and the securities loaned are monitored by FRBNY on a daily basis, with additional collateral obtained as necessary. The securities loaned continue to be accounted for in the SOMA. Prior to April 26, 1999, all Reserve Banks were authorized to engage in such lending activity.

Foreign exchange contracts are contractual agreements between two parties to exchange specified currencies, at a specified price, on a specified date. Spot foreign contracts normally settle two days after the trade date, whereas the settlement date on forward contracts is negotiated between the contracting parties, but will extend beyond two days from the trade date. The FRBNY generally enters into spot contracts, with any forward contracts generally limited to the second leg of a swap/warehousing transaction.

The FRBNY, on behalf of the Reserve Banks, maintains renewable, short-term F/X swap arrangements with two authorized foreign central banks. The parties agree to exchange their currencies up to a pre-arranged maximum amount and for an agreed upon period of time (up to twelve months), at an agreed upon interest rate. These arrangements give the FOMC temporary access to foreign currencies that it may need for intervention operations to support the dollar and give the partner foreign central bank temporary access to dollars it may need to support its own currency. Drawings under the F/X swap arrangements can be initiated by either the FRBNY or the partner foreign central bank, and must be agreed to by the drawee. The F/X swaps are structured so that the party initiating the transaction (the drawer) bears the exchange rate risk upon maturity. The Bank will generally invest the foreign currency received under an F/X swap in interest-bearing instruments.

Warehousing is an arrangement under which the FOMC agrees to exchange, at the request of the Treasury, U.S. dollars for foreign currencies held by the Treasury or ESF over a limited period of time. The purpose of the warehousing facility is to supplement the U.S. dollar resources of the Treasury and ESF for financing purchases of foreign currencies and related international operations.

In connection with its foreign currency activities, the FRBNY, on behalf of the Reserve Banks, may enter into contracts which contain varying degrees of off-balance-sheet market risk, because they represent contractual commitments involving future settlement, and counter-party credit risk. The FRBNY controls credit risk by obtaining credit approvals, establishing transaction limits, and performing daily monitoring procedures.

While the application of current market prices to the securities currently held in the SOMA portfolio and investments denominated in foreign currencies may result in values substantially above or below their carrying values, these unrealized changes in value would have no direct effect on the quantity of reserves available to the banking system or on the prospects for future Reserve Bank earnings or capital. Both the domestic and foreign components of the SOMA portfolio from time to time involve transactions that can result in gains or losses when holdings are sold prior to maturity. However, decisions regarding the securities and foreign currencies transactions, including their purchase and sale, are motivated

NOTES TO THE COMBINED FINANCIAL STATEMENTS OF THE FEDERAL RESERVE BANKS—CONTINUED

by monetary policy objectives rather than profit. Accordingly, earnings and any gains or losses resulting from the sale of such currencies and securities are incidental to the open market operations and do not motivate its activities or policy decisions.

U.S. government and federal agency securities and investments denominated in foreign currencies comprising the SOMA are recorded at cost, on a settlement-date basis, and adjusted for amortization of premiums or accretion of discounts on a straight-line basis. Interest income is accrued on a straight-line basis and is reported as "Interest on U.S. government and federal agency securities" or "Interest on investments denominated in foreign currencies," as appropriate. Income earned on securities lending transactions is reported as a component of "Other income." Gains and losses resulting from sales of securities are determined by specific issues based on average cost. Gains and losses on the sales of U.S. government and federal agency securities are reported as "Government securities gains (losses), net." Foreign-currency denominated assets are revalued monthly at current market exchange rates in order to report these assets in U.S. dollars. Realized and unrealized gains and losses on investments denominated in foreign currencies are reported as "Foreign currency gains (losses), net." Foreign currencies held through F/X swaps, when initiated by the counterparty, and warehousing arrangements are revalued monthly, with the unrealized gain or loss reported as a component of "Other assets" or "Other liabilities," as appropriate.

(E) Bank Premises and Equipment

Bank premises and equipment are stated at cost less accumulated depreciation. Depreciation is calculated on a straight-line basis over estimated useful lives of assets ranging from 2 to 50 years. New assets, major alterations, renovations and improvements are capitalized at cost as additions to the asset accounts. Maintenance, repairs and minor replacements are charged to operations in the year incurred. Internally developed software is capitalized based on the cost of direct materials and services and those indirect costs associated with developing, implementing, and testing software.

(F) Federal Reserve Notes

Federal Reserve notes are the circulating currency of the United States. These notes are issued through the various Federal Reserve agents to the Reserve Banks upon deposit with such agents of certain classes of collateral security, typically U.S. government securities. These notes are identified as issued to a specific Reserve Bank. The Federal Reserve Act provides that the collateral security tendered by the Reserve Bank to the Federal Reserve agent must be equal to the sum of the notes applied for by such Reserve Bank. In accordance with the Federal Reserve Act, gold certificates, special drawing rights certificates, U.S. government and federal agency securities, tri-party agreements, loans allowed under Section 13, and investments denominated in foreign currencies are pledged as collateral for net Federal Reserve notes outstanding. The collateral value is equal to the book value

of the collateral tendered, with the exception of securities, whose collateral value is equal to the par value of the securities tendered. Tri-party agreements, however, are valued at the contract amount. The Board of Governors may, at any time, call upon a Reserve Bank for additional security to adequately collateralize the Federal Reserve notes. To satisfy the obligation to provide sufficient collateral for outstanding Federal Reserve notes, the Reserve Banks have entered into an agreement that provides that certain assets of the Reserve Banks are jointly pledged as collateral for the Federal Reserve notes of all Reserve Banks. In the event that this collateral is insufficient, the Federal Reserve Act provides that Federal Reserve notes become a first and paramount lien on all the assets of the Reserve Banks. Finally, as obligations of the United States, Federal Reserve notes are backed by the full faith and credit of the United States government.

The "Federal Reserve notes outstanding, net" account represents Federal Reserve notes reduced by currency held in the vaults of the Reserve Banks of \$188,264 million and \$221,297 million at December 31, 2000 and 1999, respectively.

At December 31, 2000 and 1999, all gold certificates, all special drawing rights certificates, and domestic securities with par values of \$550,205 million and \$583,414 million respectively, were pledged as collateral. At December 31, 2000 and 1999, no loans or investments denominated in foreign currencies were pledged as collateral.

(G) Capital Paid-In

The Federal Reserve Act requires that each member bank subscribe to the capital stock of the Reserve Bank in an amount equal to 6 percent of the capital and surplus of the member bank. As a member bank's capital and surplus changes, its holdings of the Reserve Bank's stock must be adjusted. Member banks are those state-chartered banks that apply and are approved for membership in the System and all national banks. Currently, only one-half of the subscription is paid-in and the remainder is subject to call. These shares are nonvoting with a par value of \$100. They may not be transferred or hypothecated. By law, each member bank is entitled to receive an annual dividend of 6 percent on the paid-in capital stock. This cumulative dividend is paid semiannually. A member bank is liable for Reserve Bank liabilities up to twice the par value of stock subscribed by it.

(H) Surplus

The Board of Governors requires Reserve Banks to maintain a surplus equal to the amount of capital paid-in as of December 31. This amount is intended to provide additional capital and reduce the possibility that the Reserve Banks would be required to call on member banks for additional capital. Reserve Banks are required by the Board of Governors to transfer to the U.S. Treasury excess earnings, after providing for the costs of operations, payment of dividends, and reservation of an amount necessary to equate surplus with capital paid-in.

The Consolidated Appropriations Act of 2000 (Public Law 106-113, Section 302) directed the Reserve Banks to

NOTES TO THE COMBINED FINANCIAL STATEMENTS OF THE FEDERAL RESERVE BANKS—CONTINUED

transfer to the U.S. Treasury additional surplus funds of \$3,752 million during the Federal Government's 2000 fiscal year. Reserve Banks were not permitted to replenish surplus for these amounts during fiscal year 2000 which ended September 30, 2000; however, the surplus was replenished by December 31, 2000, for eleven of the twelve Reserve Banks. Surplus was not equated to capital at December 31, 2000, at one Reserve Bank where the amount of additional surplus required exceeded the Bank's net income in 2000 due to the substantial increase in capital paid-in and the transfer.

In the event of losses, or a substantial increase in capital, a Reserve Bank will suspend its payments to the U.S. Treasury until such losses or increases in capital are recovered through subsequent earnings. Weekly payments to the U.S. Treasury may vary significantly.

(I) Income and Costs Related to Treasury Services

Reserve Banks are required by the Federal Reserve Act to serve as fiscal agents and depositories of the United States. By statute, the Department of the Treasury is permitted, but not required, to pay for these services. The costs of providing fiscal agency and depository services to the Treasury Department that have been billed but will not be paid are reported as the "Cost of unreimbursed Treasury services."

(J) Taxes

The Reserve Banks are exempt from federal, state, and local taxes, except for taxes on real property, which are reported as a component of "Occupancy expense."

(4) U.S. GOVERNMENT AND FEDERAL AGENCY SECURITIES

Securities bought outright are held in the SOMA at the FRBNY.

Total securities held in the SOMA at December 31, 2000 and 1999, that were bought outright, were as follows (in millions):

	<u>2000</u>	<u>1999</u>
Par value		
Federal agency	\$ 130	\$ 181
U.S. government		
Bills	178,741	176,518
Notes	240,178	218,467
Bonds	92,784	82,978
Total par value	511,833	478,144
Unamortized premiums	9,735	9,098
Unaccrued discounts	(3,067)	(3,340)
Total	<u>\$518,501</u>	<u>\$483,902</u>

The maturity distribution of U.S. government and federal agency securities bought outright and securities purchased under agreements to resell, which were held in the SOMA at December 31, 2000, were as follows (in millions):

	Par value		
Maturities of securities held	U.S. government securities	Federal agency obligations	Total
Within 15 days ...	\$ 18,053	\$. . .	\$ 18,053
16 days to 90 days ..	108,961	... . .	108,961
91 days to 1 year ..	125,539	... . .	125,539
Over 1 year to 5 years	132,792	130	132,922
Over 5 years to 10 years	55,462	... . .	55,462
Over 10 years	70,896	... . .	70,896
Total	<u>\$511,703</u>	<u>\$130</u>	<u>\$511,833</u>

Maturities of securities held	Repurchase agreement triparty (Contract amount)
Within 15 days	\$31,405
16 days to 90 days	11,970
91 days to 1 year .....	... . .
Over 1 year to 5 years .....	... . .
Over 5 years to 10 years .....	... . .
Over 10 years .....	... . .
Total	<u>\$43,375</u>

Total securities held under agreements to resell at December 31, 2000 were \$43,375 million that consisted entirely of agreements through third party custodial arrangements and are reported as Securities purchased under agreements to resell (tri-party). In August 1999, the FOMC extended the maximum permissible maturity for securities purchased under agreements to resell from 60 days to 90 days.

At December 31, 2000 and 1999, matched sale-purchase transactions involving U.S. government securities with par values of \$21,112 million and \$39,182 million, respectively, were outstanding. Matched sale-purchase transactions are generally overnight arrangements.

At December 31, 2000 and 1999, U.S. government securities with par values of \$2,086 million and \$2,061 million, respectively, were loaned.

(5) INVESTMENTS DENOMINATED IN FOREIGN CURRENCIES

The FRBNY, on behalf of the Reserve Banks, holds foreign currency deposits with foreign central banks and the Bank for International Settlements and invests in foreign government debt instruments. Foreign government debt instruments held include both securities bought outright and securities held under agreements to resell. These investments are guaranteed as to principal and interest by the foreign governments.

NOTES TO THE COMBINED FINANCIAL STATEMENTS OF THE FEDERAL RESERVE BANKS—CONTINUED

Total investments denominated in foreign currencies, valued at current exchange rates at December 31, were as follows (in millions):

	2000	1999
European Union euros		
Foreign currency deposits	\$ 4,633	\$ 4,333
Government debt instruments including agreements to resell	2,743	2,538
Japanese yen		
Foreign currency deposits	2,752	323
Government debt instruments including agreements to resell	5,493	8,898
Accrued interest and amortization	49	48
Total	<u><u>\$15,670</u></u>	<u><u>\$16,140</u></u>

The maturity distribution of investments denominated in foreign currencies at December 31, 2000, were as follows (in millions):

<u>Maturities of Investments Denominated in Foreign Currencies</u>	
Within 1 year	\$14,706
Over 1 year to 5 years	418
Over 5 years to 10 years	433
Over 10 years	113
Total	<u><u>\$15,670</u></u>

At December 31, 2000 and 1999, there were no open foreign exchange contracts or outstanding F/X swaps.

At December 31, 2000 and 1999, the warehousing facility was \$5,000 million, with no balance outstanding.

(6) BANK PREMISES AND EQUIPMENT

A summary of bank premises and equipment at December 31 is as follows (in millions):

	2000	1999
Bank premises and equipment		
Land	\$ 192	\$ 191
Buildings	1,285	1,222
Building machinery and equipment	296	287
Construction in progress	163	98
Furniture and equipment	<u>1,290</u>	<u>1,238</u>
	3,226	3,036
Accumulated depreciation	<u>(1,277)</u>	<u>(1,175)</u>
Bank premises and equipment, net	<u><u>\$1,949</u></u>	<u><u>\$1,861</u></u>

Depreciation expense was \$182 million and \$183 million for the years ended December 31, 2000 and 1999, respectively.

