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Monetary Policy Report to the Congress

Report submitted to the Congress on February 23, 1999, pursuant to the Full Employment and Balanced Growth Act of 1978

MONETARY POLICY AND THE ECONOMIC OUTLOOK

In 1998, the U.S. economy again performed impressively. Output expanded rapidly, the unemployment rate fell to the lowest level since 1970, and inflation remained subdued. Transitory factors, most recently falling prices for imports and commodities, especially oil, have helped to produce the favorable outcomes of recent years, but technological advances and increased efficiency, likely reflecting in part heightened global competition and changes in business practices, suggest that some of the improvement will be more lasting.

Sound fiscal and monetary policies have contributed importantly to the good economic results: Budgetary restraint at the federal level has bolstered national saving and permitted the Federal Reserve to maintain lower interest rates than would otherwise have been possible. This policy mix and sustained progress toward price stability have fostered clearer price signals, more efficient resource use, robust business investment, and sizable advances in the productivity of labor and in the real wages of workers. The more rapid expansion of productive potential has, in turn, helped to keep inflation low even as aggregate demand has been surging and as labor markets have tightened.

This past year, economic troubles abroad posed a significant threat to the performance of the economy. Foreign economic growth slowed markedly, on average, as conditions in many countries deteriorated. The recession in Japan deepened, and several emerging market economies in Asia, which had started to weaken in the wake of the financial crises of 1997, contracted sharply. A worsening economic situation in Russia last summer led to a devaluation of the ruble and a moratorium by that country on a substantial portion of its debt payments. As the year progressed, conditions in Latin America also weakened. Although some of the troubled foreign economies are showing signs of improvement, others either are not yet in recovery or are still contracting.

The Russian crisis in mid-August precipitated a period of unusual volatility in world financial markets. The losses incurred in Russia and in other emerging market economies heightened investors' and lenders' concerns about other potential problems and led them to become substantially more cautious about taking on risk. The resulting effects on U.S. financial markets included a substantial widening of risk spreads on debt instruments, a jump in measures of market uncertainty and volatility, a drop in equity prices, and a reduction in the liquidity of many markets. To cushion the U.S. economy from the effects of these financial strains, and potentially to help reduce the strains as well, the Federal Reserve eased monetary policy on three occasions in the fall. Global financial market stresses lessened somewhat after mid-autumn, reflecting, in part, these policy steps as well as interest rate cuts in other industrial countries and international efforts to provide support to troubled emerging market economies. Although some U.S. financial flows were disrupted for a time, most firms and households remained able to obtain sufficient credit, and the turbulence did not appear to constrain spending to a significant degree. More recently, some markets were unsettled by the devaluation and subsequent floating of the Brazilian *real* in mid-January, and the problems in Brazil continue to pose risks to global markets. Thus far, however, market reaction outside Brazil to that country's difficulties has been relatively muted.

The foreign exchange value of the dollar rose substantially against the currencies of the major foreign industrial countries over the first eight months of 1998, but subsequently it fell sharply, ending the year down a little on net. The appreciation of the dollar in the first half of the year carried it to an eight-year high against the Japanese yen. In June, this strength against the yen prompted the first U.S. foreign exchange intervention operation in nearly three years, an action that appeared to slow the dollar's rise against the yen over the following days and weeks. Later in the summer, concerns about the possible impact on the U.S. economy of increasing difficulties in Latin America began to weigh on the dollar's exchange value against major foreign currencies. After peaking in mid-August, it fell sharply over the course of several weeks, reversing by mid-October the appreciation that had occurred earlier in the year. The depreciation during this period was particularly sharp against the yen. The reasons for this decline against the yen are not clear, but repayment of yen-denominated loans by international investors and decisions by Japanese investors to repatriate their assets in light of increased volatility in global markets seem to have contributed. The exchange value of the dollar fluctuated moderately against the major currencies over the rest of the year, and after declining somewhat early in 1999, it has rebounded strongly in recent weeks, as incoming data have suggested continued strength of economic activity in the United States. Since the end of 1998, the dollar has appreciated about 7 percent against the yen, partly reflecting further monetary easing in Japan. At the turn of the year, the launch of the third stage of European Economic and Monetary Union fixed the eleven participating countries' conversion rates and created a new common currency, the euro. The dollar has appreciated more than 5 percent against the euro, in part because of signs that growth has slowed recently in some euro-area economies.

With the U.S. economy expanding rapidly, the economies of many U.S. trading partners struggling, and the foreign exchange value of the dollar having risen over 1997 and the first part of 1998, the U.S. trade deficit widened considerably last year. Some domestic industries were especially affected by reductions in foreign demand or by increased competition from imports. For example, a wide range of commodity producers, notably those in agriculture, oil, and metals, experienced sharp price declines. Parts of the manufacturing sector also suffered adverse consequences from the shocks from abroad. Overall, real net exports deteriorated sharply, as exports stagnated and imports continued to surge. The deterioration was particularly marked in the first half of the year; the second half brought a further, more modest, net widening of the external deficit.

Meanwhile, domestic spending continued to advance rapidly. Household expenditures were bolstered by gains in real income and a further rise in wealth, while a low cost of capital and optimism about future profitability spurred businesses to invest heavily in new capital equipment. Although securities markets were disrupted in late summer and early fall, credit generally remained available from alternative sources. Once the strains on securities markets had eased, businesses and households generally had ready access to credit and other sources of finance on relatively favorable terms, although spreads in some markets remained quite elevated, especially for lower-rated borrowers. All told, household and business outlays rose even more rapidly than in 1997, and that acceleration kept the growth of real GDP strong even as net exports were slumping.

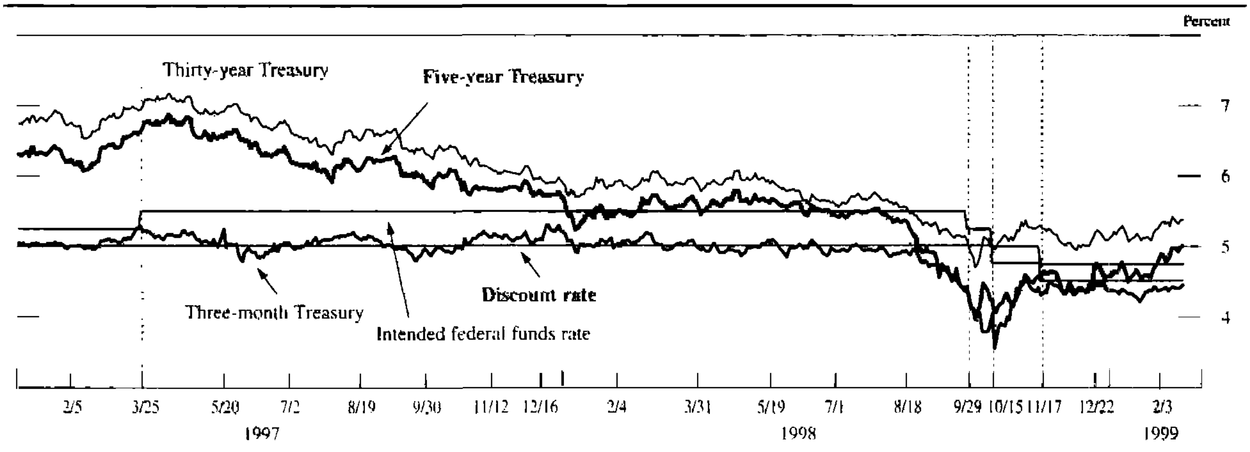
Deteriorating economic conditions abroad, coupled with the strength of the dollar over the first eight months of the year, helped to hold down inflation in the United States by trimming the prices of oil and other imports. These declines reduced both the prices paid by consumers and the costs of production in many lines of business, and the competition from abroad kept businesses from raising prices as much as they might have otherwise. As the result of a reduced rate of price inflation, workers enjoyed a larger rise in real purchasing power even as increases in nominal hourly compensation picked up only slightly on average. Because of increased gains in productivity, corporations in the aggregate were able to absorb the larger real pay increases without suffering a serious diminution of profitability.

Monetary Policy, Financial Markets, and the Economy over 1998 and Early 1999

Monetary policy in 1998 needed to balance two major risks to the economic expansion. On the one hand, with the domestic economy displaying considerable momentum and labor markets tight, the Federal Open Market Committee (FOMC) was concerned about the possible emergence of imbalances that would lead to higher inflation and thereby, eventually, put the sustainability of the expansion at risk. On the other hand, troubles in many foreign economies and resulting financial turmoil both abroad and at home seemed, at times, to raise the risk of an excessive weakening of aggregate demand.

Over the first seven months of the year, neither of these potential tendencies was sufficiently dominant to prompt a policy action by the FOMC. Although the incoming data gave no evidence of a sustained slowing of output growth, the Committee members believed that the pace of expansion likely would moderate as businesses began to slow the rapid rates at which they had been adding to their stocks of inventories and other investment goods, and as households trimmed the large advances in their spending on consumer durables and homes. Relatively firm real interest rates, buoyed by a high real federal funds rate resulting from the decline in the level of expected inflation, were thought likely to help restrain the growth of spending by businesses and households. Another check on growth was expected to come from the effects on imports and

Selected interest rates



NOTE. The data are daily. Vertical lines indicate the days on which the Federal Reserve announced a monetary policy action. The dates on the horizontal axis are those on which either the FOMC held a scheduled meeting or a policy action was announced. Last observations are for February 19, 1999.

exports of the economic difficulties in emerging market economies in Asia and elsewhere. Indeed, production in the manufacturing sector slowed substantially in the first half of the year, and capacity utilization dropped noticeably. Moreover, inflation remained subdued, and a pickup was not expected in the near-to-intermediate term because of declining oil prices, and because of economic weakness abroad and the appreciation of the dollar, which were expected to trim the prices of imported goods and to increase price competition for many U.S. producers. Nonetheless, with labor markets already quite taut and aggregate demand growing rapidly—a combination that often has signaled the impending buildup of inflationary pressures—the Committee, at its meetings from March through July, judged conditions to be such that, if a policy action were to be taken in the period immediately ahead, it more likely would be a tightening than an easing; its directives to the Account Manager of the Domestic Trading Desk at the Federal Reserve Bank of New York noted that asymmetry.

By the time of the August FOMC meeting, however, the situation was changing. Although tight labor markets and rapid output growth continued to pose a risk of higher inflation, the damping influence of foreign economic developments on the U.S. economy seemed likely to increase. The contraction in the emerging market economies in Asia appeared to be deeper than had been anticipated, and the economic situation in Japan had deteriorated. Financial markets in some foreign economies also had experienced greater turmoil, and, the day before the Committee met, Russia was forced to devalue the ruble. These difficulties had been weighing on U.S. asset markets: Stock prices had fallen sharply in late July and into August as investors became concerned about the outlook for profits, and risk spreads in debt markets had widened, albeit from very low levels. Taking account of these circumstances, the Committee again left monetary policy unchanged at the August meeting, but it shifted to a symmetric directive, reflecting its perception that the risks to the economic outlook, at prevailing short-term rates, had become roughly balanced.

Over subsequent weeks, conditions in financial markets and the economic outlook in many foreign countries deteriorated further, increasing the dangers to the U.S. expansion. With investors around the world apparently reevaluating the risks associated with various credits and seemingly becoming less willing or able to bear such risks, asset demands shifted toward safer and more liquid instruments. These shifts caused a sharp fall in yields on Treasury securities. Spreads of yields on private debt securities over those on comparable Treasury instruments widened considerably further, and issuance slowed sharply. Measures of market volatility increased, and liquidity in many financial markets was curtailed. Equity prices continued to slide lower, with most broad indexes falling back by early September to near their levels at the start of the year. Reflecting the weaker and more uncertain economic outlook, some banks boosted interest rate spreads and fees on new loans to businesses and tightened their underwriting standards.

Against this backdrop, at its September meeting the FOMC looked beyond incoming data suggesting that the economy was continuing to expand at a robust pace, and it lowered the intended level of the federal funds rate ¼ percentage point. The Committee noted that the rate cut would cushion the effects on prospective U.S. economic growth of increasing weakness in foreign economies and of less accommodative conditions in domestic financial markets. The directive adopted at the meeting suggested a bias toward further easing over the intermeeting period. In the days following the policy move, disturbances in financial markets worsened. Movements in the prices of securities were exacerbated by a deterioration in market liquidity, as some securities dealers cut back on their market-making activities, and by the expected unwinding of positions by hedge funds and other leveraged investors. In early October, Treasury yields briefly tumbled to their lowest levels in many years, reflecting efforts by investors to exchange other instruments for riskless and liquid Treasury securities.

Although some measures of market turbulence had begun to ease a bit by mid-October, financial markets remained extremely volatile and risk spreads were very wide. On October 15, consistent with the directive from the September meeting, the intended federal funds rate was trimmed another ¼ percentage point, to 5 percent. This policy move, which occurred between FOMC meetings, came at the initiative of Chairman Greenspan and followed a conference call with Committee members. At the same time, the Board of Governors approved a ¼ percentage point reduction in the discount rate. These actions were taken to buffer the domestic economy from the impact of the less accommodative conditions in domestic financial markets, in part by contributing to some stabilization of the global financial situation.

Following the October policy move, strains in domestic financial markets diminished considerably. As safe-haven demands for Treasury securities ebbed, Treasury yields generally trended higher, and measures of financial market volatility and illiquidity eased. Nonetheless, risk spreads remained very wide, and liquidity in many markets continued to be limited. Moreover, although pressures on some emerging market economies had receded a bit, partly reflecting concerted international efforts to provide assistance to Brazil, the foreign economic outlook remained uncertain. With downside risks still substantial, and in light of the cumulative effect since August of the tightening in many sectors of the credit markets and the weakening of economic activity abroad, the FOMC reduced the intended federal funds rate a further ¼ percentage point at its November meeting, bringing the total reduction during the autumn to ¾ percentage point. The Board of Governors also approved a second ¼ percentage point cut in the discount rate. The Committee believed that, with this policy action, financial conditions could reasonably be expected to be consistent with fostering sustained economic expansion while keeping inflationary pressures subdued. The action provided some insurance against an unexpectedly severe weakening of the expansion, and the Committee therefore established a symmetrical directive. By the time of the December meeting, the situation in financial markets had changed little, on balance, and the Committee decided that no further change in rates was desirable and that the directive should remain symmetrical.

Some measures of financial volatility eased further in the new year, although risk spreads on corporate bonds remained at quite high levels. Yields on Treasury securities were about flat, on balance, in January, as the effect of stronger-than-expected economic growth appeared to be about offset by data suggesting that inflation remained quiescent and perhaps also by the effects of some safe-haven flows prompted by the deteriorating situation in Brazil. Over the same period, stock prices surged higher, led by computer and other technology shares, and most stock price indexes posted new highs. By the time of the February 2–3 meeting, financial markets were easily accommodating robust demands for credit, and economic activity seemed to have more momentum than many had anticipated. However, the foreign sector continued to pose a threat to U.S. growth going forward, inflation showed no signs of picking up despite the rapid pace of growth and the very tight labor market, and some slowing of economic growth remained a likely prospect. In these circumstances, the FOMC concluded that it was prudent to wait for further information, and it left policy unchanged.

Economic Projections for 1999

By and large, the members of the Board of Governors and the Federal Reserve Bank presidents, all of whom participate in the deliberations of the FOMC, expect the economy to expand moderately, on average, in 1999. The central tendency of the FOMC participants' forecasts of real GDP growth from the fourth quarter of 1998 to the fourth quarter of 1999 is 2½ percent to 3 percent. The anticipated expansion is expected to create enough new jobs to keep the civilian unemployment rate near its recent average, in a range of 4¼ percent to 4½ percent. With tightness of the labor market expected to persist

1. Economic projections for 1999
Percent

Indicator	Federal Reserve governors and Reserve Bank presidents		Administration
	Range	Central tendency	
Change, fourth quarter to fourth quarter[1]			
Nominal GDP	3¾–5	4–4½	4.0
Real GDP[2]	2–3½	2½–3	2.0
Consumer price index[3]	1½–2½	2–2½	2.3
Average level, fourth quarter			
Civilian unemployment rate	4¼–4¾	4¼–4½	4.9

1. Change from average for fourth quarter of 1998 to average for fourth quarter of 1999.
2. Chain-weighted.
3. All urban consumers.

and oil and import prices unlikely to be as weak in 1999 as they were in 1998, inflation is expected to move up somewhat from the rate of this past year but to remain low by the standards of the past three decades: The central tendency of the FOMC participants' CPI inflation forecasts for 1999 is 2 percent to 2½ percent. The Federal Reserve officials' inflation forecasts are closely aligned with that of the Administration, and their forecasts of real GDP and unemployment depict a somewhat stronger real economy than the Administration is projecting.

Present circumstances suggest that domestic demand could continue to rise briskly for a while longer. Consumer spending continues to be driven by strong gains in employment, increases in real incomes, and rising levels of wealth. Those same factors, together with low mortgage interest rates, are keeping housing activity robust. Businesses are still investing heavily in new capital, especially computers and other high-tech equipment. Households and businesses appear willing to take on more debt in support of spending; although spreads on corporate debt remain elevated, rate levels are perceived to be attractive for most borrowers, and restraint on access to finance is not much in evidence.

As the year progresses, however, gains in domestic spending should begin to moderate. Spending increases for housing, consumer durables, and business equipment have been exceptionally large for a while now, substantially raising the rate of growth in the amounts of these goods owned by businesses and households; some moderation in outlays seems likely, lest these holdings become disproportionate to underlying trends in income and output. The outlook for spending continues to be obscured to some degree by uncertainties about the course of equity prices; a failure of these prices to match the outsized gains posted in recent years would contribute to some moderation in spending growth, especially by households. Government spending, which accounts for about one-sixth of domestic demand, seems likely to expand at a moderate pace overall. Along with the numerous other uncertainties that attend the outlook, an additional uncertainty is present this year because of the approach of the year 2000 and the associated Y2K problem.

Growth abroad is expected to remain sluggish, on balance, in 1999, limiting the prospects for exports. At the same time, growth of the U.S. economy probably will continue to generate fairly brisk increases in imports. In total, real net exports of goods and services seem likely to fall further in the coming year, although several factors—the decline in the dollar from its peak of last summer, the expected slowing of income growth in the United States, and the possibility of a slight pickup in economic growth abroad—provide a basis for thinking that this year's drop in net exports might not be as large as that of 1998.

The future course of inflation will depend in part on what happens to the prices of oil and other imports, and restraint from those sources seems unlikely to be as great as it was in 1998. The drop in the price of oil this past year left it toward the lower end of its range of the past couple of decades and has thereby reduced the incentives for exploration, drilling, and production. Futures markets have been showing a gradual rise in the price of oil going forward. Prices of nonoil imports changed little in the fourth quarter of last year after having fallen sharply in previous quarters. Indicators of the pressures on domestic resources provided mixed signals over the past year. In manufacturing, capacity utilization declined considerably, to a level below its long run average, reflecting slower production growth and sizable additions to the stock of capital. However, labor markets remained very taut, and with the economy apparently carrying substantial momentum into this year, data on costs and prices will need to be monitored carefully for signs that a rising inflation pattern might start to take hold. In that regard, the FOMC will continue to rely not only on the CPI but also on a variety of other price measures to gauge the economy's inflation performance in the period ahead.

Money and Debt Ranges for 1999

At its most recent meeting, the FOMC reaffirmed the 1999 monetary growth ranges that were chosen on a

2. Ranges for growth of monetary and debt aggregates
Percent

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

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

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, the FOMC intends these money growth ranges to be benchmarks for growth under conditions of price stability, sustainable real economic growth, and historical velocity relationships rather than ranges that encompass the expected growth of money over the coming year or that 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 would have 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, despite the apparent large shift in velocity behavior in the early 1990s, money growth has some value as an economic indicator. Indeed, some FOMC members have expressed the concern that the unusually rapid growth in the money and debt aggregates in 1998 might have reflected monetary conditions that were too accommodative and would ultimately lead to an increase in inflation pressures. The Committee will continue to monitor the monetary aggregates as well as a wide variety of other economic and financial data to inform its policy deliberations.

Last year, M2 increased 8½ percent, and with nominal GDP rising 5 percent, M2 velocity decreased 3 percent. This drop in velocity was considerably larger than would have been expected on the basis of historical relationships and the modest decline in the opportunity cost of M2 (measured as the difference between the interest rate on Treasury bills and the weighted average rate available on M2 assets). The fall in velocity in part reflected an increased demand for the safe and liquid assets in M2 as investors responded to the heightened volatility in financial markets in the second half of the year. Other factors that may have contributed include lower long-term interest rates and a very flat yield curve, which might have suggested to households that they would be giving up very little in earnings by parking savings in short-term assets in M2. In addition, M2 may have been boosted by a desire on the part of some investors to redirect savings flows away from equities after several years of outsized gains in stock market wealth. With equity wealth still elevated and the yield curve likely to remain flat, M2 velocity could continue to fall this year. However, the pace of decline should slow as some households respond to the easing of concerns about financial market volatility by reversing a portion of the shift toward M2 assets that occurred last fall. Indeed, this effect may already be visible, as M2 growth, while still robust, has slowed considerably early this year. If velocity does fall, given the Committee's expectations for nominal income growth, M2 could again exceed its price-stability benchmark range.

M3 expanded 11 percent last year, and its velocity fell 5¼ percent, the largest drop in many years. The rapid growth in this aggregate owed in large part to a substantial rise in institutional money funds. These funds have been expanding rapidly in recent years as nonfinancial firms increasingly employ them to provide cash management services. Investments in these funds provide businesses with greater liquidity than direct holdings of money market instruments, and by substituting for such direct holdings, they boost M3. M3 was also buoyed last year by a large advance in the managed liabilities banks used to fund rapid growth in bank credit. In part, the growth in bank credit reflected demand by borrowers shifting from the securities markets, and with these markets again receptive to new issues, bank credit growth this year is expected to slow to a pace more in line with broader debt aggregates However, institutional money funds are likely to continue their robust gains, contributing to a further diminution in M3 velocity and, possibly, to growth of this aggregate above its price-stability range.

Domestic nonfinancial debt grew 6¼ percent in 1998, somewhat above the middle of the 3 percent to 7 percent growth range the Committee established last February. This robust growth reflected large rises in the debt of businesses and households owing to substantial advances in spending as well as debt-financed mergers and acquisitions. However, the increase in private-sector debt was partly offset by the first annual decline in federal debt in almost thirty years. As with the monetary aggregates, the Committee left the range for debt growth unchanged for 1999. After an aberrant period in the 1980s during which debt growth greatly exceeded growth of nominal GDP, debt growth over the past decade has returned to its historical pattern of about matching growth of nominal GDP, and the Committee members expect debt to fall within its range this year.

ECONOMIC AND FINANCIAL DEVELOPMENTS IN 1998 AND EARLY 1999

The U.S. economy continued to display great vigor in 1998, despite a sharp slowing of growth in foreign economies and an unsettled world financial environment. According to the Commerce Department's advance estimate, real GDP increased a little more than 4 percent over the four quarters of the year. The economic difficulties facing many of our trading partners and the strength of the dollar through much of the year led to sluggishness in real exports of goods and services. However, the drag on the economy from that source was more than offset by exceptional strength in the real expenditures of households and businesses, which were powered by strong real income growth, large gains in the value of household wealth, ready access to finance during most of the year, and widespread optimism regarding the future of the economy. Although turmoil in financial markets seemed to threaten the economy for a time in late summer and early autumn, that threat later receded, in part because of the steps taken by the Federal Reserve to prevent the tightening of credit markets from impairing the expansion of activity. The final quarter of the year brought brisk expansion of employment and income, and the limited indicators of activity in early 1999 have been strong, on balance.

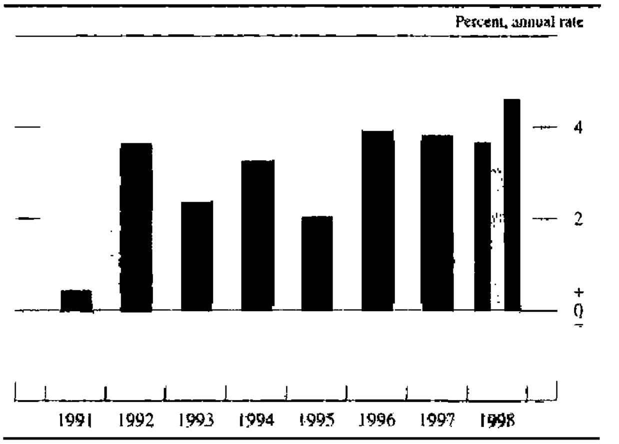
The increase in the general price level this past year was smaller than that in the previous year, which had itself been among the smallest in decades. The chain-type price index for GDP rose slightly less than 1 percent. The further slowing of price increases was in large part a reflection of sluggish conditions in the world economy, which brought declines in the prices of a wide range of imported goods, including oil and other primary commodities. In the domestic economy, nominal hourly compensation of workers picked up only slightly despite the tightness of the labor market, and much of the compensation increase was offset by gains in labor productivity. As a result, unit labor costs, the most important item in total business costs, rose only modestly.

The Household Sector

Personal consumption expenditures increased more than 5 percent in real terms in 1998, the biggest gain in a decade and a half. Support for the large rise in spending came from a combination of circumstances that, on the whole, were exceptionally favorable to households. Strong gains in employment and real hourly pay gave another appreciable boost to the growth of real labor income. At the same time, the wealth of households recorded another year of substantial increase, bolstered in large part by the continued rise in equity prices. Although not all balance sheet data for the end of 1998 are available, household net worth at that point appears to have been up about 10 percent from the level at the end of 1997. The cumulative gain in household wealth since 1994 has amounted to nearly 50 percent.

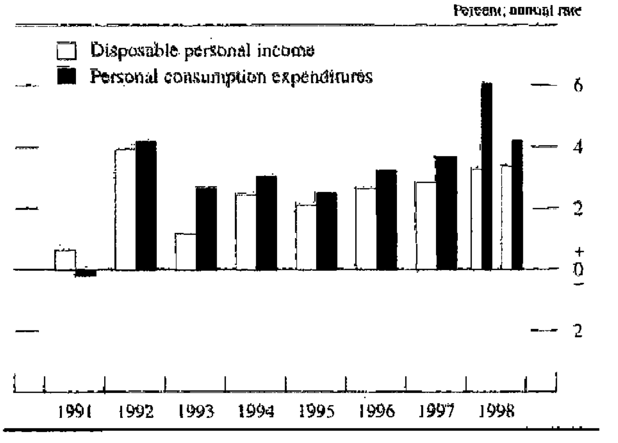
The rise in net worth probably accounts for much of the decline in the personal saving rate over the past few years, to an annual average of ½ percent in 1998. Households tend to raise their saving from current income when they feel that wealth must be increased to meet longer-run objectives, but they are willing to reduce their saving from current income when they feel that wealth already is at satisfactory levels. The

Change in real GDP

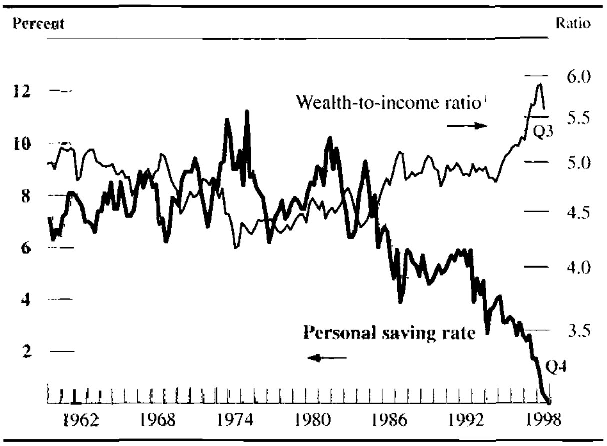


NOTE. In this chart and in subsequent charts that show the components of real GDP, changes are measured to the final quarter of the period indicated, from the final quarter of the preceding period. Last data point is from the advance GDP report for 1998:Q4.

Change in real income and consumption



Wealth and saving



1. The ratio of net worth of households to disposable personal income.

low level of the saving rate in 1998 is not so remarkable when gauged against a wealth-to-income ratio that has been running in a range well above its longer-run historical average.

All of the major categories of personal consumption expenditures—durables, nondurables, and services—recorded gains in 1998 that were the largest of the 1990s. Spending on durable goods rose more than 12 percent over the year. Within that category, expenditures on home computers once again stood out, rising roughly 70 percent in real terms, a gain that reflected both increased nominal outlays and a further substantial decline in computer prices. Consumer outlays on motor vehicles also rose sharply, despite some temporary limitations on supply from a midyear auto strike. Spending on most other types of durable goods registered increases that were well above the averages of the past decade or so. Because goods such as these are not consumed all at once—but, rather, add to stocks of durable goods that will be yielding services to consumers for a number of years—they embody a form of economic saving that is not captured in the normal measure of the saving rate in the national income accounts.

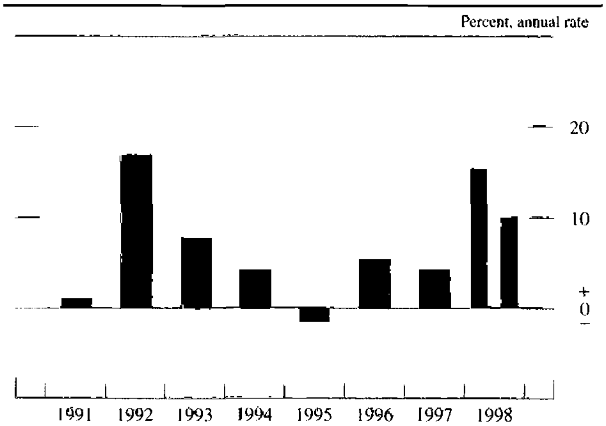
The increases in income and net worth that led households to boost consumption expenditures also led them to invest heavily in additions to the stock of housing. Declines in mortgage interest rates weighed in as well, helping to maintain the affordability of housing even as house prices moved up somewhat faster than overall inflation. These developments brought the objective of owning a home within the reach of a greater number of households, and the home-ownership rate, which has been trending up this decade, rose to another new high in 1998.

In the single-family sector, sales of new and existing homes surged, the former rising more than 10 percent from the previous year's total and the latter more than 13 percent. Construction of single-family houses strengthened markedly. The number of these units started during the year was the largest since the late 1970s, and it exceeded the previous year's total by about 12 percent. In the fourth quarter, unusually mild weather permitted builders to maintain activity later into the season than they normally would have and gave an added kick to housing starts. Starts increased further in January of this year, despite harsher weather in some regions.

In contrast to the strength in the single-family sector, the number of multifamily units started in 1998 was up only a little from the total for 1997. After bottoming out at a very low level early in the 1990s, construction of these units had been trending back up fairly briskly until this past year. But with vacancy rates on multifamily rental units running a touch higher this past year, builders and their creditors may have become concerned about adding too many new units to the stock. Financing appeared generally to be in ample supply for projects that looked promising; during the period of financial turmoil, the flow of credit was supported by substantial purchases of multifamily mortgages and mortgage-backed securities by Freddie Mac and Fannie Mae.

Total outlays for residential investment increased about 12½ percent in real terms during 1998, according to the Commerce Department's initial tally. The large increase reflected not only the construction work undertaken on new residential units during the year but also sizable advances in real outlays for home improvements and in the volume of sales activity being carried on by real estate brokers, which generated substantial gains in commissions.

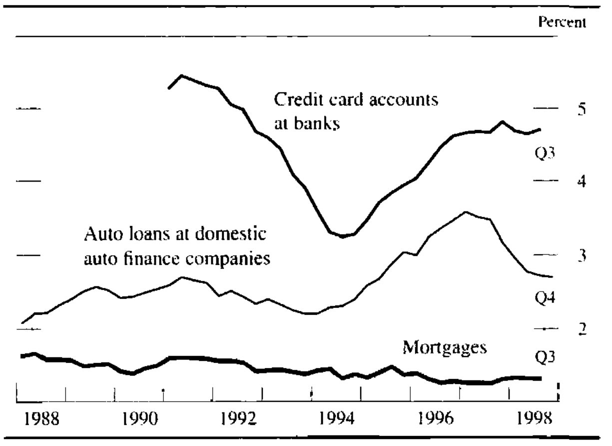
Change in real residential investment



The robust growth in household expenditures in 1998 was accompanied by an expansion of household debt that likely exceeded 8½ percent, a somewhat larger rise than in other recent years. Nonmortgage debt increased about 6 percent, about 2 percentage points above the previous year's pace but down considerably from the double-digit increases posted in 1994 and 1995. Home mortgage debt is estimated to have jumped more than 9 percent, its largest annual advance since 1990, boosted in part by the robust housing market. In addition, with mortgage rates reaching their lowest levels in many years, many households refinanced existing mortgages, and some households likely took the opportunity presented by refinancing to increase the size of their mortgages, using the extra funds raised to finance current expenditures or to pay down other debts.

The growth in household debt reflected both supply and demand influences. With wealth rising faster than income over the year and with consumer confidence remaining at historically high levels, households were willing to boost their indebtedness to finance increased spending. In addition, lenders generally remained accommodative toward all but the most marginal households, even after the turmoil in many financial markets in the fall. After a more general tightening of loan conditions in response to a rise in losses on such loans between mid-1995 and mid-1997, a smaller and declining fraction of banks tightened consumer lending standards and terms last year, according to Federal Reserve surveys. However, the availability of high loan-to-value and subprime home equity loans likely was reduced in the fall because of difficulties in the market for securities backed by such loans.

Delinquency rates on household loans



NOTE. The data are quarterly. Data on credit-card delinquencies are from bank Call Reports; data on auto loan delinquencies are from the Big Three automakers; data on mortgage delinquencies are from the Mortgage Bankers Association.

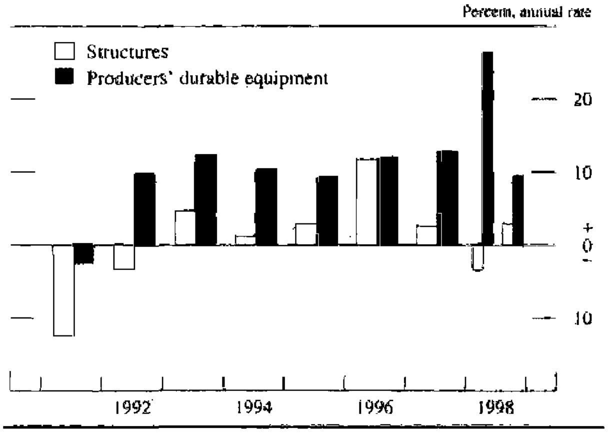
Despite the rapid increase in debt, measures of household financial stress were relatively stable last year, although some remained at high levels. The delinquency rate on home mortgages has stayed quite low in recent years, while the delinquency rate on auto loans at domestic auto finance companies has trended lower. The delinquency rate on credit card loans at banks fluctuated in a fairly narrow range in 1997 and 1998, but it remained elevated after having posted a substantial rise over the previous two years. Personal bankruptcy filings have followed a broadly similar pattern: Annual growth has run at about 3 percent over the past year and a half, down from annual increases of roughly 25 percent between mid-1995 and early 1997. The stability of these measures over the past couple of years likely owes in part to the earlier tightening of standards and terms on consumer loans. In addition, lower interest rates and longer loan maturities, which resulted from the shift toward mortgage finance, have helped to mitigate the effects of increased borrowing on household debt-service burdens.

The Business Sector

Business fixed investment increased about 12½ percent during 1998, with a 17½ percent rise in equipment spending more than accounting for the overall advance. The strength of the economy and optimism about its longer-run prospects provided underpinnings for increased investment. Outlays were also bolstered by the efficiencies obtainable with new technologies, by the favorable prices at which many types of capital equipment could be purchased, and, except during the period of financial market turmoil, by the ready availability and low cost of finance, either through borrowing or through the issuance of equity shares.

Real expenditures on office and computing equipment, after having risen at an average rate of roughly 30 percent in real terms from 1991 through 1997, shifted into even higher gear in 1998, climbing about 65 percent. The outsized increase likely owed in part to the efforts of some businesses to put new computer systems in place before the end of the millennium, in hopes of circumventing potential difficulties arising from the Y2K problem. But, beyond that, investment in computers is being driven by the same factors that have been at work throughout the expansion—namely, the introduction of machines that offer greater computing power at increasingly attractive

Change in real business fixed investment



prices and that provide businesses new and more efficient ways of organizing their operations. Price declines this past year were especially large, as the cost reductions associated with technical change were augmented by heightened international competition in the markets for semiconductors and other computer components and by price cutting to work down the stocks of some assembled products.

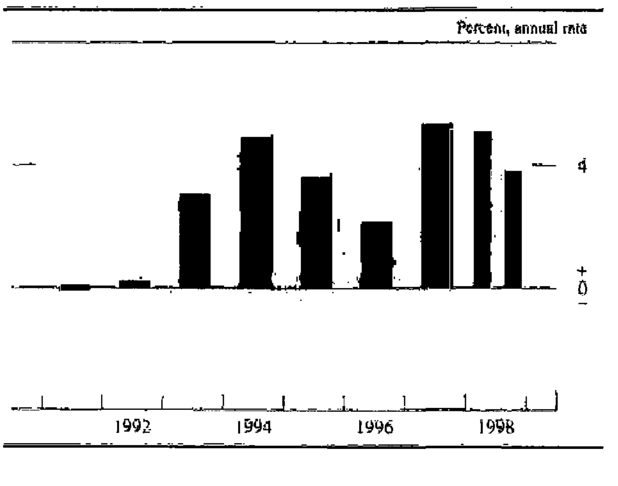
Investment in communications equipment—another high-tech category that is an increasingly important part of total equipment outlays—rose about 18½ percent in 1998. After having traced out an erratic pattern of ups and downs through the latter part of the 1980s and the early 1990s, real outlays on this type of equipment began to record sustained large annual increases in 1994, and the advance last year was one of the largest. Spending on other types of equipment displayed varying degrees of strength across different sectors but recorded a sizable gain overall. Investment in transportation equipment was strong across the board, spurred by the need to move greater volumes of goods or to carry more passengers in an expanding economy. Spending on industrial machinery advanced about 4½ percent after larger gains in most previous years of the expansion, a pattern that mirrored a slowing of output growth in the industrial sector.

Business investment in nonresidential structures, which accounts for slightly more than 20 percent of total business fixed investment, was down slightly in 1998, according to the advance estimate. Sharply divergent trends were evident within the sector, ranging from considerable strength in the construction of office buildings to marked weakness in the construction of industrial buildings. The waxing and waning of industry-specific construction cycles appears to be the main explanation for the diverse outcomes of this past year. Although some of the more speculative construction plans may have been shelved because of a tightening of the terms and standards on loans, partly in reaction to the financial turmoil, most builders appear to have been able to eventually obtain financing. Despite the sluggishness of spending on structures this past year, the level of investment remained high enough to generate continued moderate growth in the real stock of structures.

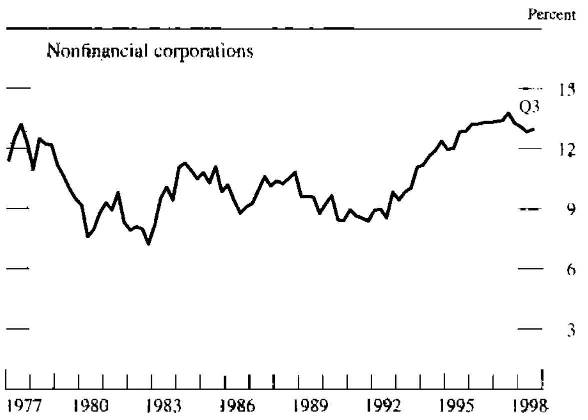
Business inventories increased about 4½ percent in real terms this past year after having risen more than 5 percent during 1997. Stocks grew at a 7 percent annual rate in the first quarter, appreciably faster than final sales, but inventory growth over the remainder of the year was considerably slower than in the first quarter. At year-end, stocks in most nonfarm industries were at levels that did not seem likely to cause firms to restrain production going forward. Inventories of vehicles may even have been a little on the lean side, as a result of both a strike that held down assemblies through the middle part of 1998 and exceptionally strong demand, which prevented the rebuilding of stocks later in the year. By contrast, inventories at year-end appear to have been excessive in a few nonfarm industries that have been hurt by the sluggish world economy. Stocks of farm commodities also appeared to be excessive, having been boosted further this past year by large harvests and sluggish export demand.

The economic profits of U.S. corporations—that is, book profits adjusted so that inventories and fixed capital are valued at their current replacement cost—rose further, on net, over the first three quarters of 1998 but at a much slower pace than in most other years of the current expansion. Companies' earnings from operations in the rest of the world fell back a bit, as did the profits of private financial corporations

Change in nonfarm business inventories



Before-tax profits as a share of GDP



NOTE. Profits from domestic operations, with inventory valuation and capital consumption adjustments, divided by gross domestic product of nonfinancial corporate sector.

from domestic operations. The profits of nonfinancial corporations from domestic operations increased at an annual rate of about 1¾ percent. Although the volume of output of the nonfinancial companies continued to rise rapidly, profits per unit of output were squeezed a bit by companies' difficulties in raising prices in step with costs in a competitive market environment.

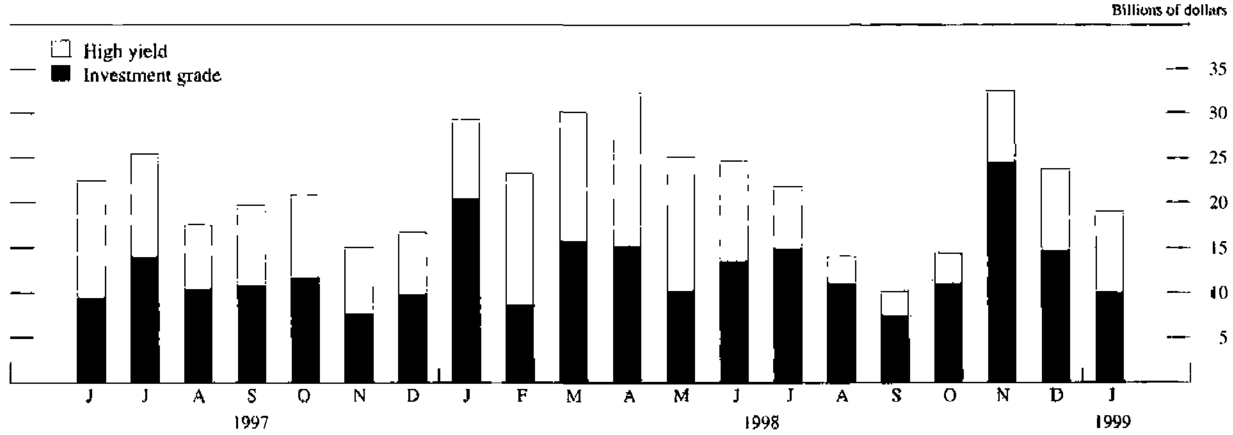
With profits expanding more slowly and investment spending still on the upswing, businesses' external funding needs increased substantially last year. Aggregate borrowing by the nonfinancial business sector is estimated to have expanded 9½ percent from the end of 1997 to the end of 1998, the largest increase in ten years. The rise reflected growth in all major types of business debt. Business borrowing was also boosted by substantial merger and acquisition activity. Indeed, mergers and acquisitions, share repurchases, and foreign purchases of U.S. firms last year overwhelmed the high level of both initial and seasoned public equity issues, and net equity retirements likely exceeded $250 billion.

The disruptions in the financial markets in late summer and early fall appear to have had little effect on total business borrowing but caused a substantial temporary shift in the sources of credit. With investors favoring high credit quality and liquidity, yields on lower-rated corporate bonds rose despite declining Treasury rates; the spread of yields on junk bonds over those on comparable Treasury securities roughly doubled between mid-summer and mid-autumn before falling back somewhat as conditions in financial markets eased. The spread of rates on lower-tier commercial paper over those on higher-quality paper rose substantially during the fall but had retraced the rise by the early part of this year.

Reflecting these adverse market conditions, nonfinancial corporate bond issuance fell sharply in August and remained low through mid-October, with issuance of junk bonds virtually halted for a time. Commercial paper issuance rose sharply in August and September, as some firms apparently decided to delay bond issues, turning temporarily to the commercial paper market instead. Bond issuance picked up again in late October, however, and issuance in November was robust. Reflecting this rebound, commercial paper outstanding fell back in the fourth quarter. More recently, bond issuance has remained healthy, while borrowing in the commercial paper market has picked up.

During the period when financial markets were strained, some borrowers substituted bank loans—in some cases under credit lines priced before the mar-

Gross corporate bond issuance

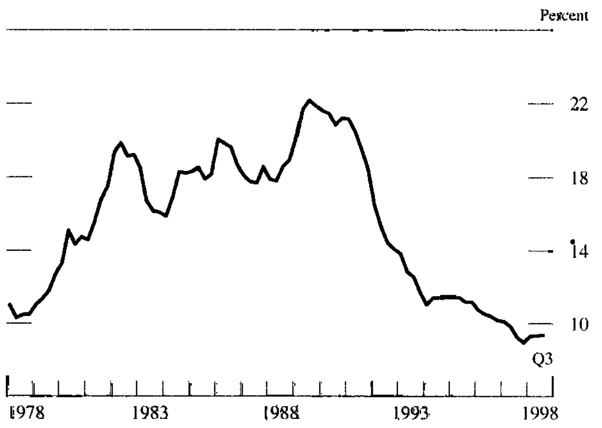


NOTE. Excludes unrated issues and issues sold abroad.

kets became volatile—for other sources of credit, and business loans at banks expanded very rapidly for a time before tailing off late in the year. Federal Reserve surveys indicate that banks responded to the turmoil in financial markets by tightening standards and terms on new loans and credit lines, especially loans to larger customers and those to finance commercial real estate ventures. The tightening reflected the less favorable or more uncertain economic outlook as well as a reduced tolerance for risk on the part of some banks. Bank lending standards and terms appear to have tightened only a little further since the fall, however, and business loans at banks have expanded a bit since the end of December.

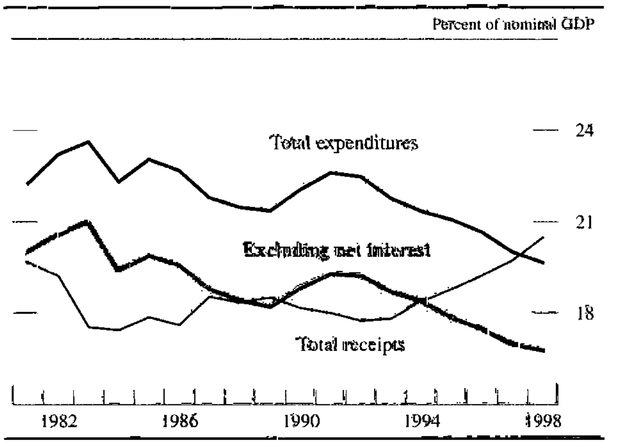
Despite the rapid growth in debt and the relatively small gain in profits last year, the financial condition of nonfinancial businesses remained strong. Interest rates for many businesses fell, on balance, over the course of the year, and bond yields for investment-grade firms reached their lowest level in many years. Reflecting these low borrowing costs, the aggregate debt-service burden for nonfinancial corporations, measured as the ratio of net interest payments to cash flow, remained about 9½ percent, near its low of 9 percent in 1997 and less than half the peak level reached in 1989. The delinquency rate for banks' commercial and industrial loans also remained near the trough reached in late 1997, while that for commercial real estate loans fell a bit further from the already very low level posted in 1997. Although Moody's Investors Service downgraded more nonfinancial firms than it upgraded over the second half of the year, the downgraded firms were smaller on average, and so the debt of those upgraded about equaled the debt of those downgraded. Through

Net interest payments of nonfinancial corporations relative to cash flow



NOTE. The data are quarterly.

Federal receipts and expenditures



NOTE. Data on receipts and expenditures are from the unified budget and are for the fiscal year ended in September.

October, business failures remained at the low end of the range seen over the past decade.

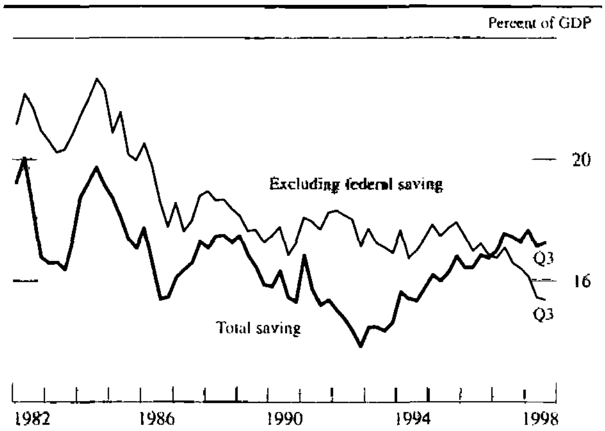
The Government Sector

The federal government recorded a surplus in the unified budget this past fiscal year for the first time in nearly three decades. The surplus, amounting to \$69 billion, was equal to about ¾ percent of GDP, a huge turnabout from the deficits of the early 1990s, which in some years were more than 4½ percent of GDP. The swing from deficit to surplus over the past few years is partly the result of fiscal policies aimed at lowering the deficit and partly the result of the strength of the economy and the stock market. Excluding net interest payments—a charge stemming from past deficits—the government recorded a surplus of more than \$300 billion in fiscal 1998.

The improvement in the government's saving position has permitted national saving—the combined gross saving of households, businesses, and governments—to move up about 3 percentage points from its low of a few years ago, even though personal saving has fallen sharply. In turn, that increase in national saving has helped facilitate the boom in investment spending—in contrast to the experience of the 1980s and early 1990s, when persistent large budget deficits tended to reduce national saving, boost interest rates higher than they otherwise would have been, and thereby crowd out private capital formation.

Federal receipts in the unified budget in fiscal year 1998 were up 9 percent from the previous fiscal year, with much of the gain coming from personal income

National saving



NOTE. National saving includes the gross saving of households, businesses, and governments.

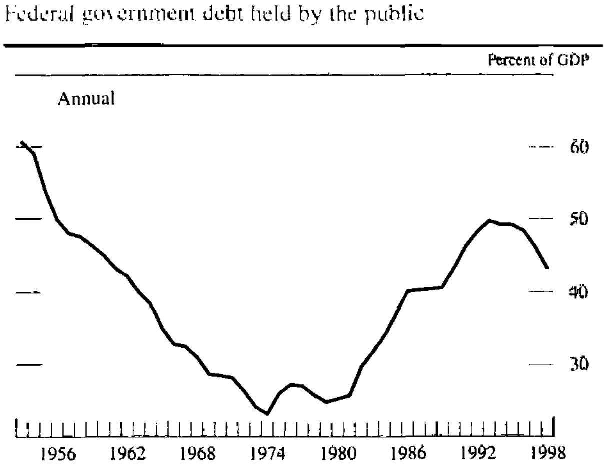
taxes, which rose more than 12 percent for a second consecutive year. These receipts have been rising faster than personal income in recent years, for several reasons: Tax rates at the high end of the income scale were raised by legislation that was passed in 1993 to help reduce the deficit; more taxpayers have moved into higher tax brackets as income has increased; and large increases in asset values have raised tax receipts from capital gains. Social insurance tax receipts, the second most important source of federal revenue, increased 6 percent in fiscal 1998, just a touch faster than the increase in fiscal 1997 and roughly in step with the growth of wages and salaries. Receipts from the taxes on corporate profits, which account for just over 10 percent of federal revenues, rose less rapidly than in other recent years, restrained by the slower growth of corporate profits. In the first three months of fiscal 1999, net receipts from corporate taxes dipped below year-earlier levels, but gains in individual income taxes and payroll taxes kept total federal receipts on a rising trajectory.

Unified outlays increased 3¼ percent in fiscal 1998 after having risen 2½ percent in the preceding fiscal year. Net interest payments and nominal expenditures for defense fell slightly in the latest fiscal year, and outlays for income security and Medicare rose only a little. Social security expenditures increased moderately but somewhat less than in other recent years. By contrast, the growth of Medicaid payments picked up to about 6 percent after having increased less than 4 percent in each of the preceding two years; however, even the 1998 rise was not large compared with those of many earlier years when both medical costs and Medicaid caseloads were increasing rapidly and rates of federal reimbursement to the states were being raised. Federal spending in fiscal 1999 will be boosted to some degree by new budget authority for a variety of functions, including defense, embassy security, disaster relief, preparation for Y2K, and aid to agriculture; this authority was created in emergency legislation that provided an exception to statutory spending restrictions.

Real federal outlays for consumption and investment, the part of federal spending that is counted in GDP, increased 1 percent, on net, from the final quarter of calendar year 1997 to the final quarter of 1998. A reduction in real defense outlays over that period was more than offset by a jump in the nondefense category.

With the budget balance shifting from deficit to surplus, the stock of publicly held federal debt declined last year for the first time since 1969 and fell further as a share of GDP. From the end of 1997 to the end of 1998, U.S. government debt fell 1½ percent, as the government reduced the outstanding stock of both bills and coupon securities. Despite the reduction in its debt, the federal government continued substantial gross borrowing to fund the retirement of maturing securities. However, with the need for funds trimmed substantially, the Treasury changed its auction schedules, discontinuing the three-year note auctions and moving to quarterly, rather than monthly, auctions of five-year notes. By reducing the number of coupon security issues, the Treasury is able to boost the size of each, thereby contributing to their liquidity. The decrease in the total volume of coupon securities is intended to boost the size of bill offerings over time, helping liquidity in that market and also allowing, as the Treasury prefers, for balanced issuance across the yield curve. The Treasury also announced in October that all future bill and coupon security auctions would employ the single-price format that had already been adopted for the

Federal government debt held by the public



two-year and five-year note auctions and for auctions of inflation-indexed securities. The Treasury judged that the single-price format had reduced servicing costs and resulted in broader market participation.

The Treasury continued to auction inflation-indexed securities in substantial volume last year in an effort to build up this part of the Treasury market. In April, the Treasury issued its first thirty-year indexed bond, and in September it announced a regular schedule of ten- and thirty-year indexed security auctions. The Treasury also began offering inflation-indexed savings bonds in September.

State and local governments recorded further increases in their budgetary surpluses in 1998, both in absolute terms and as a share of GDP. Revenue from the taxes on individuals' incomes has been growing very rapidly, keeping total receipts on a solid upward course. At the same time, the growth of transfer payments, which had threatened to overwhelm state and local budgets earlier in the decade, has slowed substantially in recent years. Growth of other types of spending has been trending up moderately, on balance. The 1998 rise in real expenditures for consumption and investment amounted to about 2¼ percent, according to the initial estimate; annual gains have been in the range of 2 percent to 2¼ percent in each of the past seven years.

Despite rising surpluses, state and local government debt increased an estimated 7 percent in 1998, a pickup of about 2 percentage points from growth in 1997. Somewhat more than half of the long-term borrowing by state and local governments last year reflected new borrowing to fund current and anticipated capital spending on utilities, transportation, education, and other capital projects. The combination of budget surpluses and relatively heavy borrowing likely reflected a number of factors. First, some of these governments may have spent the newly raised funds on capital projects while at the same time building up surpluses in "rainy day funds" for later use. Second, because state and local governments under some circumstances are allowed to hold funds raised in the markets for as long as five years before spending them, some of the money raised last year may not have been spent. Finally, there was a substantial volume of "advance refunding" last year. In an advance refunding, the borrower issues new bonds before existing higher-rate bonds can be called, in anticipation of calling the old bonds on the date that option becomes available. While this sort of refinancing temporarily boosts total debt, it allows the state or local government to lock in the lower rate even if municipal bond yields subsequently rise over the period before the call date. The high level of advance-refunding activity last year was the result of lower borrowing costs. Although yields on tax-exempt municipal securities did not decline nearly as much as those on comparable Treasury securities, they nonetheless reached their lowest levels in many years. In addition, rating agencies upgraded about five times as many state and local government issues last year as they downgraded, trimming borrowing costs further for the upgraded entities.

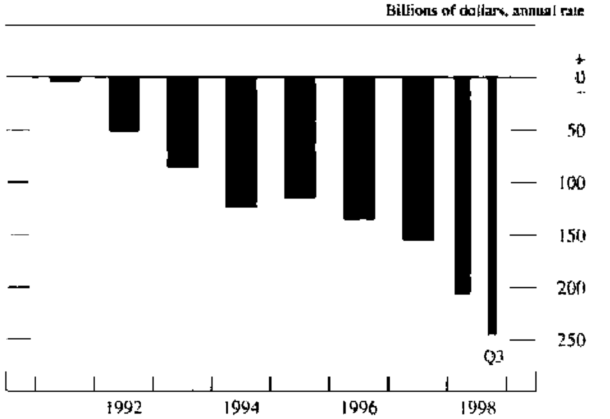
The External Sector

Trade and the Current Account

U.S. external balances deteriorated further in 1998, largely because of the disparity between the rapid growth of the U.S. economy and the sluggish growth of the economies of many of our trading partners. The nominal trade deficit for goods and services was $169 billion, considerably larger than the $110 billion deficit in 1997. For the first three quarters of the year, the current account deficit averaged $220 billion at an annual rate, substantially larger than the 1997 deficit of $155 billion. The large current account deficits of recent years have been funded with increased net foreign saving in the United States. As a result, U.S. gross domestic investment has exceeded the level that could have been financed by gross national saving alone, but at the cost of a rise in net U.S. external indebtedness.

The increase in the current account deficit last year was due to a decline in net exports of goods and services as well as a further weakening of net investment income from abroad. Until 1997, net investment income had helped to offset persistent trade deficits. But as the U.S. net external debt has risen in recent

U.S. current account

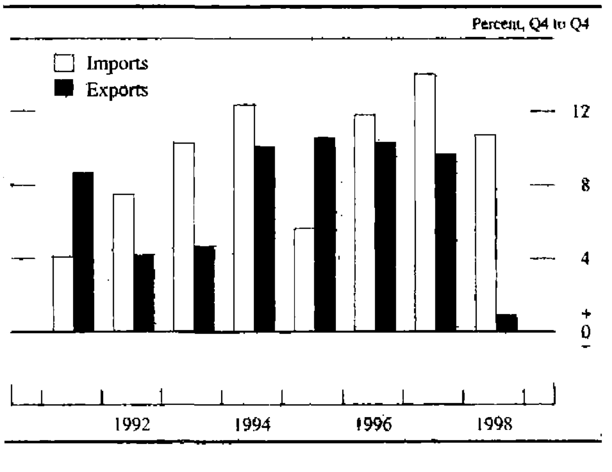


years, net investment income has become increasingly negative, moving from a $14 billion surplus in 1996 to a $5 billion deficit in 1997 and a deficit averaging $15 billion at an annual rate over the first three quarters of 1998. Net income from portfolio investment became increasingly negative during that period as the net portfolio liability position of the United States grew larger. In addition, net income from direct investment slowed last year because slower foreign economic growth lowered U.S. earnings on investment abroad, the appreciation of the dollar reduced the value of U.S. earnings, and buoyant U.S. growth boosted foreigners' earnings on direct investment in the United States.

The rise in the trade deficit reflected an increase of about 10 percent in real imports of goods and services during 1998, according to the advance estimates from the Commerce Department. The expansion was fueled by robust growth of U.S. domestic demand and by continued declines in import prices, which stemmed in part from the strength of the dollar through mid-August and in part from the effects of recessions abroad. Of the major trade categories, increases in imports were sharpest for finished goods, especially capital equipment and automotive products. The quantity of imported oil rose appreciably as demand increased in response to the strength of U.S. economic activity and lower oil prices, while domestic production declined slightly. The price of imported oil fell about $6.50 per barrel over the four quarters of the year. World oil prices fell in response to reduced demand associated with the economic slowdown in many foreign nations and with unusually warm weather in the Northern Hemisphere as well as to an increase in supply from Iraq.

Real exports of goods and services grew about 1 percent, on net, in 1998 after posting a 10 percent rise in 1997. Declines during the first three quarters (especially in machinery exports) were offset by a rebound in the fourth quarter, which was led by increases in exports of automotive products. The price competitiveness of U.S. products decreased, reflecting the appreciation of the dollar through mid-August. In addition, economic activity abroad weakened sharply; total average foreign growth (weighted by shares of U.S. exports) plunged from 4 percent in 1997 to an estimated ½ percent in 1998. Moderate expansion of exports to Europe, Canada, and Mexico was about offset by a decline in exports associated with deep recessions in Japan and the emerging Asian economies (particularly in the first half of the year) and in South America (in the second half of the year).

Change in real imports and exports of goods and services



Capital Flows

The financial difficulties in a number of emerging market economies had several noticeable effects on U.S. international capital flows in 1998. Financial turmoil put strains on official reserves in many emerging market economies. Foreign official assets in the United States fell $43 billion in the first three quarters of the year. This decline, which began in the fourth quarter of 1997, has been largest for developing countries, as many of them drew down their foreign exchange reserves in response to exchange rate pressures. OPEC nations' foreign official reserves also shrank in the first three quarters of 1998, as oil revenues dropped. Preliminary data indicate that foreign official assets in the United States, especially those of industrial countries, rebounded in the fourth quarter.

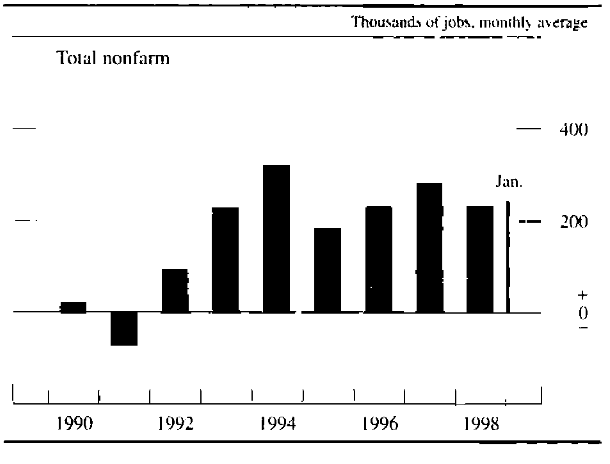
Private capital flows also were affected by the global turmoil. On a global basis, capital flows to emerging market economies fell substantially in the first half of 1998 and then dropped precipitously in late summer and early fall in the wake of the Russian crisis. During the first half of the year, U.S. residents acquired more than $40 billion of foreign securities. Net purchases virtually stopped in July, and in the August–October period U.S. residents, on net, sold about $40 billion worth of foreign securities. Preliminary data indicate a resumption of net U.S. purchases in the final two months of 1998. Foreign net purchases of U.S. securities, which were substantial in the first half of the year, fell off markedly in the July–October period, but preliminary data suggest a significant recovery in November and December. Thus, there is some evidence that the contraction in gross capital flows seen in late summer and early fall waned somewhat in the fourth quarter.

Balance of payments data available through the first three quarters of 1998 show that total private foreign purchases of U.S. securities amounted to $194 billion, somewhat below the level in the first three quarters of 1997. Private foreign purchases of U.S. Treasury securities were only $22 billion in the first three quarters, compared with $147 billion for all of 1997. Private foreigners' purchases of other U.S. securities shifted away from equities and toward bonds, relative to 1997. U.S. purchases of foreign securities slowed markedly from their 1997 pace, totaling only $27 billion for the first three quarters of 1998 compared with $89 billion for all of the preceding year. The contraction in private portfolio capital flows, though large, was overshadowed by huge direct investment capital flows, which resulted in part from a number of very large cross-border mergers. The $72 billion in foreign direct investment into the United States in the first three quarters, together with several large mergers that occurred in the fourth quarter, are certain to bring the total for last year well above the record-high $93 billion posted in 1997. Merger activity also buoyed U.S. direct investment abroad: The pace of such investment in the first three quarters suggests that the annual total will be near the record-high $122 billion recorded in 1997.

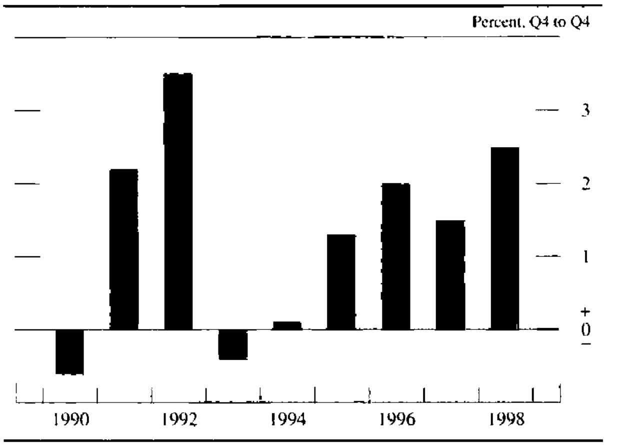
The Labor Market

The rapid growth of output in 1998 was associated with both increased hiring and continued healthy growth in labor productivity. The number of jobs on nonfarm payrolls rose about 2¼ percent from the end of 1997 to the end of 1998, a net increase of 2.8 million. Manufacturers reduced employment over the year, but in other parts of the economy the demand for labor continued to rise rapidly. The construction industry boosted employment about 6 percent over the year, and both the services industries and the finance, insurance, and real estate sector posted increases of more than 3½ percent. Stores selling building materials and home furnishings expanded employment rapidly, as did firms involved in computer services, communications, and managerial services. In the first month of 1999, nonfarm payrolls increased an additional 245,000.

Change in payroll employment



Change in output per hour



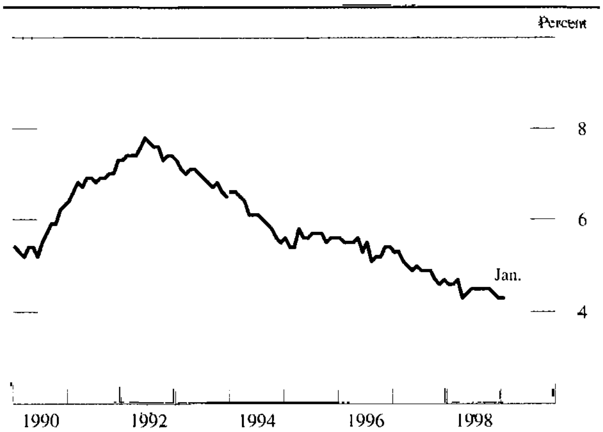
NOTE. Nonfarm business sector.

Output per hour in the nonfarm business sector rose 2½ percent in 1998 after having increased about 1¾ percent, on average, over the two previous years. By comparison, the average rate of rise during the 1980s and the first half of the 1990s was just over 1 percent per year. Because productivity often picks up to a pace above its long-run trend when economic growth accelerates, the results of the past three years might well be overstating the rate of efficiency gain that can be maintained in coming years. However, reasons for thinking that the trend might have picked up to some degree are becoming more compelling in view of the incoming data. The 1998 gain in output per hour was particularly impressive in this regard, in part because it came at a time when many businesses were diverting resources to correct the Y2K problem, a move that likely imposed a bit of drag on growth of output per hour. Higher rates of capital formation are raising the growth of capital per worker, and workers are likely becoming more skilled in employing the new technologies. Businesses not only are increasing their capital inputs but also are continuing to implement changes to their organizational structures and operating procedures that might enhance efficiency and bolster profit margins.

The rising demand for labor continued to strain supply in 1998. The civilian labor force rose just a touch more than 1 percent from the fourth quarter of 1997 to the fourth quarter of 1998, and with the number of persons holding jobs rising somewhat faster than the labor force, the civilian unemployment rate fell still further. The unemployment rate was 4.3 percent at the end of 1998; the average for the full year—4.5 percent—was the lowest of any year in almost three decades. In January of this year, the size of the labor force rose rapidly, but so did employment, and the unemployment rate remained at 4.3 percent. The percentage of the working age population that is outside the labor force and is interested in obtaining work but not actively seeking it edged down further this past year and has been in the lowest range since the collection of these data began in 1970. With the supply of labor as tight as it is, businesses are reaching further into the pool of individuals who do not have a history of strong attachment to the labor force; persons who are attempting to move from welfare to work are among the beneficiaries.

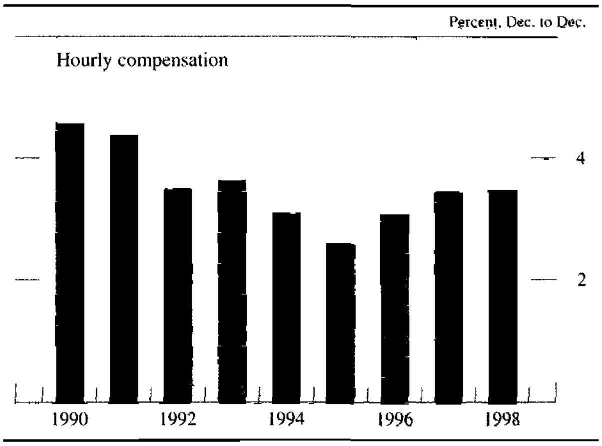
Workers have realized large increases in real wages and real hourly compensation over the past couple of years. The increases have come partly through faster gains in nominal pay than in the mid-1990s but also though reductions in the rate of price increase, which have been enhancing the real purchasing power of nominal earnings, perhaps to a greater degree than workers might have anticipated. According to the Labor Department's employment cost index, the hourly compensation of workers in private nonfarm industries rose 3½ percent in nominal terms during 1998, a touch more than in 1997 and ½ percentage point more than in 1996. Taking the consumer price index as the measure of price change, this increase in nominal hourly compensation translated into a 2 percent increase in real hourly pay, one of the largest on record in a series that goes back to the start of the 1980s; the gain was bigger still if the chain-type price index for personal consumption expenditures is used as the measure of consumer prices. Moreover, the employment cost index does not capture some of the forms of compensation that employers have been using to attract and retain workers—for example, stock options and signing bonuses.

Civilian unemployment rate



NOTE. 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 employment cost index



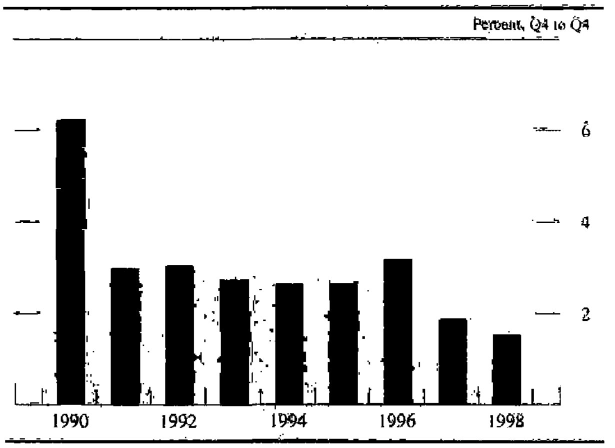
NOTE. Private industry, excluding farm and household workers.

Because of the rapid growth in labor productivity, unit labor costs have been rising much less rapidly than hourly compensation in recent years. The increase in unit labor costs in the nonfarm business sector was only 1½ percent in 1998. Businesses were unable to raise prices sufficiently to recoup even this small increase in costs, however. Labor gained a greater share of the income generated from production, and the profit share, though still high, fell back a little from its 1997 peak.

Prices

The broader measures of aggregate price change showed inflation continuing to slow in 1998. The consumer price index moved up 1½ percent over the four quarters of the year after having increased nearly 2 percent in 1997. A steep decline in energy prices in the CPI more than offset a small acceleration in the

Change in consumer prices



NOTE. Consumer price index for all urban consumers.

3. Alternative measures of price change

Percent

Price measure	1997	1998
Fixed-weight		
Consumer price index	1.9	1.5
Excluding food and energy	2.2	2.4
Chain-type		
Gross domestic product	1.7	.9
Gross domestic purchases	1.3	.5
Personal consumption expenditures	1.5	.8
Excluding food and energy	1.6	1.2

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

prices of other goods and services. Only part of the deceleration in the total CPI was attributable to technical changes in data collection and aggregation.[1]

Measures of aggregate price change from the national income and product accounts, which draw heavily on data from the CPI but also use data from other sources, showed a somewhat more pronounced deceleration of prices in 1998. The chain-type price index for personal consumption expenditures, the measure of consumer prices in the national accounts, rose ¾ percent after increasing 1½ percent in 1997. The chain-type price index for gross domestic purchases—the broadest measure of prices paid by U.S. households, businesses, and governments—increased only ½ percent in 1998 after moving up 1¼ percent over the previous year. The rise in the chain-type price index for gross domestic product of slightly less than 1 percent was down from an increase of 1¾ percent in 1997.

Developments in the external sector helped to bring about the favorable inflation outcome of 1998. Consumers benefited directly from lower prices of finished goods purchased from abroad. Lower prices for imports probably also held down the prices charged by domestic producers, not only because businesses were concerned about losing market share to foreign competitors but also because declines in commodity prices in sluggish world markets helped reduce domestic production costs to some degree.

In manufacturing, one of the sectors most heavily affected by the softness in demand from abroad, the rate of plant capacity utilization fell noticeably over the year—even as the unemployment rate continued to decline. The divergence of these two key measures of resource use—the capacity utilization rate and the unemployment rate—is unusual: They typically have exhibited similar patterns of change over the course of the business cycle. Because the unemployment rate applies to the entire economy, it presumably should be a better indicator of the degree of pressure on resources in general. At present, however, slack in the goods-producing sector—a reflection of the sizable additions to capacity in this country and excess capacity abroad—seemingly has enforced a discipline of competitive price and cost control that has affected the economy more generally.

Prices this past year tended to be weakest in the sectors most closely linked to the external economy. The price of oil fell almost 40 percent from December 1997 to December 1998. This drop triggered steep declines in the prices of petroleum products purchased directly by households. The retail price of motor fuel fell about 15 percent over the four quarters of the year, and the price of home heating fuel also plunged. With the prices of natural gas and electricity also falling, the CPI for energy was down about 9 percent over the year after having slipped 1 percent in 1997.

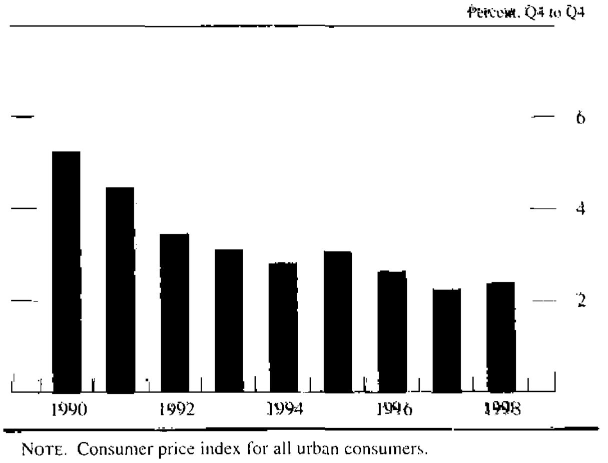
Large declines in the prices of internationally traded commodities other than oil pulled down the prices of many domestically produced primary inputs. The producer price index for crude materials other than energy, which reflects the prices charged by domestic producers of these goods, fell more than 10 percent over the year. However, because these non-oil commodities account for a small share of total production costs, the effect of their decline on inflation was much less visible further down the

1. Since the end of 1994, the Bureau of Labor Statistics has taken a number of steps to make the consumer price index a more accurate price measure. The agency also introduced new weights into the CPI at the start of 1998. In total, these changes probably reduced the 1998 rise in the CPI by slightly less than ½ percentage point, relative to the increase that would have been reported using the methodologies and weights in existence at the end of 1994. Without the changes that took effect in 1998, the deceleration in the CPI last year probably would have been about half as large as was reported.

chain of production. Intermediate materials prices excluding food and energy fell about 1½ percent over the four quarters of the year, and the prices of finished goods excluding food and energy rose about 1½ percent. The latter index was boosted, in part, by an unusually large hike in tobacco prices that followed the settlement last fall of states' litigation against the tobacco companies. In the food sector as well, the effects of declining commodity prices became less visible further down the production chain; the PPI for finished foods was about unchanged, on net, over the year, and price increases at the retail level, though small, were somewhat larger than those of the preceding year.

Consumer prices excluding those of food and energy—the core CPI—continued to rise in 1998, but not very rapidly. As measured by the CPI, these prices increased nearly 2½ percent from the final quarter of 1997 to the final quarter of 1998, a shade more than in 1997. The chain-type price index for personal consumption expenditures excluding food and energy—the core PCE price index—decelerated a bit further, rising at roughly half the pace of the core CPI. Methodological differences between the two measures are numerous; some of the technical problems that have plagued the CPI are less pronounced in the PCE price measure, but the latter also depends partly on imputations of prices for which observations are not available. Both measures, however, seemed to suggest that the underlying trend of consumer price inflation remained low. A similar message came from surveys of consumers, which showed expectations of future price increases easing a bit further in 1998—although, as in other recent years, the expected increases remained somewhat higher than actual price increases.

Change in consumer prices excluding food and energy



NOTE. Consumer price index for all urban consumers.

