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Monetary Policy Report to the Congress

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

MONETARY POLICY AND THE ECONOMIC OUTLOOK

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

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

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

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

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

By the May meeting, these recoveries were solidifying, and the pace of domestic spending appeared to be outstripping the growth of the economy's potential, even allowing for an appreciable acceleration in productivity. The Committee still expected some slowing in the expansion of aggregate demand, but the timing and extent of any moderation remained uncertain. Against this backdrop, the FOMC maintained an unchanged policy stance but announced immediately after the meeting that it had chosen a directive tilted toward the possibility of a firming of rates. This announcement implemented the disclosure policy adopted in December 1998, whereby major shifts in the Committee's views about the balance of risks or the likely direction of future policy would be made public immediately. Members expected that, by making the FOMC's concerns public earlier, such announcements would encourage financial market reactions to subsequent information that would help stabilize the economy. In practice, however, those reactions seemed to be exaggerated and to focus even more than usual on possible near-term Committee action.

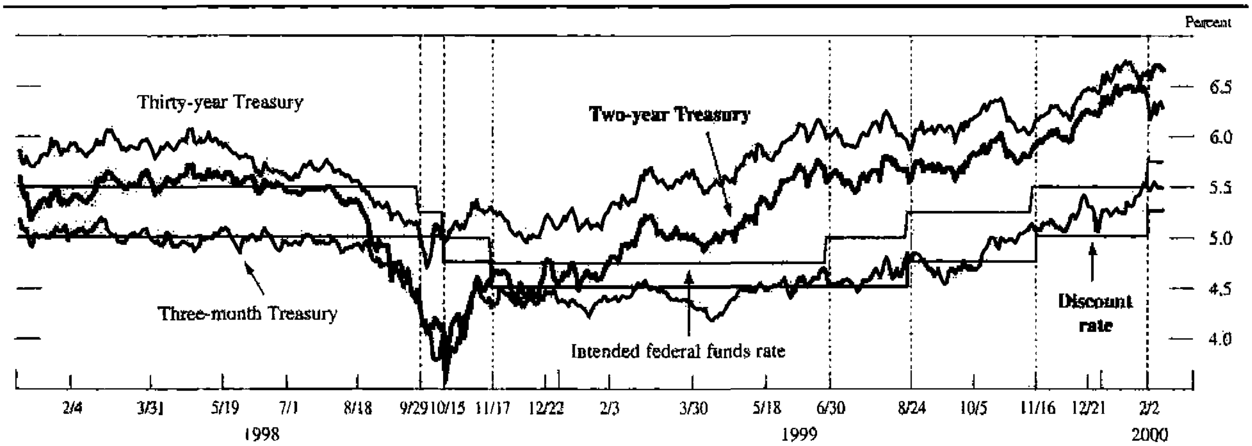
Over subsequent weeks, economic activity continued to expand vigorously, labor markets remained very tight, and oil and other commodity prices rose further. In this environment, the FOMC saw an updrift in inflation as a significant risk in the absence of some policy firming, and at the June meeting it raised the intended level of the federal funds rate ¼ percentage point. The Committee also announced a symmetric directive, noting that the marked degree of uncertainty about the extent and timing of prospective inflationary pressures meant that further firming of policy might not be undertaken in the near term, but that the Committee would need to be especially alert to emerging inflation pressures. Markets rallied on the symmetric-directive announcement, and the strength of this response together with market commentary suggested uncertainty about the interpretation of the language used to characterize possible future developments and about the time period to which the directive applied.

In the period between the June and August meetings, the ongoing strength of domestic demand and further expansion abroad suggested that at least part of the remaining easing put in place the previous fall to deal with financial market stresses was no longer needed. Consequently, at the August meeting the FOMC raised the intended level of the federal funds rate a further ¼ percentage point, to 5¼ percent. The Committee agreed that this action, along with that taken in June, would substantially reduce inflation risks and again announced a symmetric directive. In a related action, the Board of Governors approved an increase in the discount rate to 4¾ percent. At this meeting the Committee also established a working group to assess the FOMC's approach to disclosing its view about prospective developments and to propose procedural modifications.