Bank premises and equipment at December 31 include the following amounts for leases that have been capitalized (in millions):

	2000	1999
Bank premises and equipment	\$34	\$33
Accumulated depreciation	(22)	(19)
Capitalized leases, net	<u><u>\$12</u></u>	<u><u>\$14</u></u>

Certain of the Reserve Banks lease unused space to outside tenants. Those leases have terms ranging from 1 to 15 years. Rental income from such leases totaled \$18 million and \$17 million for the years ended December 31, 2000 and 1999, respectively. Future minimum lease payments under noncancelable agreements in existence at December 31, 2000, were (in millions):

2001	\$17
2002	15
2003	12
2004	10
2005	8
Thereafter	<u>22</u>
Total	<u><u>\$84</u></u>

(7) COMMITMENTS AND CONTINGENCIES

At December 31, 2000, the Reserve Banks were obligated under noncancelable leases for premises and equipment with terms ranging from 1 to approximately 23 years. These leases provide for increased rentals based upon increases in real estate taxes, operating costs or selected price indices.

Rental expense under operating leases for certain operating facilities, warehouses, and data processing and office equipment (including taxes, insurance and maintenance when included in rent), net of sublease rentals, was \$64 million and \$66 million for the years ended December 31, 2000 and 1999, respectively. Certain of the Reserve Banks' leases have options to renew.

Future minimum rental payments under noncancelable operating leases, net of sublease rentals, with terms of one year or more, at December 31, 2000, were (in millions):

	Operating
2001	\$ 14
2002	10
2003	9
2004	8
2005	7
Thereafter	<u><u>\$117</u></u>
Total	<u><u>\$165</u></u>

At December 31, 2000, the Reserve Banks had contractual commitments through the year 2007 totaling \$356.2 million for the maintenance of currency and check processing machines, none of which has been recognized. Two Reserve Banks contract for maintenance for these machines on behalf of the System and allocate the costs, annually, to each other Reserve Bank.

NOTES TO THE COMBINED FINANCIAL STATEMENTS OF THE FEDERAL RESERVE BANKS—CONTINUED

The Reserve Banks are involved in certain legal actions and claims arising in the ordinary course of business. Although it is difficult to predict the ultimate outcome of these actions, in management's opinion, based on discussions with counsel, the aforementioned litigation and claims will be resolved without material adverse effect on the financial position or results of operations of the Reserve Banks.

(8) RETIREMENT AND THRIFT PLANS

Retirement Plans

The Reserve Banks currently offer two defined benefit retirement plans to their employees, based on length of service and level of compensation. Substantially all of the Reserve Banks' employees participate in the Retirement Plan for Employees of the Federal Reserve System (System Plan) and the Benefit Equalization Retirement Plans offered by each individual Reserve Bank (BEP).

The System Plan is a multi-employer plan with contributions fully funded by participating employers. No separate accounting is maintained of assets contributed by the participating employers. FRBNY acts as the sponsor of this Plan. The prepaid pension cost includes amounts related to the participation of employees of the 12 Reserve Banks, the Board of Governors, and the Plan Administrative Office in the plan.

Following is a reconciliation of the beginning and ending balances of the System Plan benefit obligation (in millions):

	2000	1999
Estimated actuarial present value of projected benefit obligation at January 1	\$2,576	\$2,774
Service cost—benefits earned during the period	80	89
Interest cost on projected benefit obligation	191	169
Actuarial (gain) loss	90	(330)
Contributions by plan participants	3	3
Benefits paid	(132)	(129)
Plan amendments	2	...
Estimated actuarial present value of projected benefit obligation at December 31	<u>\$2,810</u>	<u>\$2,576</u>

Following is a reconciliation showing the beginning and ending balance of the System Plan assets, the funded status, and the prepaid pension benefit costs (in millions):

	2000	1999
Estimated fair value of plan assets at January 1	\$6,156	\$5,798
Actual return on plan assets	149	484
Contributions by employer	...	...
Contributions by plan participants	3	3
Benefits paid	(132)	(129)
Estimated fair value of plan assets at December 31	<u>\$6,176</u>	<u>\$6,156</u>
Funded status	\$3,366	\$3,580
Unrecognized initial net transition (obligation)	(45)	(91)
Unrecognized prior service cost	122	136
Unrecognized net actuarial (gain)	(1,192)	(1,767)
Prepaid pension benefit cost	<u>2,251</u>	<u>1,858</u>

Prepaid pension benefit costs are reported as a component of "Other assets."

The weighted-average assumptions used in developing the pension benefit obligation for the System Plan are as follows:

	2000	1999
Discount rate	7.50%	7.50%
Expected long-term rate of return on plan assets	9.00%	9.00%
Rate of compensation increase	5.00%	5.00%

The components of net periodic pension benefit credit for the System Plan as of December 31 are shown below (in millions):

	2000	1999
Service cost—benefits earned during the period	\$ 80	\$ 89
Interest cost on projected benefit obligation	191	169
Amortization of initial net transition obligation	(46)	(45)
Amortization of prior service cost	16	16
Recognized net (gain)	(85)	(76)
Expected return on plan assets	(549)	(520)
Net periodic pension benefit (credit)	<u>(\$393)</u>	<u>(\$367)</u>

Net periodic pension benefit (credit) is reported as a component of "Other expense."

The Reserve Banks' projected benefit obligation and net pension costs for the BEP at December 31, 2000 and 1999, and for the years then ended, are not material.

NOTES TO THE COMBINED FINANCIAL STATEMENTS OF THE FEDERAL RESERVE BANKS—CONTINUED

Thrift Plan

Employees of the Reserve Banks may also participate in the defined contribution Thrift Plan for Employees of the Federal Reserve System (Thrift Plan). The Reserve Banks' Thrift Plan contributions totaled \$47 million and \$45 million for the years ended December 31, 2000 and 1999, respectively, and are reported as a component of "Salaries and other benefits."

(9) POSTRETIREMENT BENEFITS OTHER THAN PENSIONS AND POSTEMPLOYMENT BENEFITS*Postretirement Benefits Other Than Pensions*

In addition to the Reserve Banks' retirement plans, employees who have met certain age and length of service requirements are eligible for both medical benefits and life insurance coverage during retirement.

The Reserve Banks fund benefits payable under the medical and life insurance plans as due and, accordingly, have no plan assets. Net postretirement benefit costs are actuarially determined using a January 1 measurement date.

Following is a reconciliation of beginning and ending balances of the benefit obligation (in millions):

	2000	1999
Accumulated postretirement benefit obligation at January 1	\$600	\$645
Service cost—benefits earned during the period	16	18
Interest cost of accumulated benefit obligation	44	39
Actuarial loss (gain)	14	(73)
Contributions by plan participants	3	3
Benefits paid	(28)	(25)
Plan amendments	(5)	(7)
Accumulated postretirement benefit obligation at December 31	<u>\$644</u>	<u>\$600</u>

Following is a reconciliation of the beginning and ending balance of the plan assets, the unfunded postretirement benefit obligation and the accrued postretirement benefit costs (in millions):

	2000	1999
Fair value of plan assets at January 1	\$. . .	\$. . .
Actual return on plan assets	. . .	. . .
Contributions by the employer	25	22
Contributions by plan participants	3	3
Benefits paid	(28)	(25)
Fair value of plan assets at December 31	<u>\$. . .</u>	<u>\$. . .</u>
Unfunded postretirement benefit obligation	<u>\$644</u>	<u>\$600</u>
Unrecognized prior service cost	<u>95</u>	<u>99</u>
Unrecognized net actuarial gain/(loss)	<u>7</u>	<u>23</u>
Accrued postretirement benefit cost	<u>\$746</u>	<u>\$722</u>

Accrued postretirement benefit costs are reported as a component of "Accrued benefit costs."

At December 31, 2000 and 1999, the weighted-average assumption used in developing the postretirement benefit obligation was 7.50 percent.

For measurement purposes, an 8.75 percent annual rate of increase in the cost of covered health care benefits was assumed for 2001. Ultimately, the health care cost trend rate is expected to decrease gradually to 5.50 percent by 2008, and remain at that level thereafter.

Assumed health care cost trend rates have a significant effect on the amounts reported for health care plans. A one percentage point change in assumed health care cost trend rates would have the following effects for the year ended December 31, 2000 (in millions):

	1 Percentage Point Increase	1 Percentage Point Decrease
Effect on aggregate of service and interest cost components of net periodic postretirement benefit cost	\$ 12	\$ (9)
Effect on accumulated postretirement benefit obligation ...	99	(82)

The following is a summary of the components of net periodic postretirement benefit costs for the years ended December 31 (in millions):

	2000	1999
Service cost—benefits earned during the period	\$15	\$18
Interest cost of accumulated benefit obligation	44	39
Amortization of prior service cost	(9)	(9)
Recognized net actuarial loss	(1)	. . .
Net periodic postretirement benefit costs ..	<u>\$49</u>	<u>\$48</u>

Net periodic postretirement benefit costs are reported as a component of "Salaries and other benefits."

Postemployment Benefits

The Reserve Banks offer benefits to former or inactive employees. Postemployment benefit costs are actuarially determined and include the cost of medical and dental insurance, survivor income, disability benefits, and those workers' compensation expenses self-insured by individual Reserve Banks. Costs were projected using the same discount rate and health care trend rates as were used for projecting postretirement costs. The accrued postemployment benefit costs recognized by the Reserve Banks at December 31, 2000 and 1999, were \$102 million and \$93 million, respectively. This cost is included as a component of "Accrued benefit costs." Net periodic postemployment benefit costs included in 2000 and 1999 operating expenses were \$21 million and \$20 million, respectively.

Statistical Tables

1. Statement of Condition of the Federal Reserve Banks,
by Bank, December 31, 2000 and 1999

Millions of dollars

Item	Total		Boston	
	2000	1999	2000	1999
ASSETS				
Gold certificate account	11,046	11,048	535	533
Special drawing rights certificate account	2,200	6,200	115	307
Coin	949	207	46	4
<i>Loans</i>				
To depository institutions	110	233	1	91
Other	0	0	0	0
Securities purchased under agreements to resell (triparty)	43,375	140,640	0	0
<i>Federal agency obligations</i>				
Bought outright	130	181	7	9
Held under repurchase agreements	0	0	0	0
<i>U.S. Treasury securities</i>				
Bought outright ¹	511,703	477,963	29,376	24,717
Held under repurchase agreements	0	0	0	0
Total loans and securities	555,318	619,017	29,385	24,817
Items in process of collection	8,019	7,278	473	383
Bank premises	1,460	1,365	93	93
<i>Other assets</i>				
Denominated in foreign currencies ²	15,670	16,140	703	725
Other ³	19,769	17,300	955	778
Interdistrict settlement account	0	0	2,782	9,921
Total assets	614,431	678,556	35,088	37,562
LIABILITIES				
Federal Reserve notes	563,450	600,662	31,891	34,764
<i>Deposits</i>				
Depository institutions	19,045	24,027	1,645	1,545
U.S. Treasury, general account	5,149	28,402	0	0
Foreign, official accounts	216	71	1	1
Other ⁴	1,390	1,270	63	34
Total deposits	25,800	53,770	1,709	1,580
Deferred credit items	7,225	6,871	521	400
Other liabilities and accrued dividends ⁵	4,165	4,390	249	240
Total liabilities	600,640	665,694	34,371	36,985
CAPITAL ACCOUNTS				
Capital paid in	6,997	6,431	358	289
Surplus	6,794	6,431	358	289
Other capital accounts	0	0	0	0
Total liabilities and capital accounts	614,431	678,556	35,088	37,562
FEDERAL RESERVE NOTE STATEMENT				
Federal Reserve notes outstanding (issued to Bank)	751,714	821,959	36,707	42,799
Less: Held by Bank	188,264	221,297	4,816	8,034
Federal Reserve notes, net	563,450	600,662	31,891	34,764
<i>Collateral for Federal Reserve notes</i>				
Gold certificate account	11,046	11,048	...	...
Special drawing rights certificate account	2,200	6,200	...	...
Other eligible assets	0	0	...	...
U.S. Treasury and federal agency securities	550,205	583,414	...	...
Total collateral	563,450	600,662	...	...

1.—Continued

New York		Philadelphia		Cleveland		Richmond	
2000	1999	2000	1999	2000	1999	2000	1999
4,428 874 74	4,435 2,431 9	414 83 52	319 187 8	520 104 67	566 299 11	750 147 117	834 516 38
0 0	0 0	2 0	1 0	0 0	0 0	5 0	12 0
43,375	140,640	0	0	0	0	0	0
50 0	72 0	5 0	5 0	7 0	10 0	8 0	14 0
197,518 0 240,944	190,346 0 331,059	21,313 0 21,320	14,316 0 14,322	28,635 0 28,643	27,667 0 27,677	30,038 0 30,051	35,957 0 35,983
893 166	941 164	384 51	282 50	282 154	401 158	658 128	493 125
3,230 8,577	3,277 8,056	486 769	479 522	1,083 964	1,081 900	4,121 1,689	3,356 1,218
-3,255	-69,615	1,353	8,761	2,260	3,273	2,402	646
255,930	280,757	24,911	24,930	34,078	34,366	40,063	43,209
240,061	236,509	23,114	23,437	31,183	31,757	34,048	36,876
4,570 5,149 192 646 10,556	10,035 28,402 47 564 39,048	702 0 1 46 749	592 0 1 15 608	1,249 0 2 112 1,363	1,118 0 2 26 1,145	1,641 0 8 42 1,691	1,957 0 6 74 2,037
943 1,435	973 1,575	404 188	326 159	349 239	315 259	683 283	566 347
252,995	278,106	24,456	24,531	33,134	33,477	36,706	39,826
1,468 1,468 0	1,325 1,325 0	228 228 0	199 199 0	472 472 0	444 444 0	1,679 1,679 0	1,691 1,691 0
255,930	280,757	24,911	24,930	34,078	34,366	40,063	43,209
300,366 60,305 240,061	326,492 89,983 236,509	31,820 8,706 23,114	30,931 7,493 23,437	36,272 5,089 31,183	38,915 7,158 31,757	50,845 16,797 34,048	54,760 17,884 36,876
...
...
...
...