U.S. Financial Markets

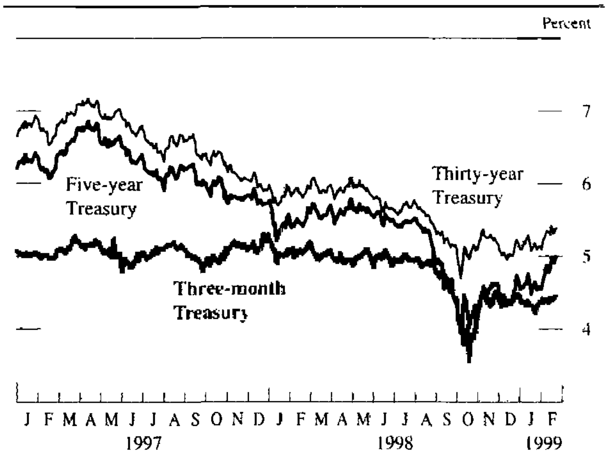
U.S. interest rates fluctuated in fairly narrow ranges over the first half of 1998, and most equity price indexes posted substantial gains. However, after the devaluation of the Russian ruble in August and subsequent difficulties in other emerging market economies, investors appeared to reassess the risks and uncertainties facing the U.S. economy and concluded that more cautious postures were in order. That sentiment was reinforced by the prospect of an unwinding of positions by some highly leveraged investors. The resulting shift toward safe, liquid investments led to a substantial widening of risk spreads on debt instruments and to volatile changes in the prices of many assets. Financial market volatility and many risk spreads returned to more normal levels later in the year and early this year, as lower interest rates and robust economic data seemed to reassure market participants that the economy would remain sound, even in the face of additional adverse shocks from abroad. However, lenders remained more cautious than they had been in the first part of last year, especially in the case of riskier credits.

Interest Rates

Over the first half of 1998, short-term Treasury rates moved in a narrow range, anchored by unchanged monetary policy, while yields on intermediate- and long-term Treasury securities varied in response to the market's shifting assessment of the likely impact of foreign economic difficulties on the U.S. economy. In late 1997 and into 1998, spreading financial crises in Asia were associated with declines in U.S. interest rates, as investors anticipated that weakness abroad would constrain U.S. economic growth and cushion the impact of tight U.S. labor markets on inflation. However, interest rates moved back up later in the first quarter of 1998, as the U.S. economy continued to expand at a healthy pace, fueled by hefty gains in domestic demand. After a couple of months of small changes, Treasury rates fell in May and June, when concerns about foreign economies, particularly in Asia, once again led some observers to expect weaker growth in the United States and may also have boosted the demand for safe Treasury securities relative to other instruments.

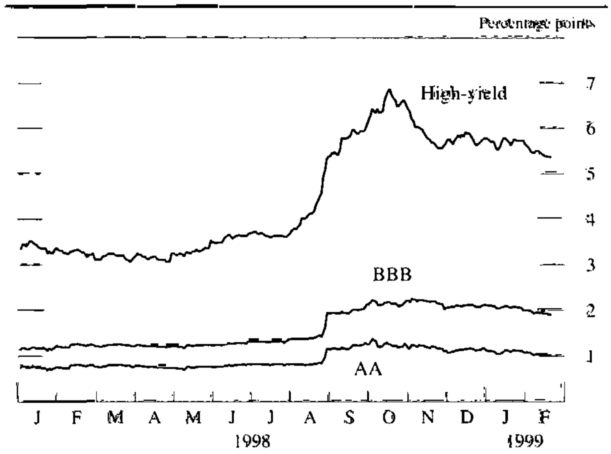
Treasury rates changed little, on net, in the early summer, but they slipped lower in August, reflecting increased concern about the Japanese economy and financial problems in Russia. The default by Russia on some government debt obligations and the devalu-

Selected Treasury rates, daily data



NOTE. Last observations are for February 19, 1999.

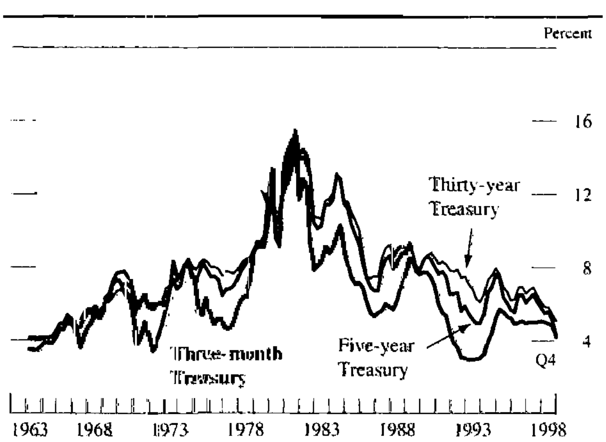
Spreads of corporate bond yields over Treasury security yields



NOTE. The data are daily. The spread of high-yield bonds compares the yield on the Merrill Lynch Master II index with that on a seven-year Treasury; the other two spreads compare yields on the appropriate Merrill Lynch indexes with that on a ten-year Treasury. Last observations are for February 19, 1999.

ation of the ruble in mid-August not only resulted in sizable losses for some investors but also undermined confidence in other emerging market economies. The currencies of many of these economies came under substantial pressure, and the market value of the international debt obligations of some countries declined sharply. U.S. investors shared in the resulting losses, and U.S. economic growth and the profits of U.S. companies were perceived to be vulnerable. In these circumstances, many investors, both here and abroad, appeared to reassess the riskiness of various counterparties and investments and to become less willing to bear risk. The resulting shift of demand toward safety and liquidity led to declines of 40 to 75 basis points in Treasury coupon yields between mid-August and mid-September. In contrast, yields on higher-quality private securities fell much less, and those on issues of lower-rated firms increased sharply. As a result, spreads of private rates over Treasury rates rose substantially, reaching levels not seen for many years, and issuance of corporate securities dropped sharply.

Selected Treasury rates, quarterly data



NOTE. The twenty-year Treasury bond rate is shown until the first issuance of the thirty-year Treasury bond in February 1977.

The desire of investors to limit risk-taking as markets became troubled in the late summer showed up clearly in mutual fund flows. High-yield bond funds, which had posted net inflows of more than $1 billion each month from May to July, saw a $3.4 billion outflow in August and inflows of less than $400 million in September and October before rebounding sharply in November. By contrast, inflows to government bond funds jumped from less than $1 billion in July to more than $2 billion a month in August and September. Equity mutual funds posted net outflows totaling nearly $12 billion in August, the first monthly outflow since 1990, and inflows over the rest of the year were well below those earlier in the year.

In part, the foreign difficulties were transmitted to U.S. markets by losses incurred by leveraged investors—including banks, brokerage houses, and hedge funds—as the prospects for distress sales of riskier assets by such investors weighed on market sentiment, depressing prices. Many of these entities did reduce the scale of their operations and trim their risk exposures, responding to pressures from more cautious counterparties. As a result, liquidity in many markets declined sharply, with bid–asked spreads widening and large transactions becoming more difficult to complete. Even in the market for Treasury securities, investors showed an increased preference for the liquidity offered by the most recent issues at each maturity, and the yields on these more actively traded "on-the-run" securities fell noticeably relative to those available on "off-the-run" issues, the ones that had been outstanding longer.

Conditions in U.S. financial markets deteriorated further following revelations in mid-September of the magnitude of the positions and the extent of the losses of a major hedge fund, Long-Term Capital Management. LTCM indicated that it sought high rates of return primarily by identifying small discrepancies in the prices of different instruments relative to historical norms and then taking highly leveraged positions in those instruments in the expectation that market prices would revert to such norms over time. In pursuing its strategy, LTCM took very large positions, some of which were in relatively small and illiquid markets.

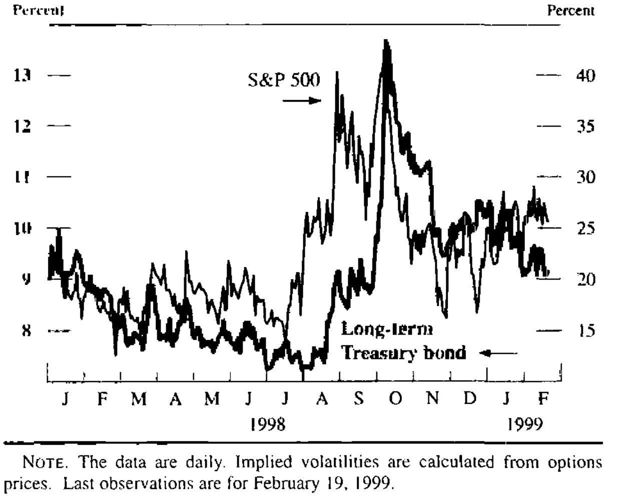
LTCM was quite successful between 1995 and 1997, but the shocks hitting world financial markets last August generated substantial losses for the firm. Losses mounted in September, and before new investors could be found, the firm encountered difficulties meeting liquidity demands arising from its collateral agreements with its creditors and counterparties. With world financial markets already suffering from heightened risk aversion and illiquidity, officials of the Federal Reserve Bank of New York judged that the precipitous unwinding of LTCM's portfolio that would follow the firm's default would significantly add to market problems, would distort market prices, and could impose large losses, not just on LTCM's creditors and counterparties, but also on other market participants not directly involved with LTCM.

In an effort to avoid these difficulties, the Federal Reserve Bank of New York contacted the major creditors and counterparties of LTCM to see if an alternative to forcing LTCM into bankruptcy could be found. At the same time, Reserve Bank officials informed some of their colleagues at the Federal Reserve Board, the Treasury, and other financial regulators of their activities. Subsequent discussions among LTCM's creditors and counterparties led to an agreement by the private-sector parties to provide an additional $3½ billion of capital to LTCM in return for a 90 percent equity stake in the firm.

Because of the potential for firms such as LTCM to have a large influence on U.S. financial markets, Treasury Secretary Robert Rubin asked the President's Working Group on Financial Markets to study the economic and regulatory implications of the operations of firms like LTCM and their relationships with their creditors. In addition, the extraordinary degree of leverage with which LTCM was able to operate has led the federal agencies responsible for the prudential oversight of the fund's creditors and counterparties to undertake reviews of the practices those firms employed in managing their risks. These reviews have suggested significant weaknesses in the risk-management practices of many firms in their dealings with LTCM and—albeit to a lesser degree—in their dealings with other highly leveraged entities. Few counterparties seem to have had a complete understanding of LTCM's risk profile, and their credit decisions were heavily influenced by the firm's reputation and strong past performance. Moreover, LTCM's counterparties did not impose sufficiently tight limits on their exposures to LTCM, in part because they relied on collateral agreements requiring frequent marking to market to limit the risk of their exposures. While these agreements generally provided for collateral with a value sufficient to cover current credit exposures, they did not deal adequately with the potential for future increases in exposures from changes in market values. This shortcoming was especially important in dealings with a firm like LTCM, which had such large positions in illiquid markets that its liquidation would likely have moved prices sharply against its creditors. In such cases, creditors need to take further steps to limit their potential future exposures, which might include requiring additional collateral or simply scaling back their activity with such firms.

The private-sector agreement to recapitalize LTCM allowed its positions to be reduced in an orderly manner over time, rather than in an abrupt fire sale. Nonetheless, the actual and anticipated unwinding of LTCM's portfolio, as well as actual and anticipated sales by other similarly placed leveraged investors, likely contributed materially to the tremendous volatility of financial markets in early October. Market

Implied volatilities



NOTE. The data are daily. Implied volatilities are calculated from options prices. Last observations are for February 19, 1999.

expectations of asset price volatility going forward, as reflected in options prices, rose sharply, as bid–asked spreads and the premium for on-the-run securities widened. Long-term Treasury yields briefly dipped to their lowest levels in more than thirty years, in part because of large demand shifts resulting from concerns about the safety and liquidity of private and emerging market securities. Spreads of rates on corporate bonds over those on comparable Treasury securities rose considerably, and issuance of corporate bonds, especially by lower-rated firms, remained very low.

By mid-October, however, market conditions had stopped deteriorating, and they began to improve somewhat in the days and weeks following the cut in the federal funds rate on October 15, between Federal Open Market Committee meetings. Internationally coordinated efforts to help Brazil cope with its financial difficulties, culminating in the announcement of an IMF-led support package in mid-November, contributed to the easing of market strains. In the Treasury market, bid–asked spreads narrowed a bit and the premium for on-the-run issues declined. With the earlier flight to quality and liquidity unwinding, Treasury rates backed up considerably. Corporate bond spreads reversed a part of their earlier rise, and investment-grade bond issuance rebounded sharply. In the high-yield bond market, investors appeared to be more hesitant, especially for all but the best-known issuers, and the volume of junk bond issuance picked up less. In the commercial paper market, yields on higher-quality paper declined; yields on lower-quality paper remained elevated, however, and some lower-tier firms reportedly drew on their bank lines for funding, giving a further boost to bank business lending, which had begun to pick up during the summer.

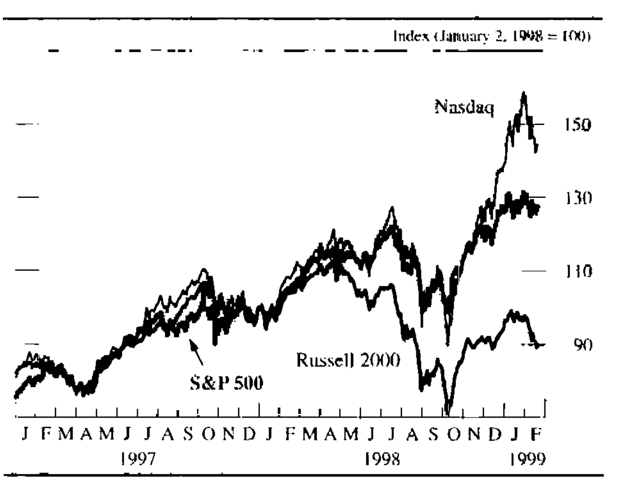
Market conditions improved a bit further immediately after the Federal Reserve's November rate cut, but some measures of market stress rose again in late November and in December. In part, this deterioration reflected widespread warnings of lower-than-expected corporate profits, a weakening economic outlook for Europe, and renewed concerns about the situation in Brazil. In addition, with risk a greater-than-usual concern, some market participants were likely less willing to hold lower-rated securities over year-end, when they would have to be reported in annual financial statements. As a result, liquidity in some markets appeared to be curtailed, and price movements were exaggerated. These effects were particularly noticeable in the commercial paper market: The spread between rates on top-tier and lower-tier thirty-day paper jumped almost 40 basis points on December 2, when that maturity crossed year-end, and then reversed the rise late in the month.

By shortly after year-end, some measures of market stress had eased considerably from their levels in the fall, although markets remained somewhat illiquid relative to historical norms, and risk spreads on corporate bonds stayed quite elevated. Nonetheless, with Treasury yields very low, corporate bond rates were apparently perceived as advantageous, and—following a lull around year-end—many corporate borrowers brought new issues to market. The devaluation and subsequent floating of the Brazilian *real* in mid-January had a relatively small effect on U.S. financial markets. More recently, intermediate- and long-term Treasury rates have increased, as incoming data have continued to show the economy expanding briskly, and investors have come to believe that no further easing of Federal Reserve policy is likely.

Equity Prices

Most equity indexes rose strongly, on balance, in 1998, with the Nasdaq Composite Index up nearly 40 percent, the S&P 500 Composite Index rising more than 25 percent, and the Dow Jones Industrial Average and the NYSE Composite Index advancing more than 15 percent. Small capitalization stocks underperformed those of larger firms, with the Russell 2000 Index off 3 percent over the year. The variation in stock prices over the course of the year was extremely wide. Prices increased substantially over the first few months of 1998, as concerns eased that Asian economic problems could lead to a slowdown in the United States and to a consequent decline

Major stock price indexes



NOTE. The data are daily. Last observations are for February 19, 1999.

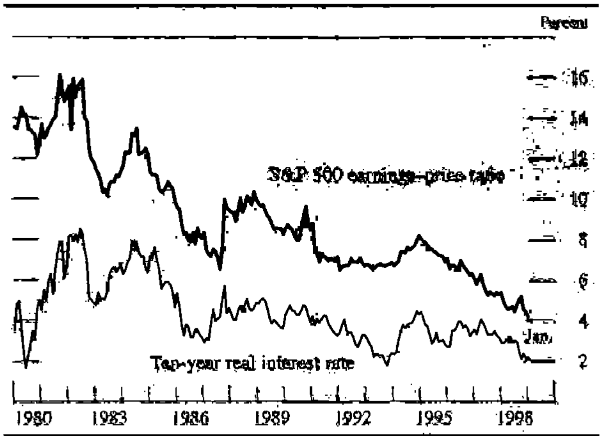
in profits. The major indexes declined, on balance, over the following couple of months before rising sharply, in some cases to new records, in late June and early July, on increasing confidence about the outlook for earnings. The main exception was the Russell 2000; small capitalization stocks fell more substantially in the spring, and their rise in July was relatively muted.

Rising concerns about the outlook for Japan and other Asian economies, as well as the deepening financial problems in Russia, caused stock prices to retrace their July gains by early August. After Russia devalued the ruble and defaulted on some debts in mid-August, prices fell further, reflecting the general turbulence in global financial markets. By the end of the month, most equity indexes had fallen back to roughly their levels at the start of the year. Commercial bank and investment bank stocks fell particularly sharply, as investors became concerned about the effect on these institutions' profits of emerging market difficulties and of substantial declines in the values of some assets. Equity prices rose for a time in September but then fell back by early October before rebounding as market dislocations eased and interest rates on many private obligations fell. By December, most major indexes were back near their July highs, although the Russell 2000 remained below its earlier peak.

In late December, and into the new year, stock prices continued to advance, with several indexes reaching new highs in January. The devaluation of the Brazilian *real* caused some firms' shares to drop as investors reevaluated prospective earnings from Latin American operations, but all the major stock indexes posted gains in January; the Nasdaq advanced nearly 15 percent over the month, driven by large advances in the stock prices of high-technology firms, especially those related to the Internet. More recently, however, stock prices fell back, as interest rates rose and some investors apparently concluded that prices had risen too far, given the outlook for earnings.

The increase in equity prices last year and early this year, coupled with the slowing of earnings growth, left many valuation measures beyond their historical ranges. After ticking higher in the late summer and early autumn, the ratio of consensus estimates of earnings over the coming twelve months to prices in the S&P 500 later fell back, dropping to a new low in January. In part, the decline in this measure over the past year likely reflected lower real long-term bond yields. For example, as measured by the difference between the ten-year nominal Treasury yield and inflation expectations reported in the

Equity valuation and long-term real interest rate



NOTE. The data are monthly. The earnings–price ratio is based on the I/B/E/S International, Inc., consensus estimate of earnings over the coming twelve months. The real interest rate is the yield on the ten-year Treasury note less the ten-year inflation expectations from the Federal Reserve Bank of Philadelphia Survey of Professional Forecasters.

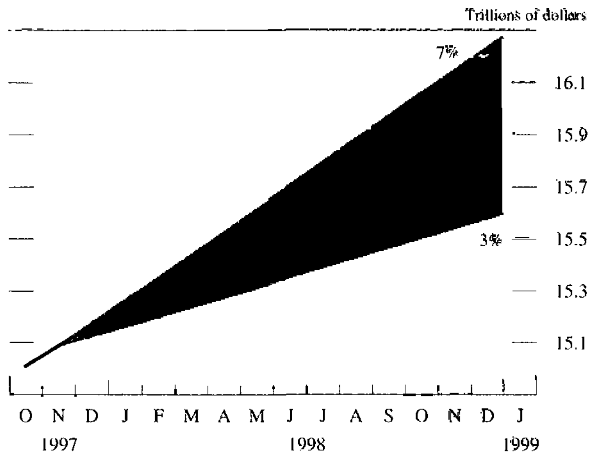
Philadelphia Federal Reserve Bank's survey of professional forecasters, real yields fell appreciably between late 1997 and early 1999. (The yield on ten-year inflation-indexed Treasury securities actually rose somewhat last year. However, the increase may have reflected the securities' lack of liquidity and the substantial rise in the premium investors were willing to pay for liquidity.) Since mid-1998, the real interest rate has declined somewhat more than the forward earnings yield on stocks, and the spread between the two consequently increased a bit, perhaps reflecting the greater sense of risk in financial markets. Nonetheless, the spread has remained quite small relative to historical norms: Investors may be anticipating rapid long-term earnings growth—consistent with the expectations of securities analysts—and they may still be satisfied with a lower risk premium for holding stocks than they have demanded historically.

Debt and the Monetary Aggregates

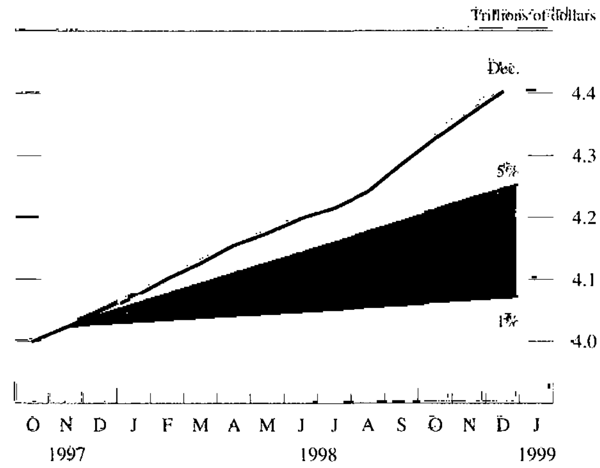
Debt and Depository Intermediation

From the fourth quarter of 1997 to the fourth quarter of 1998, the total debt of the U.S. household, government, and nonfinancial business sectors increased about 6¼ percent, in the top half of its 3 percent to 7 percent range and considerably faster than nominal GDP. Buoyed by strong spending on durable goods, housing, and business investment, as well as by merger and acquisition activity that substituted debt for equity, nonfederal debt expanded about 9 percent

Domestic nonfinancial debt: Annual range and actual level



M2: Annual range and actual level



last year, more than 2 percentage points faster than in 1997. By contrast, federal debt declined 1¼ percent, following a rise of ¾ percent the previous year.

Credit market instruments on the books of depository institutions rose at a somewhat slower pace than did the debt aggregate, posting a 5¾ percent rise in 1998, about half a percentage point less than in 1997. Growth in depository credit picked up in the second half of the year, as the turbulence in financial markets apparently led many firms to substitute bank loans for funds raised in the markets. Banks also added considerably to their holdings of securities in the third and fourth quarters, in part reflecting the attractive spreads available on non-Treasury debt instruments.

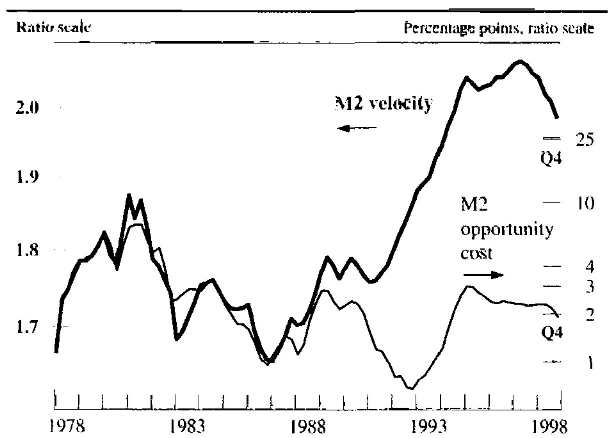
Financial firms also appeared to turn to banks for funding when the financial markets were volatile, and U.S. banks substantially expanded their lending to financial firms through repurchase agreements and loans to purchase and carry securities. As a result, growth of total bank credit, adjusted to remove the effects of mark-to-market accounting rules, accelerated to 10½ percent on a fourth-quarter to fourth-quarter basis, the largest annual increase in more than a decade.

The Monetary Aggregates

The broad monetary aggregates expanded very rapidly last year. From the fourth quarter of 1997 to the fourth quarter of 1998, M2 increased 8½ percent, placing it well above the upper bound of its 1 percent to 5 percent range. However, as the FOMC noted last February, this range was intended as a benchmark for money growth under conditions of stable prices, real economic growth near trend, and historical velocity relationships. Part of the excess of M2 above its range was the result of faster growth in nominal spending than would likely be consistent with sustained price stability. In addition, the velocity of M2 (defined as the ratio of nominal GDP to M2) fell 3 percent. Some of the decline resulted from the decrease in short-term market interest rates last year—as usual, rates on deposits fell more slowly than market rates, reducing the opportunity cost of holding M2 (defined as the difference between the rate on Treasury bills and the average return on M2 assets).

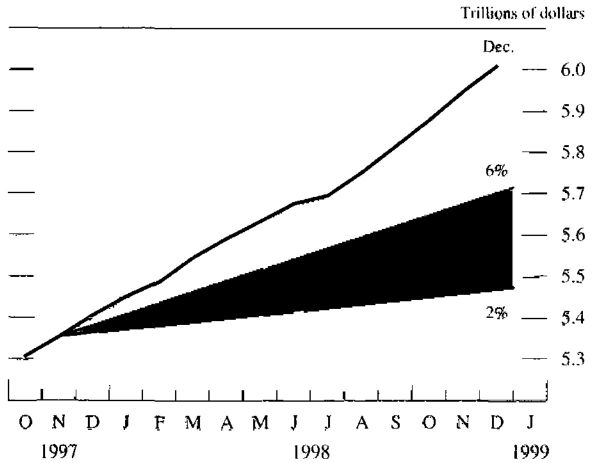
However, the bulk of the decline cannot be explained on the basis of the historical relationship between the velocity of M2 and this measure of its opportunity cost. Three factors not captured in that relationship likely contributed to the drop in velocity. First, households seem to have allocated an increased

M2 velocity and the opportunity cost of holding M2



NOTE. The data are quarterly. M2 opportunity cost is the two-quarter moving average of the three-month Treasury bill rate less the weighted-average rate paid on M2 components.

M3: Annual range and actual level



share of savings flows to monetary assets rather than equities following several years of outsized gains in stock market wealth. Second, some evidence suggests that in the 1990s the demand for M2 assets has become more sensitive to longer-term interest rates and to the slope of the yield curve, and so the decline in long-term Treasury yields last year, and the consequent flattening of the yield curve, may have increased the relative attractiveness of M2 assets. Finally, a critical source of the especially rapid M2 expansion in the fourth quarter likely was an increased demand for safe, liquid assets as investors responded to the heightened volatility in financial markets. With some of these safe-haven flows likely being reversed, growth in the broad monetary aggregates, while still brisk, has slowed appreciably early this year.

M3 expanded even faster than M2 in 1998, posting an 11 percent rise on a fourth-quarter to fourth-quarter basis. Last year's growth was the fastest since 1981 and left the aggregate well above the top end of its 2 percent to 6 percent growth range. As with M2, however, the FOMC established the M3 range as a benchmark for growth under conditions of stable prices, sustainable output growth, and the historical behavior of velocity. The rapid growth of M3 in part simply reflected the rise in M2. In addition, the non-M2 components of M3 increased 18½ percent over the year, following an even larger advance in 1997. The substantial rise in these components last year was partly the result of the funding of the robust growth in bank credit with managed liabilities, many of which are in M3. However, M3 growth was boosted to an even greater extent by flows into institution-only money funds, which have been expanding rapidly in recent years as they have increased their share of the corporate cash management business. Because investments in these funds substitute for business holdings of short-term assets that are not in M3, their rise has generated an increase in M3 growth. In addition, institution-only funds pay rates that tend to lag movements in market rates, and so their relative attractiveness was temporarily enhanced—and their growth rate boosted—by declines in short-term market interest rates late last year.

4. Growth of money and debt

Percent

Period	M1	M2	M3	Domestic nonfinancial debt
Annual[1]				
1988	4.2	5.6	6.4	9.1
1989	.6	5.2	4.1	7.5
1990	4.2	4.2	1.9	6.7
1991	8.0	3.1	1.2	4.5
1992	14.3	1.8	.6	4.5
1993	10.6	1.3	1.0	4.9
1994	2.5	.6	1.7	4.9
1995	-1.6	3.9	6.1	5.4
1996	-4.5	4.6	6.8	5.3
1997	-1.2	5.8	8.8	5.0
1998	1.8	8.5	11.0	6.3
Quarterly (annual rate)[2]				
1998:1	3.2	7.6	10.3	6.2
2	1.0	7.5	10.1	6.1
3	-2.0	6.9	8.6	6.0
4	5.0	11.0	13.2	6.4

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.

M1 increased 1¾ percent over the four quarters of 1998, its first annual increase since 1994. Currency expanded at an 8¼ percent pace, its largest rise since 1994. The increase apparently reflected continued strong foreign shipments, though at a slower pace than in 1997, and a sharp acceleration in domestic demand. Deposits in M1 declined further in 1998, reflecting the continued introduction of retail "sweep" programs. Growth of M1 deposits has been depressed for a number of years by these programs, which shift—or "sweep"—balances from household transactions accounts, which are subject to reserve requirements, into savings accounts, which are not. Because the funds are shifted back to transactions accounts when needed, depositors' access to their funds is not affected by these programs. However, banks benefit from the reduction in holdings of required reserves, which do not pay interest. Over 1998, sweep programs for demand deposit accounts became more popular, contributing to a 4¼ percent decline in such balances. By contrast, new sweep programs for other checkable deposits, which had driven double-digit declines in such deposits over the previous three years, were less important in 1998, and, with nominal spending strong and interest rates lower, other checkable deposits were about unchanged on the year.

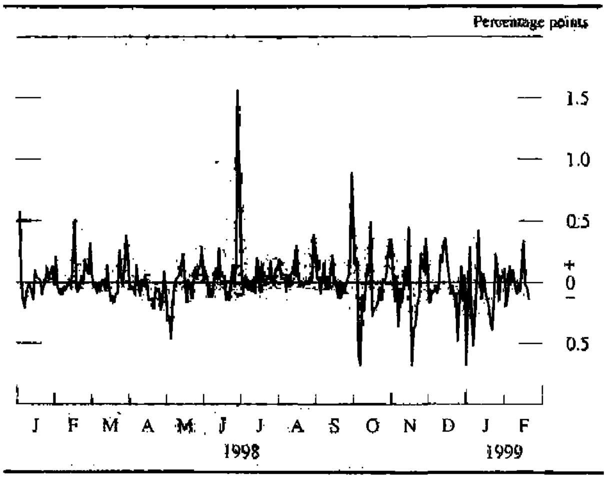
As a result of the introduction of retail sweep accounts, the average level of required reserve balances (balances that must be held at Reserve Banks to meet reserve requirements) has trended lower over the past few years. The decline has been associated with an increase in banks' required clearing balances, which are balances that banks agree in advance to hold at their Federal Reserve Bank in order to facilitate the clearing of their payments. Unlike required reserve balances, banks earn credits on their required clearing balances that can be applied to the use of Federal Reserve priced services. Despite the increase in required clearing balances, required operating balances, which are the sum of required reserve balances and required clearing balances, have declined over the past few years and in late 1998 reached their lowest level in several decades.

The decline in required operating balances has generated concerns about a possible increase in the volatility of the federal funds rate. Because a bank's required level of operating balances must be met only on average over a two-week maintenance period, banks are free to allocate their reserve holdings across the days of a maintenance period in order to minimize their reserve costs. However, banks must also manage their reserves in order to avoid overdrafts, which the Federal Reserve discourages through administrative measures and financial penalties. Thus, as required operating balances decline toward the minimum level needed to clear banks' transactions, banks are less and less able to respond to fluctuations in the federal funds rate by lending funds when the rate is high and borrowing when the rate is low. As a result, when required operating balances are low, the federal funds rate is likely to rise further than it otherwise would when demands for reserves are unexpectedly strong or supplies weak; conversely, the federal funds rate is likely to fall more in the event of weaker-than-expected demand or stronger-than-expected supply. One way to ease this difficulty would be to pay interest on required reserve balances, which would reduce banks' incentives to expend resources on sweeps and other efforts to minimize these balances.

Despite the low level of required operating balances, the federal funds rate did not become noticeably more volatile over the spring and summer of 1998. In part, this result reflected more frequent overnight open market operations by the Federal Reserve to better match the daily demand for and supply of reserves. Also, banks likely improved the management of their accounts at the Federal Reserve Banks. Moreover, large banks apparently increased their willingness to borrow at the discount window. The Federal Reserve's decision to return to lagged reserve accounting at the end of July also likely contributed to reduced volatility in the federal funds market by enhancing somewhat the ability of both banks and the Federal Reserve to forecast reserve demand.

In the latter part of 1998 and into 1999, however, the federal funds rate was more volatile. The increase may have owed partly to further reductions in

Effective federal funds rate less target rate



NOTE. Data are daily. Last observation is for February 19, 1999.

required operating balances resulting from new sweep programs, but other factors were probably more important, at least for a time. Market participants were scrutinizing borrowing banks more closely, and in some cases lenders pared or more tightly administered their counterparty credit limits, or shifted more of their placements from term to overnight maturities. The heightened attention to credit quality also made banks less willing to borrow at the discount window, because they were concerned that other market participants might detect their borrowing and interpret it as a sign of financial weakness. As a result, many banks that were net takers of funds in short-term markets attempted to lock in their funding earlier in the morning. On net, these forces boosted the demand for reserves and put upward pressure on the federal funds rate early in the day. To buffer the effect of these changes on volatility in the federal funds market, the Federal Reserve increased the supply of reserves and, at times, responded to the level of the federal funds rate early in the day when deciding on the need for market operations. Because demand had shifted to earlier in the day, however, the federal funds rate often fell appreciably below its target level by the end of the day.

At its November meeting, the FOMC amended the Authorization for Domestic Open Market Operations to extend the permitted maturity of System repurchase agreements from fifteen to sixty days. Over the remainder of 1998, the Domestic Trading Desk made use of this new authority on three occasions, arranging System repurchase agreements with maturities of thirty to forty-five days to meet anticipated seasonal reserve demands over year-end. While the Desk had in the past purchased inflation-indexed securities when rolling over holdings of maturing nominal securities, it undertook its first outright open market purchase devoted solely to inflation-indexed Treasury securities in 1998, thereby according those securities the same status in open market operations as other Treasury securities.

International Developments

In 1998, developments in international financial markets continued to be dominated by the unfolding crises in emerging markets that had begun in Thailand in 1997. Financial market turbulence spread to other emerging markets around the globe, spilling over from Korea, Indonesia, Malaysia, Singapore, the Philippines, and Hong Kong in late 1997 and in the first part of 1998 to Russia in the summer, and to Latin America, particularly Brazil, shortly thereafter. The Asian crisis contributed to a deepening recession in Japan last year, and as the year progressed, growth in several other major foreign industrial economies slowed as well.

At the beginning of 1998, many Asian currencies were declining or were under pressure. The Indonesian rupiah dropped sharply in January, amid widespread rioting and talk of a coup, and fell again in May and June, as the deepening recession prompted more social unrest and ultimately the ouster of President Suharto. Some of the rupiah's losses were reversed in the second half of the year, following the relatively orderly transition of power to President Habibie. Tighter Indonesian monetary policy, which pushed short-term interest rates as high as 70 percent by July, contributed to the rupiah's recovery. On balance, between December 1997 and December 1998, the rupiah depreciated more than 35 percent against the dollar.

In contrast, the Thai baht and Korean won, which had declined sharply in 1997, gained more than 20 percent against the dollar over the course of 1998. Policy reforms and stable political environments helped boost these currencies. Between these extremes, the currencies of the Philippines, Malaysia, Singapore, and Taiwan fluctuated in a narrower range and ended the period little changed against the dollar. In September, Malaysia imposed capital and exchange controls, fixing the ringgit's exchange rate against the dollar. The Hong Kong dollar came under pressure at times during the year, but its peg to the U.S. dollar remained intact, although at the cost of interest rates that were at times considerably elevated. Short-term interest rates in Asian economies other than Indonesia declined in 1998, and as some stability returned to Indonesian markets near the end of the year, short-term rates in that nation began to retreat from their highs.

As the year progressed, the financial storm moved from Asia to Russia. At first the Russian central bank was able to defend the ruble's peg to the dollar with interest rate increases and sporadic intervention. By midyear, however, the government's failure to reach a new assistance agreement with the International Monetary Fund, reported shortfalls in tax revenues, and the disruption of rail travel by striking coal miners protesting late wage payments brought to the fore the deep structural and political problems faced by Russia. In addition, declining oil prices were lowering government revenues and worsening the current account. As a result of these difficulties, the ruble came under renewed pressure, forcing Russian interest rates sharply higher, and Russian equity prices fell abruptly. A disbursement of $4.8 billion from the IMF in July was quickly spent to keep the currency near its level of 6.2 rubles per dollar, but the lack of progress on fiscal reform put the next IMF tranche in doubt.

On August 17, Russia announced a devaluation of the ruble and a moratorium on servicing official short-term debt. Subsequently, the ruble depreciated more than 70 percent against the dollar, the government imposed conditions on most of its foreign and domestic debt that implied substantial losses for creditors, and many Russian financial institutions became insolvent. The events in Russia precipitated a global increase in financial market turbulence, including a pullback of credit to highly leveraged investors and a widening of credit spreads in emerging market economies and in many industrial countries, which did not abate until after central banks in a number of industrial countries eased policy in the fall.

Latin American financial markets were only moderately disrupted by the Asian and Russian problems during the first half of 1998. The reaction to the Russian default, however, was swift and strong, and the prices of Latin American assets fell precipitously. The spreads between yields on Latin American Brady bonds and comparable U.S. Treasuries widened considerably (with increases ranging from 900 basis points in Argentina to 1500 basis points in Brazil) and peaked in early September before retracing part of the rise. Latin American equity prices plunged, ending the year down 25 percent or more. Several currencies came under pressure, despite sharp increases in short-term interest rates. The Mexican peso, which was also weakened by the effects of falling oil prices, depreciated 18 percent against the dollar over the year. The Colombian peso and the Ecuadorian sucre were devalued, but Argentina's currency board arrangement survived.

Brazil's central bank defended the *real*'s crawling peg until mid-January 1999 but is estimated to have used more than half of the $75 billion in foreign exchange reserves it had amassed as of last April. Anticipation of the IMF-led financial assistance package for Brazil helped spur a partial recovery in Latin American asset markets in late September and October. The details of the $41.5 billion loan package were announced in November, but after the package was approved by the IMF in early December, Brazil's Congress rejected a part of the government's fiscal austerity plan, sparking renewed financial turmoil. In mid-December, $9.3 billion of the loan package was disbursed, but as the year ended, the continuing pressure from investors seeking to take funds out of Brazil put the long-run viability of the crawling exchange rate peg in doubt. The *real* came under pressure again in early January after the state of Minas Gerais threatened not to pay its debt to the federal government. On January 13, the *real* was devalued 8 percent, and two days later it was allowed to float. Since the end of 1998, the *real* has depreciated nearly 38 percent against the dollar, and capital flight from Brazil has likely persisted. The collapse of the *real* exerted some downward pressure on the currencies of other Latin American countries. Thus far, however, contagion has been more limited than it was after the Russian devaluation; unlike Russia, Brazil has continued to meet debt service obligations, and investors apparently had an opportunity to adjust positions in advance of the devaluation and have drawn a distinction between Brazil's problems and those of other economies.

The fallout from the financial crises that hit several Asian emerging market economies in late 1997 triggered a further decline in output in the region in early 1998. In the countries most heavily affected—Thailand, Korea, Malaysia, and Indonesia—output dropped at double-digit annual rates in the first half of the year, as credit disruptions, widespread failures in the financial and corporate sectors, and a resulting high degree of economic uncertainty depressed activity severely. Output in Hong Kong also dropped in early 1998, as interest rates rose sharply amid pressure on its currency peg. Later in the year, with financial conditions in most of the Asian crisis countries stabilizing somewhat, output started to bottom out.

The Asian crisis had a relatively moderate effect on China, although it may have encouraged authorities in that country to move ahead more quickly with various financial sector reforms. Financial tensions mounted early this year as foreign investors have reacted with concern to the failure of the Guangdong International Trust and Investment Corporation. Chinese growth remained fairly strong throughout 1998, despite a dramatic slowdown in the growth of exports.

Inflation in the Asian developing economies rose only moderately on average in 1998, as the inflationary effects of currency depreciations in the region were largely offset by the deflationary influence of very weak domestic activity. The current account balances of the Asian crisis countries swung into substantial surplus last year, reflecting a sharp drop in imports resulting from the falloff in domestic demand as well as improvement in the countries' competitive positions associated with the substantial depreciations of their currencies in late 1997 and early 1998.

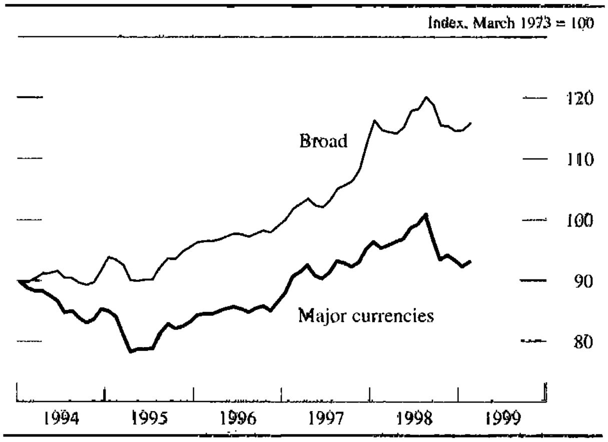
In Russia, economic activity declined last year as interest rates were pushed up in an attempt to fend off pressure on the ruble. After the August debt moratorium and ruble devaluation, output dropped sharply, ending the year down about 10 percent from its year-earlier level. The ruble collapse triggered a surge in inflation to a triple-digit annual rate during the latter part of the year.

In Latin America, the pace of economic activity slowed only moderately in the first half of 1998, as the spillover from the Asian financial turbulence was limited. The Russian financial crisis in August, in contrast, had a strong impact on real activity in Latin America, particularly Brazil and Argentina, where interest rates moved sharply higher in response to exchange rate pressures. Output in both countries is estimated to have declined in the second half of the year at annual rates of about 5 percent. Activity in Mexico and Venezuela was also depressed by lower oil export revenues. Inflation rates in Latin American countries were little changed in 1998 and ranged from 1 percent in Argentina and 3 percent in Brazil to 31 percent in Venezuela.

The dollar's value, measured on a trade-weighted basis against the currencies of a broad group of important U.S. trading partners, rose almost 7 percent during the first eight months of 1998, but it then fell, by December reaching a level about 2 percent above its year-earlier level. (When adjusted for changes in U.S. and foreign consumer price levels, the real value of the dollar in December 1998 was about 1 percent below its level in December 1997.) Before the Russian default, the dollar was supported by the robust pace of U.S. economic activity, which at times generated expectations that monetary policy would be tightened and which contrasted with weakening economic activity abroad, especially in Japan. Occasionally, however, the positive influence of the strong economy was countered by worries about growing U.S. external deficits. From August through October, in the aftermath of the Russian financial meltdown, concerns that increased difficulties in Latin America might affect the U.S. economy disproportionately, as well as expectations of lower U.S. interest rates, weighed on the value of the dollar, and it fell sharply. The broad index of the dollar's exchange value eased a bit further during the fourth quarter of the year. So far in 1999, the dollar has gained nearly 3 percent in terms of the broad index.

Against the currencies of the major foreign industrial countries, the dollar declined 2 percent in nominal terms over 1998, on balance, reversing some of its 10 percent appreciation the preceding year. Among these currencies, the dollar's value fluctuated most widely against the Japanese yen. The dollar rose against the yen during the first half of the year as a

Nominal dollar exchange rate indexes

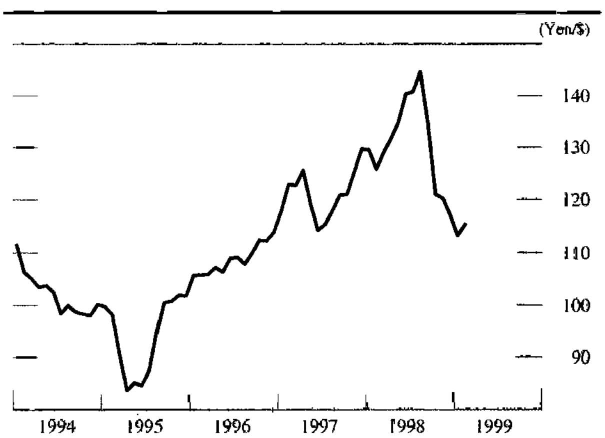


NOTE. The data are monthly. Indexes are trade-weighted averages of the exchange value of the dollar against major currencies and against the currencies of a broad group of important U.S. trading partners. Last observations are for the first three weeks of February 1999.

result of concerns about the effects of the Asian crisis on the already-weak Japanese economy and further signs of deepening recession and persistent banking system problems in that country. It reached a level of almost 147 yen per dollar in mid-June, prompting coordinated intervention by U.S. and Japanese authorities in foreign exchange markets that helped to contain further downward pressure on the yen. The dollar resumed its appreciation against the yen, albeit at a slower pace, in July and early August.

The turning point in the dollar–yen rate came after the Russian collapse, amid the global flight from risk that caused liquidity to dry up in the markets for many assets. During the first week of October, the dollar dropped nearly 14 percent against the yen in extremely illiquid trading conditions. Although fun-

U.S. exchange rate with Japan



NOTE. The data are monthly. Last observation is for the first three weeks of February 1999.

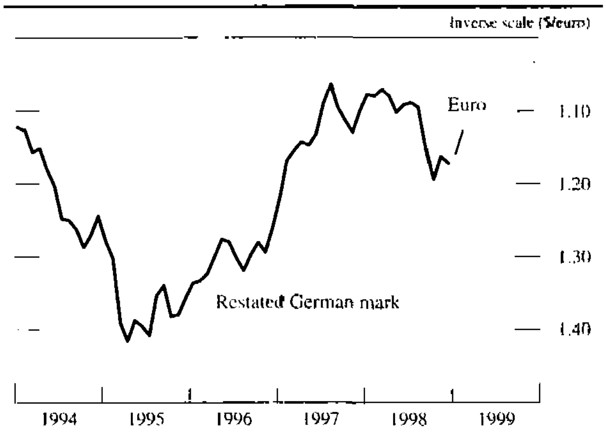
damental factors in Japan, such as progress on bank reform, fiscal stimulus, and the widening trade surplus may have helped boost the yen against the dollar, market commentary at the time focused on reports that some international investors were buying large amounts of yen. These large purchases reportedly were needed to unwind positions in which investors had used yen loans to finance a variety of speculative investments. On balance, the dollar depreciated almost 10 percent against the yen in 1998, reversing most of its net gain during 1997. It depreciated further against the yen in early 1999, hitting a two-year low on January 11, but it then rebounded somewhat amid reports of intervention purchases of dollars by the Bank of Japan. More recently, the Bank of Japan has eased monetary policy further, and the dollar has strengthened against the yen. So far this year, the dollar has gained about 7 percent against the yen.

Japanese economic activity contracted in 1998, as the country remained in its most protracted recession of the postwar era. Business and residential investment plunged, and private consumption stagnated, more than offsetting positive contributions from government spending and net exports. Core consumer prices declined slightly, while wholesale prices fell almost 4½ percent. In April, the Japanese government announced a large fiscal stimulus package. During the final two months of the year, the government announced another set of fiscal measures slated for implementation during 1999, which included permanent personal and corporate income tax cuts, various incentives for investment, and further increases in public expenditures.

Against the German mark, the dollar depreciated about 6 percent, on net, during 1998. Late in the year the dollar moved up against the mark, as evidence of a European growth slowdown raised expectations of easier monetary conditions in Europe. In the event, monetary policy was eased sooner than market participants had expected, with a coordinated European interest rate cut coming in early December.

A major event at the turn of the year was the birth of the euro, which marked the beginning of Stage Three of European Economic and Monetary Union (EMU). On December 31, the rates locking the euro with the eleven legacy currencies were determined; based on these rates, the value of the euro at the moment of its creation was $1.16675. Trading in the euro opened on January 4, with the first trades reflecting a significant premium for the euro over its initial value. As the first week of trading progressed, however, the initial euphoria wore off, and so far this year the dollar has strengthened more than 5 percent against the euro, partly reflecting better-than-expected economic data in the United States, contrasted with weaker-than-expected data in the euro area.

U.S. dollar exchange rate against the restated German mark and the euro

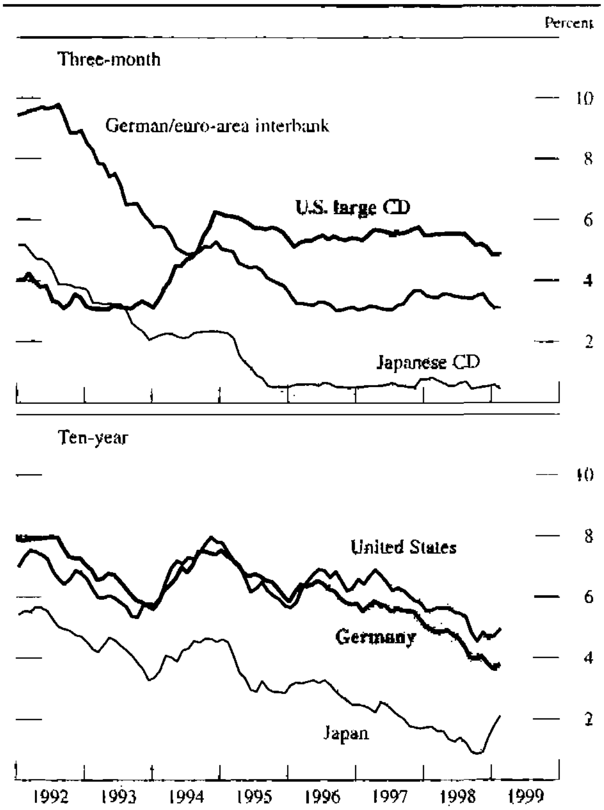


NOTE. The data are monthly. Restated German mark is the dollar/mark exchange rate rescaled by the official conversion factor between the mark and the euro, 1.95583, through December 1998. Euro exchange rate as of January 1999. Last observation is for the first three weeks of February 1999.

In the eleven European countries whose currencies are now fixed against the euro, output growth slowed moderately over the course of 1998, as net exports weakened and business sentiment worsened. Unemployment rates came down slightly, but the average of these rates remained in the double-digit range. Consumer price inflation continued to slow, helped by lower oil prices. In December, the harmonized CPI for the eleven countries stood ¾ percent above its year-earlier level, meeting the European Central Bank's primary objective of inflation below 2 percent.

Between December 1997 and December 1998, the average value of the dollar changed little against the British pound but rose 8 percent against the Canadian dollar. Weakness in primary commodity prices, including oil, likely depressed the value of the Canadian dollar. The Bank of Canada raised official rates in January 1998 and again in August, in response to currency market pressures. The Bank of England raised official rates in June 1998 to counter inflation pressures. Tighter monetary conditions in both countries, as well as a decline in net exports associated with global difficulties, contributed to a slowing of output growth in the second half of the year. The deceleration was sharper in the United Kingdom than in Canada. U.K. inflation eased slightly to near its target rate, while Canadian inflation remained near the bottom of its target range. In response to weaker economic activity as well as to the expected effects of the global financial turmoil, both the Bank of Canada

U.S. and foreign interest rates



NOTE. The data are monthly. Last observations are for the first three weeks of February 1999.

and the Bank of England have lowered official interest rates since September.

The general trend toward easier monetary conditions was reflected in declines in short-term interest rates in almost all the G-10 countries during the year. Interest rates in the euro area converged to relatively low German levels in anticipation of the launch of the third stage of EMU. Yields on ten-year government bonds in the major foreign industrial countries declined significantly over the course of the year, as economic activity slowed, inflation continued to moderate, and investors sought safer assets. Between December 1997 and December 1998, ten-year interest rates fell 180 basis points in the United Kingdom and 150 basis points in Germany. The ten-year rate fell only 30 basis points in Japan, on balance, declining about 90 basis points over the first ten months of the year but backing up in November and December. Market participants attributed the increase to concerns that the demand for bonds would be insufficient to meet the surge in debt issuance associated with the latest fiscal stimulus package.

Share prices on European stock exchanges posted another round of strong advances last year, with price indexes rising 8 percent in the United Kingdom, about 15 percent in Germany, nearly 29 percent in France, and 41 percent in Italy. In contrast, Japanese equity prices fell more than 9 percent in 1998, and Canadian share prices decreased 4 percent. After a considerable run-up earlier in the year, share prices around the globe fell sharply in August and September, but they rebounded in subsequent months as the Federal Reserve and central banks in many other industrial countries eased monetary policy.

On November 17, the FOMC voted unanimously to reauthorize Federal Reserve participation in the North American Framework Agreement (NAFA), established in 1994, and in the associated bilateral reciprocal currency swap arrangements with the Bank of Canada and the Bank of Mexico. On December 7, the Secretary of the Treasury authorized renewal of the Treasury's participation in the NAFA and of the associated Exchange Stabilization Agreement with Mexico. Other bilateral swap arrangements with the Federal Reserve—those with the Bank for International Settlements, the Bank of Japan, and many European central banks—were allowed to lapse in light of their disuse over the past fifteen years and in the presence of other well-established arrangements for international monetary cooperation. The swap arrangement between the Treasury's Exchange Stabilization Fund and the German Bundesbank was also allowed to lapse. □

Treasury and Federal Reserve Foreign Exchange Operations

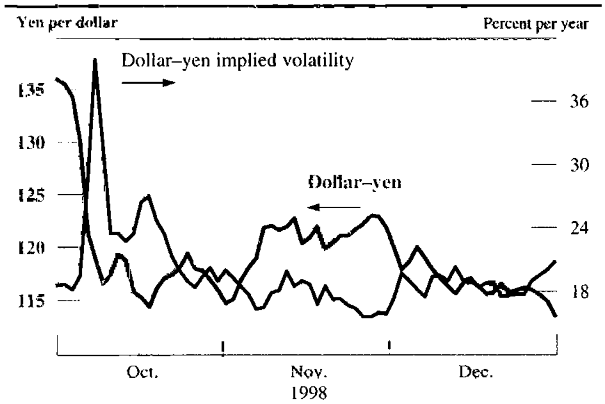
This quarterly report describes U.S. Treasury and System foreign exchange operations for the period from October through December 1998. It was presented by Peter R. Fisher, Executive Vice President, Federal Reserve Bank of New York, and Manager, System Open Market Account. Jason J. Bonança was primarily responsible for preparation of the report.

During the fourth quarter of 1998, the dollar depreciated 17.4 percent against the Japanese yen and was virtually unchanged against the German mark. Against the yen, the dollar fell sharply, as long dollar positions in speculative accounts were unwound in an effort to deleverage balance sheets and cover trading losses incurred in other markets. Later in the period, rising long-term interest rates in Japan relative to those in the United States helped to reverse a temporary dollar rebound. Against the mark, the dollar rose from early lows after relative interest rate expectations shifted in favor of the dollar, but the dollar partially retraced its gains after U.S. equity prices retreated from record highs in November. The U.S. monetary authorities did not intervene in the foreign exchange markets during the quarter.

A SHARP DECLINE OF THE DOLLAR AGAINST THE YEN

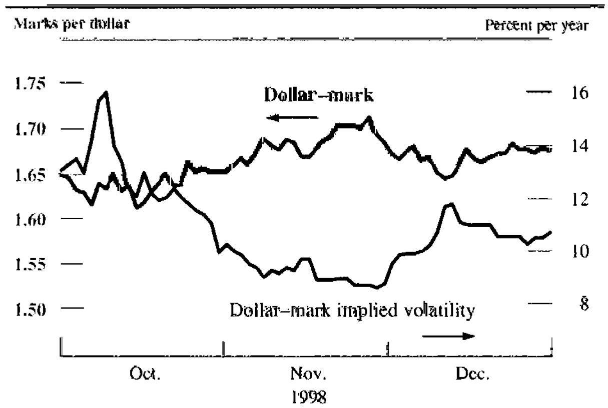
At the outset of the quarter, market unease regarding global financial market instability was on the rise. Although the dollar began the period at ¥136.50, it soon depreciated suddenly and sharply as hedge funds and other speculative accounts liquidated long dollar positions in an effort to reduce risk, deleverage balance sheets, and cover losses incurred in other markets. On October 7, the dollar–yen exchange rate fell 6.7 percent, from ¥133.90 to ¥120.55—the largest percentage change in one day since 1974. Volatility in the exchange rate intensified during the following morning's New York trading session, with the dollar falling to a low of ¥111.58 but then suddenly rebounding to a high of ¥123.40. Many market participants ascribed the dollar's burst of strength to rumors of central bank intervention or market inquiries by monetary officials. Others noted that the exchange rate's rebound occurred only after the market achieved a reasonable degree of confidence that no official intervention had taken place. Still, many market participants noted persistent interest in selling dollars in the range around ¥120, largely because of concerns that levels above this range would spark a

1. Spot exchange rate of the dollar against the Japanese yen and volatility implied by one-month option prices, 1998:Q4



NOTE. Data in this chart and those that follow are daily.
SOURCES. J.P. Morgan, Bloomberg L.P.

2. Spot exchange rate of the dollar against the German mark and volatility implied by one-month option prices, 1998:Q4



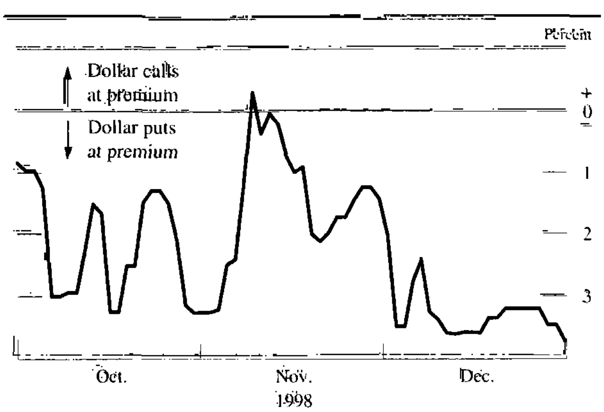
SOURCES. J.P. Morgan, Bloomberg L.P.

fresh round of position unwinding. The rapidity and magnitude of the price movements contributed to a decrease in direct interbank dealing, and bid–ask spreads quoted by some banks were several times wider than typical levels.

In contrast, an increase in electronic trading activity served to concentrate available liquidity in a transparent pricing environment. This shift in market volume to the electronically brokered medium may have influenced the price action during the dollar's depreciation. The transparency afforded by electronic brokering allowed dealers to observe prices at which actual trades were being executed. Thus, as the market digested new information, traders were not obligated to deal in order to discover current prices, reducing the need to shed undesired positions that might have been accumulated as a consequence of such dealing. As a result, price movements may have been steeper but less erratic, given that individual market participants were more able to refrain from transacting until rates reached levels they considered attractive.

Through early November, the dollar traded in a less volatile manner, largely between ¥115 and ¥120. Despite the dollar's stabilization after the sudden decline, many market participants continued to believe that leveraged investors were holding long dollar positions that they wished to unwind and that a significant possibility of a new round of heavy dollar selling remained. Option prices throughout the quarter reflected this anxiety regarding investor positioning. One-month implied volatility, while having subsided from an all-time high of 40 percent on

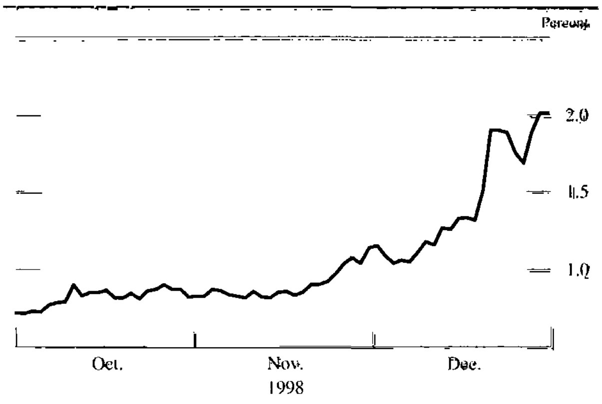
3. One-month dollar-yen risk reversals, 1998:Q4



NOTE. A risk reversal is an option position consisting of a written dollar put and a purchased dollar call that mature on the same date and are equally out-of-the-money. The price of a risk reversal indicates whether the dollar call or the dollar put is more valuable. If the dollar call is at a premium, the market is willing to pay more to insure against the risk that the dollar will rise. If the dollar put is at a premium, the market is willing to pay more to insure against the risk that the dollar will fall.

SOURCE. J.P. Morgan

4. Japanese government benchmark bond yield, 1998:Q4



SOURCE. Bloomberg L.P.

October 8, continued to trade between 15 percent and 23 percent. Meanwhile, risk reversals partly reflected a desire to protect against further downward moves in the dollar, with the premium for dollar puts in the one-month maturity reaching an all-time high of 3.6 percent on December 14.

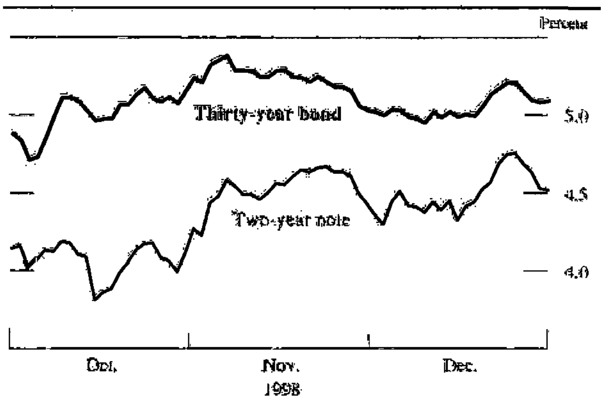
Late in the period, movements of the dollar against the yen were increasingly influenced by events in Japan, as volatility in the Japanese government bond (JGB) market increased markedly. On December 22, the Trust Fund Bureau of the Japanese Ministry of Finance announced that it would significantly reduce its purchases of Japanese government securities. This event, juxtaposed with pre-existing market anxieties regarding increased bond supply, helped the benchmark JGB yield to rise from 0.77 percent to 2.01 percent over the period. Over the quarter, the interest rate differential between ten-year JGBs and U.S. Treasuries declined 102 basis points, to end at 263 basis points. Increasing concern over the growing U.S. current account deficit placed some further pressure on the dollar. Finally, market participants noted that the yen derived some further support from expectations that the slump in Japanese economic growth might have reached its nadir. The dollar finished the quarter toward the bottom of its period range, at ¥112.80.

Swings in Asset Prices before Federal Reserve Easing

At the outset of the period, global financial market conditions were tumultuous, with investors concerned that turmoil in emerging markets was beginning to exercise increasing influence on the developed markets. Many market participants were disappointed with the magnitude of the September 29 easing by the Federal Reserve and believed that the Federal Reserve would not continue to ease aggressively in the face of heightened market volatility. The concerns of market participants persisted after the meeting of the Group of Seven (G-7) finance ministers and central bank governors on October 3–4, with many observing that concrete policy measures to confront the global financial turmoil had not yet materialized.

With this deterioration in sentiment, asset prices reflected a mounting aversion to risk. European share prices fell sharply, with the DAX slipping to a 1998 low on October 8. Moreover, throughout the first two weeks of the quarter, market participants became particularly concerned with the health of the financial sector, especially with respect to institutions believed to have sizable exposures to hedge funds or to have incurred significant losses as a result of the volatility in financial assets. On October 7, the S&P Investment Bank and Brokerage Index dropped to a twenty-one-month low. Shortly thereafter, a trend of steepening government yield curves emerged in both the United States and Europe, as investors herded cash into short-term government debt and as expectations for monetary easing as a response to the situation began to emerge. Therefore, while flight-to-quality flows had helped to push the thirty-year Treasury bond yield to an all-time low of 4.72 percent on October 5, two-year Treasury notes outperformed the thirty-year bond during the second week of October. By October 13, the yield spread between thirty-year and two-year Treasuries had increased from its period open of 73 basis points to 98 basis points. Over the first weeks of the period, spreads between some on-the-run and off-the-run Treasuries increased to several times typical levels, suggesting a heightened investor demand for liquidity.

5. U.S. Treasury yields, 1998:Q4



SOURCE. Bloomberg L.P.

On October 15, the Federal Reserve announced a reduction of 25 basis points in the targeted federal funds rate, from 5.25 to 5.00 percent, noting "growing caution by lenders and unsettled conditions in financial markets more generally." The change in the target, which was the second easing by the Federal Reserve in about as many weeks, came sooner than many market participants had expected. Over the following weeks, many financial asset prices recovered from their lows. Sentiment was also boosted by speculation that international financial institutions and monetary authorities would provide more financial support to Brazil than had previously been expected. Other policy developments around this time also encouraged market recovery. On October 21, the U.S. Congress passed legislation funding the increase in the U.S. quota in the International Monetary Fund and the New Arrangements to Borrow. Further, on October 30, G-7 leaders, finance ministers, and central bank governors issued statements laying out an immediate action plan to strengthen the international financial system and a broader agenda going forward. Nevertheless, the trend of market recovery was uneven throughout the rest of the quarter. Concern over the Brazilian government's commitment to fiscal reform surfaced intermittently and led to bouts of weakness in relatively risky financial assets. Declining oil prices weighed on petroleum-related stocks and on currencies viewed as commodity sensitive. In addition, sentiment toward emerging markets was adversely affected by renewed declines in commodity prices more broadly. By late November, the Commodities Research Bureau commodity price index had reached a new historic low and continued to trend weaker throughout the rest of the period.

On November 17, the Federal Open Market Committee (FOMC) announced a reduction of 25 basis points in the targeted federal funds rate, to 4.75 percent. In the statement issued with its decision, the Committee said that "although conditions in financial markets have settled down materially since mid-October, unusual strains remain." In the aftermath of this ease, many asset prices consolidated the trend of recovery begun earlier. In addition, the International Monetary Fund announced a $41.5 billion assistance package for Brazil on November 13. As part of this international financial support program, the U.S. Treasury announced that, through the Exchange Stabilization Fund, it would participate in a substitution agreement to guarantee up to $5.0 billion of the $13.28 billion Bank for International Settlements Credit Facility for Brazil. Shortly thereafter, the average Brady bond's stripped yield spread to Treasuries, as measured by the J. P. Morgan Emerging Markets

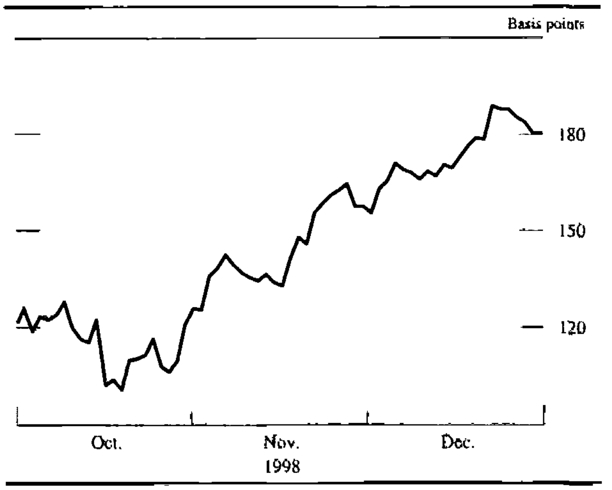
Bond Index, fell to a period low of 944 basis points. Toward the end of the quarter, trading in most instruments grew increasingly thin, with many investors reluctant to establish new risk positions before the year's end.

Relatively Subdued Dollar Trading Against the Mark

Early in the quarter, the dollar traded in a relatively volatile fashion at the bottom of its 1998 range, between DM 1.61 and DM 1.66. During this period, the dollar was pressured by the increase in risk aversion in global financial markets and increasing expectations that the Federal Reserve was more likely to reduce interest rates than the Bundesbank. However, this trend began to reverse after the reduction in interest rates announced by the Federal Reserve on October 15. Following the announcement, many market participants began to anticipate that European interest rates were also likely to fall. These expectations were supported by weak business sentiment data from Germany as well as downward revisions to market forecasts for European growth. As a result, expectations for future interest rate differentials between the United States and Europe moved in the dollar's favor after the Federal Reserve's action, and the implied yield spread between the March Eurodollar and Euromark contracts rose. The dollar reached its quarter high of DM 1.7145 on November 27.

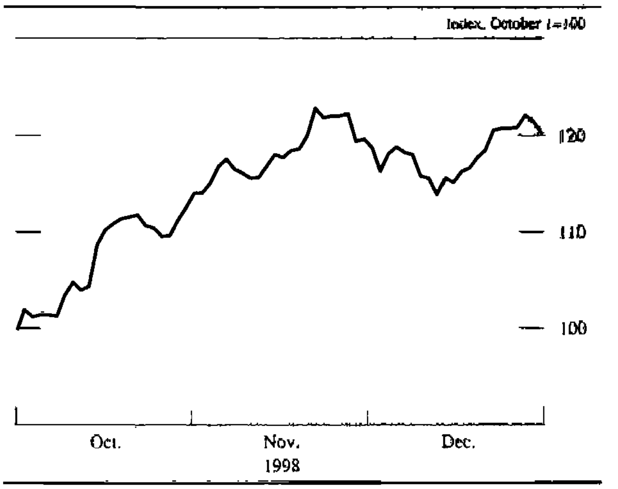
Late in November, the dollar retraced some of these gains after U.S. equity prices retreated from

6. Implied yield spread between March 1999 Eurodollar and Euromark futures, 1998:Q4



NOTE. Data are the Eurodollar implied yield minus the Euromark implied yield.
SOURCE. Bloomberg L.P.

7. Dow Jones industrial average, 1998:Q4



SOURCE. Bloomberg L.P.

newly established historic highs; profit warnings from major U.S. corporations and year-end profit taking contributed to this move in share prices. In addition, commentary from European monetary officials led to doubts regarding the likelihood of reductions in continental interest rates, lending more support to the mark. The dollar's weakening trend ended shortly after the December 3 announcement that the monetary authorities of the eleven countries participating in the European Economic and Monetary Union had reduced interest rates in a coordinated move. Toward the end of the year, expectations for future interest rate spreads continued to move against the mark and helped to lift the dollar to levels near DM 1.68, where it finished the period.

Treasury and Federal Reserve Foreign Exchange Reserves

The U.S. monetary authorities did not undertake any intervention operations during the quarter. At the end of the quarter, the current values of the German mark and Japanese yen reserve holdings totaled \$19.8 billion for the Federal Reserve System and \$16.4 billion for the Exchange Stabilization Fund. The U.S. monetary authorities invest all of their foreign currency balances in a variety of instruments that yield market-related rates of return and have a high degree of liquidity and credit quality. A significant portion of these balances is invested in German and Japanese government securities held directly or under repurchase agreement. As of December 31, outright holdings of government securities by the U.S. monetary authorities totaled \$7.6 billion.

Japanese and German government securities held under repurchase agreement are arranged either through transactions executed directly in the market or through agreements with official institutions. Government securities held under repurchase agreement by the U.S. monetary authorities totaled $9.4 billion at the end of the quarter. Foreign currency reserves are also invested in deposits at the Bank for International Settlements and in facilities at other official institutions.

RECIPROCAL CURRENCY ARRANGEMENTS

On November 17 the FOMC voted unanimously to reauthorize Federal Reserve participation in the North American Framework Agreement (NAFA), established in 1994, and the associated bilateral reciprocal currency ("swap") arrangements with the Bank of Canada and the Bank of Mexico. Likewise, the Secretary of the Treasury authorized, on December 7, the renewal of the Treasury's participation in the NAFA and of the associated Exchange Stabilization Agreement with Mexico.

Because of the formation of the European Central Bank and in light of fifteen years of disuse, the bilateral swap arrangements of the Federal Reserve with the Austrian National Bank, the National Bank of Belgium, the Bank of France, the German Bundesbank, the Bank of Italy, and the Netherlands Bank were jointly deemed no longer necessary in view of the well-established, present-day arrangements for international monetary cooperation. Accordingly, the respective parties to the arrangements mutually agreed to allow them to lapse. The swap arrangement between the Exchange Stabilization Fund and the German Bundesbank was also allowed to lapse. Similarly, it was jointly agreed to allow the bilateral swap arrangements between the Federal Reserve and the National Bank of Denmark, the Bank of England, the Bank of Japan, the Bank of Norway, the Bank of Sweden, the Swiss National Bank, and the Bank for International Settlements to lapse in light of their disuse and present-day arrangements for international monetary cooperation. □

1. Foreign currency holdings of U.S. monetary authorities based on current exchange rates, 1998:Q4
Millions of dollars

Item	Balance, Sept. 30, 1998	Quarterly changes in balances by source					Balance, Dec. 31, 1998
		Net purchases and sales[1]	Impact of sales[2]	Investment income	Currency valuation adjustments[3]	Interest accrual (net) and other	
FEDERAL RESERVE							
Deutsche marks	12,688.6	0	0	111.3	24.1	0	12,824.0
Japanese yen	5,663.8	0	0	5.0	1,178.1	0	6,846.9
Total	18,352.4	0	0	116.3	1,202.2	0	19,670.9
Interest receivables[4]	95.1	...	...	...	...	−12.3	82.8
Other cash flow from investments[5]	...	...	...	...	...	14.8	14.8
Total	**18,447.5**	...	...	**116.3**	**1,202.2**	**2.5**	**19,768.5**
U.S. TREASURY EXCHANGE STABILIZATION FUND							
Deutsche marks	6,423.4	0	0	58.7	12.3	0	6,494.4
Japanese yen	8,106.0	0	0	7.4	1,686.0	0	9,799.4
Total	14,529.4	0	0	66.1	1,698.3	0	16,293.8
Interest receivables[4]	48.6	...	...	...	...	−4.3	44.3
Other cash flow from investments[5]	...	...	...	...	...	21.4	21.4
Total	**14,578.0**	...	...	**66.1**	**1,698.3**	**17.1**	**16,359.5**

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

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

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

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

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

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

2. Net profits or losses (–) on U.S. Treasury and Federal Reserve foreign exchange operations, based on historical cost-of-acquisition exchange rates, 1998:Q4

Millions of dollars

Period and item	Federal Reserve	U.S. Treasury Exchange Stabilization Fund
Valuation profits and losses on outstanding assets and liabilities, Sept. 30, 1998		
Deutsche marks	974.3	84.3
Japanese yen	51.7	80.0
Total	**1,026.0**	**164.3**
Realized profits and losses from foreign currency sales, Sept. 30, 1998–Dec. 31, 1998		
Deutsche marks	0	0
Japanese yen	0	0
Total	**0**	**0**
Valuation profits and losses on outstanding assets and liabilities, Dec. 31, 1998		
Deutsche marks	998.5	96.6
Japanese yen	1,229.8	1,766.0
Total	**2,228.2**	**1,862.7**

3. Currency arrangements, December 31, 1998

Millions of dollars

Institution	Amount of facility	Outstanding, Dec. 31, 1998
	Federal Reserve reciprocal currency arrangements	
Bank of Canada	2,000	0
Bank of Mexico	3,000	0
Total	**5,000**	**0**
	U.S. Treasury Exchange Stabilization Fund currency arrangements	
Bank of Mexico	3,000	0
Total	**3,000**	**0**

Industrial Production and Capacity Utilization for January 1999

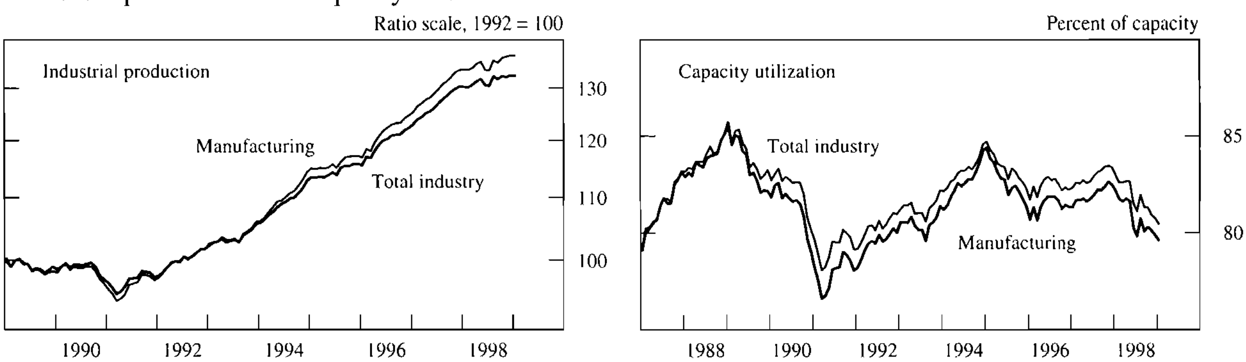
Released for publication February 17

Industrial production was unchanged in January. Manufacturing output increased 0.1 percent, and utility output increased 0.2 percent, but production at mines decreased 1.8 percent. At 136.7 percent of its 1992 average, manufacturing production in January was 2.2 percent higher than it had been in January 1998. Overall capacity utilization in January slipped 0.3 percentage point, to 80.5 percent, 1½ percentage points below its 1967–98 average.