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

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

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 11, 2000.

Incoming information during the period leading up to the FOMC's October meeting suggested that the growth of domestic economic activity had picked up from the second quarter's pace, and foreign economies appeared to be strengthening more than had been anticipated, potentially adding pressure to already-taut labor markets and possibly creating inflationary imbalances that would undermine economic performance. But the FOMC viewed the risk of a significant increase in inflation in the near term as small and decided to await more evidence on how the economy was responding to its previous tightenings before changing its policy stance. However, the Committee anticipated that the evidence might well signal the need for additional tightening, and it again announced a directive that was biased toward restraint.

Information available through mid-November pointed toward robust growth in overall economic activity and a further depletion of the pool of unemployed workers willing to take a job. Although higher real interest rates appeared to have induced some softening in interest-sensitive sectors of the economy, the anticipated moderation in the growth of aggregate demand did not appear sufficient to avoid added pressures on resources, predominantly labor. These conditions, along with further increases in oil and other commodity prices, suggested a significant risk that inflation would pick up over time, given prevailing financial conditions. Against this backdrop, the FOMC raised the target for the federal funds rate an additional ¼ percentage point in November. At that time, a symmetric directive was adopted, consistent with the Committee's expectation that no further policy move was likely to be considered before the February meeting. In a related action, the Board of Governors approved an increase in the discount rate of ¼ percentage point, to 5 percent.

At the December meeting, FOMC members held the stance of policy unchanged and, to avoid any misinterpretation of policy intentions that might unsettle financial markets around the century date change, announced a symmetric directive. But the statement issued after the meeting also highlighted members' continuing concern about inflation risks going forward and indicated the Committee's intention to evaluate, as soon as its next meeting, whether those risks suggested that further tightening was appropriate.

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

Financial markets and the economy came through the century date change smoothly. By the February 2000 meeting, there was little evidence that demand was coming into line with potential supply, and the risks of inflationary imbalances appeared to have risen. At the meeting, the FOMC raised its target for the federal funds rate ¼ percentage point to 5¾ percent, and characterized the risks as remaining on the side of higher inflation pressures. In a related action, the Board of Governors approved a ¼ percentage point increase in the discount rate, to 5¼ percent.

Economic Projections for 2000

The members of the Board of Governors and the Federal Reserve Bank presidents, all of whom participate in the deliberations of the FOMC, expect to see another year of favorable economic performance in 2000, although the risk of higher inflation will need to be watched especially carefully. The central tendency of the FOMC participants' forecasts of real GDP growth from the fourth quarter of 1999 to the fourth quarter of 2000 is 3½ percent to 3¾ percent. A substantial part of the gain in output will likely come from further increases in productivity. Nonetheless, economic expansion at the pace that is anticipated should create enough new jobs to keep the unemployment rate in a range of 4 percent to 4¼ percent, close to its recent average. The central tendency of the FOMC participants' inflation forecasts for 2000—as measured by the chain-type price index for personal consumption expenditures—is 1¾ percent to 2 percent, a range that runs a little to the low side of the energy-led 2 percent rise posted in 1999.[1] Even though futures markets suggest that energy prices may turn down later this year, prices elsewhere in the economy could be pushed upward by a combination of factors, including reduced restraint from non-oil import prices, wage and price pressures associated with lagged effects of the past year's oil price rise, and larger increases in costs that might be forthcoming in another year of tight labor markets.

1. Economic projections for 2000

Percent

Indicator	Memo: 1999 actual	Federal Reserve governors and Reserve Bank presidents	
		Range	Central tendency
Change, fourth quarter to fourth quarter[1]			
Nominal GDP	5.9	5–6	5¼–5½
Real GDP[2]	4.2	3½–4¼	3½–3¾
PCE chain-type price index	2.0	1½–2½	1¾–2
Average level, fourth quarter			
Civilian unemployment rate	4.1	4–4¼	4–4¼

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

2. Chain-weighted.

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

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

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

high levels of consumer confidence and the likely lagged effects of the large increments to household wealth registered to date. The boost to aggregate demand from the marked pickup in productivity growth implies that the level of interest rates needed to align demand with potential supply may have increased substantially. Although the recent rise in interest rates may lead to some slowing of spending, aggregate demand may well continue to outpace gains in potential output over the near term, an imbalance that contains the seeds of rising inflationary and financial pressures that could undermine the expansion.