1. Statement of Condition of the Federal Reserve Banks,
by Bank, December 31, 2000 and 1999—Continued

Millions of dollars

Item	Atlanta		Chicago	
	2000	1999	2000	1999
ASSETS				
Gold certificate account	802	724	1,064	993
Special drawing rights certificate account	166	450	212	549
Coin	83	20	114	32
<i>Loans</i>				
To depository institutions	6	14	25	34
Other	0	0	0	0
Securities purchased under agreements to resell (triparty)	0	0	0	0
<i>Federal agency obligations</i>				
Bought outright	9	11	16	17
Held under repurchase agreements	0	0	0	0
<i>U.S. Treasury securities</i>				
Bought outright ¹	34,060	29,093	61,207	44,890
Held under repurchase agreements	0	0	0	0
Total loans and securities	34,075	29,118	61,248	44,942
Items in process of collection	514	603	1,119	753
Bank premises	251	146	104	107
<i>Other assets</i>				
Denominated in foreign currencies ²	1,122	1,134	1,409	1,581
Other ³	1,147	945	1,953	1,379
Interdistrict Settlement Account	4,499	13,643	-770	23,292
Total assets	42,658	46,784	66,453	73,628
LIABILITIES				
Federal Reserve notes	39,286	43,852	61,206	68,385
<i>Deposits</i>				
Depository institutions	1,097	899	2,796	2,970
U.S. Treasury, general account	0	0	0	0
Foreign, official accounts	2	2	3	3
Other ⁴	86	36	134	56
Total deposits	1,185	937	2,933	3,029
Deferred credit items	877	772	575	637
Other liabilities and accrued dividends ⁵	320	302	476	420
Total liabilities	41,668	45,863	65,190	72,471
CAPITAL ACCOUNTS				
Capital paid in	495	460	632	578
Surplus	495	460	632	578
Other capital accounts	0	0	0	0
Total liabilities and capital accounts	42,658	46,784	66,453	73,628
FEDERAL RESERVE NOTE STATEMENT				
Federal Reserve notes outstanding (issued to Bank)	60,948	62,089	70,685	79,306
Less: Held by Federal Reserve Bank	21,662	18,237	9,479	10,920
Federal Reserve notes, net	39,286	43,852	61,206	68,385

NOTE. Components may not sum to totals because of rounding

1. Includes securities loaned—fully guaranteed by U.S. Treasury securities pledged with Federal Reserve Banks—

and excludes securities sold and scheduled to be bought back under matched sale-purchase transactions.

1.—Continued

St. Louis		Minneapolis		Kansas City		Dallas		San Francisco	
2000	1999	2000	1999	2000	1999	2000	1999	2000	1999
359 71 51	337 175 10	158 30 33	140 78 13	340 66 67	313 175 17	514 98 91	575 341 16	1,162 234 155	1,279 692 30
8 0	37 0	5 0	10 0	31 0	11 0	5 0	10 0	23 0	12 0
0	0	0	0	0	0	0	0	0	0
5 0	6 0	1 0	2 0	4 0	5 0	4 0	9 0	14 0	19 0
19,438 0 19,451	15,722 0 15,765	2,154 0 2,159	5,716 0 5,729	17,052 0 17,087	14,333 0 14,350	15,140 0 15,148	23,816 0 23,835	55,770 0 55,807	51,389 0 51,421
539 34	471 32	516 126	599 128	579 49	474 51	334 138	296 146	1,727 166	1,581 165
385 643	327 498	572 140	549 209	436 571	381 457	513 544	616 743	1,609 1,816	2,635 1,594
-740	5,176	-642	-3,050	-818	3,969	-5,829	-9,087	-1,241	13,071
20,793	22,792	3,093	4,395	18,377	20,186	11,552	17,481	61,435	72,468
19,410	21,575	1,587	2,766	16,646	18,829	9,754	15,269	55,263	66,641
596 0 1 39 636	440 0 1 20 461	456 0 1 1 458	482 0 1 5 488	722 0 1 53 776	480 0 1 18 499	939 0 1 32 972	1,246 0 1 49 1,297	2,632 0 3 137 2,771	2,263 0 5 374 2,641
296 175	272 168	451 63	584 87	433 164	340 160	298 151	269 226	1,394 422	1,419 446
20,517	22,476	2,560	3,925	18,020	19,828	11,175	17,060	59,850	71,147
138 138 0	158 158 0	368 165 0	235 235 0	179 179 0	179 179 0	188 188 0	211 211 0	792 792 0	660 660 0
20,793	22,792	3,093	4,395	18,377	20,186	11,552	17,481	61,435	72,468
23,180 3,770	26,444 4,869	9,581 7,994	11,348 8,581	21,578 4,932	24,597 5,769	32,467 22,713	36,681 21,412	77,265 22,001	87,597 20,956
19,410	21,575	1,587	2,766	16,646	18,829	9,754	15,269	55,263	66,641

2. Valued monthly at market exchange rates.

3. The System total includes depository institution overdrafts of \$8 million for 2000 and \$22 million for 1999.

4. Includes international organization deposits of \$133 million for 2000 and \$139 million for 1999. These

deposits are held solely by the Federal Reserve Bank of New York.

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

2. Federal Reserve Open Market Transactions, 2000

Millions of dollars

Type of security and transaction	Jan.	Feb.	Mar.	Apr.
U.S. TREASURY SECURITIES				
<i>Outright transactions (excluding matched transactions)</i>				
Treasury bills				
Gross purchases	0	0	0	2,294
Gross sales	0	0	0	0
Exchanges	37,029	38,607	48,459	37,141
New bills	37,029	38,607	48,459	37,141
Redemptions	0	0	198	779
Others within 1 year				
Gross purchases	0	0	0	0
Gross sales	0	0	0	0
Maturity shift	3,566	6,877	5,034	0
Exchanges	-4,360	-6,688	-3,515	0
Redemptions	390	0	0	568
0 to 5 years				
Gross purchases	160	0	740	1,723
Gross sales	0	0	0	0
Maturity shift	-3,566	-5,210	-5,034	0
Exchanges	4,045	4,348	3,515	0
5 to 10 years				
Gross purchases	809	0	489	930
Gross sales	0	0	0	0
Maturity shift	0	-949	0	0
Exchanges	316	1,170	0	0
More than 10 years				
Gross purchases	1,069	0	330	0
Gross sales	0	0	0	0
Maturity shift	0	-717	0	0
Exchanges	0	1,170	0	0
All maturities				
Gross purchases	2,038	0	1,559	4,947
Gross sales	0	0	0	0
Redemptions	390	0	198	1,347
<i>Matched transactions</i>				
Gross purchases	492,277	340,127	401,404	336,103
Gross sales	471,663	339,585	401,841	334,751
<i>Repurchase agreements</i>				
Gross purchases	0	0	0	0
Gross sales	0	0	0	0
Net change in U.S. Treasury securities	22,262	542	923	4,952

2.—Continued

May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
0	0	1,825	531	231	779	2,507	509	8,676
0	0	0	0	0	0	0	0	0
36,386	44,008	33,718	42,797	37,006	38,142	45,182	39,428	477,904
36,386	44,008	33,718	42,797	37,006	38,142	45,182	39,428	477,904
2,297	4,188	4,902	3,438	3,898	2,656	1,021	1,145	24,522
164	1,875	1,284	2,770	716	0	580	1,420	8,809
0	0	0	0	0	0	0	0	0
13,063	4,672	5,152	7,040	0	8,663	7,957	0	62,025
-12,633	-3,109	-3,333	-7,396	0	-6,608	-7,012	0	-54,656
0	0	367	887	0	787	780	0	3,779
890	706	2,259	2,508	2,385	734	1,332	1,045	14,482
0	0	0	0	0	0	0	0	0
-10,334	-4,672	-5,152	-3,439	0	-8,663	-5,997	0	-52,068
10,063	3,109	3,333	5,418	0	6,608	5,737	0	46,177
0	0	0	1,914	448	0	510	771	5,871
0	0	0	0	0	0	0	0	0
-1,552	0	0	-3,601	0	0	-699	0	-6,801
2,570	0	0	1,254	0	0	1,275	0	6,585
528	1,151	500	727	547	982	0	0	5,833
0	0	0	0	0	0	0	0	0
-1,177	0	0	0	0	0	-1,261	0	-3,155
0	0	0	724	0	0	0	0	1,894
1,582	3,732	5,868	8,450	4,326	2,495	4,929	3,745	43,670
0	0	0	0	0	0	0	0	0
2,297	4,188	5,269	4,325	3,898	3,443	1,802	1,145	28,301
357,355	368,396	344,935	381,349	335,321	344,920	351,391	345,680	4,381,188
356,640	369,739	344,384	381,475	334,530	346,428	351,232	348,917	4,399,257
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
-1	-1,800	1,150	3,999	1,219	-2,457	3,286	-637	33,439

2. Federal Reserve Open Market Transactions, 2000—Continued

Millions of dollars

Type of security and transaction	Jan.	Feb.	Mar.	Apr.
FEDERAL AGENCY OBLIGATIONS				
<i>Outright transactions</i>				
Gross purchases	0	0	0	0
Gross sales	0	0	0	0
Redemptions	6	25	0	10
<i>Repurchase agreements</i>				
Gross purchases	0	0	0	0
Gross sales	0	0	0	0
Net change in agency obligations	-6	-25	0	-10
TRIPARTY ARRANGEMENTS				
<i>Repurchase agreements¹</i>				
Gross purchases	61,345	82,998	61,230	79,585
Gross sales	178,880	81,335	62,253	78,425
Net change in triparty arrangements	-117,535	1,663	-1,023	1,160
Total net change in System Open Market Account	-95,279	2,180	-100	6,102

NOTE. Sales, redemptions, and negative figures reduce holdings of the System Open Market Account; all other figures increase such holdings. Components may not sum to totals because of rounding.

1. Cash value of agreements through third-party custodial banks. These agreements are collateralized by U.S. government and federal agency securities.

2.—Continued

May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	10	0	0	0	51
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	-10	0	0	0	-51
107,375	70,850	66,485	47,265	66,080	64,428	87,125	95,470	890,236
105,885	70,315	75,925	46,230	67,285	62,308	79,295	79,365	987,501
1,490	535	-9,440	1,035	-1,205	2,120	7,830	16,105	-97,265
1,489	-1,265	-8,290	5,034	4	-337	11,116	15,468	-63,877

3. Federal Reserve Bank Holdings of U.S. Treasury and Federal Agency Securities, December 31, 1998–2000

Millions of dollars

Description	December 31			Change	
	2000	1999	1998	1999 to 2000	1998 to 1999
U.S. TREASURY SECURITIES					
Held outright¹	532,815	517,145	473,068	15,670	44,077
<i>By remaining maturity</i>					
Bills					
1–90 days	130,710	124,294	106,996	6,416	17,298
91 days to 1 year	69,143	91,405	108,703	-22,262	-17,298
Notes and bonds					
1 year or less	73,812	59,899	49,149	13,913	10,750
More than 1 year through 5 years	132,792	124,169	107,730	8,623	16,439
More than 5 years through 10 years	55,461	51,107	44,822	4,354	6,285
More than 10 years	70,896	66,270	55,668	4,626	10,602
<i>By type</i>					
Bills	199,854	215,699	215,699	-15,845	0
Notes	240,177	218,467	187,895	21,710	30,572
Bonds	92,784	82,978	69,474	9,806	13,504
Repurchase agreements	0	0	19,674	0	-19,674
MSPs, foreign accounts	21,112	39,182	20,927	-18,070	18,255
MSPs, in the market	0	0	0	0	0
FEDERAL AGENCY SECURITIES					
Held outright¹	130	181	338	-51	-157
<i>By remaining maturity</i>					
1 year or less	0	51	102	-51	-51
More than 1 year through 5 years	130	10	61	120	-51
More than 5 years through 10 years	0	120	175	-120	-55
More than 10 years	0	0	0	0	0
<i>By issuer</i>					
Federal Farm Credit Banks	0	0	10	0	-10
Federal Home Loan Banks	0	6	38	-6	-32
Federal Land Banks	0	0	0	0	0
Federal National Mortgage Association	130	175	290	-45	-115
Repurchase agreements	0	0	10,702	0	-10,702
TRIPARTY ARRANGEMENTS					
Repurchase agreements²	43,375	140,640	0	-97,265	140,640

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

1. Excludes the effects of temporary transactions—repurchase agreements and matched sale–purchase agreements (MSPs).

2. Cash value of agreements through third-party custodial banks. These arrangements are collateralized by U.S. government and federal agency securities.