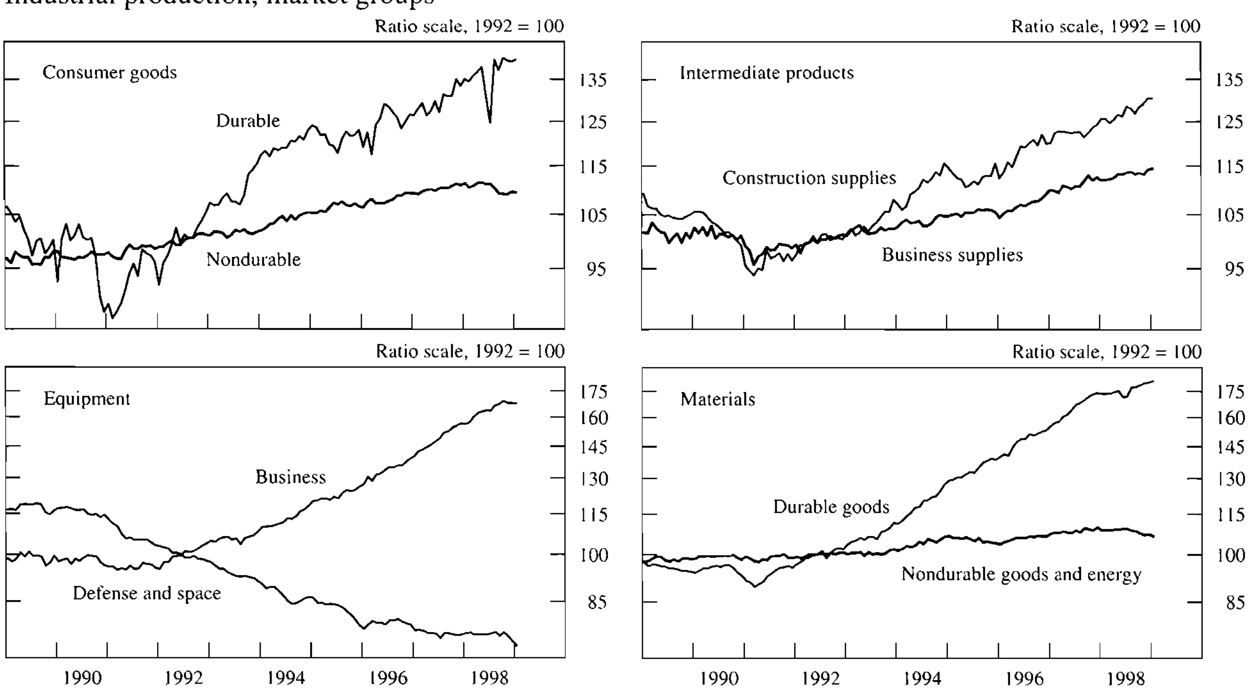
Market Groups

The output of durable consumer goods, which increased 0.3 percent, was lifted by an increase in

Industrial production and capacity utilization



Industrial production, market groups



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

Industrial production and capacity utilization, January 1999

Category	Industrial production, index, 1992 = 100								
	1998			1999	Percentage change				
					1998[1]			1999[1]	Jan. 1998 to Jan. 1999
	Oct.[r]	Nov.[r]	Dec.[r]	Jan.[p]	Oct.[r]	Nov.[r]	Dec.[r]	Jan.[p]	
Total	**132.4**	**132.3**	**132.5**	**132.5**	**.4**	**–.1**	**.2**	**.0**	**1.7**
Previous estimate	132.6	132.5	132.8	...	.5	–.1	.2	...	...
Major market groups									
Products, total[2]	124.9	124.5	124.7	124.6	.6	–.3	.2	–.1	1.6
Consumer goods	115.2	115.1	115.4	115.4	.4	–.1	.3	.0	–.5
Business equipment	169.0	168.0	168.0	167.7	1.0	–.6	.0	–.1	7.3
Construction supplies	128.4	129.1	130.3	130.3	1.2	.5	1.0	.0	3.8
Materials	144.5	144.8	145.2	145.3	.1	.2	.3	.1	1.9
Major industry groups									
Manufacturing	136.1	136.4	136.6	136.7	.7	.2	.1	.1	2.2
Durable	161.2	161.0	161.4	161.6	1.0	–.1	.2	.1	5.1
Nondurable	110.9	111.6	111.6	111.6	.3	.7	.0	–.1	–1.3
Mining	102.0	101.4	100.3	98.5	–.4	–.5	–1.2	–1.8	–8.5
Utilities	116.5	111.4	114.1	114.3	–3.1	–4.4	2.4	.2	4.2
	Capacity utilization, percent								MEMO Capacity, percentage change, Jan. 1998 to Jan. 1999
	Average, 1967–98	Low, 1982	High, 1988–89	1998	1998			1999	
				Jan.	Oct.[r]	Nov.[r]	Dec.[r]	Jan.[p]	
Total	**82.1**	**71.1**	**85.4**	**83.0**	**81.3**	**80.9**	**80.8**	**80.5**	**4.9**
Previous estimate	...			...	81.4	81.0	80.9	...	...
Manufacturing	81.1	69.0	85.7	82.2	80.3	80.1	79.9	79.6	5.5
Advanced processing	80.5	70.4	84.2	81.0	79.6	79.5	79.1	78.8	6.5
Primary processing	82.4	66.2	88.9	85.2	82.4	82.3	82.4	82.1	2.8
Mining	87.5	80.3	88.0	90.0	84.7	84.2	83.1	81.6	.9
Utilities	87.4	75.9	92.6	87.2	92.0	87.9	90.0	90.1	.9

NOTE. Data seasonally adjusted or calculated from seasonally adjusted monthly data.
1. Change from preceding month.
2. Contains components in addition to those shown.
r Revised.
p Preliminary.

automotive products. In contrast, the production of nondurable consumer goods excluding energy fell 0.3 percent and was down 2¼ percent from its level a year ago, a drop reflecting, in part, softness for clothing and paper products. The output of consumer energy products, which has been volatile recently, rose noticeably again in January.

The production of business equipment edged down 0.1 percent. Declines in the output of industrial equipment and transit equipment more than offset a gain in information processing equipment. Some of the decrease in transit equipment reflects further reductions in commercial aircraft production, which peaked last fall after having climbed rapidly during the past few years. The output of construction supplies was flat, but at a high level, following strong gains in the fourth quarter. The production of business supplies increased 0.2 percent.

The production of materials inched up 0.1 percent after having risen modestly in the preceding three months. The production of durable goods materials increased 0.5 percent mainly because of strength in the production of semiconductors and computer parts. However, the output of basic metals fell 0.6 percent, continuing the weakness that had begun in early 1998. In addition, the output of consumer durable parts, which rose rapidly late last year, has somewhat eased recently. The production of nondurable materials also edged down 0.2 percent, a move mainly reflecting ongoing weakness in textiles and chemicals.

INDUSTRY GROUPS

Manufacturing output edged up 0.1 percent, with a small gain in the production of durable goods and a slight pullback in the production of nondurable goods. Within durable goods industries, changes in production were mixed. Industries with large increases in production included lumber, furniture, and electrical machinery; industries showing cutbacks included primary metals, transportation equipment (notably civilian aircraft), and miscellaneous manufactures. The production of nondurable goods edged down 0.1 percent in January after having been flat in December. Losses in tobacco, apparel, and leather products more than offset gains in petroleum and food products. Mining production fell again, pulled down by a sharp drop-off in coal production and the continued contraction in oil and gas extraction.

The factory operating rate dropped 0.3 percentage point, to 79.6 percent—more than 2½ percentage points below the level of January 1998. The utilization rates for advanced-processing and primary-processing industries slipped 0.3 percentage point. The utilization rate for mines fell 1.5 percentage points, to a level about 6 percentage points below its long-term average. Temperatures remained relatively warm, and the operating rate for utilities, at about 90 percent, was little changed.

NOTICE

The data in this release include preliminary estimates of capacity growth for 1999. The capacity estimates in next month's release will incorporate a small change in the method used to interpolate the annual estimates of capacity growth to the monthly frequency. The current monthly capacity figures are computed under the assumption that capacity growth is constant from the beginning to the end of a year but that growth rates may change abruptly between the last months of one year and the first months of the next. The new procedure, which allows capacity growth rates to change smoothly over time, will be incorporated in the data beginning with October 1998. □

Statements to the Congress

Statement by Alan Greenspan, Chairman, Board of Governors of the Federal Reserve System, before the Committee on Ways and Means, U.S. House of Representatives, January 20, 1999

The American economy through year-end continued to perform in an outstanding manner. Economic growth remained solid, and financial markets, after freezing up temporarily following the Russian default, are again channeling an ample flow of capital to businesses and households. Labor markets have remained quite tight, but, to date, this has failed to ignite the inflationary pressures that many had feared.

To be sure, there is decided softness in a number of manufacturing industries, as weakness in many foreign economies has reduced demand for U.S. exports and intensified competition from imports. Moreover, underutilized production capacity and pressure on domestic profit margins, especially among manufacturers, are likely to rein in the rapid growth of new capital investment. With corporations already relying increasingly on borrowing to finance capital investment, any evidence of a marked slowing in corporate cash flow is likely to induce a relatively prompt review of capital budgets.

The situation in Brazil and its potential for spilling over to reduce demand in other emerging market economies also constitute a possible source of downside risk for demand in the United States. So far, markets seem to have reacted reasonably well to the decisions by the Brazilian authorities to float their currency and redouble efforts at fiscal discipline. But follow-through in reducing budget imbalances and in containing the effects on inflation of the drop in value of the currency will be needed to bolster confidence and to limit the potential for contagion to the financial markets and economies of Brazil's important trading partners, including the United States.

While there are risks going forward, to date domestic demand and hence employment and output in the United States certainly has remained vigorous. Though the pace of economic expansion is widely expected to moderate as 1999 unfolds, signs of an appreciable slowdown as yet remain scant.

But to assess the economic outlook properly, we need to reach beyond the mere description of America's sparkling economic performance of eight years of record peacetime expansion to seek a deeper understanding of the forces that have produced it. I want to take a few moments this morning to discuss one key element behind our current prosperity—the rise in the value markets place on the capital assets of U.S. businesses. Lower inflation, greater competitiveness, and the flexibility and adaptability of our businesses have enabled them to take advantage of a rapid pace of technological change to make our capital stock more productive and profitable. I will argue that the process of recognizing this greater value has produced capital gains in equity markets that have lowered the cost of investment in new plant and equipment and spurred consumption. But while asset values are very important to the economy and so must be carefully monitored and assessed by the Federal Reserve, they are not themselves a target of monetary policy. We need to react to changes in financial markets, as we did this fall, but our objective is the maximum sustainable growth of the U.S. economy, not particular levels of asset prices.

As I have testified before the Congress many times, I believe, at root, that the remarkable generation of capital gains of recent years has resulted from the dramatic fall in inflation expectations and associated risk premiums and broad advances in a wide variety of technologies that produced critical synergies in the 1990s.

Capital investment, especially in high-tech equipment, has accelerated dramatically since 1993, presumably reflecting a perception on the part of businesses that the application of these emerging technological synergies would engender a significant increase in rates of return on new investment.

Indeed, some calculations support that perception. They suggest that the rate of return on capital facilities put in place during recent years has, in fact, moved up markedly. In part this may result from improved capital productivity—that is, the efficiency of the capital stock. In addition, we may be witnessing some payoffs from improved organizational and managerial efficiencies of U.S. businesses and from the greater education—in school and on the job—that U.S. workers have acquired to keep pace with the new technology. All these factors have been reflected in an acceleration of labor productivity growth.

Parenthetically, improved productivity probably explains why the American economy has done so well despite our oft-cited subnormal national saving rate. The profitability of investment here has attracted saving from abroad, an attraction that has enabled us to finance a current account deficit while maintaining a strong dollar. Clearly, we use both domestic saving and imported financial capital in a highly efficient manner, apparently more efficiently than many, if not most, other major industrial countries.

While discussions of consumer spending often continue to emphasize *current income* from labor and capital as the prime sources of funds, during the 1990s, capital gains, which reflect the valuation of expected *future incomes*, have taken on a more prominent role in driving our economy.

The steep uptrend in asset values of recent years has had important effects on virtually all areas of our economy but perhaps most significantly on household behavior. It can be seen most clearly in the measured personal saving rate, which has declined from almost 6 percent in 1992 to effectively zero today.

Arguably, the average household does not perceive that its saving has fallen off since 1992. In fact, the net worth of the average household has increased nearly 50 percent since the end of 1992, well in excess of the gains of the previous six years. Households have been accumulating resources for retirement or for a rainy day, despite very low measured saving rates.

The resolution of this seeming dilemma illustrates the growing role of rising asset values in supporting personal consumption expenditures in recent years. It also illustrates the importance when interpreting our official statistics of taking account of how they deal with changes in asset values.

With regard first to the statistical issues, capital gains themselves are not counted as income, but some transactions resulting from capital gains reduce disposable household income as we measure it, while having no effect on consumption. As a consequence, as capital gains and these associated transactions mount, published saving rates are decreased. For example, reported personal income is reduced when corporations cut back payments into defined-benefit pension plans because of higher equity prices; however, such reductions do not diminish anticipated retirement income and thus should not lower consumption. And reported disposable income is decreased when households pay taxes on capital gains realizations that would not have been so large in less ebullient markets. However, capital gains tax payments also are highly unlikely to be associated with lower spending because the cash realized from the sale of the asset exceeds the tax, and in most cases the typical household presumably does not perceive of this transaction as reducing available income or financial resources. Together these two effects probably account for an appreciable portion of the reduction in the reported saving rate.

But beyond these statistical issues, there is little doubt that capital gains have increased consumption relative to income from current production over recent years. Economists have long recognized a "wealth effect"—a tendency for consumption to rise by a fraction of the capital gains on existing assets owned by households—though the magnitude of this effect remains difficult to estimate accurately. We have some evidence from recent years that all or most of the decline in the saving rate is accounted for by the upper income quintile in which the capital gains have disproportionately accrued, which suggests that the wealth effect has been real and significant. Thus, all else equal, a flattening of stock prices would likely slow the growth of spending, and a decline in equity values, especially a severe one, could lead to a considerable weakening of consumer demand.

Some moderation in economic growth, however, might be required to sustain the expansion. Through the end of 1998, the economy continued to grow more rapidly than can be currently accommodated on an ongoing basis, even with higher, technology-driven productivity growth. Growth has continued to shrink the pool of workers willing to work but without jobs. While higher productivity has helped to keep labor cost increases in check, it cannot be expected to do so indefinitely in ever-tighter labor markets.

Despite brisk demand and improved productivity growth, corporate profits have sagged over recent quarters. This is attributable in part to some acceleration in labor compensation, but other factors have also been pressing, especially intensified competition and lower prices facing our exporters and those industries competing with imports. In these circumstances, businesses will feel under considerable pressure to preserve profit margins should labor costs accelerate further, or should the falling prices of commodity inputs, like oil, turn around. But to date, businesses' evident pricing power has been scant. Either that would change and inflation could begin to mount or, if costs could not be recouped, capital outlays might well be cut back.

The recent behavior of profits also underlines the unusual nature of the rebound in equity prices and the possibility that the recent performance of the equity markets will have difficulty in being sustained. The level of equity prices would appear to envision substantially greater growth of profits than has been experienced of late.

Moreover, the impressive capital gains of recent years would seem also to rest on a perception of relatively low risk in corporate ownership. Risk aversion and uncertainty rose sharply over the late summer and fall of 1998 after the Russian default in mid-August, as evidenced by widening spreads among yields on debt of differing credit qualities and liquidity. The rise in uncertainty increased the discounting of claims on future incomes, and that reduced stock market prices even as the long-term earnings growth expectations of security analysts continued to rise. As risk aversion subsided after mid-October, stock prices returned to record levels.

Markets have doubtless stabilized significantly after the turbulence of last fall, but they remain fragile, as the repercussions of the recent Brazilian devaluation attest. Moreover, our chronic current account deficit has widened significantly, in part reflecting the strength of domestic demand that has accompanied the further accumulation of capital gains. The continued increase in our net external debt and its growing servicing costs clearly are not sustainable indefinitely.

In light of the importance of financial markets in the economy, and of the volatility and vulnerability in financial asset prices more generally, policymakers must continue to pay particular attention to these markets. The Federal Reserve's easing last fall responded to an abrupt stringency in financial markets and the effects that the consequent increased risk aversion was likely to have on economic activity going forward. We were particularly concerned about higher costs and disrupted financing in debt markets, where much of consumption and investment is funded. We were not attempting to prop up equity prices, nor did we plan to continue to ease rates until equity prices recovered, as some have erroneously inferred.

This has not been, and is not now, our policy or intent. As I have discussed earlier, movements in equity prices can play an important role in the economy, which the central bank must take into account. And we may question from time to time whether asset prices may not embody a more optimistic outlook than seems reasonable, or what the consequences might be of a further rise in those prices followed by a steep decline. But many other forces also drive our economy, and it is the performance of the entire economy that forms our objectives and shapes our actions.

Nonetheless, in the current state of financial markets, policymakers are going to have to be particularly wary of actions that unnecessarily sow uncertainties, undermine confidence, and interfere with the efficient allocation of capital on which our economic prosperity and asset values rest. It is important not to undermine the highly sensitive ongoing process of reallocation of capital from less to more productive uses. For productivity and standards of living to grow, not only must capital raised in markets be allocated efficiently, but internal cash flow, including the depreciation charges from the existing capital stock, must be continuously directed to their most profitable uses. It is this continuous churning, this so-called creative destruction, that has become so essential to the effective deployment of advanced technologies by this country over recent decades. In this regard, drift toward protectionist trade policies, which are always so difficult to reverse, is a much greater threat than is generally understood.

It is well known that erecting barriers to the free flow of goods and services across national borders undermines the division of labor and standards of living by impeding the adjustment of the capital stock to its most productive uses. Not so well understood, in my judgment, is the impact that fear of growing protectionism would have on profit expectations, and hence on the current values of capital assets. Protectionism was a threat to standards of living when capital asset values were low relative to income. It becomes particularly pernicious in an environment, such as today's, when that is no longer the case.

In sum, it has been the ability of our flexible and innovative businesses and workforce that has enabled the United States to take full advantage of emerging technologies to produce greater growth and higher asset values. Policy has facilitated this process by containing inflation and by promoting competitiveness through deregulation and an open global trading system. Our task going forward—at the Federal Reserve as well as in the Congress and Administration—is to sustain and strengthen these policies, which in turn have sustained and strengthened our now record peacetime economic expansion.

Statement by Alan Greenspan, Chairman, Board of Governors of the Federal Reserve System, before the Committee on the Budget, U.S. Senate, January 28, 1999

As you requested in your letter of invitation, today I will be addressing one of our nation's most pressing public policy challenges: social security.

The dramatic increase in the ratio of retirees to workers that is projected, as the baby boomers move to retirement and enjoy ever-greater longevity, makes our current pay-as-you-go social security system unsustainable. Furthermore, the broad support for social security appears destined to fade as the implications of its current form of financing become increasingly apparent. To date, with the ratio of retirees to workers having been relatively low, workers have not considered it a burden to share the goods and services they produce with retirees. The rising birth rate after World War II, which, in due course, lowered the ratio of retirees to workers, helped make the social security program exceptionally popular, even among those paying the taxes to support it.

Indeed, workers perceived it to be a good investment for their *own* retirement. For those born before World War II, the annuity value of benefits on retirement far exceeded the cumulative sum at the time of retirement of contributions by the worker and his or her employer, plus interest. For example, the implicit real rate of return has been strikingly high for those born in 1920—on average, near 6 percent. The real interest rate on U.S. Treasury bonds, by comparison, has generally been less than 3 percent.

But births flattened after the baby boom, and life expectancy beyond age sixty-five continued to rise. Consequently, the ratio of the number of workers contributing to social security to the number of beneficiaries has declined to the point that maintaining the annuity value of benefits on retirement at a level well in excess of accumulated contributions has become increasingly unlikely. Those born in 1960, for example, are currently calculated to receive a real rate of return, on average, of less than 2 percent on their cumulative contributions. Indeed, even these low rates of return for more recent cohorts likely are being overestimated because they are based on current law taxes and benefits. In all likelihood, these taxes will have to be raised, or benefits cut, given that the system as a whole is still significantly underfunded, at least according to the intermediate projections of the Old-Age and Survivors Insurance (OASI) actuaries. For the present value of current law benefits over the next seventy-five years to be fully funded through contributions, social security taxes would have to be raised by about 2.2 percent of taxable payroll; to be fully funded in perpetuity, that is, to ensure that taxes and interest income will always be sufficient to pay benefits, social security taxes would have to be raised much more—perhaps between about 4 percent and 5 percent of taxable payroll.

This issue of funding underscores the critical elements in the forthcoming debate on social security reform because it focuses on the core of any retirement system, private or public. Simply put, enough resources must be set aside over a lifetime of work to fund retirement consumption. At the most rudimentary level, one could envision households saving by actually storing goods purchased during their working years for consumption during retirement. Even better, the resources that would have otherwise gone into the stored goods could be diverted to the production of new capital assets, which would, cumulatively, over a working lifetime, produce an even greater quantity of goods and services to be consumed in retirement.

In this light, increasing our national saving is critical. The President's approach to social security reform supports a large unified budget surplus. This is a major step in the right direction in that it would ensure that the current rise in government's positive contribution to national saving is sustained. The large surpluses projected over the next fifteen years, if they actually materialize, can significantly reduce the fiscal pressures created by our changing demographics.

To maximize the benefits of this increased saving, it is crucial that the saving is put to its best use. For productivity and standards of living to grow, financial capital raised in markets or generated from internal cash flow from existing plant and equipment must be continuously directed by firms to its most profitable uses—namely new physical capital facilities perceived as the most efficient in serving consumers' multiple preferences. It is this continuous churning, this so-called creative destruction, that has become so essential to the effective deployment of advanced technologies by this country over recent decades. Indeed, improved productivity of capital probably explains much of why the American economy has done so well despite our comparatively low national saving rate. In addition, the profitability of investment in the United States has attracted saving from abroad, which has facilitated the expansion and modernization of our capital stock. Clearly, we use both domestic saving and imported financial capital in a highly efficient manner, apparently more efficiently than many, if not most, other major industrial countries.

Looking forward, the effective application of our capital to its most highly valued use is going to become, if anything, more important, as we strive to increase the resources available to provide for the retirement of the baby boomers without, in the future, significantly reducing the consumption of workers.

Investing a portion of the social security trust fund assets in equities, as the Administration and others have proposed, would arguably put at risk the efficiency of our capital markets and thus, our economy. Even with Herculean efforts, I doubt if it would be feasible to insulate, over the long run, the trust funds from political pressures—direct and indirect—to allocate capital to less than its most productive use.

The experience of public pension funds seems to bear this out. Although relevant comparisons to private plans are difficult to construct, there is evidence that the average rate of return on state and local pension funds tends to be lower than the return realized on comparable private pension funds, other pooled investments, and market indexes. Of course, a significant part of this disparity would be eliminated if these returns were adjusted for risk because public pension plans are often invested more conservatively than private plans. But there is evidence that returns are lower even after accounting for differences in the portfolio allocation between stocks and bonds. For example, it has been shown that state pension plans that are required to direct a portion of their investments in-state and those that make "economically targeted investments" experience lower returns as a result. Similarly, there is evidence that suggests that the greater the proportion of trustees who are political appointees, the lower the rate of return. A lower risk-adjusted rate of return on financial assets is almost invariably an indication of lower rates of return on the real underlying assets on which they are a claim.

Some have argued that the federal government has already shown itself capable of investing in equities without political interference, and I have no doubt that the investments of the $60 billion federal thrift plan and the $6 billion Federal Reserve retirement plan have been made independently. Moreover, the federal thrift plan has not been an attraction because it is a defined contribution plan and therefore effectively self-policed by individual contributors. These plans do not reach the asset size threshold to engage the political establishment—but that would not be the case for a multitrillion dollar social security trust fund. A trust fund invested in U.S. Treasury securities does not appear to be available for politically supported private projects. A fund that can own equity would.

This issue is of particular concern when the pension plan provides a defined benefit. Under these circumstances, the beneficiaries' returns are government guaranteed, and hence they have no incentive to monitor the performance of their invested funds. In sum, because I do not believe that it is politically feasible to insulate such huge funds from governmental influence, investing social security trust fund assets in equities compromises the efficient allocation of our capital—which, as the past few years have demonstrated, is so essential to raising our standards of living.

This risk might be worth taking if having the social security trust fund invest in equities provided real benefits to households. But this is not likely to be the case on average. Having the trust fund invest in private securities most likely will increase its rate of return, although perhaps not on a properly risk-adjusted basis. But, as I have argued previously before this committee, unless new savings are created in the process, the corporate securities that displace Treasury securities in the social security trust funds must be exactly offset by the mirror image displacement of corporate securities by government securities in private portfolios, probably largely in private funds held for retirement. This swap is essentially a zero sum game. To a first approximation, aggregate retirement resources—from both social security and private funds—do not change.

The crucial retirement funding issues center on how to increase the amount of saving and how to allocate resources between active workers and retirees. It may turn out that the additional new resource requirements, whether mandated savings or additional taxes, to fully fund current benefit levels will prove too burdensome, particularly once future Medicare benefits are accounted for. If so, the level of retirement benefits, funded through social security or private retirement accounts, that is affordable in our economy will remain an important issue. There have been extensive discussions of potential changes, such as extending the age of full retirement benefit entitlement, altering the benefit calculation bend points, and adjusting annual cost-of-living escalation to a more accurate measure. Considerations such as these should not be taken off the table.

While a sharp rise in the number of retirees in about ten years seems almost a certainty, the financial and economic state of the American economy in the early twenty-first century is not. We cannot confidently project large surpluses in our unified budget over the next fifteen years, given the inherent uncertainties of budget forecasting. How can we ignore the fact that virtually all forecasts of the budget balance have been wide• of the mark in recent years? For example, as recently as February 1997, the Office of Management and Budget projected a deficit for fiscal year 1998 of $121 billion—a $191 billion error. The Congressional Budget Office and others made similar errors. Likewise, in 1983, we confidently projected a solvent social security trust fund through 2057. Our latest estimate with few changes in the program is 2032.

It is possible, as some maintain, that the OASI actuaries are too conservative and that productivity growth could be far greater than is anticipated in their "intermediate" estimate. If that is, in fact, our prospect, the social security system is not in as much jeopardy as it currently appears. But proper fiscal planning requires that consequences of mistakes in all directions be evaluated. If we move now to shore up the social security program, or replace it, in part or in whole, with a private system, and subsequently find that we had been too pessimistic in our projections, the costs to our society would be few. If we assume more optimistic scenarios and they prove wrong, the imbalances could become overwhelming, and finding a solution would be even more divisive than today's problem. □

Announcements

APPOINTMENTS OF NEW MEMBERS AND A NEW CHAIR AND VICE CHAIR OF THE CONSUMER ADVISORY COUNCIL

The Federal Reserve Board on January 5, 1999, named ten new members to its Consumer Advisory Council for three-year terms and designated a new chair and vice chair of the council for 1999.

The council, which consists of thirty members, advises the Board on the exercise of its responsibilities under the Consumer Credit Protection Act and on other matters in the area of consumer financial services. The council meets three times a year in Washington, D.C. Yvonne S. Sparks, President of the Community Investment Department for NationsBank Community Investments Group in St. Louis, Missouri, was designated chair. Her term runs through December 1999. Dwight Golann, a professor of law at Suffolk University Law School in Boston, Massachusetts, was designated vice chair. His term on the council ends in December 2000.

The ten new members are the following:

Lauren Anderson
Executive Director, Neighborhood Housing Service
New Orleans, Louisiana

Ms. Anderson is the Executive Director of the Neighborhood Housing Services of New Orleans, a nonprofit housing corporation that has the reputation of doing highly creative and innovative projects. Ms. Anderson was previously a project manager for the Department of Housing and Economic Development for Jersey City, a staff attorney for the American Civil Liberties Union, and an associate with a law firm representing nonprofit and affordable housing developers. She has served on the Board of Directors of the Metropolitan Area Committee, the New Orleans Neighborhood Development Collaborative, and the Federal Home Loan Bank of Dallas.

Malcolm M. Bush
President, The Woodstock Institute
Chicago, Illinois

Mr. Bush is President of The Woodstock Institute, a nonprofit organization that engages in applied research, public education, and technical assistance to increase investment and promote economic development in low- to moderate-income and minority communities. Before joining Woodstock in 1992, Mr. Bush served as assistant professor of social policy at the University of Chicago and as assistant professor of urban policy and education and chairperson of the program in social policy and human development at Northwestern University. He has authored a book *Families in Distress: Public, Private, and Civic Responsibilities* and published more than thirty-five articles on economic development, social issues, and public policy in various professional journals. Mr. Bush is the Board Chair for the Financial Markets Center and on the Board of Directors of the National Community Reinvestment Coalition. He is also co-chair of the Steering Committee of the Chicago Federal Reserve Bank's Mortgage Credit Partnership Project and the Advisory Board of the Reserve Bank's Assessing the Midwest Economy Project.

John C. Gamboa
Executive Director, The Greenlining Institute
San Francisco, California

John C. Gamboa, the Executive Director of the Greenlining Institute, has managerial experience in academia and in the private and nonprofit sectors. He was Executive Director of the Latino Issues Forum; Communications Manager, University of California at Berkeley; Executive Director of Project Participar, a citizenship program; and Marketing and Advertising Manager at Pacific Bell. As Executive Director for the Greenlining Institute, Mr. Gamboa focuses on public policy issues that promote economic development in urban and low-income areas and on developing minority youth into future community leaders. He has been active in combating redlining and in providing a voice for the poor and underserved in insurance, banking, utilities, and telecommunications issues.

Rose M. Garcia
Executive Director, El Paso Collaborative for Community and Economic Development
El Paso, Texas

Ms. Garcia is the Executive Director of the El Paso Collaborative for Community and Economic Development, an umbrella organization that provides funding, technical assistance, and training to twenty community development organizations. She also serves as chairperson of the Texas Association of Community Development Organizations, as a board member of Services for Seniors, as an executive board member and officer of the National Farmworker Housing Project Directors Association, and as a member of Concilio Campesino del Sudoeste. For twenty years Ms. Garcia has been a leader in the development of affordable housing in Texas and New Mexico, in both rural and metropolitan communities, and has extensive hands-on experience in affordable housing development. Ms. Garcia presently serves on the Board of Directors of Waterworks, Inc., a program of the Pew Charitable Trust to finance innovative water/sewer projects in colonias along the U.S.–Mexico border.

Vincent Giblin
General Vice President, International Union of Operating Engineers
West Caldwell, New Jersey

Mr. Giblin is the Chief Executive Officer of Local 68 of the International Union of Operating Engineers in West Caldwell, New Jersey. This union has 5,000 members with jurisdiction throughout the entire State of New Jersey. In addition, Mr. Giblin serves as Chairman of the Board of Horizon Blue Cross and Blue Shield of New Jersey. He is also the General Vice President of the International Union of Operating Engineers, an international body with jurisdiction over 400,000 members throughout North America. Mr. Giblin is President of the Northeastern States Conference of Operating Engineers, which covers the East Coast from Maine to Pittsburgh to Delaware. Previously, Mr. Giblin was a Commissioner of the New Jersey Economic Development Authority and also served as Chairman of the New Jersey Casino Reinvestment and Development Authority. During that time, he actively sought favorable government financing to facilitate the expansion of public housing construction.

Willie Jones
Regional Director, Community Builders, Inc.
Boston, Massachusetts

Mr. Jones is the Deputy Director of The Community Builders, Inc. He has spearheaded the company's efforts to secure new HOPE VI engagements nationally. Before going to Community Builders, Inc., Mr. Jones was an assistant to the Dean at the College of Engineering at Northeastern University, responsible for recruitment and retention of minority students in the technical degree programs. He is also Vice Chair of the Massachusetts Community and Banking Council. Mr. Jones has received numerous community achievement awards and has been on the Board of Directors of the Greater Roxbury Neighborhood Authority. He has also taught a graduate course, "Real Estate Development and Finance," at Tufts University in the Urban and Environmental Policy Program, as well as "Project Management" at the Massachusetts Institute of Technology Department of Urban Studies and Planning in the Professional Development Institute.

Anne Li
Executive Director, New Jersey Community Loan Fund
Trenton, New Jersey

Ms. Li is Executive Director of the New Jersey Community Loan Fund. The Fund is a nonprofit community development financial institution that seeks to increase the flow of capital to build economic self-sufficiency for lower-income people and communities throughout New Jersey. Ms. Li was appointed by the Governor to the New Jersey Redevelopment Authority and to the Community Financial Services Advisory Board of the New Jersey State Department of Banking and is also a member of the Community Advisory Council to the Federal Home Loan Bank of New York.

Marta Ramos
Vice President and CRA Officer, Banco Popular de Puerto Rico
San Juan, Puerto Rico

Ms. Ramos is the Vice President and CRA officer for Banco Popular de Puerto Rico, the main subsidiary of Popular, Inc., a bank holding company with $22.9 billion in assets. Besides serving Puerto Rico with the largest branch network, Popular, Inc. has banking branches in California, Florida, Illinois, New Jersey, New York, Texas, the U.S. Virgin Islands, and the British Virgin Islands. Ms. Ramos was the founder and past president of the Compliance and CRA Committees of the Puerto Rico Bankers Association; served as an advisor to the Concilio de Corporaciones en Desarrollo Comunitario, an umbrella organization of community development corporations in Puerto Rico; a member of the planning committee and advisory board of the Puerto Rico Community Foundation Consortium; a founding member of the Puerto Rico Housing Network, a nonprofit organization created to support housing initiatives in Puerto Rico; a founding member of Habitat for Humanity of Puerto Rico; and a member of the Private Industry Council of the Municipality of San Juan.

Gary Washington
Senior Vice President and CRA Officer, ABN AMRO North America, Inc.
Chicago, Illinois

Mr. Washington is Senior Vice President and CRA officer of ABN AMRO North America, Inc., a Dutch-owned bank with $115 billion in U.S. assets. He directs and oversees the community reinvestment activity of all ABN AMRO banking units in the United States. Mr. Washington works closely with affordable housing organizations and small businesses. His work contributed to the formation of the LaSalle Community Development Corporation, which provides debt and equity for community development projects. Mr. Washington currently serves on the board of directors of several organizations, such as the Chicago Equity Fund and the Jane Addams Hull House. He has been named a fellow by Leadership Greater Chicago and served as founding chair of the CRA subcommittee for the Chicago Clearinghouse Association.

Robert L. Wynn II
Financial Education Officer, Department of Financial Institutions
Madison, Wisconsin

Mr. Wynn is the Financial Education Officer for the Wisconsin Department of Financial Institutions. Before his current post, Mr. Wynn was the Director of the Bureau of Minority Business Development for the Wisconsin Department of Commerce. He was responsible for directing the bureau's business development initiatives to foster small business ownership. Under his leadership, the bureau provided an early planning grant to a start-up community development bank owned by three African–American women in Milwaukee. Mr. Wynn worked to develop the Minority Business Development Fund, which provides direct loans for working capital, machinery and equipment, land and building acquisition, and general expansion. He also established the Milwaukee Economic Education

Partnership, which includes a "Youth Enterprise Academy" and a teacher-training component, and founded the South Central Wisconsin Council of the National Association of Investors.

Council members whose terms continue through 1999 and 2000 are the following:

Wayne-Kent A. Bradshaw, President and Chief Executive Officer, Family Savings Bank, FSB, Los Angeles, California (1999)

Janet C. Koehler, Senior Manager of Electronic Commerce, AT&T Universal Card Services, Jacksonville, Florida (1999)

Carol Parry, Executive Vice President, Chase Manhattan Bank, New York, New York (1999)

Philip Price, Jr., Executive Director, The Philadelphia Plan, Philadelphia, Pennsylvania (1999)

Marilyn Ross, Executive Director, Holy Name Housing Corporation, Omaha, Nebraska (1999)

Gail Small, Executive Director, Native Action, Lame Deer, Montana (1999)

Walter J. Boyer, President, United Central Bank, Garland, Texas (2000)

Jeremy Eisler, Director of Litigation, South Mississippi Legal Services Corp., Biloxi, Mississippi (2000)

Robert F. Elliott, Vice Chairman, Household International, Prospect Heights, Illinois (2000)

Karla Irvine, Executive Director, Housing Opportunities Made Equal of Greater Cincinnati, Inc., Cincinnati, Ohio (2000)

Gwenn Kyzer, Vice President, Target Marketing Service Experian, Inc., Allen, Texas (2000)

John C. Lamb, Senior Staff Counsel, Department of Consumer Affairs, Sacramento, California (2000)

Martha W. Miller, President, Choice Federal Credit Union, Greensboro, North Carolina (2000)

Daniel W. Morton, Vice President and Senior Counsel, Huntington National Bank, Columbus, Ohio (2000)

Charlotte Newton, Consumer Advisor, Springfield, Virginia (2000)

David L. Ramp, Attorney, Legal Aid Society of Minneapolis, Minneapolis, Minnesota (2000)

Robert G. Schwemm, Professor of Law, University of Kentucky, Lexington, Kentucky (2000)

David J. Shirk, Senior Vice President, Frontier Investment Company, Eugene, Oregon (2000)

ISSUANCE OF SUPERVISORY GUIDANCE ON CERTAIN ELEMENTS OF COUNTERPARTY CREDIT RISK-MANAGEMENT SYSTEMS

The Federal Reserve on February 1, 1999, announced the issuance of supervisory guidance providing supervisors and bankers information on certain elements of counterparty credit risk-management systems that may need special review and enhancement.

The guidance is being issued to address potential weaknesses in current risk-management systems identified by losses stemming from recent market turbulence and various supervisory reviews of bank management systems for counterparty credit risk.

The guidance reiterates and expands on fundamental principles of counterparty credit risk management that are covered in existing supervisory materials of the Federal Reserve and other regulators and in established industry standards, including the Federal Reserve's supervisory manual entitled *Trading and Capital Markets Activities.*

The guidance instructs supervisory staff to continue and, when appropriate, strengthen their efforts in evaluating whether banking institutions accomplish the following:

- Devote sufficient resources and adequate attention to the management of the risks involved in growing, highly profitable or potentially high-risk activities and product lines
- Have internal audit and independent risk-management functions that adequately focus on growth, profitability, and risk criteria in targeting their reviews
- Achieve an appropriate balance among all elements of credit risk management, including both qualitative and quantitative assessments of counterparty creditworthiness; measurement and evaluation of both on- and off-balance-sheet exposures, including potential future exposure; adequate stress testing; reliance on collateral and other credit enhancements; and the monitoring of exposures against meaningful limits
- Employ policies that are sufficiently calibrated to the risk profiles of particular types of counterparties and instruments to ensure adequate credit risk assessment, exposure measurement, limit setting, and use of credit enhancements
- Ensure that actual business practices conform to stated policies and their intent
- Move in a timely fashion to enhance their measurement of counterparty credit risk exposures, including the refinement of potential future exposure measures and the establishment of stress-testing

methodologies that better incorporate the interaction of market and credit risks.

To adequately evaluate these conditions, supervisors are advised to ensure that they conduct sufficient and targeted transaction testing on those activities, business lines, and products that are experiencing significant growth, above-normal profitability, or large potential future exposures. The supervisory guidance material is available on the Federal Reserve's web site: (http://www.federalreserve.gov).

PRELIMINARY FIGURES AVAILABLE ON OPERATING INCOME OF THE FEDERAL RESERVE BANKS

Preliminary figures released on January 7, 1999, indicate that operating income of the Federal Reserve Banks amounted to $28.147 billion during 1998. Net income before payment of dividends, additions to surplus, and payments to the Treasury totaled $27.623 billion. About $26.549 billion of this net income was distributed to the U.S. Treasury during 1998.

The income of the Federal Reserve System is derived primarily from interest earned on U.S. government securities that the Federal Reserve has acquired through open market operations. Income from the provision of financial services amounted to $817.1 million.

Operating expenses of the twelve Reserve Banks and their branches totaled $1.785 billion. In addition, earnings credits in the amount of $347.5 million were granted to depository institutions under the Monetary Control Act of 1980. Assessments to Reserve Banks for Board expenditures totaled $178 million, and the cost of currency amounted to $408.5 million.

Net additions to income amounted to $1.915 billion, resulting primarily from unrealized gains on assets denominated in foreign currencies that were revalued to reflect current market exchange rates. Statutory dividends to member banks were $343 million.

Under the policy established by the Board of Governors at the end of 1964, all net income after the statutory dividend to member banks and the amount necessary to equate surplus to paid-in capital is transferred to the U.S. Treasury.

ENFORCEMENT ACTIONS

The Federal Reserve Board on January 21, 1999, announced the joint issuance with the Office of the Comptroller of the Currency (OCC) of a consent order of prohibition against Bob L. Sellers, a former officer, director, and shareholder of First National Summit Bankshares, Crested Butte, Colorado, a former bank holding company, and a former officer and director of First National Summit Bank, Crested Butte, Colorado, a former national bank. The Board also announced on January 21, 1999, the issuance of a consent order of assessment of civil money penalty against Mr. Sellers.

Mr. Sellers, without admitting to any allegations, consented to the issuance of the order in connection with his alleged acquisition of more than 25 percent of the outstanding voting shares of First National Summit Bankshares in 1994 without prior approval from the Board and his alleged misrepresentations and omissions of fact in connection with regulatory filings to the Board and the OCC.

The order prohibits Mr. Sellers from participating in the conduct of the affairs of any financial institution and requires that he pay a civil money penalty of $100,000.

The Federal Reserve Board on January 26, 1999, announced the issuance of an order of removal and prohibition against John H. Ahn, a former director and institution-affiliated party of the Hanmi Bank, Los Angeles, California. □

Minutes of the Federal Open Market Committee Meeting Held on December 22, 1998

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 22, 1998, at 9:00 a.m.

Present:

Mr. Greenspan, Chairman
Mr. McDonough, Vice Chairman
Mr. Ferguson
Mr. Gramlich
Mr. Hoenig
Mr. Jordan
Mr. Kelley
Mr. Meyer
Ms. Minehan
Mr. Poole
Ms. Rivlin

Messrs. Boehne, McTeer, Moskow, and Stern, Alternate Members of the Federal Open Market Committee

Messrs. Broaddus, Guynn, and Parry, Presidents of the Federal Reserve Banks of Richmond, Atlanta, and San Francisco 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
Mr. Prell, Economist

Ms. Browne, Messrs. Cecchetti, Hakkio, Lindsey, Simpson, Sniderman, and Stockton, Associate Economists

Mr. Fisher, Manager, System Open Market Account

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

Ms. Johnson, Director, Division of International Finance, Board of Governors

Messrs. Alexander and Hooper, Deputy Directors, Division of International Finance, Board of Governors

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

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

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

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

Messrs. Beebe, Eisenbeis, Goodfriend, Hunter, Lang, and Rolnick, Senior Vice Presidents, Federal Reserve Banks of San Francisco, Atlanta, Richmond, Chicago, Philadelphia, and Minneapolis respectively

Mr. Gavin and Ms. Perelmuter, Vice Presidents, Federal Reserve Banks of St. Louis and New York respectively

Mr. Duca, Assistant Vice President, Federal Reserve Bank of Dallas

By unanimous vote, the minutes of the meeting of the Federal Open Market Committee held on November 17, 1998, 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.

By unanimous vote the Committee amended the Authorization for Foreign Currency Operations to add the euro to the list of foreign currencies in which the Federal Reserve Bank of New York is authorized to conduct open market operations. The Desk's holdings of German marks will automatically be converted to euros when that currency is introduced on January 1, 1999.

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 November 17, 1998, through December 21, 1998. By unanimous vote, the Committee ratified these transactions.

The Committee then turned to the economic and financial outlook and the implementation of monetary policy over the intermeeting period ahead. A summary of the economic and financial information available at the time of the meeting and of the Committee's discussion is provided below, followed by the domestic policy directive that was approved by the Committee and issued to the Federal Reserve Bank of New York.

The information reviewed at this meeting suggested that the economy had continued to expand at a brisk pace in recent months. Domestic final demand had remained robust, and production and employment had recorded further solid gains. Trends in various measures of wages and prices had been mixed in recent months.

Nonfarm payroll employment rose strongly in November after having recorded reduced increases in September and October. Job gains were widespread in November; hiring in the services industries remained brisk, construction payrolls surged further, and retail employment rebounded after a lackluster rise in October. In sharp contrast to the general job picture, employment in manufacturing continued to drop. The civilian unemployment rate fell to 4.4 percent in November.

Total industrial production declined somewhat in November in association with a weather-related drop in utilities output and persisting weakness in mining activity. Manufacturing output was unchanged in November after a considerable increase in October. Production in high-tech industries recorded large gains over the October–November period, the output of construction supplies climbed rapidly, and consumer goods manufacture expanded briskly. However, production of motor vehicles and parts was unchanged on balance over the two months and materials output continued to decline, with the iron and steel industry registering particularly large decreases. The utilization of manufacturing capacity dropped over the October–November period to its lowest level in more than five years.

Strength in consumer spending persisted in October and November, with retail sales rising sharply in both months. Increases in sales of motor vehicles and other durable goods were particularly large, but expenditures for nondurable goods also recorded sizable advances. Supported by continuing gains in disposable income and the rebound in the stock market, consumer confidence remained at a relatively favorable level, though noticeably below the peak reached earlier in the year.

The residential housing sector continued to surge, as single-family housing starts registered another strong advance in November and sales of new homes remained at a very high level. Unseasonably favorable weather over much of the country evidently contributed to that performance. Nonetheless, the low level of mortgage rates and a record high in an index of consumer assessments of homebuying conditions in November suggested that strength in single-family housing might continue for a time. Multifamily housing starts in October and November were slightly above the average for earlier in the year, and permits for new projects had been rising recently.

Business fixed investment appeared to have rebounded from a small decrease in the third quarter that had been associated in part with a strike-related drop in business purchases of motor vehicles and persisting weakness in nonresidential construction. Shipments of office and computing equipment rose sharply in October after having declined for two months, and a sizable backlog of orders for communications equipment suggested that the downturn in shipments in October after a September surge would be shortlived. In addition, outlays for heavy trucks reached record levels and expenditures for aircraft were well maintained. In the nonresidential sector, building activity remained soft in October. Office construction picked up further in response to falling vacancy rates and rising rental costs, but other building activity continued sluggish, and available data on new contracts pointed to persisting weakness.

Business inventory accumulation slowed appreciably in October after a sizable rise in the third quarter. In manufacturing, however, the pace of stockbuilding picked up in October from a slow rate in the third quarter, and the stock–shipments ratio remained in the upper portion of its narrow range over the past year. In the wholesale sector, inventories declined somewhat in October following a large increase in the third quarter; much of the reduction was in farm products. The inventory–sales ratio for the wholesale sector was still at the top of its range over the past year. Retail inventory accumulation in October was near the modest pace of the third quarter, and the inventory–sales ratio was slightly below its range over the preceding twelve months.

The nominal deficit on U.S. trade in goods and services in October was little changed from its September level but was slightly smaller than its average for the third quarter. The value of exports was up considerably in October from its third-quarter average; the largest gains were in machinery, agricultural products, and industrial supplies. The value of imports also rose in October. The rise in imports was spread across all major trade categories, with the largest increases being in capital goods and oil. The limited information available for the fourth quarter suggested that the Japanese economy remained mired in recession and that the pace of economic growth in most of the other major industrial countries was slowing. Activity in most of the Asian developing economies remained depressed, though there were signs that activity in some was nearing a trough and that growth in China and Taiwan had picked up somewhat. In contrast, economic conditions in most Latin American economies had worsened considerably in recent months.

Consumer price inflation remained subdued in November, with both the overall index and the index excluding food and energy items rising at the same relatively low rates as in October. For the twelve months ended in November, the increase in core consumer prices was a little larger than in the previous twelve-month period, reflecting slightly bigger advances in the prices of both commodities and services. A similar pattern was evident in producer prices of finished goods other than food and energy; core producer prices continued to rise at a low rate in November, and the increase in these prices in the twelve months ended in November was somewhat larger than in the previous twelve-month period. In contrast, prices for crude and intermediate materials continued their downward trend in both the October–November period and the twelve months ended in November. Growth in average hourly earnings of production or nonsupervisory workers had slowed over recent months to a modest rate in October and November. While the deceleration in hourly earnings was relatively widespread across industries, and most pronounced in manufacturing, wages continued to accelerate in the services industries and in finance, insurance, and real estate.

At its meeting on November 17, 1998, the Committee adopted a directive that called for implementing conditions in reserve markets that were consistent with a one-quarter percentage point decrease in the federal funds rate to an average of around 4¾ percent. The Committee also decided that moving to a symmetric directive would be appropriate, given that further easing likely would not be needed over the months ahead unless unexpected developments were to point toward a more substantial weakening in the growth of economic activity or to less inflation than was currently anticipated. The reserve conditions associated with this directive were expected to be consistent with some moderation in the growth of M2 and M3 over the months ahead.

Open market operations immediately after the meeting were directed toward implementing the desired slight easing in the degree of pressure on reserve positions, and through the remainder of the intermeeting period the Manager sought to maintain that easier stance. The federal funds rate remained very close to its intended lower level on average, and most other short-term market rates registered small mixed changes. Longer-term Treasury rates declined somewhat in response to a weaker outlook for foreign economic activity and the potential damping effect of lower commodity prices on inflation. Share prices in U.S. equity markets remained volatile but posted substantial increases on balance over the intermeeting period.

In foreign exchange markets, the trade-weighted value of the dollar fell slightly over the intermeeting period in relation to other major currencies and also in terms of an index of the currencies of other countries that are important trading partners of the United States. Concerns about the vulnerability of U.S. markets to financial difficulties in Brazil and uncertainty generated by the impeachment proceedings were said to weigh on the dollar at times. The dollar's larger decline against the Japanese yen than against the German mark and other European currencies may have stemmed from a disparity in interest rate movements in those countries; long-term interest rates rose in Japan, partly in anticipation of heightened financing requirements associated with further fiscal stimulus, while European interest rates fell in response to cuts in official interest rates and weaker-than-expected economic data. Financial conditions affecting emerging market economies continued to improve for a time after the Committee eased monetary policy at its November 17 meeting, but that trend was subsequently reversed after Brazil's legislature decided to reject a key fiscal reform measure.

M2 and M3 had continued to expand rapidly in recent months, although incoming data indicated that growth was slowing somewhat in December. The continued strength of M2 in November reflected the reduction in its opportunity cost as a result of recent easings of monetary policy, greater growth of liquid deposits in association with heavy mortgage refinancing activity, and brisk demand for U.S. currency both at home and abroad. M3 growth was bolstered by further large flows into institution-only money market funds and additional RP financing in association with hefty acquisitions of securities by banks. For the year through November, both aggregates rose at rates well above the Committee's annual ranges. Total domestic nonfinancial debt had expanded in recent months at a pace somewhat above the middle of its range. Continued paydowns of debt by the federal government were more than offset by appreciable growth of private demands for credit to finance strong spending on durable goods, housing, and business investment, as well as merger and acquisition activity.

The staff forecast prepared for this meeting pointed to considerable slowing in the expansion of economic activity in the year ahead to a pace somewhat below the estimated growth of the economy's potential. However, the expansion was expected to pick up later to a rate more in line with that potential. Subdued expansion of foreign economic activity and the lagged effects of the earlier rise in the foreign exchange value of the dollar were expected to place continuing, albeit diminishing, restraint on the demand for U.S. exports for some period ahead and to lead to further substitution of imports for domestic products. In addition, growth in private final demand would be restrained to some extent by the tighter terms and conditions that were now being imposed by many types of lenders, by the anticipated waning of positive wealth effects stemming from earlier large increases in equity prices, and by the buildup of stocks of consumer durables, housing units, and business capital goods. Pressures on labor resources were likely to ease slightly as the expansion of economic activity moderated, but inflation was projected to rise noticeably over the year ahead, largely in association with a partial reversal of the decline in energy prices this year.

In the Committee's discussion of current and prospective economic conditions, members commented that moderate growth at a pace close to the economy's potential remained a reasonable expectation for the year ahead. The members recognized, however, that such a projection was subject to an unusually wide range of uncertainty in both directions. On the upside, they emphasized the marked resilience and persisting strength of private domestic demand, which had kept the economy expanding at a faster pace than most had anticipated. In addition, members commented that domestic financial conditions, including the rebound in stock market prices, currently were supportive of further expansion in aggregate demand, and in that regard several noted the continued rapid growth of the broad monetary aggregates. Still, domestic financial markets remained unusually sensitive and subject to relatively pronounced adjustments to unanticipated developments that could have substantial effects on confidence and economic activity. The external sector continued to represent a major source of downside risk; the economies of several industrial countries seemed to be weakening and the outlook for several key emerging market economies remained in doubt, with a further loss of confidence and contagion from the latter a continuing threat. With regard to the outlook for inflation, members reported that labor markets were extraordinarily tight across the nation, but they saw only limited evidence of accelerating wage increases and little or no evidence of rising inflation in broad measures of prices. Several commented, however, that the risks of inflation appeared to be tilted to the upside, given the continuing strength of the domestic expansion and accommodative financial conditions.

In their review of developments in various parts of the country and major industries, members referred to widespread evidence of high levels and strong growth of overall domestic production and demand, but also to the continued retarding effects of the foreign trade sector on agriculture and manufacturing and extractive industries. Growth in consumer spending was expected to moderate over coming quarters from a very robust pace. Factors contributing to this assessment included expectations of somewhat slower growth in employment and incomes and the prospect that increases in financial wealth would moderate or even end at some point. Members also referred to the possibility that the very low saving rate would tend to limit increases in consumer spending, but they noted that high levels of consumer confidence and wealth along with low interest rates should help to sustain at least moderate growth in coming quarters.

Forecasts of business investment spending pointed to appreciable deceleration in the year ahead after very rapid increases in recent years. Among the factors cited in support of a slowing uptrend were the anticipated slower growth in overall demand and the large cumulative buildup of business capital that had resulted in comparatively subdued pressures on capacity. Forecasts of reduced growth in business expenditures tended to be supported by anecdotal reports that many business firms were planning to trim their capital outlays during the year ahead. Perhaps the slower growth in corporate earnings, which had been evident since earlier in the year, and reduced cash flows were beginning to exert some restraint on business capital spending. Some members observed, however, that there was little evidence thus far of any deceleration in business equipment expenditures and that the persistence of tight labor markets should continue to encourage relatively rapid growth in labor-saving business capital.

Housing activity had displayed a great deal of strength in recent months according to both anecdotal and statistical reports at this meeting. Comparatively warm weather had extended the building season in several areas, while rising incomes and low interest rates had continued to stimulate housing demand. Some retrenchment in housing activity from currently high levels seemed likely over coming quarters, given the recent large additions to the stock of housing units and some anticipated deceleration in the growth of jobs and incomes.

Members viewed the foreign sector as likely to exert a smaller negative effect on domestic growth in the year ahead. This view was based on the expectation of some stabilization or improvement in foreign financial markets and economies. In addition, the foreign exchange value of the dollar had been declining in recent months, and the effects of its earlier appreciation on the trade balance would be waning. However, they recognized that net exports could turn out to be substantially more negative than the modal forecast, given the persistence of very fragile financial and economic conditions in several large emerging economies, continued weakness in the Japanese economy, and questions about the prospective strength of economic activity in other industrial nations. As recent experience had demonstrated, a crisis in one or a group of important financial markets and economies could spread rapidly around the world.

The outlook for inflation remained favorable, though some members referred to a number of upside risks going forward. For now, however, there were few signs of rising price inflation despite widespread indications of very tight labor markets, including reports of further tightening in some areas. Indeed, the most recent wage and price data were encouraging. Increases in core measures of prices were limited, and sizable declines in oil and commodity prices should help to moderate inflation going forward, in part by holding down inflation expectations. Looking beyond the nearer term, current forecasts suggested that moderating growth in overall economic activity would tend to limit pressures on resources and foster relatively subdued price inflation in the context of robust productivity growth and ample industrial capacity. Members who viewed the risks as tilted mainly to the upside commented that the effects of the anticipated reversal of a number of factors—including the declines in oil and commodity prices and restrained increases in health care costs—that had tended to hold down overall inflation might turn out to be more pronounced than was currently forecast. Moreover, underlying cost and price pressures might emerge more rapidly under such circumstances, especially if overall demand continued to outpace the growth of potential. Some members also referred to the potential inflationary effects over time of the continuation of quite rapid monetary growth. On balance, however, the members generally believed that prospective trends in overall economic activity and the persistence of strong competitive pressures in most markets, including the effects of foreign competition, were likely in the context of now firmly embedded expectations of low inflation to moderate any tendency for price inflation to accelerate over the year ahead.

In the Committee's discussion of policy for the intermeeting period, all the members agreed on the desirability of maintaining an unchanged policy stance. The System's policy easing actions since late September had helped to stabilize a dangerously eroding financial situation, and current financial conditions as well as underlying economic trends suggested that needed policy adjustments had been completed. For now at least, monetary policy appeared to be consistent with the Committee's objectives of fostering sustained low inflation and high employment. Accordingly, the Committee had entered a period where vigilance was called for but where the direction and timing of the next policy move were uncertain.

As already noted, Committee members saw risks on both sides of their forecasts. Persistently strong demand and increasingly supportive conditions in debt and equity markets suggested the possibility of rising inflation pressures. But greater disturbances abroad, especially if they were to be transmitted to domestic financial markets, could exert considerable restraint on the domestic economy. Fortunately, with low inflation, if not price stability, increasingly embedded in expectations, the Committee would have time to react to potential inflationary pressures. In the event of downward shocks to the expansion, prompt action to ease policy would be needed, but such shocks could not be anticipated at this point. Against this background, all the members indicated that they were in favor of retaining the symmetry in the existing directive.

Before its vote on policy at this meeting, the Committee discussed the wording of the operating paragraph of the directive, building on progress made toward a consensus at previous meetings. Attention focused in part on proposed new wording to describe the possibility of intermeeting actions. There were minor differences about specific wording, but no strongly held opinions, and all the members agreed that the new wording preferred by a majority of the members represented an improvement over the traditional language in that it would communicate more clearly and succinctly the substance of the Committee's policy decisions. The Committee also discussed deleting the last sentence in the operating paragraph relating to the outlook for the growth of money; another paragraph in the directive would continue to report the long-run ranges for such growth that the Federal Reserve Act requires the Committee to establish. With regard to the proposed deletion, some felt it was desirable for the central bank to retain a reference to money in the operating paragraph; more members supported the deletion on the ground that, as had been explained to the Congress, money growth had not had any special significance for some time in the formulation of monetary policy owing to often unexplained and unexpected changes in velocity. The rewording of the sentence on symmetry and the deletion of the sentence on money were not intended to imply any change in policy or the Committee's approach to policy or its decisionmaking.

At the conclusion of the Committee's discussion, all the members supported a reworded directive that called for maintaining conditions in reserve markets that were consistent with an unchanged federal funds rate of about 4¾ percent and did not contain any bias with respect to the direction of possible adjustments to policy during the intermeeting period.

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

The information reviewed at this meeting suggests that the economy has continued to expand at a brisk pace in recent months. Growth in nonfarm payroll employment was strong in November, after more moderate gains in September and October, and the civilian unemployment rate fell to 4.4 percent. Total industrial production declined somewhat in November, but manufacturing output was stable and up considerably from the third-quarter pace. Business inventory accumulation slowed appreciably in October after a sizable rise in the third quarter. The nominal deficit on U.S. trade in goods and services narrowed slightly in October from its third-quarter average. Total retail sales rose sharply in October and November, and housing starts were strong as well. Available indicators point to a considerable pickup in business capital spending after a lull in the third quarter. Trends in various measures of wages and prices have been mixed in recent months.

Most short-term interest rates have changed little on balance since the meeting on November 17, but longer-term rates have declined somewhat. Share prices in equity markets have remained volatile and have posted sizable gains on balance over the intermeeting period. In foreign exchange markets, the trade-weighted value of the dollar has declined slightly over the period in relation to other major currencies and in terms of an index of the currencies of other countries that are important trading partners of the United States.

M2 and M3 have posted very large increases in recent months. For the year through November, both aggregates rose at rates well above the Committee's annual ranges. Total domestic nonfinancial debt has expanded in recent months at a pace somewhat above the middle of its range.

The Federal Open Market Committee seeks monetary and financial conditions that will foster price stability and promote sustainable growth in output. In furtherance of these objectives, the Committee reaffirmed at its meeting on June 30–July 1 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 1997 to the fourth quarter of 1998. The range for growth of total domestic nonfinancial debt was maintained at 3 to 7 percent for the year. For 1999, the Committee agreed on a tentative basis to set the same ranges for growth of the monetary aggregates and debt, measured from the fourth quarter of 1998 to the fourth quarter of 1999. The behavior of the monetary aggregates will continue to be evaluated in the light of progress toward price level stability, movements in their velocities, and developments in the economy and financial markets.

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

Votes for this action: Messrs. Greenspan, McDonough, Ferguson, Gramlich, Hoenig, Jordan, Kelley, Meyer, Ms. Minehan, Mr. Poole, and Ms. Rivlin. Votes against this action: None.

Disclosure Policy

The members also discussed various issues relating to the timing and manner of releasing information about the Committee's policy decisions. A range of views was expressed, as at earlier meetings, on the desirability of releasing a statement routinely not only after those meetings at which there was a change in the stance of policy but also after meetings where the Committee altered its view of the direction of possible policy actions during the intermeeting period. Members who favored more announcements believed that such disclosure, by providing more information on the Committee's views of the risks in the economic outlook, generally would allow financial market prices to reflect more accurately the likely future stance of monetary policy. However, other members were concerned that such announcements often would provoke market reactions. As a consequence, the Committee would become less willing to change the symmetry in the directive, and a policy of immediate release might therefore have adverse repercussions on the Committee's decisionmaking. Nonetheless, the members decided to implement the previously stated policy of releasing, on an infrequent basis, an announcement immediately after certain FOMC meetings when the stance of monetary policy remained unchanged. Specifically, the Committee would do so on those occasions when it wanted to communicate to the public a major shift in its views about the balance of risks or the likely direction of future policy. Such announcements would not be made after every change in the symmetry of the directive but only when it seemed important for the public to be aware of an important shift in the members' views. On the basis of experience with such announcements, the Committee would evaluate later whether further changes in its approach to disclosures would be desirable.

It was agreed that the next meeting of the Committee would be held on Tuesday–Wednesday, February 2–3, 1999.

The meeting adjourned at 12:55 p.m.

Donald L. Kohn
Secretary

Legal Developments

ORDERS ISSUED UNDER BANK HOLDING COMPANY ACT

Orders Issued Under Section 3 of the Bank Holding Company Act

Union Planters Corporation
Memphis, Tennessee

Union Planters Holding Corporation
Memphis, Tennessee

Order Approving Acquisition of a Bank Holding Company

Union Planters Corporation and Union Planters Holding Corporation (collectively, "Union Planters"), bank holding companies within the meaning of the Bank Holding Company Act ("BHC Act"), have requested the Board's approval under section 3 of the BHC Act (12 U.S.C. § 1842) to acquire all of the voting shares of First Mutual Bancorp, Inc. ("First Mutual") and thereby acquire its wholly owned subsidiary, First Mutual Bank, S.B. ("Savings Bank"), both in Decatur, Illinois.[1] Notice of the proposal, affording interested persons an opportunity to submit comments, has been published (63 *Federal Register* 65,209 (1998)).[2] The time for filing comments has expired, and the Board has considered the proposal and all comments received in light of the factors set forth in section 3 of the BHC Act. Union Planters operates bank and thrift subsidiaries in Alabama, Arkansas, Florida, Illinois, Indiana, Iowa, Kentucky, Louisiana, Mississippi, Missouri, Tennessee, and Texas. Union Planters controls the 11th largest depository institution in Illinois, controlling deposits of $3.3 billion, representing approximately 1.6 percent of total deposits in depository institutions in the state.[3] First Mutual is the 80th largest depository institution in Illinois, controlling approximately $334.2 million in deposits, representing less than 1 percent of total deposits in depository institutions in the state. On consummation of the proposal, the banks controlled by Union Planters would represent the tenth largest depository institution in Illinois, controlling deposits of $3.6 billion, representing approximately 1.7 percent of total deposits in depository institutions in the state.

Interstate Analysis

Section 3(d) of the BHC Act allows the Board to approve an application by a bank holding company to acquire control of a bank located in a state other than the home state of such bank holding company if certain conditions are met.[4] For purposes of the BHC Act, the home state of Union Planters is Tennessee and Union Planters proposes to acquire control of a bank in Illinois. All of the conditions for an interstate acquisition enumerated in section 3(d) are met in this case.[5] In light of all the facts of record, the Board is permitted to approve the proposal under section 3(d) of the BHC Act.

Competitive Considerations

The BHC Act prohibits the Board from approving an application under section 3 if the proposal would result in a monopoly or would be in furtherance of any attempt to monopolize the business of banking.[6] The BHC Act also prohibits the Board from approving a proposal that would substantially lessen competition or tend to create a monopoly in any relevant market, unless the Board finds that the anticompetitive effects of the proposed transaction are clearly outweighed in the public interest by the probable effects of the transaction in meeting the convenience and needs of the community to be served.[7] Union Planters and First Mutual each compete in the Decatur and Lincoln banking markets, both in Illinois.[8] The Board has carefully

1. Savings Bank is a state-chartered savings bank that has elected not to be supervised by the Office of Thrift Supervision as a savings association and, accordingly, is a bank for purposes of the BHC Act.

2. Union Planters also has requested the Board's approval to hold and exercise an option to acquire up to 19.9 percent of First Mutual's voting shares. The option would expire on consummation of the proposal.

3. In this context, depository institutions include commercial banks, savings banks, and savings associations. Asset and ranking data are as of June 30, 1997.

4. 12 U.S.C. § 1842(d). A bank holding company's home state is the state in which the operations of the bank holding company's banking subsidiaries were principally conducted on July 1, 1966, or the date on which the company became a bank holding company, whichever is later.

5. 12 U.S.C. §§ 1842(d)(1)(A) & (B) and 1842(d)(2)(A) & (B). Union Planters meets the capital and managerial requirements established by applicable law. On consummation of the proposal, Union Planters and its affiliates would control less than 10 percent of the total amount of deposits of insured depository institutions in the United States, and less than 30 percent of the total amount of deposits in Illinois. *See* Ill. Comp. Stat. Ann. 10–3.09(a) (West 1998). In addition, Savings Bank has been in existence and operated continuously for more than five years. *See* Ill. Comp. Stat. Ann. 10–3.071(i) (West 1998). All other requirements of section 3(d) of the BHC Act also would be met on consummation of the proposal.

6. 12 U.S.C. § 1842(c)(1)(A).

7. 12 U.S.C. § 1842(c)(1)(B).

8. The Decatur banking market is approximated by Macon County; Dora, Lovington, Marrow Bone, Sullivan, and Jonathan Creek town-

reviewed the competitive effects of the proposal in these markets in light of all the facts of record, including the projected increase in the concentration of total deposits in depository institutions in the market ("market deposits"),[9] as measured by the Herfindahl–Hirschman Index ("HHI") under the Department of Justice Merger Guidelines ("DOJ Guidelines"),[10] and the number of competitors that would remain in the market.

In the Lincoln banking market, the change in market concentration, as measured by the HHI, would exceed the guidelines applied by the Board and the Department of Justice. Union Planters is the second largest depository institution in the Lincoln banking market, controlling deposits of $94.3 million, representing approximately 22.7 percent of market deposits. First Mutual is the eighth largest depository institution in the market, controlling deposits of $32.3 million, representing approximately 3.9 percent of market deposits when weighted at 50 percent. On consummation of the proposal, Union Planters would become the largest depository institution in the market, controlling deposits of approximately $126.7 million, representing approximately 29.3 percent of market deposits. The HHI would increase by 246 points to 1918.

In evaluating the likely competitive effects of the proposed transaction, the Board has placed particular weight on the significant number of competitors that would remain in the market relative to the market's size.[11] Eleven competitors, in addition to Union Planters, would remain in the market after consummation of the proposal. This represents a large number of competitors relative to the size of the market.[12] Of these 11 competitors, five would each control more than 5 percent of market deposits, including one competitor that would control more than 9 percent of market deposits and one that would control approximately 28.5 percent of market deposits. Thus, a significant number of other institutions would have the market share and resources to compete effectively in the Lincoln banking market and the number of competitors reduces the likelihood of successful anticompetitive collusion in the market.

Union Planters and First Mutual also compete in the Decatur banking market. Consummation of the proposal would be consistent with the DOJ Guidelines and prior Board precedent in this banking market.[13] As in other cases, the Board sought comments from the Department of Justice and the Federal Deposit Insurance Corporation ("FDIC") on the competitive effects of the proposal. The Department of Justice has reviewed the proposal and advised the Board that consummation of the proposal would not likely have a significantly adverse competitive effect in the Lincoln or Decatur banking markets or in any other relevant market. The FDIC has been consulted and has not objected to consummation of the proposal. Based on these and all other facts of record, and for the reasons discussed in this order, the Board concludes that consummation of the proposal is not likely to result in any significantly adverse effects on competition or the concentration of banking resources in the Lincoln or Decatur banking markets or in any other relevant banking market.

Financial, Managerial, and Other Considerations

The BHC Act also requires the Board to consider the financial and managerial resources and future prospects of the companies and banks involved in the proposal, the convenience and needs of the communities to be served, and certain supervisory factors. The Board has reviewed these factors in light of all the facts of record, including supervisory reports of examination assessing the financial and managerial resources of the organizations. Based on all the facts of record, the Board concludes that the financial and managerial resources and future prospects of Union Planters, First Mutual, and their respective subsidiary de-

ships in Moultrie County; Moweaqua, Penn, Flat Branch, Pickaway, Todds Point, Ridge, and Okaw townships in Shelby County; and Willow Branch and Cerro Gordo townships in Piatt County, all in Illinois. The Lincoln banking market consists of Logan County, Illinois, excluding Corwin township.

9. Market share data used to analyze the competitive effects of the proposal are as of June 30, 1997, and are based on calculations in which the deposits of thrift institutions are included at 50 percent. The Board previously has indicated that thrift institutions have become, or have the potential to become, significant competitors of commercial banks. *See Midwest Financial Group*, 75 *Federal Reserve Bulletin* 386 (1989); *National City Corporation*, 70 *Federal Reserve Bulletin* 386 (1984). Thus, the Board has regularly included thrift deposits in the calculation of market share on a 50-percent weighted basis. *See, e.g., First Hawaiian, Inc.*, 77 *Federal Reserve Bulletin* 52 (1991). In light of the existing restrictions on the lending activities of Illinois-chartered savings banks, the Board has weighted the current market share of Savings Bank at 50 percent. *See* Ill. Comp. Stat. Ann. 1009 (West 1998). Because the deposits of Savings Bank would be acquired by a commercial banking organization, Savings Bank's deposits are included at 100 percent in the calculation of *pro forma* market shares. *See Norwest Corporation*, 78 *Federal Reserve Bulletin* 452 (1992); *First Banks, Inc.*, 76 *Federal Reserve Bulletin* 669 (1990).

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

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

12. The Lincoln banking market has total deposits of approximately $431 million. The number of competitors remaining in the Lincoln banking market after consummation would be 25 percent greater than the average number of competitors in the other 8 banking markets in Illinois that have between $350 million and $500 million in total market deposits.

13. On consummation of the proposal, Union Planters would become the largest depository institution in the Decatur banking market, controlling deposits of $369 million, representing approximately 22 percent of market deposits. The HHI would increase by 201 points to 1289, and 22 other depository institutions would remain in the market.

pository institutions are consistent with approval, as are the other supervisory factors the Board must consider under section 3 of the BHC Act. Considerations related to the convenience and needs of the communities to be served also are consistent with approval of the proposal.

Conclusion

Based on the foregoing, and in light of all the facts of record, the Board has determined that the applications should be, and hereby are, approved. The Board's approval is specifically conditioned on compliance by Union Planters with all of the commitments made in connection with the application. These commitments are deemed to be conditions imposed in writing by the Board in connection with its findings and decision and, as such, may be enforced in proceedings under applicable law. The proposed acquisition of First Mutual shall not be consummated before the fifteenth calendar day after the effective date of this order, or later than three months after the effective date of this order, unless such period is extended for good cause by the Board or by the Federal Reserve Bank of St. Louis, acting pursuant to delegated authority.

By order of the Board of Governors, effective January 11, 1999.

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

ROBERT DEV. FRIERSON
Associate Secretary of the Board

Orders Issued Under Section 4 of the Bank Holding Company Act

First Security Corporation
Salt Lake City, Utah

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

First Security Corporation ("First Security"), a bank holding company within the meaning of the Bank Holding Company Act ("BHC Act"), has requested the Board's approval under section 4(c)(8) of the BHC Act (12 U.S.C. § 1843(c)(8)) and section 225.24 of the Board's Regulation Y (12 C.F.R. 225.24) to acquire Van Kasper & Company, San Francisco, California ("Company"), and thereby acquire control of Company's wholly owned subsidiaries[1] and a 24.5-percent voting interest in Redwood Securities Group, Inc. ("Redwood"), also of San Francisco. First Security would thereby engage in the following nonbanking activities:

(1) Extending credit and servicing loans, in accordance with section 225.28(b)(1) of Regulation Y (12 C.F.R. 225.28(b)(1));
(2) Engaging in activities related to extending credit, in accordance with section 225.28(b)(2) of Regulation Y (12 C.F.R. 225.28(b)(2));
(3) Providing financial and investment advisory services, in accordance with section 225.28(b)(6) of Regulation Y (12 C.F.R. 225.28(b)(6));
(4) Providing securities brokerage, riskless principal, and private placement services, in accordance with section 225.28(b)(7)(i), (ii), and (iii) of Regulation Y (12 C.F.R. 225.28(b)(7)(i), (ii), and (iii));
(5) Underwriting and dealing in government obligations and money market instruments in which state member banks may underwrite and deal under 12 U.S.C. §§ 335 and 24(7) ("bank-eligible securities"), and engaging in investing and trading activities, in accordance with section 225.28(b)(8)(i) and (ii) of Regulation Y (12 C.F.R. 225.28(b)(8)(i) and (ii));
(6) Engaging in insurance agency activities, in accordance with section 4(c)(8)(G) of the BHC Act and section 225.28(b)(11)(vii) of Regulation Y (12 C.F.R. 225.28(b)(11)(vii));[2]
(7) Underwriting and dealing in, to a limited extent, all types of debt and equity securities other than interests in open-end investment companies ("bank-ineligible securities"); and
(8) Acting as the general partner of private investment limited partnerships that invest in assets in which a bank holding company is permitted to invest.

Notice of the proposal, affording interested persons an opportunity to submit comments, has been published (63 *Federal Register* 67,692 (1998)). The time for filing comments has expired, and the Board has considered the notice and all comments received in light of the factors set forth in section 4(c)(8) of the BHC Act.

First Security, with total consolidated assets of approximately $19.4 billion, is the 44th largest banking organization in the United States.[3] First Security operates subsidiary banks with branches in Utah, California, Nevada, New Mexico, Idaho, Oregon, and Wyoming, and engages through other subsidiaries in a broad range of permissible nonbanking activities. Company, with total consolidated assets of $22.1 million, engages directly and indirectly in a broad range of securities underwriting and dealing, securi-

1. Company's principal wholly owned subsidiaries are Van Kasper Advisers, Inc., Van Kasper Capital, and Van Kasper Ventures.

2. First Security is authorized to engage in insurance agency activities under section 4(c)(8)(G) of the BHC Act, which authorizes those bank holding companies that engaged with Board approval in insurance agency activities prior to 1971 to engage in insurance agency activities.

3. Asset and ranking data are as of June 30, 1998.

ties brokerage, investment advisory, and other activities. Redwood, with total consolidated assets of $946 thousand, underwrites and deals in limited types of securities, including municipal and government agency securities, and provides securities brokerage services.[4]

After consummation of the proposal, Company would be renamed First Security Van Kasper. First Security anticipates merging its existing section 20 subsidiary, First Security Capital Markets, Inc., Salt Lake City, Utah ("FSCMI"), with and into Company in May 1999, with Company surviving the merger.[5] Company would continue to own 24.5 percent of the voting shares of and control Redwood after these transactions.[6] Company and Redwood are, and after consummation of the proposal will continue to be, registered as broker-dealers with the Securities and Exchange Commission ("SEC") under the Securities Exchange Act of 1934 (15 U.S.C. § 78a *et seq.*) and members of the National Association of Securities Dealers, Inc. ("NASD"). Accordingly, Company and Redwood are, and will continue to be, subject to the record-keeping and reporting obligations, fiduciary standards, and other requirements of the Securities Exchange Act of 1934, the SEC, and the NASD.