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

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

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

Money and Debt Ranges for 2000

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

Given continued uncertainty about movements in the velocities of M2 and M3 (the ratios of nominal GDP to the aggregates), the Committee still has little confidence that money growth within any particular range selected for the year would be associated with the economic performance it expected or desired.

2. Ranges for growth of monetary and debt aggregates
Percent

Aggregate	1998	1999	2000
M2	1–5	1–5	1–5
M3	2–6	2–6	2–6
Debt	3–7	3–7	3–7

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

Nonetheless, the Committee believes that money growth has some value as an economic indicator, and it will continue to monitor the monetary aggregates among a wide variety of economic and financial data to inform its policy deliberations.

M2 increased 6¼ percent last year. With nominal GDP rising 6 percent, M2 velocity fell a bit overall, although it rose in the final two quarters of the year as market interest rates climbed relative to yields on M2 assets. Further increases in market interest rates early this year could continue to elevate M2 velocity. Nevertheless, given the Committee's expectations for nominal GDP growth, M2 could still be above the upper end of its range in 2000.

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

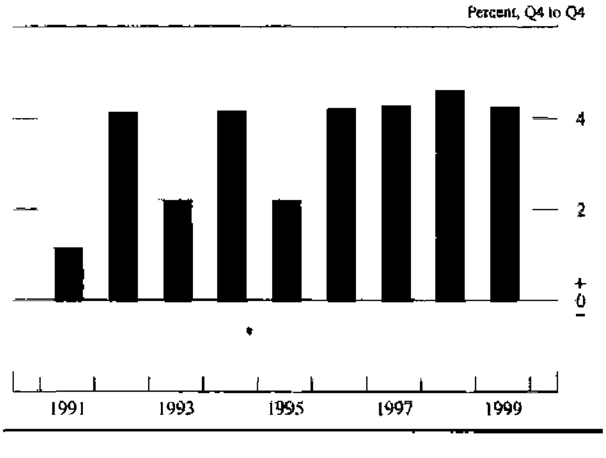
Domestic nonfinancial debt grew 6½ percent in 1999, near the upper end of the 3 percent to 7 percent growth range the Committee established last February. This robust growth reflected large increases in the debt of businesses and households that were due to substantial advances in spending as well as to debt-financed mergers and acquisitions. However, the increase in private-sector debt was partly offset by a substantial decline in federal debt. The Committee left the range for debt growth in 2000 unchanged at 3 percent to 7 percent. After an aberrant period in the 1980s during which debt expanded much more rapidly than nominal GDP, the growth of debt has returned to its historical pattern of about matching the growth of nominal GDP over the past decade, and the Committee members expect debt to remain within its range again this year.

Economic and Financial Developments in 1999 and Early 2000

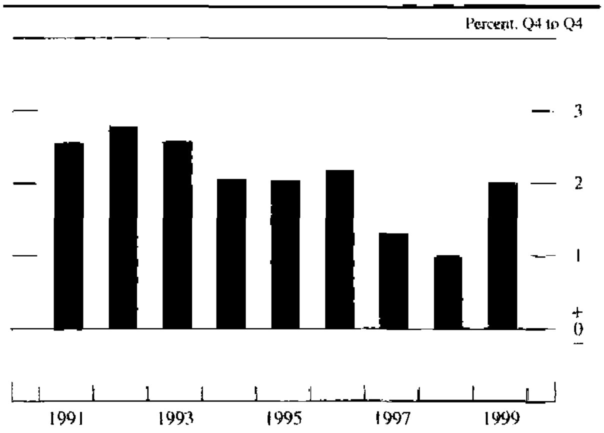
The U.S. economy retained considerable strength in 1999. According to the Commerce Department's advance estimate, the rise in real gross domestic product over the four quarters of the year exceeded 4 percent for the fourth consecutive year. The growth of household expenditures was bolstered by further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