4. Number and Annual Salaries of Officers and Employees of the Federal Reserve Banks, December 31, 2000

Federal Reserve Bank (including Branches)	President	Other officers		Employees			Total	
	Salary (dollars)	Number	Salaries (dollars)	Number		Salaries (dollars)	Number	Salaries (dollars)
				Full-time	Part-time			
Boston	222,800	69	8,718,822	1,100	156	56,148,405	1,326	65,090,027
New York	283,300	261	40,802,375	3,061	69	171,952,706	3,392	213,038,381
Philadelphia	205,000	58	7,232,200	1,150	68	49,631,410	1,277	57,068,610
Cleveland	222,700	49	5,649,700	1,251	47	50,568,588	1,348	56,440,988
Richmond	222,800	93	10,463,100	1,955	139	80,701,513	2,188	91,387,413
Atlanta	239,100	94	11,572,750	2,436	56	97,154,906	2,587	108,966,756
Chicago	249,000	85	10,378,640	1,942	78	94,337,451	2,106	104,965,091
St. Louis	209,000	71	7,686,050	1,162	75	45,797,021	1,309	53,692,071
Minneapolis	232,700	49	5,713,200	1,128	122	47,318,330	1,300	53,264,230
Kansas City	222,300	67	7,376,100	1,480	64	60,800,284	1,612	68,398,684
Dallas	221,000	63	4,902,298	1,402	78	50,320,848	1,544	55,444,146
San Francisco	303,000	77	10,643,700	2,246	72	115,295,602	2,396	126,242,302
Federal Reserve Information Technology	0	27	3,423,700	636	8	40,973,642	671	44,397,342
Total	2,832,700	1,063	134,562,635	20,949	1,032	961,000,706	23,056	1,098,396,041

5. Income and Expenses of the Federal Reserve Banks, by Bank, 2000

Thousands of dollars

Item	Total	Boston	New York	Philadelphia	Cleveland
CURRENT INCOME					
Loans	22,846	1,183	1,588	85	154
U.S. Treasury and federal agency securities	32,736,903	1,756,418	13,546,318	1,211,301	1,774,378
Foreign currencies	269,531	12,095	55,552	8,358	18,626
Priced services	881,544	47,104	91,254	42,663	59,087
Other	53,167	1,796	28,136	1,212	2,163
Total	33,963,992	1,818,596	13,722,848	1,263,619	1,854,408
CURRENT EXPENSES					
Salaries and other personnel expenses	1,187,573	67,356	230,222	59,860	59,070
Retirement and other benefits	319,774	18,872	70,027	14,170	16,090
Net periodic pension costs ¹	-392,599	0	-392,609	-2	-1
Fees	46,452	1,890	7,280	981	2,604
Travel	54,473	2,419	8,329	2,234	3,573
Software expenses	82,598	3,760	9,817	2,263	5,329
Postage and other shipping costs	85,045	1,615	5,216	1,721	2,269
Communications	12,117	1,151	2,598	446	654
Materials and supplies	54,269	2,505	9,862	3,767	3,049
<i>Building expenses</i>					
Taxes on real estate	31,536	4,701	4,340	1,531	1,851
Property depreciation	67,545	4,428	12,775	2,987	5,795
Utilities	29,211	2,514	6,603	2,407	1,924
Rent	33,376	710	11,157	282	270
Other	34,459	907	10,050	1,426	2,539
<i>Equipment</i>					
Purchases	9,876	832	1,628	615	531
Rentals	31,932	167	1,872	271	282
Depreciation	114,215	6,569	19,847	5,107	5,988
Repairs and maintenance	86,611	5,338	10,529	4,530	5,159
<i>Earnings-credit costs</i>	385,204	23,567	61,438	14,167	39,251
Other	70,660	4,935	13,380	2,906	4,105
Shared costs, net ²	0	5,141	23,971	12,837	13,862
Recoveries	-68,061	-11,573	-7,741	-2,622	-2,917
Expenses capitalized ³	-2,138	-161	0	-199	-252
Total	2,274,130	147,643	120,591	131,689	171,025
Reimbursements	-302,442	-18,921	-54,878	-22,760	-26,345
Net expenses	1,971,688	128,722	65,713	108,929	144,680

For notes see end of table.

5.—Continued

Richmond	Atlanta	Chicago	St. Louis	Minneapolis	Kansas City	Dallas	San Francisco
513	808	5,555	3,396	4,265	3,207	834	1,259
1,982,103	2,044,067	3,544,503	1,151,197	196,802	1,019,316	1,098,193	3,412,308
70,889	19,295	24,242	6,620	9,846	7,497	8,828	27,681
68,127	162,529	98,248	47,100	46,371	68,367	58,427	92,266
2,396	4,786	4,672	1,183	454	942	1,062	4,366
2,124,028	2,231,485	3,677,220	1,209,497	257,738	1,099,328	1,167,344	3,537,880
148,203	117,833	111,939	56,832	55,838	72,588	70,723	137,107
38,417	33,412	29,353	16,761	14,541	16,615	20,840	30,677
0	8	-4	7	2	4	-3	-1
15,224	4,776	3,301	960	3,645	960	1,620	3,211
7,441	5,438	5,264	2,653	2,991	3,640	3,421	7,068
36,928	4,999	3,943	2,483	3,329	1,711	2,091	5,945
3,553	45,492	5,188	2,810	3,229	4,685	2,692	6,574
925	1,033	1,500	768	551	720	960	810
6,290	6,549	4,961	3,171	2,040	3,320	3,927	4,828
2,032	2,291	3,920	372	4,878	517	2,294	2,809
5,975	4,170	5,834	3,604	4,113	4,092	5,554	8,217
2,512	1,538	2,513	1,420	1,634	1,377	1,913	2,855
10,754	6,585	1,467	888	64	532	539	127
2,804	2,355	5,474	1,173	2,113	1,083	2,435	2,101
1,377	1,060	695	354	326	714	496	1,248
26,482	741	765	312	195	168	161	516
24,514	11,528	8,901	5,126	4,953	6,587	5,235	9,860
16,926	11,452	8,971	3,120	3,218	3,294	4,432	9,644
57,290	19,892	48,655	15,841	16,550	17,173	23,296	48,085
9,261	6,778	7,197	3,478	3,305	4,490	4,487	6,338
-152,343	5,451	21,780	20,775	8,089	16,360	14,575	9,502
-20,710	-3,185	-6,052	-1,817	-789	-1,336	-4,854	-4,465
-105	-590	-131	-59	0	-331	-285	-24
243,749	289,606	275,433	141,033	134,814	158,966	166,550	293,031
-34,174	-13,047	-19,700	-28,009	-24,697	-20,394	-14,116	-25,402
209,575	276,359	255,733	113,025	110,117	138,572	152,434	267,629

5. Income and Expenses of the Federal Reserve Banks, by Bank, 2000—Continued

Thousands of dollars

Item	Total	Boston	New York	Philadelphia	Cleveland
PROFIT AND LOSS					
Current net income	31,992,304	1,689,874	13,657,135	1,154,690	1,709,728
<i>Additions to and deductions from (–) current net income⁴</i>					
Profits on sales of U.S. Treasury and federal agency securities	0	0	0	0	0
Profits on foreign exchange transactions	0	0	0	0	0
Other additions	2,138	30	22	32	7
Total additions	2,138	30	22	32	7
Losses on sales of U.S. Treasury and federal agency securities	–82,313	–4,494	–32,270	–2,953	–4,684
Losses on foreign exchange transactions	–1,409,988	–63,273	–290,614	–43,723	–97,439
Other deductions	–1,776	–1	–15	–5	–2
Total deductions	–1,494,077	–67,767	–322,899	–46,681	–102,125
Net addition to or deduction from (–) current net income	–1,491,940	–67,738	–322,877	–46,648	–102,119
Cost of unreimbursed Treasury services	8,088	387	519	4,173	517
<i>Assessments by Board</i>					
Board expenditures ⁵	188,067	8,296	39,458	5,827	12,835
Cost of currency	435,838	25,225	171,610	17,006	23,043
Net income before payment to U.S. Treasury	29,868,372	1,588,229	13,122,671	1,081,036	1,571,215
Dividends paid	409,614	18,781	89,281	12,705	27,482
Payments to U.S. Treasury (interest on Federal Reserve notes)	25,343,892	1,331,225	12,117,903	923,508	1,256,932
Transferred to/from surplus	4,114,865	238,223	915,487	144,823	286,802
Surplus, January 1	6,431,077	288,595	1,325,475	199,425	444,429
Surplus, December 31 ⁶	6,793,942	358,447	1,467,657	227,900	471,943

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

1. Reflects the effect of Financial Accounting Standards Board Statement of Financial Accounting Standards No. 87, *Employers' Accounting for Pensions* (SFAS 87). The System Retirement Plan for employees is recorded on behalf of the System on the books of the Federal Reserve Bank of New York, resulting in a reduction in expenses of \$392,656 thousand. The Retirement Benefits Equalization Plan is recorded by each Federal Reserve Bank.

2. Includes distribution of costs for projects performed by one Reserve Bank for the benefit of one or more other Reserve Banks.

3. Includes expenses for labor and materials temporarily capitalized and charged to activities when products are consumed.

4. Includes reimbursement from the U.S. Treasury for uncut sheets of Federal Reserve notes, gains and losses on the sale of Reserve Bank buildings, counterfeit currency that is not charged back to the depositing institution, and stale Reserve Bank checks that are written off.

5. For additional details, see the preceding chapter, "Board of Governors Financial Statements."

6. Reflects the statutorily required special transfer of surplus to the U.S. Treasury of \$3,752 billion on May 10, 2000.

5.—Continued

Richmond	Atlanta	Chicago	St. Louis	Minneapolis	Kansas City	Dallas	San Francisco
1,914,453	1,954,926	3,421,487	1,096,472	147,621	960,756	1,014,910	3,270,251
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
10	1,965	10	1	1	2	56	2
10	1,965	10	1	1	2	56	2
-5,503	-5,248	-8,802	-2,920	-661	-2,608	-3,258	-8,911
-370,837	-100,938	-126,818	-34,630	-51,509	-39,219	-46,183	-144,807
-5	-2	-2	-2	-2	-4	-1,737	0
-376,345	-106,187	-135,622	-37,552	-52,172	-41,830	-51,177	-153,718
-376,335	-104,222	-135,612	-37,551	-52,171	-41,829	-51,122	-153,717
377	185	622	49	272	421	400	166
48,405	13,377	16,816	4,552	7,563	5,131	6,139	19,667
26,758	31,819	49,619	15,655	2,008	13,662	11,080	48,354
1,462,578	1,805,324	3,218,818	1,038,665	85,607	899,713	946,169	3,048,347
100,688	29,183	36,414	9,086	18,562	10,747	12,203	44,482
387,802	1,472,600	2,791,850	957,376	0	784,655	833,400	2,486,643
974,088	303,541	390,553	72,203	67,045	104,310	100,567	517,223
1,691,431	460,390	578,431	157,954	234,937	178,884	210,646	660,481
1,678,709	495,332	631,518	138,004	164,915	178,830	188,318	792,368

6. Income and Expenses of the Federal Reserve Banks, 1914–2000

Thousands of dollars

Federal Reserve Bank and period	Current income	Net expenses	Net additions or deductions (-)†	Assessments by Board of Governors	
				Board expenditures	Costs of currency
<i>All Banks</i>					
1914–15.....	2,173	2,018	6	302	...
1916.....	5,218	2,082	-193	192	...
1917.....	16,128	4,922	-1,387	238	...
1918.....	67,584	10,577	-3,909	383	...
1919.....	102,381	18,745	-4,673	595	...
1920.....	181,297	27,549	-3,744	710	...
1921.....	122,866	33,722	-6,315	741	...
1922.....	50,499	28,837	-4,442	723	...
1923.....	50,709	29,062	-8,233	703	...
1924.....	38,340	27,768	-6,191	663	...
1925.....	41,801	26,819	-4,823	709	...
1926.....	47,600	24,914	-3,638	722	1,714
1927.....	43,024	24,894	-2,457	779	1,845
1928.....	64,053	25,401	-5,026	698	806
1929.....	70,955	25,810	-4,862	782	3,099
1930.....	36,424	25,358	-93	810	2,176
1931.....	29,701	24,843	311	719	1,479
1932.....	50,019	24,457	-1,413	729	1,106
1933.....	49,487	25,918	-12,307	800	2,505
1934.....	48,903	26,844	-4,430	1,372	1,026
1935.....	42,752	28,695	-1,737	1,406	1,477
1936.....	37,901	26,016	486	1,680	2,178
1937.....	41,233	25,295	-1,631	1,748	1,757
1938.....	36,261	25,557	2,232	1,725	1,630
1939.....	38,501	25,669	2,390	1,621	1,356
1940.....	43,538	25,951	11,488	1,704	1,511
1941.....	41,380	28,536	721	1,840	2,588
1942.....	52,663	32,051	-1,568	1,746	4,826
1943.....	69,306	35,794	23,768	2,416	5,336
1944.....	104,392	39,659	3,222	2,296	7,220
1945.....	142,210	41,666	-830	2,341	4,710
1946.....	150,385	50,493	-626	2,260	4,482
1947.....	158,656	58,191	1,973	2,640	4,562
1948.....	304,161	64,280	-34,318	3,244	5,186
1949.....	316,537	67,931	-12,122	3,243	6,304
1950.....	275,839	69,822	36,294	3,434	7,316
1951.....	394,656	83,793	-2,128	4,095	7,581
1952.....	456,060	92,051	1,584	4,122	8,521
1953.....	513,037	98,493	-1,059	4,100	10,922
1954.....	438,486	99,068	-134	4,175	6,490
1955.....	412,488	101,159	-265	4,194	4,707
1956.....	595,649	110,240	-23	5,340	5,603
1957.....	763,348	117,932	-7,141	7,508	6,374
1958.....	742,068	125,831	124	5,917	5,973
1959.....	886,226	131,848	98,247	6,471	6,384
1960.....	1,103,385	139,894	13,875	6,534	7,455
1961.....	941,648	148,254	3,482	6,265	6,756
1962.....	1,048,508	161,451	-56	6,655	8,030
1963.....	1,151,120	169,638	615	7,573	10,063
1964.....	1,343,747	171,511	726	8,655	17,230
1965.....	1,559,484	172,111	1,022	8,576	23,603
1966.....	1,908,500	178,212	996	9,022	20,167
1967.....	2,190,404	190,561	2,094	10,770	18,790
1968.....	2,764,446	207,678	8,520	14,198	20,474
1969.....	3,373,361	237,828	-558	15,020	22,126

For notes see end of table.