Underwriting and Dealing in Bank-Ineligible Securities

The Board has determined that, subject to the framework of prudential limitations established in previous decisions to address the potential for conflicts of interests, unsound banking practices, or other adverse effects, underwriting and dealing in bank-ineligible securities is so closely related to banking as to be a proper incident thereto within the meaning of section 4(c)(8) of the BHC Act.[7] The Board also has determined that underwriting and dealing in bank-ineligible securities is consistent with section 20 of the Glass–Steagall Act (12 U.S.C. § 377), provided that the company engaged in the activity derives no more than 25 percent of its gross revenues from underwriting and dealing in bank-ineligible securities.[8]

First Security has committed that Company and Redwood each will conduct its underwriting and dealing activities using the methods and procedures and subject to the prudential limitations established by the Board in the Section 20 Orders. First Security also has committed that Company and Redwood each will conduct its bank-ineligible securities underwriting and dealing activities subject to the Board's revenue restriction.[9] As a condition of this order, First Security is required to conduct the bank-ineligible securities activities of Company and Redwood subject to the revenue restrictions and Operating Standards established for section 20 subsidiaries ("Operating Standards").[10]

4. Company currently holds certain investments in securities that exceed the levels permissible for bank holding companies. First Security has committed to conform, within two years of consummation of the proposal, all investments held by Company and its subsidiaries to the requirements of section 4 of the BHC Act and the Board's regulations and interpretations thereunder.

5. FSCMI currently underwrites and deals in, to a limited extent, certain types of bank-ineligible securities and engages in other permissible nonbanking activities. *See*, Letter dated December 18, 1997, from Jennifer J. Johnson, Deputy Secretary of the Board, to David R. Wilson.

6. First Security has committed, among other things, that Redwood will be treated as an affiliate of First Security's subsidiary banks for purposes of sections 23A and 23B of the Federal Reserve Act and as a subsidiary of First Security within the meaning of the BHC Act. *See* SR Letter No. 96–39 (APP) (December 26, 1996).

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

8. Compliance with the revenue limitation shall be calculated in accordance with the method stated in the Section 20 Orders, as modified by the *Order Approving Modifications to the Section 20 Orders*, 75 *Federal Reserve Bulletin* 751 (1989); *10 Percent Revenue Limit on Bank-Ineligible Activities of Subsidiaries of Bank Holding Companies Engaged in Underwriting and Dealing in Securities*, 61 *Federal Register* 48,953 (1996); and *Revenue Limit on Bank-Ineligible Activities of Subsidiaries of Bank Holding Companies Engaged in Underwriting and Dealing in Securities*, 61 *Federal Register* 68,750 (1996) (collectively, "Modification Orders"). In light of the fact that First Security proposes to acquire Company and Redwood as going concerns, the Board concludes that allowing Company and Redwood each to calculate compliance with the revenue limitation on an annualized basis during the first year after consummation, and thereafter on a rolling quarterly average basis, would be consistent with the Section 20 Orders. *See U.S. Bancorp*, 84 *Federal Reserve Bulletin* 483 (1998); *Dauphin Deposit Corporation*, 77 *Federal Reserve Bulletin* 672 (1991).

9. As noted above, First Security intends to merge FSCMI with and into Company in May 1999. Until that merger occurs, First Security will operate Company and FSCMI as separate corporate entities and FSCMI and Company will be independently subject to the 25-percent revenue limitation on underwriting and dealing in bank-ineligible securities. In addition, because Redwood will remain at all times a separate corporate entity, Redwood also will be independently subject to the 25-percent revenue limitation. *See Citicorp*, 73 *Federal Reserve Bulletin* 473, 486 n.45 (1987), *aff'd sub nom. Securities Industry Ass'n v. Board of Governors of the Federal Reserve System*, 839 F.2d 47 (2d Cir.), *cert. denied*, 486 U.S. 1059 (1988). The Board concludes, based on all the aspects of this proposal, including the fact that Company is significantly larger than FSCMI and will survive the merger with FSCMI, the management structure of the proposed merged company, and the activities of the merging companies and the proposed merged company, that the merger of FSCMI and Company would not disqualify Company from calculating compliance with the revenue test in conformance with the annualized treatment described in this order. *See KeyCorp*, 84 *Federal Reserve Bulletin* 1075 (1998).

10. 12 C.F.R. 225.200. Company and Redwood each may provide services that are necessary incidents to the proposed underwriting and dealing activities. Unless Company or Redwood receives specific approval under section 4(c)(8) of the BHC Act to conduct the incidental activities independently, any revenues from such activities must be treated as ineligible revenues subject to the Board's revenue limitation.

Other Activities Approved by Regulation or Order

The Board previously has determined that credit and credit-related activities; financial and investment advisory activities; securities brokerage, riskless principal, and private placement activities; bank-eligible securities underwriting and dealing; investing and trading activities; and certain insurance agency activities are closely related to banking within the meaning of section 4(c)(8) of the BHC Act.[11] In addition, the Board previously has determined by order that private investment limited partnership activities are permissible for bank holding companies when conducted within certain limits.[12] First Security has committed that it will conform the activities of Company and Redwood to the requirements of, and will conduct the activities of Company and Redwood in accordance with the limitations set forth in, Regulation Y and the Board's orders and interpretations relating to each of the activities.

Other Considerations

In order to approve this notice, the Board also must determine that performance of the proposed activities is a proper incident to banking; that is, that the proposed activities "can reasonably be expected to produce benefits to the public, such as greater convenience, increased competition, or gains in efficiency, that outweigh possible adverse effects, such as undue concentration of resources, decreased or unfair competition, conflicts of interests, or unsound banking practices."[13] As part of its review of these factors, the Board considers the financial and managerial resources of the notificant and its subsidiaries and the effect the transaction would have on such resources.[14]

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

The Board also has reviewed the managerial resources of each of the entities involved in this proposal in light of examination reports and other supervisory information. In connection with the proposal, the Federal Reserve Bank of San Francisco ("Reserve Bank") has reviewed the policies and procedures of Company and Redwood to ensure compliance with this order and the Section 20 Orders, including Company's and Redwood's operational and managerial infrastructure; computer, audit, and accounting systems; and internal risk management procedures and controls. The Board also has considered the ability of First Security to monitor Redwood's activities and compliance with this order and the Section 20 Orders. First Security has stated that Company has the ability to monitor Redwood's financial condition and securities transactions on a daily basis. A senior officer of Company serves as a director on Redwood's three-member board of directors, and Company's controller also serves as Redwood's controller.[15] In addition, Redwood operates on Company's premises in space leased from Company, and Company provides accounting and administrative support for Redwood's securities activities. On the basis of the Reserve Bank's review and all other facts of record, including the commitments provided in this case, the proposed managerial and risk management systems of Company and Redwood, the relationships between Company and Redwood, and the limited nature of Redwood's activities, the Board has concluded that financial and managerial considerations are consistent with approval of the notice.

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

The Board also expects that consummation of the proposal would provide added convenience to the customers of First Security and Company. First Security has indicated that consummation of the proposal would expand the range of products and services available to its customers and those of Company. In addition, there are public benefits to be derived from permitting capital markets to operate so that bank holding companies can make potentially profitable investments in nonbanking companies and from permitting banking organizations to allocate their resources in

11. *See* 12 C.F.R. 225.28(b)(1), (2), (6), (7)(i), (ii), and (iii), (8)(i) and (ii), and (11)(vii).

12. *See Dresdner Bank AG*, 84 *Federal Reserve Bulletin* 361 (1998); *Meridian Bancorp, Inc.*, 80 *Federal Reserve Bulletin* 736 (1994).

13. 12 U.S.C. § 1843(c)(8).

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

15. Company's controller also is designated as Redwood's financial and operations principal for NASD purposes and, as such, is responsible for preparing and ensuring the accuracy of all financial reports submitted by Redwood to the SEC and NASD; supervising all individuals who assist in the preparation of such reports, individuals who maintain Redwood's books and records, and individuals who are involved in the administration of Redwood's back office operations; and ensuring Redwood's compliance with all financial responsibility rules promulgated pursuant to the Securities Exchange Act of 1934. *See* NASD Rule 1022(b).

the manner they consider to be most efficient when such investments and actions are consistent, as in this case, with the relevant considerations under the BHC Act.

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

Conclusion

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

The Board's determination also is subject to all the terms and conditions set forth in Regulation Y, including those in sections 225.7 and 225.25(c) (12 C.F.R. 225.7 and 225.25(c)), and to the Board's authority to require modification or termination of the activities of a bank holding company or any of its subsidiaries as the Board finds necessary to ensure compliance with, or to prevent evasion of, the provisions and purposes of the BHC Act and the Board's regulations and orders issued thereunder. The Board's decision is specifically conditioned on compliance with all the commitments made in connection with this notice, including the commitments discussed in this order and the conditions set forth in this order and the Board regulations and orders noted above. The commitments and conditions are deemed to be conditions imposed in writing by the Board in connection with its findings and decision, and, as such, may be enforced in proceedings under applicable law.

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

By order of the Board of Governors, effective January 25, 1999.

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

ROBERT DEV. FRIERSON
Associate Secretary of the Board

APPLICATIONS APPROVED UNDER BANK HOLDING COMPANY ACT
By the Secretary of the Board

Recent applications have been approved by the Secretary of the Board as listed below. Copies are available upon request to the Freedom of Information Office, Office of the Secretary, Board of Governors of the Federal Reserve System, Washington, D.C. 20551.

Section 3

Applicant(s)	Bank(s)	Effective Date
Old National Bancorp, Evansville, Indiana	Dulaney Bancorp, Inc., Marshall, Illinois Dulaney National Bank, Marshall, Illinois	January 20, 1999

Section 4

Applicant(s)	Bank(s)	Effective Date
First Tennessee National Corporation, Memphis, Tennessee	First Horizon, FSB, Bristol, Virginia	January 15, 1999

By Federal Reserve Banks

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

Section 3

Applicant(s)	Bank(s)	Reserve Bank	Effective Date
Ace Gas, Inc., Deshler, Nebraska; Gibbon Exchange Company, Gibbon, Nebraska	Junction City First National Company, Junction City, Kansas; First National Bank and Trust Company, Junction City, Kansas	Kansas City	December 30, 1998
Adbanc, Inc., Ogallala, Nebraska	Indianola Agency, Inc., Indianola, Nebraska; Bank of Indianola, Indianola, Nebraska	Kansas City	January 12, 1999
Altrust Financial Services, Inc., ESOP, Cullman, Alabama	Altrust Financial Services, Inc., Cullman, Alabama	Atlanta	December 29, 1998
Area Bancshares Corporation, Owensboro, Kentucky; Cardinal Bancshares, Inc., Lexington, Kentucky	Alliance Bank, Somerset, Kentucky	St. Louis	December 30, 1998
Bancorp of Rantoul, Inc., Rantoul, Illinois	Rossville Bancorp, Inc., Rossville, Illinois; The First National Bank of Rossville, Rossville, Illinois	Chicago	January 13, 1999
Barret Bancorp, Inc., Barretville, Tennessee	Barretville Bank and Trust Company, Barretville, Tennessee; Somerville Bank and Trust Company, Somerville, Tennessee	St. Louis	December 29, 1998
BCC Bancshares, Inc., Hardin, Illinois	Bank of Calhoun County, Hardin, Illinois	St. Louis	January 21, 1999
Business Bank Corporation, Las Vegas, Nevada	Las Vegas Business Bank, Las Vegas, Nevada	San Francisco	January 21, 1999
CBCC, Inc., West Chester, Pennsylvania	Community Bank of Chester County, Exton, Pennsylvania	Philadelphia	January 25, 1998
Central Bancorp, Inc., Somerville, Massachusetts	Central Cooperative Bank, Somerville, Massachusetts	Boston	December 30, 1998
Central Bancshares of Kansas City, Inc., Kansas City, Missouri	ASB Bancshares, Inc., Harrisonville, Missouri	Kansas City	January 21, 1999
Citizens Bankshares Employee Stock Ownership Plan and Trust, Farmington, New Mexico	Citizens Bankshares, Inc., Farmington, New Mexico	Kansas City	January 14, 1999
Citizens First Corporation, Bowling Green, Kentucky	Citizens First Bank, Inc., Bowling Green, Kentucky	St. Louis	December 28, 1998
Community First Bancshares, Inc., Harrison, Arkansas	Community First Bank, Harrison, Arkansas	St. Louis	January 7, 1999
Cornerstone Bancorp, Inc., Stamford, Connecticut	Cornerstone Bank, Stamford, Connecticut	New York	January 27, 1999
Durant Bancorp, Inc., Durant, Oklahoma	Security National Bancshares of Sapulpa, Inc., Sapulpa, Oklahoma	Kansas City	January 27, 1999
Cyrus Bancshares, Inc., Cyrus, Minnesota	State Bank of Cyrus, Cyrus, Minnesota	Minneapolis	December 30, 1998

Section 3—Continued

Applicant(s)	Bank(s)	Reserve Bank	Effective Date
Eggemeyer Advisory Corp., Rancho Santa Fe, California Castle Creek Capital, L.L.C., Rancho Santa Fe, California Castle Creek Capital Partners Fund-I, L.P., Rancho Santa Fe, California	UB&T Holding Company, Abilene, Texas United Bank & Trust, Abilene, Texas	San Francisco	January 13, 1999
First Commerce Bancshares, Inc., Lincoln, Nebraska	First Commerce Bancshares of Colorado, Inc., Colorado Springs, Colorado	Kansas City	January 26, 1999
First Commerce Bancshares of Colorado, Inc., Colorado Springs, Colorado	First Commerce Bank of Colorado, N.A., Colorado Springs, Colorado	Kansas City	January 26, 1999
First National Bank of Clovis Employee Stock Ownership Trust, Clovis, New Mexico	National Bancshares, Inc., Clovis, New Mexico	Dallas	December 15, 1998
Fishback Financial Corporation, Brookings, South Dakota	Pipestone Bancshares, Inc., Pipestone, Minnesota	Minneapolis	December 24, 1998
Founders Bancshares, Inc., Dallas, Texas Skillman Bancshares, Inc., Dover, Delaware	Founders National Bank Skillman, Dallas, Texas	Dallas	January 14, 1999
Humboldt Bancorp, Eureka, California	Capitol Valley Bank, Roseville, California	San Francisco	January 21, 1999
Marlborough Bancorp, Marlborough, Massachusetts	Marlborough Cooperative Bank, Marlborough, Massachusetts	Boston	January 7, 1999
McIlroy Family Limited Partnership, Bowling Green, Missouri	Community State Bank of Bowling Green, Bowling Green, Missouri	St. Louis	January 21, 1999
Osceola Bancorporation, Inc., Osceola, Wisconsin	Chisago Bancorporation, Inc., Chisago City, Minnesota Chisago State Bank, Chisago City, Minnesota	Minneapolis	January 6, 1999
Overton Financial Corporation, Overton, Texas Overton Delaware Corporation, Dover, Delaware	Longview Financial Corporation, Longview, Texas	Dallas	December 15, 1998
P&C Investments, Inc., Muscatine, Iowa	Peoples National Corporation, Columbus Junction, Iowa Community Bank, Muscatine, Iowa	Chicago	December 23, 1998
Peoples Bancorporation, Inc., Easley, South Carolina	Seneca National Bank, Seneca, South Carolina	Richmond	January 21, 1999
People's Utah Bancorp, American Fork, Utah	Bank of American Fork, American Fork, Utah	San Francisco	December 28, 1998
South Georgia Bank Holding Company, Omega, Georgia	South Georgia Banking Company, Omega, Georgia	Atlanta	January 19, 1999
State National Bancshares, Inc., Lubbock, Texas	UB&T Holding Company, Abilene, Texas United Bank & Trust, Abilene, Texas	Dallas	January 7, 1999

Section 3—Continued

Applicant(s)	Bank(s)	Reserve Bank	Effective Date
Synergy Bancshares, Inc., Houma, Louisiana	Synergy Bank, Houma, Louisiana	Atlanta	January 12, 1999
Tower Financial Corporation, Fort Wayne, Indiana	Tower Bank & Trust Company, Fort Wayne, Indiana	Chicago	January 19, 1999
Union Planters Corporation, Memphis, Tennessee Union Planters Holding Corporation, Memphis, Tennessee	First & Farmers Bancshares, Inc., Somerset, Kentucky First & Farmers Bank of Somerset, Inc., Somerset, Kentucky Bank of Cumberland, Burkesville, Kentucky	St. Louis	January 12, 1999
United Security Bancorporation, Spokane, Washington	Bancwest Financial Corporation, Walla Walla, Washington Bank of the West, Walla Walla, Washington	San Francisco	January 15, 1999
WB&T Bancshares, Inc., Duncanville, Texas WB&T Delaware Bancshares, Inc., Wilmington, Delaware	Western Bank & Trust, Duncanville, Texas	Dallas	January 21, 1999
Wells Fargo & Company, San Francisco, California	Mercantile Financial Enterprises, Inc., Brownsville, Texas Mercantile Bank, National Association, Brownsville, Texas	San Francisco	January 27, 1999
Wells Fargo & Company, San Francisco, California	Riverton State Bank Holding Company, Riverton, Wyoming Riverton, State Bank, Riverton, Wyoming Dubois National Bank, Dubois, Wyoming	San Francisco	January 19, 1999
Woodlands Bancorp, Inc., Homer, Louisiana	First Woodlands Bank, Homer, Louisiana	Dallas	December 30, 1998

Section 4

Applicant(s)	Nonbanking Activity/Company	Reserve Bank	Effective Date
Cardinal Financial Corporation, Fairfax, Virginia	Cardinal Wealth Services, Inc., Fairfax, Virginia	Richmond	January 8, 1999
Carolina First Corporation, Greenville, South Carolina	*Net.B@nk*, Inc., Alpharetta, Georgia *Net.B@nk*, Alpharetta, Georgia	Richmond	January 13, 1999
Chambers Bancshares, Inc., Danville, Arkansas Community Investments, Inc., Elkins, Arkansas	Northwest Community Bancshares, Inc., Fayetteville, Arkansas Community Bank, F.S.B., Fayetteville, Arkansas	St. Louis	January 14, 1999
Fifth Third Bancorp, Cincinnati, Ohio Fifth Third Bank Cincinnati, Cincinnati, Ohio	Enterprise Federal Bancorp, Inc., West Chester, Ohio Enterprise Federal Savings Bank, West Chester, Ohio	Cleveland	January 22, 1999
First Bank Shares of the South East, Inc., Alma, Georgia	To engage in lending activities	Atlanta	December 31, 1999

Section 4—Continued

Applicant(s)	Nonbanking Activity/Company	Reserve Bank	Effective Date
FJSB Bancshares, Ft. Jennings, Ohio Pandora Bancshares, Pandora, Ohio Diamond Bancshares, Antwerp, Ohio United Bancshares, Columbus Grove, Ohio Sherwood Banc Corp., Sherwood, Ohio	Northwest Financial Services, LLC Glandorf, Ohio	Cleveland	January 11, 1999
Marshall & Ilsley Corporation, Milwaukee, Wisconsin M&I Data Services, Inc., Milwaukee, Wisconsin	Moneyline Express, Inc., Minneapolis, Minnesota	Chicago	December 30, 1998
Mellon Bank Corporation, Pittsburgh, Pennsylvania	Mellon Financial Markets, Inc., Pittsburgh, Pennsylvania	Cleveland	January 22, 1999
Royal Bank of Canada, Montreal, Quebec, Canada	Bull & Bear Securities, Inc., New York, New York	New York	January 11, 1999
Skandinaviska Enskilda Banken, Stockholm, Sweden	ABB Investment Management Corp., Stamford, Connecticut	New York	January 15, 1999
South Plains Financial, Inc., Lubbock, Texas South Plains Delaware Financial Corporation, Dover, Delaware	ARC Check Cashing, Inc., Lubbock, Texas	Dallas	January 27, 1999
Union Bankshares Corporation, Bowling Green, Virginia Mortgage Capital Investors, Springfield, Virginia	Union Bank & Trust Company, Bowling Green, Virginia	Richmond	January 4, 1999
U.S. Bancorp, Minneapolis, Minnesota	Libra Investments, Inc., Los Angeles, California	Minneapolis	December 24, 1998
U.S. Trust Corporation, New York, New York	Radnor Capital Management, Inc., Wayne, Pennsylvania Custodian Securities Inc., Wayne, Pennsylvania	New York	December 30, 1998
VIB Corporation, El Centro, California	Bank of Stockdale, F.S.B., Bakersfield, California	San Francisco	December 23, 1998
Wells Fargo & Company, San Francisco, California	Century Business Credit Corp, New York, New York	San Francisco	January 8, 1999
Wells Fargo & Company, San Francisco, California Norwest Financial Services, Inc., Des Moines, Iowa Norwest Financial, Inc., Des Moines, Iowa	SunStar Acceptance Corporation, Dallas, Texas	San Francisco	January 11, 1999
Wells Fargo & Company, San Francisco, California Norwest Mortgage, Inc., Des Moines, Iowa Norwest Ventures, LLC Des Moines, Iowa	MidAmerican Home Services Mortgage, LLC, West Des Moines, Iowa	San Francisco	January 22, 1999

Sections 3 and 4

Applicant(s)	Nonbanking Activity/Company	Reserve Bank	Effective Date
Superior Financial Holding Corporation, Minneapolis, Minnesota	Commercial State Bancorporation, Two Harbors, Minnesota Commercial State Bank of Two Harbors, Two Harbors, Minnesota Commercial State Insurance Agency, Inc., Two Harbors, Minnesota	Minneapolis	January 5, 1999

APPLICATIONS APPROVED UNDER BANK MERGER ACT
By Federal Reserve Banks

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

Applicant(s)	Bank(s)	Reserve Bank	Effective Date
Anadarko Bank and Trust Company, Anadarko, Oklahoma	Anadarko Branch of BancFirst, Oklahoma City, Oklahoma	Kansas City	January 12, 1999
First American Bank and Trust Co., Purcell, Oklahoma	First American Bank, Maysville, Oklahoma	Kansas City	January 21, 1999
First State Bank, Brunsville, Iowa	Farmers State Bank, Merrill, Iowa	Chicago	January 8, 1999
Mobile County Bank, Grand Bay, Alabama	Union Planters Bank, N.A., Mobile, Alabama	Atlanta	January 22, 1999
People First Bank, Hennessey, Oklahoma	First State Bank, Hobart, Oklahoma	Kansas City	January 4, 1999
Southern California Bank, Newport Beach, California	Pacific National Bank, Newport Beach, California	San Francisco	December 30, 1998
Union Bank & Trust Company, Bowling Green, Virginia	King George State Bank, King George, Virginia	Richmond	January 28, 1999
U.S. Bank, Johnstown, Pennsylvania	First Western Bank, N.A., New Castle, Pennsylvania	Philadelphia	December 24, 1998

PENDING CASES INVOLVING THE BOARD OF GOVERNORS

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

Nelson v. Greenspan, No. 1:99CV00215 (EGS) (D.D.C., filed January 28, 1999). Employment discrimination complaint.

Fraternal Order of Police v. Board of Governors, No. 1:98CV03116 (D. D.C., filed December 22, 1998). Declaratory judgment action challenging Board labor practices.

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

Attorneys Against American Apartheid v. Board of Governors, No. 98-1483 (D.C. Cir., filed October 21, 1998). Petition for review of denial of reconsideration of a Board order dated August 17, 1998, approving the merger of NationsBank Corporation, Charlotte, North Carolina, and BankAmerica. Corporation, San Francisco, California. On December 7, 1998, the Board filed a motion to dismiss the petition. The court of appeals granted the motion on January 19, 1999.

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

Jones v. Board of Governors, No. 98–30138 (5th Cir., filed February 9, 1998). Appeal of district court dismissal of complaint alleging violations of the Fair Housing Act. On November 19, 1998, the court dismissed the appeal.

Cunningham v. Board of Governors, No. 98–1459 (D.C. Cir., filed September 30, 1998). Petition for review of a Board order dated September 23, 1998, conditionally approving the applications of Travelers Group, Inc., New York, New York, to become a bank holding company by acquiring Citicorp, New York, New York, and its bank and nonbank subsidiaries. On December 4, 1998, the Court granted the Board's motion to dismiss the petition.

Clarkson v. Greenspan, No.98–5349 (D.C. Cir., filed July 29, 1998). Appeal of district court order granting Board's motion for summary judgment in a Freedom of Information Act case. On September 14, 1998, the Board filed a motion for summary affirmance of the district court dismissal.

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

Board of Governors v. Pharaon, No. 98–6101 (2d Cir., filed May 4, 1998). Appeal of partial denial of Board's motion for summary judgment in action to freeze assets of individual pending administrative adjudication of civil money penalty assessment by the Board. On May 22, 1998, the appellee filed a cross-appeal from the partial final judgment.

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

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

Goldman v. Department of the Treasury, No. 1–97-CV-3798 (N.D. Ga., filed December 23, 1997). Declaratory judgment action challenging Federal Reserve notes as lawful money. On March 2, 1998, the Board filed a motion to dismiss the action.

Kerr v. Department of the Treasury, No. CV-S-97–01877-DWH (D. Nev., filed December 22, 1997). Challenge to income taxation and Federal Reserve notes. On September 3, 1998, a motion to dismiss was filed on behalf of all federal defendants.

Towe v. Board of Governors, No. 97–71143 (9th Cir., filed September 15, 1997). Petition for review of a Board order dated August 18, 1997, prohibiting Edward Towe and Thomas E. Towe from further participation in the banking industry.

Bettersworth v. Board of Governors, No. 97-CA-624 (W.D. Tex., filed August 21, 1997). Privacy Act case.

Final Enforcement Orders Issued by the Board of Governors

John H. Ahn
Los Angeles, California

The Federal Reserve Board announced on January 26, 1999, the issuance of an Order of Removal and Prohibition against John H. Ahn, a former director and institution-affiliated party of the Hanmi Bank, Los Angeles, California.

Bob L. Sellers
Crested Butte, Colorado

The Federal Reserve Board announced on January 21, 1999, the joint issuance with the Office of the Comptroller of the Currency of a consent Order of Prohibition against Bob L. Sellers, a former officer, director and shareholder of First National Summit Bankshares, Crested Butte, Colorado, a former bank holding company, and a former officer and director of First National Summit Bank, Crested Butte, Colorado, a former national bank. The Board also announced on January 21, 1999, the issuance of a consent Order of Assessment of Civil Money Penalty against Mr. Sellers.

Financial and Business Statistics

Guide to Tabular Presentation

SYMBOLS AND ABBREVIATIONS

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

GENERAL INFORMATION

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

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

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

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

1.10 RESERVES, MONEY STOCK, LIQUID ASSETS, AND DEBT MEASURES

Percent annual rate of change, seasonally adjusted[1]

Monetary or credit aggregate	1998				1998				
	Q1	Q2	Q3	Q4	Aug.	Sept.r	Oct.r	Nov.	Dec.
Reserves of depository institutions[2]									
1 Total	−1.9	−3.8	−7.4	−1.6	4.9	−11.0	−5.4	5.0	9.1
2 Required	−1.8	−2.5	−9.0	−2.3	1.0	−16.1	−2.5	3.8	10.4
3 Nonborrowed	−.6	−4.3	−8.4	−.4	4.6	−10.5	−3.3	7.5	8.2
4 Monetary base[3]	6.9	4.1	6.9	9.8	8.9	11.6	9.4	9.1	9.5
Concepts of money, liquid assets, and debt[4]									
5 M1	3.0	.2	−2.4r	5.7	−3.2r	3.7	7.3	10.0r	5.0
6 M2	8.0	7.4	6.5r	12.0	8.2r	14.5	12.6	10.7r	10.6
7 M3	11.0	10.2	7.4	14.2	12.7r	15.3	13.6	15.3r	11.7
8 Debt	6.2	6.1	6.1	n.a.	6.3r	5.9	6.8	7.2	n.a.
Nontransaction components									
9 In M2[5]	9.7	9.9	9.6r	14.1	12.0r	18.1	14.3	10.9r	12.6
10 In M3 only[6]	20.4r	18.8	10.2r	20.5	26.0r	17.5	16.4	28.3r	14.6
Time and savings deposits									
Commercial banks									
11 Savings, including MMDAs	13.6	14.3	13.8	17.9	15.2	18.7	16.0	17.4	22.9
12 Small time[7]	1.5	−1.0	.4r	1.4	4.8r	1.2	1.3	2.7r	−4.2
13 Large time[8,9]	19.9r	18.1r	−1.2r	3.5	15.1r	−1.1	−4.8	14.6r	4.3
Thrift institutions									
14 Savings, including MMDAs	7.6	11.6	6.9	10.2	2.7	7.5	11.9	12.1	12.9
15 Small time[7]	−.4	−5.7r	−6.7r	−5.6	−15.7r	−2.2	−1.1	−10.5r	−6.6
16 Large time[8]	14.4	−.8	−3.8r	5.4	−8.3	4.2	6.9	5.5r	16.5
Money market mutual funds									
17 Retail	19.0	21.0	21.3	31.3	32.9	48.3	31.3	17.0	18.5
18 Institution-only	18.9	36.5	21.6	48.0	36.5	38.4	60.9	44.4	31.5
Repurchase agreements and Eurodollars									
19 Repurchase agreements[10]	34.1	14.5	10.6	16.5	33.4	29.8	−20.3	46.2	24.2
20 Eurodollars[10]	7.6	−7.7	27.8	14.4	40.1	8.9	27.3	6.3r	−22.7
Debt components[4]									
21 Federal	.0	−1.4	−1.5	n.a.	−.8	−3.3	−3.1	−.4	n.a.
22 Nonfederal	8.3	8.6	8.5	n.a.	8.5	8.8	9.8	9.6	n.a.

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

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

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

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

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

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

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

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

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

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

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

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

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

10. Includes both overnight and term.

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

Millions of dollars

Factor	Average of daily figures			Average of daily figures for week ending on date indicated						
	1998			1998						
	Oct.	Nov.	Dec.	Nov. 18	Nov. 25	Dec. 2	Dec. 9	Dec. 16	Dec. 23	Dec. 30
SUPPLYING RESERVE FUNDS										
1 Reserve Bank credit outstanding	489,492	495,325	504,028	495,211	494,162[r]	501,439	495,999	503,105	504,233	510,960
U.S. government securities[2]										
2 Bought outright—System account[3]	447,493	451,629	453,911	450,434	452,826	454,398	454,530	454,019	453,111	454,191
3 Held under repurchase agreements	3,235	3,391	7,685	4,084	3,004	5,714	3,509	6,909	8,098	11,000
Federal agency obligations										
4 Bought outright	394	373	346	373	372	368	368	338	338	338
5 Held under repurchase agreements	3,425	3,864	5,371	4,215	2,691	5,291	3,245	6,380	5,767	5,570
6 Acceptances	0	0	0	0	0	0	0	0	0	0
Loans to depository institutions										
7 Adjustment credit	86	48	90	72	84	34	2	25	8	345
8 Seasonal credit	104	35	15	33	23	16	12	13	16	20
9 Extended credit	0	0	0	0	0	0	0	0	0	0
10 Float	181	544	1,621	466	627[r]	706	757	575	1,749	3,392
11 Other Federal Reserve assets	34,572	35,440	34,988	35,536	34,534	34,911	33,577	34,846	35,147	36,103
12 Gold stock	11,043	11,041	11,041	11,042	11,041	11,040	11,041	11,041	11,041	11,043
13 Special drawing rights certificate account	9,200	9,200	9,200	9,200	9,200	9,200	9,200	9,200	9,200	9,200
14 Treasury currency outstanding	26,111[r]	26,184[r]	26,245	26,183[r]	26,197[r]	26,211	26,225	26,239	26,253	26,267
ABSORBING RESERVE FUNDS										
15 Currency in circulation	496,474[r]	502,751[r]	510,744	502,653[r]	503,955[r]	507,004	506,784	507,797	511,471	516,798
16 Treasury cash holdings	91	92	89	88	98	100	98	87	84	85
Deposits, other than reserve balances, with Federal Reserve Banks										
17 Treasury	5,407	5,135	5,923	4,801	5,026	5,304	5,035	6,324	5,434	7,195
18 Foreign	224	188	178	178	179	207	154	195	194	174
19 Service-related balances and adjustments	6,947	6,867	6,850	6,772	6,793	7,211	6,737	6,703	6,977	6,852
20 Other	414	403	322	410	389	363	346	290	231	235
21 Other Federal Reserve liabilities and capital	17,347	17,476	16,935	17,220	17,042	16,804	16,499	17,113	17,197	17,152
22 Reserve balances with Federal Reserve Banks[4]	8,941	8,840	9,473	9,514	7,117[r]	10,897	6,813	11,076	9,137	8,979
	End-of-month figures			Wednesday figures						
	Oct.	Nov.	Dec.	Nov. 18	Nov. 25	Dec. 2	Dec. 9	Dec. 16	Dec. 23	Dec. 30
SUPPLYING RESERVE FUNDS										
1 Reserve Bank credit outstanding	494,886	504,546[r]	522,337	494,351	499,127[r]	498,912	498,642	503,843	508,066	517,603
U.S. government securities[2]										
2 Bought outright—System account[3]	450,179	453,991	452,141	451,617	454,525	454,213	454,775	455,035	454,657	454,772
3 Held under repurchase agreements	4,286	8,970	19,674	3,630	3,830	5,020	4,897	5,702	7,845	15,549
Federal agency obligations										
4 Bought outright	388	368	338	373	368	368	368	338	338	338
5 Held under repurchase agreements	3,538	6,172	10,702	4,263	4,662	2,967	3,486	7,181	5,742	7,388
6 Acceptances	0	0	0	0	0	0	0	0	0	0
Loans to depository institutions										
7 Adjustment credit	1	1	1	15	126	111	6	145	21	1,642
8 Seasonal credit	68	15	16	24	19	13	11	14	21	27
9 Extended credit	0	0	0	0	0	0	0	0	0	0
10 Float	−329	462[r]	1,738	456	523[r]	1,668	926	729	4,189	875
11 Other Federal Reserve assets	36,755	34,567	37,726	33,973	35,073	34,553	34,172	34,699	35,254	37,013
12 Gold stock	11,041	11,041	11,046	11,041	11,040	11,041	11,041	11,041	11,041	11,046
13 Special drawing rights certificate account	9,200	9,200	9,200	9,200	9,200	9,200	9,200	9,200	9,200	9,200
14 Treasury currency outstanding	26,155[r]	26,211[r]	26,281	26,183[r]	26,197[r]	26,211	26,225	26,239	26,253	26,267
ABSORBING RESERVE FUNDS										
15 Currency in circulation	497,493[r]	507,159[r]	517,496	503,466[r]	506,799[r]	507,759	507,954	509,933	515,758	518,347
16 Treasury cash holdings	87	99	85	98	99	100	87	84	85	85
Deposits, other than reserve balances, with Federal Reserve Banks										
17 Treasury	4,440	5,219	6,086	4,720	4,881	4,382	4,199	8,628	3,837	10,174
18 Foreign	154	211	167	214	252	171	155	170	175	166
19 Service-related balances and adjustments	6,860	7,211	7,053	6,772	6,793	7,211	6,737	6,703	6,977	6,852
20 Other	380	337	1,605	406	356	360	327	263	175	164
21 Other Federal Reserve liabilities and capital	18,241	16,579	16,354	16,859	16,852	16,253	16,649	16,965	16,969	16,957
22 Reserve balances with Federal Reserve Banks[4]	13,627	14,182[r]	20,017	8,240	9,532[r]	9,128	9,001	7,577	10,584	11,372

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

1.12 RESERVES AND BORROWINGS Depository Institutions[1]

Millions of dollars

Reserve classification	Prorated monthly averages of biweekly averages									
	1996	1997	1998	1998						
	Dec.	Dec.	Dec.	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1 Reserve balances with Reserve Banks[2]	13,395	10,673	9,028	9,668	9,646	9,682	9,284	9,026	8,855	9,028
2 Total vault cash[3]	44,525	44,707	44,305	42,635	42,035	42,121	42,579	43,348	43,109	44,305
3 Applied vault cash[4]	37,848	37,206	35,997	35,427	34,954	35,025	34,909	35,090	35,297[r]	35,997
4 Surplus vault cash[5]	6,678	7,500	8,308	7,208	7,081	7,095	7,670	8,258	7,812[r]	8,308
5 Total reserves[6]	51,242	47,880	45,024	45,095	44,600	44,707	44,193	44,115	44,152	45,024
6 Required reserves	49,819	46,196	43,432	43,475	43,235	43,194	42,509	42,544	42,527[r]	43,432
7 Excess reserve balances at Reserve Banks[7]	1,423	1,683	1,593	1,620	1,365	1,513	1,684	1,572	1,624	1,593
8 Total borrowings at Reserve Banks[8]	155	324	117	251	258	271	251	174	84	117
9 Seasonal borrowings	68	79	15	159	215	242	178	107	37	15
10 Extended credit[9]	0	0	0	0	0	0	0	0	0	0
	Biweekly averages of daily figures for two week periods ending on dates indicated									
	1998									1999
	Sept. 9	Sept. 23	Oct. 7	Oct. 21	Nov. 4	Nov. 18	Dec. 2[r]	Dec. 16	Dec. 30	Jan. 13
1 Reserve balances with Reserve Banks[2]	10,363	8,439	9,588	8,400	9,509	8,520	9,028	8,949	9,064	9,630
2 Total vault cash[3]	41,793	42,900	42,948	44,084	42,598	43,080	43,313	43,230	45,470	45,023
3 Applied vault cash[4]	34,712	35,039	34,905	35,321	34,897	34,935	35,853	35,273	36,746	35,924
4 Surplus vault cash[5]	7,081	7,862	8,043	8,763	7,701	8,145	7,460	7,957	8,724	9,100
5 Total reserves[6]	45,075	43,477	44,493	43,720	44,405	43,455	44,880	44,222	45,810	45,554
6 Required reserves	43,153	42,093	42,514	42,520	42,599	41,913	43,221	42,917	43,990	43,247
7 Excess reserve balances at Reserve Banks[7]	1,922	1,384	1,978	1,200	1,806	1,542	1,659	1,304	1,820	2,306
8 Total borrowings at Reserve Banks[8]	247	190	379	122	103	82	79	26	195	370
9 Seasonal borrowings	209	171	152	105	79	40	20	13	18	9
10 Extended credit[9]	0	0	0	0	0	0	0	0	0	0

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

1.14 FEDERAL RESERVE BANK INTEREST RATES

Percent per year

Current and previous levels

Federal Reserve Bank	Adjustment credit[1]			Seasonal credit[2]			Extended credit[3]		
	On 2/12/99	Effective date	Previous rate	On 2/12/99	Effective date	Previous rate	On 2/12/99	Effective date	Previous rate
Boston	4.50	11/18/98	4.75	4.80	2/11/99	4.75	5.30	2/11/99	5.25
New York		11/17/98							
Philadelphia		11/17/98							
Cleveland		11/19/98							
Richmond		11/18/98							
Atlanta		11/18/98							
Chicago		11/19/98							
St. Louis		11/19/98							
Minneapolis		11/19/98							
Kansas City		11/18/98							
Dallas		11/17/98							
San Francisco	4.50	11/17/98	4.75	4.80	2/11/99	4.75	5.30	2/11/99	5.25

Range of rates for adjustment credit in recent years[4]

Effective date	Range (or level)—All F.R. Banks	F.R. Bank of N.Y.
In effect Dec. 31, 1977	6	6
1978—Jan. 9	6–6.5	6.5
20	6.5	6.5
May 11	6.5–7	7
12	7	7
July 3	7–7.25	7.25
10	7.25	7.25
Aug. 21	7.75	7.75
Sept. 22	8	8
Oct. 16	8–8.5	8.5
20	8.5	8.5
Nov. 1	8.5–9.5	9.5
3	9.5	9.5
1979—July 20	10	10
Aug. 17	10–10.5	10.5
20	10.5	10.5
Sept. 19	10.5–11	11
21	11	11
Oct. 8	11–12	12
10	12	12
1980—Feb. 15	12–13	13
19	13	13
May 29	12–13	13
30	12	12
June 13	11–12	11
16	11	11
July 28	10–11	10
29	10	10
Sept. 26	11	11
Nov. 17	12	12
Dec. 5	12–13	13
8	13	13
1981—May 5	13–14	14
8	14	14

Effective date	Range (or level)—All F.R. Banks	F.R. Bank of N.Y.
1981—Nov. 2	13–14	13
6	13	13
Dec. 4	12	12
1982—July 20	11.5–12	11.5
23	11.5	11.5
Aug. 2	11–11.5	11
3	11	11
16	10.5	10.5
27	10–10.5	10
30	10	10
Oct. 12	9.5–10	9.5
13	9.5	9.5
Nov. 22	9–9.5	9
26	9	9
Dec. 14	8.5–9	9
15	8.5–9	8.5
17	8.5	8.5
1984—Apr. 9	8.5–9	9
13	9	9
Nov. 21	8.5–9	8.5
26	8.5	8.5
Dec. 24	8	8
1985—May 20	7.5–8	7.5
24	7.5	7.5
1986—Mar. 7	7–7.5	7
10	7	7
Apr. 21	6.5–7	6.5
23	6.5	6.5
July 11	6	6
Aug. 21	5.5–6	5.5
22	5.5	5.5
1987—Sept. 4	5.5–6	6
11	6	6

Effective date	Range (or level)—All F.R. Banks	F.R. Bank of N.Y.
1988—Aug. 9	6–6.5	6.5
11	6.5	6.5
1989—Feb. 24	6.5–7	7
27	7	7
1990—Dec. 19	6.5	6.5
1991—Feb. 1	6–6.5	6
4	6	6
Apr. 30	5.5–6	5.5
May 2	5.5	5.5
Sept. 13	5–5.5	5
17	5	5
Nov. 6	4.5–5	4.5
7	4.5	4.5
Dec. 20	3.5–4.5	3.5
24	3.5	3.5
1992—July 2	3–3.5	3
7	3	3
1994—May 17	3–3.5	3.5
18	3.5	3.5
Aug. 16	3.5–4	4
18	4	4
Nov. 15	4–4.75	4.75
17	4.75	4.75
1995—Feb. 1	4.75–5.25	5.25
9	5.25	5.25
1996—Jan. 31	5.00–5.25	5.00
Feb. 5	5.00	5.00
1998—Oct. 15	4.75–5.00	4.75
Oct. 16	4.75	4.75
1998—Nov. 17	4.50–4.75	4.50
Nov. 19	4.50	4.50
In effect Feb. 12, 1999	4.50	4.50

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

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

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

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

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

1.15 RESERVE REQUIREMENTS OF DEPOSITORY INSTITUTIONS[1]

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

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

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

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

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

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

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

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

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

1.17 FEDERAL RESERVE OPEN MARKET TRANSACTIONS[1]

Millions of dollars

Type of transaction and maturity	1995	1996	1997	1998 May	1998 June	1998 July	1998 Aug.	1998 Sept.	1998 Oct.	1998 Nov.
U.S. TREASURY SECURITIES[2]										
Outright transactions (excluding matched transactions)										
Treasury bills										
1 Gross purchases	10,932	9,901	9,147	0	0	0	0	0	0	0
2 Gross sales	0	0	0	0	0	0	0	0	0	0
3 Exchanges	405,296	426,928	436,257	35,190	32,830	40,312	34,607	33,140	40,712	34,957
4 For new bills	405,296	426,928	435,907	35,190	32,830	40,312	34,607	33,140	40,712	34,957
5 Redemptions	900	0	0	0	0	0	0	0	0	0
Others within one year										
6 Gross purchases	390	524	5,549	0	0	0	986	1,038	741	662
7 Gross sales	0	0	0	0	0	0	0	0	0	0
8 Maturity shifts	43,574	30,512	41,716	6,951	1,520	2,638	6,367	2,301	2,423	5,444
9 Exchanges	−35,407	−41,394	−27,499	−4,990	−5,084	−2,242	−8,964	−2,242	−400	−8,093
10 Redemptions	1,776	2,015	1,996	0	0	1,311	0	0	602	0
One to five years										
11 Gross purchases	5,366	3,898	19,680	0	0	0	535	3,989	725	2,397
12 Gross sales	0	0	0	0	0	0	0	0	0	0
13 Maturity shifts	−34,646	−25,022	−37,987	−6,620	−1,520	−2,638	−2,168	−2,301	−2,423	−4,574
14 Exchanges	26,387	31,459	20,274	2,270	5,084	1,842	5,828	2,242	0	6,013
Five to ten years										
15 Gross purchases	1,432	1,116	3,849	0	0	0	303	351	0	862
16 Gross sales	0	0	0	0	0	0	0	0	0	0
17 Maturity shifts	−3,093	−5,469	−1,954	−331	0	0	−3,411	0	0	718
18 Exchanges	7,220	6,666	5,215	2,720	0	0	1,364	0	400	1,135
More than ten years										
19 Gross purchases	2,529	1,655	5,897	0	0	0	1,769	0	1,674	698
20 Gross sales	0	0	0	0	0	0	0	0	0	0
21 Maturity shifts	−2,253	−20	−1,775	0	0	0	−789	0	0	−1,589
22 Exchanges	1,800	3,270	2,360	0	0	400	1,772	0	0	945
All maturities										
23 Gross purchases	20,649	17,094	44,122	0	0	0	3,593	5,377	3,140	4,619
24 Gross sales	0	0	0	0	0	0	0	0	0	0
25 Redemptions	2,676	2,015	1,996	0	0	1,311	0	0	602	0
Matched transactions										
26 Gross purchases	2,197,736	3,092,399	3,577,954	367,934	369,358	373,285	346,245	380,594	402,581	358,438
27 Gross sales	2,202,030	3,094,769	3,580,274	368,281	370,569	371,142	348,318	382,063	400,995	359,256
Repurchase agreements										
28 Gross purchases	331,694	457,568	810,485	7,722	57,098	52,116	39,078	63,924	40,823	23,884
29 Gross sales	328,497	450,359	809,268	20,456	41,414	63,531	38,402	59,731	48,672	19,200
30 Net change in U.S. Treasury securities	16,875	19,919	41,022	−13,081	14,473	−10,584	2,196	8,101	−3,725	8,484
FEDERAL AGENCY OBLIGATIONS										
Outright transactions										
31 Gross purchases	0	0	0	0	0	0	0	0	0	0
32 Gross sales	0	0	0	0	0	0	25	0	0	0
33 Redemptions	1,003	409	1,540	0	25	0	50	48	15	20
Repurchase agreements										
34 Gross purchases	36,851	75,354	160,409	1,575	14,548	11,236	33,431	18,486	51,471	51,419
35 Gross sales	36,776	74,842	159,369	3,300	12,913	12,341	30,625	19,953	50,032	48,785
36 Net change in federal agency obligations	−928	103	−500	−1,725	1,610	−1,105	2,731	−1,515	1,424	2,614
37 **Total net change in System Open Market Account**	**15,948**	**20,021**	**40,522**	**−14,806**	**16,083**	**−11,689**	**4,927**	**6,586**	**−2,301**	**11,098**

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

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

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

Millions of dollars

Account	Wednesday					End of month		
	1998					1998		
	Dec. 2	Dec. 9	Dec. 16	Dec. 23	Dec. 30	Oct. 31	Nov. 30	Dec. 31
	Consolidated condition statement							
ASSETS								
1 Gold certificate account	11,041	11,041	11,041	11,041	11,046	11,041	11,041	11,046
2 Special drawing rights certificate account	9,200	9,200	9,200	9,200	9,200	9,200	9,200	9,200
3 Coin	377	385	399	392	360	426	391	358
Loans								
4 To depository institutions	124	18	159	42	1,669	69	17	17
5 Other	0	0	0	0	0	0	0	0
6 Acceptances held under repurchase agreements	0	0	0	0	0	0	0	0
Federal agency obligations								
7 Bought outright	368	368	338	338	338	388	368	338
8 Held under repurchase agreements	2,967	3,486	7,181	5,742	7,388	3,538	6,172	10,702
9 **Total U.S. Treasury securities**	**459,233**	**459,672**	**460,737**	**462,502**	**470,321**	**454,465**	**462,961**	**471,815**
10 Bought outright[2]	454,213	454,775	455,035	454,657	454,772	450,179	453,991	452,141
11 Bills	196,853	197,413	197,671	197,291	197,404	197,450	196,631	194,772
12 Notes	187,888	187,890	187,891	187,893	187,895	185,033	187,888	187,895
13 Bonds	69,472	69,472	69,473	69,473	69,474	67,696	69,472	69,474
14 Held under repurchase agreements	5,020	4,897	5,702	7,845	15,549	4,286	8,970	19,674
15 **Total loans and securities**	**462,691**	**463,544**	**468,415**	**468,623**	**479,716**	**458,460**	**469,517**	**482,872**
16 Items in process of collection	9,257	8,373	8,751	11,532	8,895	4,702	2,899	6,933
17 Bank premises	1,294	1,295	1,296	1,297	1,297	1,293	1,294	1,300
Other assets								
18 Denominated in foreign currencies[3]	18,945	18,954	18,963	18,971	18,980	19,573	18,943	19,767
19 All other[4]	14,384	14,138	14,534	15,228	16,829	15,976	14,456	16,625
20 **Total assets**	**527,190**	**526,931**	**532,600**	**536,284**	**546,322**	**520,672**	**527,740**	**548,101**
LIABILITIES								
21 Federal Reserve notes	482,025	482,201	484,177	489,982	492,524	471,851	481,438	491,657
22 **Total deposits**	**21,043**	**20,698**	**23,722**	**21,211**	**29,435**	**25,568**	**27,260**	**34,165**
23 Depository institutions	16,130	16,018	14,662	17,024	18,931	20,592	21,493	26,306
24 U.S. Treasury—General account	4,382	4,199	8,628	3,837	10,174	4,440	5,219	6,086
25 Foreign—Official accounts	171	155	170	175	166	154	211	167
26 Other	360	327	263	175	164	380	337	1,605
27 Deferred credit items	7,869	7,383	7,735	8,122	7,406	5,012	2,463	5,924
28 Other liabilities and accrued dividends[5]	4,376	4,357	4,477	4,448	4,464	4,518	4,456	4,450
29 **Total liabilities**	**515,314**	**514,639**	**520,112**	**523,763**	**533,829**	**506,948**	**515,617**	**536,197**
CAPITAL ACCOUNTS								
30 Capital paid in	5,936	5,937	5,942	5,948	5,951	5,920	5,931	5,952
31 Surplus	5,209	5,220	5,220	5,220	5,246	5,220	5,205	5,952
32 Other capital accounts	732	1,135	1,325	1,352	1,296	2,583	987	0
33 **Total liabilities and capital accounts**	**527,190**	**526,931**	**532,600**	**536,284**	**546,322**	**520,672**	**527,740**	**548,101**
MEMO								
34 Marketable U.S. Treasury securities held in custody for foreign and international accounts	595,379	596,183	597,588	599,533	594,076	576,466	596,157	n.a.
	Federal Reserve note statement							
35 Federal Reserve notes outstanding (issued to Banks)	603,378	608,301	613,352	613,352	612,055	588,229	601,253	611,688
36 LESS: Held by Federal Reserve Banks	121,353	126,100	129,175	123,370	119,530	116,378	119,815	120,030
37 Federal Reserve notes, net	482,025	482,201	484,177	489,982	492,524	471,851	481,438	491,657
Collateral held against notes, net								
38 Gold certificate account	11,041	11,041	11,041	11,041	11,046	11,041	11,041	11,046
39 Special drawing rights certificate account	9,200	9,200	9,200	9,200	9,200	9,200	9,200	9,200
40 Other eligible assets	0	0	0	0	0	0	0	0
41 U.S. Treasury and agency securities	461,785	461,960	463,937	469,741	472,278	451,610	461,197	471,412
42 **Total collateral**	**482,025**	**482,201**	**484,177**	**489,982**	**492,524**	**471,851**	**481,438**	**491,657**

1. Some of the data in this table also appear in the Board's H.4.1 (503) weekly statistical release. For ordering address, see inside front cover.
2. Includes securities loaned—fully guaranteed by U.S. Treasury securities pledged with Federal Reserve Banks—and includes compensation that adjusts for the effects of inflation on the principal of inflation-indexed securities. Excludes securities sold and scheduled to be bought back under matched sale–purchase transactions.
3. Valued monthly at market exchange rates.
4. Includes special investment account at the Federal Reserve Bank of Chicago in Treasury bills maturing within ninety days.
5. Includes exchange-translation account reflecting the monthly revaluation at market exchange rates of foreign exchange commitments.

1.19 FEDERAL RESERVE BANKS Maturity Distribution of Loan and Security Holding

Millions of dollars

Type of holding and maturity	Wednesday					End of month		
	1998					1998		
	Dec. 2	Dec. 9	Dec. 16	Dec. 23	Dec. 30	Oct. 30	Nov. 30	Dec. 31
1 **Total loans**	**51**	**18**	**159**	**42**	**1,669**	**69**	**16**	**18**
2 Within fifteen days[1]	44	8	157	42	1,668	51	4	18
3. Sixteen days to ninety days	6	10	2	n.a.	1	18	12	n.a.
4 **Total U.S. Treasury securities**[2]	**459,233**	**456,440**	**457,505**	**457,995**	**465,814**	**454,465**	**462,961**	**467,308**
5 Within fifteen days[1]	13,380	15,130	12,481	14,480	23,470	8,752	16,007	16,325
6 Sixteen days to ninety days	99,594	101,338	99,531	98,154	97,252	100,244	100,695	99,127
7 Ninety-one days to one year	138,427	132,137	137,657	137,522	137,252	141,715	138,427	143,635
8 One year to five years	107,348	107,349	107,349	107,349	107,350	106,109	107,348	107,730
9 Five years to ten years	44,818	44,818	44,820	44,820	44,822	42,034	44,817	44,822
10 More than ten years	55,667	55,667	55,667	55,667	55,668	55,611	55,666	55,668
11 **Total federal agency obligations**	**3,335**	**1,226**	**4,891**	**2,727**	**4,373**	**3,926**	**6,540**	**7,687**
12 Within fifteen days[1]	2,997	888	4,553	2,389	4,035	3,538	6,202	7,349
13 Sixteen days to ninety days	2	2	27	27	27	52	2	27
14 Ninety-one days to one year	100	100	75	75	75	93	100	75
15 One year to five years	51	51	61	61	61	58	51	61
16 Five years to ten years	185	185	175	175	175	185	185	175
17 More than ten years	0	0	0	0	0	0	0	0

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

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

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

Billions of dollars, averages of daily figures

Item	1995 Dec.	1996 Dec.	1997 Dec.	1998 Dec.	1998 May	1998 June	1998 July	1998 Aug.	1998 Sept.	1998 Oct.	1998 Nov.	1998 Dec.
					Seasonally adjusted							
ADJUSTED FOR CHANGES IN RESERVE REQUIREMENTS[2]												
1 Total reserves[3]	56.40	50.08	46.67	44.91	45.59	45.39	44.81	45.00	44.59	44.39	44.57	44.91
2 Nonborrowed reserves[4]	56.14	49.93	46.35	44.79	45.44	45 14	44.56	44.73	44.33	44.21	44.49	44.79
3 Nonborrowed reserves plus extended credit[5]	56.14	49.93	46.35	44.79	45.44	45.14	44.56	44.73	44.33	44.21	44.49	44.79
4 Required reserves	55.12	48.66	44.99	43.32	44.44	43.77	43.45	43.48	42.90	42.81	42.95	43.32
5 Monetary base[6]	434.17	452.38	480.15	513.95	489.10	491.63	493.70	497.38r	502.17r	506.08r	509.94r	513.95
					Not seasonally adjusted							
6 Total reserves[7]	58.02	51.52	47.97	45.18	44.87	45.17	44.69	44.81	44.31	44.24	44.29	45.18
7 Nonborrowed reserves	57.76	51.37	47.65	45.06	44.71	44.92	44.43	44.54	44.06	44.07	44.21	45.06
8 Nonborrowed reserves plus extended credit[5]	57.76	51.37	47.65	45.06	44.71	44.92	44.43	44.54	44.06	44.07	44.21	45.06
9 Required reserves[8]	56.74	50.10	46.29	43.59	43.72	43.55	43.32	43.30	42.63	42.67	42.67	43.59
10 Monetary base[9]	439.03	456.72	485.11	518.36	488.28	491 18	495.35	497.56	501.05r	504.57r	510.24r	518.36
NOT ADJUSTED FOR CHANGES IN RESERVE REQUIREMENTS[10]												
11 Total reserves[11]	57.90	51.24	47.88	45.02	44.81	45.10	44.60	44.71	44.19	44.12	44.15	45.02
12 Nonborrowed reserves	57.64	51.09	47.56	44.91	44.65	44.84	44.34	44.44	43.94	43.94	44.07	44.91
13 Nonborrowed reserves plus extended credit[5]	57.64	51.09	47.56	44.91	44.65	44.84	44.34	44.44	43.94	43.94	44.07	44.91
14 Required reserves	56.62	49.82	46.20	43.43	43.66	43.48	43.24	43.19	42.51	42.54	42.53	43.43
15 Monetary base[12]	444.45	463.49	491.92	525.09	494.95	497.93	502.20	504.46r	507.86r	511.42r	517.01r	525.09
16 Excess reserves[13]	1.28	1.42	1.68	1.59	1.15	1.62	1.37	1.51	1.68	1.57	1.62	1.59
17 Borrowings from the Federal Reserve	.26	.16	.32	.12	.15	25	.26	.27	.25	.17	.08	.12

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

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

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

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

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

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

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

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

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

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

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

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

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

1.21 MONEY STOCK, LIQUID ASSETS, AND DEBT MEASURES[1]

Billions of dollars, averages of daily figures

Item	1995 Dec.	1996 Dec.	1997 Dec.	1998 Dec.	1998[r]			
					Sept.	Oct.	Nov.	Dec.
				Seasonally adjusted				
Measures[2]								
1 M1	1,128.7	1,082.8	1,076.0	1,092.3	1,072.3	1,078.8	1,087.8	1,092.3
2 M2	3,651.2	3,826.1	4,046.4	4,412.3	4,289.9	4,334.8	4,373.6	4,412.3
3 M3	4,595.6	4,931.1	5,376.8	5,982.5	5,785.0	5,850.4	5,924.9	5,982.5
4 Debt	13,695.6	14,424.1	15,167.3	n.a.	15,870.0	15,959.3	16,055.3	n.a.
M1 components								
5 Currency[3]	372.4	394.9	425.5	460.1	449.6	453.4	456.8	460.1
6 Travelers checks[4]	8.9	8.6	8.2	8.3	7.9	8.1	8.2	8.3
7 Demand deposits[5]	391.0	403.6	397.1	376.7	373.7	374.2	376.3	376.7
8 Other checkable deposits[6]	356.4	275.9	245.2	247.2	241.2	243.1	246.5	247.2
Nontransaction components								
9 In M2[7]	2,522.6	2,743.2	2,970.4	3,320.1	3,217.6	3,256.0	3,285.7	3,320.1
10 In M3 only[8]	944.4	1,105.0	1,330.4	1,570.2	1,495.1	1,515.5	1,551.3	1,570.2
Commercial banks								
11 Savings deposits, including MMDAs	775.0	904.8	1,020.9	1,189.3	1,135.2	1,150.3	1,167.0	1,189.3
12 Small time deposits[9]	575.8	594.5	625.7	626.4	626.5	627.2	628.6	626.4
13 Large time deposits[10, 11]	345.4	413.2	487.5	535.9	529.7	527.6	534.0	535.9
Thrift institutions								
14 Savings deposits, including MMDAs	359.7	366.9	376.6	415.1	402.6	406.6	410.7	415.1
15 Small time deposits[9]	357.2	354.3	343.9	326.8	331.8	331.5	328.6	326.8
16 Large time deposits[10]	74.2	78.0	85.4	88.6	86.5	87.0	87.4	88.6
Money market mutual funds								
17 Retail	454.9	522.8	603.2	762.4	721.5	740.3	750.8	762.4
18 Institution-only	253.9	310.3	376.2	511.6	457.5	480.7	498.5	511.6
Repurchase agreements and Eurodollars								
19 Repurchase agreements[12]	182.4	194.2	236.1	283.4	272.1	267.5	277.8	283.4
20 Eurodollars[12]	88.6	109.2	145.3	150.7	149.4	152.8	153.6	150.7
Debt components								
21 Federal debt	3,638.9	3,780.6	3,798.4	n.a.	3,760.0	3,750.3	3,748.9	n.a.
22 Nonfederal debt	10,056.7	10,643.5	11,368.9	n.a.	12,110.0	12,209.0	12,306.4	n.a.
				Not seasonally adjusted				
Measures[2]								
23 M1	1,152.4	1,104.9	1,097.6	1,113.4	1,069.0	1,075.1	1,092.7	1,113.4
24 M2	3,672.0	3,845.4	4,065.3	4,431.4	4,281.2	4,320.7	4,375.3	4,431.4
25 M3	4,615.2	4,948.9	5,394.0	6,000.4	5,769.3	5,841.2	5,929.6	6,000.4
26 Debt	13,697.0	14,424.4	15,166.8	n.a.	15,835.9	15,922.1	16,037.7	n.a.
M1 components								
27 Currency[3]	376.2	397.9	429.0	464.1	448.3	452.6	457.4	464.1
28 Travelers checks[4]	8.5	8.3	7.9	8.0	8.1	8.2	8.1	8.0
29 Demand deposits[5]	407.2	419.9	413.0	391.8	372.7	373.0	381.2	391.8
30 Other checkable deposits[6]	360.5	278.8	247.7	249.6	239.9	241.3	246.0	249.6
Nontransaction components								
31 In M2[7]	2,519.6	2,740.5	2,967.8	3,318.0	3,212.1	3,245.6	3,282.6	3,318.0
32 In M3 only[8]	943.2	1,103.5	1,328.6	1,569.0	1,488.1	1,520.6	1,554.3	1,569.0
Commercial banks								
33 Savings deposits, including MMDAs	774.1	903.3	1,019.0	1,187.0	1,133.5	1,146.1	1,166.3	1,187.0
34 Small time deposits[9]	573.8	592.7	624.1	625.0	626.1	627.2	627.9	625.0
35 Large time deposits[10, 11]	345.8	413.6	488.0	536.4	532.1	535.6	540.2	536.4
Thrift institutions								
36 Savings deposits, including MMDAs	359.2	366.4	375.9	414.3	402.0	405.2	410.4	414.3
37 Small time deposits[9]	355.9	353.2	343.0	326.0	331.6	331.5	328.2	326.0
38 Large time deposits[10]	74.3	78.1	85.4	88.6	86.9	88.4	88.4	88.6
Money market mutual funds								
39 Retail	456.4	524.8	605.8	765.7	719.0	735.6	749.9	765.7
40 Institution-only	255.8	312.7	378.9	515.7	451.3	475.4	497.3	515.7
Repurchase agreements and Eurodollars								
41 Repurchase agreements[12]	178.0	188.8	229.4	275.5	270.1	270.0	276.4	275.5
42 Eurodollars[12]	89.4	110.3	146.9	152.8	147.7	151.2	152.0	152.8
Debt components								
43 Federal debt	3,645.9	3,787.9	3,805.8	n.a.	3,743.4	3,727.8	3,746.7	n.a.
44 Nonfederal debt	10,051.1	10,636.5	11,361.1	n.a.	12,092.5	12,194.3	12,291.1	n.a.

Footnotes appear on following page.

NOTES TO TABLE 1.21

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

12. Includes both overnight and term.

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

A. All commercial banks

Billions of dollars

Account	Monthly averages								Wednesday figures			
	1997	1998[r]							1998			
	Dec.	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Dec. 9	Dec. 16	Dec. 23	Dec. 30
	Seasonally adjusted											
Assets												
1 Bank credit	4,095.0[r]	4,263.7	4,280.5	4,341.6	4,398.9	4,488.8	4,529.7	4,552.1	4,565.3	4,562.5	4,549.0	4,538.6
2 Securities in bank credit	1,081.9	1,121.6	1,130.4	1,156.5	1,177.1	1,217.8	1,226.6	1,235.8	1,237.5	1,238.1	1,239.3	1,232.0
3 U.S. government securities	747.3	756.9	760.7	771.2	767.4	774.3	790.7	792.9	791.4	785.0	794.3	800.9
4 Other securities	334.6	364.7	369.8	385.3	409.7	443.5	435.9	443.0	446.1	453.1	445.0	431.1
5 Loans and leases in bank credit[2]	3,013.1[r]	3,142.1	3,150.1	3,185.2	3,221.9	3,271.0	3,303.0	3,316.3	3,327.8	3,324.4	3,309.6	3,306.7
6 Commercial and industrial	853.9[r]	887.0	897.7	906.1	918.3	938.8	947.0	945.0	950.7	948.7	942.9	938.1
7 Real estate	1,230.7[r]	1,274.4	1,271.6	1,280.9	1,283.2	1,287.6	1,309.7	1,323.9	1,331.0	1,319.9	1,319.3	1,325.4
8 Revolving home equity	97.7	97.8	97.5	97.6	97.9	97.0	97.4	97.4	97.6	97.8	97.3	97.1
9 Other	1,133.0[r]	1,176.7	1,174.1	1,183.3	1,185.3	1,190.6	1,212.3	1,226.5	1,233.5	1,222.1	1,222.0	1,228.3
10 Consumer	506.5	503.2	496.3	495.0	497.9	497.5	500.0	503.7	501.3	504.7	504.4	506.0
11 Security[3]	97.6	130.2	131.9	137.7	142.9	158.9	152.5	151.4	150.0	152.7	156.1	148.4
12 Other loans and leases	324.4[r]	347.3	352.5	365.3	379.6	388.2	393.9	392.3	394.8	398.4	386.9	388.7
13 Interbank loans	209.7	217.8	213.2	206.1	219.8	220.2	219.8	214.9	206.7	214.6	221.1	219.0
14 Cash assets[4]	262.9	250.4	243.5	251.6	253.3	243.1	249.7	249.5	260.4	241.3	259.4	237.2
15 Other assets[5]	296.0	312.5	312.7	318.1	323.3	323.1	327.0	329.0	323.4	332.3	331.3	329.0
16 **Total assets**[6]	**4,806.9[r]**	**4,986.8**	**4,992.2**	**5,060.2**	**5,137.9**	**5,217.3**	**5,268.1**	**5,287.3**	**5,297.9**	**5,292.7**	**5,302.5**	**5,265.4**
Liabilities												
17 Deposits	3,112.1	3,222.4	3,191.2	3,221.7	3,244.2	3,268.7	3,312.2	3,321.0	3,321.2	3,316.5	3,340.4	3,303.8
18 Transaction	688.1	682.7	664.7	665.3	675.0	666.1	666.0	665.2	649.3	652.6	692.2	673.6
19 Nontransaction	2,424.1	2,539.7	2,526.5	2,556.4	2,569.3	2,602.6	2,646.2	2,655.8	2,671.9	2,663.9	2,648.2	2,630.2
20 Large time	636.7	685.7	668.1	680.3	685.9	697.6	709.2	702.1	708.0	704.1	697.8	695.1
21 Other	1,787.3	1,854.0	1,858.3	1,876.0	1,883.3	1,905.0	1,936.9	1,953.7	1,963.9	1,959.8	1,950.3	1,935.0
22 Borrowings	819.2	858.4	857.7	859.9	888.8	936.4	974.8	984.7	992.2	990.0	976.9	985.0
23 From banks in the U.S.	305.0	289.4	295.3	298.1	308.4	319.7	328.5	326.6	329.7	330.4	319.9	324.9
24 From others	514.2	569.0	562.5	561.8	580.4	616.7	646.3	658.1	662.4	659.6	657.0	660.1
25 Net due to related foreign offices	194.9[r]	170.7	187.6	203.8	202.7	226.1	218.4	217.2	227.7	214.4	213.3	216.3
26 Other liabilities	280.9[r]	308.7	322.1	334.9	344.2	359.3	341.0	342.9	336.0	346.8	342.7	346.7
27 **Total liabilities**	**4,407.1[r]**	**4,560.2**	**4,558.6**	**4,620.3**	**4,679.9**	**4,790.5**	**4,846.5**	**4,865.7**	**4,877.1**	**4,867.7**	**4,873.3**	**4,851.8**
28 Residual (assets less liabilities)[7]	399.7[r]	426.5	433.7	439.9	457.9	426.8	421.6	421.5	420.8	425.0	429.2	413.6
	Not seasonally adjusted											
Assets												
29 Bank credit	4,104.9[r]	4,265.0	4,274.4	4,328.1	4,385.8	4,492.3	4,538.0	4,562.9	4,562.7	4,572.0	4,555.7	4,565.9
30 Securities in bank credit	1,077.1[r]	1,124.5	1,124.8	1,147.9	1,164.9	1,214.1	1,226.2	1,231.0	1,235.1	1,231.3	1,227.9	1,230.3
31 U.S. government securities	745.2	759.4	756.8	766.3	762.3	771.7	791.9	791.4	794.5	785.3	790.2	794.4
32 Other securities	331.8	365.2	368.0	381.6	402.6	442.4	434.3	439.5	440.7	446.0	437.7	435.9
33 Loans and leases in bank credit[2]	3,027.8[r]	3,140.5	3,149.7	3,180.2	3,220.9	3,278.2	3,311.8	3,331.9	3,327.6	3,340.6	3,327.8	3,335.6
34 Commercial and industrial	852.1[r]	889.7	897.3	900.1	912.9	936.7	945.5	942.9	941.8	944.6	943.0	942.6
35 Real estate	1,234.1	1,272.0	1,273.7	1,284.5	1,288.1	1,294.3	1,316.3	1,327.5	1,336.9	1,324.6	1,320.8	1,327.5
36 Revolving home equity	98.0	97.5	97.6	97.8	98.6	97.8	98.1	97.7	97.9	98.0	97.4	97.5
37 Other	1,136.1	1,174.5	1,176.1	1,186.7	1,189.5	1,196.5	1,218.2	1,229.8	1,239.0	1,226.5	1,223.4	1,230.0
38 Consumer	512.8	500.3	494.4	496.7	500.7	499.3	502.5	510.0	504.1	510.2	512.2	515.4
39 Security[3]	100.3	130.1	129.7	133.2	139.5	159.3	153.8	154.3	151.9	158.4	159.4	149.8
40 Other loans and leases	328.4	348.3	354.6	365.7	379.8	388.5	393.6	397.2	392.9	402.8	392.4	400.5
41 Interbank loans	219.1	214.4	206.8	199.0	214.2	216.2	226.3	224.8	217.7	228.4	225.7	227.7
42 Cash assets[4]	282.1	245.3	239.1	239.3	251.2	246.9	259.0	267.7	254.6	262.8	269.9	283.3
43 Other assets[5]	296.3	311.0	314.0	320.0	324.5	322.3	328.1	329.0	323.7	332.5	328.5	330.8
44 **Total assets**[6]	**4,845.6[r]**	**4,978.2**	**4,976.6**	**5,028.9**	**5,117.9**	**5,219.8**	**5,293.2**	**5,326.2**	**5,300.5**	**5,337.4**	**5,321.5**	**5,349.6**
Liabilities												
45 Deposits	3,144.6	3,214.5	3,183.7	3,211.6	3,248.4	3,272.4	3,330.7	3,353.0	3,334.4	3,354.0	3,352.6	3,366.3
46 Transaction	722.4	677.8	659.8	651.9	670.3	662.1	676.7	698.9	652.6	690.2	713.9	746.6
47 Nontransaction	2,422.2	2,536.7	2,523.8	2,559.6	2,578.1	2,610.3	2,654.0	2,654.0	2,681.9	2,663.8	2,638.7	2,619.7
48 Large time	641.3	683.4	664.8	679.4	687.6	701.5	715.4	707.2	715.4	709.6	703.0	698.1
49 Other	1,780.9	1,853.3	1,859.0	1,880.2	1,890.5	1,908.8	1,938.6	1,946.8	1,966.5	1,954.1	1,935.7	1,921.6
50 Borrowings	817.2	868.1	862.1	852.6	891.9	932.3	970.7	979.8	971.2	987.9	981.0	983.0
51 From banks in the U.S.	308.8	292.3	295.4	294.1	307.2	315.7	328.8	330.7	329.8	335.7	327.6	328.8
52 From others	508.4	575.8	566.6	558.5	584.7	616.7	641.9	649.1	641.4	652.2	653.4	654.2
53 Net due to related foreign offices	193.7[r]	176.6	189.1	203.6	202.3	223.7	216.5	218.2	223.1	213.8	215.7	224.8
54 Other liabilities	281.9[r]	308.0	321.4	334.9	343.9	359.0	342.4	343.9	337.3	347.7	343.3	347.7
55 **Total liabilities**	**4,437.3[r]**	**4,567.2**	**4,556.3**	**4,602.6**	**4,686.6**	**4,787.4**	**4,860.2**	**4,894.9**	**4,866.0**	**4,903.4**	**4,892.6**	**4,921.8**
56 Residual (assets less liabilities)[7]	408.3	411.0	420.3	426.3	431.3	432.4	433.0	431.3	434.6	434.1	428.9	427.8
MEMO												
57 Revaluation gains on off-balance-sheet items[8]	82.5	92.7	92.7	95.7	110.0	130.1	110.0	n.a.	119.2	123.8	114.4	112.5
58 Revaluation losses on off-balance-sheet items[8]	85.8	90.6	90.6	96.5	110.7	128.1	109.4	n.a.	116.3	120.1	113.3	112.0

Footnotes appear on p. A21.