6.—Continued

Dividends paid	Payments to U.S. Treasury		Transferred to surplus (section 13b)	Transferred to surplus (section 7)
	Statutory transfers ²	Interest on Federal Reserve notes		
217	...	...	...	...
1,743				
6,804	1,134			1,134
5,541				48,334
5,012	2,704			70,652
5,654	60,725			82,916
6,120	59,974			15,993
6,307	10,851			—660
6,553	3,613			2,546
6,682	114			—3,078
6,916	59			2,474
7,329	818			8,464
7,755	250			5,044
8,458	2,585			21,079
9,584	4,283			22,536
10,269	17			—2,298
10,030				—7,058
9,282	2,011			11,021
8,874				—917
8,782			—60	6,510
8,505	298		28	607
7,830	227		103	353
7,941	177		67	2,616
8,019	120		—419	1,862
8,110	25		—426	4,534
8,215	82		—54	17,617
8,430	141		—4	571
8,669	198		50	3,554
8,911	245		135	40,327
9,500	327		201	48,410
10,183	248		262	81,970
10,962	67		28	81,467
11,523	36	75,284	87	8,366
11,920		166,690		18,523
12,329		193,146		21,462
13,083		196,629		21,849
13,865		254,874		28,321
14,682		291,935		46,334
15,558		342,568		40,337
16,442		276,289		35,888
17,712		251,741		32,710
18,905		401,556		53,983
20,081		542,708		61,604
21,197		524,059		59,215
22,722		910,650		—93,601
23,948		896,816		42,613
25,570		687,393		70,892
27,412		799,366		45,538
28,912		879,685		55,864
30,782		1,582,119		—465,823
32,352		1,296,810		27,054
33,696		1,649,455		18,944
35,027		1,907,498		29,851
36,959		2,463,629		30,027
39,237		3,019,161		39,432

6. Income and Expenses of the Federal Reserve Banks, 1914–2000—Continued

Thousands of dollars

Federal Reserve Bank and period	Current income	Net expenses	Net additions or deductions (-)¹	Assessments by Board of Governors	
				Board expenditures	Costs of currency
1970.....	3,877,218	276,572	11,442	21,228	23,574
1971.....	3,723,370	319,608	94,266	32,634	24,943
1972.....	3,792,335	347,917	-49,616	35,234	31,455
1973.....	5,016,769	416,879	-80,653	44,412	33,826
1974.....	6,280,091	476,235	-78,487	41,117	30,190
1975.....	6,257,937	514,359	-202,370	33,577	37,130
1976.....	6,623,220	558,129	7,311	41,828	48,819
1977.....	6,891,317	568,851	-177,033	47,366	55,008
1978.....	8,455,309	592,558	-633,123	53,322	60,059
1979.....	10,310,148	625,168	-151,148	50,530	68,391
1980.....	12,802,319	718,033	-115,386	62,231	73,124
1981.....	15,508,350	814,190	-372,879	63,163	82,924
1982.....	16,517,385	926,034	-68,833	61,813	98,441
1983.....	16,068,362	1,023,678	-400,366	71,551	152,135
1984.....	18,068,821	1,102,444	-412,943	82,116	162,606
1985.....	18,131,983	1,127,744	1,301,624	77,378	173,739
1986.....	17,464,528	1,156,868	1,975,893	97,338	180,780
1987.....	17,633,012	1,146,911	1,796,594	81,870	170,675
1988.....	19,526,431	1,205,960	-516,910	84,411	164,245
1989.....	22,249,276	1,332,161	1,254,613	89,580	175,044
1990.....	23,476,604	1,349,726	2,099,328	103,752	193,007
1991.....	22,553,002	1,429,322	405,729	109,631	261,316
1992.....	20,235,028	1,474,531	-987,788	128,955	295,401
1993.....	18,914,251	1,657,800	-230,268	140,466	355,947
1994.....	20,910,742	1,795,328	2,363,862	146,866	368,187
1995.....	25,395,148	1,818,416	857,788	161,348	370,203
1996.....	25,164,303	1,947,861	-1,676,716	162,642	402,517
1997.....	26,917,213	1,976,453	-2,611,570	174,407	364,454
1998.....	28,149,477	1,833,436	1,906,037	178,009	408,544
1999.....	29,346,836	1,852,162	-533,557	213,790	484,959
2000.....	33,963,992	1,971,688	-1,500,027	188,067	435,838
Total, 1914–2000	535,786,356	38,180,719	3,346,655	3,068,527	6,082,928
<i>Aggregate for each Bank, 1914–2000</i>					
Boston.....	28,916,698	2,580,331	91,291	118,486	352,767
New York.....	178,860,569	5,908,886 ³	1,183,114	776,579	2,009,808
Philadelphia.....	20,052,718	2,107,931	74,946	137,744	236,063
Cleveland.....	34,168,310	2,437,017	119,036	211,708	372,302
Richmond.....	42,099,293	3,362,341	-22,705	273,978	515,140
Atlanta.....	26,364,621	3,768,791	283,601	249,337	357,153
Chicago.....	67,932,649	4,928,968	430,347	379,498	725,337
St. Louis.....	18,622,625	1,976,866	48,100	82,514	227,061
Minneapolis.....	9,199,451	1,815,852	89,746	91,645	96,224
Kansas City.....	20,376,632	2,461,831	96,927	114,651	230,880
Dallas.....	26,156,253	2,497,090	389,938	189,379	282,488
San Francisco.....	63,036,537	4,334,815	562,315	443,008	677,706
Total	535,786,356	38,180,719	3,346,655	3,068,527	6,082,928

NOTE. Also see note at the end of table 1.

Components may not sum to totals because of rounding.

... Not applicable.

1. For 1987 and subsequent years, includes the cost of services provided to the Treasury by Federal Reserve Banks for which reimbursement was not received.

2. Represents transfers made as a franchise tax from 1917 to 1932; transfers made under section 13b of the Federal Reserve Act from 1935 to 1947; and transfers made under section 7 of the Federal Reserve Act for 1996 and 1997.

6.—Continued

Dividends paid	Payments to U.S. Treasury		Transferred to surplus (section 13b)	Transferred to surplus (section 7)
	Statutory transfers ²	Interest on Federal Reserve notes		
41,137	...	3,493,571	...	32,580
43,488	...	3,356,560	...	40,403
46,184	...	3,231,268	...	50,661
49,140	...	4,340,680	...	51,178
52,580	...	5,549,999	...	51,483
54,610	...	5,382,064	...	33,828
57,351	...	5,870,463	...	53,940
60,182	...	5,937,148	...	45,728
63,280	...	7,005,779	...	47,268
67,194	...	9,278,576	...	69,141
70,355	...	11,706,370	...	56,821
74,574	...	14,023,723	...	76,897
79,352	...	15,204,591	...	78,320
85,152	...	14,228,816	...	106,663
92,620	...	16,054,095	...	161,996
103,029	...	17,796,464	...	155,253
109,588	...	17,803,895	...	91,954
117,499	...	17,738,880	...	173,771
125,616	...	17,364,319	...	64,971
129,885	...	21,646,417	...	130,802
140,758	...	23,608,398	...	180,292
152,553	...	20,777,552	...	228,356
171,763	...	16,774,477	...	402,114
195,422	...	15,986,765	...	347,583
212,090	...	20,470,011	...	282,122
230,527	...	23,389,367	...	283,075
255,884	5,517,716	14,565,624	...	635,343
299,652	20,658,972	0	...	831,705
343,014	17,785,942	8,774,994	...	731,575
373,579	0	25,409,736	...	479,053
409,614	0	25,343,892	...	4,114,865
5,074,773	44,113,958	431,724,494	-4	10,887,615³
208,047	2,579,504	22,623,237	135	545,482
1,296,263	17,307,161	150,414,517	-433	2,330,903
237,578	1,312,118	15,725,925	291	370,014
362,126	2,827,043	27,318,977	-10	758,181
492,631	3,083,928	31,662,058	-72	2,686,584
393,500	2,713,230	18,376,729	5	789,476
611,484	4,593,811	56,114,454	12	1,009,433
136,613	1,833,837	14,173,307	-27	240,554
153,126	416,227	6,405,077	65	310,982
184,163	1,249,703	15,936,885	-9	295,454
291,903	1,510,802	21,446,422	55	328,051
707,339	4,686,594	51,526,906	-17	1,222,500
5,074,773	44,113,958	431,724,494	-4	10,887,615⁴

3. This amount is reduced \$2,165,864 thousand, which is related to the System Retirement Plan. See note 1, table 5.

4. The \$10,887,615 thousand transferred to surplus was reduced by direct charges of \$500 thousand for charge-off on Bank premises (1927), \$139,300 thousand for contributions to capital of the Federal Deposit Insurance Corporation (1934), \$4 thousand net upon elimina-

tion of section 13b surplus (1958), and \$106,000 thousand (1996), \$107,000 thousand (1997), and \$3,752,000 thousand (2000) transferred to the Treasury as statutorily required; and was increased by transfer of \$11,131 thousand from reserves for contingencies (1955), leaving a balance of \$6,793,942 thousand on December 31, 2000.

7. Acquisition Costs and Net Book Value of Premises of the Federal Reserve Banks and Branches, December 31, 2000

Thousands of dollars

Federal Reserve Bank or Branch	Acquisition costs				Net book value	Other real estate ³
	Land	Buildings (including vaults) ¹	Building machinery and equipment	Total ²		
BOSTON	22,074	98,872	15,161	136,106	93,416	...
NEW YORK	20,330	169,973	48,203	238,506	160,968	
Buffalo	888	4,830	3,233	8,951	4,978	
PHILADELPHIA	2,380	65,731	9,133	77,244	50,723	
CLEVELAND	3,112	118,322	24,452	145,885	124,282	
Cincinnati	2,247	17,994	8,687	28,928	13,320	
Pittsburgh	1,658	13,323	8,668	23,650	16,813	
RICHMOND	6,629	71,736	25,398	103,763	76,421	
Baltimore	6,478	27,101	4,929	38,509	24,931	
Charlotte	3,130	27,541	4,750	35,421	26,499	...
ATLANTA	17,608	131,874	0	149,482	149,475	...
Birmingham	7,098	44,875	3,250	55,223	54,931	...
Jacksonville	1,730	18,304	2,976	23,010	16,991	48
Miami	3,746	14,608	3,790	22,144	14,613	...
Nashville	629	3,750	2,834	7,213	3,894	
New Orleans	3,498	8,381	4,058	15,937	10,903	...
CHICAGO	5,044	122,801	12,767	140,612	96,066	...
Detroit	798	6,911	3,731	11,439	8,084	...
ST. LOUIS	700	22,531	8,353	31,584	17,908	...
Little Rock	1,148	4,882	1,940	7,970	6,115	...
Louisville	700	4,755	1,631	7,086	4,730	...
Memphis	1,136	4,679	3,484	9,299	5,680	...
MINNEAPOLIS	11,377	100,027	13,356	124,760	115,413	
Helena	2,042	9,513	902	12,457	10,233	...
KANSAS CITY	2,048	19,531	8,379	29,959	14,986	...
Denver	3,188	8,056	3,700	14,945	8,837	...
Oklahoma City	646	11,243	3,493	15,382	10,353	...
Omaha	6,535	11,314	1,401	19,250	14,846	...
DALLAS	29,049	105,477	20,240	154,766	129,317	...
El Paso	262	2,911	1,018	4,191	2,540	
Houston	0	257	0	257	257	26,481
San Antonio	482	5,656	2,722	8,861	5,880	...
SAN FRANCISCO	15,600	77,929	19,436	112,965	75,560	...
Los Angeles	4,847	58,282	9,821	72,950	53,173	...
Portland	2,884	11,453	2,982	17,319	14,173	...
Salt Lake City	495	9,407	2,832	12,733	9,695	...
Seattle	325	12,943	4,192	17,460	13,257	...
Total	192,540	1,447,773	295,903	1,936,216	1,460,264	26,530

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

1. Includes expenditures for construction at some offices, pending allocation to appropriate accounts.

2. Excludes charge-offs of \$17,699 thousand before 1952.

3. Covers acquisitions for banking-house purposes and Bank premises formerly occupied and being held pending sale.

8. Operations in Principal Departments of the Federal Reserve Banks, 1997-2000

Operation	2000	1999	1998	1997
<i>Millions of pieces (except as noted)</i>				
Loans (thousands) ¹	31,505	23,092	26,341	24,510
Currency processed	8,179	7,257	7,251	7,769
Currency destroyed	5,138	6,719	8,454	9,603
Coin received ²				
Checks handled				
U.S. government checks	262	288	321	378
Postal money orders	230	226	213	204
Other	16,994	17,075	16,573	15,949
Government securities transfers	14	13	14	13
Transfer of funds	108	103	98	90
Automated clearinghouse transactions				
Commercial	3,812	3,344	2,966	2,603
Government	838	809	753	677
Food stamps redeemed	686	1,158	1,843	2,854
<i>Millions of dollars</i>				
Loans ¹			20,431	39,863
Currency processed	542,567	444,234	409,166	399,080
Currency destroyed	112,164	82,951	94,858	123,359
Coin received ²	666	778	1,001	1,212
Checks handled				
U.S. government checks	282,791	306,077	343,670	401,989
Postal money orders	30,036	29,118	28,469	26,464
Other	13,849,084	13,788,037	13,076,097	12,169,087
Government securities transfers	188,133,178	179,486,282	197,781,609	174,949,330
Transfer of funds	379,756,389	343,381,658	328,748,912	288,419,808
Automated clearinghouse transactions				
Commercial	11,619,954	10,862,424	10,338,376	9,128,779
Government	2,404,491	2,233,279	1,988,335	1,581,552
Food stamps redeemed	3,414	6,221	9,278	15,054

1. Collection of data discontinued effective 1999.

2. For 1999-2000, does not include coin activity at Federal Reserve off-site coin terminals.

9. Federal Reserve Bank Interest Rates on Loans to Depository Institutions,
December 31, 2000

Reserve Bank	Adjustment credit ¹	Seasonal credit ²	Extended credit ³	
			First thirty days of borrowing	After thirty days of borrowing
All Federal Reserve Banks	6.00	6.45	6.00	6.95

1. Adjustment credit is available on a short-term basis to help depository institutions meet temporary needs for funds that cannot be met through reasonable alternative sources. Adjustment credit is usually provided at the basic discount rate, but under certain circumstances a special rate or rates above the basic discount rate may be applied. See section 201.3(a) of Regulation A.