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

B. Domestically chartered commercial banks

Billions of dollars

Account	Monthly averages								Wednesday figures			
	1997	1998							1998			
	Dec.	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Dec. 9	Dec. 16	Dec. 23	Dec. 30
	Seasonally adjusted											
Assets												
1 Bank credit	3,551.6[r]	3,695.5	3,708.4	3,753.2	3,794.4	3,864.1	3,909.6	3,950.9	3,951.9	3,951.4	3,957.0	3,951.9
2 Securities in bank credit	895.8	921.4	929.3	944.1	961.6	995.9	1,002.8	1,019.1	1,017.4	1,021.5	1,024.9	1,017.5
3 U.S. government securities	670.7	668.4	669.6	677.1	685.2	694.1	710.2	711.8	712.0	704.3	712.9	718.0
4 Other securities	225.0	253.0	259.6	266.9	276.5	301.8	292.5	307.2	305.4	317.2	312.1	299.5
5 Loans and leases in bank credit[2]	2,655.9[r]	2,774.1	2,779.1	2,809.2	2,832.7	2,868.2	2,906.8	2,931.9	2,934.5	2,929.9	2,932.1	2,934.4
6 Commercial and industrial	633.5[r]	675.2	683.6	692.0	700.3	715.0	723.1	726.9	725.2	726.7	728.5	728.2
7 Real estate	1,204.8	1,250.3	1,247.6	1,257.1	1,259.6	1,264.4	1,287.6	1,303.2	1,309.9	1,299.2	1,298.9	1,305.1
8 Revolving home equity	97.7	97.8	97.5	97.6	97.9	97.0	97.4	97.4	97.6	97.8	97.3	97.1
9 Other	1,107.1	1,152.5	1,150.1	1,159.5	1,161.7	1,167.4	1,190.2	1,205.8	1,212.3	1,201.4	1,201.6	1,208.0
10 Consumer	506.5	503.2	496.3	495.0	497.9	497.5	500.0	503.7	501.3	504.7	504.4	506.0
11 Security[3]	52.9	67.6	69.9	73.5	75.2	89.2	87.5	85.4	85.7	85.5	88.7	82.6
12 Other loans and leases	258.3[r]	277.9	281.6	291.5	299.6	302.1	308.5	312.6	312.5	313.8	311.5	312.5
13 Interbank loans	178.5	193.9	192.3	186.1	191.4	194.8	193.3	187.8	186.6	190.3	188.5	186.8
14 Cash assets[4]	229.6	215.6	208.5	217.8	219.3	207.7	216.2	215.7	226.0	205.9	227.2	204.0
15 Other assets[5]	252.8	278.7	278.7	282.4	285.5	283.9	290.5	289.9	285.1	290.9	291.7	290.6
16 **Total assets**[6]	**4,156.0[r]**	**4,326.4**	**4,330.4**	**4,382.6**	**4,433.3**	**4,492.8**	**4,551.7**	**4,586.4**	**4,592.0**	**4,580.7**	**4,606.4**	**4,575.2**
Liabilities												
17 Deposits	2,839.6	2,919.3	2,893.6	2,915.8	2,929.7	2,949.8	2,996.9	3,013.6	3,008.9	3,007.1	3,036.7	3,002.0
18 Transaction	678.2	671.6	651.0	653.1	659.7	650.9	653.7	654.5	639.0	641.7	681.0	663.8
19 Nontransaction	2,161.4	2,247.7	2,242.6	2,262.7	2,270.0	2,298.9	2,343.2	2,359.2	2,369.9	2,365.4	2,355.8	2,338.1
20 Large time	376.9	393.4	385.1	385.1	384.3	397.5	410.5	409.0	409.5	409.4	408.5	406.7
21 Other	1,784.5	1,854.3	1,857.5	1,877.7	1,885.7	1,901.4	1,932.7	1,950.2	1,960.4	1,956.0	1,947.3	1,931.4
22 Borrowings	669.7	691.4	690.0	694.7	709.8	750.9	789.2	805.3	815.5	803.6	796.6	811.2
23 From banks in the U.S.	279.2	259.9	269.5	276.1	278.2	287.8	295.1	298.1	302.3	296.6	292.0	302.1
24 From others	390.6	431.5	420.5	418.5	431.6	463.2	494.2	507.2	513.2	506.9	504.6	509.1
25 Net due to related foreign offices	73.2	73.4	79.8	93.6	105.6	116.9	116.3	114.9	122.5	112.2	112.6	113.4
26 Other liabilities	185.2[r]	218.8	228.6	235.5	240.2	252.0	238.7	242.2	233.1	241.6	245.1	249.3
27 **Total liabilities**	**3,767.8[r]**	**3,902.9**	**3,892.0**	**3,939.6**	**3,985.4**	**4,069.6**	**4,141.2**	**4,176.0**	**4,180.0**	**4,164.4**	**4,191.1**	**4,175.9**
28 Residual (assets less liabilities)[7]	388.3[r]	423.5	438.4	443.0	447.9	423.2	410.5	410.4	412.0	416.2	415.3	399.2
	Not seasonally adjusted											
Assets												
29 Bank credit	3,562.3[r]	3,693.8	3,699.5	3,737.2	3,786.4	3,868.3	3,925.5	3,963.2	3,956.2	3,962.9	3,964.4	3,973.8
30 Securities in bank credit	894.7	921.2	920.9	931.3	952.8	991.8	1,007.7	1,018.4	1,018.4	1,017.3	1,019.1	1,020.1
31 U.S. government securities	669.0	670.8	666.1	671.5	680.1	691.0	710.5	710.7	714.0	704.7	710.0	712.8
32 Other securities	225.7	250.4	254.8	259.8	272.8	300.9	297.2	307.7	304.4	312.6	309.1	307.3
33 Loans and leases in bank credit[2]	2,667.5[r]	2,772.7	2,778.6	2,805.9	2,833.6	2,876.4	2,917.8	2,944.8	2,937.8	2,945.6	2,945.2	2,953.7
34 Commercial and industrial	630.8	678.0	683.5	687.1	695.9	713.1	722.0	724.0	718.5	723.2	726.5	728.3
35 Real estate	1,208.1	1,248.0	1,250.0	1,260.8	1,264.6	1,270.8	1,294.1	1,306.7	1,315.6	1,303.8	1,300.5	1,307.1
36 Revolving home equity	98.0	97.5	97.6	97.8	98.6	97.8	98.1	97.7	97.9	98.0	97.4	97.5
37 Other	1,110.1	1,150.5	1,152.4	1,163.0	1,166.0	1,173.0	1,195.9	1,209.0	1,217.7	1,205.7	1,203.1	1,209.6
38 Consumer	512.8	500.3	494.4	496.7	500.7	499.3	502.5	510.0	504.1	510.2	512.2	515.4
39 Security[3]	54.1	67.7	68.3	69.8	72.2	89.6	89.1	87.2	87.8	90.0	90.6	81.6
40 Other loans and leases	261.6	278.6	282.4	291.5	300.3	303.6	310.2	316.9	311.8	318.4	315.5	321.4
41 Interbank loans	187.9	190.5	185.9	179.1	185.8	190.8	199.8	197.7	197.6	204.1	193.1	195.5
42 Cash assets[4]	247.2	209.6	204.2	205.5	217.1	211.2	224.6	232.2	219.1	225.6	235.6	248.2
43 Other assets[5]	252.4	278.0	280.3	283.5	286.7	284.0	291.1	289.3	283.7	290.0	289.0	292.6
44 **Total assets**[6]	**4,193.2[r]**	**4,314.6**	**4,312.4**	**4,348.0**	**4,418.4**	**4,496.7**	**4,583.0**	**4,624.5**	**4,598.7**	**4,624.7**	**4,624.0**	**4,652.2**
Liabilities												
45 Deposits	2,869.0	2,909.6	2,887.9	2,906.9	2,932.3	2,954.0	3,016.5	3,042.5	3,020.7	3,042.2	3,043.3	3,059.6
46 Transaction	712.1	666.6	646.0	639.7	654.4	646.8	664.4	687.7	642.2	678.7	702.1	736.0
47 Nontransaction	2,156.9	2,243.0	2,241.9	2,267.2	2,278.0	2,307.2	2,352.0	2,354.8	2,378.5	2,363.6	2,341.2	2,323.6
48 Large time	377.1	391.0	384.0	387.5	387.8	400.9	415.5	409.5	413.6	411.0	407.1	403.6
49 Other	1,779.8[r]	1,851.9	1,857.9	1,879.8	1,890.2	1,906.3	1,936.5	1,945.3	1,965.0	1,952.6	1,934.1	1,920.0
50 Borrowings	667.7	701.1	694.4	687.4	713.0	746.8	785.1	800.4	794.5	801.4	800.7	809.3
51 From banks in the U.S.	283.0	262.8	269.7	272.1	277.0	283.7	295.4	302.2	302.4	301.9	299.8	306.0
52 From others	384.8	438.2	424.7	415.2	435.9	463.1	489.7	498.2	492.1	499.6	500.9	503.2
53 Net due to related foreign offices	67.1	80.1	84.9	96.7	106.8	115.5	113.7	111.3	119.6	108.7	109.2	109.1
54 Other liabilities	185.2[r]	218.8	228.6	235.5	240.2	252.0	238.7	242.2	233.1	241.6	245.1	249.3
55 **Total liabilities**	**3,789.0[r]**	**3,909.6**	**3,895.7**	**3,926.5**	**3,992.3**	**4,068.4**	**4,154.0**	**4,196.5**	**4,167.9**	**4,193.9**	**4,198.4**	**4,227.3**
56 Residual (assets less liabilities)[7]	404.1[r]	405.1	416.7	421.5	426.1	428.3	429.0	428.0	430.8	430.7	425.6	424.9
MEMO												
57 Revaluation gains on off-balance-sheet items[8]	41.0	50.5	51.0	51.9	61.7	78.7	62.7	n.a.	68.3	73.0	69.5	66.8
58 Revaluation losses on off-balance-sheet items[8]	43.9	50.1	50.4	54.2	65.1	80.5	65.1	n.a.	69.1	73.2	71.9	69.8
59 Mortgage-backed securities[9]	281.1	291.2	294.4	301.9	314.0	337.2	346.4	n.a.	348.6	343.6	344.4	347.7

Footnotes appear on p. A21.

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

C. Large domestically chartered commercial banks

Billions of dollars

Account	Monthly averages								Wednesday figures			
	1997	1998[r]							1998			
	Dec.[r]	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Dec. 9	Dec. 16	Dec. 23	Dec. 30
	Seasonally adjusted											
Assets												
1 Bank credit	2,171.7	2,275.4	2,274.4	2,305.1	2,336.2	2,391.9	2,411.9	2,434.1	2,439.5	2,434.5	2,439.1	2,430.6
2 Securities in bank credit	494.6	519.5	521.5	532.2	547.0	572.6	569.4	577.6	578.4	580.7	582.6	573.4
3 U.S. government securities	355.1	356.9	355.4	361.3	367.8	371.8	380.1	376.6	378.1	369.7	377.1	381.2
4 Trading account	27.4	23.4	20.4	21.3	22.0	20.9	23.4	24.0	22.6	21.3	25.8	26.8
5 Investment account	327.7	333.5	335.0	340.0	345.8	350.9	356.7	352.6	355.6	348.4	351.2	354.4
6 Other securities	139.5	162.7	166.1	170.9	179.2	200.8	189.3	201.0	200.2	211.0	205.5	192.3
7 Trading account	63.3	79.5	81.1	83.1	89.5	109.1	92.5	99.9	99.7	109.4	103.8	90.9
8 Investment account	76.2	83.2	85.0	87.7	89.8	91.7	96.8	101.1	100.6	101.7	101.7	101.4
9 State and local government	22.1	22.2	22.4	22.6	23.2	23.9	24.6	25.0	24.8	25.0	25.0	25.1
10 Other	54.0	60.9	62.6	65.1	66.6	67.8	72.2	76.2	75.8	76.7	76.8	76.3
11 Loans and leases in bank credit[2]	1,677.1	1,755.9	1,752.8	1,772.9	1,789.1	1,819.3	1,842.5	1,856.5	1,861.1	1,853.8	1,856.5	1,857.2
12 Commercial and industrial	458.0	490.4	497.6	502.9	508.9	521.4	527.7	529.6	528.3	529.6	531.0	530.4
13 Bankers acceptances	1.3	1.2	1.3	1.3	1.3	1.2	1.2	1.2	1.3	1.3	1.3	1.3
14 Other	456.8	489.2	496.3	501.7	507.6	520.2	526.5	528.4	528.7	530.0	531.3	530.7
15 Real estate	677.1	695.0	686.6	687.8	685.5	686.1	698.6	705.9	714.6	703.0	701.0	705.2
16 Revolving home equity	69.4	69.1	68.7	68.6	68.8	68.0	67.7	67.5	67.6	67.8	67.5	67.2
17 Other	607.7	625.8	617.9	619.2	616.7	618.1	630.8	638.5	647.0	635.3	633.6	638.0
18 Consumer	302.8	301.8	294.6	295.8	298.7	299.7	300.6	301.8	301.1	301.5	301.6	303.5
19 Security[3]	47.4	61.6	63.9	67.4	68.9	82.7	80.8	79.0	78.9	79.1	82.5	76.5
20 Federal funds sold to and repurchase agreements with broker–dealers	31.1	42.9	44.9	48.0	50.1	64.7	63.6	62.8	62.1	63.6	66.5	59.7
21 Other	16.3	18.7	19.0	19.4	18.8	18.0	17.3	16.3	16.8	15.5	16.0	16.9
22 State and local government	11.9	11.6	11.1	11.5	11.5	11.6	11.9	11.6	11.6	11.6	11.5	11.6
23 Agricultural	10.1	10.1	10.0	10.0	10.0	9.9	10.0	10.1	10.1	10.1	10.2	10.2
24 Federal funds sold to and repurchase agreements with others	11.6	5.6	8.9	10.0	12.4	12.9	12.4	16.1	14.6	17.8	15.2	17.9
25 All other loans	75.2	85.3	83.9	88.9	93.2	93.5	97.8	96.5	97.8	96.4	96.3	94.6
26 Lease-financing receivables	83.0	94.4	96.3	98.7	100.0	101.4	102.8	105.7	104.1	104.7	107.2	107.3
27 Interbank loans	127.8	128.0	123.9	115.7	117.5	119.0	119.3	120.5	118.7	123.8	120.3	120.9
28 Federal funds sold to and repurchase agreements with commercial banks	87.4	77.2	70.1	62.5	64.2	73.6	75.2	73.6	73.7	77.7	71.3	72.1
29 Other	40.4	50.8	53.8	53.2	53.4	45.4	44.0	46.9	45.0	46.2	49.0	48.8
30 Cash assets[4]	162.2	149.1	143.8	151.2	151.3	141.0	147.9	147.7	157.6	139.4	155.8	138.5
31 Other assets[5]	196.2	214.8	215.7	219.3	219.8	215.8	218.2	216.9	211.6	218.1	218.2	218.9
32 **Total assets**[6]	**2,620.4**	**2,729.4**	**2,720.0**	**2,754.0**	**2,787.3**	**2,829.8**	**2,859.4**	**2,881.4**	**2,889.7**	**2,878.1**	**2,895.5**	**2,870.8**
Liabilities												
33 Deposits	1,613.0	1,644.3	1,620.1	1,627.8	1,628.2	1,639.7	1,666.3	1,672.6	1,671.5	1,669.3	1,689.4	1,660.8
34 Transaction	392.8	383.2	367.8	369.3	373.1	366.6	368.3	367.3	357.6	358.8	384.6	372.7
35 Nontransaction	1,220.2	1,261.1	1,252.3	1,258.5	1,255.1	1,273.1	1,298.1	1,305.4	1,313.9	1,310.5	1,304.8	1,288.2
36 Large time	215.8	222.5	216.1	214.9	209.8	221.5	230.3	230.0	230.4	231.1	229.8	227.7
37 Other	1,004.4	1,038.5	1,036.2	1,043.5	1,045.3	1,051.6	1,067.7	1,075.4	1,083.5	1,079.5	1,075.0	1,060.4
38 Borrowings	519.3	532.5	526.6	531.8	544.5	579.2	610.0	621.2	630.9	620.2	613.4	625.5
39 From banks in the U.S.	209.3	188.8	190.5	197.5	198.4	204.0	208.1	209.3	212.8	207.4	204.1	213.3
40 From others	310.0	343.7	336.1	334.2	346.2	375.3	401.8	411.8	418.1	412.9	409.3	412.2
41 Net due to related foreign offices	68.9	69.6	76.1	89.9	101.8	112.3	112.7	111.3	118.9	109.0	108.9	109.3
42 Other liabilities	157.3	189.0	198.5	204.9	209.6	220.2	206.0	209.7	200.5	208.9	212.8	216.8
43 **Total liabilities**	**2,358.5**	**2,435.4**	**2,421.3**	**2,454.3**	**2,484.2**	**2,551.4**	**2,595.0**	**2,614.7**	**2,621.8**	**2,607.4**	**2,624.6**	**2,612.5**
44 Residual (assets less liabilities)[7]	261.9	294.0	298.6	299.7	303.2	278.4	264.4	266.7	267.9	270.8	270.9	258.3

Footnotes appear on p. A21.

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

C. Large domestically chartered commercial banks—Continued

Account	Monthly averages								Wednesday figures			
	1997	1998[r]							1998			
	Dec.[r]	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Dec. 9	Dec. 16	Dec. 23	Dec. 30
	Not seasonally adjusted											
Assets												
45 Bank credit	2,181.6	2,269.0	2,267.4	2,289.6	2,326.1	2,396.3	2,428.6	2,445.9	2,446.5	2,446.5	2,442.1	2,449.7
46 Securities in bank credit	495.4	516.2	514.5	520.5	539.0	571.6	577.7	578.9	582.7	578.9	577.1	576.9
47 U.S. government securities	354.9	356.6	353.1	356.5	363.1	371.0	383.2	377.0	382.6	371.9	374.5	377.0
48 Trading account	27.0	22.5	19.9	21.2	21.9	21.9	24.6	23.6	24.5	21.9	24.2	23.4
49 Investment account	327.9	334.1	333.3	335.3	341.2	349.0	358.6	353.5	358.1	350.0	350.3	353.6
50 Mortgage-backed securities	217.1	217.7	219.1	225.9	236.5	255.3	258.0	n.a.	256.7	250.8	251.6	253.1
51 Other	111.1	116.7	114.5	109.7	105.0	93.9	100.5	n.a.	101.4	99.1	98.7	100.5
52 One year or less	30.0	31.6	30.4	29.0	27.7	26.1	27.2	n.a.	27.0	25.7	26.3	26.9
53 One to five years	56.9	49.2	52.1	48.9	44.2	37.2	38.2	n.a.	38.8	38.4	38.5	38.0
54 More than five years	24.2	35.9	31.9	31.8	33.0	30.6	35.2	n.a.	35.6	35.0	33.9	35.7
55 Other securities	140.5	159.6	161.3	164.0	175.9	200.7	194.5	201.8	200.1	207.0	202.6	199.9
56 Trading account	63.6	76.7	77.0	76.8	86.4	108.8	96.4	99.6	98.2	104.3	100.1	97.6
57 Investment account	77.0	82.9	84.3	87.2	89.4	91.9	98.0	102.2	101.9	102.7	102.5	102.3
58 State and local government	22.2	22.4	22.3	22.7	23.2	24.0	24.6	25.0	24.8	25.0	25.0	25.1
59 Other	54.8	60.6	62.1	64.6	66.2	67.9	73.4	77.2	77.1	77.8	77.5	77.2
60 Loans and leases in bank credit[2]	1,686.2	1,752.8	1,752.9	1,769.1	1,787.1	1,824.6	1,851.0	1,867.0	1,863.8	1,867.7	1,865.0	1,872.7
61 Commercial and industrial	456.0	491.5	497.7	499.5	506.0	521.1	527.8	527.2	522.9	527.0	528.9	530.2
62 Bankers acceptances	1.3	1.2	1.2	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
63 Other	454.6	490.3	496.5	498.3	504.6	519.8	526.5	525.9	521.6	525.6	527.6	528.9
64 Real estate	679.5	692.1	688.9	691.1	688.8	690.2	702.8	708.5	719.3	706.5	701.2	706.4
65 Revolving home equity	69.7	68.9	68.9	68.9	69.4	68.6	68.4	67.8	68.0	68.1	67.5	67.6
66 Other	371.0	382.2	382.8	384.5	380.6	382.6	393.6	n.a.	409.9	396.1	390.7	395.4
67 Commercial	238.4	237.0	236.8	237.3	238.4	238.6	240.1	n.a.	241.4	242.3	243.0	243.4
68 Consumer	306.7	300.6	294.4	297.3	300.7	300.6	301.6	305.8	302.4	305.1	305.8	310.4
69 Security[3]	48.7	61.7	62.3	63.7	65.8	83.1	82.3	80.8	81.1	83.6	84.4	75.6
70 Federal funds sold to and repurchase agreements with broker–dealers	31.4	42.6	43.9	45.1	47.6	65.2	65.0	63.7	64.7	66.6	66.8	57.8
71 Other	17.2	19.2	18.5	18.6	18.2	17.9	17.3	17.1	16.4	17.0	17.7	17.8
72 State and local government	12.0	11.5	11.1	11.5	11.6	11.6	12.0	11.7	11.8	11.7	11.7	11.7
73 Agricultural	10.1	10.2	10.3	10.3	10.3	10.1	10.1	10.1	10.0	10.0	10.1	10.4
74 Federal funds sold to and repurchase agreements with others	11.6	5.6	8.9	10.0	12.4	12.9	12.4	16.1	14.6	17.8	15.2	17.9
75 All other loans	78.4	85.5	83.5	88.2	92.7	94.0	99.3	100.6	97.7	101.2	100.5	101.8
76 Lease-financing receivables	83.2	94.0	95.8	97.5	98.9	101.0	102.8	106.0	104.0	104.6	107.2	108.5
77 Interbank loans	133.2	128.4	122.9	113.1	116.3	116.2	121.3	125.6	119.9	132.1	123.0	128.5
78 Federal funds sold to and repurchase agreements with commercial banks	91.5	77.5	69.4	60.7	63.7	70.9	76.9	77.5	74.4	84.9	72.5	77.5
79 Other	41.6	50.9	53.5	52.5	52.7	45.2	44.4	48.2	45.5	47.2	50.5	51.0
80 Cash assets[4]	176.2	144.0	140.2	141.1	149.8	144.6	154.0	161.0	152.2	155.6	163.5	172.9
81 Other assets[5]	196.2	214.8	215.7	219.3	219.8	215.8	218.2	216.9	211.6	218.1	218.2	218.9
82 **Total assets[6]**	**2,649.6**	**2,718.2**	**2,708.2**	**2,725.4**	**2,774.2**	**2,835.0**	**2,884.1**	**2,911.6**	**2,892.3**	**2,914.4**	**2,908.9**	**2,932.2**
Liabilities												
83 Deposits	1,634.6	1,637.9	1,620.0	1,625.4	1,634.3	1,645.9	1,679.5	1,694.2	1,678.0	1,697.5	1,694.3	1,704.3
84 Transaction	416.0	379.8	365.6	360.2	370.0	364.4	374.9	390.4	356.8	385.8	399.7	424.7
85 Nontransaction	1,218.5	1,258.1	1,254.5	1,265.2	1,264.3	1,281.5	1,304.6	1,303.7	1,321.1	1,311.7	1,294.5	1,279.6
86 Large time	216.1	220.1	215.0	217.3	213.3	224.8	235.3	230.5	234.4	232.6	228.4	224.6
87 Other	1,002.5	1,038.0	1,039.5	1,047.9	1,051.0	1,056.7	1,069.3	1,073.3	1,086.7	1,079.1	1,066.2	1,055.0
88 Borrowings	516.5	541.8	530.9	523.1	544.3	574.7	606.4	615.6	612.9	617.3	613.1	622.1
89 From banks in the U.S.	213.0	191.2	190.5	192.7	196.0	200.4	209.6	213.4	214.6	212.7	210.0	216.5
90 From nonbanks in the U.S.	303.6	350.7	340.4	330.4	348.3	374.3	396.8	402.2	398.3	404.6	403.1	405.5
91 Net due to related foreign offices	62.8	76.2	81.2	92.9	103.0	110.9	110.1	107.7	116.0	105.5	105.5	105.0
92 Other liabilities	157.3	189.0	198.5	204.9	209.6	220.2	206.0	209.7	200.5	208.9	212.8	216.8
93 **Total liabilities**	**2,371.2**	**2,445.0**	**2,430.6**	**2,446.4**	**2,491.2**	**2,551.7**	**2,602.1**	**2,627.2**	**2,607.3**	**2,629.1**	**2,625.7**	**2,648.1**
94 Residual (assets less liabilities)[7]	278.4	273.2	277.6	279.1	283.0	283.3	282.1	284.4	284.9	285.3	283.3	284.1
MEMO												
95 Revaluation gains on off-balance-sheet items[8]	41.0	50.5	51.0	51.9	61.7	78.7	62.7	n.a.	68.3	73.0	69.5	66.8
96 Revaluation losses on off-balance-sheet items[8]	43.9	50.1	50.4	54.2	65.1	80.5	65.1	n.a.	69.1	73.2	71.9	69.8
97 Mortgage-backed securities[9]	235.6	239.9	242.6	249.3	260.1	280.4	287.1	n.a.	287.4	281.8	282.1	285.4
98 Pass-through securities	158.7	157.7	157.8	161.1	167.1	189.3	196.6	n.a.	197.4	193.2	194.4	195.0
99 CMOs, REMICs, and other mortgage-backed securities	76.9	82.2	84.8	88.2	93.0	91.1	90.5	n.a.	90.1	88.5	87.7	90.4
100 Net unrealized gains (losses) on available-for-sale securities[10]	2.1	3.2	3.5	3.1	3.7	4.4	3.1	n.a.	3.1	3.0	3.0	2.9
101 Offshore credit to U.S. residents[11]	34.2	36.1	35.3	35.6	36.8	38.5	39.1	38.5	37.3	37.6	39.8	39.0

Footnotes appear on p. A21.

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

D. Small domestically chartered commercial banks

Billions of dollars

Account	Monthly averages								Wednesday figures			
	1997	1998[r]							1998			
	Dec.[r]	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Dec. 9	Dec. 16	Dec. 23	Dec. 30
	Seasonally adjusted											
Assets												
1 Bank credit	1,380.0	1,420.1	1,434.0	1,448.1	1,458.2	1,472.2	1,497.6	1,516.8	1,512.4	1,516.9	1,517.9	1,521.3
2 Securities in bank credit	401.2	401.9	407.8	411.9	414.6	423.2	433.4	441.5	439.0	440.8	442.4	444.1
3 U.S. government securities	315.7	311.5	314.3	315.8	317.4	322.2	330.1	335.3	333.8	334.7	335.8	336.8
4 Other securities	85.5	90.4	93.5	96.1	97.2	101.0	103.2	106.2	105.2	106.2	106.6	107.3
5 Loans and leases in bank credit[2]	978.8	1,018.2	1,026.3	1,036.2	1,043.6	1,049.0	1,064.3	1,075.4	1,073.4	1,076.1	1,075.5	1,077.2
6 Commercial and industrial	175.4	184.7	186.1	189.1	191.5	193.6	195.4	197.3	196.9	197.1	197.5	197.8
7 Real estate	527.7	555.3	561.1	569.3	574.1	578.2	589.1	597.2	595.3	596.2	597.9	599.9
8 Revolving home equity	28.3	28.6	28.8	29.0	29.0	29.0	29.7	29.9	30.0	30.0	29.8	29.9
9 Other	499.4	526.7	532.2	540.2	545.1	549.2	559.4	567.3	565.3	566.2	568.1	570.0
10 Consumer	203.8	201.3	201.7	199.3	199.1	197.8	199.4	202.0	200.2	203.1	202.9	202.5
11 Security[3]	5.4	6.0	6.0	6.1	6.3	6.5	6.7	6.4	6.7	6.4	6.2	6.0
12 Other loans and leases	66.4	70.9	71.4	72.5	72.6	72.8	73.6	72.5	74.3	73.3	71.0	71.0
13 Interbank loans	50.7	65.9	68.3	70.4	73.9	75.8	74.0	67.3	67.9	66.4	68.3	65.9
14 Cash assets[4]	67.4	66.5	64.7	66.6	68.0	66.7	68.3	67.9	68.4	66.5	71.3	65.5
15 Other assets[5]	56.6	63.9	63.0	63.1	65.6	68.0	72.3	73.0	73.5	72.8	73.6	71.8
16 **Total assets**[6]	**1,535.7**	**1,597.0**	**1,610.4**	**1,628.7**	**1,646.0**	**1,663.0**	**1,692.3**	**1,704.9**	**1,702.3**	**1,702.5**	**1,710.9**	**1,704.3**
Liabilities												
17 Deposits	1,226.6	1,275.0	1,273.5	1,288.0	1,301.5	1,310.1	1,330.6	1,341.0	1,337.4	1,337.8	1,347.3	1,341.1
18 Transaction	285.4	288.4	283.2	283.7	286.6	284.3	285.5	287.2	281.4	283.0	296.4	291.2
19 Nontransaction	941.2	986.6	990.3	1,004.3	1,014.9	1,025.8	1,045.1	1,053.8	1,056.0	1,054.9	1,051.0	1,050.0
20 Large time	161.0	170.9	169.0	170.1	174.5	176.1	180.1	179.0	179.1	178.4	178.7	179.0
21 Other	780.1	815.7	821.3	834.1	840.4	849.8	865.0	874.8	876.9	876.5	872.3	871.0
22 Borrowings	150.5	158.8	163.4	162.9	165.3	171.7	179.2	184.1	184.6	183.3	183.2	185.7
23 From banks in the U.S.	69.9	71.1	79.0	78.6	79.8	83.8	86.9	88.8	89.5	89.3	87.9	88.8
24 From others	80.6	87.7	84.4	84.3	85.4	87.9	92.3	95.4	95.1	94.1	95.3	96.9
25 Net due to related foreign offices	4.3	3.9	3.7	3.7	3.7	4.7	3.6	3.6	3.6	3.2	3.7	4.1
26 Other liabilities	27.9	29.8	30.1	30.7	30.6	31.8	32.7	32.5	32.6	32.8	32.3	32.5
27 **Total liabilities**	**1,409.3**	**1,467.5**	**1,470.7**	**1,485.3**	**1,501.2**	**1,518.3**	**1,546.2**	**1,561.3**	**1,558.2**	**1,557.1**	**1,566.5**	**1,563.5**
28 Residual (assets less liabilities)[7]	126.4	129.5	139.8	143.4	144.8	144.8	146.1	143.7	144.1	145.5	144.4	140.9
	Not seasonally adjusted											
Assets												
29 Bank credit	1,380.6	1,424.9	1,432.1	1,447.7	1,460.4	1,472.0	1,496.9	1,517.3	1,509.7	1,516.4	1,522.2	1,524.1
30 Securities in bank credit	399.3	405.0	406.5	410.8	413.9	420.2	430.1	439.5	435.7	438.4	442.0	443.1
31 U.S. government securities	314.1	314.2	313.0	315.0	317.0	320.0	327.3	333.7	331.4	332.8	335.5	335.8
32 Other securities	85.2	90.8	93.5	95.8	96.9	100.2	102.8	105.8	104.3	105.6	106.5	107.4
33 Loans and leases in bank credit[2]	981.3	1,019.9	1,025.7	1,036.9	1,046.5	1,051.8	1,066.8	1,077.8	1,074.0	1,077.9	1,080.2	1,081.0
34 Commercial and industrial	174.9	186.5	185.8	187.6	190.0	191.9	194.2	196.8	195.6	196.2	197.5	198.1
35 Real estate	528.6	555.9	561.1	569.7	575.8	580.7	591.2	598.2	596.2	597.2	599.3	600.7
36 Revolving home equity	28.3	28.5	28.7	28.9	29.2	29.2	29.8	29.9	29.9	29.9	29.9	29.9
37 Other	500.3	527.4	532.4	540.8	546.6	551.5	561.5	568.3	566.4	567.3	569.5	570.8
38 Consumer	206.2	199.7	200.0	199.4	200.0	198.7	201.0	204.2	201.7	205.1	206.4	205.0
39 Security[3]	5.4	6.0	6.0	6.1	6.3	6.5	6.7	6.4	6.7	6.4	6.2	6.0
40 Other loans and leases	66.2	71.8	72.8	74.1	74.4	74.0	73.7	72.3	73.8	73.0	70.7	71.2
41 Interbank loans	54.8	62.1	63.0	65.9	69.5	74.7	78.5	72.1	77.7	72.0	70.1	67.0
42 Cash assets[4]	71.0	65.6	64.0	64.4	67.3	66.6	70.5	71.2	66.9	70.0	72.1	75.3
43 Other assets[5]	56.2	63.2	64.6	64.2	66.8	68.2	72.9	72.4	72.1	72.0	70.8	73.7
44 **Total assets**[6]	**1,543.6**	**1,596.4**	**1,604.2**	**1,622.5**	**1,644.2**	**1,661.7**	**1,698.9**	**1,712.9**	**1,706.5**	**1,710.2**	**1,715.1**	**1,720.0**
Liabilities												
45 Deposits	1,234.4	1,271.6	1,267.9	1,281.5	1,298.1	1,308.1	1,336.9	1,348.4	1,342.8	1,344.8	1,349.0	1,355.3
46 Transaction	296.1	286.8	280.4	279.5	284.4	282.4	289.6	297.3	285.4	292.9	302.3	311.3
47 Nontransaction	938.3	984.8	987.4	1,002.0	1,013.7	1,025.6	1,047.4	1,051.0	1,057.4	1,051.9	1,046.7	1,044.0
48 Large time	161.0	170.9	169.0	170.1	174.5	176.1	180.1	179.0	179.1	178.4	178.7	179.0
49 Other	777.3	814.0	818.4	831.9	839.2	849.6	867.2	872.0	878.2	873.5	868.0	865.0
50 Borrowings	151.2	159.3	163.5	164.2	168.7	172.1	178.7	184.8	181.6	184.2	187.7	187.2
51 From banks in the U.S.	70.0	71.7	79.2	79.4	81.0	83.3	85.8	88.8	87.8	89.2	89.8	89.5
52 From others	81.2	87.6	84.3	84.8	87.6	88.9	92.9	96.0	93.9	94.9	97.9	97.7
53 Net due to related foreign offices	4.3	3.9	3.7	3.7	3.7	4.7	3.6	3.6	3.6	3.2	3.7	4.1
54 Other liabilities	27.9	29.8	30.1	30.7	30.6	31.8	32.7	32.5	32.6	32.8	32.3	32.5
55 **Total liabilities**	**1,417.8**	**1,464.6**	**1,465.1**	**1,480.2**	**1,501.1**	**1,516.7**	**1,551.9**	**1,569.3**	**1,560.6**	**1,564.8**	**1,572.7**	**1,579.1**
56 Residual (assets less liabilities)[7]	125.8	131.9	139.1	142.4	143.1	145.1	147.0	143.6	145.9	145.4	142.4	140.9
MEMO												
57 Mortgage-backed securities[9]	45.5	51.3	51.8	52.6	53.9	56.8	59.3	n.a.	61.2	61.9	62.3	62.3

Footnotes appear on p. A21.

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

E. Foreign-related institutions

Billions of dollars

Account	Monthly averages								Wednesday figures			
	1997	1998[r]							1998			
	Dec.	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Dec. 9	Dec. 16	Dec. 23	Dec. 30
	Seasonally adjusted											
Assets												
1 Bank credit	543.4[r]	568.2	572.1	588.4	604.6	624.7	620.1	601.1	613.4	611.1	592.0	586.7
2 Securities in bank credit	186.2[r]	200.2	201.1	212.4	215.4	221.9	223.9	216.7	220.1	216.6	214.4	214.5
3 U.S. government securities	76.6	88.6	91.0	94.1	82.2	80.2	80.5	81.0	79.5	80.7	81.5	82.9
4 Other securities	109.6	111.6	110.1	118.4	133.2	141.7	143.4	135.7	140.7	135.9	132.9	131.6
5 Loans and leases in bank credit[2]	357.2[r]	368.0	371.0	376.0	389.2	402.8	396.2	384.4	393.3	394.5	377.6	372.3
6 Commercial and industrial	220.5[r]	211.8	214.1	214.1	218.0	223.8	223.9	218.0	225.5	221.9	214.4	209.9
7 Real estate	25.9	24.2	23.9	23.9	23.6	23.3	22.0	20.7	21.2	20.7	20.3	20.3
8 Security[3]	44.8[r]	62.5	62.0	64.2	67.6	69.6	65.0	66.0	64.3	67.2	67.4	65.9
9 Other loans and leases	66.1	69.4	70.9	73.9	80.0	86.1	85.4	79.7	82.3	84.7	75.5	76.1
10 Interbank loans	31.2	23.9	21.0	20.0	28.4	25.4	26.5	27.1	20.0	24.3	32.6	32.2
11 Cash assets[4]	33.3	34.8	35.0	33.8	34.0	35.4	33.5	33.9	34.4	35.4	32.2	33.2
12 Other assets[5]	43.1	33.8	34.1	35.7	37.9	39.2	36.6	39.1	38.3	41.5	39.5	38.3
13 **Total assets**[6]	**650.8[r]**	**660.4**	**661.9**	**677.6**	**704.6**	**724.5**	**716.4**	**700.9**	**705.9**	**712.0**	**696.1**	**690.3**
Liabilities												
14 Deposits	272.5	303.1	297.6	305.9	314.5	318.9	315.3	307.3	312.3	309.4	303.7	301.8
15 Transaction	9.8	11.1	13.7	12.3	15.3	15.2	12.3	10.7	10.4	10.9	11.2	9.8
16 Nontransaction	262.7	292.0	283.9	293.6	299.2	303.7	303.0	296.6	302.0	298.5	292.4	292.0
17 Borrowings	149.4[r]	167.0	167.7	165.2	178.9	185.5	185.6	179.4	176.7	186.5	180.3	173.7
18 From banks in the U.S.	25.8	29.5	25.8	21.9	30.2	32.0	33.4	28.5	27.4	33.8	27.8	22.8
19 From others	123.6	137.5	141.9	143.3	148.8	153.5	152.2	150.9	149.2	152.7	152.5	150.9
20 Net due to related foreign offices	121.7[r]	97.3	107.8	110.2	97.1	109.1	102.1	102.3	105.2	102.2	100.6	102.9
21 Other liabilities	95.7	89.9	93.5	99.3	104.0	107.3	102.3	100.7	102.9	105.1	97.5	97.4
22 **Total liabilities**	**639.4[r]**	**657.3**	**666.6**	**680.7**	**694.6**	**720.8**	**705.3**	**689.8**	**697.1**	**703.3**	**682.1**	**675.9**
23 Residual (assets less liabilities)[7]	11.4	3.0	−4.7	−3.1	10.0	3.6	11.1	11.2	8.8	8.7	13.9	14.4
	Not seasonally adjusted											
Assets												
24 Bank credit	542.6[r]	571.2	574.9	590.8	599.3	624.0	612.5	599.6	606.6	609.1	591.4	592.1
25 Securities in bank credit	182.4[r]	203.4	203.9	216.6	212.0	222.2	218.5	212.6	216.8	214.0	208.8	210.2
26 U.S. government securities	76.3[r]	88.6	90.7	94.8	82.2	80.8	81.4	80.7	80.5	80.7	80.2	81.7
27 Trading account	13.7	20.0	25.1	30.7	20.2	16.0	13.8	n.a.	14.4	15.6	15.7	17.0
28 Investment account	62.5	68.6	65.2	63.3	61.1	63.3	66.6	n.a.	66.1	65.1	64.5	64.7
29 Other securities	106.1	114.8	113.2	121.7	129.8	141.5	137.1	131.9	136.3	133.3	128.6	128.6
30 Trading account	61.9	70.1	70.1	75.3	83.4	89.6	82.3	n.a.	83.6	80.4	76.4	77.0
31 Investment account	44.1	44.6	43.0	46.3	46.2	51.7	55.0	n.a.	52.6	52.9	52.2	51.6
32 Loans and leases in bank credit[2]	360.2	367.8	371.1	374.3	387.3	401.7	394.0	387.0	389.8	395.1	382.6	381.9
33 Commercial and industrial	221.3	211.8	213.9	213.0	216.9	223.7	223.5	218.9	223.3	221.4	216.5	214.3
34 Real estate	26.0	24.0	23.7	23.7	23.5	23.5	22.3	20.8	21.3	20.8	20.3	20.4
35 Security[3]	46.1	62.4	61.4	63.4	67.4	69.7	64.7	67.1	64.1	68.4	68.8	68.1
36 Other loans and leases	66.8	69.7	72.1	74.2	79.5	84.8	83.4	80.3	81.1	84.4	76.9	79.1
37 Interbank loans	31.2	23.9	21.0	20.0	28.4	25.4	26.5	27.1	20.0	24.3	32.6	32.2
38 Cash assets[4]	34.9	35.7	34.8	33.8	34.1	35.7	34.4	35.5	35.5	37.2	34.3	35.1
39 Other assets[5]	43.9	33.0	33.7	36.5	37.9	38.3	37.0	39.8	40.0	42.5	39.5	38.2
40 **Total assets**[6]	**652.4[r]**	**663.6**	**664.2**	**680.9**	**699.4**	**723.1**	**710.2**	**701.7**	**701.8**	**712.8**	**697.5**	**697.4**
Liabilities												
41 Deposits	275.6	304.9	295.8	304.6	316.1	318.4	314.3	310.5	313.7	311.8	309.3	306.7
42 Transaction	10.3	11.2	13.8	12.2	15.9	15.2	12.3	11.2	10.4	11.6	11.9	10.7
43 Nontransaction	265.3	293.7	282.0	292.4	300.1	303.1	302.0	299.3	303.3	300.2	297.5	296.1
44 Borrowings	149.4[r]	167.0	167.7	165.2	178.9	185.5	185.6	179.4	176.7	186.5	180.3	173.7
45 From banks in the U.S.	25.8	29.5	25.8	21.9	30.2	32.0	33.4	28.5	27.4	33.8	27.8	22.8
46 From others	123.6	137.5	141.9	143.3	148.8	153.5	152.2	150.9	149.2	152.7	152.5	150.9
47 Net due to related foreign offices	126.6[r]	96.5	104.2	106.9	95.6	108.1	102.8	106.9	103.5	105.1	106.4	115.6
48 Other liabilities	96.7[r]	89.1	92.8	99.3	103.7	107.0	103.6	101.7	104.2	106.1	98.2	98.4
49 **Total liabilities**	**648.3[r]**	**657.6**	**660.5**	**676.0**	**694.3**	**719.0**	**706.3**	**698.4**	**698.1**	**709.5**	**694.3**	**694.5**
50 Residual (assets less liabilities)[7]	4.1	6.0	3.6	4.9	5.2	4.1	3.9	3.3	3.8	3.3	3.2	2.9
MEMO												
51 Revaluation gains on off-balance-sheet items[8]	41.5	42.2	41.7	43.8	48.3	51.4	47.3	n.a.	50.9	50.8	44.9	45.7
52 Revaluation losses on off-balance-sheet items[8]	41.9	40.6	40.2	42.3	45.5	47.7	44.3	n.a.	47.2	46.9	41.4	42.1

Footnotes appear on p. A21.

NOTES TO TABLE 1.26

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

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

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

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

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

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

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

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

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

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

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

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

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

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

1.32 COMMERCIAL PAPER AND BANKERS DOLLAR ACCEPTANCES OUTSTANDING

A. Commercial Paper

Millions of dollars, seasonally adjusted, end of period

Item	Year ending December					1998					
	1993 Dec.	1994 Dec.	1995 Dec.	1996 Dec.	1997 Dec.	June	July	Aug.	Sept.	Oct.	Nov.
1 **All issuers**	**555,075**	**595,382**	**674,904**	**775,371**	**966,699**	**1,091,554**	**1,102,307**	**1,119,816**	**1,152,337**	**1,150,213**	**1,159,027**
Financial companies[1]											
2 Dealer-placed paper[2], total	218,947	223,038	275,815	361,147	513,307	597,193	616,382	606,355	639,571	627,170	621,246
3 Directly placed paper[3], total	180,389	207,701	210,829	229,662	252,536	276,476	266,022	281,927	271,526	289,184	304,545
4 Nonfinancial companies[4]	155,739	164,643	188,260	184,563	200,857	217,885	219,904	231,534	241,239	233,859	233,236

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

B. Bankers Dollar Acceptances[1]

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

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

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

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

Percent per year

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

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

1.35 INTEREST RATES Money and Capital Markets

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

Item	1996	1997	1998	1998				1998, week ending				
				Sept.	Oct.	Nov.	Dec.	Nov. 27	Dec. 4	Dec. 11	Dec. 18	Dec. 25
MONEY MARKET INSTRUMENTS												
1 Federal funds[1,2,3]	5.30	5.46	5.35	5.51	5.07	4.83	4.68	4.54	4.86	4.68	4.97	4.69
2 Discount window borrowing[2,4]	5.02	5.00	4.92	5.00	4.86	4.63	4.50	4.50	4.50	4.50	4.50	4.50
Commercial paper[3,5,6]												
Nonfinancial												
3 1-month	n.a.	5.57	5.40	5.44	5.14	5.00	5.24	4.84	5.09	5.16	5.26	5.44
4 2-month	n.a.	5.57	5.38	5.37	5.08	5.14	5.12	5.07	5.16	5.09	5.13	5.20
5 3-month	n.a.	5.56	5.34	5.31	5.04	5.06	5.00	4.99	5.04	5.00	5.00	5.02
Financial												
6 1-month	n.a.	5.59	5.42	5.45	5.18	5.04	5.31	4.87	5.14	5.33	5.35	5.44
7 2-month	n.a.	5.59	5.40	5.38	5.12	5.19	5.13	5.11	5.21	5.13	5.14	5.14
8 3-month	n.a.	5.60	5.37	5.32	5.09	5.15	5.04	5.10	5.04	5.05	5.04	5.06
Commercial paper (historical)[3,5,7]												
9 1-month	5.43	5.54	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
10 3-month	5.41	5.58	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
11 6-month	5.42	5.62	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Finance paper, directly placed (historical)[3,5,8]												
12 1-month	5.31	5.44	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
13 3-month	5.29	5.48	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
14 6-month	5.21	5.48	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Bankers acceptances[3,5,9]												
15 3-month	5.31	5.54	5.39	5.38	5.12	5.15	5.08	5.10	5.13	5.07	5.04	5.07
16 6-month	5.31	5.57	5.30	5.27	4.88	4.92	4.91	4.91	4.94	4.87	4.87	4.92
Certificates of deposit, secondary market[3,10]												
17 1-month	5.35	5.54	5.49	5.49	5.24	5.16	5.47	5.09	5.53	5.44	5.51	5.58
18 3-month	5.39	5.62	5.47	5.41	5.21	5.24	5.14	5.18	5.20	5.13	5.14	5.18
19 6-month	5.47	5.73	5.44	5.33	4.99	5.07	5.01	5.06	5.03	4.98	4.99	5.04
20 Eurodollar deposits, 3-month[3,11]	5.38	5.61	5.45	5.39	5.17	5.21	5.13	5.14	5.18	5.13	5.13	5.16
U.S. Treasury bills												
Secondary market[3,5]												
21 3-month	5.01	5.06	4.78	4.61	3.96	4.41	4.39	4.47	4.38	4.36	4.37	4.44
22 6-month	5.08	5.18	4.83	4.63	4.05	4.42	4.40	4.45	4.36	4.38	4.38	4.48
23 1-year	5.22	5.32	4.80	4.50	3.95	4.33	4.32	4.38	4.26	4.31	4.27	4.41
Auction high[3,5,12]												
24 3-month	5.02	5.07	4.81	4.74	4.08	4.44	4.42	4.45	4.44	4.32	4.39	4.44
25 6-month	5.09	5.18	4.85	4.75	4.15	4.43	4.43	4.43	4.41	4.38	4.39	4.44
26 1-year	5.23	5.36	4.85	4.51	4.06	4.40	4.31	n.a.	n.a.	4.31	n.a.	n.a.
U.S. TREASURY NOTES AND BONDS												
Constant maturities[13]												
27 1-year	5.52	5.63	5.05	4.71	4.12	4.53	4.52	4.59	4.46	4.49	4.47	4.63
28 2-year	5.84	5.99	5.13	4.67	4.09	4.54	4.51	4.64	4.43	4.45	4.43	4.67
29 3-year	5.99	6.10	5.14	4.62	4.18	4.57	4.48	4.64	4.42	4.43	4.41	4.64
30 5-year	6.18	6.22	5.15	4.62	4.18	4.54	4.45	4.62	4.39	4.39	4.36	4.59
31 7-year	6.34	6.33	5.28	4.76	4.46	4.78	4.65	4.80	4.60	4.59	4.57	4.78
32 10-year	6.44	6.35	5.26	4.81	4.53	4.83	4.65	4.83	4.64	4.60	4.59	4.75
33 20-year	6.83	6.69	5.72	5.38	5.30	5.48	5.36	5.46	5.31	5.29	5.32	5.47
34 30-year	6.71	6.61	5.58	5.20	5.01	5.25	5.06	5.21	5.05	5.00	5.01	5.16
Composite												
35 More than 10 years (long-term)	6.80	6.67	5.69	5.34	5.24	5.43	5.29	5.40	5.25	5.23	5.25	5.41
STATE AND LOCAL NOTES AND BONDS												
Moody's series[14]												
36 Aaa	5.52	5.32	4.93	4.84	4.76	4.87	4.83	4.86	4.87	4.78	4.80	4.86
37 Baa	5.79	5.50	5.14	5.11	5.10	5.15	5.17	5.18	5.15	5.13	5.15	5.21
38 *Bond Buyer* series[15]	5.76	5.52	5.09	4.99	4.93	5.03	4.98	5.01	4.96	4.94	4.96	5.03
CORPORATE BONDS												
39 Seasoned issues, all industries[16]	7.66	7.54	6.87	6.75	6.77	6.87	6.72	6.77	6.68	6.69	6.70	6.80
Rating group												
40 Aaa	7.37	7.27	6.53	6.40	6.37	6.41	6.22	6.28	6.18	6.18	6.19	6.29
41 Aa	7.55	7.48	6.80	6.68	6.70	6.79	6.65	6.70	6.60	6.62	6.62	6.72
42 A	7.69	7.54	6.93	6.82	6.85	6.95	6.80	6.85	6.77	6.77	6.77	6.87
43 Baa	8.05	7.87	7.22	7.09	7.18	7.34	7.23	7.28	7.19	7.19	7.21	7.30
MEMO												
Dividend–price ratio[17]												
44 Common stocks	2.19	1.77	n.a.	1.59	1.59	1.43	1.37	1.37	1.39	1.37	1.41	1.34

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

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

1.36 STOCK MARKET Selected Statistics

Indicator	1996	1997	1998	1998 Apr.	1998 May	1998 June	1998 July	1998 Aug.	1998 Sept.	1998 Oct.	1998 Nov.	1998 Dec.
	Prices and trading volume (averages of daily figures)[1]											
Common stock prices (indexes)												
1 New York Stock Exchange (Dec. 31, 1965 = 50)	357.98	456.99	550.65	578.05	574.46	569.76	586.39	539.16	506.56	511.49	564.26	576.05
2 Industrial	453.57	574.97	684.35	711.89	712.39	731.01	718.54	665.66	629.51	636.62	704.46	717 14
3 Transportation	327.30	415.08	468.61	523.73	505.02	492.98	503.89	441.36	408.75	396.61	442.95	456.70
4 Utility	126.36	143.87	190.52	207.32	198.25	188.26	189.95	186.24	186.17	195.09	206.29	215.57
5 Finance	303.94	424.84	516.65	563.07	551.28	548.57	579.67	511.22	454.28	448.12	501.45	510.31
6 Standard & Poor's Corporation (1941–43 = 10)[2]	670.49	873.43	1,085.50	1,112.20	1,108.42	1,108.39	1,156.58	1,074.62	1,020.64	1,032.47	1,144.43	1,190.05
7 American Stock Exchange (Aug. 31, 1973 = 50)[3]	570.86	628.34	682.69	742.33	735.02	704.59	724.83	655.67	621.48	607.16	667.60	660.76
Volume of trading (thousands of shares)												
8 New York Stock Exchange	409,740	523,254	666,534	647,110	569,239	605,576	639,744	712,710	790,238	808,816	668,932	680,397
9 American Stock Exchange	22,567	n.a.	n.a.	29,544	27,004	25,447	26,473	32,721	33,331	31,946	27,266	28,756
	Customer financing (millions of dollars, end-of-period balances)											
10 **Margin credit at broker–dealers[4]**	**97,400**	**126,090**	**140,980**	**140,240**	**143,600**	**147,700**	**154,370**	**147,800**	**137,540**	**130,160**	**139,710[r]**	**140,980**
Free credit balances at brokers[5]												
11 Margin accounts[6]	22,540	31,410	40,250	28,160	26,200	29,840	31.820	38,460	41.970	43,500	40,620[r]	40.250
12 Cash accounts	40,430	52,160	62,450	51,050	47,770	51,205	53,780	53.850	54,240	54,610	56,170[r]	62.450

	Margin requirements (percent of market value and effective date)[7]					
	Mar. 11, 1968	June 8, 1968	May 6, 1970	Dec. 6, 1971	Nov. 24, 1972	Jan. 3, 1974
13 Margin stocks	70	80	65	55	65	50
14 Convertible bonds	50	60	50	50	50	50
15 Short sales	70	80	65	55	65	50

1. Daily data on prices are available upon request to the Board of Governors. For ordering address, see inside front cover.
2. In July 1976 a financial group, composed of banks and insurance companies, was added to the group of stocks on which the index is based. The index is now based on 400 industrial stocks (formerly 425), 20 transportation (formerly 15 rail), 40 public utility (formerly 60), and 40 financial.
3. On July 5, 1983, the American Stock Exchange rebased its index, effectively cutting previous readings in half.
4. Since July 1983, under the revised Regulation T, margin credit at broker–dealers has included credit extended against stocks, convertible bonds, stocks acquired through the exercise of subscription rights, corporate bonds, and government securities. Separate reporting of data for margin stocks, convertible bonds, and subscription issues was discontinued in April 1984.
5. Free credit balances are amounts in accounts with no unfulfilled commitments to brokers and are subject to withdrawal by customers on demand.
6. Series initiated in June 1984.
7. Margin requirements, stated in regulations adopted by the Board of Governors pursuant to the Securities Exchange Act of 1934, limit the amount of credit that can be used to purchase and carry "margin securities" (as defined in the regulations) when such credit is collateralized by securities. Margin requirements on securities are the difference between the market value (100 percent) and the maximum loan value of collateral as prescribed by the Board. Regulation T was adopted effective Oct. 15, 1934; Regulation U, effective May 1, 1936; Regulation G, effective Mar. 11, 1968; and Regulation X, effective Nov. 1, 1971.

On Jan. 1, 1977, the Board of Governors for the first time established in Regulation T the initial margin required for writing options on securities, setting it at 30 percent of the current market value of the stock underlying the option. On Sept. 30, 1985, the Board changed the required initial margin, allowing it to be the same as the option maintenance margin required by the appropriate exchange or self-regulatory organization; such maintenance margin rules must be approved by the Securities and Exchange Commission.

1.38 FEDERAL FISCAL AND FINANCING OPERATIONS

Millions of dollars

Type of account or operation	Fiscal year			Calendar year					
				1998					
	1996	1997	1998	July	Aug.	Sept.	Oct.	Nov.	Dec.
U.S budget[1]									
1 Receipts, total	1,453,062	1,579,292	1,721,798	119,723	111,741	180,936	119,974	113,978	178,646
2 On-budget	1,085,570	1,187,302	1,305,999	87,820	79,135	149,726	90,064	81,836	143,337
3 Off-budget	367,492	391,990	415,799	31,903	32,606	31,210	29,910	32,142	35,309
4 Outlays, total	1,560,512	1,601,235	1,652,552	143,807	122,907	142,725	152,436	131,095	184,056
5 On-budget	1,259,608	1,290,609	1,335,948	115,714	92,555	107,900	123,687	100,078	149,401
6 Off-budget	300,904	310,626	316,604	28,094	30,352	34,814	28,749	31,017	34,655
7 Surplus or deficit (−), total	−107,450	−21,943	69,246	−24,084	−11,166	38,222	−32,462	−17,117	−5,410
8 On-budget	−174,038	−103,307	−29,949	−27,894	−13,420	41,826	−33,623	−18,242	−6,064
9 Off-budget	66,588	81,364	99,195	3,809	2,254	−3,604	1,161	1,125	654
Source of financing (total)									
10 Borrowing from the public	129,712	38,171	−51,049	−16,370	33,989	−46,413	15,330	22,364	−5,390
11 Operating cash (decrease, or increase (−))	−6,276	604	4,743	36,210	−362	−2,451	2,661	20,335	−1,621
12 Other[2]	−15,986	−16,832	−22,940	4,244	−22,461	10,642	14,471	−25,582	12,421
MEMO									
13 Treasury operating balance (level, end of period)	44,225	43,621	38,878	36,065	36,427	38,878	36,217	15,882	17,503
14 Federal Reserve Banks	7,700	7,692	4,952	4,648	6,704	4,952	4,440	5,219	6,086
15 Tax and loan accounts	36,525	35,930	33,926	31,417	29,722	33,926	31,776	10,663	11,417

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

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

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

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

Millions of dollars

Source or type	Fiscal year		Calendar year						
	1997	1998	1997		1998		1998		
			H1	H2	H1	H2	Oct.	Nov.	Dec.
RECEIPTS									
1 **All sources**	**1,579,292**	**1,721,798**	**845,527**	**773,812**	**922,632**	**824,998**	**119,974**	**113,978**	**178,646**
2 Individual income taxes, net	737,466	828,586	400,436	354,072	447,514	392,332	60,255	51,341	75,988
3 Withheld	580,207	646,483	292,252	306,865	316,309	339,144	54,277	52,530	69,628
4 Nonwithheld	250,753	281,527	191,050	58,069	219,136	65,204	7,098	2,214	7,094
5 Refunds	93,560	99,476	82,926	10,869	87,989	12,032	1,120	3,404	734
Corporation income taxes									
6 Gross receipts	204,493	213,249	106,451	104,659	109,353	104,163	6,547	4,805	45,123
7 Refunds	22,198	24,593	9,635	10,135	14,220	14,250	4,789	1,364	2,749
8 Social insurance taxes and contributions, net	539,371	571,831	288,251	260,795	312,713	268,466	41,237	45,926	48,601
9 Employment taxes and contributions[2]	506,751	540,014	268,357	247,794	293,520	256,142	39,690	42,940	47,869
10 Unemployment insurance	28,202	27,484	17,709	10,724	17,080	10,121	1,142	2,655	315
11 Other net receipts[3]	4,418	4,333	2,184	2,280	2,112	2,202	405	331	417
12 Excise taxes	56,924	57,673	28,084	31,133	29,922	33,366	9,630	6,021	5,446
13 Customs deposits	17,928	18,297	8,619	9,679	8,546	9,838	1,776	1,380	1,472
14 Estate and gift taxes	19,845	24,076	10,477	10,262	12,971	12,359	2,089	2,132	2,239
15 Miscellaneous receipts[4]	25,465	32,658	12,866	13,348	15,837	18,735	3,228	3,738	2,527
OUTLAYS									
16 **All types**	**1,601,235**	**1,652,552**	**797,418**	**824,370**	**815,886**	**877,026**	**152,436**	**131,095**	**184,056**
17 National defense	270,473	268,456	132,698	140,873	129,351	140,196	25,730	18,173	27,178
18 International affairs	15,228	13,109	5,740	9,420	4,610	8,296	169	4,924	822
19 General science, space, and technology	17,174	18,219	8,938	10,040	9,426	10,142	1,550	1,558	1,918
20 Energy	1,483	1,270	803	411	957	699	−135	−218	151
21 Natural resources and environment	21,369	22,396	9,628	11,106	10,051	12,671	1,859	2,080	2,545
22 Agriculture	9,032	12,206	1,465	10,590	2,387	16,757	3,287	5,620	3,238
23 Commerce and housing credit	−14,624	1,014	−7,575	−3,526	−2,483	4,046	1,078	−701	−1,821
24 Transportation	40,767	40,332	16,847	20,414	16,196	20,834	3,445	3,447	3,400
25 Community and regional development	11,005	9,720	5,678	5,749	4,863	6,972	1,260	1,405	1,505
26 Education, training, employment, and social services	53,008	54,919	25,080	26,851	25,928	27,245	4,861	4,111	5,465
27 Health	123,843	131,440	61,809	63,552	65,053	67,836	12,572	10,477	11,757
28 Social security and Medicare	555,273	572,047	278,863	283,109	286,305	316,809	50,544	43,728	79,633
29 Income security	230,886	233,202	124,034	106,353	125,196	109,481	20,104	14,644	21,945
30 Veterans benefits and services	39,313	41,781	17,697	22,077	19,615	22,750	5,465	1,841	5,305
31 Administration of justice	20,197	22,832	10,670	10,212	11,287	12,041	1,899	2,067	2,132
32 General government	12,768	13,444	6,623	7,302	6,139	9,079	2,377	1,418	2,198
33 Net interest[5]	244,013	243,359	122,655	122,620	122,345	116,954	19,442	19,350	20,029
34 Undistributed offsetting receipts[6]	−49,973	−47,194	−24,235	−22,795	−21,340	−25,795	−3,078	−2,828	−3,343

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

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

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

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

5. Includes interest received by trust funds.

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

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

1.40 FEDERAL DEBT SUBJECT TO STATUTORY LIMITATION

Billions of dollars, end of month

Item	1996	1997				1998			
	Dec. 31	Mar. 31	June 30	Sept. 30	Dec. 31	Mar. 31	June 30	Sept. 30	Dec. 31
1 **Federal debt outstanding**	**5,357**	**5,415**	**5,410**	**5,446**	**5,536**	**5,573**	**5,578**	**5,556**	**5,643**
2 Public debt securities	5,323	5,381	5,376	5,413	5,502	5,542	5,548	5,526	5,614
3 Held by public	3,826	3,874	3,805	3,815	3,847	3,872	3,790	3,761	n.a.
4 Held by agencies	1,497	1,507	1,572	1,599	1,656	1,670	1,758	1,766	n.a.
5 Agency securities	34	34	34	33	34	31	30	29	29
6 Held by public	27	26	26	26	27	26	26	26	n.a.
7 Held by agencies	8	8	7	7	7	5	4	4	n.a.
8 **Debt subject to statutory limit**	**5,237**	**5,294**	**5,290**	**5,328**	**5,417**	**5,457**	**5,460**	**5,440**	**5,530**
9 Public debt securities	5,237	5,294	5,290	5,328	5,416	5,456	5,460	5,439	5,530
10 Other debt[1]	0	0	0	0	0	0	0	0	0
MEMO									
11 Statutory debt limit	5,500	5,500	5,500	5,950	5,950	5,950	5,950	5,950	5,950

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

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

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

Billions of dollars, end of period

Type and holder	1995	1996	1997	1998	1998			
					Q1	Q2	Q3	Q4
1 **Total gross public debt**	**4,988.7**	**5,323.2**	**5,502.4**	**5,614.2**	**5,542.4**	**5,547.9**	**5,526.2**	**5,614.2**
By type								
2 Interest-bearing	4,964.4	5,317.2	5,494.9	5,605.4	5,535.3	5,540.2	5,518.7	5,605.4
3 Marketable	3,307.2	3,459.7	3,456.8	3,355.5	3,467.1	3,369.5	3,331.0	3,355.5
4 Bills	760.7	777.4	715.4	691.0	720.1	641.1	637.7	691.0
5 Notes	2,010.3	2,112.3	2,106.1	1,960.7	2,091.9	2,064.6	2,009.1	1,960.7
6 Bonds	521.2	555.0	587.3	621.2	598.7	598.7	610.4	621.2
7 Inflation-indexed notes and bonds[1]	n.a.	n.a.	33.0	50.6	41.5	50.1	41.9	50.6
8 Nonmarketable[2]	1,657.2	1,857.5	2,038.1	2,249.9	2,068.2	2,170.7	2,187.7	2,249.9
9 State and local government series	104.5	101.3	124.1	165.3	139.1	155.0	164.4	165.3
10 Foreign issues[3]	40.8	37.4	36.2	34.3	35.4	36.0	35.1	34.3
11 Government	40.8	47.4	36.2	34.3	36.4	36.0	35.1	34.3
12 Public	.0	.0	.0	.0	.0	.0	.0	.0
13 Savings bonds and notes	181.9	182.4	181.2	180.3	181.2	180.7	180.8	180.3
14 Government account series[4]	1,299.6	1,505.9	1,666.7	1,840.0	1,681.5	1,769.1	1,777.3	1,840.0
15 Non-interest-bearing	24.3	6.0	7.5	8.8	7.2	7.7	7.5	8.8
By holder[5]								
16 U.S. Treasury and other federal agencies and trust funds	1,304.5	1,497.2	1,655.7	n.a.	1,670.4	1,757.6	1,765.6	n.a.
17 Federal Reserve Banks	391.0	410.9	451.9	n.a.	400.0	458.4	458.1	n.a.
18 Private investors	3,294.9	3,411.2	3,393.4	n.a.	3,430.7	3,330.6	3,301.0	n.a.
19 Commercial banks	278.7	261.8	269.8	n.a.	278.6	263.7	260.0	n.a.
20 Money market funds	71.5	91.6	88.9	n.a.	84.8	82.7	84.2	n.a.
21 Insurance companies	241.5	214.1	224.9	n.a.	182.2	185.0	188.0	n.a.
22 Other companies	228.8	258.5	265.0	n.a.	268.1	267.2	271.4	n.a.
23 State and local treasuries[6,7]	469.6	482.5	493.0	n.a.	444.8	464.7	469.0	n.a.
Individuals								
24 Savings bonds	185.0	187.0	186.5	n.a.	186.3	186.0	186.0	n.a.
25 Other securities	162.7	169.6	168.4	n.a.	165.8	165.0	166.4	n.a.
26 Foreign and international[8]	862.2	1,135.6	1,278.0	n.a.	1,240.3	1,248.6	1,217.2	n.a.
27 Other miscellaneous investors[7,9]	794.9	610.5	418.8	n.a.	579.8	467.7	458.9	n.a.

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

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

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

Millions of dollars, daily averages

Item	1998			1998, week ending								
	Sept.	Oct.	Nov.	Nov. 4	Nov. 11	Nov. 18	Nov. 25	Dec. 2	Dec. 9	Dec. 16	Dec. 23	Dec. 30
OUTRIGHT TRANSACTIONS[2]												
By type of security												
1 U.S. Treasury bills	35,694	30,362	35,010	36,927	37,505	37,730	27,247	39,754	35,490	31,544	22,028	27,504
Coupon securities, by maturity												
2 Five years or less	141,855	131,248	111,370	119,017	113,914	116,567	106,682	93,540	97,507	78,916	61,226	56,767
3 More than five years	85,071	94,390	73,238	79,512	100,016	66,838	59,214	61,330	59,804	52,035	40,259	25,372
4 Inflation-indexed	1,173	1,497	602	799	723	566	561	259	386	239	236	157
Federal agency												
5 Discount notes	46,151	46,265	43,274r	48,124	44,257	45,013	38,786	40,902	41,600	38,054	36,437	36,404
Coupon securities, by maturity												
6 One year or less	1,127	700	856	556	1,007	1,089	749	693	454	975	953	254
7 More than one year, but less than or equal to five years	4,853	4,864	3,461	3,480	3,828	3,695	2,465	4,599	6,101	2,720	2,527	1,616
8 More than five years	2,911	4,640	3,894	5,642	6,525	3,377	1,994	2,048	2,896	2,230	2,378	1,377
9 Mortgage-backed	89,908	92,708	68,053	65,166	98,205	68,541	47,392	62,512	99,250	63,416	37,763	24,278
By type of counterparty												
With interdealer broker												
10 U.S. Treasury	146,046	146,311	121,806	134,810	142,375	119,988	106,181	104,774	107,472	91,709	65,449	56,682
11 Federal agency	3,186	3,478	2,223	2,328	2,325	2,306	1,954	2,327	3,568	1,806	1,517	1,390
12 Mortgage-backed	30,665	31,293	22,926	23,531	29,348	24,085	17,183	20,633	34,264	23,038	14,505	8,562
With other												
13 U.S. Treasury	117,747	111,185	98,413	101,445	109,782	101,713	87,522	90,109	85,715	71,025	58,300	53,118
14 Federal agency	51,856	52,991	49,261r	55,474	53,292	50,868	42,039	45,914	47,483	42,172	40,778	38,260
15 Mortgage-backed	59,243	61,415	45,127	41,635	68,857	44,456	30,209	41,879	64,986	40,379	23,259	15,716
FUTURES TRANSACTIONS[3]												
By type of deliverable security												
16 U.S. Treasury bills	180	0	50	0	n.a.	n.a.	87	34	80	166	0	0
Coupon securities, by maturity												
17 Five years or less	4,378	3,296	3,281	3,395	3,049	2,659	3,522	4,526	2,717	2,936	2,718	1,820
18 More than five years	20,105	19,467	16,164	14,398	19,134	15,334	16,172	14,928	12,523	11,200	8,845	5,211
19 Inflation-indexed	0	0	0	0	0	0	0	0	0	0	0	0
Federal agency												
20 Discount notes	0	0	0	0	0	0	0	0	0	0	0	0
Coupon securities, by maturity												
21 One year or less	0	0	0	0	0	0	0	0	0	0	0	0
22 More than one year, but less than or equal to five years	0	0	0	0	0	0	0	0	0	0	0	0
23 More than five years	0	0	0	0	0	0	0	0	0	0	0	0
24 Mortgage-backed	0	0	0	0	0	0	0	0	0	0	0	0
OPTIONS TRANSACTIONS[4]												
By type of underlying security												
25 U.S. Treasury bills	0	0	0	0	0	0	0	0	0	0	0	0
Coupon securities, by maturity												
26 Five years or less	1,984	1,685	1,145	997	1,123	1,567	805	1,209	684	1,242	864	733
27 More than five years	6,152	8,125	5,621	6,295	6,655	6,364	4,126	4,418	3,474	3,189	2,737	1,471
28 Inflation-indexed	0	0	0	0	0	0	0	0	0	0	0	0
Federal agency												
29 Discount notes	0	0	0	0	0	0	0	0	0	0	0	0
Coupon securities, by maturity												
30 One year or less	0	0	0	0	0	0	0	0	0	0	0	0
31 More than one year, but less than or equal to five years	0	0	0	0	0	0	0	0	0	0	0	0
32 More than five years	0	0	0	0	0	0	0	0	0	0	0	0
33 Mortgage-backed	745	862	912	3,861	1,821	682	480	822	1,258	781	326	733

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

Dealers report cumulative transactions for each week ending Wednesday.

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

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

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

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

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

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

Millions of dollars

Item	1998			1998, week ending							
	Sept.	Oct.	Nov.	Nov 4	Nov. 11	Nov. 18	Nov. 25	Dec. 2	Dec. 9	Dec. 16	Dec 23
	Positions[2]										
NET OUTRIGHT POSITIONS[3]											
By type of security											
1 U.S. Treasury bills	853	−9,335	−6,782	−10,085	−5,730	−7,128	−12,085	2,294	4,374	−11,472	−9,773
Coupon securities, by maturity											
2 Five years or less	−5,360	1,196	558	5,186	2,529	−499	−970	−2,286	−5,282	−7,691	−5,142
3 More than five years	−2,004	6,412	7,272	4,171	7,601	10,547	6,549	5,717	4,007	3,512	3,304
4 Inflation-indexed	1,554	2,705	1,798	2,381	2,153	1,703	1,406	1,517	1,241	1,089	1,104
Federal agency											
5 Discount notes	17,211	18,395	17,666	17,306	21,745	16,948	14,748	17,333	21,969	22,540	22,223
Coupon securities, by maturity											
6 One year or less	2,668	1,870	2,188	1,765	1,587	2,473	2,702	2,251	1,958	2,297	1,895
7 More than one year, but less than or equal to five years	4,801	5,119	3,208	3,903	4,172	2,954	1,967	3,396	4,026	4,415	2,257
8 More than five years	6,913	6,797	5,584	4,485	5,391	6,935	5,566	4,866	5,302	4,338	1,964
9 Mortgage-backed	58,415	48,954	37,219	40,623	41,319	36,771	34,469	33,233	41,692	39,932	37,331
NET FUTURES POSITIONS[4]											
By type of deliverable security											
10 U.S. Treasury bills	606	n.a.	271	n.a.	−51	245	418	551	495	n.a.	n.a.
Coupon securities, by maturity											
11 Five years or less	−8,716	−9,070	−4,399	−5,152	−3,919	−4,721	−2,838	−6,203	−5,845	−4,269	−2,998
12 More than five years	−25,612	−24,562	−27,583	−22,823	−26,286	−33,074	−26,853	−26,539	−26,034	−26,745	−23,356
13 Inflation-indexed	0	0	0	0	0	0	0	0	0	0	0
Federal agency											
14 Discount notes	0	0	0	0	0	0	0	0	0	0	0
Coupon securities, by maturity											
15 One year or less	0	0	0	0	0	0	0	0	0	0	0
16 More than one year, but less than or equal to five years	0	0	0	0	0	0	0	0	0	0	0
17 More than five years	0	0	0	0	0	0	0	0	0	0	0
18 Mortgage-backed	0	0	0	0	0	0	0	0	0	0	0
NET OPTIONS POSITIONS											
By type of deliverable security											
19 U.S. Treasury bills	0	0	0	0	0	0	0	0	0	0	0
Coupon securities, by maturity											
20 Five years or less	−1,153	−1,301	−2,128	−1,738	−2,316	−1,947	−2,137	−2,418	−2,535	−3,260	−3,928
21 More than five years	−2,553	−3,788	−1,602	−2,696	−1,461	−1,502	−1,824	−752	−721	−1,275	−1,858
22 Inflation-indexed	0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	0	0	0
Federal agency											
23 Discount notes	0	0	0	0	0	0	0	0	0	0	0
Coupon securities, by maturity											
24 One year or less	0	0	0	0	0	0	0	0	0	0	0
25 More than one year, but less than or equal to five years	0	0	0	0	0	0	0	0	0	0	0
26 More than five years	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a
27 Mortgage-backed	1,629	3,160	2,380	3,033	2,956	2,229	2,240	1,458	479	1,087	1,815
	Financing[5]										
Reverse repurchase agreements											
28 Overnight and continuing	316,256	278,468	240,639	260,682	217,473	253,440	233,620	248,942	250,409	265,083	226,311
29 Term	784,437	847,663	780,552	875,786	906,415	683,253	733,259	730,585	778,286	814,651	850,670
Securities borrowed											
30 Overnight and continuing	229,685	234,431	210,066	219,573	209,364	219,514	196,395	209,357	206,947	205,544	203,289
31 Term	99,774	109,805	107,922	106,468	113,261	97,449	112,719	109,554	110,517	111,511	112,705
Securities received as pledge											
32 Overnight and continuing	3,152	2,851	3,174	2,900	2,741	3,494	3,435	3,186	2,816	3,203	3,304
33 Term	0	0	63	n.a.	n.a.	60	64	67	67	n.a.	n.a.
Repurchase agreements											
34 Overnight and continuing	718,744	666,957	588,736	613,268	566,780	631,286	535,673	614,567	612,649	646,524	598,564
35 Term	704,430	777,445	709,894	796,830	834,146	598,187	701,338	634,759	685,047	705,563	758,512
Securities loaned											
36 Overnight and continuing	11,057	8,157	8,943	8,693	8,483	9,069	9,076	9,424	9,863	9,803	7,669
37 Term	4,119	3,947	4,008	4,011	4,117	4,085	3,895	3,904	4,409	3,763	2,434
Securities pledged											
38 Overnight and continuing	52,222	53,861	46,851	54,969	45,686	49,081	44,093	42,728	45,538	48,618	48,429
39 Term	5,624	5,112	3,556	4,904	4,789	489	3,893	4,576	4,610	5,279	5,207
Collateralized loans											
40 Total	14,140	21,841	23,528	21,712	23,009	26,943	21,054	24,391	22,408	26,182	20,734

1. Data for positions and financing are obtained from reports submitted to the Federal Reserve Bank of New York by the U.S. government securities dealers on its published list of primary dealers. Weekly figures are close-of-business Wednesday data. Positions for calendar days of the report week are assumed to be constant. Monthly averages are based on the number of calendar days in the month.

2. Securities positions are reported at market value.

3. Net outright positions include immediate and forward positions. Net immediate positions include securities purchased or sold (other than mortgage-backed agency securities) that have been delivered or are scheduled to be delivered in five business days or less and "when-issued" securities that settle on the issue date of offering. Net immediate positions for mortgage-backed agency securities include securities purchased or sold that have been delivered or are scheduled to be delivered in thirty business days or less.

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

4. Futures positions reflect standardized agreements arranged on an exchange. All futures positions are included regardless of time to delivery.

5. Overnight financing refers to agreements made on one business day that mature on the next business day; continuing contracts are agreements that remain in effect for more than one business day but have no specific maturity and can be terminated without advance notice by either party; term agreements have a fixed maturity of more than one business day. Financing data are reported in terms of actual funds paid or received, including accrued interest.