2. Seasonal credit is available to help smaller depository institutions meet regular, seasonal needs for funds that cannot be met through special industry lenders and that arise from a combination of expected patterns of movement in their deposits and loans. The discount rate on seasonal credit takes into account rates on market sources of funds and ordinarily is reestablished on the first business day of each two-week reserve maintenance period; however, it is never lower than the discount rate applicable to adjustment credit. See section 201.3(b) of Regulation A.

3. Extended credit is available to depository institutions, if similar assistance is not reasonably available from other sources, when exceptional circumstances or practices involve only a particular institution or when an institution is experiencing difficulties adjusting to changing market conditions over a longer period of time. See section 201.3(c) of Regulation A.

Extended-credit loans outstanding more than thirty days will be charged a flexible rate somewhat above rates on market sources of funds; the rate will always be at least 50 basis points above the discount rate applicable to adjustment credit. The flexible rate is reestablished on the first business day of each two-week reserve maintenance period. At the discretion of the Federal Reserve Bank, the flexible rate may be charged on extended-credit loans that are outstanding less than thirty days.

10. Reserve Requirements of Depository Institutions, December 31, 2000

Type of deposit	Requirements	
	Percentage of deposits	Effective date
<i>Net transaction accounts</i> ¹		
\$0 million-\$42.8 million ²	3	12-28-00
More than \$42.8 million ³	10	12-28-00
Nonpersonal time deposits ⁴	0	12-27-90
Eurocurrency liabilities ⁵	0	12-27-90

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

1. 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.

2. 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 each year. Effective with the reserve maintenance period beginning December 28, 2000, for depository institutions that report weekly, and with the reserve maintenance period beginning January 18, 2001, for institutions that report quarterly, the amount was decreased from \$44.3 million to \$42.8 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 December 28, 2000, for depository institutions that report weekly, and with the reserve maintenance period beginning January 18, 2001, for institutions that report quarterly, the exemption was raised from \$5.0 million to \$5.5 million.

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

4. 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 December 13, 1990, and to zero for the maintenance period that began December 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 January 17, 1991.

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

5. 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 4).

11. Initial Margin Requirements under Regulations T, U, and X

Percent of market value

Effective date	Margin stocks	Convertible bonds	Short sales, T only ¹
1934, Oct. 1	25-45	...	...
1936, Feb. 1	25-55	...	...
Apr. 1	55	...	...
1937, Nov. 1	40	...	50
1945, Feb. 5	50	...	50
July 5	75	...	75
1946, Jan. 21	100	...	100
1947, Feb. 21	75	...	75
1949, Mar. 3	50	...	50
1951, Jan. 17	75	...	75
1953, Feb. 20	50	...	50
1955, Jan. 4	60	...	60
Apr. 23	70	...	70
1958, Jan. 16	50	...	50
Aug. 5	70	...	70
Oct. 16	90	...	90
1960, July 28	70	...	70
1962, July 10	50	...	50
1963, Nov. 6	70	...	70
1968, Mar. 11	70	50	70
June 8	80	60	80
1970, May 6	65	50	65
1971, Dec. 6	55	50	55
1972, Nov. 24	65	50	65
1974, Jan. 3	50	50	50

NOTE. These regulations, adopted by the Board of Governors pursuant to the Securities Exchange Act of 1934, limit the amount of credit to purchase and carry "margin securities" (as defined in the regulations) when such value 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 October 15, 1934; Regulation U, effective May 1, 1936; and Regulation X, effective November 1, 1971. The former Regulation G, which was adopted effective March 11, 1968, was merged with Regulation U, effective April 1, 1998.

1. From October 1, 1934, to October 31, 1937, the requirement was the margin "customarily required" by the brokers and dealers.

12. Principal Assets and Liabilities and Number of Insured Commercial Banks in the United States, by Class of Bank, June 30, 2000 and 1999

Millions of dollars, except as noted

Item	Total	Member banks			Nonmember banks		
		Total	National	State			
2000							
ASSETS							
Loans and investments	4,400,182	3,471,696	2,494,827	976,868	928,486		
Loans, gross	3,371,753	2,683,443	1,979,302	704,140	688,311		
Net	3,369,258	2,681,963	1,978,243	703,720	687,296		
Investments	1,028,429	788,253	515,525	272,728	240,175		
U.S. Treasury and federal agency securities	315,111	213,717	127,536	86,181	101,394		
Other	713,318	574,536	387,989	186,547	138,782		
Cash assets, total	244,286	201,238	151,594	49,644	43,048		
LIABILITIES							
Deposits, total	3,259,112	2,485,487	1,788,445	697,041	773,625		
Interbank	53,948	44,923	32,540	12,382	9,025		
Other transaction	623,039	470,771	340,530	130,241	152,268		
Other nontransaction	2,582,125	1,969,793	1,415,374	554,418	612,332		
Equity capital	493,874	396,035	279,336	116,699	97,839		
Number of banks	8,450	3,295	2,300	995	5,155		
1999 ^r							
ASSETS							
Loans and investments	3,963,597	3,134,241	2,373,434	760,807	829,356		
Loans, gross	2,972,155	2,377,026	1,827,191	549,835	595,128		
Net	2,969,510	2,375,558	1,826,044	549,514	593,952		
Investments	991,442	757,215	546,243	210,972	234,228		
U.S. Treasury and federal agency securities	307,796	205,994	140,710	65,284	101,802		
Other	683,646	551,221	405,532	145,688	132,426		
Cash assets, total	236,950	196,497	149,165	47,331	40,453		
LIABILITIES							
Deposits, total	3,060,372	2,353,308	1,755,358	597,951	707,064		
Interbank	54,662	47,320	36,797	10,524	7,342		
Other transaction	650,132	496,420	371,086	125,334	153,713		
Other nontransaction	2,355,578	1,809,568	1,347,475	462,094	546,010		
Equity capital	457,317	367,616	270,989	96,627	89,701		
Number of banks	8,653	3,410	2,410	1,000	5,243		

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

r. Data have been revised.

13. Reserves of Depository Institutions, Federal Reserve Bank Credit, and Related Items—Year-End 1918–2000 and Month-End 2000

Millions of dollars

Period	Factors supplying reserve funds															
	Federal Reserve Bank credit outstanding										Gold stock ⁶	Special drawing rights certificate account	Treasury currency outstanding ⁷			
	U.S. Treasury and federal agency securities			Loans	Float ³	All other ⁴	Other Federal Reserve assets ⁵	Total								
	Total	Bought outright ¹	Held under repurchase agreement ²													
1918.....	239	239	0	1,766	199	294	0	2,498	2,873	...	1,795					
1919.....	300	300	0	2,215	201	575	0	3,292	2,707	...	1,707					
1920.....	287	287	0	2,687	119	262	0	3,355	2,639	...	1,709					
1921.....	234	234	0	1,144	40	146	0	1,563	3,373	...	1,842					
1922.....	436	436	0	618	78	273	0	1,405	3,642	...	1,958					
1923.....	134	80	54	723	27	355	0	1,238	3,957	...	2,009					
1924.....	540	536	4	320	52	390	0	1,302	4,212	...	2,025					
1925.....	375	367	8	643	63	378	0	1,459	4,112	...	1,977					
1926.....	315	312	3	637	45	384	0	1,381	4,205	...	1,991					
1927.....	617	560	57	582	63	393	0	1,655	4,092	...	2,006					
1928.....	228	197	31	1,056	24	500	0	1,809	3,854	...	2,012					
1929.....	511	488	23	632	34	405	0	1,583	3,997	...	2,022					
1930.....	739	686	43	251	21	372	0	1,373	4,306	...	2,027					
1931.....	817	775	42	638	20	378	0	1,853	4,173	...	2,035					
1932.....	1,855	1,851	4	235	14	41	0	2,145	4,226	...	2,204					
1933.....	2,437	2,435	2	98	15	137	0	2,688	4,036	...	2,303					
1934.....	2,430	2,430	0	7	5	21	0	2,463	8,238	...	2,511					
1935.....	2,431	2,430	1	5	12	38	0	2,486	10,125	...	2,476					
1936.....	2,430	2,430	0	3	39	28	0	2,500	11,258	...	2,532					
1937.....	2,564	2,564	0	10	19	19	0	2,612	12,760	...	2,637					
1938.....	2,564	2,564	0	4	17	16	0	2,601	14,512	...	2,798					
1939.....	2,484	2,484	0	7	91	11	0	2,593	17,644	...	2,963					
1940.....	2,184	2,184	0	3	80	8	0	2,274	21,995	...	3,087					
1941.....	2,254	2,254	0	3	94	10	0	2,361	22,737	...	3,247					
1942.....	6,189	6,189	0	6	471	14	0	6,679	22,726	...	3,648					
1943.....	11,543	11,543	0	5	681	10	0	12,239	21,938	...	4,094					
1944.....	18,846	18,846	0	80	815	4	0	19,745	20,619	...	4,131					
1945.....	24,252	24,252	0	249	578	2	0	15,091	20,065	...	4,339					
1946.....	23,350	23,350	0	163	580	1	0	24,093	20,529	...	4,562					
1947.....	22,559	22,559	0	85	535	1	0	23,181	22,754	...	4,562					
1948.....	23,333	23,333	0	223	541	1	0	24,097	24,244	...	4,589					
1949.....	18,885	18,885	0	78	534	2	0	19,499	24,427	...	4,598					
1950.....	20,778	20,725	53	67	1,368	3	0	22,216	22,706	...	4,636					
1951.....	23,801	23,605	196	19	1,184	5	0	25,009	22,695	...	4,709					
1952.....	24,697	24,034	663	156	967	4	0	25,825	23,187	...	4,812					
1953.....	25,916	25,318	598	28	935	2	0	26,880	22,030	...	4,894					
1954.....	24,932	24,888	44	143	808	1	0	25,885	21,713	...	4,985					
1955.....	24,785	24,391	394	108	1,585	29	0	26,507	21,690	...	5,008					
1956.....	24,915	24,610	305	50	1,665	70	0	26,699	21,949	...	5,066					
1957.....	24,238	23,719	519	55	1,424	66	0	25,784	22,781	...	5,146					
1958.....	26,347	26,252	95	64	1,296	49	0	27,755	20,534	...	5,234					
1959.....	26,648	26,607	41	458	1,590	75	0	28,771	19,456	...	5,311					

For notes see end of table.

13.—Continued

Factors absorbing reserve funds												
Currency in circulation	Treasury cash holdings ⁸	Deposits, other than reserves, with Federal Reserve Banks			Other Federal Reserve accounts ⁵	Required clearing balances	Other Federal Reserve liabilities and capital ⁵	Member bank reserves ⁹				
		Treasury	Foreign	Other				With Federal Reserve Banks	Currency and coin ¹⁰	Required ¹¹	Excess ¹¹	
4,951	288	51	96	25	118	0	0	1,636	0	1,585	51	
5,091	385	51	73	28	208	0	0	1,890	0	1,822	68	
5,325	218	57	5	18	298	0	0	1,781	0	0	0	
4,403	214	96	12	15	285	0	0	1,753	0	1,654	99	
4,530	225	11	3	26	276	0	0	1,934	0	0	0	
4,757	213	38	4	19	275	0	0	1,898	0	1,884	14	
4,760	211	51	19	20	258	0	0	2,220	0	2,161	59	
4,817	203	16	8	21	272	0	0	2,212	0	2,256	-44	
4,808	201	17	46	19	293	0	0	2,194	0	2,250	-56	
4,716	208	18	5	21	301	0	0	2,487	0	2,424	63	
4,686	202	23	6	21	348	0	0	2,389	0	2,430	-41	
4,578	216	29	6	24	393	0	0	2,355	0	2,428	-73	
4,603	211	19	6	22	375	0	0	2,471	0	2,375	96	
5,360	222	54	79	31	354	0	0	1,961	0	1,994	-33	
5,388	272	8	19	24	355	0	0	2,509	0	1,933	576	
5,519	284	3	4	128	360	0	0	2,729	0	1,870	859	
5,536	3,029	121	20	169	241	0	0	4,096	0	2,282	1,814	
5,882	2,566	544	29	226	253	0	0	5,587	0	2,743	2,844	
6,543	2,376	244	99	160	261	0	0	6,606	0	4,622	1,984	
6,550	3,619	142	172	235	263	0	0	7,027	0	5,815	1,212	
6,856	2,706	923	199	242	260	0	0	8,724	0	5,519	3,205	
7,598	2,409	634	397	256	251	0	0	11,653	0	6,444	5,209	
8,732	2,213	368	1,133	599	284	0	0	4,026	0	7,411	6,615	
11,160	2,215	867	774	586	291	0	0	12,450	0	9,365	3,085	
15,410	2,193	799	793	485	256	0	0	13,117	0	11,129	1,988	
20,499	2,303	579	1,360	356	339	0	0	12,886	0	11,650	1,236	
25,307	2,375	440	1,204	394	402	0	0	14,373	0	12,748	1,625	
28,515	2,287	977	862	446	495	0	0	15,915	0	14,457	1,458	
28,952	2,272	393	508	314	607	0	0	16,139	0	15,577	562	
28,868	1,336	870	392	569	563	0	0	17,899	0	16,400	1,499	
28,224	1,325	1,123	642	547	590	0	0	20,479	0	19,277	1,202	
27,600	1,312	821	767	750	106	0	0	16,568	0	15,550	1,018	
27,741	1,293	668	895	565	714	0	0	17,681	0	16,509	1,172	
29,206	1,270	247	526	363	746	0	0	20,056	0	19,667	389	
30,433	1,270	389	550	455	777	0	0	19,950	0	20,520	-570	
30,781	761	346	423	493	839	0	0	20,160	0	19,397	763	
30,509	796	563	490	441	907	0	0	18,876	0	18,618	258	
31,158	767	394	402	554	925	0	0	19,005	0	18,903	102	
31,790	775	441	322	426	901	0	0	19,059	0	19,089	-30	
31,834	761	481	356	246	998	0	0	19,034	0	19,091	-57	
32,193	683	358	272	391	1,122	0	0	18,504	0	18,574	-70	
32,591	391	504	345	694	841	0	0	18,174	310	18,619	-135	

13. Reserves of Depository Institutions, Federal Reserve Bank Credit, and Related Items—Year-End 1918–2000 and Month-End 2000—Continued

Millions of dollars

Period	Factors supplying reserve funds										
	Federal Reserve Bank credit outstanding									Gold stock ⁶	
	U.S. Treasury and federal agency securities			Loans	Float ³	All other ⁴	Other Federal Reserve assets ⁵	Total		Special drawing rights certificate account	
	Total	Bought outright ¹	Held under repurchase agreement ²								
1960.....	27,384	26,984	400	33	1,847	74	0	29,338	17,767	...	5,398
1961.....	28,881	30,478	159	130	2,300	51	0	31,362	16,889	...	5,585
1962.....	30,820	28,722	342	38	2,903	110	0	33,871	15,978	...	5,567
1963.....	33,593	33,582	11	63	2,600	162	0	36,418	15,513	...	5,578
1964.....	37,044	36,506	538	186	2,606	94	0	39,930	15,388	...	5,405
1965.....	40,768	40,478	290	137	2,248	187	0	43,340	13,733	...	5,575
1966.....	44,316	43,655	661	173	2,495	193	0	47,177	13,159	...	6,317
1967.....	49,150	48,980	170	141	2,576	164	0	52,031	11,982	...	6,784
1968.....	52,937	52,937	0	186	3,443	58	0	56,624	10,367	...	6,795
1969.....	57,154	7,154 ⁵	0	183	3,440	64	2,743	64,584	10,367	...	6,852
1970.....	62,142	62,142	0	335	4,261	57	1,123	67,918	10,732	400	7,147
1971.....	70,804	69,481	1,323	39	4,343	261	1,068	76,515	10,132	400	7,710
1972.....	71,230	71,119	111	1,981	3,974	106	1,260	78,551	10,410	400	8,313
1973.....	80,495	80,395	100	1,258	3,099	68	1,152	86,072	11,567	400	8,716
1974.....	85,714	84,760	954	299	2,001	999	3,195	92,208	11,652	400	9,253
1975.....	94,124	92,789	1,335	211	3,688	1,126	3,312	102,461	11,599	500	10,218
1976.....	104,093	100,062	4,031	25	2,601	991	3,182	110,892	11,598	1,200	10,810
1977.....	111,274	108,922	2,352	265	3,810	954	2,442	118,745	11,718	1,250	11,331
1978.....	118,591	117,374	1,217	1,174	6,432	587	4,543	131,327	11,671	1,300	11,831
1979.....	126,167	124,507	1,660	1,454	6,767	704	5,613	140,705	11,172	1,800	13,083
1980.....	130,592	128,038	2,554	1,809	4,467	776	8,739	146,383	11,160	2,518	13,427
1981.....	140,348	136,863	3,485	1,601	1,762	195	9,230	153,136	11,151	3,318	13,687
1982.....	148,837	144,544	4,293	717	2,735	1,480	9,890	63,659	11,148	4,618	13,786
1983.....	160,795	159,203	1,592	918	1,605	418	8,728	172,464	11,121	4,618	15,732
1984.....	169,627	167,612	2,015	3,577	833	0	12,347	186,384	11,096	4,618	16,418
1985.....	191,248	186,025	5,223	3,060	988	0	15,302	210,598	11,090	4,718	17,075
1986.....	221,459	205,454	16,005	1,565	1,261	0	17,475	241,760	11,084	5,018	17,567
1987.....	231,420	226,459	4,961	3,815	811	0	15,837	251,883	11,078	5,018	18,177
1988.....	247,489	240,628	6,861	2,170	1,286	0	18,803	269,748	11,060	5,018	18,799
1989.....	235,417	233,300	2,117	481	1,093	0	39,631	276,622	11,059	8,518	19,628
1990.....	259,785	241,431	18,354	190	2,566	0	39,880	302,421	11,058	10,018	20,402 ^r
1991.....	288,429	272,531	15,898	218	1,026	0	34,524	324,197	11,059	10,018	21,014 ^r
1992.....	308,517	300,423	8,094	675	3,350	0	30,278	342,820	11,056	8,018	21,447 ^r
1993.....	349,866	336,654	13,212	94	963	0	33,394	384,317	11,053	8,018	22,095 ^r
1994.....	378,746	368,156	10,590	223	740	0	33,441	413,150	11,051	8,018	22,994 ^r
1995.....	394,693	380,831	13,862	135	231	0	33,483	428,543	11,050	10,168	24,003 ^r
1996.....	414,715	393,132	21,583	85	5,297	0	32,222	452,319	11,048	9,718	24,966 ^r
1997.....	455,260	431,420	23,840	2,035	561	0	32,044	489,901	11,047	9,200	25,543 ^r
1998.....	482,854	452,478	30,376	17	1,009	0	37,692	521,573	11,046	9,200	26,270
1999.....	618,784	478,144	140,640	233	407	0	34,799	654,223	11,048	6,200	28,013
2000.....	555,208	511,833	43,375	110	795	0	36,896	593,009	11,046	2,200	31,219

13.—Continued

Factors absorbing reserve funds

Currency in circulation	Treasury cash holdings ⁸	Deposits, other than reserves, with Federal Reserve Banks			Other Federal Reserve accounts ⁵	Required clearing balances	Other Federal Reserve liabilities and capital ⁵	Member bank reserves ⁹			
		Treasury	Foreign	Other				With Federal Reserve Banks	Currency and coin ¹⁰	Required ¹¹	Excess ^{11,12}
32,869	377	485	217	533	941	0	0	17,081	2,544	18,988	637
33,918	422	465	279	320	1,044	0	0	17,387	2,544	18,988	96
35,338	380	597	247	393	1,007	0	0	17,454	3,262	20,071	645
37,692	361	880	171	291	1,065	0	0	17,049	4,099	20,677	471
39,619	612	820	229	321	1,036	0	0	18,086	4,151	21,663	574
42,056	760	668	150	355	211	0	0	18,447	4,163	22,848	-238
44,663	1,176	416	174	588	-147	0	0	19,779	4,310	24,321	-232
47,226	1,344	1,123	135	563	-773	0	0	21,092	4,631	25,905	-182
50,961	695	703	216	747	-1,353	0	0	21,818	4,921	27,439	-700
53,950	596	1,312	134	807	0	0	1,919	22,085	5,187	28,173	-901
57,903	431	1,156	148	1,233	0	0	1,986	24,150	5,423	30,033	-460
61,068	460	2,020	294	999	0	0	2,131	27,788	5,743	32,496	1,035
66,516	345	1,855	325	840	0	0	2,143	25,647	6,216	32,044	98 ¹²
72,497	317	2,542	251	1,419 ¹³	0	0	2,669	27,060	6,781	35,268	-1,360
79,743	185	2,113	418	1,275 ¹³	0	0	2,935	25,843	7,370	37,011	-3,798
86,547	483	7,285	353	1,090	0	0	2,968	26,052	8,036	35,197	-1,103 ¹⁴
93,717	460	10,393	352	1,357	0	0	3,063	25,158	8,628	35,461	-1,535
103,811	392	7,114	379	1,187	0	0	3,292	26,870	9,421	37,615	-1,265
114,645	240	4,196	368	1,256	0	0	4,275	31,152	10,538	42,694	-893
125,600	494	4,075	429	1,412	0	0	4,957	29,792	11,429	44,217	-2,835
136,829	441	3,062	411	617	0	0	4,671	27,456	13,654	40,558	675
144,774	443	4,301	505	781	0	117	5,261	25,111	15,576	42,145	-1,442
154,908	429	5,033	328	1,033	0	436	4,990	26,053	16,666	41,391	1,328
171,935	479	3,661	191	851	0	1,013	5,392	20,413	17,821	39,179	-945
183,796	513	5,316	253	867	0	1,126	5,952	20,693			
197,488	550	9,351	480	1,041	0	1,490	5,940	27,141			
211,995	447	7,588	287	917	0	1,812	6,088	46,295			
230,205	454	5,313	244	1,027	0	1,687	7,129	40,097			
247,649	395	8,656	347	548	0	1,605	7,683	37,742			
260,456	450	6,217	589	1,298	0	1,618	8,486	36,713			
286,963 ^r	561	8,960	369	242	0	1,962	8,147	36,696			
307,756 ^r	636	17,697	968	1,706	0	3,949	8,113	25,464			
334,701 ^r	508	7,492	206	372	0	5,898	7,984	26,181	n.a.	n.a.	n.a.
365,271 ^r	377	14,809	386	397	0	6,332	9,292	28,619			
403,843 ^r	335	7,161	250	876	0	4,197	11,959	26,592			
424,244 ^r	270	5,979	386	932	0	5,167	12,342	24,444			
450,648 ^r	249	7,742	167	892	0	6,601	13,829	17,923			
482,327 ^r	225	5,444	457	900	0	6,665 ^r	15,500	24,173 ^r			
517,484 ^r	85	6,086	167	1,605	0	6,784	16,354	19,522			
628,359	109	28,402	71	1,261	0	7,482 ^r	17,256	16,545 ^r			
593,271	450	5,149	216	1,382	0	6,332	17,962	12,713			

13. Reserves of Depository Institutions, Federal Reserve Bank Credit, and Related Items—Year-End 1918–2000 and Month-End 2000—Continued

Millions of dollars

Period	Factors supplying reserve funds													
	Federal Reserve Bank credit outstanding										Gold stock ⁶	Special drawing rights certificate account	Treasury currency outstanding ⁷	
	U.S. Treasury and federal agency securities			Loans	Float ³	All other ⁴	Other Federal Reserve assets ⁵	Total						
	Total	Bought outright ¹	Held under repurchase agreement ²											
2000														
Jan.	523,508	500,403	23,105	130	2,572	0	34,843	561,052	11,048	6,200	28,282			
Feb.	525,689	500,921	24,768	109	456	0	32,248	558,502	11,048	6,200	28,622			
Mar.	525,603	501,858	23,745	236	-271	0	34,173	559,741	11,048	6,200	29,003			
Apr.	531,740	506,835	24,905	240	-243	0	34,994	566,731	11,048	5,200	29,348			
May	533,279	506,884	26,395	431	1,366	0	32,353	567,429	11,048	5,200	29,671			
June	532,020	505,090	26,930	512	166	0	34,015	566,713	11,046	4,200	29,979			
July	523,733	506,243	17,490	628	1,260	0	35,110	560,732	11,046	4,200	30,283			
Aug.	528,847	510,322	18,525	597	128	0	33,264	562,835	11,046	4,200	30,549			
Sept.	528,863	511,543	17,320	372	256	0	35,890	565,381	11,046	3,200	30,811			
Oct.	528,531	509,091	19,440	248	1,431	0	36,347	566,556	11,046	3,200	31,093			
Nov.	539,727	512,457	27,270	136	-435	0	33,872	573,299	11,046	3,200	31,163			
Dec.	555,208	511,833	43,375	110	795	0	36,896	593,009	11,046	2,200	31,219			

NOTE. For a description of figures and discussion of their significance, see *Banking and Monetary Statistics, 1941–1970* (Board of Governors of the Federal Reserve System, 1976), pp. 507–23.