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

1.44 FEDERAL AND FEDERALLY SPONSORED CREDIT AGENCIES Debt Outstanding

Millions of dollars, end of period

Agency	1994	1995	1996	1997	1998				
					June	July	Aug.	Sept.	Oct.
1 **Federal and federally sponsored agencies**	**738,928**	**844,611**	**925,823**	**1,022,609**	**1,061,253**	n.a.	n.a.	**1,172,575**	n.a.
2 Federal agencies	39,186	37,347	29,380	27,792	26,817	26,990	26,668	26,691	26,350
3 Defense Department[1]	6	6	6	6	6	6	6	6	6
4 Export-Import Bank[2,3]	3,455	2,050	1,447	552	1,295	n.a.	n.a.	n.a.	n.a.
5 Federal Housing Administration[4]	116	97	84	102	144	156	155	174	188
6 Government National Mortgage Association certificates of participation[5]	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
7 Postal Service[6]	8,073	5,765	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
8 Tennessee Valley Authority	27,536	29,429	27,853	27,786	26,811	26,984	26,507	26,685	26,344
9 United States Railway Association[6]	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
10 Federally sponsored agencies[7]	699,742	807,264	896,443	994,817	1,073,863[r]	1,090,715	1,103,596	1,145,884	n.a.
11 Federal Home Loan Banks	205,817	243,194	263,404	313,919	328,514	328,009	334,494	343,188	367,274
12 Federal Home Loan Mortgage Corporation	93,279	119,961	156,980	169,200	200,314	208,800	213,800	232,994	246,708
13 Federal National Mortgage Association	257,230	299,174	331,270	369,774	406,162	415,229	423,188	430,582	431,300
14 Farm Credit Banks[8]	53,175	57,379	60,053	63,517	64,717	64,528	57,910	64,332	60,720
15 Student Loan Marketing Association[9]	50,335	47,529	44,763	37,717	33,231	33,270	33,350	33,760	n.a.
16 Financing Corporation[10]	8,170	8,170	8,170	8,170	8,170	8,170	8,170	8,170	8,170
17 Farm Credit Financial Assistance Corporation[11]	1,261	1,261	1,261	1,261	1,261	1,261	1,261	1,261	1,261
18 Resolution Funding Corporation[12]	29,996	29,996	29,996	29,996	29,996	29,996	29,996	29,996	29,996
MEMO									
19 **Federal Financing Bank debt**[13]	**103,817**	**78,681**	**58,172**	**49,090**	**136,892**	**42,610**	**42,396**	**45,955**	**44,952**
Lending to federal and federally sponsored agencies									
20 Export-Import Bank[3]	3,449	2,044	1,431	552	1,295	↑	↑	↑	↑
21 Postal Service[6]	8,073	5,765	n.a.	n.a.	n.a.				
22 Student Loan Marketing Association	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
23 Tennessee Valley Authority	3,200	3,200	n.a.	n.a.	n.a.				
24 United States Railway Association[6]	n.a.	n.a.	n.a.	n.a.	n.a.	↓	↓	↓	↓
Other lending[14]									
25 Farmers Home Administration	33,719	21,015	18,325	13,530	13,530	10,900	9,756	9,500	9,500
26 Rural Electrification Administration	17,392	17,144	16,702	14,898	14,819	14,126	14,284	14,166	14,191
27 Other	37,984	29,513	21,714	20,110	107,248	17,584	18,356	22,289	21,261

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

1.45 NEW SECURITY ISSUES Tax-Exempt State and Local Governments

Millions of dollars

Type of issue or issuer, or use	1995	1996	1997	1998 May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1 **All issues, new and refunding**[1]	**145,657**	**171,222**	**214,694**	**22,862**	**29,665**	**22,599**	**20,344**	**17,526**	**19,528**	**19,325**	**24,288**
By type of issue											
2 General obligation	56,980	60,409	69,934	4,827	10,135	6,515	5,812	5,619	6,791	5,433	8,632
3 Revenue	88,677	110,813	134,989	18,035	19,530	16,084	14,532	11,907	12,737	13,892	15,656
By type of issuer											
4 State	14,665	13,651	18,237	1,146	2,809	1,972	1,483	1,280	1,865	778	2,561
5 Special district or statutory authority[2]	93,500	113,228	134,919	16,865	18,099	16,244	14,233	12,490	12,924	13,473	15,937
6 Municipality, county, or township	37,492	44,343	70,558	4,851	7,220	5,673	4,628	3,756	4,739	5,073	5,790
7 **Issues for new capital**	**102,390**	**112,298**	**135,519**	**15,281**	**19,341**	**15,895**	**11,258**	**9,106**	**12,736**	**12,452**	**14,517**
By use of proceeds											
8 Education	23,964	26,851	31,860	2,819	4,911	2,733	2,435	2,041	2,605	2,353	2,766
9 Transportation	11,890	12,324	13,951	1,043	2,962	3,677	1,982	918	1,598	806	1,800
10 Utilities and conservation	9,618	9,791	12,219	5,971	2,368	795	1,179	831	2,785	2,225	984
11 Social welfare	19,566	24,583	27,794	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
12 Industrial aid	6,581	6,287	6,667	576	563	1,002	709	315	471	638	1,376
13 Other purposes	30,771	32,462	35,095	2,482	5,279	4,674	2,764	2,726	3,359	3,242	4,477

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

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

1.46 NEW SECURITY ISSUES U.S. Corporations

Millions of dollars

Type of issue, offering, or issuer	1995	1996	1997	1998 Apr.	May	June	July	Aug.	Sept.	Oct.[r]	Nov.
1 **All issues**[1]	**673,571**	n.a.	n.a.	**83,646**	**84,449**	**109,687**	**77,750**	**60,708**	**85,833**	**70,907**	**105,985**
2 **Bonds**[2]	**572,998**	n.a.	n.a.	**71,929**	**70,313**	**93,243**	**68,133**	**57,145**	**81,352**	**62,692**	**97,640**
By type of offering											
3 Public, domestic	408,707	465,489	537,880	55,452	56,965	78,280	54,266	45,745	71,134	48,256	82,034
4 Private placement, domestic[3]	87,492	n.a.	n.a.	7,600	7,600	7,600	7,600	7,600	7,600	7,600	7,600
5 Sold abroad	76,799	83,433	103,188	8,878	5,748	7,363	6,267	3,800	2,618	6,837	8,006
By industry group											
6 Nonfinancial	156,763	n.a.	n.a.	24,585	20,456	24,444	24,821	20,399	16,562	16,632	32,087
7 Financial	416,235	429,157	510,953	47,345	49,857	68,799	43,313	36,746	64,790	46,060	65,553
8 **Stocks**[2]	**105,323**	**122,006**	**117,880**	**12,470**	**14,700**	**17,111**	**9,772**	**3,725**	**4,640**	**8,655**	**8,869**
By type of offering											
9 Public	73,223	122,006	117,880	12,470	14,700	17,111	9,772	3,725	4,640	8,655	8,869
10 Private placement[3]	32,100	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
By industry group											
11 Nonfinancial	52,707	80,460	60,386	5,551	9,271	10,248	6,390	2,560	2,266	5,879	6,112
12 Financial	20,516	41,546	57,494	6,919	5,429	6,863	3,382	1,165	2,374	2,776	2,757

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

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

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

Millions of dollars

Item	1997	1998	1998							
			May	June	July	Aug.	Sept.	Oct.	Nov.[r]	Dec
1 **Sales of own shares**[2]	**1,190,900**	**1,461,925**	**113,593**	**122,288**	**134,801**	**111,587**	**118,478**	**116,471**	**112,627**	**141,195**
2 Redemptions of own shares	918,728	1,216,714	84,421	97,899	107,368	118,812	107,049	108,838	89,702	133,981
3 Net sales[3]	272,172	245,210	29,172	24,389	27,433	−7,225	11,429	7,633	22,925	7,214
4 **Assets**[4]	**3,409,315**	**4,176,935**	**3,882,061**	**3,986,952**	**3,957,093**	**3,479,401**	**3,625,841**	**3,804,591**	**4,002,089**	**4,176,935**
5 Cash[5]	174,154	192,361	171,425	199,135	195,966	194,435	211,253	210,026	207,422	192,361
6 Other	3,235,161	3,984,574	3,710,636	3,787,817	3,761,127	3,284,967	3,414,588	3,594,565	3,794,667	3,984,574

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

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

1.48 CORPORATE PROFITS AND THEIR DISTRIBUTION

Billions of dollars; quarterly data at seasonally adjusted annual rates

Account	1995	1996	1997	1996	1997				1998		
				Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
1 Profits with inventory valuation and capital consumption adjustment	672.4	750.4	817.9	762.0	794.3	815.5	840.9	820.8	829.2	820.6	827.0
2 Profits before taxes	635.6	680.2	734.4	685.7	712.4	729.8	758.9	736.4	719.1	723.5	720.5
3 Profits-tax liability	211.0	226.1	246.1	224.2	238.8	241.9	254.2	249.3	239.9	241.6	243.2
4 Profits after taxes	424.6	454.1	488.3	461.5	473.6	487.8	504.7	487.1	479.2	481.8	477.3
5 Dividends	205.3	261.9	275.1	273.6	274.1	274.7	275.1	276.4	277.3	278.1	279.0
6 Undistributed profits	219.3	192.3	213.2	187.9	199.5	213.2	229.5	210.6	201.8	203.7	198.3
7 Inventory valuation	−22.6	−1.2	6.9	3.0	8.1	10.3	4.8	4.3	25.3	7.8	11.7
8 Capital consumption adjustment	59.4	71.4	76.6	73.3	73.8	75.5	77.2	80.1	84.9	89.4	94.8

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

1.51 DOMESTIC FINANCE COMPANIES Assets and Liabilities[1]

Billions of dollars, end of period; not seasonally adjusted

Account	1994	1995	1996	1997				1998		
				Q1	Q2	Q3	Q4	Q1	Q2	Q3
ASSETS										
1 Accounts receivable, gross[2]	543.7	607.0	637.1	648.0	651.6	660.5	663.3	667.2	676.0	688.9
2 Consumer	201.9	233.0	244.9	249.4	255.1	254.5	256.8	251.7	251.3	255.3
3 Business	274.9	301.6	309.5	315.2	311.7	319.5	318.5	325.9	334.9	335.1
4 Real estate	66.9	72.4	82.7	83.4	84.8	86.4	87.9	89.6	89.9	98.5
5 LESS: Reserves for unearned income	52.9	60.7	55.6	51.3	57.2	54.6	52.7	52.1	53.2	52.4
6 Reserves for losses	11.3	12.8	13.1	12.8	13.3	12.7	13.0	13.1	13.2	13.2
7 Accounts receivable, net	479.5	533.5	568.3	583.9	581.2	593.1	597.6	601.9	609.6	623.3
8 All other	216.8	250.9	290.0	289.6	306.8	289.1	312.4	329.7	340.1	313.6
9 **Total assets**	**696.3**	**784.4**	**858.3**	**873.4**	**887.9**	**882.3**	**910.0**	**931.6**	**949.7**	**936.8**
LIABILITIES AND CAPITAL										
10 Bank loans	14.8	15.3	19.7	18.4	18.8	20.4	24.1	22.0	22.3	24.9
11 Commercial paper	171.6	168.6	177.6	185.3	193.7	189.6	201.5	211.7	225.9	226.9
Debt										
12 Owed to parent	41.8	51.1	60.3	61.0	60.0	61.6	64.7	64.6	60.0	58.3
13 Not elsewhere classified	247.4	300.0	332.5	324.6	345.3	322.8	328.8	338.2	348.7	337.7
14 All other liabilities	146.2	163.6	174.7	189.2	171.4	190.1	189.6	193.1	188.9	185.4
15 Capital, surplus, and undivided profits	74.6	85.9	93.5	94.9	98.7	97.9	101.3	102.1	103.9	103.6
16 **Total liabilities and capital**	**696.3**	**784.4**	**858.3**	**873.4**	**887.9**	**882.3**	**910.0**	**931.6**	**949.7**	**936.8**

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

1.52 DOMESTIC FINANCE COMPANIES Owned and Managed Receivables[1]

Billions of dollars, amounts outstanding

Type of credit	1995	1996	1997	1998 June	1998 July	1998 Aug.	1998 Sept.	1998 Oct.	1998 Nov.
	Seasonally adjusted								
1 **Total**	**682.4**	**761.9**	**809.8**	**831.3**	**840.6**	**846.4**	**853.5**	**867.2[r]**	**872.7**
2 Consumer	283.1	307.7	327.7	332.5	336.6	339.1	343.9	351.7[r]	353.8
3 Real estate	72.4	111.9	121.1	120.9	125.2	128.1	128.8	132.3	134.3
4 Business	326.8	342.4	361.0	377.9	378.7	379.2	380.7	383.2[r]	384.7
	Not seasonally adjusted								
5 **Total**	**689.5**	**769.7**	**818.1**	**836.0**	**835.2**	**842.6**	**850.0**	**865.5[r]**	**874.4**
6 Consumer	285.8	310.6	330.9	335.4	338.5	340.5	344.9	351.2[r]	353.9
7 Motor vehicles loans	81.1	86.7	87.0	89.9	91.7	95.3	96.2	97.6	99.0
8 Motor vehicle leases	80.8	92.5	96.8	97.0	97.3	96.9	94.9	94.6	94.4
9 Revolving[2]	28.5	32.5	38.6	29.9	29.6	30.2	29.3	34.6	34.7
10 Other[3]	42.6	33.2	34.4	34.4	35.0	34.7	34.6	34.6	34.6
Securitized assets[4]									
11 Motor vehicle loans	34.8	36.8	44.3	49.3	50.2	49.2	51.8	51.6[r]	53.4
12 Motor vehicle leases	3.5	8.7	10.8	10.9	10.8	10.7	14.2	14.4	14.2
13 Revolving	n.a.	0.0	0.0	5.3	5.3	5.3	5.3	5.3	5.3
14 Other	14.7	20.1	19.0	18.6	18.5	18.2	18.8	18.6	18.4
15 Real estate	72.4	111.9	121.1	120.9	125.2	128.1	128.8	132.3	134.3
16 One- to four-family	n.a.	52.1	59.0	62.3	65.9	68.6	68.4	72.2	74.1
17 Other	n.a.	30.5	28.9	27.5	28.5	28.7	30.1	30.2	30.7
Securitized real estate assets[4]									
18 One- to four-family	n.a.	28.9	33.0	30.9	30.6	30.7	30.2	29.8	29.4
19 Other	n.a.	0.4	0.2	0.1	0.1	0.1	0.1	0.1	0.1
20 Business	331.2	347.2	366.1	379.7	371.5	374.0	376.2	382.0[r]	386.3
21 Motor vehicles	66.5	67.1	63.5	68.4	61.1	62.5	65.5	68.5	70.9
22 Retail loans	21.8	25.1	25.6	29.2	29.2	29.6	30.0	30.4	29.4
23 Wholesale loans[5]	36.6	33.0	27.7	28.2	21.0	22.0	24.2	27.0	30.3
24 Leases	8.0	9.0	10.2	11.0	10.9	10.9	11.3	11.1	11.2
25 Equipment	8.0	9.0	10.2	212.8	212.8	212.0	210.8	211.5	212.0
26 Loans	8.0	9.0	10.2	52.7	51.6	51.8	47.9	47.2	47.8
27 Leases	8.0	9.0	10.2	160.2	161.2	160.2	162.9	164.3	164.2
28 Other business receivables[6]	8.0	9.0	10.2	53.7	54.5	57.0	58.9	59.6	60.4
Securitized assets[4]									
29 Motor vehicles	8.0	9.0	10.2	29.1	26.3	25.9	24.5	25.0	25.8
30 Retail loans	8.0	9.0	10.2	2.3	2.2	2.1	2.0	1.9	2.4
31 Wholesale loans	8.0	9.0	10.2	26.7	24.1	23.8	22.5	23.2	23.4
32 Leases	8.0	9.0	10.2	0.0	0.0	0.0	0.0	0.0	0.0
33 Equipment	8.0	9.0	10.2	10.5	11.5	11.4	11.3	12.0[r]	11.8
34 Loans	8.0	9.0	10.2	4.1	5.1	4.9	4.9	5.6	5.4
35 Leases	8.0	9.0	10.2	6.4	6.4	6.4	6.4	6.4[r]	6.4
36 Other business receivables[6]	8.0	9.0	10.2	5.3	5.4	5.2	5.3	5.2	5.3

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

Includes finance company subsidiaries of bank holding companies but not of retailers and banks. Data in this table also appear in the Board's G.20 (422) monthly statistical release. For ordering address, see inside front cover.

1. Owned receivables are those carried on the balance sheet of the institution. Managed receivables are outstanding balances of pools upon which securities have been issued; these balances are no longer carried on the balance sheets of the loan originator. Data are shown before deductions for unearned income and losses. Components may not sum to totals because of rounding.

2. Excludes revolving credit reported as held by depository institutions that are subsidiaries of finance companies.

3. Includes personal cash loans, mobile home loans, and loans to purchase other types of consumer goods such as appliances, apparel, boats, and recreation vehicles.

4. Outstanding balances of pools upon which securities have been issued; these balances are no longer carried on the balance sheets of the loan originator.

5. Credit arising from transactions between manufacturers and dealers, that is, floor plan financing.

6. Includes loans on commercial accounts receivable, factored commercial accounts, and receivable dealer capital; small loans used primarily for business or farm purposes; and wholesale and lease paper for mobile homes, campers, and travel trailers.

1.53 MORTGAGE MARKETS Mortgages on New Homes

Millions of dollars except as noted

Item	1996	1997	1998	1998						
				June	July	Aug.	Sept.	Oct.	Nov.	Dec.
	Terms and yields in primary and secondary markets									
PRIMARY MARKETS										
Terms[1]										
1 Purchase price (thousands of dollars)	182.4	180.1	195.2	193.7	208.7	191.5	192.7	201.4	192.1	206.0
2 Amount of loan (thousands of dollars)	139.2	140.3	151.1	151.0	160.1	150.4	150.8	155.8	148.1	159.0
3 Loan-to-price ratio (percent)	78.2	80.4	80.0	81.0	78.7	81.3	80.9	79.8	79.5	79.4
4 Maturity (years)	27.2	28.2	28.4	28.3	28.5	28.6	28.7	28.6	28.3	28.7
5 Fees and charges (percent of loan amount)[2]	1.21	1.02	0.89	0.85	0.90	0.87	0.85	0.86	0.76	0.98
Yield (percent per year)										
6 Contract rate[1]	7.56	7.57	6.95	7.03	6.99	6.95	6.85	6.72	6.68	6.80
7 Effective rate[1,3]	7.77	7.73	7.08	7.16	7.13	7.09	6.98	6.85	6.80	6.94
8 Contract rate (HUD series)[4]	8.03	7.76	7.00	7.08	7.05	6.86	6.64	6.86	6.84	6.83
SECONDARY MARKETS										
Yield (percent per year)										
9 FHA mortgages (Section 203)[5]	8.19	7.89	7.04	7.07	7.05	7.03	6.53	7.07	7.02	7.06
10 GNMA securities[6]	7.48	7.26	6.43	6.54	6.48	6.42	6.05	6.10	6.25	6.18
	Activity in secondary markets									
FEDERAL NATIONAL MORTGAGE ASSOCIATION										
Mortgage holdings (end of period)										
11 Total	287,052	316,678	414,515	349,249	359,827	366,890	375,665	386,452	399,804	414,515
12 FHA/VA insured	30,592	31,925	33,770	32,896	33,036	32,929	32,903	32,814	33,420	33,770
13 Conventional	256,460	284,753	380,745	316,353	326,791	333,961	342,762	353,638	366,384	380,745
14 Mortgage transactions purchased (during period)	68,618	70,465	188,448	11,916	17,326	14,316	15,681	18,967	23,557	26,222
Mortgage commitments (during period)										
15 Issued[7]	65,859	69,965	193,795	16,921	13,217	17,016	16,282	30,551	17,994	16,803
16 To sell[8]	130	1,298	1,880	0	419	233	249	393	0	434
FEDERAL HOME LOAN MORTGAGE CORPORATION										
Mortgage holdings (end of period)[8]										
17 Total	137,755	164,421	255,009	196,634	202,582	206,856	216,521	231,458	242,270	255,009
18 FHA/VA insured	220	177	602	422	456	489	569	569	602	602
19 Conventional	137,535	164,244	254,407	196,212	202,126	206,367	215,952	230,889	241,668	254,407
Mortgage transactions (during period)										
20 Purchases	125,103	117,401	267,402	22,394	22,605	21,507	25,366	20,629	23,986	34,299
21 Sales	119,702	114,258	250,565	21,133	22,263	20,634	24,294	19,472	22,660	28,024
22 Mortgage commitments contracted (during period)[9]	128,995	120,089	281,899	20,008	23,528	24,694	23,375	25,025	28,903	29,703

1. Weighted averages based on sample surveys of mortgages originated by major institutional lender groups for purchase of newly built homes; compiled by the Federal Housing Finance Board in cooperation with the Federal Deposit Insurance Corporation.
2. Includes all fees, commissions, discounts, and "points" paid (by the borrower or the seller) to obtain a loan.
3. Average effective interest rate on loans closed for purchase of newly built homes, assuming prepayment at the end of ten years.
4. Average contract rate on new commitments for conventional first mortgages; from U.S. Department of Housing and Urban Development (HUD). Based on transactions on the first day of the subsequent month.
5. Average gross yield on thirty-year, minimum-downpayment first mortgages insured by the Federal Housing Administration (FHA) for immediate delivery in the private secondary market. Based on transactions on first day of subsequent month.
6. Average net yields to investors on fully modified pass-through securities backed by mortgages and guaranteed by the Government National Mortgage Association (GNMA), assuming prepayment in twelve years on pools of thirty-year mortgages insured by the Federal Housing Administration or guaranteed by the Department of Veterans Affairs.
7. Does not include standby commitments issued, but includes standby commitments converted.
8. Includes participation loans as well as whole loans.
9. Includes conventional and government-underwritten loans. The Federal Home Loan Mortgage Corporation's mortgage commitments and mortgage transactions include activity under mortgage securities swap programs, whereas the corresponding data for FNMA exclude swap activity.

1.54 MORTGAGE DEBT OUTSTANDING[1]

Millions of dollars, end of period

Type of holder and property	1994	1995	1996	1997		1998		
				Q3	Q4	Q1	Q2	Q3[p]
1 **All holders**	**4,392,794**	**4,602,654**	**4,929,422**	**5,180,913**	**5,279,327**	**5,379,351**	**5,502,583**	**5,642,865**
By type of property								
2 One- to four-family residences	3,355,485	3,529,403	3,761,017	3,956,813	4,029,268	4,101,294	4,192,363	4,297,628
3 Multifamily residences	271,748	281,592	300,559	308,417	314,585	320,229	326,532	332,922
4 Nonfarm, nonresidential	682,590	707,098	780,713	825,922	845,057	866,402	890,708	918,020
5 Farm	82,971	84,561	87,134	89,760	90,417	91,425	92,980	94,295
By type of holder								
6 Major financial institutions	1,819,806	1,894,420	1,979,114	2,068,002	2,086,764	2,119,323	2,124,305	2,144,075
7 Commercial banks[2]	1,012,711	1,090,189	1,145,389	1,227,131	1,244,151	1,270,076	1,280,778	1,295,721
8 One- to four-family	615,861	669,434	698,508	752,323	762,556	779,954	784,957	784,958
9 Multifamily	39,346	43,837	46,675	49,166	50,642	51,790	52,175	53,049
10 Nonfarm, nonresidential	334,953	353,088	375,322	398,841	403,975	410,876	415,329	429,032
11 Farm	22,551	23,830	24,883	26,801	26,978	27,456	28,316	28,682
12 Savings institutions[3]	596,191	596,763	628,335	631,444	631,822	637,012	629,882	633,281
13 One- to four-family	477,626	482,353	513,712	519,564	520,672	527,036	520,276	525,174
14 Multifamily	64,343	61,987	61,570	60,348	59,543	59,074	58,704	56,631
15 Nonfarm, nonresidential	53,933	52,135	52,723	51,187	51,252	50,532	50,519	51,078
16 Farm	289	288	331	346	354	369	383	398
17 Life insurance companies	210,904	207,468	205,390	209,426	210,792	212,235	213,645	215,073
18 One- to four-family	7,018	7,316	6,772	7,080	7,186	7,321	7,488	7,629
19 Multifamily	23,902	23,435	23,197	23,615	23,755	23,902	24,038	24,181
20 Nonfarm, nonresidential	170,421	167,095	165,399	168,374	169,377	170,423	171,393	172,411
21 Farm	9,563	9,622	10,022	10,358	10,473	10,589	10,726	10,851
22 Federal and related agencies	315,580	306,774	300,935	291,410	292,581	293,499	294,547	294,307
23 Government National Mortgage Association	6	2	2	7	8	8	8	7
24 One- to four-family	6	2	2	7	8	8	8	7
25 Multifamily	0	0	0	0	0	0	0	0
26 Farmers Home Administration[4]	41,781	41,791	41,596	41,332	41,195	40,972	40,921	40,907
27 One- to four-family	18,098	17,705	17,303	17,458	17,253	17,160	17,059	17,025
28 Multifamily	11,319	11,617	11,685	11,713	11,720	11,714	11,722	11,736
29 Nonfarm, nonresidential	5,670	6,248	6,841	7,246	7,370	7,369	7,497	7,566
30 Farm	6,694	6,221	5,768	4,916	4,852	4,729	4,644	4,579
31 Federal Housing and Veterans' Administrations	10,964	9,809	6,244	3,462	3,821	3,694	3,631	3,448
32 One- to four-family	4,753	5,180	3,524	1,437	1,767	1,641	1,610	1,593
33 Multifamily	6,211	4,629	2,719	2,025	2,054	2,053	2,021	1,855
34 Resolution Trust Corporation	10,428	1,864	0	0	0	0	0	0
35 One- to four-family	5,200	691	0	0	0	0	0	0
36 Multifamily	2,859	647	0	0	0	0	0	0
37 Nonfarm, nonresidential	2,369	525	0	0	0	0	0	0
38 Farm	0	0	0	0	0	0	0	0
39 Federal Deposit Insurance Corporation	7,821	4,303	2,431	1,476	724	786	564	482
40 One- to four-family	1,049	492	365	221	109	118	85	72
41 Multifamily	1,595	428	413	251	123	134	96	82
42 Nonfarm, nonresidential	5,177	3,383	1,653	1,004	492	534	384	328
43 Farm	0	0	0	0	0	0	0	0
44 Federal National Mortgage Association	174,312	176,824	174,556	168,458	167,722	166,670	167,202	166,243
45 One- to four-family	158,766	161,665	160,751	156,363	156,245	155,876	156,769	156,208
46 Multifamily	15,546	15,159	13,805	12,095	11,477	10,794	10,433	10,035
47 Federal Land Banks	28,555	28,428	29,602	30,346	30,657	31,005	31,352	32,009
48 One- to four-family	1,671	1,673	1,742	1,786	1,804	1,824	1,845	1,883
49 Farm	26,885	26,755	27,860	28,560	28,853	29,181	29,507	30,126
50 Federal Home Loan Mortgage Corporation	41,712	43,753	46,504	46,329	48,454	50,364	50,869	51,211
51 One- to four-family	38,882	39,901	41,758	40,953	42,629	44,440	44,597	44,254
52 Multifamily	2,830	3,852	4,746	5,376	5,825	5,924	6,272	6,957
53 Mortgage pools or trusts[5]	1,730,004	1,863,210	2,064,882	2,202,549	2,272,999	2,330,674	2,442,603	2,548,050
54 Government National Mortgage Association	450,934	472,283	506,340	529,867	536,810	533,011	537,586	541,431
55 One- to four-family	441,198	461,438	494,158	516,217	523,156	519,152	523,243	526,934
56 Multifamily	9,736	10,845	12,182	13,650	13,654	13,859	14,343	14,497
57 Federal Home Loan Mortgage Corporation	490,851	515,051	554,260	569,920	579,385	583,144	609,791	635,726
58 One- to four-family	487,725	512,238	551,513	567,340	576,846	580,715	607,469	633,124
59 Multifamily	3,126	2,813	2,747	2,580	2,539	2,429	2,322	2,602
60 Federal National Mortgage Association	530,343	582,959	650,780	690,919	709,582	730,832	761,359	798,460
61 One- to four-family	520,763	569,724	633,210	670,677	687,981	708,125	737,631	770,979
62 Multifamily	9,580	13,235	17,570	20,242	21,601	22,707	23,728	27,481
63 Farmers Home Administration[4]	19	11	3	2	2	2	2	2
64 One- to four-family	3	2	0	0	0	0	0	0
65 Multifamily	0	0	0	0	0	0	0	0
66 Nonfarm, nonresidential	9	5	0	0	0	0	0	0
67 Farm	7	4	3	2	2	2	2	2
68 Private mortgage conduits	257,857	292,906	353,499	411,841	447,219	483,685	533,865	572,431
69 One- to four-family[6]	208,500	227,800	261,900	299,400	318,000	336,824	364,316	391,736
70 Multifamily	11,744	15,584	21,967	25,655	29,264	33,477	38,144	40,893
71 Nonfarm, nonresidential	37,613	49,522	69,633	86,786	99,955	113,384	131,405	139,802
72 Farm	0	0	0	0	0	0	0	0
73 Individuals and others[7]	527,404	538,251	584,491	618,951	626,984	635,855	641,129	656,433
74 One- to four-family	368,366	371,789	375,798	405,988	413,057	421,100	425,010	436,052
75 Multifamily	69,611	73,524	81,282	81,702	82,387	82,372	82,535	82,921
76 Nonfarm, nonresidential	72,445	75,097	109,143	112,485	112,636	113,283	114,182	117,803
77 Farm	16,983	17,841	18,268	18,777	18,904	19,100	19,402	19,657

1. Multifamily debt refers to loans on structures of five or more units.
2. Includes loans held by nondeposit trust companies but not loans held by bank trust departments.
3. Includes savings banks and savings and loan associations.
4. FmHA-guaranteed securities sold to the Federal Financing Bank were reallocated from FmHA mortgage pools to FmHA mortgage holdings in 1986:Q4 because of accounting changes by the Farmers Home Administration.
5. Outstanding principal balances of mortgage-backed securities insured or guaranteed by the agency indicated.
6. Includes securitized home equity loans.
7. Other holders include mortgage companies, real estate investment trusts, state and local credit agencies, state and local retirement funds, noninsured pension funds, credit unions, and finance companies.

SOURCE. Based on data from various institutional and government sources. Separation of nonfarm mortgage debt by type of property, if not reported directly, and interpolations and extrapolations, when required for some quarters, are estimated in part by the Federal Reserve. Line 69 from Inside Mortgage Securities and other sources.

1.55 CONSUMER CREDIT[1]

Millions of dollars, amounts outstanding, end of period

Holder and type of credit	1995	1996	1997	1998 June	1998 July	1998 Aug.	1998 Sept.[r]	1998 Oct.[r]	1998 Nov.
	Seasonally adjusted								
1 **Total**	**1,095,711**	**1,181,913**	**1,233,099**	**1,263,683**	**1,269,844[r]**	**1,277,412[r]**	**1,285,346**	**1,297,171**	**1,301,068**
2 Automobile	364,209	392,321	413,369	425,510	428,121	432,240	434,964	436,966	441,340
3 Revolving	443,183	499,486	531,140	545,339	543,612[r]	548,747[r]	552,462	557,093	556,403
4 Other[2]	288,319	290.105	288,590	292,834	298,111[r]	296,425[r]	297,920	303,113	303,325
	Not seasonally adjusted								
5 **Total**	**1,122,828**	**1,211,590**	**1,264,103**	**1,256,897**	**1,262,958[r]**	**1,277,611[r]**	**1,288,362**	**1,299,809**	**1,308,947**
By major holder									
6 Commercial banks	501,963	526,769	512,563	491,509	491,507[r]	498,219[r]	497,860	501,982	500,383
7 Finance companies	152,123	152,391	160,022	154,275	156,366	160,151	160,078	166,861	168,262
8 Credit unions	131,939	144,148	152,362	152,400	153,735	154,146	155,167	156,043	156,467
9 Savings institutions	40,106	44,711	47,172	48,329	48,989	49,648	50,307	50,966	51,625
10 Nonfinancial business[3]	85,061	77,745	78,927	65,265	65,478	66,004	65,557	65,949	66,632
11 Pools of securitized assets[4]	211,636	265,826	313,057	345,119	346,883[r]	349,443[r]	359,393	358,008	365,578
By major type of credit[5]									
12 Automobile	367,069	395,609	416,962	425,227	429,723	434,924	438,965	442,255	445,465
13 Commercial banks	151,437	157,047	155,254	150,877	153,203	155,508	156,287	156,788	157,126
14 Finance companies	81,073	86,690	87,015	89,948	91,741	95,257	96,183	97,637	98,954
15 Pools of securitized assets[4]	44,635	51,719	64,950	71,615	72,470	70,766	72,146	71,788	72,582
16 Revolving	464,134	522,860	555,858	539,572	537,349[r]	545,564[r]	549,786	555,456	559,079
17 Commercial banks	210,298	228,615	219,826	200,901	197,646	200,424	197,615	199,234	195,377
18 Finance companies	28,460	32,493	38,608	29,893	29,605	30,155	29,312	34,597	34,696
19 Nonfinancial business[3]	53,525	44,901	44,966	33,544	33,807	34,009	33,743	33,762	33,787
20 Pools of securitized assets[4]	147,934	188,712	221,465	245,635	246,635[r]	251,165[r]	259,348	258,139	265,311
21 Other	291,625	293,121	291,283	292,098	295,886[r]	297,123[r]	299,611	302,098	304,403
22 Commercial banks	140,228	141,107	137,483	139,731	140,658[r]	142,287[r]	143,958	145,960	147,880
23 Finance companies	42,590	33,208	34,399	34,434	35,020	34,739	34,583	34,627	34,612
24 Nonfinancial business[3]	31,536	32,844	33,961	31,721	31,671	31,995	31,814	32,187	32,845
25 Pools of securitized assets[4]	19,067	25,395	26,642	27,869	27,778	27,512	27,899	28,081	27,685

1. The Board's series on amounts of credit covers most short- and intermediate-term credit extended to individuals. Data in this table also appear in the Board's G.19 (421) monthly statistical release. For ordering address, see inside front cover.
2. Comprises mobile home loans and all other loans that are not included in automobile or revolving credit, such as loans for education, boats, trailers, or vacations. These loans may be secured or unsecured.
3. Includes retailers and gasoline companies.
4. Outstanding balances of pools upon which securities have been issued; these balances are no longer carried on the balance sheets of the loan originator.
5. Totals include estimates for certain holders for which only consumer credit totals are available.

1.56 TERMS OF CONSUMER CREDIT[1]

Percent per year except as noted

Item	1995	1996	1997	1998 May	1998 June	1998 July	1998 Aug.	1998 Sept.	1998 Oct.	1998 Nov.
INTEREST RATES										
Commercial banks[2]										
1 48-month new car	9.57	9.05	9.02	8.69	n.a.	n.a.	8.71	n.a.	n.a.	8.62
2 24-month personal	13.94	13.54	13.90	13.76	n.a.	n.a.	13.45	n.a.	n.a.	13.75
Credit card plan										
3 All accounts	15.90	15.63	15.77	15.67	n.a.	n.a.	15.83	n.a.	n.a.	15.69
4 Accounts assessed interest	15.64	15.50	15.57	15.62	n.a.	n.a.	15.85	n.a.	n.a.	15.72
Auto finance companies										
5 New car	11.19	9.84	7.12	6.07	6.02	6.23[r]	6.00	5.92	6.33	6.79
6 Used car	14.48	13.53	13.27	12.73	12.63	12.51	12.68	12.65	12.58	12.41
OTHER TERMS[3]										
Maturity (months)										
7 New car	54.1	51.6	54.1	50.8	50.9	51.7	53.0	53.1	53.1	52.8
8 Used car	52.2	51.4	51.0	52.9	54.0	54.1	54.1	54.2	54.2	54.3
Loan-to-value ratio										
9 New car	92	91	92	93	91	92	93	93	92	91
10 Used car	99	100	99	99	100	100	101	101	100	100
Amount financed (dollars)										
11 New car	16,210	16,987	18,077	18,793	18,878	19,084	19,068	19,028	19,199	19,590
12 Used car	11,590	12,182	12,281	12,607	12,698	12,733	12,407	12,731	12,914	13,112

1. The Board's series on amounts of credit covers most short- and intermediate-term credit extended to individuals. Data in this table also appear in the Board's G.19 (421) monthly statistical release. For ordering address, see inside front cover.
2. Data are available for only the second month of each quarter.
3. At auto finance companies.

1.57 FUNDS RAISED IN U.S. CREDIT MARKETS[1]

Billions of dollars; quarterly data at seasonally adjusted annual rates

Transaction category or sector	1993	1994	1995	1996	1997	1997 Q1	1997 Q2	1997 Q3	1997 Q4	1998 Q1	1998 Q2	1998 Q3
	Nonfinancial sectors											
1 **Total net borrowing by domestic nonfinancial sectors**	**588.0**	**571.5**	**700.4**	**726.7**	**769.6**	**675.9**	**617.7**	**829.6**	**955.1**	**922.1**	**938.0**	**930.6**
By sector and instrument												
2 Federal government	256.1	155.9	144.4	145.0	23.1	64.9	−43.5	30.3	40.8	−30.0	−70.9	−136.5
3 Treasury securities	248.3	155.7	142.9	146.6	23.2	66.3	−43.8	31.2	39.0	−27.6	−69.4	−136.1
4 Budget agency securities and mortgages	7.8	.2	1.5	−1.6	−.1	−1.4	.2	−.9	1.7	−2.4	−1.4	−.4
5 Nonfederal	331.9	415.6	555.9	581.7	746.4	611.0	661.2	799.2	914.3	952.1	1,008.9	1,067.0
By instrument												
6 Commercial paper	10.0	21.4	18.1	−.9	13.7	7.2	20.3	14.5	12.8	53.9	6.6	88.4
7 Municipal securities and loans	74.8	−35.9	−48.2	2.6	71.4	34.1	59.6	88.9	103.2	116.7	100.1	84.1
8 Corporate bonds	75.2	23.3	73.3	72.5	90.7	79.4	86.1	122.9	74.4	157.2	160.8	88.0
9 Bank loans n.e.c.	6.4	75.2	102.3	66.2	107.3	140.7	118.1	31.6	138.7	55.8	157.3	142.6
10 Other loans and advances	−18.9	34.0	67.2	33.8	68.7	34.2	20.8	78.0	141.6	83.2	37.9	78.0
11 Mortgages	123.7	172.7	204.3	318.8	342.1	253.0	296.7	413.0	405.8	428.1	481.2	497.8
12 Home	156.2	178.2	173.9	265.3	268.3	218.2	211.4	334.2	309.3	324.1	360.5	365.8
13 Multifamily residential	−6.8	−1.3	8.0	12.7	11.5	4.1	12.9	6.6	22.3	19.9	22.6	22.9
14 Commercial	−26.7	−6.4	20.8	38.3	59.1	28.6	68.4	67.9	71.6	80.0	91.9	103.9
15 Farm	1.0	2.2	1.6	2.6	3.3	2.1	4.1	4.3	2.6	4.0	6.2	5.3
16 Consumer credit	60.7	124.9	138.9	88.8	52.5	62.5	59.5	50.3	37.8	57.3	65.1	88.2
By borrowing sector												
17 Household	207.8	311.0	343.7	370.3	355.6	334.9	329.7	362.9	394.9	437.2	469.8	472.7
18 Nonfinancial business	57.9	150.9	263.7	218.2	334.8	259.2	289.1	363.8	427.1	420.6	460.2	521.6
19 Corporate	52.1	143.3	236.8	171.4	265.0	206.4	214.5	291.5	347.5	331.4	354.6	404.7
20 Nonfarm noncorporate	3.2	3.3	23.9	42.0	63.5	47.8	68.6	66.8	70.6	81.4	98.2	110.2
21 Farm	2.6	4.4	2.9	4.8	6.4	4.9	6.0	5.5	9.0	7.9	7.4	6.7
22 State and local government	66.2	−46.2	−51.5	−6.8	56.1	16.9	42.5	72.6	92.3	94.3	78.9	72.7
23 Foreign net borrowing in United States	69.8	−14.0	71.1	76.9	56.9	31.2	61.7	92.5	42.3	68.5	86.6	−27.0
24 Commercial paper	−9.6	−26.1	13.5	11.3	3.7	15.5	10.4	−11.6	7	56.0	−24.8	6.9
25 Bonds	82.9	12.2	49.7	55.8	46.7	15.5	38.7	100.3	32.4	14.3	107.5	−34.8
26 Bank loans n.e.c.	.7	1.4	8.5	9.1	8.5	−.7	11.5	7.3	15.7	5.2	8.4	3.5
27 Other loans and advances	−4.2	−1.5	−.5	.8	−2.0	.9	1.2	−3.5	−6.5	−7.0	−4.4	−2.6
28 **Total domestic plus foreign**	**657.8**	**557.5**	**771.5**	**803.6**	**826.5**	**707.1**	**679.3**	**922.1**	**997.4**	**990.6**	**1,024.7**	**903.5**
	Financial sectors											
29 **Total net borrowing by financial sectors**	**294.4**	**468.4**	**456.4**	**556.2**	**644.3**	**336.5**	**657.1**	**595.5**	**987.9**	**839.8**	**1,012.9**	**992.8**
By instrument												
30 Federal government-related	165.3	287.5	204 1	231.5	212.8	105.7	286.2	161.0	298.1	227.3	413.4	561.6
31 Government-sponsored enterprise securities	80.6	176.9	105 9	90.4	98.4	−8.9	198.1	46.4	157.9	142.5	166.4	294.0
32 Mortgage pool securities	84.7	115.4	98.2	141.1	114.4	114.6	88.1	114.6	140.3	84.8	247.0	267.5
33 Loans from U.S. government	.0	−4.8	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
34 Private	129.1	180.9	252.3	324.7	431.5	230.9	370.9	434.5	689.8	612.5	599.5	431.2
35 Open market paper	−5.5	40.5	42 7	92.2	166.7	176.6	77.0	168.8	244.2	237.4	134.8	141.0
36 Corporate bonds	123.1	121.8	196.7	179.7	207.9	61.7	229.4	194.8	345.8	315.5	373.5	158.8
37 Bank loans n.e.c	−14 4	−13.7	3.9	16.9	13.6	6.5	−6.0	23.2	30.7	18.9	7.2	41 1
38 Other loans and advances	22.4	22.6	3.4	27.9	35.6	−20.1	63.0	37.5	61.7	32.7	76.0	82.3
39 Mortgages	3.6	9.8	5.6	7.9	7.8	6.2	7.5	10.1	7.3	8.0	8.0	8.0
By borrowing sector												
40 Commercial banking	13.4	20.1	22.5	13.0	46.1	14.4	76.4	32.5	61.0	83.5	80.0	78.2
41 Savings institutions	11.3	12.8	2.6	25.5	19.7	−16.8	31.9	22.3	41.7	10.6	31.2	63.7
42 Credit unions	.2	.2	− 1	.1	.1	−.2	.2	.2	.3	5	.2	1.0
43 Life insurance companies	.2	.3	−.1	1.1	2	.8	1	.2	−.3	.0	−.6	1.6
44 Government-sponsored enterprises	80.6	172.1	105.9	90.4	98.4	−8 9	198.1	46.4	157.9	142.5	166.4	294.0
45 Federally related mortgage pools	84.7	115.4	98.2	141.1	114.4	114.6	88.1	114.6	140.3	84.8	247.0	267.5
46 Issuers of asset-backed securities (ABSs)	83.6	72.9	141 1	153.6	204.4	85.8	120 7	226.2	385.1	254.4	367.2	272.4
47 Finance companies	−1.4	48.7	50.2	45.9	48.7	5.6	120.5	8.9	59.6	80.1	101.8	−13.6
48 Mortgage companies	.0	−11.5	.4	12.4	−1.3	−.7	−12.2	3.6	4.2	5.2	−5.5	3.0
49 Real estate investment trusts (REITs)	3.4	13.7	5.7	11.0	24.8	15.1	19.8	32.0	32.1	36.3	33.9	27 4
50 Brokers and dealers	12.0	.5	−5.0	−2.0	8.1	−2.9	34.9	−6.9	7.0	−1.0	20.0	16.5
51 Funding corporations	6.3	23.1	34.9	64.1	80.7	129.7	−21.5	115 4	99.2	142.8	−28.6	−19 1

1.57 FUNDS RAISED IN U.S. CREDIT MARKETS[1]—Continued

Transaction category or sector	1993	1994	1995	1996	1997	1997 Q1	1997 Q2	1997 Q3	1997 Q4	1998 Q1	1998 Q2	1998 Q3
	All sectors											
52 **Total net borrowing, all sectors**	**952.2**	**1,025.9**	**1,227.8**	**1,359.8**	**1,470.7**	**1,043.7**	**1,336.4**	**1,517.6**	**1,985.3**	**1,830.3**	**2,037.6**	**1,896.3**
53 Open market paper	−5.1	35.7	74.3	102.6	184.1	199.3	107.7	171.7	257.7	347.3	116.6	236.2
54 U.S. government securities	421.4	448.1	348.5	376.5	235.9	170.6	242.6	191.3	338.9	197.3	342.5	425.1
55 Municipal securities	74.8	−35.9	−48.2	2.6	71.4	34.1	59.6	88.9	103.2	116.7	100.1	84.1
56 Corporate and foreign bonds	281.2	157.3	319.6	308.0	345.4	156.6	354.2	418.1	452.7	487.0	641.8	212.0
57 Bank loans n.e.c.	−7.2	62.9	114.7	92.1	129.3	146.5	123.6	62.2	185.1	79.9	172.9	187.2
58 Other loans and advances	−.8	50.3	70.2	62.5	102.2	15.0	85.0	112.0	196.8	108.9	109.4	157.6
59 Mortgages	127.3	182.5	209.9	326.8	349.9	259.2	304.2	423.1	413.1	436.1	489.2	505.8
60 Consumer credit	60.7	124.9	138.9	88.8	52.5	62.5	59.5	50.3	37.8	57.3	65.1	88.2
	Funds raised through mutual funds and corporate equities											
61 **Total net issues**	**429.7**	**125.2**	**143.9**	**234.2**	**183.3**	**171.7**	**175.0**	**240.8**	**145.9**	**209.4**	**260.3**	**−118.2**
62 Corporate equities	137.7	24.6	−3.5	−3.4	−81.8	−77.9	−75.1	−59.1	−115.1	−112.0	−123.4	−266.7
63 Nonfinancial corporations	21.3	−44.9	−58.3	−64.2	−114.4	−90.4	−100.0	−124.0	−143.3	−139.2	−128.7	−221.8
64 Foreign shares purchased by U.S. residents	63.4	48.1	50.4	60.0	41.3	46.6	54.4	64.3	−.3	13.6	4.0	−33.1
65 Financial corporations	53.0	21.4	4.4	.8	−8.6	−34.1	−29.4	.5	28.5	13.6	1.3	−11.9
66 Mutual fund shares	292.0	100.6	147.4	237.6	265.1	249.6	250.1	299.9	261.0	321.4	383.7	148.5

1. Data in this table also appear in the Board's Z.1 (780) quarterly statistical release, tables F.2 through F.4. For ordering address, see inside front cover.

1.58 SUMMARY OF FINANCIAL TRANSACTIONS[1]

Billions of dollars except as noted; quarterly data at seasonally adjusted annual rates

Transaction category or sector	1993	1994	1995	1996	1997	1997				1998		
						Q1	Q2	Q3	Q4	Q1	Q2	Q3
NET LENDING IN CREDIT MARKETS[2]												
1 **Total net lending in credit markets**	**952.2**	**1,025.9**	**1,227.8**	**1,359.8**	**1,470.7**	**1,043.7**	**1,336.4**	**1,517.6**	**1,985.3**	**1,830.3**	**2,037.6**	**1,896.3**
2 Domestic nonfederal nonfinancial sectors	41.6	238.0	-107.0	-10.7	-108.2	-253.6	-59.8	-160.3	40.7	-232.0	433.9	-101.0
3 Household	1.0	274.7	-11.5	-11.4	-125.4	-285.4	-75.5	-153.7	12.9	-261.4	321.6	-223.6
4 Nonfinancial corporate business	9.1	17.7	-8.8	20.0	14.8	58.8	-28.7	31.7	-2.6	33.8	-27.8	1.3
5 Nonfarm noncorporate business	-1.1	.6	4.7	4.4	2.7	2.5	2.7	2.8	2.9	3.0	3.2	3.3
6 State and local governments	32.6	-55.0	-91.4	-23.7	-.3	-29.5	41.8	-41.0	27.5	-7.4	136.9	118.1
7 Federal government	-18.4	-27.5	-.2	-7.7	4.9	1.7	5.7	3.3	9.0	15.5	12.8	13.9
8 Rest of the world	129.3	132.3	273.9	414.7	312.5	330.6	308.6	402.9	208.0	237.4	317.5	78.1
9 Financial sectors	799.7	683.0	1,061.1	963.5	1,261.5	964.9	1,081.8	1,271.7	1,727.7	1,809.4	1,273.4	1,905.3
10 Monetary authority	36.2	31.5	12.7	12.3	38.3	34.4	42.9	22.9	52.9	27.4	7.7	48.3
11 Commercial banking	142.2	163.4	265.9	187.5	324.3	316.0	290.0	226.2	464.9	292.9	136.1	242.1
12 U.S.-chartered banks	149.6	148.1	186.5	119.6	274.9	206.1	286.7	220.7	386.2	260.5	130.5	286.6
13 Foreign banking offices in United States	-9.8	11.2	75.4	63.3	40.2	101.7	-3.6	4.6	58.2	11.6	18.1	-53.5
14 Bank holding companies	.0	.9	-.3	3.9	5.4	2.2	5.1	-5.0	19.4	15.3	-17.6	6.0
15 Banks in U.S.-affiliated areas	2.4	3.3	4.2	.7	3.7	6.1	1.8	5.8	1.1	5.5	5.1	2.9
16 Savings institutions	-23.3	6.7	-7.6	19.9	-4.7	-5.3	23.8	-35.3	-2.0	10.1	-11.7	38.7
17 Credit unions	21.7	28.1	16.2	25.5	16.8	20.5	25.2	13.6	7.7	16.5	22.7	20.4
18 Bank personal trusts and estates	9.5	7.1	-8.3	-7.7	7.6	3.4	10.7	7.3	8.8	2.4	3.1	2.0
19 Life insurance companies	100.9	66.7	99.2	72.5	101.0	88.3	174.4	106.0	35.3	102.9	67.2	86.8
20 Other insurance companies	27.7	24.9	21.5	22.5	25.2	6.0	28.0	32.0	34.7	23.4	-1.5	-9.9
21 Private pension funds	49.5	45.5	61.3	48.3	67.6	55.0	58.5	66.2	90.7	72.6	141.8	97.2
22 State and local government retirement funds	22.7	22.3	27.5	45.9	36.6	23.2	34.6	79.1	9.5	81.7	60.6	83.9
23 Money market mutual funds	20.4	30.0	86.5	88.8	87.5	58.2	26.1	121.5	144.2	172.0	200.1	247.5
24 Mutual funds	159.5	-7.1	52.5	48.9	80.9	63.9	90.0	108.0	61.8	143.6	152.6	107.8
25 Closed-end funds	20.0	-3.7	10.5	4.7	-3.4	-3.4	-3.4	-3.4	-3.4	-2.4	-2.4	-2.4
26 Government-sponsored enterprises	87.8	117.8	84.7	92.0	95.0	44.9	119.9	55.8	159.2	166.0	143.4	249.0
27 Federally related mortgage pools	84.7	115.4	98.2	141.1	114.4	114.6	88.1	114.6	140.3	84.8	247.0	267.5
28 Asset-backed securities issuers (ABSs)	81.0	65.8	119.3	123.4	166.0	62.3	105.9	163.7	332.2	195.3	336.1	237.1
29 Finance companies	-20.9	48.3	49.9	18.4	21.9	39.8	.9	68.3	-21.3	28.7	27.1	83.5
30 Mortgage companies	.0	-24.0	-3.4	8.2	16.4	-1.3	-24.4	82.9	8.3	10.4	-11.0	5.9
31 Real estate investment trusts (REITs)	.6	4.7	2.2	2.0	-2.0	-2.1	-2.1	-2.1	-1.7	-2.0	-2.0	-2.0
32 Brokers and dealers	14.8	-44.2	90.1	-15.7	13.7	-14.5	-11.7	15.8	65.3	250.4	-188.6	123.7
33 Funding corporations	-35.3	-16.2	-17.8	25.2	58.6	60.9	4.7	28.7	140.2	132.6	-54.8	-21.8
RELATION OF LIABILITIES TO FINANCIAL ASSETS												
34 **Net flows through credit markets**	**952.2**	**1,025.9**	**1,227.8**	**1,359.8**	**1,470.7**	**1,043.7**	**1,336.4**	**1,517.6**	**1,985.3**	**1,830.3**	**2,037.6**	**1,896.3**
Other financial sources												
35 Official foreign exchange	.8	-5.8	8.8	-6.3	.7	-17.6	.4	2.4	17.5	1.0	8.1	11.4
36 Special drawing rights certificates	.0	.0	2.2	-.5	-.5	-2.1	.0	.0	.0	.0	.0	.0
37 Treasury currency	.4	.7	.6	.1	.0	.4	.2	1.3	-1.9	.3	.2	1.7
38 Foreign deposits	-18.5	52.9	35.3	85.9	107.4	186.7	23.9	116.1	103.0	-45.3	89.0	77.1
39 Net interbank transactions	50.5	89.8	9.9	-51.6	-19.4	-78.4	-57.0	-21.7	79.6	-107.1	23.3	22.9
40 Checkable deposits and currency	117.3	-9.7	-12.7	15.8	41.5	81.8	50.6	-38.4	71.9	65.6	109.3	-61.2
41 Small time and savings deposits	-70.3	-39.9	96.6	97.2	97.1	151.5	34.0	47.0	155.9	154.9	36.2	111.2
42 Large time deposits	-23.5	19.6	65.6	114.0	122.5	56.3	174.7	188.4	70.7	186.2	-16.5	80.5
43 Money market fund shares	20.2	43.3	142.3	145.8	157.6	157.6	98.9	226.2	147.8	248.0	186.4	400.7
44 Security repurchase agreements	71.3	78.2	110.4	40.0	115.2	32.7	218.9	111.2	98.1	242.8	-45.4	181.6
45 Corporate equities	137.7	24.6	-3.5	-3.4	-81.8	-77.9	-75.1	-59.1	-115.1	-112.0	-123.4	-266.7
46 Mutual fund shares	292.0	100.6	147.4	237.6	265.1	249.6	250.1	299.9	261.0	321.4	383.7	148.5
47 Trade payables	52.2	94.0	101.5	76.9	98.0	59.9	48.8	130.0	153.2	90.6	4.7	36.4
48 Security credit	61.4	-.1	26.7	52.4	110.1	110.4	127.5	90.6	111.9	168.9	-110.3	69.2
49 Life insurance reserves	36.0	34.5	44.9	43.6	52.9	49.8	62.5	62.8	36.6	47.3	36.8	26.1
50 Pension fund reserves	255.7	246.2	233.2	230.8	296.8	256.6	318.9	326.9	284.8	253.8	280.6	258.9
51 Taxes payable	11.4	2.6	6.2	16.2	14.6	21.7	14.1	30.2	-7.6	9.4	-6.7	34.5
52 Investment in bank personal trusts	.9	17.8	4.0	-8.6	75.0	68.8	71.8	80.8	78.4	50.3	57.5	47.8
53 Noncorporate proprietors' equity	25.5	55.6	71.5	49.3	40.7	49.6	47.5	48.2	17.2	36.5	9.9	12.0
54 Miscellaneous	340.0	252.4	457.3	451.4	593.4	787.2	532.0	636.7	417.7	1,220.1	422.0	830.8
55 **Total financial sources**	**2,313.0**	**2,083.2**	**2,776.0**	**2,946.5**	**3,557.7**	**3,188.3**	**3,279.2**	**3,797.0**	**3,966.0**	**4,663.0**	**3,383.0**	**3,919.6**
Liabilities not identified as assets (−)												
56 Treasury currency	-.2	-.2	-.5	-.9	-.6	-.3	-.5	.7	-2.4	-.2	-.3	1.2
57 Foreign deposits	-5.7	43.0	25.1	59.4	107.4	176.9	10.7	93.8	148.3	-94.7	145.1	44.3
58 Net interbank liabilities	4.2	-2.7	-3.1	-3.3	-19.9	30.3	-26.7	-50.0	-33.0	30.7	11.4	19.3
59 Security repurchase agreements	46.4	69.4	22.9	-.7	59.5	-107.3	185.3	-10.6	170.5	99.3	-107.3	57.2
60 Taxes payable	15.8	16.6	21.1	20.4	17.2	19.3	29.3	15.3	5.2	6.5	.9	25.7
61 Miscellaneous	-170.8	-150.0	-213.5	-82.0	-254.9	26.9	-414.3	-94.8	-537.4	92.5	-108.2	5.1
Floats not included in assets (−)												
62 Federal government checkable deposits	-1.5	-4.8	-6.0	.5	-2.7	-4.6	-8.3	10.0	-7.9	7.5	-41 7	24.1
63 Other checkable deposits	-1.3	-2.8	-3.8	-4.0	-3.9	-3.3	-4.3	-3.0	-5.0	-4.0	-3.0	-3.2
64 Trade credit	-4.0	1.5	-11.7	-27.0	15.1	-8.7	-58.7	48.0	79.7	12.6	-97.1	-73.6
65 **Total identified to sectors as assets**	**2,430.0**	**2,113.3**	**2,945.3**	**2,984.2**	**3,640.4**	**3,059.2**	**3,566.7**	**3,787.6**	**4,148.1**	**4,512.9**	**3,583.2**	**3,819.5**

1. Data in this table also appear in the Board's Z.1 (780) quarterly statistical release, tables F.1 and F.5. For ordering address, see inside front cover.

2. Excludes corporate equities and mutual fund shares.

1.59 SUMMARY OF CREDIT MARKET DEBT OUTSTANDING[1]

Billions of dollars, end of period

Transaction category or sector	1994	1995	1996	1997	1997 Q1	1997 Q2	1997 Q3	1997 Q4	1998 Q1	1998 Q2	1998 Q3
					Nonfinancial sectors						
1 **Total credit market debt owed by domestic nonfinancial sectors**	**13,013.7**	**13,714.1**	**14,440.8**	**15,208.8**	**14,608.2**	**14,727.5**	**14,931.5**	**15,208.8**	**15,440.4**	**15,636.0**	**15,865.1**
By sector and instrument											
2 Federal government	3,492.3	3,636.7	3,781.8	3,804.9	3,829.8	3,760.6	3,771.2	3,804.9	3,830.8	3,749.0	3,720.2
3 Treasury securities	3,465.6	3,608.5	3,755.1	3,778.3	3,803.5	3,734.3	3,745.1	3,778.3	3,804.8	3,723.4	3,694.7
4 Budget agency securities and mortgages	26.7	28.2	26.6	26.5	26.3	26.3	26.1	26.5	25.9	25.6	25.5
5 Nonfederal	9,521.4	10,077.3	10,659.0	11,403.9	10,778.4	10,966.9	11,160.2	11,403.9	11,609.7	11,887.1	12,145.0
By instrument											
6 Commercial paper	139.2	157.4	156.4	168.6	168.7	179.3	176.6	168.6	193.1	202.5	216.9
7 Municipal securities and loans	1,341.7	1,293.5	1,296.0	1,367.5	1,305.1	1,326.8	1,340.2	1,367.5	1,397.1	1,429.3	1,440.0
8 Corporate bonds	1,253.0	1,326.3	1,398.8	1,489.5	1,418.7	1,440.2	1,470.9	1,489.5	1,528.8	1,569.0	1,591.0
9 Bank loans n.e.c.	759.9	862.1	928.3	1,035.6	964.5	1,000.2	1,000.1	1,035.6	1,051.6	1,097.0	1,123.9
10 Other loans and advances	669.6	736.9	770.6	839.3	784.4	788.5	802.9	839.3	865.6	873.8	887.6
11 Mortgages	4,374.1	4,578.4	4,897.2	5,239.3	4,950.6	5,026.8	5,142.7	5,239.3	5,337.4	5,458.6	5,596.9
12 Home	3,355.5	3,529.4	3,761.0	4,029.3	3,805.7	3,860.6	3,956.8	4,029.3	4,101.3	4,192.4	4,297.6
13 Multifamily residential	265.6	273.6	289.9	301.4	290.9	294.2	295.8	301.4	306.4	312.0	317.7
14 Commercial	670.0	690.8	759.1	818.3	766.3	783.4	800.3	818.3	838.3	861.2	887.2
15 Farm	83.0	84.6	87.1	90.4	87.7	88.7	89.8	90.4	91.4	93.0	94.3
16 Consumer credit	983.9	1,122.8	1,211.6	1,264.1	1,186.4	1,205.0	1,226.7	1,264.1	1,236.1	1,256.9	1,288.7
By borrowing sector											
17 Household	4,452.5	4,801.1	5,142.7	5,500.9	5,177.1	5,268.6	5,379.0	5,500.9	5,558.5	5,683.7	5,823.5
18 Nonfinancial business	3,947.3	4,206.0	4,452.9	4,783.5	4,532.3	4,612.2	4,685.7	4,783.5	4,906.9	5,032.5	5,142.7
19 Corporate	2,683.2	2,915.1	3,115.3	3,376.1	3,184.3	3,241.9	3,297.4	3,376.1	3,479.9	3,575.5	3,656.7
20 Nonfarm noncorporate	1,121.8	1,145.8	1,187.7	1,251.2	1,199.7	1,216.8	1,232.9	1,251.2	1,271.6	1,296.1	1,323.0
21 Farm	142.2	145.1	149.9	156.3	148.3	153.4	155.4	156.3	155.4	160.9	163.0
22 State and local government	1,121.7	1,070.2	1,063.4	1,119.5	1,069.0	1,086.1	1,095.5	1,119.5	1,144.3	1,170.8	1,178.8
23 **Foreign credit market debt held in United States**	**370.8**	**441.9**	**518.8**	**569.6**	**524.3**	**539.2**	**557.7**	**569.6**	**584.1**	**606.6**	**600.3**
24 Commercial paper	42.7	56.2	67.5	65.1	69.3	71.3	64.3	65.1	76.7	71.4	74.0
25 Bonds	242.3	291.9	347.7	394.4	351.6	361.2	386.3	394.4	398.0	424.9	416.2
26 Bank loans n.e.c.	26.1	34.6	43.7	52.1	43.5	46.4	48.2	52.1	53.4	55.5	56.4
27 Other loans and advances	59.8	59.3	60.0	58.0	59.9	60.3	58.9	58.0	55.9	54.8	53.8
28 **Total credit market debt owed by nonfinancial sectors, domestic and foreign**	**13,384.5**	**14,156.0**	**14,959.6**	**15,778.4**	**15,132.5**	**15,266.7**	**15,489.2**	**15,778.4**	**16,024.5**	**16,242.6**	**16,465.5**
					Financial sectors						
29 **Total credit market debt owed by financial sectors**	**3,822.2**	**4,281.2**	**4,837.3**	**5,448.6**	**4,916.5**	**5,084.9**	**5,205.3**	**5,448.6**	**5,653.5**	**5,911.5**	**6,164.5**
By instrument											
30 Federal government-related	2,172.7	2,376.8	2,608.3	2,821.0	2,634.7	2,706.2	2,746.5	2,821.0	2,877.9	2,981.2	3,121.6
31 Government-sponsored enterprise securities	700.6	806.5	896.9	995.3	894.7	944.2	955.8	995.3	1,030.9	1,072.5	1,146.0
32 Mortgage pool securities	1,472.1	1,570.3	1,711.4	1,825.8	1,740.0	1,762.1	1,790.7	1,825.8	1,847.0	1,908.7	1,975.6
33 Loans from U.S. government	.0	0	0	0	.0	.0	.0	.0	.0	.0	.0
34 Private	1,649.5	1,904.4	2,229.1	2,627.5	2,281.8	2,378.6	2,458.8	2,627.5	2,775.6	2,930.3	3,042.9
35 Open market paper	441.6	486.9	579.1	745.7	623.0	642.5	684.7	745.7	804.9	838.9	874.2
36 Corporate bonds	1,008.8	1,205.4	1,385.1	1,560.0	1,396.5	1,457.6	1,478.1	1,560.0	1,634.7	1,732.5	1,777.3
37 Bank loans n.e.c.	48.9	52.8	69.7	83.3	70.6	69.2	74.8	83.3	87.3	89.3	99.3
38 Other loans and advances	131.6	135.0	162.9	198.5	157.9	173.7	183.0	198.5	206.6	225.6	246.2
39 Mortgages	18.7	24.3	32.2	40.0	33.8	35.6	38.2	40.0	42.0	44.0	46.0
By borrowing sector											
40 Commercial banks	94.5	102.6	113.6	140.6	115.3	125.7	130.0	140.6	148.7	159.6	169.6
41 Bank holding companies	133.6	148.0	150.0	168.6	151.6	160.5	164.0	168.6	181.2	190.5	200.3
42 Savings institutions	112.4	115.0	140.5	160.3	136.3	144.3	149.8	160.3	162.9	170.7	186.6
43 Credit unions	.5	.4	.4	.6	.4	.4	.5	.6	.7	.8	1.0
44 Life insurance companies	.6	5	1.6	1.8	1.8	1.8	1.9	1.8	1.8	1.6	2.0
45 Government-sponsored enterprises	700.6	806.5	896.9	995.3	894.7	944.2	955.8	995.3	1,030.9	1,072.5	1,146.0
46 Federally related mortgage pools	1,472.1	1,570.3	1,711.4	1,825.8	1,740.0	1,762.1	1,790.7	1,825.8	1,847.0	1,908.7	1,975.6
47 Issuers of asset-backed securities (ABSs)	579.0	720.1	873.8	1,089.3	889.9	917.9	989.0	1,089.3	1,147.2	1,236.7	1,308.7
48 Brokers and dealers	34.3	29.3	27.3	35.3	26.6	35.3	33.6	35.3	35.1	40.1	44.2
49 Finance companies	433.7	483.9	529.8	554.5	528.4	557.8	532.7	554.5	571.9	596.9	589.5
50 Mortgage companies	18.7	19.1	31.5	30.3	31.4	28.3	29.2	30.3	31.6	30.2	30.9
51 Real estate investment trusts (REITs)	31.1	36.8	47.8	72.6	51.6	56.6	64.6	72.6	81.7	90.1	97.0
52 Funding corporations	211.0	248.6	312.7	373.8	348.6	350.0	363.4	373.8	412.9	413.0	413.1
					All sectors						
53 **Total credit market debt, domestic and foreign**	**17,206.8**	**18,437.2**	**19,797.0**	**21,227.0**	**20,049.0**	**20,351.5**	**20,694.5**	**21,227.0**	**21,678.0**	**22,154.1**	**22,630.0**
54 Open market paper	623.5	700.4	803.0	979.4	861.1	893.1	925.7	979.4	1,074.8	1,112.7	1,165.1
55 U.S. government securities	5,665.0	6,013.6	6,390.0	6,625.9	6,464.5	6,466.8	6,517.7	6,625.9	6,708.6	6,730.2	6,841.8
56 Municipal securities	1,341.7	1,293.5	1,296.0	1,367.5	1,305.1	1,326.8	1,340.2	1,367.5	1,397.1	1,429.3	1,440.0
57 Corporate and foreign bonds	2,504.0	2,823.6	3,131.7	3,444.0	3,166.8	3,259.1	3,335.3	3,444.0	3,561.5	3,726.4	3,784.5
58 Bank loans n.e.c.	834.9	949.6	1,041.7	1,171.0	1,078.6	1,115.8	1,123.1	1,171.0	1,192.3	1,241.8	1,279.6
59 Other loans and advances	860.9	931.1	993.6	1,095.8	1,002.3	1,022.5	1,044.9	1,095.8	1,128.2	1,154.3	1,187.5
60 Mortgages	4,392.8	4,602.7	4,929.4	5,279.3	4,984.3	5,062.5	5,180.9	5,279.3	5,379.4	5,502.6	5,642.9
61 Consumer credit	983.9	1,122.8	1,211.6	1,264.1	1,186.4	1,205.0	1,226.7	1,264.1	1,236.1	1,256.9	1,288.7

1. Data in this table also appear in the Board's Z.1 (780) quarterly statistical release, tables L.2 through L.4. For ordering address, see inside front cover

1.60 SUMMARY OF FINANCIAL ASSETS AND LIABILITIES[1]

Billions of dollars except as noted, end of period

Transaction category or sector	1994	1995	1996	1997	1997 Q1	1997 Q2	1997 Q3	1997 Q4	1998 Q1	1998 Q2	1998 Q3
CREDIT MARKET DEBT OUTSTANDING[2]											
1 **Total credit market assets**	**17,206.8**	**18,437.2**	**19,797.0**	**21,227.0**	**20,049.0**	**20,351.5**	**20,694.5**	**21,227.0**	**21,678.0**	**22,154.1**	**22,630.0**
2 Domestic nonfederal nonfinancial sectors	3,038.1	2,890.0	2,919.3	2,761.1	2,849.1	2,798.0	2,739.4	2,761.1	2,699.8	2,766.7	2,758.4
3 Household	1,981.4	1,928.7	1,966.7	1,791.3	1,909.6	1,849.7	1,793.7	1,791.3	1,744.4	1,778.2	1,739.5
4 Nonfinancial corporate business	289.2	280.4	291.0	305.8	286.8	281.4	290.4	305.8	294.7	289.7	291.8
5 Nonfarm noncorporate business	37.6	42.3	46.7	49.4	47.4	48.0	48.7	49.4	50.2	51.0	51.8
6 State and local governments	729.9	638.6	614.8	614.5	605.4	618.9	606.6	614.5	610.5	647.8	675.3
7 Federal government	203.4	203.2	195.5	200.4	195.9	197.3	198.2	200.4	204.3	207.5	210.9
8 Rest of the world	1,216.0	1,530.3	1,931.2	2,258.9	2,019.4	2,095.0	2,196.4	2,258.9	2,323.5	2,401.6	2,421.7
9 Financial sectors	12,749.2	13,813.7	14,750.9	16,006.6	14,984.6	15,261.2	15,560.5	16,006.6	16,450.3	16,778.3	17,239.0
10 Monetary authority	368.2	380.8	393.1	431.4	397.1	412.4	412.7	431.4	433.8	440.3	446.5
11 Commercial banking	3,254.3	3,520.1	3,707.7	4,031.9	3,775.7	3,856.8	3,912.9	4,031.9	4,093.3	4,136.4	4,195.6
12 U.S.-chartered banks	2,869.6	3,056.1	3,175.8	3,450.7	3,218.1	3,295.2	3,351.9	3,450.7	3,505.1	3,543.6	3,616.2
13 Foreign banking offices in United States	337.1	412.6	475.8	516.1	499.5	501.8	501.0	516.1	517.9	525.6	510.0
14 Bank holding companies	18.4	18.0	22.0	27.4	22.5	23.8	22.5	27.4	31.2	26.8	28.3
15 Banks in U.S.-affiliated areas	29.2	33.4	34.1	37.8	35.6	36.1	37.5	37.8	39.2	40.4	41.1
16 Savings institutions	920.8	913.3	933.2	928.5	931.9	937.8	929.0	928.5	931.0	928.1	937.8
17 Credit unions	246.8	263.0	288.5	305.3	291.2	299.9	303.9	305.3	306.7	315.1	320.7
18 Bank personal trusts and estates	248.0	239.7	232.0	239.5	232.8	235.5	237.3	239.5	240.1	240.9	241.4
19 Life insurance companies	1,482.6	1,581.8	1,654.3	1,755.2	1,680.2	1,724.1	1,750.4	1,755.2	1,784.8	1,801.9	1,823.3
20 Other insurance companies	446.4	468.7	491.2	515.3	491.6	498.6	506.6	515.3	521.1	520.8	518.3
21 Private pension funds	656.9	718.2	766.5	834.2	780.3	794.9	811.5	834.2	852.3	887.7	912.1
22 State and local government retirement funds	455.8	483.3	529.2	565.8	531.6	542.7	562.0	565.8	582.5	600.2	621.4
23 Money market mutual funds	459.0	545.5	634.3	721.9	659.0	656.5	678.7	721.9	775.0	815.9	869.9
24 Mutual funds	718.8	771.3	820.2	901.1	838.5	861.3	890.4	901.1	939.3	977.6	1,007.0
25 Closed-end funds	86.0	96.4	101.1	97.7	100.3	99.4	98.5	97.7	97.1	96.5	95.9
26 Government-sponsored enterprises	663.3	748.0	813.6	908.6	824.3	854.8	868.7	908.6	949.5	985.9	1,048.1
27 Federally related mortgage pools	1,472.1	1,570.3	1,711.4	1,825.8	1,740.0	1,762.1	1,790.7	1,825.8	1,847.0	1,908.7	1,975.6
28 Asset-backed securities issuers (ABSs)	541.7	661.0	784.4	950.4	794.6	818.9	863.3	950.4	993.5	1,075.3	1,138.4
29 Finance companies	476.2	526.2	544.5	566.4	552.4	553.1	564.4	566.4	572.0	579.0	593.7
30 Mortgage companies	36.5	33.0	41.2	57.6	40.9	34.8	55.5	57.6	60.2	57.4	58.9
31 Real estate investment trusts (REITs)	13.3	15.5	17.5	15.5	17.0	16.5	15.9	15.5	15.0	14.5	14.0
32 Brokers and dealers	93.3	183.4	167.7	181.4	164.1	161.2	165.1	181.4	244.0	196.9	227.8
33 Funding corporations	109.3	94.1	119.3	173.2	141.1	139.9	142.9	173.2	212.0	199.2	192.7
RELATION OF LIABILITIES TO FINANCIAL ASSETS											
34 **Total credit market debt**	**17,206.8**	**18,437.2**	**19,797.0**	**21,227.0**	**20,049.0**	**20,351.5**	**20,694.5**	**21,227.0**	**21,678.0**	**22,154.1**	**22,630.0**
Other liabilities											
35 Official foreign exchange	53.2	63.7	53.7	48.9	46.3	46.7	46.1	48.9	48.2	50.1	54.5
36 Special drawing rights certificates	8.0	10.2	9.7	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2
37 Treasury currency	17.6	18.2	18.3	18.3	18.4	18.4	18.7	18.3	18.4	18.4	18.8
38 Foreign deposits	373.9	418.8	516.1	619.4	562.8	568.8	597.8	619.4	608.1	630.4	649.6
39 Net interbank liabilities	280.1	290.7	240.8	219.7	210.9	197.1	189.4	219.7	182.7	192.2	192.8
40 Checkable deposits and currency	1,242.0	1,229.3	1,245.1	1,286.6	1,220.0	1,265.3	1,234.2	1,286.6	1,259.4	1,321.0	1,282.8
41 Small time and savings deposits	2,183.2	2,279.7	2,377.0	2,474.1	2,427.1	2,432.3	2,438.8	2,474.1	2,525.2	2,530.8	2,553.4
42 Large time deposits	411.2	476.9	590.9	713.4	606.0	646.7	696.1	713.4	760.9	754.0	776.2
43 Money market fund shares	602.9	745.3	891.1	1,048.7	950.8	952.4	1,005.1	1,048.7	1,130.7	1,153.7	1,249.7
44 Security repurchase agreements	549.5	659.9	699.9	815.1	713.8	766.7	795.4	815.1	879.5	867.0	913.6
45 Mutual fund shares	1,477.3	1,852.8	2,342.4	2,989.4	2,410.6	2,717.5	2,973.6	2,989.4	3,340.2	3,439.0	3,117.3
46 Security credit	279.0	305.7	358.1	468.2	380.0	414.8	432.2	468.2	505.3	481.0	491.8
47 Life insurance reserves	505.3	550.2	593.8	646.7	606.2	621.9	637.6	646.7	658.6	667.8	674.3
48 Pension fund reserves	4,870.5	5,589.4	6,315.4	7,399.0	6,402.3	6,907.5	7,290.6	7,399.0	7,957.6	8,052.7	7,528.6
49 Trade payables	1,140.6	1,242.2	1,319.0	1,417.0	1,301.8	1,319.8	1,352.0	1,417.0	1,407.0	1,413.9	1,422.8
50 Taxes payable	101.4	107.6	123.8	138.4	137.3	133.9	143.2	138.4	149.4	140.4	150.8
51 Investment in bank personal trusts	699.4	803.0	871.7	1,082.8	888.7	982.9	1,058.9	1,082.8	1,179.3	1,207.2	1,112.4
52 Miscellaneous	5,331.6	5,705.9	6,028.5	6,504.4	6,302.8	6,276.1	6,488.9	6,504.4	6,789.6	6,874.4	7,210.9
53 **Total liabilities**	**37,333.7**	**40,786.5**	**44,392.1**	**49,126.2**	**45,244.2**	**46,629.6**	**48,102.1**	**49,126.2**	**51,087.1**	**51,957.0**	**52,039.5**
Financial assets not included in liabilities (+)											
54 Gold and special drawing rights	21.1	22.1	21.4	21.1	20.9	21.1	21.0	21.1	21.2	21.0	21.2
55 Corporate equities	6,237.9	8,331.3	10,062.4	12,776.0	10,063.5	11,627.0	12,649.4	12,776.0	14,397.6	14,556.1	12,758.4
56 Household equity in noncorporate business	3,380.4	3,598.7	3,806.7	4,129.6	3,903.4	3,992.9	4,059.6	4,129.6	4,140.2	4,169.2	4,151.0
Liabilities not identified as assets (−)											
57 Treasury currency	−5.4	−5.8	−6.7	−7.3	−6.8	−6.9	−6.7	−7.3	−7.4	−7.4	−7.1
58 Foreign deposits	325.4	360.2	431.2	534.5	475.4	478.1	501.5	534.5	510.8	547.1	558.1
59 Net interbank transactions	−6.5	−9.0	−10.6	−32.2	−1.6	−8.1	−22.1	−32.2	−21.2	−17.1	−15.5
60 Security repurchase agreements	67.8	90.7	90.0	149.5	68.1	108.6	116.4	149.5	177.8	145.7	170.4
61 Taxes payable	48.8	62.4	76.9	91.5	74.8	77.6	88.0	91.5	87.3	91.6	97.9
62 Miscellaneous	−1,039.2	−1,324.3	−1,698.4	−2,106.4	−1,576.9	−1,675.4	−1,656.8	−2,106.4	−2,017.5	−2,022.3	−1,990.9
Floats not included in assets (−)											
63 Federal government checkable deposits	3.4	3.1	−1.6	−8.1	−9.7	−6.8	−7.8	−8.1	−10.4	−16.1	−12.0
64 Other checkable deposits	38.0	34.2	30.1	26.2	25.6	27.9	19.5	26.2	21.4	24.2	15.7
65 Trade credit	−245.9	−257.6	−284.5	−280.5	−339.5	−366.6	−372.3	−280.5	−330.0	−365.9	−390.4
66 **Total identified to sectors as assets**	**47,786.6**	**53,784.7**	**59,656.3**	**67,685.8**	**60,522.6**	**63,642.1**	**66,172.6**	**67,685.8**	**71,235.2**	**72,323.7**	**70,543.7**

1. Data in this table also appear in the Board's Z.1 (780) quarterly statistical release, tables L.1 and L.5. For ordering address, see inside front cover.

2. Excludes corporate equities and mutual fund shares.

2.10 NONFINANCIAL BUSINESS ACTIVITY Selected Measures

Monthly data seasonally adjusted, and indexes 1992=100, except as noted

Measure	1996	1997	1998	1998								
				Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.[r]	Dec.
1 **Industrial production**[1]	**119.5**	**126.8**	**131.4**	**131.3**	**131.9**	**130.6**	**130.5**	**132.4**	**131.9**	**132.6[r]**	**132.5**	**132.8**
Market groupings												
2 Products, total	114.4	119.6	123.7	124.0	124.5	123.6	123.3	124.9	124.1[r]	125.2[r]	124.9	125.0
3 Final, total	115.5	121.1	125.6	126.2	126.6	125.5	124.7	126.8	126.0	127.1[r]	126.8	126.5
4 Consumer goods	111.3	114.1	115.4	116.4	116.8	115.1	114.0	116.1	114.8	115.6[r]	115.8	115.8
5 Equipment	122.7	133.9	144.2	143.6	144.2	144.1	143.9	146.0	146.2[r]	147.8[r]	146.5	145.8
6 Intermediate	110.9	115.2	118.1	117.3	118.2	118.0	119.1	119.1	118.3[r]	119.2[r]	119.3	120.3
7 Materials	127.8	138.2	144.0	143.1	143.6	141.8	141.9	144.4	144.4	144.5[r]	144.6	145.3
Industry groupings												
8 Manufacturing	121.4	129.7	135.1	134.9	135.4	133.7	133.6	135.7	135.2	136.3[r]	136.5	136.7
9 Capacity utilization, manufacturing (percent)[2]	81.4	82.0	80.9	81.7	81.6	80.2	79.8	80.7	80.1	80.4[r]	80.1	79.9
10 Construction contracts[3]	130.9	142.7	149.9	151.0[r]	152.0[r]	153.0[r]	154.0[r]	154.0[r]	149.0[r]	147.0[r]	148.0	147.0
11 Nonagricultural employment, total[4]	117.3	120.3	123.4	122.8	123.2	123.3	123.5	123.8	123.9	124.1	124.3	124.7
12 Goods-producing, total	2.4	2.4	2.3	102.7	102.5	102.6	101.9	102.4	102.3	102.2	102.1	102.4
13 Manufacturing, total	97.4	98.2	98.5	99.1	99.0	98.9	97.9	98.4	98.4	98.1	97.7	97.7
14 Manufacturing, production workers	98.6	99.6	99.6	100.4	100.1	99.9	98.4	99.1	99.3	99.0	98.6	98.5
15 Service-producing	123.1	126.5	130.1	129.3	129.7	130.0	130.4	130.6	130.9	131.1	131.5	131.8
16 Personal income, total	165.2	174.5	n.a.	181.4	182.2	182.7	183.4	184.2	184.8	185.6	186.4	n.a.
17 Wages and salary disbursements	159.8	171.2	n.a.	180.3	181.5	181.8	182.8	184.1	184.6	185.5	186.6	n.a.
18 Manufacturing	135.7	144.7	n.a.	151.0	151.5	150.5	149.6	151.3	152.1	151.7	151.7	n.a.
19 Disposable personal income[5]	164.0	171.7	n.a.	177.0	177.5	177.9	178.7	179.4	179.9	180.8	181.5	n.a.
20 Retail sales[5]	159.6	166.9	175.3	173.7	175.8	176.0	174.8	174.9	175.6	177.7	178.9	180.4
Prices[6]												
21 Consumer (1982–84=100)	156.9	160.5	163.0	162.5	162.8	163.0	163.2	163.4	163.6	164.0	164.0	163.9
22 Producer finished goods (1982=100)	131.3	131.8	130.7	130.4	130.6	130.7	131.0	130.7[r]	130.6	131.4	130.8	131.0

1. Data in this table appear in the Board's G.17 (419) monthly statistical release. The data are also available on the Board's web site, http://www.federalreserve.gov/releases/g17. The latest historical revision of the industrial production index and the capacity utilization rates was released in November 1998. The recent annual revision is described in an article in the January 1999 issue of the *Bulletin*. For a description of the methods of estimating industrial production and capacity utilization, see "Industrial Production and Capacity Utilization: Historical Revision and Recent Developments," *Federal Reserve Bulletin*, vol. 83 (February 1997), pp. 67–92, and the references cited therein. For details about the construction of individual industrial production series, see "Industrial Production: 1989 Developments and Historical Revision," *Federal Reserve Bulletin*, vol. 76 (April 1990), pp. 187–204.
2. Ratio of index of production to index of capacity. Based on data from the Federal Reserve, DRI McGraw-Hill, U.S. Department of Commerce, and other sources.
3. Index of dollar value of total construction contracts, including residential, nonresidential, and heavy engineering, from McGraw-Hill Information Systems Company, F.W. Dodge Division.
4. Based on data from U.S. Department of Labor, *Employment and Earnings*. Series covers employees only, excluding personnel in the armed forces.
5. Based on data from U.S. Department of Commerce, *Survey of Current Business*.
6. Based on data not seasonally adjusted. Seasonally adjusted data for changes in the price indexes can be obtained from the U.S. Department of Labor, Bureau of Labor Statistics, *Monthly Labor Review*.

NOTE. Basic data (not indexes) for series mentioned in notes 4 and 5, and indexes for series mentioned in notes 3 and 6, can also be found in the *Survey of Current Business*.

2.11 LABOR FORCE, EMPLOYMENT, AND UNEMPLOYMENT

Thousands of persons; monthly data seasonally adjusted

Category	1996[r]	1997[r]	1998	1998							
				May	June	July	Aug.	Sept.	Oct.[r]	Nov.[r]	Dec.
HOUSEHOLD SURVEY DATA[1]											
1 Civilian labor force[2]	133,943	136,297	137,673	137,369[r]	137,498[r]	137,407[r]	137,481[r]	138,081[r]	138,116	138,193	138,547
Employment											
2 Nonagricultural industries[3]	123,264	126,159	128,085	127,979[r]	127,890[r]	127,753[r]	127,772[r]	128,348[r]	128,300	128,765	129,304
3 Agriculture	3,443	3,399	3,378	3,351[r]	3,363[r]	3,423[r]	3,492[r]	3,470[r]	3,558	3,348	3,222
Unemployment											
4 Number	7,236	6,739	6,210	6,039[r]	6,245[r]	6,231[r]	6,217[r]	6,263[r]	6,258	6,080	6,021
5 Rate (percent of civilian labor force)	5.4	4.9	4.5	4.4[r]	4.5	4.5	4.5	4.5[r]	4.5	4.4	4.3
ESTABLISHMENT SURVEY DATA											
6 **Nonagricultural payroll employment**[4]	**119,608**	**122,690**	**125,833**	**125,562**	**125,751**	**125,869**	**126,191**	**126,363**	**126,527**	**126,778**	**127,156**
7 Manufacturing	18,495	18,657	18,716	18,805	18,780	18,594	18,693	18,692	18,633	18,570	18,557
8 Mining	580	592	575	579	578	571	571	568	564	560	557
9 Contract construction	5,418	5,686	5,965	5,917	5,946	5,970	5,989	5,981	6,012	6,054	6,158
10 Transportation and public utilities	6,253	6,395	6,551	6,534	6,538	6,550	6,570	6,579	6,595	6,609	6,641
11 Trade	28,079	28,659	29,299	29,238	29,269	29,374	29,383	29,454	29,453	29,529	29,589
12 Finance	6,911	7,091	7,341	7,311	7,333	7,370	7,372	7,393	7,417	7,439	7,467
13 Service	34,454	36,040	37,525	37,350	37,494	37,614	37,691	37,768	37,905	38,041	38,152
14 Government	19,419	19,570	19,862	19,828	19,813	19,826	19,922	19,928	19,948	19,976	20,035

1. Beginning January 1994, reflects redesign of current population survey and population controls from the 1990 census.
2. Persons sixteen years of age and older, including Resident Armed Forces. Monthly figures are based on sample data collected during the calendar week that contains the twelfth day; annual data are averages of monthly figures. By definition, seasonality does not exist in population figures.
3. Includes self-employed, unpaid family, and domestic service workers.
4. Includes all full- and part-time employees who worked during, or received pay for, the pay period that includes the twelfth day of the month; excludes proprietors, self-employed persons, household and unpaid family workers, and members of the armed forces. Data are adjusted to the March 1992 benchmark, and only seasonally adjusted data are available at this time.

SOURCE. Based on data from U.S. Department of Labor, *Employment and Earnings*.

2.12 OUTPUT, CAPACITY, AND CAPACITY UTILIZATION[1]

Seasonally adjusted

Series	1998				1998				1998			
	Q1	Q2	Q3[r]	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3[r]	Q4
	Output (1992=100)				Capacity (percent of 1992 output)				Capacity utilization rate (percent)[2]			
1 **Total industry**	**130.4**	**131.3**	**131.6**	**132.6**	**157.6**	**159.6**	**161.5**	**163.5**	**82.7**	**82.3**	**81.5**	**81.1**
2 Manufacturing	133.8	134.7	134.8	136.5	163.5	165.8	168.1	170.3	81.8	81.2	80.2	80.2
3 Primary processing[3]	121.2	121.1	120.2	120.3	143.0	144.0	145.1	146.1	84.8	84.1	82.9	82.4
4 Advanced processing[4]	140.1	141.4	142.1	144.6	173.5	176.4	179.2	182.0	80.8	80.2	79.3	79.5
5 Durable goods	154.4	156.1	157.9	161.2	190.2	193.9	197.5	201.2	81.2	80.5	79.9	80.1
6 Lumber and products	115.6	116.4	117.7	118.8	142.0	143.0	143.9	144.9	81.4	81.4	81.8	82.0
7 Primary metals	128.2	125.3	122.4	119.4	140.8	142.0	143.2	144.4	91.0	88.3	85.5	82.7
8 Iron and steel	128.3	124.0	118.7	111.3	140.9	142.8	144.6	146.5	91.0	86.9	82.1	76.0
9 Nonferrous	128.0	127.0	126.8	129.0	140.4	140.8	141.3	141.7	91.2	90.1	89.7	91.0
10 Industrial machinery and equipment	194.1	203.0	207.9	212.1	226.5	234.7	242.9	251.6	85.7	86.5	85.6	84.3
11 Electrical machinery	278.2	282.8	292.7	303.7	351.2	366.6	381.6	396.7	79.2	77.1	76.7	76.6
12 Motor vehicles and parts	140.8	135.3	137.2	149.1	182.8	183.9	184.9	186.0	77.0	73.6	74.2	80.2
13 Aerospace and miscellaneous transportation equipment	102.7	106.1	106.6	106.1	127.0	127.5	128.0	128.5	80.8	83.2	83.3	82.5
14 Nondurable goods	112.7	112.7	111.3	111.6	135.8	136.6	137.5	138.4	83.1	82.5	80.9	80.6
15 Textile mill products	113.6	113.2	112.1	111.5	134.8	134.9	135.1	135.2	84.3	83.9	83.0	82.5
16 Paper and products	115.5	115.0	115.0	115.1	130.6	131.6	132.5	133.4	88.5	87.4	86.8	86.3
17 Chemicals and products	116.8	116.9	114.4	114.1	147.1	148.0	148.9	149.7	79.4	79.0	76.8	76.2
18 Plastics materials	127.3	127.5	128.4	128.5	139.4	140.7	141.9	143.2	91.3	90.6	90.5	89.8
19 Petroleum products	111.6	112.0	112.7	112.8	116.2	116.5	116.8	117.1	96.1	96.1	96.5	96.3
20 Mining	107.0	105.3	103.6	101.4	119.7	119.9	120.1	120.5	89.4	87.8	86.2	84.1
21 Utilities	110.9	115.6	119.6	115.7	125.9	126.2	126.5	126.7	88.1	91.6	94.6	91.3
22 Electric	112.8	118.3	121.2	119.0	123.5	123.8	124.0	124.3	91.3	95.6	97.7	95.8

Series	1973	1975	Previous cycle[5]		Latest cycle[6]		1997	1998					
	High	Low	High	Low	High	Low	Dec.	July	Aug.	Sept.[r]	Oct.[r]	Nov.	Dec.[p]
	Capacity utilization rate (percent)[2]												
1 **Total industry**	**89.2**	**72.6**	**87.3**	**71.1**	**85.4**	**78.1**	**83.4**	**81.1**	**82.0**	**81.3**	**81.4**	**81.0**	**80.9**
2 Manufacturing	88.5	70.5	86.9	69.0	85.7	76.6	82.5	79.8	80.7	80.1	80.4	80.1	79.9
3 Primary processing[3]	91.2	68.2	88.1	66.2	88.9	77.7	85.4	83.4	83.1	82.1	82.4	82.3	82.4
4 Advanced processing[4]	87.2	71.8	86.7	70.4	84.2	76.1	81.4	78.5	79.9	79.5	79.8	79.5	79.2
5 Durable goods	89.2	68.9	87.7	63.9	84.6	73.1	82.0	78.6	80.9	80.3	80.6	80.0	79.8
6 Lumber and products	88.7	61.2	87.9	60.8	93.6	75.5	81.4	81.8	82.3	81.1	81.5	82.0	82.4
7 Primary metals	100.2	65.9	94.2	45.1	92.7	73.7	91.3	85.9	86.9	83.7	84.1	82.1	81.8
8 Iron and steel	105.8	66.6	95.8	37.0	95.2	71.8	91.3	83.5	84.7	78.1	78.3	74.9	74.7
9 Nonferrous	90.8	59.8	91.1	60.1	89.3	74.2	91.5	88.9	89.7	90.6	91.2	91.2	90.7
10 Industrial machinery and equipment	96.0	74.3	93.2	64.0	85.4	72.3	85.3	87.0	85.2	84.5	85.0	84.3	83.6
11 Electrical machinery	89.2	64.7	89.4	71.6	84.0	75.0	81.1	76.8	76.2	77.0	76.9	76.4	76.4
12 Motor vehicles and parts	93.4	51.3	95.0	45.5	89.1	55.9	81.7	58.3	83.4	80.9	80.9	80.1	79.5
13 Aerospace and miscellaneous transportation equipment	78.4	67.6	81.9	66.6	87.3	79.2	78.9	83.8	83.5	82.6	83.7	82.5	81.4
14 Nondurable goods	87.8	71.7	87.5	76.4	87.3	80.7	83.4	81.7	80.9	80.2	80.5	80.8	80.6
15 Textile mill products	91.4	60.0	91.2	72.3	90.4	77.7	84.1	83.9	82.8	82.3	83.4	82.3	81.8
16 Paper and products	97.1	69.2	96.1	80.6	93.5	85.0	89.4	87.7	87.0	85.7	86.7	86.2	86.0
17 Chemicals and products	87.6	69.7	84.6	69.9	86.2	79.3	80.1	77.9	76.7	75.9	76.2	76.2	76.3
18 Plastics materials	102.0	50.6	90.9	63.4	97.0	74.8	93.6	91.6	92.9	87.1	89.1	89.8	90.4
19 Petroleum products	96.7	81.1	90.0	66.8	88.5	85.1	95.4	97.2	97.7	94.7	94.5	96.9	97.5
20 Mining	94.3	88.2	96.0	80.3	88.0	87.0	89.0	87.2	86.3	85.2	84.6	84.2	83.6
21 Utilities	96.2	82.9	89.1	75.9	92.6	83.4	89.9	93.7	95.1	95.0	92.7	89.9	91.3
22 Electric	99.0	82.7	88.2	78.9	95.0	87.1	92.2	96.7	97.8	98.8	96.9	94.7	95.7

1. Data in this table appear in the Board's G.17 (419) monthly statistical release. The data are also available on the Board's web site, http://www.federalreserve.gov/releases/g17. The latest historical revision of the industrial production index and the capacity utilization rates was released in November 1998. The recent annual revision is described in an article in the January 1999 issue of the *Bulletin*. For a description of the methods of estimating industrial production and capacity utilization, see "Industrial Production and Capacity Utilization: Historical Revision and Recent Developments," *Federal Reserve Bulletin*, vol. 83 (February 1997), pp. 67–92, and the references cited therein. For details about the construction of individual industrial production series, see "Industrial Production: 1989 Developments and Historical Revision," *Federal Reserve Bulletin*, vol. 76 (April 1990), pp. 187–204.

2. Capacity utilization is calculated as the ratio of the Federal Reserve's seasonally adjusted index of industrial production to the corresponding index of capacity.

3. Primary processing includes textiles; lumber; paper; industrial chemicals; synthetic materials; fertilizer materials; petroleum products; rubber and plastics; stone, clay, and glass; primary metals; and fabricated metals.

4. Advanced processing includes foods; tobacco; apparel; furniture and fixtures; printing and publishing; chemical products such as drugs and toiletries; agricultural chemicals; leather and products; machinery; transportation equipment; instruments; and miscellaneous manufactures.

5. Monthly highs, 1978–80; monthly lows, 1982.

6. Monthly highs, 1988–89; monthly lows, 1990–91.

2.13 INDUSTRIAL PRODUCTION Indexes and Gross Value[1]

Monthly data seasonally adjusted

Group	1992 proportion	1998 avg.	1997 Dec.	1998 Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.[r]	Oct.[r]	Nov.	Dec.[p]
			Index (1992 = 100)												
MAJOR MARKETS															
1 **Total index**	**100.0**	**131.4**	**130.3**	**130.3**	**130.2**	**130.7**	**131.3**	**131.9**	**130.6**	**130.5**	**132.4**	**131.9**	**132.6**	**132.5**	**132.8**
2 Products	60.5	123.7	122.3	122.6	122.5	123.2	124.0	124.5	123.6	123.3	124.9	124.1	125.2	124.9	125.0
3 Final products	46.3	125.6	124.0	124.5	124.2	125.3	126.2	126.6	125.5	124.7	126.8	126.0	127.1	126.8	126.5
4 Consumer goods, total	29.1	115.4	115.4	116.0	115.2	115.8	116.4	116.8	115.1	114.0	116.1	114.8	115.6	115.8	115.8
5 Durable consumer goods	6.1	135.8	133.3	135.1	134.5	135.9	136.9	138.3	130.7	124.6	140.1	137.4	140.0	140.0	140.6
6 Automotive products	2.6	132.9	134.5	133.0	131.5	132.7	134.6	136.8	121.7	107.3	141.7	136.4	140.7	139.9	139.9
7 Autos and trucks	1.7	137.9	144.1	141.0	138.6	138.9	141.3	143.5	118.2	92.8	151.4	143.4	150.6	149.7	148.3
8 Autos, consumer	.9	109.1	113.1	115.1	104.8	106.5	107.4	108.4	93.8	75.8	124.4	128.3	119.9	113.6	115.4
9 Trucks, consumer	.7	166.4	173.5	166.1	170.5	169.8	173.8	177.1	142.2	110.0	178.9	161.1	181.0	184.3	180.3
10 Auto parts and allied goods	.9	124.9	119.8	120.5	120.3	122.7	123.7	126.0	125.4	125.6	127.6	125.9	126.6	125.8	127.6
11 Other	3.5	138.0	132.3	136.7	136.9	138.5	138.8	139.4	137.8	138.7	138.5	138.0	139.1	139.7	140.9
12 Appliances, televisions, and air conditioners	1.0	205.8	187.4	195.5	197.9	203.8	203.4	202.7	199.9	207.8	209.4	209.9	213.6	220.7	223.1
13 Carpeting and furniture	.8	117.4	112.6	119.2	115.8	114.3	115.9	119.1	117.0	117.3	116.7	116.3	119.3	118.5	119.3
14 Miscellaneous home goods	1.6	115.1	114.1	115.6	116.8	118.3	118.2	117.9	117.1	115.9	115.3	114.5	113.6	112.8	113.6
15 Nondurable consumer goods	23.0	110.4	110.9	111.3	110.5	110.8	111.4	111.5	111.2	111.2	110.3	109.3	109.7	110.0	109.8
16 Foods and tobacco	10.3	108.9	108.4	110.4	110.1	109.1	110.2	110.8	108.5	108.5	107.5	106.9	108.1	109.5	109.1
17 Clothing	2.4	97.8	100.6	100.7	99.3	100.4	99.9	98.8	98.8	98.4	97.7	97.1	95.7	94.8	93.8
18 Chemical products	4.5	120.8	121.8	121.3	121.2	121.3	123.2	122.5	122.8	122.2	119.0	118.0	118.8	119.5	120.0
19 Paper products	2.9	105.8	109.5	109.2	107.7	106.3	106.2	105.7	105.3	106.3	106.6	105.9	105.2	104.6	103.2
20 Energy	2.9	113.6	112.5	109.1	106.5	113.2	111.5	112.5	118.2	118.4	120.1	116.8	116.9	113.7	115.5
21 Fuels	.8	111.1	110.2	111.0	110.4	111.2	111.6	110.9	111.4	112.9	112.1	108.3	108.4	112.2	113.0
22 Residential utilities	2.1	114.3	113.2	107.6	104.0	113.7	111.0	112.9	121.2	120.7	123.7	120.7	120.8	113.8	116.3
23 Equipment	17.2	144.2	139.4	139.5	140.3	142.4	143.6	144.2	144.1	143.9	146.0	146.2	147.8	146.5	145.8
24 Business equipment	13.2	163.6	156.5	156.3	157.0	160.1	162.2	163.1	163.6	163.5	166.6	167.4	169.5	168.2	168.1
25 Information processing and related	5.4	210.1	194.5	195.3	199.2	202.3	206.0	209.2	210.3	211.8	213.1	217.3	220.0	219.6	222.5
26 Computer and office equipment	1.1	647.3	496.8	520.3	547.4	584.9	601.5	620.6	638.6	654.6	671.6	693.6	722.0	749.0	765.6
27 Industrial	4.0	139.9	139.8	138.4	136.6	139.4	139.4	138.1	142.9	144.2	142.3	139.5	141.5	140.2	139.5
28 Transit	2.5	133.8	125.6	126.0	126.8	130.3	133.6	135.5	128.2	121.9	141.6	140.1	142.3	140.8	139.6
29 Autos and trucks	1.2	124.2	127.4	126.2	120.9	121.6	123.4	125.1	108.6	91.7	136.9	135.6	136.1	134.0	134.0
30 Other	1.3	139.1	138.7	137.7	136.9	139.8	140.8	139.6	141.7	146.6	132.6	140.9	141.0	138.2	134.6
31 Defense and space equipment	3.3	75.7	75.8	76.2	76.3	75.9	75.9	76.0	75.8	76.1	76.5	75.5	76.4	75.4	74.1
32 Oil and gas well drilling	.6	135.0	149.6	153.9	157.4	155.7	147.6	147.1	136.7	131.9	127.7	123.4	119.4	115.2	106.5
33 Manufactured homes	.2	148.9	142.3	147.1	149.6	148.0	148.0	149.0	146.1	151.1	145.7	147.8	150.9	154.6	153.0
34 Intermediate products, total	14.2	118.1	117.0	117.0	117.1	116.9	117.3	118.2	118.0	119.1	119.1	118.3	119.2	119.3	120.3
35 Construction supplies	5.3	127.1	124.2	125.5	125.7	124.7	125.4	126.6	126.1	128.5	128.0	126.9	128.2	129.6	130.4
36 Business supplies	8.9	112.7	112.6	112.0	112.1	112.2	112.5	113.3	113.2	113.6	113.8	113.3	113.9	113.2	114.3
37 Materials	39.5	144.0	143.4	142.6	142.5	142.7	143.1	143.6	141.8	141.9	144.4	144.4	144.5	144.6	145.3
38 Durable goods materials	20.8	176.3	174.1	173.6	173.5	173.7	174.5	175.4	171.7	171.8	177.4	177.7	178.8	179.4	180.5
39 Durable consumer parts	4.0	144.1	150.0	143.1	144.2	143.7	144.4	147.9	131.9	129.7	149.6	147.7	146.3	146.0	145.6
40 Equipment parts	7.6	277.2	261.1	263.4	264.5	265.8	266.9	268.6	271.0	274.1	278.0	282.7	286.3	288.8	292.9
41 Other	9.2	128.9	130.0	130.7	129.7	129.7	130.3	129.6	128.3	128.1	128.3	127.7	128.5	128.8	129.1
42 Basic metal materials	3.1	121.3	123.5	126.1	125.9	123.7	123.5	123.0	120.1	120.2	121.9	118.2	118.5	117.5	117.3
43 Nondurable goods materials	8.9	113.4	116.1	114.8	114.9	114.2	114.4	114.1	113.9	114.1	113.1	112.0	111.5	111.6	111.5
44 Textile materials	1.1	109.3	113.5	109.9	111.1	110.6	110.5	111.0	110.2	110.1	107.7	107.6	108.9	107.0	106.4
45 Paper materials	1.8	116.1	117.9	117.2	117.0	116.3	116.3	115.5	117.3	117.3	116.4	115.0	115.7	114.5	114.2
46 Chemical materials	3.9	114.1	117.6	117.2	116.5	115.6	116.2	115.6	114.8	114.6	113.6	111.8	110.9	110.8	111.0
47 Other	2.1	111.3	112.3	110.0	111.4	111.0	110.9	111.2	110.6	111.7	111.6	111.5	110.2	112.7	112.4
48 Energy materials	9.7	103.8	103.8	103.0	102.8	103.7	103.8	104.3	104.8	104.8	104.4	105.2	103.8	103.0	103.9
49 Primary energy	6.3	101.4	101.1	101.6	101.4	101.0	101.3	101.0	101.8	102.9	101.2	102.3	102.6	100.6	101.3
50 Converted fuel materials	3.3	108.5	109.1	105.8	105.6	109.0	108.6	110.8	110.7	108.6	110.7	110.9	106.3	107.9	109.2
SPECIAL AGGREGATES															
51 Total excluding autos and trucks	97.1	131.4	130.2	130.2	130.2	130.7	131.3	131.8	131.2	131.6	132.1	131.7	132.3	132.2	132.6
52 Total excluding motor vehicles and parts	95.1	130.9	129.5	129.7	129.7	130.3	130.9	131.3	131.2	131.7	131.3	131.0	131.7	131.7	132.0
53 Total excluding computer and office equipment	98.2	127.1	126.9	126.7	126.4	126.7	127.3	127.7	126.4	126.2	128.0	127.4	127.9	127.7	127.9
54 Consumer goods excluding autos and trucks	27.4	114.1	113.8	114.7	113.9	114.5	115.1	115.3	114.8	114.9	114.3	113.2	113.8	114.0	114.1
55 Consumer goods excluding energy	26.2	115.6	115.7	116.8	116.2	116.1	117.0	117.3	114.7	113.5	115.7	114.6	115.5	116.1	115.9
56 Business equipment excluding autos and trucks	12.0	168.0	159.9	159.7	161.1	164.6	166.7	167.4	170.0	171.8	169.9	171.0	173.3	172.0	172.0
57 Business equipment excluding computer and office equipment	12.1	142.5	139.7	138.8	138.7	140.8	142.3	142.6	142.7	142.2	144.8	145.1	146.5	144.6	144.2
58 Materials excluding energy	29.8	156.6	155.8	155.0	155.0	154.9	155.5	156.0	153.4	153.6	156.9	156.7	157.2	157.6	158.3

2.13 INDUSTRIAL PRODUCTION Indexes and Gross Value[1]—Continued

Group	SIC code[2]	1992 proportion	1998 avg.	1997 Dec.	1998 Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.r	Oct.r	Nov.	Dec.p
				Index (1992 = 100)												
MAJOR INDUSTRIES																
59 **Total index**	.	**100.0**	**131.4**	**130.3**	**130.3**	**130.2**	**130.7**	**131.3**	**131.9**	**130.6**	**130.5**	**132.4**	**131.9**	**132.6**	**132.5**	**132.8**
60 Manufacturing	. .	85.4	135.1	133.7	133.8	133.7	134.1	134.9	135.4	133.7	133.6	135.7	135.2	136.3	136.5	136.7
61 Primary processing	. .	26.5	120.6	121.5	121.6	121.1	121.0	121.5	121.4	120.2	120.7	120.6	119.3	120.1	120.3	120.6
62 Advanced processing	.	58.8	142.1	139.7	139.8	140.0	140.6	141.6	142.3	140.4	139.9	143.3	143.2	144.4	144.6	144.8
63 Durable goods	.	45.0	157.5	154.0	153.9	154.0	155.2	156.2	157.2	154.8	154.4	159.8	159.6	161.1	160.9	161.5
64 Lumber and products	24	2.0	116.9	115.0	115.2	116.2	115.3	116.1	116.4	116.7	117.5	118.5	117.0	117.9	118.9	119.7
65 Furniture and fixtures	25	1.4	121.5	120.4	119.4	118.6	121.5	121.0	120.6	122.0	120.8	120.1	121.6	123.8	123.9	125.1
66 Stone, clay, and glass products	32	2.1	125.9	125.0	124.6	124.0	124.5	124.0	124.5	123.5	125.4	127.0	126.6	127.6	129.3	129.6
67 Primary metals	33	3.1	123.8	127.8	129.2	128.1	127.1	127.5	126.5	122.1	122.6	124.4	120.1	121.0	118.6	118.5
68 Iron and steel	331,2	1.7	120.7	127.6	128.9	128.2	127.7	126.7	125.5	119.8	120.2	122.5	113.4	114.3	109.7	109.9
69 Raw steel	331PT	.1	115.7	119.6	122.5	123.3	120.0	122.4	121.9	116.0	118.3	120.3	112.6	109.7	100.2	102.2
70 Nonferrous	333–6,9	1.4	127.5	128.1	129.7	128.0	126.4	128.4	127.6	124.9	125.4	126.7	128.1	129.1	129.2	128.7
71 Fabricated metal products	34	5.0	127.2	128.2	127.6	126.6	127.2	127.8	128.7	128.0	127.8	126.3	126.2	127.0	127.3	128.0
72 Industrial machinery and equipment	35	8.0	203.7	189.0	191.8	192.3	198.4	200.6	202.5	205.8	209.0	207.0	207.7	211.3	212.1	212.9
73 Computer and office equipment	357	1.8	650.4	502.2	526.3	552.6	589.6	605.4	623.9	641.4	657.0	673.6	695.5	723.9	751.1	767.4
74 Electrical machinery	36	7.3	291.5	276.5	277.7	278.5	278.2	280.8	282.0	285.5	289.4	290.8	297.7	301.0	303.0	307.0
75 Transportation equipment	37	9.5	123.1	124.1	121.3	121.5	122.3	123.3	125.2	114.2	108.2	130.3	127.6	128.6	127.4	126.2
76 Motor vehicles and parts	371	4.9	141.2	148.6	141.9	140.4	140.0	140.8	144.1	121.1	107.6	154.2	149.9	150.2	149.0	148.1
77 Autos and light trucks	371PT	2.6	128.5	134.1	132.0	128.2	128.8	130.9	132.7	110.1	86.9	142.0	136.5	140.4	138.5	137.8
78 Aerospace and miscellaneous transportation equipment	372–6,9	4.6	105.0	100.0	100.9	102.6	104.5	105.7	106.3	106.3	107.1	106.9	105.8	107.4	106.0	104.8
79 Instruments	38	5.4	113.1	112.0	111.5	112.5	112.8	113.0	113.8	112.4	112.6	113.0	114.2	115.0	113.9	114.4
80 Miscellaneous	39	1.3	117.7	119.9	119.7	119.9	120.0	120.1	119.1	118.5	118.5	117.7	117.0	115.9	114.4	115.8
81 Nondurable goods	. .	40.4	112.0	112.7	113.1	112.8	112.4	113.0	113.0	112.0	112.1	111.3	110.6	111.2	111.8	111.8
82 Foods	20	9.4	109.5	109.0	110.5	109.9	109.7	110.3	110.7	109.2	109.0	107.9	107.7	109.2	111.1	110.6
83 Tobacco products	21	1.6	106.0	106.4	110.1	112.7	105.3	109.8	111.5	104.7	106.0	107.0	104.2	101.9	99.8	100.0
84 Textile mill products	22	1.8	112.7	113.1	115.0	113.2	112.6	113.3	114.5	112.0	113.2	111.8	111.2	112.7	111.3	110.6
85 Apparel products	23	2.2	99.2	102.3	102.5	101.1	101.6	101.0	100.4	100.5	100.1	99.2	98.3	97.4	95.7	95.4
86 Paper and products	26	3.6	115.2	116.2	115.7	115.9	115.0	115.2	115.0	114.9	115.9	115.3	113.9	115.4	115.0	115.0
87 Printing and publishing	27	6.7	105.2	107.0	106.4	106.4	105.4	105.5	105.6	105.5	105.4	104.9	104.6	104.8	105.3	105.0
88 Chemicals and products	28	9.9	115.5	117.3	117.0	116.7	116.6	117.7	116.9	116.2	115.7	114.3	113.3	113.9	114.0	114.5
89 Petroleum products	29	1.4	112.2	110.6	111.2	110.5	113.0	112.8	111.5	111.6	113.4	114.1	110.7	110.6	113.5	114.3
90 Rubber and plastic products	30	3.5	132.6	130.9	131.0	131.1	131.4	133.2	133.1	132.4	132.7	132.2	132.6	133.5	134.9	135.8
91 Leather and products	31	.3	75.3	78.8	77.3	78.3	77.9	76.3	75.8	74.5	75.3	74.0	73.5	73.1	73.7	72.8
92 Mining	.	6.9	104.1	106.4	107.6	107.5	105.8	105.7	105.4	104.7	104.6	103.7	102.4	101.8	101.4	100.8
93 Metal	10	.5	110.2	107.5	110.9	123.2	109.3	106.9	108.5	108.0	105.7	109.0	106.4	111.1	112.0	111.5
94 Coal	12	1.0	109.7	116.1	112.4	104.3	103.4	107.2	106.0	110.4	112.8	109.7	115.8	110.8	108.6	114.5
95 Oil and gas extraction	13	4.8	99.9	102.2	103.6	104.6	104.0	102.9	102.4	100.4	100.0	99.2	96.8	96.8	95.2	93.4
96 Stone and earth minerals	14	.6	124.4	121.9	127.5	123.1	120.0	123.3	124.4	125.6	125.4	124.3	120.3	118.8	128.3	126.0
97 Utilities	. . .	7.7	114.6	113.1	109.8	109.0	114.0	112.8	115.2	118.7	118.3	120.2	120.3	117.4	113.9	115.7
98 Electric	491,493PT	6.2	117.8	113.8	111.4	111.2	115.7	115.2	118.9	121.0	119.8	121.2	122.6	120.3	117.7	119.0
99 Gas	492,493PT	1.6	103.3	109.9	102.2	99.3	106.3	102.0	98.3	108.4	111.7	115.7	109.7	103.8	96.5	100.6
SPECIAL AGGREGATES																
100 Manufacturing excluding motor vehicles and parts	.	80.5	134.7	132.8	133.4	133.4	133.8	134.6	134.9	134.5	135.1	134.6	134.4	135.5	135.8	136.1
101 Manufacturing excluding computer and office equipment	. .	83.6	130.2	129.7	129.6	129.4	129.5	130.2	130.6	128.8	128.6	130.6	130.0	130.9	131.0	131.1
102 Computers, communications equipment, and semiconductors	. . .	5.9	515.5	451.5	459.3	467.6	473.4	482.7	490.7	502.9	511.8	522.5	538.3	551.9	561.9	574.1
103 Manufacturing excluding computers and semiconductors	.	81.1	120.2	120.4	120.3	120.1	120.2	120.9	121.1	119.2	118.9	120.6	119.9	120.6	120.5	120.5
104 Manufacturing excluding computers, communications equipment, and semiconductors	.	79.5	118.6	118.9	118.8	118.5	118.7	119.3	119.5	117.5	117.2	119.0	118.1	118.9	118.9	118.8
		Gross value (billions of 1992 dollars, annual rates)														
Major Markets																
105 **Products, total**	.	**2,001.9**	**2,492.8**	**2,455.0**	**2,462.9**	**2,456.2**	**2,474.5**	**2,489.8**	**2,498.5**	**2,470.3**	**2,454.6**	**2,525.1**	**2,501.0**	**2,526.0**	**2,524.5**	**2,528.5**
106 Final	. .	1,552.1	1,960.9	1,927.4	1,935.8	1,928.6	1,948.1	1,961.6	1,966.1	1,938.2	1,915.6	1,985.9	1,966.4	1,988.4	1,987.0	1,985.8
107 Consumer goods	.	1,049.6	1,214.9	1,212.7	1,220.1	1,210.8	1,218.7	1,224.8	1,225.2	1,201.8	1,185.0	1,227.4	1,208.2	1,221.4	1,226.3	1,227.8
108 Equipment	. .	502.5	747.1	717.3	718.2	720.6	732.5	739.9	744.2	740.1	734.3	762.5	762.7	771.5	764.8	761.9
109 Intermediate	.	449.9	533.8	528.2	528.0	528.3	527.6	529.7	533.6	532.6	538.4	540.3	535.7	539.0	538.8	543.6

1. Data in this table appear in the Board's G.17 (419) monthly statistical release. The data are also available on the Board's web site, http://www.federalreserve.gov/releases/g17. The latest historical revision of the industrial production index and the capacity utilization rates was released in November 1998. The recent annual revision is described in an article in the January 1999 issue of the *Bulletin*. For a description of the methods of estimating industrial production and capacity utilization, see "Industrial Production and Capacity Utilization: Historical Revision and Recent Developments," *Federal Reserve Bulletin*, vol. 83 (February 1997), pp. 67–92, and the references cited therein. For details about the construction of individual industrial production series, see "Industrial Production: 1989 Developments and Historical Revision," *Federal Reserve Bulletin*, vol. 76 (April 1990), pp. 187–204.

2. Standard industrial classification.

2.14 HOUSING AND CONSTRUCTION

Monthly figures at seasonally adjusted annual rates except as noted

Item	1995	1996	1997	1998 Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.r	Oct.r	Nov.
	Private residential real estate activity (thousands of units except as noted)												
NEW UNITS													
1 Permits authorized	1,333	1,426	1,441r	1,635	1,569	1,517	1,543	1,517	1,581	1,618	1,544	1,690	1,656
2 One-family	997	1,070	1,062r	1,176	1,136	1,145	1,152	1,128	1,173	1,180	1,164	1,198	1,238
3 Two-family or more	335	356	387	459	433	372	391	389	408	438	380	492	418
4 Started	1,354	1,477	1,474	1,616	1,585	1,546	1,538	1,620	1,704	1,621	1,569	1,693	1,662
5 One-family	1,076	1,161	1,134	1,263	1,239	1,237	1,224	1,269	1,300	1,261	1,250	1,291	1,367
6 Two-family or more	278	316	340	353	346	309	314	351	404	360	319	402	295
7 Under construction at end of period[1]	776	820	834	907	911	911	917	930	937	940	948	969	970
8 One-family	554	584	570	609	616	619	627	639	643	645	650	659	666
9 Two-family or more	222	235	264	298	295	292	290	291	294	295	298	310	304
10 Completed	1,319	1,405	1,407	1,461	1,486	1,509	1,458	1,484	1,549	1,515	1,466	1,447	1,596
11 One-family	1,073	1,123	1,122	1,142	1,130	1,198	1,112	1,166	1,225	1,178	1,185	1,156	1,254
12 Two-family or more	247	283	285	319	356	311	346	318	324	337	281	291	342
13 Mobile homes shipped	341	361	354	377	374	370	374	362	380	368	369	352	390
Merchant builder activity in one-family units													
14 Number sold	667	757	803	878	836	892	892	919	877	839r	843	897	965
15 Number for sale at end of period[1]	374	326	287	281	285	286	287	287	284	285	289	293	292
Price of units sold (thousands of dollars)[2]													
16 Median	133.9	140.0	145.9	156.0	152.0	148.0	153.2	148.0	149.9	154.9r	153.0	150.0	148.7
17 Average	158.7	166.4	175.8	181.6	178.9	176.7	183.5	175.9	179.8	186.5r	182.6	181.5	175.4
EXISTING UNITS (one-family)													
18 Number sold	3,812	4,087	4,215	4,770	4,890	4,770	4,830	4,740	4,910	4,730	4,690	4,770	4,880
Price of units sold (thousands of dollars)[2]													
19 Median	113.1	118.2	124.1	124.5	127.1	128.2	130.5	134.0	133.8	132.9	131.2	130.7	131.7
20 Average	139.1	145.5	154.2	153.9	157.2	159.7	162.3	169.2	168.4	165.9	162.9	161.8	163.9
	Value of new construction (millions of dollars)[3]												
CONSTRUCTION													
21 Total put in place	**538,158**	**581,813**	**618,051**	**638,180**	**639,913**	**645,974**	**635,396**	**650,341**	**658,673r**	**663,300r**	**670,133**	**672,049**	**677,752**
22 Private	408,012	444,743	470,969	490,896	494,333	500,078	496,495	503,592	511,514r	516,601r	521,050	527,069	529,624
23 Residential	231,191	255,570	265,536	282,496	286,045	289,666	288,003	291,907	299,300r	300,612r	304,993	307,533	311,191
24 Nonresidential	176,821	189,173	205,433	208,400	208,288	210,412	208,492	211,685	212,214r	215,989r	216,057	219,536	218,433
25 Industrial buildings	32,535	32,563	31,417	30,936	31,474	31,457	29,642	30,067	28,616r	32,302r	30,300	29,069	28,247
26 Commercial buildings	68,245	75,722	83,727	84,152	83,981	86,064	86,321	88,480	88,310r	86,243r	87,553	90,271	92,885
27 Other buildings	27,084	30,637	37,382	39,151	37,812	39,168	37,678	37,334	37,406r	38,305r	38,309	38,006	37,624
28 Public utilities and other	48,957	50,252	52,906	54,161	55,021	53,723	54,851	55,804	57,882r	59,139r	59,895	62,190	59,677
29 Public	130,147	137,070	147,082	147,284	145,580	145,896	138,901	146,749	147,159r	146,699r	149,083	144,979	148,128
30 Military	2,983	2,639	2,625	2,916	2,818	2,850	2,471	2,659	3,325r	3,187r	2,325	2,577	2,499
31 Highway	38,126	41,326	45,246	45,561	45,559	46,175	42,030	44,541	43,809r	44,291r	45,719	45,713	46,045
32 Conservation and development	6,371	5,926	5,628	6,305	5,488	4,985	5,146	5,989	5,475r	5,442r	5,904	5,148	5,763
33 Other	82,667	87,179	93,583	92,502	91,715	91,886	89,254	93,560	94,550r	93,779r	95,135	91,541	93,821

1. Not at annual rates.
2. Not seasonally adjusted.
3. Recent data on value of new construction may not be strictly comparable with data for previous periods because of changes by the Bureau of the Census in its estimating techniques. For a description of these changes, see *Construction Reports* (C-30-76-5), issued by the Census Bureau in July 1976.

SOURCE. Bureau of the Census estimates for all series except (1) mobile homes, which are private, domestic shipments as reported by the Manufactured Housing Institute and seasonally adjusted by the Census Bureau, and (2) sales and prices of existing units, which are published by the National Association of Realtors. All back and current figures are available from the originating agency. Permit authorizations are those reported to the Census Bureau from 19,000 jurisdictions beginning in 1994.

2.15 CONSUMER AND PRODUCER PRICES

Percentage changes based on seasonally adjusted data except as noted

Item	Change from 12 months earlier		Change from 3 months earlier (annual rate)				Change from 1 month earlier					Index level, Dec. 1998[1]
	1997 Dec.	1998 Dec.	1998 Mar.	1998 June	1998 Sept.	1998 Dec.	1998 Aug.	1998 Sept.	1998 Oct.	1998 Nov.	1998 Dec.	
CONSUMER PRICES[2] (1982–84=100)												
1 **All items**	**1.7**	**1.6**	**.2**	**2.5**	**1.5**	**2.2**	**.2**	**.0**	**.2**	**.2**	**.1**	**163.9**
2 Food	1.5	2.3	1.3	3.0	2.0	2.8	.2	.0	.6	.1	.0	162.3
3 Energy items	−3.4	−8.8	−21.1	−1.9	−8.7	−2.0	−1.0	−1.3	.9	.0	−1.4	98.9
4 All items less food and energy	2.2	2.4	2.4	2.6	2.3	2.5	.2	.2	.2	.2	.3	174.8
5 Commodities	.4	1.3	.8	1.1	1.1	2.0	.2	−.1	.0	−.1	.6	143.9
6 Services	3.0	3.0	3.0	3.2	3.0	2.5	.3	.3	.2	.3	.2	192.5
PRODUCER PRICES (1982=100)												
7 Finished goods	−1.2	−.1	−3.0	.3	.3	1.9	−.3[r]	.2[r]	.2	−.2	.4	131.0
8 Consumer foods	−.8	−.1	−1.8	.9	1.8	−1.2	−.2[r]	.2[r]	.4	−.5	−.1	134.3
9 Consumer energy	−6.4	−12.1	−27.0	−1.1	−10.2	−8.9	−2.5[r]	.0[r]	1.2	−1.2	−2.3	70.5
10 Other consumer goods	.3	4.1	3.9	1.4	3.3	7.8	.1[r]	.4[r]	.0	.1	1.7	151.5
11 Capital equipment	−.6	−.1	.0	−1.2	.9	.0	−.1[r]	.3[r]	.0	.1	−.1	137.8
Intermediate materials												
12 Excluding foods and feeds	−.8	−2.9	−4.4	−1.3	−1.9	−4.2	−.3	−.2	−.2	−.2	−.6	121.5
13 Excluding energy	.3	−1.5	−.9	−1.2	−1.5	−2.7	−.1[r]	−.2[r]	−.3	−.2	−.2	132.3
Crude materials												
14 Foods	−4.0	−10.8	−14.3	−.7	−22.6	−5.9	−.8[r]	−2.1[r]	4.0	−1.9	−3.4	97.2
15 Energy	−23.1	−26.5	−53.5	−14.6	−15.2	−13.0	−9.0[r]	−.5[r]	1.9	.0	−5.2	62.0
16 Other	.0	−16.0	−13.6	−5.6	−18.3	−25.4	−2.6[r]	−.9[r]	−2.7	−2.5	−2.0	128.1

1. Not seasonally adjusted.
2. Figures for consumer prices are for all urban consumers and reflect a rental-equivalence measure of homeownership.

SOURCE. U.S. Department of Labor, Bureau of Labor Statistics.

2.16 GROSS DOMESTIC PRODUCT AND INCOME

Billions of current dollars except as noted; quarterly data at seasonally adjusted annual rates

Account	1995	1996	1997	1997 Q3	1997 Q4	1998 Q1	1998 Q2	1998 Q3
GROSS DOMESTIC PRODUCT								
1 **Total**	**7,269.6**	**7,661.6**	**8,110.9**	**8,170.8**	**8,254.5**	**8,384.2**	**8,440.6**	**8,537.9**
By source								
2 Personal consumption expenditures	4,953.9	5,215.7	5,493.7	5,540.3	5,593.2	5,676.5	5,773.7	5,846.7
3 Durable goods	611.0	643.3	673.0	681.2	682.2	705.1	720.1	718.9
4 Nondurable goods	1,473.6	1,539.2	1,600.6	1,611.3	1,613.2	1,633.1	1,655.2	1,670.0
5 Services	2,869.2	3,033.2	3,220.1	3,247.9	3,297.8	3,338.2	3,398.4	3,457.7
6 Gross private domestic investment	1,043.2	1,131.9	1,256.0	1,265.7	1,292.0	1,366.6	1,345.0	1,364.4
7 Fixed investment	1,012.5	1,099.8	1,188.6	1,211.1	1,220.1	1,271.1	1,305.8	1,307.5
8 Nonresidential	727.7	787.9	860.7	882.3	882.8	921.3	941.9	931.6
9 Structures	201.3	216.9	240.2	243.8	246.4	245.0	245.4	246.2
10 Producers' durable equipment	526.4	571.0	620.5	638.5	636.4	676.3	696.6	685.4
11 Residential structures	284.8	311.8	327.9	328.8	337.4	349.8	363.8	375.8
12 Change in business inventories	30.7	32.1	67.4	54.6	71.9	95.5	39.2	57.0
13 Nonfarm	40.1	24.5	63.1	47.3	66.9	90.5	31.5	49.3
14 Net exports of goods and services	−83.9	−91.2	−93.4	−94.7	−98.8	−123.7	−159.3	−165.5
15 Exports	819.4	873.8	965.4	981.7	988.6	973.3	949.6	936.2
16 Imports	903.3	965.0	1,058.8	1,076.4	1,087.4	1,097.1	1,108.9	1,101.7
17 Government consumption expenditures and gross investment	1,356.4	1,405.2	1,454.6	1,459.5	1,468.1	1,464.9	1,481.2	1,492.3
18 Federal	509.1	518.4	520.2	521.0	520.1	511.6	520.7	519.4
19 State and local	847.3	886.8	934.4	938.5	947.9	953.3	960.4	972.9
By major type of product								
20 Final sales, total	7,238.9	7,629.5	8,043.5	8,116.2	8,182.6	8,288.7	8,401.3	8,480.9
21 Goods	2,644.9	2,780.3	2,911.2	2,944.3	2,948.7	3,005.8	3,025.3	3,029.0
22 Durable	1,143.4	1,228.8	1,310.1	1,337.1	1,334.3	1,376.9	1,380.8	1,373.0
23 Nondurable	1,501.5	1,551.6	1,601.0	1,607.2	1,614.4	1,628.8	1,644.4	1,655.9
24 Services	3,974.9	4,179.5	4,414.1	4,448.0	4,501.2	4,538.4	4,619.5	4,678.5
25 Structures	619.1	669.7	718.3	723.9	732.7	744.6	756.6	773.5
26 Change in business inventories	30.7	32.1	67.4	54.6	71.9	95.5	39.2	57.0
27 Durable goods	32.4	20.8	33.6	19.9	34.0	49.9	4.5	19.5
28 Nondurable goods	−1.7	11.4	33.8	34.7	37.9	45.6	34.7	37.5
MEMO								
29 **Total GDP in chained 1992 dollars**	**6,761.7**	**6,994.8**	**7,269.8**	**7,311.2**	**7,364.6**	**7,464.7**	**7,498.6**	**7,566.5**
NATIONAL INCOME								
30 **Total**	**5,923.7**	**6,256.0**	**6,646.5**	**6,704.8**	**6,767.9**	**6,875.0**	**6,945.5**	**7,032.3**
31 Compensation of employees	4,208.9	4,409.0	4,687.2	4,715.5	4,798.0	4,882.8	4,945.2	5,011.6
32 Wages and salaries	3,441.9	3,640.4	3,893.6	3,919.3	3,993.6	4,065.9	4,121.6	4,181.1
33 Government and government enterprises	622.7	640.9	664.2	666.7	671.4	679.5	685.8	692.7
34 Other	2,819.2	2,999.5	3,229.4	3,252.6	3,322.2	3,386.4	3,435.8	3,488.4
35 Supplement to wages and salaries	767.0	768.6	793.7	796.2	804.4	816.8	823.5	830.5
36 Employer contributions for social insurance	365.3	381.7	400.7	402.7	407.4	414.1	417.9	422.1
37 Other labor income	401.6	387.0	392.9	393.6	397.0	402.8	405.7	408.4
38 Proprietors' income[1]	488.1	527.7	551.2	556.5	558.0	564.2	571.7	576.1
39 Business and professional[1]	465.6	488.8	515.8	520.2	526.6	536.8	544.0	550.9
40 Farm[1]	22.4	38.9	35.5	36.3	31.4	27.4	27.7	25.2
41 Rental income of persons[2]	133.7	150.2	158.2	158.6	158.8	158.3	161.0	163.6
42 Corporate profits[1]	672.4	750.4	817.9	840.9	820.8	829.2	820.6	827.0
43 Profits before tax[3]	635.6	680.2	734.4	758.9	736.4	719.1	723.5	720.5
44 Inventory valuation adjustment	−22.6	−1.2	6.9	4.8	4.3	25.3	7.8	11.7
45 Capital consumption adjustment	59.4	71.4	76.6	77.2	80.1	84.9	89.4	94.8
46 Net interest	420.6	418.6	432.0	433.3	432.4	440.5	447.1	454.0

1. With inventory valuation and capital consumption adjustments.
2. With capital consumption adjustment.
3. For after-tax profits, dividends, and the like, see table 1.48.

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

2.17 PERSONAL INCOME AND SAVING

Billions of current dollars except as noted; quarterly data at seasonally adjusted annual rates

Account	1995	1996	1997	1997		1998		
				Q3	Q4	Q1	Q2	Q3
PERSONAL INCOME AND SAVING								
1 **Total personal income**	**6,072.1**	**6,425.2**	**6,784.0**	**6,820.9**	**6,904.9**	**7,003.9**	**7,081.9**	**7,160.8**
2 Wage and salary disbursements	3,428.5	3,631.1	3,889.8	3,915.5	3,989.9	4,061.9	4,117.6	4,177.1
3 Commodity-producing industries	863.9	909.0	975.0	979.4	1,003.7	1,019.0	1,023.2	1,028.0
4 Manufacturing	647.9	674.6	719.5	722.3	741.3	750.4	750.8	750.9
5 Distributive industries	782.9	823.3	879.8	886.3	904.5	918.9	932.2	945.8
6 Service industries	1,158.9	1,257.9	1,370.8	1,383.2	1,410.2	1,444.5	1,476.4	1,510.6
7 Government and government enterprises	622.7	640.9	664.2	666.7	671.4	679.5	685.8	692.7
8 Other labor income	401.6	387.0	392.9	393.6	397.0	402.8	405.7	408.4
9 Proprietors' income[1]	488.1	527.7	551.2	556.5	558.0	564.2	571.7	576.1
10 Business and professional[1]	465.6	488.8	515.8	520.2	526.6	536.8	544.0	550.9
11 Farm[1]	22.4	38.9	35.5	36.3	31.4	27.4	27.7	25.2
12 Rental income of persons[2]	133.7	150.2	158.2	158.6	158.8	158.3	161.0	163.6
13 Dividends	192.8	248.2	260.3	260.4	261.3	261.6	262.1	263.0
14 Personal interest income	704.9	719.4	747.3	750.5	753.0	757.0	763.0	769.2
15 Transfer payments	1,015.9	1,068.0	1,110.4	1,114.0	1,120.5	1,139.0	1,145.8	1,152.9
16 Old-age survivors, disability, and health insurance benefits	507.8	538.0	565.9	568.3	572.2	581.6	585.0	589.0
17 LESS: Personal contributions for social insurance	293.6	306.3	326.2	328.2	333.6	340.9	345.1	349.5
18 EQUALS: Personal income	6,072.1	6,425.2	6,784.0	6,820.9	6,904.9	7,003.9	7,081.9	7,160.8
19 LESS: Personal tax and nontax payments	795.0	890.5	989.0	999.0	1,025.5	1,066.8	1,092.9	1,108.4
20 EQUALS: Disposable personal income	5,277.0	5,534.7	5,795.1	5,821.8	5,879.4	5,937.1	5,988.9	6,052.4
21 LESS: Personal outlays	5,097.2	5,376.2	5,674.1	5,723.3	5,781.2	5,864.0	5,963.3	6,039.8
22 EQUALS: Personal saving	179.8	158.5	121.0	98.5	98.2	73.0	25.6	12.6
MEMO								
Per capita (chained 1992 dollars)								
23 Gross domestic product	25,690.5	26,335.8[r]	27,136.2	27,260.4	27,398.2	27,718.8	27,783.0	27,972.1
24 Personal consumption expenditures	17,498.4	17,893.1[r]	18,340.8[r]	18,445.2	18,530.5	18,771.1	19,007.8	19,156.3
25 Disposable personal income	18,640.0	18,989.0	19,349.0	19,385.0	19,478.0	19,632.0	19,719.0	19,829.0
26 Saving rate (percent)	3.4	2.9	2.1	1.7	1.7	1.2	.4	.2
GROSS SAVING								
27 **Gross saving**	**1,187.4**	**1,274.5**	**1,406.3**	**1,427.0**	**1,428.0**	**1,482.5**	**1,448.5**	**1,474.5**
28 Gross private saving	1,106.2	1,114.5	1,141.6	1,139.0	1,131.6	1,130.1	1,079.0	1,078.7
29 Personal saving	179.8	158.5	121.0	98.5	98.2	73.0	25.6	12.6
30 Undistributed corporate profits[1]	256.1	262.4	296.7	311.5	295.0	312.0	300.9	304.8
31 Corporate inventory valuation adjustment	−22.6	−1.2	6.9	4.8	4.3	25.3	7.8	11.7
Capital consumption allowances								
32 Corporate	431.1	452.0	477.3	480.8	487.7	492.5	497.8	503.1
33 Noncorporate	225.9	232.3	242.8	244.4	247.0	248.6	250.7	254.2
34 Gross government saving	81.2	160.0	264.7	288.0	296.4	352.4	369.4	395.7
35 Federal	−103.7	−39.6	49.5	70.0	72.3	128.7	143.9	161.6
36 Consumption of fixed capital	70.7	70.6	70.6	70.3	70.2	69.9	69.5	69.6
37 Current surplus or deficit (−), national accounts	−174.4	−110.3	−21.1	−.3	2.2	58.8	74.4	92.0
38 State and local	184.8	199.7	215.2	218.0	224.1	223.7	225.6	234.2
39 Consumption of fixed capital	73.2	77.1	81.1	81.4	82.7	83.5	84.3	85.4
40 Current surplus or deficit (−), national accounts	111.7	122.6	134.1	136.6	141.4	140.2	141.3	148.7
41 **Gross investment**	**1,160.9**	**1,242.3**	**1,350.5**	**1,361.9**	**1,360.7**	**1,428.4**	**1,362.7**	**1,372.5**
42 Gross private domestic investment	1,043.2	1,131.9	1,256.0	1,265.7	1,292.0	1,366.6	1,345.0	1,364.4
43 Gross government investment	218.4	229.7	235.4	237.3	236.5	237.4	232.5	239.7
44 Net foreign investment	−100.6	−119.2	−140.9	−141.0	−167.8	−175.6	−214.8	−231.6
45 **Statistical discrepancy**	**−26.5**	**−32.2**	**−55.8**	**−65.1**	**−67.3**	**−54.1**	**−85.7**	**−102.0**

1. With inventory valuation and capital consumption adjustments.
2. With capital consumption adjustment.

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

3.10 U.S. INTERNATIONAL TRANSACTIONS Summary

Millions of dollars; quarterly data seasonally adjusted except as noted[1]

Item credits or debits	1995	1996	1997	1997		1998		
				Q3	Q4	Q1	Q2	Q3[p]
1 Balance on current account	−115,254	−134,915	−155,215	−38,094	−45,043	−46,735	−56,690	−61,299
2 Merchandise trade balance[2]	−173,729	−191,337	−197,954	−49,296	−49,839	−55,698	−64,443	−64,360
3 Merchandise exports	575,845	611,983	679,325	172,302	174,284	171,469	164,821	163,560
4 Merchandise imports	−749,574	−803,320	−877,279	−221,598	−224,123	−227,167	−229,264	−227,920
5 Military transactions, net	4,769	4,684	6,781	1,945	1,103	1,527	1,043	1,101
6 Other service transactions, net	69,069	78,079	80,967	20,246	20,277	19,164	19,529	17,504
7 Investment income, net	19,275	14,236	−5,318	−1,544	−4,247	−2,248	−3,377	−5,460
8 U.S. government grants	−11,170	−15,023	−12,090	−2,362	−5,213	−2,266	−2,063	−2,582
9 U.S. government pensions and other transfers	−3,433	−4,442	−4,193	−1,056	−1,069	−1,126	−1,126	−1,132
10 Private remittances and other transfers	−20,035	−21,112	−23,408	−6,027	−6,055	−6,088	−6,253	−6,370
11 Change in U.S. government assets other than official reserve assets, net (increase, −)	−589	−708	174	436	29	−388	−433	194
12 Change in U.S. official reserve assets (increase, −)	−9,742	6,668	−1,010	−730	−4,524	−444	−1,945	−2,026
13 Gold	0	0	0	0	0	0	0	0
14 Special drawing rights (SDRs)	−808	370	−350	−139	−150	−182	72	188
15 Reserve position in International Monetary Fund	−2,466	−1,280	−3,575	−463	−4,221	−85	−1,031	−2,078
16 Foreign currencies	−6,468	7,578	2,915	−128	−153	−177	−986	−136
17 Change in U.S. private assets abroad (increase, −)	−317,122	−374,761	−477,666	−123,023	−118,946	−44,816	−107,409	−46,220
18 Bank-reported claims[3]	−75,108	−91,555	−147,439	−29,577	−27,539	3,074	−24,615	−28,335
19 Nonbank-reported claims	−45,286	−86,333	−120,403	−24,791	−47,907	−6,596	−14,327	...
20 U.S. purchases of foreign securities, net	−100,074	−115,801	−87,981	−41,167	−8,030	−6,973	−27,878	16,970
21 U.S. direct investments abroad, net	−96,654	−81,072	−121,843	−27,488	−35,470	−34,321	−40,589	−21,243
22 Change in foreign official assets in United States (increase, +)	109,768	127,344	15,817	21,258	−26,979	11,324	−10,274	−46,370
23 U.S. Treasury securities	68,977	115,671	−7,270	6,686	−24,578	11,336	−20,318	−32,811
24 Other U.S. government obligations	3,735	5,008	4,334	2,667	86	2,610	254	1,906
25 Other U.S. government liabilities[4]	−217	−362	−2,521	−1,167	−244	−1,059	−422	−414
26 Other U.S. liabilities reported by U.S. banks[3]	34,008	5,704	21,928	12,439	−3,250	−607	9,380	−12,607
27 Other foreign official assets[5]	3,265	1,323	−654	633	1,007	−956	832	−2,444
28 Change in foreign private assets in United States (increase, +)	355,681	436,013	717,624	160,180	247,470	84,205	175,133	159,232
29 U.S. bank-reported liabilities[3]	30,176	16,478	148,059	12,606	89,643	−50,497	37,670	82,680
30 U.S. nonbank-reported liabilities	59,637	39,404	107,779	26,275	47,390	32,707	18,040	...
31 Foreign private purchases of U.S. Treasury securities, net	99,548	154,996	146,710	35,432	35,301	−1,701	26,916	−257
32 U.S. currency flows	12,300	17,362	24,782	6,576	9,900	746	2,349	7,277
33 Foreign purchases of other U.S. securities, net	96,367	130,151	196,845	60,327	36,783	77,019	71,017	22,938
34 Foreign direct investments in United States, net	57,653	77,622	93,449	18,964	28,453	25,931	19,141	27,065
35 Allocation of special drawing rights	0	0	0	0	0	0	0	0
36 Discrepancy	−22,742	−59,641	−99,724	−20,027	−52,007	−3,146	1,618	−3,511
37 Due to seasonal adjustment	...	...	...	−10,018	3,528	6,217	1,474	−10,760
38 Before seasonal adjustment	−22,742	−59,641	−99,724	−10,009	−55,535	−9,363	144	7,249
MEMO								
Changes in official assets								
39 U.S. official reserve assets (increase, −)	−9,742	6,668	−1,010	−730	−4,524	−444	−1,945	−2,026
40 Foreign official assets in United States, excluding line 25 (increase, +)	109,985	127,706	18,338	22,425	−26,735	12,383	−9,852	−45,956
41 Change in Organization of Petroleum Exporting Countries official assets in United States (part of line 22)	4,239	14,911	10,822	3,031	−1,282	−968	−494	−12,013

1. Seasonal factors are not calculated for lines 12–16, 18–20, 22–34, and 38–40.
2. Data are on an international accounts basis. The data differ from the Census basis data, shown in table 3.11, for reasons of coverage and timing. Military exports are excluded from merchandise trade data and are included in line 5.
3. Reporting banks include all types of depository institutions as well as some brokers and dealers.
4. Associated primarily with military sales contracts and other transactions arranged with or through foreign official agencies.
5. Consists of investments in U.S. corporate stocks and in debt securities of private corporations and state and local governments.

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

3.11 U.S. FOREIGN TRADE[1]

Millions of dollars; monthly data seasonally adjusted

Item	1995	1996	1997	1998 May	June	July	Aug.	Sept.	Oct.	Nov.[p]
1 Goods and services, balance	−101,857	−111,040	−113,684	−15,641	−14,213	−14,917	−16,674	−14,369	−13,588	−15,493
2 Merchandise	−173,560	−191,170	−198,975	−22,578	−20,530	−21,029	−22,735	−20,801	−20,167	−21,881
3 Services	71,703	80,130	85,291	6,937	6,317	6,112	6,061	6,432	6,579	6,388
4 Goods and services, exports	794,610	848,833	931,370	76,650	76,225	74,994	74,988	77,467	80,219	78,653
5 Merchandise	575,871	612,069	678,150	54,719	54,767	53,825	53,862	56,005	58,339	56,837
6 Services	218,739	236,764	253,220	21,931	21,458	21,169	21,126	21,462	21,880	21,816
7 Goods and services, imports	−896,467	−959,873	−1,045,054	−92,291	−90,438	−89,911	−91,662	−91,836	−93,807	−94,146
8 Merchandise	−749,431	−803,239	−877,125	−77,297	−75,297	−74,854	−76,597	−76,806	−78,506	−78,718
9 Services	−147,036	−156,634	−167,929	−14,994	−15,141	−15,057	−15,065	−15,030	−15,301	−15,428

1. Data show monthly values consistent with quarterly figures in the U.S. balance of payments accounts.

SOURCE. *FT900*, U.S. Department of Commerce, Bureau of the Census and Bureau of Economic Analysis.

3.12 U.S. RESERVE ASSETS

Millions of dollars, end of period

Asset	1995	1996	1997	1998 May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.[p]
1 **Total**	**85,832**	**75,090**	**69,954**	**70,723**	**71,161**	**72,264**	**73,544**	**75,66**	**79,183**	**77,683**	**81,755**
2 Gold stock, including Exchange Stabilization Fund[1]	11,050	11,049	11,050	11,049	11,047	11,046	11,046	11,044	11,041	11,041	11,041
3 Special drawing rights[2,3]	11,037	10,312	10,027	10,296	10,001	9,586	9,891	10,106	10,379	10,393	10,603
4 Reserve position in International Monetary Fund[2]	14,649	15,435	18,071	18,957	18,945	20,780	21,161	21,644	22,278	22,049	24,111
5 Foreign currencies[4]	49,096	38,294	30,809	30,421	31,168	30,852	31,446	32,882	35,485	34,200	36,001

1. Gold held "under earmark" at Federal Reserve Banks for foreign and international accounts is not included in the gold stock of the United States; see table 3.13, line 3. Gold stock is valued at $42.22 per fine troy ounce.
2. Special drawing rights (SDRs) are valued according to a technique adopted by the International Monetary Fund (IMF) in July 1974. Values are based on a weighted average of exchange rates for the currencies of member countries. From July 1974 through December 1980, sixteen currencies were used; since January 1981, five currencies have been used. U.S. SDR holdings and reserve positions in the IMF also have been valued on this basis since July 1974.
3. Includes allocations of SDRs by the International Monetary Fund on Jan. 1 of the year indicated, as follows: 1970—$867 million; 1971—$717 million; 1972—$710 million; 1979—$1,139 million; 1980—$1,152 million; 1981—$1,093 million; plus net transactions in SDRs.
4. Valued at current market exchange rates.

3.13 FOREIGN OFFICIAL ASSETS HELD AT FEDERAL RESERVE BANKS[1]

Millions of dollars, end of period

Asset	1995	1996	1997	1998 May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.[p]
1 **Deposits**	**386**	**167**	**457**	**156**	**200**	**161**	**161**	**347**	**154**	**211**	**167**
Held in custody											
2 U.S. Treasury securities[2]	522,170	638,049	620,885	622,557	616,569	613,893	588,337	578,403	588,768	608,060	607,574
3 Earmarked gold[3]	11,702	11,197	10,763	10,641	10,617	10,586	10,510	10,457	10,403	10,355	10,343

1. Excludes deposits and U.S. Treasury securities held for international and regional organizations.
2. Marketable U.S. Treasury bills, notes, and bonds and nonmarketable U.S. Treasury securities, in each case measured at face (not market) value.
3. Held in foreign and international accounts and valued at $42.22 per fine troy ounce; not included in the gold stock of the United States.

3.15 SELECTED U.S. LIABILITIES TO FOREIGN OFFICIAL INSTITUTIONS

Millions of dollars, end of period

Item	1996	1997	1998						
			May[r]	June	July	Aug.	Sept.	Oct.	Nov.[p]
1 **Total**[1]	**758,624**	**778,596[r]**	**786,183**	**781,205[r]**	**775,372[r]**	**760,864[r]**	**735,121[r]**	**747,509[r]**	**753,911**
By type									
2 Liabilities reported by banks in the United States[2]	113,098	135,384[r]	142,657	144,235[r]	142,375[r]	144,120[r]	131,551[r]	135,088[r]	125,470
3 U.S. Treasury bills and certificates[3]	198,921	148,301	137,652	134,324	131,089	130,398	128,146	128,598	133,702
U.S. Treasury bonds and notes									
4 Marketable	379,497	423,456	431,702	428,216	428,685	411,765	401,461	410,462	422,305
5 Nonmarketable[4]	5,968	5,994	6,189	6,229	6,269	6,311	6,350	5,997	6,035
6 U.S. securities other than U.S. Treasury securities[5]	61,140	65,461	67,983	68,201	66,954	68,270	67,613	67,364	66,399
By area									
7 Europe[1]	257,915	263,221[r]	269,174	264,718[r]	270,355[r]	266,600	258,234	270,632	271,962
8 Canada	21,295	18,749	20,122	19,396	19,963	16,387	16,170	17,216	19,457
9 Latin America and Caribbean	80,623	97,616	101,833	100,924[r]	100,901[r]	98,480[r]	79,838[r]	78,123[r]	77,418
10 Asia	385,484	382,363[r]	379,147	378,113	367,687	363,902	365,631	368,068[r]	371,796
11 Africa	7,379	10,118	10,577	11,555	11,904	11,501	11,721	11,113[r]	10,221
12 Other countries	5,926	6,527	5,328	6,497	4,560	3,992	3,525	2,355	3,055

1. Includes the Bank for International Settlements.
2. Principally demand deposits, time deposits, bankers acceptances, commercial paper, negotiable time certificates of deposit, and borrowings under repurchase agreements.
3. Includes nonmarketable certificates of indebtedness and Treasury bills issued to official institutions of foreign countries.
4. Excludes notes issued to foreign official nonreserve agencies. Includes current value of zero-coupon Treasury bond issues to foreign governments as follows: Mexico, beginning March 1988, 20-year maturity issue and beginning March 1990, 30-year maturity issue; Venezuela, beginning December 1990, 30-year maturity issue; Argentina, beginning April 1993, 30-year maturity issue.
5. Debt securities of U.S. government corporations and federally sponsored agencies, and U.S. corporate stocks and bonds.

SOURCE. Based on U.S. Department of the Treasury data and on data reported to the department by banks (including Federal Reserve Banks) and securities dealers in the United States, and on the 1989 benchmark survey of foreign portfolio investment in the United States.

3.16 LIABILITIES TO, AND CLAIMS ON, FOREIGNERS Reported by Banks in the United States[1] Payable in Foreign Currencies

Millions of dollars, end of period

Item	1994	1995	1996	1997	1998[r]		
				Dec.	Mar.	June	Sept.
1 Banks' liabilities	89,258	109,713	103,383	117,524	100,638	87,889	93,815
2 Banks' claims	60,711	74,016	66,018	83,038	82,209	68,286	67,813
3 Deposits	19,661	22,696	22,467	28,661	28,127	27,387	27,293
4 Other claims	41,050	51,320	43,551	54,377	54,082	40,899	40,520
5 Claims of banks' domestic customers[2]	10,878	6,145	10,978	8,191	7,926	7,354	8,453

1. Data on claims exclude foreign currencies held by U.S. monetary authorities.
2. Assets owned by customers of the reporting bank located in the United States that represent claims on foreigners held by reporting banks for the accounts of the domestic customers.

3.17 LIABILITIES TO FOREIGNERS Reported by Banks in the United States[1]
Payable in U.S. dollars

Millions of dollars, end of period

Item	1995	1996	1997	1998						
				May[r]	June	July	Aug.	Sept.	Oct.	Nov.[p]
BY HOLDER AND TYPE OF LIABILITY										
1 **Total, all foreigners**	**1,099,549**	**1,162,148**	**1,283,787r**	**1,260,399**	**1,288,032**	**1,306,155r**	**1,341,295r**	**1,350,292r**	**1,372,015**	**1,346,836**
2 Banks' own liabilities	753,461	758,998	883,740r	852,149	884,734	896,972	928,182	917,008r	910,971	881,306
3 Demand deposits	24,448	27,034	32,104	31,199	36,246	30,928	33,038	33,547	32,071	32,077
4 Time deposits[2]	192,558	186,910	198,546r	185,309	186,686	188,056	183,556r	174,173r	158,651	149,730
5 Other[3]	140,165	143,510	168,011r	192,115	183,402r	192,536	190,542r	165,205r	153,050	143,375
6 Own foreign offices[4]	396,290	401,544	485,079r	443,526	478,400r	485,452	521,046	544,083r	567,199	556,124
7 Banks' custodial liabilities[5]	346,088	403,150	400,047	408,250	403,298	409,183r	413,113r	433,284	461,044	465,530
8 U.S. Treasury bills and certificates[6]	197,355	236,874	193,239	173,873	169,225	164,274	162,235	160,598	168,764	182,917
9 Other negotiable and readily transferable instruments[7]	52,200	72,011	93,641	107,826	112,598	117,433	123,378	142,169	151,229	142,391
10 Other	96,533	94,265	113,167	126,551	121,475	127,476r	127,500r	130,517	141,051	140,222
11 Nonmonetary international and regional organizations[8]	11,039	13,972	11,690	14,202	14,103	14,314	15,188	15,215	12,688	13,201
12 Banks' own liabilities	10,347	13,355	11,486	13,559	13,441	12,188	13,684	13,862	11,522	12,261
13 Demand deposits	21	29	16	227	226	19	59	408	97	234
14 Time deposits[2]	4,656	5,784	5,466	7,029	6,784	6,354	6,252	5,763	5,418	5,802
15 Other[3]	5,670	7,542	6,004	6,303	6,431	5,815	7,373	7,691	6,007	6,225
16 Banks' custodial liabilities[5]	692	617	204	643	662	2,126	1,504	1,353	1,166	940
17 U.S. Treasury bills and certificates[6]	350	352	69	359	338	349	490	435	509	570
18 Other negotiable and readily transferable instruments[7]	341	265	133	284	322	1,777	1,012	818	657	370
19 Other	1	0	2	0	2	0	2	100	0	0
20 Official institutions[9]	275,928	312,019	283,685r	280,309	278,559r	273,464r	274,518r	259,697r	263,686	259,172
21 Banks' own liabilities	83,447	79,406	102,028r	104,389	102,392r	102,275r	101,608r	85,310r	85,092	79,655
22 Demand deposits	2,098	1,511	2,314	2,052	2,582	3,560	3,456	3,607	3,325	2,744
23 Time deposits[2]	30,717	33,336	41,396r	36,074	36,044r	36,333r	35,578r	28,076r	26,434	25,851
24 Other[3]	50,632	44,559	58,318r	66,263	63,766r	62,382r	62,574r	53,627r	55,333	51,060
25 Banks' custodial liabilities[5]	192,481	232,613	181,657r	175,920	176,167	171,189	172,910	174,387	178,594	179,517
26 U.S. Treasury bills and certificates[6]	168,534	198,921	148,301	137,652	134,324	131,089	130,398	128,146	128,598	133,702
27 Other negotiable and readily transferable instruments[7]	23,603	33,266	33,151r	37,978	41,180	39,792	41,759	45,684	49,691	45,346
28 Other	344	426	205	290	663	308	753	557	305	469
29 Banks[10]	691,412	694,835	816,007r	782,954	809,091r	824,652r	852,890r	876,463r	898,782	886,291
30 Banks' own liabilities	567,834	562,898	642,207r	602,048	632,872r	643,722r	673,127r	687,824r	690,431	674,151
31 Unaffiliated foreign banks	171,544	161,354	157,128r	158,522	154,472r	158,270r	152,081r	143,741r	123,232	118,027
32 Demand deposits	11,758	13,692	17,527	16,111	20,772	15,097	16,063	15,799	15,802	15,119
33 Time deposits[2]	103,471	89,765	83,433	74,168	75,231	78,252	74,201	71,259r	55,837	51,190
34 Other[3]	56,315	57,897	56,168r	68,243	58,469r	64,921r	61,817r	56,683r	51,593	51,718
35 Own foreign offices[4]	396,290	401,544	485,079r	443,526	478,400r	485,452	521,046	544,083r	567,199	556,124
36 Banks' custodial liabilities[5]	123,578	131,937	173,800r	180,906	176,219	180,930r	179,763r	188,639	208,351	212,140
37 U.S. Treasury bills and certificates[6]	15,872	23,106	31,915	26,920	25,337	22,929	20,696	21,563	27,556	35,213
38 Other negotiable and readily transferable instruments[7]	13,035	17,027	35,393r	38,231	38,122	39,203	40,180	44,807	48,230	44,991
39 Other	94,671	91,804	106,492	115,755	112,760	118,798r	118,887r	122,269	132,565	131,936
40 Other foreigners	121,170	141,322	172,405r	182,934	186,279r	193,725r	198,699	198,917	196,859	188,172
41 Banks' own liabilities	91,833	103,339	128,019r	132,153	136,029r	138,787r	139,763	130,012	123,926	115,239
42 Demand deposits	10,571	11,802	12,247	12,809	12,666	12,252	13,460	13,733	12,847	13,980
43 Time deposits[2]	53,714	58,025	68,251r	68,038	68,627r	67,117r	67,525	69,075	70,962	66,887
44 Other[3]	27,548	33,512	47,521	51,306	54,736	59,418	58,778	47,204	40,117	34,372
45 Banks' custodial liabilities[5]	29,337	37,983	44,386	50,781	50,250	54,938	58,936	68,905	72,933	72,933
46 U.S. Treasury bills and certificates[6]	12,599	14,495	12,954	8,942	9,226	9,907	10,651	10,454	12,101	13,432
47 Other negotiable and readily transferable instruments[7]	15,221	21,453	24,964	31,333	32,974	36,661	40,427	50,860	52,651	51,684
48 Other	1,517	2,035	6,468	10,506	8,050	8,370	7,858	7,591	8,181	7,817
MEMO										
49 Negotiable time certificates of deposit in custody for foreigners	9,103	14,573	16,083	23,440	21,229	22,847	25,867	27,391	29,905	28,793

1. Reporting banks include all types of depository institutions as well as some brokers and dealers. Excludes bonds and notes of maturities longer than one year.
2. Excludes negotiable time certificates of deposit, which are included in "Other negotiable and readily transferable instruments."
3. Includes borrowing under repurchase agreements.
4. For U.S. banks, includes amounts owed to own foreign branches and foreign subsidiaries consolidated in quarterly Consolidated Reports of Condition filed with bank regulatory agencies. For agencies, branches, and majority-owned subsidiaries of foreign banks, consists principally of amounts owed to the head office or parent foreign bank, and to foreign branches, agencies, or wholly owned subsidiaries of the head office or parent foreign bank.
5. Financial claims on residents of the United States, other than long-term securities, held by or through reporting banks for foreign customers.
6. Includes nonmarketable certificates of indebtedness and Treasury bills issued to official institutions of foreign countries.
7. Principally bankers acceptances, commercial paper, and negotiable time certificates of deposit.
8. Principally the International Bank for Reconstruction and Development, the Inter-American Development Bank, and the Asian Development Bank. Excludes "holdings of dollars" of the International Monetary Fund.
9. Foreign central banks, foreign central governments, and the Bank for International Settlements.
10. Excludes central banks, which are included in "Official institutions."