Components may not sum to totals because of rounding.

... Not applicable.

r. Revised.

n.a. Not available.

1. Beginning in 1969, 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. Beginning September 29, 1971, includes federal agency issues bought outright.

2. Beginning December 1, 1966, includes federal agency obligations held under repurchase agreements.

3. Beginning in 1960, figures reflect a minor change in concept; see *Federal Reserve Bulletin*, vol. 47 (February 1961), p. 164.

4. Principally acceptances and, until August 21, 1959, industrial loans, authority for which expired on that date.

5. For the period before April 16, 1969, includes the total of Federal Reserve capital paid in, surplus, other

capital accounts, and other liabilities and accrued dividends, less the sum of bank premises and other assets, and is reported as “Other Federal Reserve accounts”; thereafter, “Other Federal Reserve assets” and “Other Federal Reserve liabilities and capital” are shown separately.

6. Before January 30, 1934, includes gold held in Federal Reserve Banks and in circulation.

7. Includes currency and coin (other than gold) issued directly by the Treasury. The largest components are fractional and dollar coins. For details see “Currency and Coin in Circulation,” *Treasury Bulletin*.

8. Coin and paper currency held by the Treasury, as well as any gold in excess of the gold certificates issued to the Reserve Bank.

9. Beginning in November 1979, includes reserves of member banks, Edge Act corporations, and U.S. agencies and branches of foreign banks. Beginning on November 13, 1980, includes reserves of all depository institutions.

Beginning in 1984, data on “Currency and coin” and “Required” and “Excess” reserves changed from daily to biweekly basis.

13.—Continued

Cur- rency in cir- cu- la- tion	Trea- sury cash hold- ings ⁸	Factors absorbing reserve funds						Member bank reserves ⁹			
		Deposits, other than reserves, with Federal Reserve Banks			Other Federal Reserve ac- counts ⁹	Re- quired clear- ing bal- ances	Other Federal Reserve li- abili- ties and capital ⁵	With Federal Reserve Banks	Member bank reserves ⁹		
		Trea- sury	For- eign	Other					With Federal Reserve Banks	Cur- rency and coin ¹⁰	Re- quired ¹¹
566,568	125	6,119	82	265	0	7,031	18,101	8,291			
564,877	162	5,004	129	243	0	6,526	18,785	8,647			
563,200	174	4,357	125	188	0	6,615	19,752	11,581			
563,825	203	15,868	142	251	0	6,535	18,558	6,945			
570,521	140	5,445	110	226	0	6,435	15,271	15,199			
571,115	76	6,208	105	203	0	6,350	15,719	12,163			
568,806	118	5,392	76	228	0	6,259	15,331	10,050			
571,430	166	5,961	79	214	0	6,258	15,180	9,343			
568,612	184	8,459	139	177	0	6,295	15,243	11,329			
572,397	289	5,360	115	245	0	6,346	16,416	10,728			
579,545	344	4,382	104	276	0	6,179	18,199	9,679			
593,271	450	5,149	216	1,382	0	6,332	17,962	12,713			

10. Between December 1, 1959, and November 23, 1960, part was allowed as reserves; thereafter all was allowed.

11. Estimated through 1958. Before 1929, data were available only on call dates (in 1920 and 1922 the call date was December 29). Beginning on September 12, 1968, the amount is based on close-of-business figures for the reserve period two weeks before the report date.

12. Beginning with week ending November 15, 1972, includes \$450 million of reserve deficiencies on which Federal Reserve Banks are allowed to waive penalties for a transition period in connection with bank adaptation to Regulation J as amended, effective November 9, 1972. Allowable deficiencies are as follows (beginning with first statement week of quarter, in millions): 1973—Q1, \$279; Q2, \$172; Q3, \$112; Q4, \$84; 1974—Q1, \$67; Q2, \$58. The transition period ended with the second quarter of 1974.

13. For the period before July 1973, includes certain deposits of domestic nonmember banks and foreign-owned banking institutions held with member banks and redeposited in full with Federal Reserve Banks in connection with voluntary participation by nonmember institutions in the Federal Reserve System program of credit restraint.

As of December 12, 1974, the amount of voluntary nonmember bank and foreign-agency and branch deposits at Federal Reserve Banks that are associated with marginal reserves are no longer reported. However, two amounts are reported: (1) deposits voluntarily held as reserves by agencies and branches of foreign banks operating in the United States and (2) Eurodollar liabilities.

14. Adjusted to include waivers of penalties for reserve deficiencies, in accordance with change in Board policy effective November 19, 1975.

14. Banking Offices and Banks Affiliated with Bank Holding Companies in the United States, December 31, 1999 and 2000

Type of office	Total	Commercial banks ¹				State-chartered savings banks			
		Total	Member						
			Total	National	State				
BANKS		All banking offices							
Number, Dec. 31, 1999 ..	8,986	8,528	3,320	2,311	1,009	5,208	458		
Changes during 2000									
New banks	200	192	53	38	15	139	8		
Banks converted into branches	-444	-431	-243	-160	-83	-188	-13		
Ceased banking operation ²	-46	-36	-13	-12	-1	-23	-10		
Other ³	0	5	47	-3	50	-42	-5		
Net change	-290	-270	-156	-137	-19	-114	-20		
Number, Dec. 31, 2000 ..	8,696	8,258	3,164	2,174	990	5,094	438		
BRANCHES AND ADDITIONAL OFFICES									
Number, Dec. 31, 1999 ..	67,559	64,246	47,054	35,833	11,221	17,192	3,313		
Changes during 2000									
New branches	2,013	1,881	1,179	744	435	702	132		
Branches converted from banks	444	436	278	181	97	158	8		
Discontinued ²	-1,528	-1,421	-1,256	-980	-276	-165	-107		
Other ³	0	172	467	-1,518	1,985	-295	-172		
Net change	929	1,068	668	-1,573	2,241	400	-139		
Number, Dec. 31, 2000 ..	68,488	65,314	47,722	34,260	13,462	17,592	3,174		
		Banks affiliated with bank holding companies							
BANKS									
Number, Dec. 31, 1999 ..	6,861	6,725	2,770	1,911	859	3,955	136		
Changes during 2000									
BHC-affiliated new banks	233	223	87	59	28	136	10		
Banks converted into branches	-412	-404	-236	-156	-80	-168	-8		
Ceased banking operation ²	-39	-30	-13	-12	-1	-17	-9		
Other ³	0	5	43	-2	45	-38	-5		
Net change	-218	-206	-119	-111	-8	-87	-12		
Number, Dec. 31, 2000 ..	6,643	6,519	2,651	1,800	851	3,868	124		

1. For purposes of this table, banks are entities that are defined as banks in the Bank Holding Company Act as amended and implemented in Federal Reserve Regulation Y. Generally, a bank is any institution that accepts demand deposits and is engaged in the business of making commercial loans or any institution that is

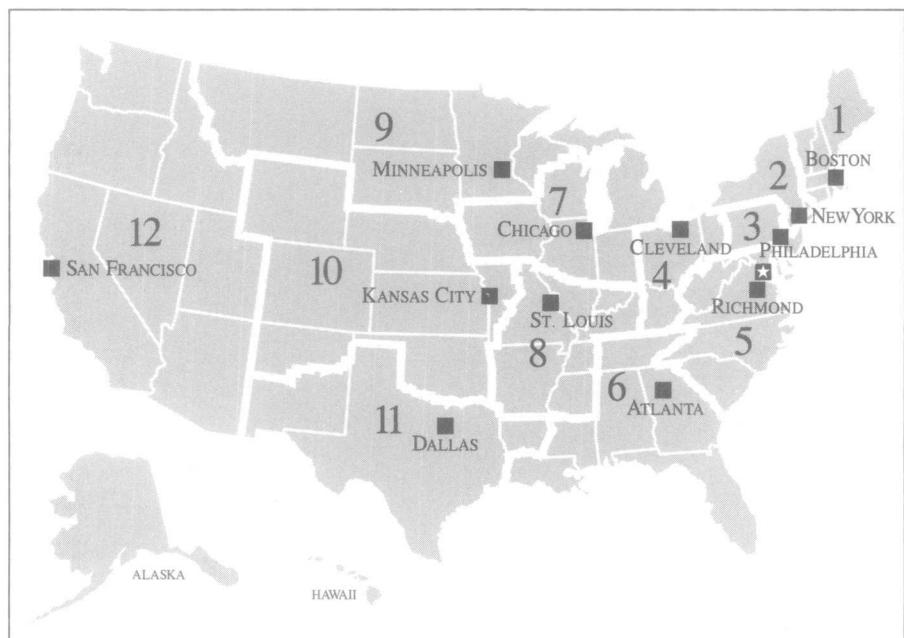
defined as an insured bank in section 3(h) of the FDIC Act. Covers entities in the United States and its territories and possessions (affiliated insular areas).

2. Institutions that no longer meet the Regulation Y definition of bank.

3. Interclass changes and sales of branches.

*Maps of the
Federal Reserve System*

The Federal Reserve System



LEGEND

Both pages

■ Federal Reserve Bank city

☒ Board of Governors of the Federal Reserve System, Washington, D.C.

Facing page

● Federal Reserve Branch city

— Branch boundary

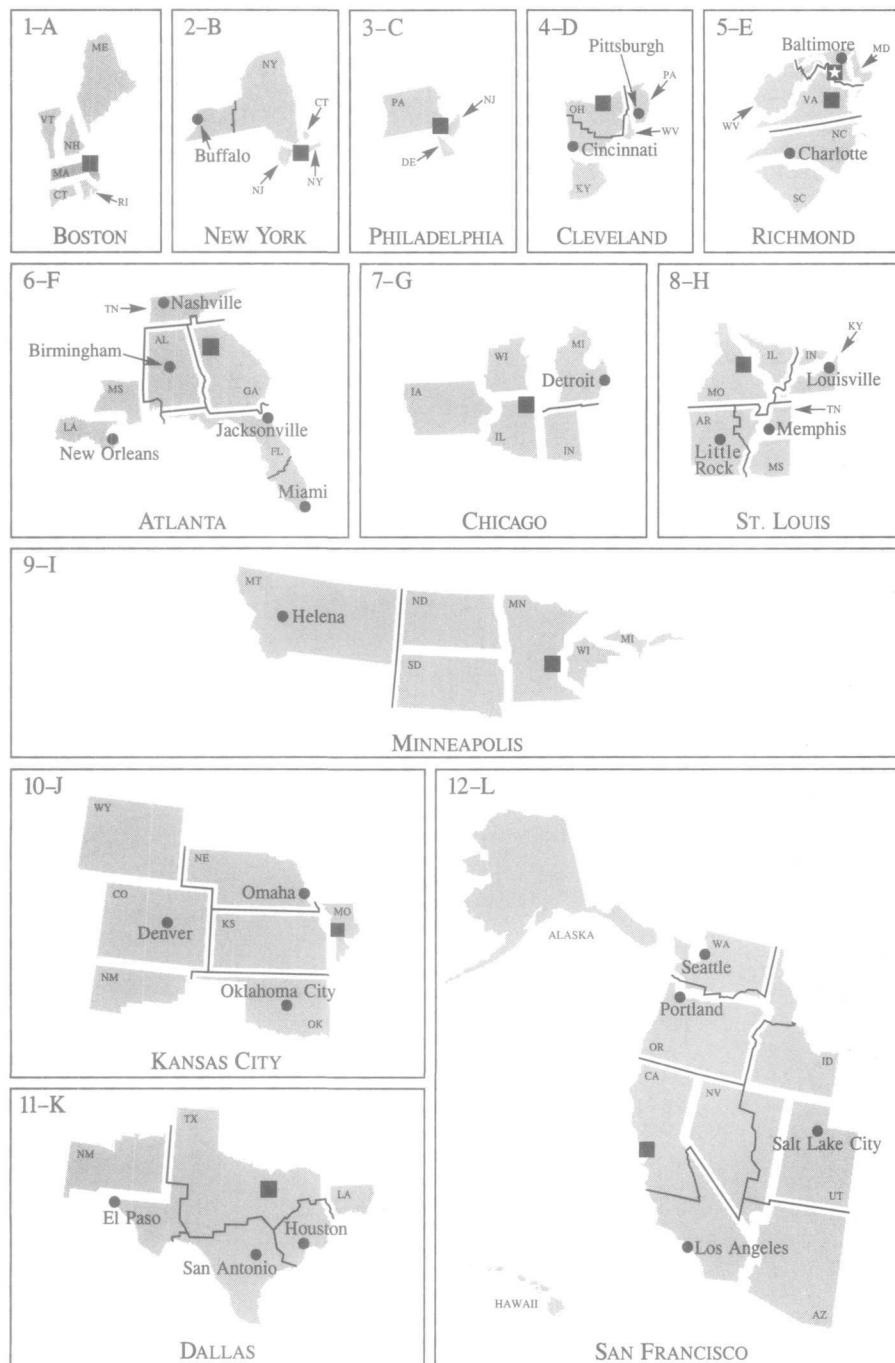
NOTE

The Federal Reserve officially identifies Districts by number and by Reserve Bank city (shown on both pages) and by letter (shown on the facing page).

In the 12th District, the Seattle Branch serves Alaska, and the San Francisco Bank serves Hawaii.

The System serves commonwealths and territories as follows: The New York

Bank serves the Commonwealth of Puerto Rico and the U.S. Virgin Islands; the San Francisco Bank serves American Samoa, Guam, and the Commonwealth of the Northern Mariana Islands. The maps show the boundaries within the System as of year-end 2000.



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