3.17 LIABILITIES TO FOREIGNERS Reported by Banks in the United States[1]—Continued

Item	1995	1996	1997	1998						
				May	June	July	Aug.	Sept.	Oct.	Nov.[p]
AREA										
50 **Total, all foreigners**	**1,099,549**	**1,162,148**	**1,283,787[r]**	**1,260,399[r]**	**1,288,032**	**1,306,155[r]**	**1,341,295[r]**	**1,350,292[r]**	**1,372,015**	**1,346,836**
51 **Foreign countries**	**1,088,510**	**1,148,176**	**1,272,097[r]**	**1,246,197[r]**	**1,273,929**	**1,291,841[r]**	**1,326,107[r]**	**1,335,077[r]**	**1,359,327**	**1,333,635**
52 Europe	362,819	376,590	420,432[r]	405,476[r]	402,103	431,783	457,537	450,587[r]	451,340	449,626
53 Austria	3,537	5,128	2,717	3,012	2,268	2,602	2,671	3,137[r]	2,799	2,940
54 Belgium and Luxembourg	24,792	24,084	41,007	35,518	35,454	33,845	35,086	33,934[r]	39,911	42,014
55 Denmark	2,921	2,565	1,514	1,443	1,989	2,013	2,128	1,578	1,813	1,675
56 Finland	2,831	1,958	2,246	1,365	1,438	1,211	1,350	1,181	1,193	1,706
57 France	39,218	35,078	46,607	47,869	46,162	47,140	48,328	50,405[r]	47,348	48,172
58 Germany	24,035	24,660	23,737	26,452	25,470	23,730	28,751	25,811	22,014	22,602
59 Greece	2,014	1,835	1,552	2,610	2,429	2,784	2,941	2,544	2,901	2,444
60 Italy	10,868	10,946	11,378	11,127	11,509	11,114	10,625	9,183	7,124	6,378
61 Netherlands	13,745	11,110	7,385	7,265	6,845	7,097	9,239	8,066	7,306	9,298
62 Norway	1,394	1,288	317	774	607	1,179	1,469	688	1,149	797
63 Portugal	2,761	3,562	2,262	2,160	2,334	2,823	2,424	2,292	2,377	2,400
64 Russia	7,948	7,623	7,968	3,952	4,654	6,398	2,718	3,085	3,735	2,698
65 Spain	10,011	17,707	18,989	15,519[r]	11,649	12,079	14,283	20,485[r]	26,569	27,015
66 Sweden	3,246	1,623	1,628	2,181[r]	3,148	2,198	1,769	3,285	3,257	3,857
67 Switzerland	43,625	44,538	39,023[r]	33,852[r]	38,986[r]	44,676[r]	39,362	48,393[r]	47,332	50,167
68 Turkey	4,124	6,738	4,054	4,467	4,894	5,077	4,317	4,264	4,105	3,842
69 United Kingdom	139,183	153,420	181,904	178,335[r]	176,703	196,859	219,197	204,915	202,481	195,045
70 Yugoslavia[11]	177	206	239	270	234	322	242	253	362	271
71 Other Europe and other former U.S.S.R.[12]	26,389	22,521	25,905[r]	27,305[r]	25,330[r]	28,636[r]	30,637	27,088[r]	27,564	26,305
72 Canada	30,468	38,920	28,341	26,021	28,864	29,526	27,844	28,701	31,278	29,221
73 Latin America and Caribbean	440,213	467,529	536,393[r]	550,702[r]	568,228	564,055[r]	556,699[r]	561,502[r]	576,056	545,916
74 Argentina	12,235	13,877	20,199	16,938	18,502	21,010	21,655	18,384	17,706	18,892
75 Bahamas	94,991	88,895	112,217	114,222	116,435	115,309	113,543	124,249[r]	128,893	115,598
76 Bermuda	4,897	5,527	6,911	7,142	7,769	7,216	7,332	7,920	7,247	7,241
77 Brazil	23,797	27,701	31,037	38,421[r]	35,345	34,292	27,824	18,453	17,308	13,371
78 British West Indies	239,083	251,465	276,418[r]	277,962[r]	295,321	290,009[r]	291,098[r]	298,697[r]	310,332	298,962
79 Chile	2,826	2,915	4,072	4,234[r]	4,356	4,987	4,726	5,725	5,598	4,780
80 Colombia	3,659	3,256	3,652	4,383	4,805	4,023	4,102	4,475	4,888	4,120
81 Cuba	8	21	66	59	63	63	62	62	57	63
82 Ecuador	1,314	1,767	2,078	1,783	1,616	1,772	1,608	1,540	1,679	1,509
83 Guatemala	1,276	1,282	1,494	1,353	1,363	1,273	1,237	1,241	1,232	1,206
84 Jamaica	481	628	450	438	522	519	550	541	578	524
85 Mexico	24,560	31,240	33,972	37,679[r]	38,044	38,554	38,087	35,681	38,058	36,704
86 Netherlands Antilles	4,673	6,099	5,085	7,447	6,861	8,922	8,340	8,588	6,200	6,010
87 Panama	4,264	4,099	4,241	4,104[r]	3,723	3,596	3,675	3,826	3,793	3,776
88 Peru	974	834	893	964	925	984	900	843	799	814
89 Uruguay	1,836	1,890	2,382	1,991	1,982	2,097	2,091	2,276	2,223	2,199
90 Venezuela	11,808	17,363	21,601	21,600	20,442	19,492	20,125	19,180	19,662	19,607
91 Other	7,531	8,670	9,625[r]	9,982[r]	10,154	9,937	9,744	9,821	9,803	10,540
92 Asia	240,595	249,083	269,379[r]	244,770[r]	254,412	247,952	266,480	275,745[r]	284,371	293,576
China										
93 Mainland	33,750	30,438	18,252	20,209	21,558	18,919	18,506	18,523	15,813	13,783
94 Taiwan	11,714	15,995	11,840[r]	12,648	11,619	11,333	11,290	12,080	12,800	12,359
95 Hong Kong	20,197	18,789	17,722	18,106	19,720	15,826	18,349	16,627	16,508	16,739
96 India	3,373	3,930	4,567	4,882	4,821	4,678	6,437	5,144	5,337	5,089
97 Indonesia	2,708	2,298	3,554	3,185[r]	3,848	3,938	5,651	5,470	5,671	6,247
98 Israel	4,041	6,051	6,281	6,251	6,095	5,969	5,296	5,984	4,781	8,106
99 Japan	109,193	117,316	143,401	111,623	118,669	123,167	131,376	142,767	156,279	164,311
100 Korea (South)	5,749	5,949	13,060	14,010	13,269	12,713	12,493	12,971	12,499	12,391
101 Philippines	3,092	3,378	3,250	2,802	3,418	2,609	2,777	2,712	2,539	2,849
102 Thailand	12,279	10,912	6,501	8,876	7,148	6,780	7,869	6,664	7,134	6,788
103 Middle Eastern oil-exporting countries[13]	15,582	16,285	14,959	15,300[r]	13,829	13,902	14,532	16,627	14,718	16,370
104 Other	18,917	17,742	25,992	26,878[r]	30,418	28,118	31,904	30,176[r]	30,292	28,544
105 Africa	7,641	8,116	10,347	10,968[r]	10,735	10,788	10,562	11,098	9,749	8,889
106 Egypt	2,136	2,012	1,663	1,460	1,523	1,319	1,459	1,616	1,288	1,498
107 Morocco	104	112	138	115	84	74	76	88	78	75
108 South Africa	739	458	2,158	2,465	2,642	2,446	2,428	2,658	2,358	1,659
109 Zaire	10	10	10	5	5	7	35	6	7	12
110 Oil-exporting countries[14]	1,797	2,626	3,060	4,079	3,552	3,893	3,684	3,727	3,291	3,017
111 Other	2,855	2,898	3,318	2,844[r]	2,929	3,049	2,880	3,003	2,727	2,628
112 Other	6,774	7,938	7,205[r]	8,260	9,587	7,737	6,985	7,444	6,533	6,407
113 Australia	5,647	6,479	6,304	7,416	8,510	6,490	5,931	6,427	5,372	5,180
114 Other	1,127	1,459	901[r]	844	1,077	1,247	1,054	1,017	1,161	1,227
115 Nonmonetary international and regional organizations	11,039	13,972	11,690	14,202[r]	14,103	14,314	15,188	15,215	12,688	13,201
116 International[15]	9,300	12,099	10,517	12,509	12,548	11,220	12,825	12,782	10,397	11,292
117 Latin American regional[16]	893	1,339	424	846[r]	694	750	721	803	1,008	598
118 Other regional[17]	846	534	749	847	861	2,344	1,642	1,630	1,283	1,311

11. Since December 1992, has excluded Bosnia, Croatia, and Slovenia.
12. Includes the Bank for International Settlements. Since December 1992, has included all parts of the former U.S.S.R. (except Russia), and Bosnia, Croatia, and Slovenia.
13. Comprises Bahrain, Iran, Iraq, Kuwait, Oman, Qatar, Saudi Arabia, and United Arab Emirates (Trucial States).
14. Comprises Algeria, Gabon, Libya, and Nigeria.
15. Principally the International Bank for Reconstruction and Development. Excludes "holdings of dollars" of the International Monetary Fund.
16. Principally the Inter-American Development Bank.
17. Asian, African, Middle Eastern, and European regional organizations, except the Bank for International Settlements, which is included in "Other Europe."

3.18 BANKS' OWN CLAIMS ON FOREIGNERS Reported by Banks in the United States[1]
Payable in U.S. Dollars

Millions of dollars, end of period

Area or country	1995	1996	1997	1998						
				May	June	July	Aug.	Sept.r	Oct.	Nov.p
1 **Total, all foreigners**	**532,444**	**599,925**	**708,225r**	**703,521r**	**727,960r**	**740,227r**	**764,878**	**768,427**	**749,489**	**755,148**
2 **Foreign countries**	**530,513**	**597,321**	**705,762r**	**701,129r**	**725,045r**	**735,817r**	**760,488**	**763,105**	**744,099**	**750,910**
3 Europe	132,150	165,769	199,880	208,567	223,277	229,928	227,688	234,967	224,661	228,909
4 Austria	565	1,662	1,354	2,130	1,259	1,892	1,856	1,849	2,373	2,311
5 Belgium and Luxembourg	7,624	6,727	6,641	6,115	7,782	8,459	6,779	8,200	9,230	7,409
6 Denmark	403	492	980	1,286	1,198	933	1,374	1,059	1,768	2,524
7 Finland	1,055	971	1,233	931	1,146	1,032	1,161	1,073	1,149	1,056
8 France	15,033	15,246	16,239	16,276	15,474	14,421	17,314	17,077	16,307	18,875
9 Germany	9,263	8,472	12,676	15,301	15,751	11,327	12,029	15,375	15,121	17,997
10 Greece	469	568	402	428	364	450	530	373	415	510
11 Italy	5,370	6,457	6,230	6,533	6,435	6,345	8,617	6,510	7,153	6,531
12 Netherlands	5,346	7,117	6,141	3,980	5,763	5,642	4,321	4,803	5,230	5,686
13 Norway	665	808	555	736	680	553	1,110	640	662	385
14 Portugal	888	418	777	1,496	888	1,156	725	975	885	679
15 Russia	660	1,669	1,248	1,117	1,057	1,345	1,209	920	883	760
16 Spain	2,166	3,211	2,942	6,218	5,560	6,424	5,225	7,980	6,051	5,234
17 Sweden	2,080	1,739	1,854	3,181	3,069	4,553	4,456	4,319	4,508	5,087
18 Switzerland	7,474	19,798	28,846	29,317	34,970	49,359	49,258	55,798	43,337	45,858
19 Turkey	803	1,109	1,558	2,386	2,414	2,010	1,990	1,900	1,848	1,915
20 United Kingdom	67,784	85,234	103,143	102,889	109,755	104,397	99,174	97,436	98,746	97,072
21 Yugoslavia[2]	147	115	52	19	53	79	53	53	53	53
22 Other Europe and other former U.S.S.R.[3]	4,355	3,956	7,009	8,228	9,659	9,551	10,507	8,627	8,942	8,967
23 Canada	20,874	26,436	27,189r	24,974r	32,701r	36,007	41,402	41,165	37,316	44,750
24 Latin America and Caribbean	256,944	274,153	343,730r	361,015r	365,814	359,277	379,383	373,237	368,394	367,393
25 Argentina	6,439	7,400	8,924	8,228r	8,518	8,421	8,724	8,777	9,087	9,225
26 Bahamas	58,818	71,871	89,379	78,083	77,595	78,770	77,875	86,867	88,923	91,171
27 Bermuda	5,741	4,129	8,782	8,890	9,452	10,622	9,629	10,610	6,585	5,702
28 Brazil	13,297	17,259	21,696	25,354	24,552	24,187	23,530	19,073	17,644	17,813
29 British West Indies	124,037	105,510	145,471	168,124	176,825	166,203	192,334	182,757	183,122	178,578
30 Chile	4,864	5,136	7,913	8,482	8,497	8,434	8,307	8,345	8,549	8,645
31 Colombia	4,550	6,247	6,945	7,208	7,102	6,914	6,905	6,813	6,764	6,639
32 Cuba	0	0	0	0	0	0	0	0	0	0
33 Ecuador	825	1,031	1,311	1,498	1,430	1,649	1,518	1,458	1,444	1,344
34 Guatemala	457	620	886	955	932	911	950	1,166	947	1,483
35 Jamaica	323	345	424	385	320	335	318	305	330	299
36 Mexico	18,024	18,425	19,428r	21,127r	20,371	20,062	20,078	20,677	22,039	22,483
37 Netherlands Antilles	9,229	25,209	17,838	17,352	14,294	16,278	12,939	10,294	7,323	7,696
38 Panama	3,008	2,786	4,364	4,393	4,233	4,308	4,157	4,226	4,011	3,853
39 Peru	1,829	2,720	3,491	3,792	3,965	4,009	4,061	3,829	3,706	3,629
40 Uruguay	466	589	629	807	959	1,154	1,055	955	958	1,040
41 Venezuela	1,661	1,702	2,129	2,381	2,495	2,436	2,649	2,638	2,689	2,788
42 Other	3,376	3,174	4,120	3,956	4,274	4,584	4,354	4,447	4,273	5,005
43 Asia	115,336	122,478	125,092r	96,855r	94,825r	100,187r	102,382	104,614	104,727	100,720
China										
44 Mainland	1,023	1,401	1,579	2,934	1,989	1,679	2,703	1,380	2,275	2,476
45 Taiwan	1,713	1,894	922r	724r	836r	585r	651	1,031	1,079	957
46 Hong Kong	12,821	12,802	13,991r	12,886r	12,870r	11,045	13,821	10,548	8,244	8,238
47 India	1,846	1,946	2,200	1,913	1,972	1,822	1,878	1,823	1,582	1,533
48 Indonesia	1,696	1,762	2,651r	2,128r	2,098	2,010	2,031	2,108	1,990	2,048
49 Israel	739	633	768	893	954	1,116	898	941	1,504	914
50 Japan	61,468	59,967	59,549r	42,080r	43,005r	45,566	44,822	52,213	52,904	48,406
51 Korea (South)	13,975	18,901	18,162	11,936	11,027r	12,863	11,508	9,823	9,733	8,943
52 Philippines	1,318	1,697	1,689	1,614	1,541	1,244r	1,259	1,280	1,128	1,619
53 Thailand	2,612	2,679	2,259	1,906	1,889	1,820	1,883	2,129	1,952	1,884
54 Middle Eastern oil-exporting countries[4]	9,639	10,424	10,790	9,338	8,448	11,207	12,136	12,681	13,531	15,079
55 Other	6,486	8,372	10,532r	8,503r	8,196	9,230	8,792	8,657	8,805	8,623
56 Africa	2,742	2,776	3,530	3,693	2,484	3,497	3,262	3,012	2,785	2,611
57 Egypt	210	247	247	281	283	294	279	272	322	259
58 Morocco	514	524	511	490	430	471	426	390	405	390
59 South Africa	465	584	805	859	653	630	653	694	665	704
60 Zaire	1	0	0	0	0	0	0	0	0	0
61 Oil-exporting countries[5]	552	420	1,212	1,078	308	1,331	1,046	787	533	454
62 Other	1,000	1,001	755	985	810	771	858	869	860	804
63 Other	2,467	5,709	6,341r	6,025r	5,944r	6,921	6,371	6,110	6,216	6,527
64 Australia	1,622	4,577	5,300r	5,705r	5,438r	6,067	5,999	5,783	5,809	6,008
65 Other	845	1,132	1,041	320	506	854	372	327	407	519
66 Nonmonetary international and regional organizations[6]	1,931	2,604	2,463	2,392	2,915	4,410	4,390	5,322	5,390	4,238

1. Reporting banks include all types of depository institutions as well as some brokers and dealers.
2. Since December 1992, has excluded Bosnia, Croatia, and Slovenia.
3. Includes the Bank for International Settlements. Since December 1992, has included all parts of the former U.S.S.R. (except Russia), and Bosnia, Croatia, and Slovenia.
4. Comprises Bahrain, Iran, Iraq, Kuwait, Oman, Qatar, Saudi Arabia, and United Arab Emirates (Trucial States).
5. Comprises Algeria, Gabon, Libya, and Nigeria.
6. Excludes the Bank for International Settlements, which is included in "Other Europe."

3.19 BANKS' OWN AND DOMESTIC CUSTOMERS' CLAIMS ON FOREIGNERS Reported by Banks in the United States[1] Payable in U.S. Dollars

Millions of dollars, end of period

Type of claim	1995	1996	1997[r]	1998						
				May	June[r]	July[r]	Aug.[r]	Sept.[r]	Oct.	Nov.[p]
1 **Total**	**655,211**	**743,919**	**852,852**	...	**880,836**	.	...	**926,478**	. .	...
2 Banks' claims	532,444	599,925	708,225	703,521[r]	727,960	740,227	764,878	768,427	749,489	755,148
3 Foreign public borrowers	22,518	22,216	20,581	28,927[r]	27,780	35,635	29,758	26,377	28,110	25,986
4 Own foreign offices[2]	307,427	341,574	431,685	415,196[r]	435,201	446,536	466,019	486,452	476,973	486,997
5 Unaffiliated foreign banks	101,595	113,682	109,230	105,688[r]	107,832	101,956	106,034	108,972	109,140	118,015
6 Deposits	37,771	33,826	30,995	21,282	22,843	23,283	24,593	30,426	26,713	34,149
7 Other	63,824	79,856	78,235	84,406[r]	84,989	78,673	81,441	78,546	82,427	83,866
8 All other foreigners	100,904	122,453	146,729	153,710[r]	157,147	156,100	163,067	146,626	135,266	124,150
9 Claims of banks' domestic customers[3]	122,767	143,994	144,627	..	152,876	..	..	158,051	...	..
10 Deposits	58,519	77,657	73,110	.	86,008	..	..	89,602	.	..
11 Negotiable and readily transferable instruments[4]	44,161	51,207	53,967		52,171	..	.	53,512	.	..
12 Outstanding collections and other claims	20,087	15,130	17,550	...	14,697	..	..	14,937	.	..
MEMO										
13 Customer liability on acceptances	8,410	10,388	9,624	...	6,599	...	...	6,068	..	...
14 Dollar deposits in banks abroad, reported by nonbanking business enterprises in the United States[5]	30,717	39,661	34,046	32,172	25,287	32,347	28,217	25,512	35,786	34,858

1. For banks' claims, data are monthly; for claims of banks' domestic customers, data are for quarter ending with month indicated.

Reporting banks include all types of depository institution as well as some brokers and dealers.

2. For U.S. banks, includes amounts due from own foreign branches and foreign subsidiaries consolidated in quarterly Consolidated Reports of Condition filed with bank regulatory agencies. For agencies, branches, and majority-owned subsidiaries of foreign banks, consists principally of amounts due from the head office or parent foreign bank, and from foreign branches, agencies, or wholly owned subsidiaries of the head office or parent foreign bank.

3. Assets held by reporting banks in the accounts of their domestic customers.

4. Principally negotiable time certificates of deposit, bankers acceptances, and commercial paper.

5. Includes demand and time deposits and negotiable and nonnegotiable certificates of deposit denominated in U.S. dollars issued by banks abroad.

3.20 BANKS' OWN CLAIMS ON UNAFFILIATED FOREIGNERS Reported by Banks in the United States[1] Payable in U.S. Dollars

Millions of dollars, end of period

Maturity, by borrower and area[2]	1994	1995	1996	1997	1998[r]		
				Dec.[r]	Mar.	June	Sept.
1 **Total**	**202,282**	**224,932**	**258,106**	**276,550**	**285,570**	**292,747**	**281,085**
By borrower							
2 Maturity of one year or less	170,411	178,857	211,859	205,781	214,779	211,347	208,392
3 Foreign public borrowers	15,435	14,995	15,411	12,081	16,965	16,997	14,613
4 All other foreigners	154,976	163,862	196,448	193,700	197,814	194,350	193,779
5 Maturity of more than one year	31,871	46,075	46,247	70,769	70,791	81,400	72,693
6 Foreign public borrowers	7,838	7,522	6,790	8,499	11,265	10,647	10,875
7 All other foreigners	24,033	38,553	39,457	62,270	59,526	70,753	61,818
By area							
Maturity of one year or less							
8 Europe	56,381	55,622	55,690	58,294	69,150	73,787	69,010
9 Canada	6,690	6,751	8,339	9,917	9,297	8,766	8,953
10 Latin America and Caribbean	59,583	72,504	103,254	97,207	101,070	99,611	99,650
11 Asia	40,567	40,296	38,078	33,964	28,751	23,570	22,330
12 Africa	1,379	1,295	1,316	2,211	2,227	1,116	1,762
13 All other[3]	5,811	2,389	5,182	4,188	4,284	4,497	6,687
Maturity of more than one year							
14 Europe	4,358	4,995	6,965	13,240	15,118	15,606	15,381
15 Canada	3,505	2,751	2,645	2,525	2,765	2,571	2,982
16 Latin America and Caribbean	15,717	27,681	24,943	42,049	39,363	47,969	39,134
17 Asia	5,323	7,941	9,392	10,235	10,786	12,589	12,122
18 Africa	1,583	1,421	1,361	1,236	1,254	1,259	1,170
19 All other[3]	1,385	1,286	941	1,484	1,505	1,406	1,904

1. Reporting banks include all types of depository institutions as well as some brokers and dealers.

2. Maturity is time remaining until maturity.

3. Includes nonmonetary international and regional organizations.

3.21 CLAIMS ON FOREIGN COUNTRIES Held by U.S. and Foreign Offices of U.S. Banks[1]

Billions of dollars, end of period

Area or country	1994	1995	1996 Sept.	1996 Dec.	1997 Mar.	1997 June	1997 Sept.	1997 Dec.	1998 Mar.	1998 June	1998 Sept.
1 **Total**	**499.5**	**551.9**	**586.2**	**645.3**	**647.6r**	**678.8**	**711.0**	**726.0r**	**739.1r**	**746.6r**	**731.9**
2 G-10 countries and Switzerland	191.2	206.0	220.0	228.3	231.4	250.0	247.8r	242.8	249.0r	275.0	258.5
3 Belgium and Luxembourg	7.2	13.6	11.3	11.7	14.1	9.4	11.4	11.0	11.2	13.1	10.9
4 France	19.1	19.4	17.4	16.6	19.7	17.9	20.2	15.4	15.5r	20.5	19.9
5 Germany	24.7	27.3	33.9	29.8	32.1	34.1	34.7	28.6	25.5	28.7	28.9
6 Italy	11.8	11.5	15.2	16.0	14.4	20.2	19.3	15.5	19.7	19.5	18.0
7 Netherlands	3.6	3.7	5.9	4.0	4.5	6.4	7.2	6.2	7.3	8.3	8.0
8 Sweden	2.7	2.7	3.0	2.6	3.4	3.6	4.1	3.3	4.8	3.1	2.1
9 Switzerland	5.1	6.7	6.3	5.3	6.0	5.4	4.8	7.2	5.6	6.9	7.4
10 United Kingdom	85.8	82.4	90.5	104.7	99.2	110.6	108.3	113.4	120.1	134.8	125.0
11 Canada	10.0	10.3	14.8	14.0	16.3	15.7	15.1	13.7	13.5	16.5	15.5
12 Japan	21.1	28.5	21.7	23.7	21.7	26.8	22.6	28.6	25.8	23.7	22.7
13 Other industrialized countries	45.7	50.2	62.1	65.7	66.4	71.7	73.8	64.5	74.3	72.0	71.1
14 Austria	1.1	.9	1.0	1.1	1.9	1.5	1.7	1.5	1.7	1.9	2.1
15 Denmark	1.3	2.6	1.7	1.5	1.7	2.8	3.7	2.4	2.0	2.1	2.8
16 Finland	.9	.8	.6	.8	.7	1.4	1.9	1.3	1.5	1.4	1.6
17 Greece	4.5	5.7	6.1	6.7	6.3	6.1	6.2	5.1	6.1	5.8	5.7
18 Norway	2.0	3.2	3.0	8.0	5.3	4.7	4.6	3.6	4.0	3.4	3.3
19 Portugal	1.2	1.3	1.4	.9	1.0	1.1	1.4	.9	.7	1.3	1.0
20 Spain	13.6	11.6	16.1	13.2	14.4	15.4	13.9	11.7	16.5	15.1	17.3
21 Turkey	1.6	1.9	2.8	2.7	2.8	3.4	4.4	4.5	4.9	6.5	5.2
22 Other Western Europe	3.2	4.7	4.8	4.7	6.3	5.5	6.1	8.2	9.9	9.6	10.2
23 South Africa	1.0	1.2	1.7	2.0	1.9	1.9	1.9	2.2	3.7	5.0	3.7
24 Australia	15.4	16.4	22.8	24.0	24.4	27.8	28.0r	23.1	23.2	20.0	18.2
25 OPEC[2]	24.1	22.1	19.2	19.7	21.8	22.3	22.9	26.0	25.7	25.3	25.8
26 Ecuador	.5	.7	.9	1.1	1.1	.9	1.2	1.3	1.3	1.2	1.2
27 Venezuela	3.7	2.7	2.3	2.4	1.9	2.1	2.2	2.5	3.3	3.2	3.1
28 Indonesia	3.8	4.8	5.4	5.2	4.9	5.6	6.5	6.7	5.5	5.1	4.7
29 Middle East countries	15.3	13.3	10.2	10.7	13.2	12.5	11.8	14.4	14.3	15.5	16.1
30 African countries	.9	.6	.4	.4	.7	1.2	1.1	1.2	1.4	.3	.8
31 Non-OPEC developing countries	96.0	112.6	124.4	130.3	128.1	140.6	137.0	138.7	147.4	144.4	138.3
Latin America											
32 Argentina	11.2	12.9	15.0	14.3	14.3	16.4	17.1	18.4	19.3	20.2	22.3
33 Brazil	8.4	13.7	17.8	20.7	22.0	27.3	26.1	28.6	32.4	29.9	23.4
34 Chile	6.1	6.8	6.6	7.0	6.8	7.6	8.0	8.7	9.0	9.1	8.5
35 Colombia	2.6	2.9	3.1	4.1	3.7	3.3	3.4	3.4	3.3	3.6	3.4
36 Mexico	18.4	17.3	16.3	16.2	17.2	16.6	16.4	17.4	17.7	17.9	18.4
37 Peru	.5	.8	1.3	1.6	1.6	1.4	1.8	2.0	2.1	2.2	2.2
38 Other	2.7	2.8	3.0	3.3	3.4	3.4	3.6	4.1	4.0	4.4	4.6
Asia											
China											
39 Mainland	1.1	1.8	2.6	2.5	2.7	3.6	4.3	3.2	4.2	3.9	2.8
40 Taiwan	9.2	9.4	10.4	10.3	10.5	10.6	9.7	9.0	11.7	11.3	12.1
41 India	4.2	4.4	3.8	4.3	4.9	5.3	4.9	4.9	5.0	4.9	5.3
42 Israel	.4	.5	.5	.5	.6	.8	1.0	.7	.7	.9	.9
43 Korea (South)	16.2	19.1	21.9	21.5	14.6	16.3	16.2	15.6	16.2	14.5	12.9
44 Malaysia	3.1	4.4	5.5	6.0	6.5	6.4	5.6	5.1	4.5	4.7	5.0
45 Philippines	3.3	4.1	5.4	5.8	6.0	7.0	5.7	5.7	5.0	5.4	4.7
46 Thailand	2.1	4.9	4.8	5.7	6.8	7.3	6.2	5.4	5.5	4.9	5.3
47 Other Asia	4.7	4.5	4.1	4.1	4.3	4.7	4.5	4.3	4.2	3.7	3.1
Africa											
48 Egypt	.3	.4	.6	.7	.9	1.1	.9	.9	1.0	1.5	1.7
49 Morocco	.6	.7	.7	.7	.6	.7	.7	.6	.6	.6	.5
50 Zaire	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0
51 Other Africa[3]	.8	.9	1.0	.9	.9	.9	.9	.8	1.1	.8	1.1
52 Eastern Europe	2.7	4.2	5.3	6.9	8.9	7.1	9.8	9.1	12.0	10.9	6.0
53 Russia[4]	.8	1.0	1.8	3.7	3.5	4.2	5.1	5.1	7.5r	6.8	2.8
54 Other	1.9	3.2	3.5	3.2	5.4	2.9	4.7	4.0	4.6	4.1	3.2
55 Offshore banking centers	72.9	99.2	105.2	134.7	131.3	129.6	138.9	145.7	129.3	123.5	127.8
56 Bahamas	10.2	11.0	14.2	20.3	20.9	16.1	19.8	29.9	29.2	22.7	38.1
57 Bermuda	8.4	6.3	4.0	4.5	6.7	7.9	9.8	9.8	9.0	9.3	10.4
58 Cayman Islands and other British West Indies	21.4	32.4	32.0	37.2	32.8	35.1	45.7	43.4	24.9	33.9	27.4
59 Netherlands Antilles	1.6	10.3	11.7	26.1	19.9	15.8	21.7	14.6	14.0	10.5	6.0
60 Panama[5]	1.3	1.4	1.7	2.0	2.0	2.6	2.1	3.1	3.2	3.3	4.0
61 Lebanon	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.2
62 Hong Kong, China	20.0	25.0	26.0	27.9	30.8	35.2	27.2	32.2	33.8	30.0	30.6
63 Singapore	10.1	13.1	15.5	16.7	17.9	16.7	12.7	12.7	15.0	13.5	11.1
64 Other[6]	.1	.1	.1	.1	.1	.3	.1	.1	.1	.2	.2
65 Miscellaneous and unallocated[7]	66.9	57.6	50.0	59.6	59.6	57.6	80.8	99.1	101.3	95.6	104.3

1. The banking offices covered by these data include U.S. offices and foreign branches of U.S. banks, including U.S. banks that are subsidiaries of foreign banks. Offices not covered include U.S. agencies and branches of foreign banks. Beginning March 1994, the data include large foreign subsidiaries of U.S. banks. The data also include other types of U.S. depository institutions as well as some types of brokers and dealers. To eliminate duplication, the data are adjusted to exclude the claims on foreign branches held by a U.S. office or another foreign branch of the same banking institution.

These data are on a gross claims basis and do not necessarily reflect the ultimate country risk or exposure of U.S. banks. More complete data on the country risk exposure of U.S. banks are available in the quarterly Country Exposure Lending Survey published by the Federal Financial Institutions Examination Council.

2. Organization of Petroleum Exporting Countries, shown individually; other members of OPEC (Algeria, Gabon, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, and United Arab Emirates); and Bahrain and Oman (not formally members of OPEC).
3. Excludes Liberia. Beginning March 1994 includes Namibia.
4. As of December 1992, excludes other republics of the former Soviet Union.
5. Includes Canal Zone.
6. Foreign branch claims only.
7. Includes New Zealand, Liberia, and international and regional organizations.

3.22 LIABILITIES TO UNAFFILIATED FOREIGNERS Reported by Nonbanking Business Enterprises in the United States

Millions of dollars, end of period

Type of liability, and area or country	1994	1995	1996	1997			1998		
				June	Sept.	Dec.	Mar.	June	Sept.^p
1 **Total**	**54,309**	**46,448**	**54,798**	**56,501**	**55,891**	**59,618**	**58,040**	**56,822**	**55,139**
2 Payable in dollars	38,298	33,903	38,956	38,651	39,746	41,888	42,258	45,210	43,894
3 Payable in foreign currencies	16,011	12,545	15,842	17,850	16,145	17,730	15,782	11,612	11,245
By type									
4 Financial liabilities	32,954	24,241	26,065	28,263	26,461	29,113	28,050	22,322	19,331
5 Payable in dollars	18,818	12,903	11,327	11,442	11,487	12,975	13,568	11,988	9,812
6 Payable in foreign currencies	14,136	11,338	14,738	16,821	14,974	16,138	14,482	10,334	9,519
7 Commercial liabilities	21,355	22,207	28,733	28,238	29,430	30,505	29,990	34,500	35,808
8 Trade payables	10,005	11,013	12,720	11,040	10,885	10,904	10,107	14,989	16,200
9 Advance receipts and other liabilities	11,350	11,194	16,013	17,198	18,545	19,601	19,883	19,511	19,608
10 Payable in dollars	19,480	21,000	27,629	27,209	28,259	28,913	28,690	33,222	34,082
11 Payable in foreign currencies	1,875	1,207	1,104	1,029	1,171	1,592	1,300	1,278	1,726
By area or country									
Financial liabilities									
12 Europe	21,703	15,622	16,195	18,530	18,019	19,238	20,307	15,468	12,905
13 Belgium and Luxembourg	495	369	632	238	89	186	127	75	150
14 France	1,727	999	1,091	1,280	1,334	1,684	1,795	1,699	1,457
15 Germany	1,961	1,974	1,834	1,765	1,730	2,018	2,578	2,441	2,167
16 Netherlands	552	466	556	466	507	494	472	484	417
17 Switzerland	688	895	699	591	645	776	345	189	179
18 United Kingdom	15,543	10,138	10,177	12,968	12,165	12,318	13,145	8,765	6,610
19 Canada	629	632	1,401	1,616	651	2,392	1,045	539	389
20 Latin America and Caribbean	2,034	1,783	1,668	1,285	1,067	1,386	965	1,320	1,351
21 Bahamas	101	59	236	124	10	141	17	6	1
22 Bermuda	80	147	50	55	64	229	86	49	73
23 Brazil	207	57	78	97	52	143	91	76	154
24 British West Indies	998	866	1,030	775	669	604	517	845	834
25 Mexico	0	12	17	15	76	26	21	51	23
26 Venezuela	5	2	1	1	1	1	1	1	1
27 Asia	8,403	5,988	6,423	6,248	6,239	5,394	5,024	4,315	4,005
28 Japan	7,314	5,436	5,869	5,668	5,725	5,085	4,767	3,869	3,754
29 Middle Eastern oil-exporting countries[1]	35	27	25	39	23	32	23	0	0
30 Africa	135	150	38	29	33	60	33	29	31
31 Oil-exporting countries[2]	123	122	0	0	0	0	0	0	0
32 All other[3]	50	66	340	555	452	643	676	651	650
Commercial liabilities									
33 Europe	6,773	7,700	9,767	8,683	9,343	10,228	9,951	15,327	16,708
34 Belgium and Luxembourg	241	331	479	736	703	666	565	557	629
35 France	728	481	680	708	782	764	840	613	750
36 Germany	604	767	1,002	845	945	1,274	1,068	1,222	1,410
37 Netherlands	722	500	766	288	452	439	443	502	441
38 Switzerland	327	413	624	429	400	375	407	355	509
39 United Kingdom	2,444	3,568	4,303	3,818	3,829	4,086	4,041	9,119	10,025
40 Canada	1,037	1,040	1,090	1,136	1,150	1,175	1,347	1,206	1,595
41 Latin America and Caribbean	1,857	1,740	2,574	2,500	2,224	2,176	2,051	2,290	1,845
42 Bahamas	19	1	63	33	38	16	27	14	48
43 Bermuda	345	205	297	397	180	203	174	209	168
44 Brazil	161	98	196	225	233	220	249	246	256
45 British West Indies	23	56	14	26	23	12	5	27	5
46 Mexico	574	416	665	594	562	565	520	557	511
47 Venezuela	276	221	328	304	322	261	219	196	230
48 Asia	10,741	10,421	13,422	13,875	14,628	14,966	14,672	13,655	13,605
49 Japan	4,555	3,315	4,614	4,430	4,553	4,500	4,372	4,039	3,846
50 Middle Eastern oil-exporting countries[1]	1,576	1,912	2,168	2,420	2,984	3,111	3,138	3,194	3,582
51 Africa	428	619	1,040	941	929	874	833	921	810
52 Oil-exporting countries[2]	256	254	532	423	504	408	376	354	372
53 Other[3]	519	687	840	1,103	1,156	1,086	1,136	1,101	1,245

1. Comprises Bahrain, Iran, Iraq, Kuwait, Oman, Qatar, Saudi Arabia, and United Arab Emirates (Trucial States).
2. Comprises Algeria, Gabon, Libya, and Nigeria.
3. Includes nonmonetary international and regional organizations.

3.23 CLAIMS ON UNAFFILIATED FOREIGNERS Reported by Nonbanking Business Enterprises in the United States

Millions of dollars, end of period

	Type of claim, and area or country	1994	1995	1996	1997			1998		
					June	Sept.	Dec.	Mar.	June	Sept.p
1	**Total**	**57,888**	**52,509**	**63,642**	**68,266**	**70,760**	**70,077**	**71,004**	**74,165**	**79,514**
2	Payable in dollars	53,805	48,711	58,630	62,082	64,144	62,173	65,359	68,329	73,284
3	Payable in foreign currencies	4,083	3,798	5,012	6,184	6,616	7,904	5,645	5,836	6,230
	By type									
4	Financial claims	33,897	27,398	35,268	40,717	42,059	38,908	40,301	32,341	37,262
5	Deposits	18,507	15,133	21,404	24,308	24,125	23,139	20,863	14,762	15,406
6	Payable in dollars	18,026	14,654	20,631	22,817	22,566	21,290	19,155	13,084	13,374
7	Payable in foreign currencies	481	479	773	1,491	1,559	1,849	1,708	1,678	2,032
8	Other financial claims	15,390	12,265	13,864	16,409	17,934	15,769	19,438	17,579	21,856
9	Payable in dollars	14,306	10,976	12,069	13,152	14,621	11,576	16,981	14,904	19,867
10	Payable in foreign currencies	1,084	1,289	1,795	3,257	3,313	4,193	2,457	2,675	1,989
11	Commercial claims	23,991	25,111	28,374	27,549	28,701	31,169	30,703	41,824	42,252
12	Trade receivables	21,158	22,998	25,751	24,858	25,110	27,536	26,888	37,741	37,868
13	Advance payments and other claims	2,833	2,113	2,623	2,691	3,591	3,633	3,815	4,083	4,384
14	Payable in dollars	21,473	23,081	25,930	26,113	26,957	29,307	29,223	40,341	40,043
15	Payable in foreign currencies	2,518	2,030	2,444	1,436	1,744	1,862	1,480	1,483	2,209
	By area or country									
	Financial claims									
16	Europe	7,936	7,609	9,282	12,904	15,862	16,948	14,187	14,091	14,473
17	Belgium and Luxembourg	86	193	185	203	360	406	378	518	496
18	France	800	803	694	680	1,112	1,015	902	796	1,140
19	Germany	540	436	276	281	352	427	393	290	359
20	Netherlands	429	517	493	519	764	677	911	975	867
21	Switzerland	523	498	474	447	448	434	401	403	409
22	United Kingdom	4,649	4,303	6,119	9,814	11,254	12,286	9,289	9,639	9,849
23	Canada	3,581	2,851	3,445	6,422	4,279	3,313	4,688	3,020	4,090
24	Latin America and Caribbean	19,536	14,500	19,577	18,725	19,176	15,543	18,207	11,967	15,758
25	Bahamas	2,424	1,965	1,452	2,064	2,442	2,459	1,316	1,306	2,105
26	Bermuda	27	81	140	188	190	108	66	48	63
27	Brazil	520	830	1,468	1,617	1,501	1,313	1,408	1,394	710
28	British West Indies	15,228	10,393	15,182	13,553	12,957	10,311	13,551	7,349	10,960
29	Mexico	723	554	457	497	508	537	967	1,089	1,122
30	Venezuela	35	32	31	21	15	36	47	57	50
31	Asia	1,871	1,579	2,221	1,934	2,015	2,133	2,174	2,376	2,121
32	Japan	953	871	1,035	766	999	823	791	886	928
33	Middle Eastern oil-exporting countries[1]	141	3	22	20	15	11	9	12	13
34	Africa	373	276	174	179	174	319	325	155	157
35	Oil-exporting countries[2]	0	5	14	15	16	15	16	15	16
36	All other[3]	600	583	569	553	553	652	720	732	663
	Commercial claims									
37	Europe	9,540	9,824	10,443	9,603	10,486	12,120	12,854	23,473	23,154
38	Belgium and Luxembourg	213	231	226	327	331	328	232	522	345
39	France	1,881	1,830	1,644	1,377	1,642	1,796	1,939	2,273	2,392
40	Germany	1,027	1,070	1,337	1,229	1,395	1,614	1,670	1,828	1,548
41	Netherlands	311	452	562	613	573	597	534	610	609
42	Switzerland	557	520	642	389	381	554	476	420	547
43	United Kingdom	2,556	2,656	2,946	2,836	2,904	3,660	4,828	14,376	14,128
44	Canada	1,988	1,951	2,165	2,464	2,649	2,660	2,882	2,779	2,296
45	Latin America and Caribbean	4,117	4,364	5,276	5,241	5,028	5,750	5,481	6,212	6,742
46	Bahamas	9	30	35	29	22	27	13	12	39
47	Bermuda	234	272	275	197	128	244	238	483	1,136
48	Brazil	612	898	1,303	1,136	1,101	1,162	1,128	1,183	1,062
49	British West Indies	83	79	190	98	98	109	88	110	91
50	Mexico	1,243	993	1,128	1,140	1,219	1,392	1,302	1,462	1,356
51	Venezuela	348	285	357	451	418	576	441	585	566
52	Asia	6,982	7,312	8,376	8,460	8,576	8,713	7,638	7,623	7,629
53	Japan	2,655	1,870	2,003	2,079	2,048	1,976	1,713	2,012	2,216
54	Middle Eastern oil-exporting countries[1]	708	974	971	1,014	987	1,107	987	1,127	967
55	Africa	454	654	746	618	764	680	613	657	740
56	Oil-exporting countries[2]	67	87	166	81	207	119	122	116	128
57	Other[3]	910	1,006	1,368	1,163	1,198	1,246	1,235	1,080	1,691

1. Comprises Bahrain, Iran, Iraq, Kuwait, Oman, Qatar, Saudi Arabia, and United Arab Emirates (Trucial States).
2. Comprises Algeria, Gabon, Libya, and Nigeria.
3. Includes nonmonetary international and regional organizations.

3.24 FOREIGN TRANSACTIONS IN SECURITIES

Millions of dollars

Transaction, and area or country	1996	1997	1998 Jan.–Nov.	1998 May[r]	June[r]	July[r]	Aug.[r]	Sept.[r]	Oct.	Nov.[p]
				U.S. corporate securities						
STOCKS										
1 Foreign purchases	590,714	1,097,958	1,457,236	129,559	146,147	152,833	141,566	137,418	145,588	126,494
2 Foreign sales	578,203	1,028,361	1,407,747	121,354	142,591	150,308	139,722	147,891	142,831	118,996
3 **Net purchases, or sales (−)**	**12,511**	**69,597**	**49,489**	**8,205**	**3,556**	**2,525**	**1,844**	**−10,473**	**2,757**	**7,498**
4 **Foreign countries**	**12,585**	**69,754**	**49,871**	**8,225**	**3,581**	**2,739**	**1,843**	**−10,430**	**2,754**	**7,515**
5 Europe	5,367	62,688	69,888	10,670	7,227	6,983	5,459	2,182	−249	4,386
6 France	−2,402	6,641	6,713	650	1,734	199	988	85	360	50
7 Germany	1,104	9,059	10,798	1,834	1,020	1,503	1,326	1,281	68	372
8 Netherlands	1,415	3,831	7,994	564	830	1,265	163	876	1,009	1,816
9 Switzerland	2,715	7,848	6,583	2,234	1,490	1,092	−277	−307	−1,974	−420
10 United Kingdom	4,478	22,478	21,182	2,968	695	1,154	1,740	700	632	1,902
11 Canada	2,226	−1,406	−3,787	−474	−1,600	−443	−276	−195	−507	−198
12 Latin America and Caribbean	5,816	5,203	−2,307	−1,333	1,798	−614	610	−11,766	2,058	3,691
13 Middle East[1]	−1,600	383	−863	−234	286	−134	−157	148	−177	−334
14 Other Asia	918	2,072	−12,709	−611	−3,949	−2,905	−4,112	−678	1,823	−8
15 Japan	−372	4,787	−1,548	−208	−540	−306	214	519	597	822
16 Africa	−85	472	608	275	204	−14	159	−98	−217	41
17 Other countries	−57	342	−959	−68	−385	−134	160	−23	23	−63
18 **Nonmonetary international and regional organizations**	**−74**	**−157**	**−382**	**−20**	**−25**	**−214**	**1**	**−43**	**3**	**−17**
BONDS[2]										
19 Foreign purchases	393,953	610,116	844,376	65,612	74,891	74,951	67,529	100,186	108,796	79,813
20 Foreign sales	268,487	475,958	686,790	53,226	53,464	64,461	58,678	92,663	105,432	60,550
21 **Net purchases, or sales (−)**	**125,466**	**134,158**	**157,586**	**12,386**	**21,427**	**10,490**	**8,851**	**7,523**	**3,364**	**19,263**
22 **Foreign countries**	**125,295**	**133,595**	**158,007**	**12,328**	**21,328**	**10,567**	**8,813**	**7,473**	**3,353**	**20,233**
23 Europe	77,570	71,631	116,728	5,277	12,630	8,650	5,813	12,323	12,185	14,489
24 France	4,460	3,300	3,560	−17	667	451	233	184	701	235
25 Germany	4,439	2,742	4,164	−133	203	806	139	268	−135	435
26 Netherlands	2,107	3,576	2,494	546	369	−859	32	275	704	64
27 Switzerland	1,170	187	4,892	794	404	234	100	1,003	−50	251
28 United Kingdom	60,509	54,134	88,575	4,296	9,283	5,665	3,924	9,760	10,187	11,527
29 Canada	4,486	6,264	5,893	628	607	640	439	443	292	558
30 Latin America and Caribbean	17,737	34,733	22,041	6,461	6,346	1,730	1,592	−2,927	−11,135	2,293
31 Middle East[1]	1,679	2,155	2,522	109	162	171	−188	−58	2	835
32 Other Asia	23,762	16,996	9,557	−111	1,253	−597	1,709	−1,847	1,185	1,934
33 Japan	14,173	9,357	6,143	460	527	−511	−10	−713	1,624	1,194
34 Africa	624	1,005	174	−31	101	−48	−17	−61	55	24
35 Other countries	−563	811	1,092	−5	229	21	−535	−400	769	100
36 **Nonmonetary international and regional organizations**	**171**	**563**	**−421**	**58**	**99**	**−77**	**38**	**50**	**11**	**−970**
				Foreign securities						
37 Stocks, net purchases, or sales (−)	−59,268	−40,942	7,822	−3,383	2,502	−3,537	5,557	6,107	8,046	−2,569
38 Foreign purchases	450,365	756,015	870,999	80,967	88,610	82,247	74,376	89,496	90,407	70,301
39 Foreign sales	509,633	796,957	863,177	84,350	86,108	85,784	68,819	83,389	82,361	72,870
40 Bonds, net purchases, or sales (−)	−51,369	−48,171	−14,185	−2,687	−12,413	3,076	1,049	3,384	15,980	−830
41 Foreign purchases	1,114,035	1,451,704	1,278,469	110,415	151,482	118,922	139,393	152,881	102,202	55,573
42 Foreign sales	1,165,404	1,499,875	1,292,654	113,102	163,895	115,846	138,344	149,497	86,222	56,403
43 **Net purchases, or sales (−), of stocks and bonds**	**−110,637**	**−89,113**	**−6,363**	**−6,070**	**−9,911**	**−461**	**6,606**	**9,491**	**24,026**	**−3,399**
44 **Foreign countries**	**−109,766**	**−88,921**	**−6,194**	**−6,238**	**−9,885**	**−390**	**6,623**	**9,492**	**24,119**	**−3,393**
45 Europe	−57,139	−29,874	8,072	−2,029	−7,273	2,281	1,202	6,007	10,792	2,331
46 Canada	−7,685	−3,085	3,665	−1,338	161	2,201	2,667	−1,118	946	562
47 Latin America and Caribbean	−11,507	−25,258	−12,674	−1,893	−2,553	−4,838	−1,196	1,214	4,585	−3,907
48 Asia	−27,831	−25,123	−1,762	−776	516	−59	4,227	3,550	6,699	−1,989
49 Japan	−5,887	−10,001	219	−678	−38	−316	1,741	2,239	6,134	−2,390
50 Africa	−1,517	−3,293	−1,416	−79	−32	−269	−122	−163	4	−56
51 Other countries	−4,087	−2,288	−2,079	−123	−704	294	−155	2	1,093	−334
52 **Nonmonetary international and regional organizations**	**−871**	**−192**	**−169**	**168**	**−26**	**−71**	**−17**	**−1**	**−93**	**−6**

1. Comprises oil-exporting countries as follows: Bahrain, Iran, Iraq, Kuwait, Oman, Qatar, Saudi Arabia, and United Arab Emirates (Trucial States).

2. Includes state and local government securities and securities of U.S. government agencies and corporations. Also includes issues of new debt securities sold abroad by U.S. corporations organized to finance direct investments abroad.

3.25 MARKETABLE U.S. TREASURY BONDS AND NOTES Foreign Transactions[1]

Millions of dollars; net purchases, or sales (−) during period

Area or country	1996	1997	1998	1998						
			Jan.–Nov.	May	June[r]	July[r]	Aug.[r]	Sept.[r]	Oct.	Nov.[p]
1 **Total estimated**	**232,241**	**184,171**	**35,978**	**21,495[r]**	**1,506**	**−4,454**	**−15,795**	**−5,270**	**−2,311**	**25,424**
2 Foreign countries	234,083	183,688	34,632	21,344[r]	1,810	−4,507	−15,795	−5,261	−2,973	25,524
3 Europe	118,781	144,921	13,404	935[r]	229	−6,465	−2,823	−2,771	−9,987	5,488
4 Belgium and Luxembourg	1,429	3,427	1,657	176	−513	215	667	113	−606	510
5 Germany	17,980	22,471	704	14[r]	−1,381	82	−1,799	894	1,171	307
6 Netherlands	−582	1,746	−6,431	434[r]	543	−675	−3,081	−579	1,543	−1,156
7 Sweden	2,242	−465	905	184	335	239	−152	−330	193	586
8 Switzerland	328	6,028	5,065	44	−973	−827	−680	363	2,811	531
9 United Kingdom	65,658	98,253	9,046	−2,823[r]	−1,543	−5,921	8,000	2,217	−13,168	3,207
10 Other Europe and former U.S.S.R.	31,726	13,461	2,458	2,906	3,761	422	−5,778	−5,449	−1,931	1,503
11 Canada	2,331	−811	−42	−223	−83	−619	−2,088	−663	−1,188	3,694
12 Latin America and Caribbean	20,785	−2,554	82	20,063[r]	2,912	685	−5,940	−1,233	−491	1,961
13 Venezuela	−69	655	−49	−313[r]	818	308	−1,308	6	−35	327
14 Other Latin America and Caribbean	8,439	−549	9,615	−330[r]	3,722	2,185	3,914	2,982	−1,288	−5,411
15 Netherlands Antilles	12,415	−2,660	−9,484	20,706[r]	−1,628	−1,808	−8,546	−4,221	832	7,045
16 Asia	89,735	39,567	22,991	1,455	−1,152	1,326	−3,856	−207	7,756	13,587
17 Japan	41,366	20,360	9,298	1,582	−2,442	774	299	128	1,233	7,311
18 Africa	1,083	1,524	735	64[r]	145	−22	62	81	87	145
19 Other	1,368	1,041	−2,538	−950	−241	588	−1,150	−468	850	649
20 Nonmonetary international and regional organizations	−1,842	483	1,346	151	−304	53	0	−9	662	−100
21 International	−1,390	621	418	136	−318	−135	−10	−288	645	−19
22 Latin American regional	−779	170	197	−1	0	192	8	−5	0	−6
MEMO										
23 Foreign countries	234,083	183,688	34,632	21,344[r]	1,810	−4,507	−15,795	−5,261	−2,973	25,524
24 Official institutions	85,807	43,959	−1,151	898	−3,486	469	−16,920	−10,304	9,001	11,843
25 Other foreign	148,276	139,729	35,783	20,446[r]	5,296	−4,976	1,125	5,043	−11,974	13,681
Oil-exporting countries										
26 Middle East[2]	10,232	7,636	−14,112	951	−1,388	−2,578	−4,160	−5,837	−276	233
27 Africa[3]	1	−12	2	0	0	0	1	0	0	0

1. Official and private transactions in marketable U.S. Treasury securities having an original maturity of more than one year. Data are based on monthly transactions reports. Excludes nonmarketable U.S. Treasury bonds and notes held by official institutions of foreign countries.

2. Comprises Bahrain, Iran, Iraq, Kuwait, Oman, Qatar, Saudi Arabia, and United Arab Emirates (Trucial States).

3. Comprises Algeria, Gabon, Libya, and Nigeria.

3.28 FOREIGN EXCHANGE RATES AND INDEXES OF THE FOREIGN EXCHANGE VALUE OF THE U.S. DOLLAR[1]

Currency units per dollar except as noted

Item	1996	1997	1998	1998 Aug.	1998 Sept.	1998 Oct.	1998 Nov.	1998 Dec.	1999 Jan.
					Exchange Rates				
COUNTRY/CURRENCY UNIT									
1 Australia/dollar[2]	78.28	74.37	62.91	58.88	58.89	61.79	63.49	61.82	63.20
2 Austria/schilling	10.589	12.206	12.379	12.574	11.955	11.524	11.840	11.746	n.a.
3 Belgium/franc	30.97	35.81	36.31	36.85	35.05	33.81	34.71	34.44	n.a.
4 Brazil/real	1.0051	1.0779	1.1605	1.1717	1.1805	1.1889	1.1932	1.2052	1.5120
5 Canada/dollar	1.3638	1.3849	1.4836	1.5346	1.5218	1.5452	1.5404	1.5433	1.5194
6 China, P.R./yuan	8.3389	8.3193	8.3008	8.3100	8.3055	8.2778	8.2778	8.2780	8.2789
7 Denmark/krone	5.8003	6.6092	6.7030	6.8067	6.4717	6.2294	6.3960	6.3531	6.4194
8 European Monetary Union/euro[3]	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	1.1591
9 Finland/markka	4.5948	5.1956	5.3473	5.4340	5.1734	4.9845	5.1163	5.0769	n.a.
10 France/franc	5.1158	5.8393	5.8995	5.9912	5.6969	5.4925	5.6422	5.5981	n.a.
11 Germany/deutsche mark	1.5049	1.7348	1.7597	1.7869	1.6990	1.6381	1.6827	1.6698	n.a.
12 Greece/drachma	240.82	273.28	295.70	301.21	292.47	281.64	282.64	280.43	278.91
13 Hong Kong/dollar	7.7345	7.7431	7.7467	7.7494	7.7480	7.7483	7.7432	7.7471	7.7486
14 India/rupee	35.51	36.36	41.36	42.84	42.58	42.39	42.43	42.59	42.55
15 Ireland/pound[2]	159.95	151.63	142.48	140.37	147.24	152.21	147.77	148.76	n.a.
16 Italy/lira	1,542.76	1,703.81	1,736.85	1,763.01	1,678.92	1,620.96	1,664.91	1,653.23	n.a.
17 Japan/yen	108.78	121.06	130.99	144.68	134.48	121.05	120.29	117.07	113.29
18 Malaysia/ringgit	2.5154	2.8173	3.9254	4.2036	3.8050	3.8000	3.8000	3.8014	3.8000
19 Mexico/peso	7.600	7.918	9.152	9.371	10.219	10.159	9.969	9.907	10.128
20 Netherlands/guilder	1.6863	1.9525	1.9837	2.0148	1.9169	1.8479	1.8969	1.8816	n.a.
21 New Zealand/dollar[2]	68.77	66.25	53.61	50.11	50.44	52.13	53.40	52.23	53.88
22 Norway/krone	6.4594	7.0857	7.5521	7.7248	7.5564	7.4294	7.4562	7.6050	7.4532
23 Portugal/escudo	154.28	175.44	180.25	182.99	174.19	168.01	172.52	171.19	n.a.
24 Singapore/dollar	1.4100	1.4857	1.6722	1.7571	1.7226	1.6378	1.6378	1.6515	1.6791
25 South Africa/rand	4.3011	4.6072	5.5417	6.3198	6.0966	5.7991	5.6511	5.9030	5.9931
26 South Korea/won	805.00	950.77	1,400.40	1,314.29	1,375.54	1,344.14	1,294.01	1,213.22	1,175.11
27 Spain/peseta	126.68	146.53	149.41	151.72	144.33	139.23	143.05	142.08	n.a.
28 Sri Lanka/rupee	55.289	59.026	65.006	66.642	66.260	66.345	67.578	68.117	68.630
29 Sweden/krona	6.7082	7.6446	7.9522	8.1282	7.8816	7.8395	8.0140	8.0716	7.8188
30 Switzerland/franc	1.2361	1.4514	1.4506	1.4933	1.4000	1.3373	1.3852	1.3604	1.3856
31 Taiwan/dollar	27.468	28.775	33.547	34.731	34.646	33.121	32.603	32.337	32.300
32 Thailand/baht	25.359	31.072	41.262	41.720	40.402	38.118	36.527	36.276	36.622
33 United Kingdom/pound[2]	156.07	163.76	165.73	163.42	168.23	169.44	166.11	167.08	164.98
34 Venezuela/bolivar	417 19	488.39	548.39	571.88	583.85	570.68	569.66	565.89	569.80
					Indexes[3]				
NOMINAL									
35 G-10 (March 1973=100)[4]	87.34	96.38	98.85	101.80	97.17	93.69	95.46	94.6054	n.a.
36 Broad (January 1997=100)[5]	97.43	104.47	116.25	120.14	118.85	115.46	115.34	114.5649	114.6788
37 Major currencies (March 1973=100)[6]	85.23	91.85	96.52	100.96	96.99	93.46	94.23	93.4047	92.3726
38 Other important trading partners (January 1997=100)[7]	98.25	104.67	125.70	127.77	131.38	129.02	127.31	126.8028	128.9817
REAL									
39 Broad (March 1973=100)[5]	85.89	90.49	98.37	101.82[r]	100.08[r]	97.07[r]	96.63	95.8551	95.8186
40 Major currencies (March 1973=100)[6]	85.83	93.20	98.33	103.21	99.05	95.47[r]	96.22	95.4420	94.5743
41 Other important trading partners (March 1973=100)[7]	106.57	94.55	105.60	107.37[r]	108.91[r]	106.53[r]	104.31[r]	103.5331	104.6995

1. Averages of certified noon buying rates in New York for cable transfers. Data in this table also appear in the Board's G.5 (405) monthly statistical release. For ordering address, see inside front cover.
2. Value in U.S. cents.
3. As of January 1999, the euro is reported in place of the individual euro-area currencies. These currency rates can be derived from the euro rate by using the fixed conversion rates (in currencies per euro) as shown below:

Euro equals

13.7603	Austrian schillings	1936.27	Italian lire
40.3399	Belgian francs	40.3399	Luxembourg francs
5.94573	Finnish markkas	2.20371	Netherlands guilders
6.55957	French francs	200.482	Portuguese escudos
1.95583	German marks	166.386	Spanish pesetas
.787564	Irish pounds		

4. For more information on the indexes of the foreign exchange value of the dollar, see *Federal Reserve Bulletin*, vol. 84 (October 1998), pp. 811–18.
5. Weighted average of the foreign exchange value of the U.S. dollar against the currencies of the other G-10 countries. The weight for each of the ten countries is the 1972–76 average world trade of that country divided by the average world trade of all ten countries combined. Series revised as of August 1978 (see *Federal Reserve Bulletin*, vol. 64 (August 1978), p. 700).
6. Weighted average of the foreign exchange value of the U.S. dollar against the currencies of a broad group of U.S. trading partners. The weight for each currency is computed as an average of U.S. bilateral import shares from and export shares to the issuing country and of a measure of the importance to U.S. exporters of that country's trade in third country markets.
7. Weighted average of the foreign exchange value of the U.S. dollar against a subset of broad index currencies that circulate widely outside the country of issue. The weight for each currency is its broad index weight scaled so that the weights of the subset of currencies in the index sum to one.
8. Weighted average of the foreign exchange value of the U.S. dollar against a subset of broad index currencies that do not circulate widely outside the country of issue. The weight for each currency is its broad index weight scaled so that the weights of the subset of currencies in the index sum to one.

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RISK MEASUREMENT AND SYSTEMIC RISK: PROCEEDINGS OF A JOINT CENTRAL BANK RESEARCH CONFERENCE. 1996. 578 pp. $25.00 each.

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Consumer Handbook to Credit Protection Laws
A Guide to Business Credit for Women, Minorities, and Small Businesses
Series on the Structure of the Federal Reserve System
- The Board of Governors of the Federal Reserve System
- The Federal Open Market Committee
- Federal Reserve Bank Board of Directors
- Federal Reserve Banks

A Consumer's Guide to Mortgage Lock-Ins
A Consumer's Guide to Mortgage Settlement Costs
A Consumer's Guide to Mortgage Refinancings
Home Mortgages: Understanding the Process and Your Right to Fair Lending
How to File a Consumer Complaint
Making Sense of Savings
SHOP: The Card You Pick Can Save You Money
Welcome to the Federal Reserve
When Your Home is on the Line: What You Should Know About Home Equity Lines of Credit
Keys to Vehicle Leasing
Looking for the Best Mortgage

STAFF STUDIES: Only Summaries Printed in the BULLETIN

Studies and papers on economic and financial subjects that are of general interest. Requests to obtain single copies of the full text or to be added to the mailing list for the series may be sent to Publications Services.

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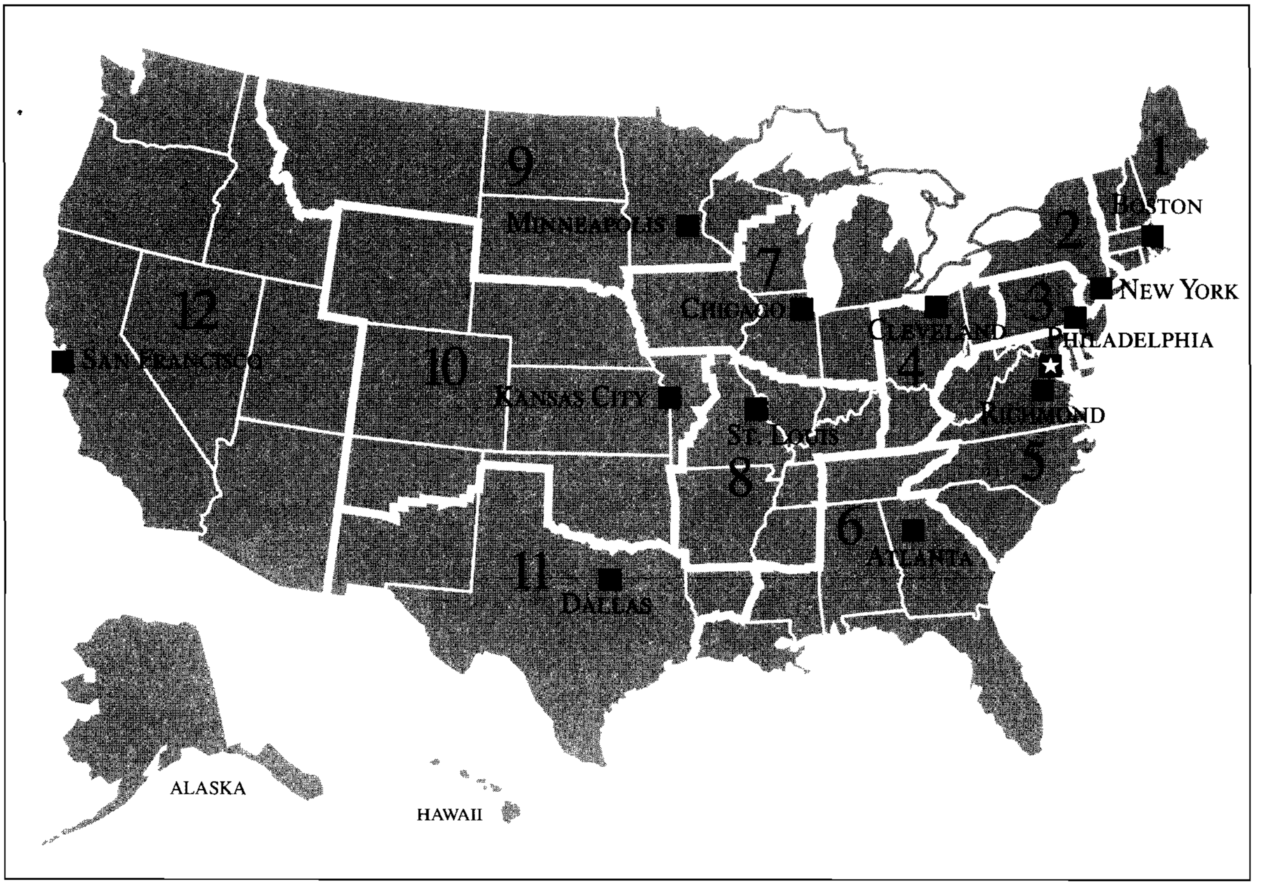
171. THE COST OF BANK REGULATION: A REVIEW OF THE EVIDENCE, by Gregory Elliehausen, April 1998. 35 pp.

Maps of the Federal Reserve System



Legend

Both pages

- ■ Federal Reserve Bank city
- ■ Board of Governors of the Federal Reserve System, Washington, D.C.

Facing page

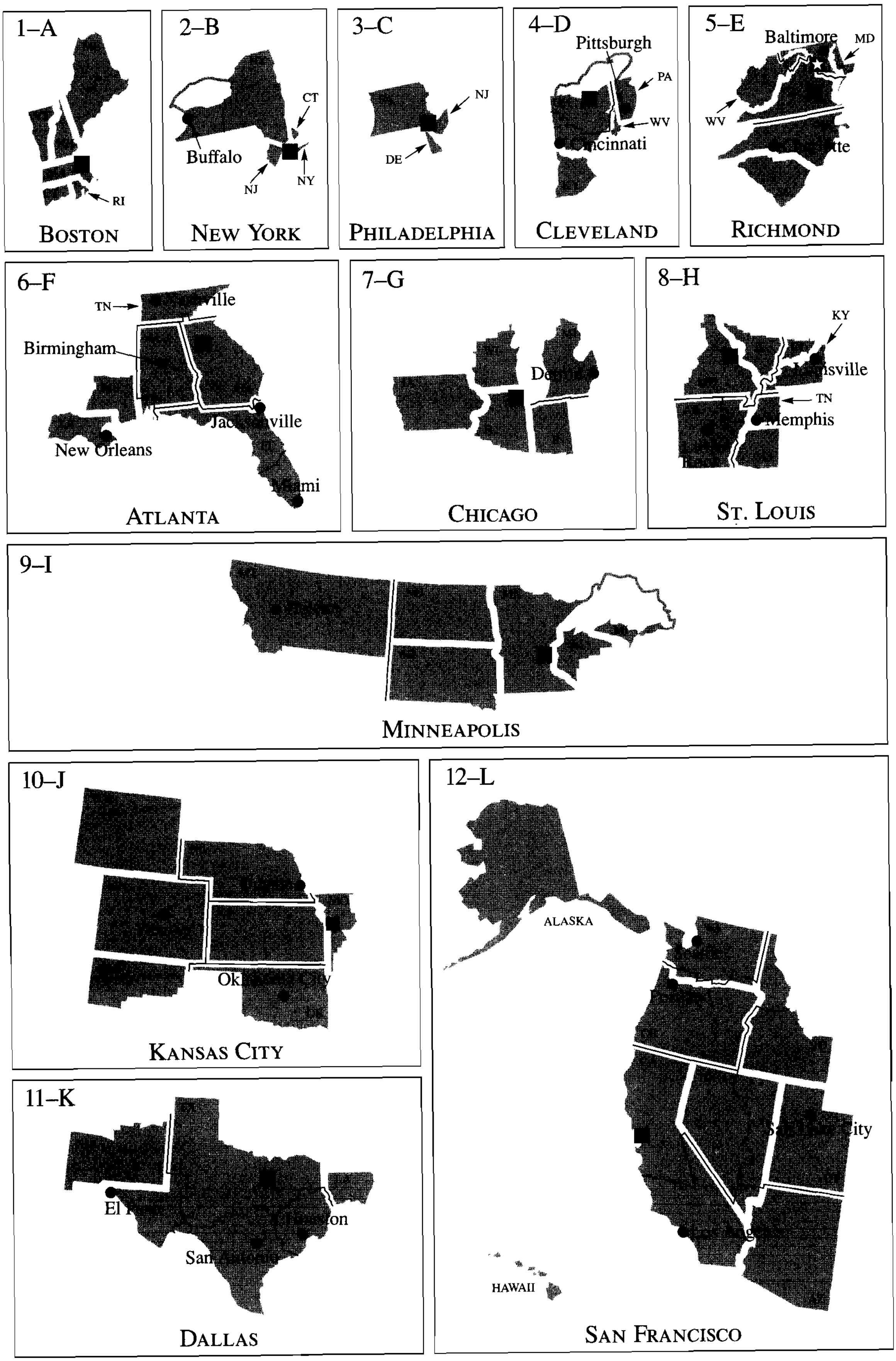
- • Federal Reserve Branch city
- — Branch boundary

Note

The Federal Reserve officially identifies Districts by number and Reserve Bank city (shown on both pages) and by letter (shown on the facing page).

In the 12th District, the Seattle Branch serves Alaska, and the San Francisco Bank serves Hawaii.

The System serves commonwealths and territories as follows: the New York Bank serves the Commonwealth of Puerto Rico and the U.S. Virgin Islands; the San Francisco Bank serves American Samoa, Guam, and the Commonwealth of the Northern Mariana Islands. The Board of Governors revised the branch boundaries of the System most recently in February 1996.


1–A
RI
BOSTON
2–B
CT
Buffalo
NJ
NY
NEW YORK
3–C
NJ
DE
PHILADELPHIA
4–D
Pittsburgh
PA
WV
CLEVELAND
5–E
Baltimore
MD
WV
RICHMOND
6–F
TN
Birmingham
New Orleans
ATLANTA
7–G
CHICAGO
8–H
KY
TN
ST. LOUIS
9–I
MINNEAPOLIS
10–J
KANSAS CITY
11–K
DALLAS
12–L
ALASKA
HAWAII
SAN FRANCISCO

Federal Reserve Banks, Branches, and Offices

FEDERAL RESERVE BANK branch, or *facility*	Zip	Chairman Deputy Chairman	President First Vice President	Vice President in charge of branch
BOSTON*	02106	William C. Brainard William O. Taylor	Cathy E. Minehan Paul M. Connolly	
NEW YORK*	10045	John C. Whitehead Peter G. Peterson	William J. McDonough Jamie B. Stewart, Jr.	
Buffalo	14240	Bal Dixit		Carl W. Turnipseed[1]
PHILADELPHIA	19105	Joan Carter Charisse R. Lillie	Edward G. Boehne William H. Stone, Jr.	
CLEVELAND*	44101	G. Watts Humphrey, Jr. David H. Hoag	Jerry L. Jordan Sandra Pianalto	
Cincinnati	45201	George C. Juilfs		Charles A. Cerino[1]
Pittsburgh	15230	John T. Ryan, III		Robert B. Schaub
RICHMOND*	23219	Claudine B. Malone Jeremiah J. Sheehan	J. Alfred Broaddus, Jr. Walter A. Varvel	
Baltimore	21203	Daniel R. Baker		William J. Tignanelli[1]
Charlotte	28230	Joan H. Zimmerman		Dan M. Bechter[1]
ATLANTA	30303	John F. Wieland Paula Lovell	Jack Guynn Patrick K. Barron	 James M. Mckee
Birmingham	35283	V. Larkin Martin		Fred R. Herr[1]
Jacksonville	32231	Marsha G. Rydberg		James D. Hawkins[1]
Miami	33152	Mark T. Sodders		James T. Curry III
Nashville	37203	N. Whitney Johns		Melvyn K. Purcell
New Orleans	70161	R. Glenn Pumpelly		Robert J. Musso
CHICAGO*	60690	Lester H. McKeever, Jr. Arthur C. Martinez	Michael H. Moskow William C. Conrad	
Detroit	48231	Florine Mark		David R. Allardice[1]
ST. LOUIS	63166	Susan S. Elliott Charles W. Mueller	William Poole W. LeGrande Rives	
Little Rock	72203	Diana T. Hueter		Robert A. Hopkins
Louisville	40232	Roger Reynolds		Thomas A. Boone
Memphis	38101	Mike P. Sturdivant, Jr.		Martha L. Perine
MINNEAPOLIS	55480	David A. Koch James J. Howard	Gary H. Stern Colleen K. Strand	
Helena	59601	Thomas O. Markle		Samuel H. Gane
KANSAS CITY	64198	Jo Marie Dancik Terrence P. Dunn	Thomas M. Hoenig Richard K. Rasdall	
Denver	80217	Kathryn A. Paul		Carl M. Gambs[1]
Oklahoma City	73125	Larry W. Brummett		Kelly J. Dubbert
Omaha	68102	Gladys Styles Johnston		Steven D. Evans
DALLAS	75201	Roger R. Hemminghaus James A. Martin	Robert D. McTeer, Jr. Helen E. Holcomb	
El Paso	79999	Patricia Z. Holland-Branch		Sammie C. Clay
Houston	77252	Edward O. Gaylord		Robert Smith, III[1]
San Antonio	78295	Bartell Zachry		James L. Stull[1]
SAN FRANCISCO	94120	Gary G. Michael Nelson C. Rising	Robert T. Parry John F. Moore	
Los Angeles	90051	Lonnie Kane		Mark L. Mullinix[1]
Portland	97208	Nancy Wilgenbusch		Raymond H. Laurence[1]
Salt Lake City	84125	Barbara L. Wilson		Andrea P. Wolcott
Seattle	98124	Richard R. Sonstelie		Gordon R. G. Werkema[2]

*Additional offices of these Banks are located at Windsor Locks, Connecticut 06096; East Rutherford, New Jersey 07016; Utica at Oriskany, New York 13424; Columbus, Ohio 43216; Columbia, South Carolina 29210; Charleston, West Virginia 25311; Des Moines, Iowa 50306; Indianapolis, Indiana 46204; Milwaukee, Wisconsin 53202; and Peoria, Illinois 61607.

1. Senior Vice President.
2. Executive Vice President