The combination of a strong U.S. economy and improving economic conditions abroad led to firmer prices in some markets this past year. Industrial commodity prices turned up—sharply in some cases—after having dropped appreciably in 1998. Oil prices, responding both to OPEC production restraint and to the growth of world demand, more than doubled over the course of the year, and the prices of non-oil

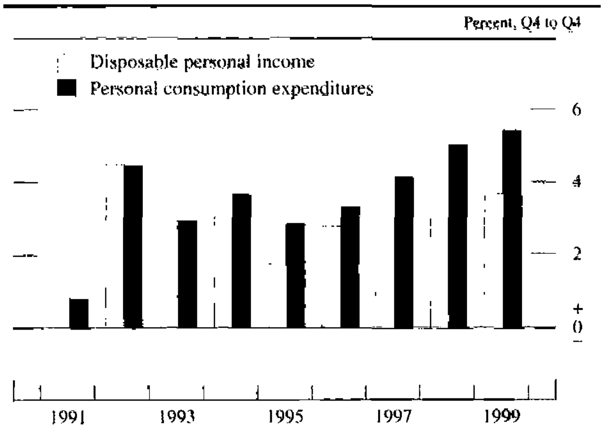
Change in real GDP



Change in PCE chain-type price index



Change in real income and consumption



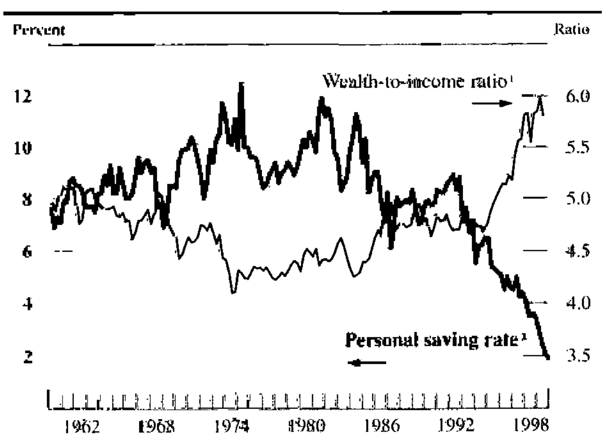
imports declined less rapidly than in previous years, when a rising dollar, as well as sluggish conditions abroad, had pulled them lower. The higher oil prices of 1999 translated into sharp increases in retail energy prices and gave a noticeable boost to consumer prices overall; the chain-type price index for personal consumption expenditures rose 2 percent, double the increase of 1998. Outside the energy sector, however, consumer prices increased at about the same low rate as in the previous year, even as the unemployment rate continued to edge down. Rapid gains in productivity enabled businesses to offset a substantial portion of the increases in nominal compensation, thereby holding the rise of unit labor costs in check, and business pricing policies continued to be driven to a large extent by the desire to maintain or increase market share at the expense of some slippage in unit profits, albeit from a high level.

The Household Sector

Personal consumption expenditures increased about 5½ percent in real terms in 1999, a second year of exceptionally rapid advance. As in other recent years, the strength of consumption in 1999 reflected sustained increases in employment and real hourly pay, which bolstered the growth of real disposable personal income. Added impetus came from another year of rapid growth in net worth, which, coming on top of the big gains of previous years, led households in the aggregate to spend a larger portion of their current income than they would have otherwise. The personal saving rate, as measured in the national income and product accounts, dropped further, to an average of about 2 percent in the final quarter of 1999; it has fallen about 4½ percentage points over the past five years, a period during which yearly gains in household net worth have averaged more than 10 percent in nominal terms and the ratio of household wealth to disposable personal income has moved up sharply.

The strength of consumer spending this past year extended across a broad front. Appreciable gains were reported for most types of durable goods. Spending on motor vehicles, which had surged about 13½ percent in 1998, moved up another 5½ percent in 1999. The inflation-adjusted increases for furniture, appliances, electronic equipment, and other household durables also were quite large, supported in part by a strong housing market. Spending on services advanced about 4½ percent in real terms, led by sizable increases for recreation and personal business services. Outlays for nondurables, such as food and clothing, also rose rapidly. Exceptional strength in

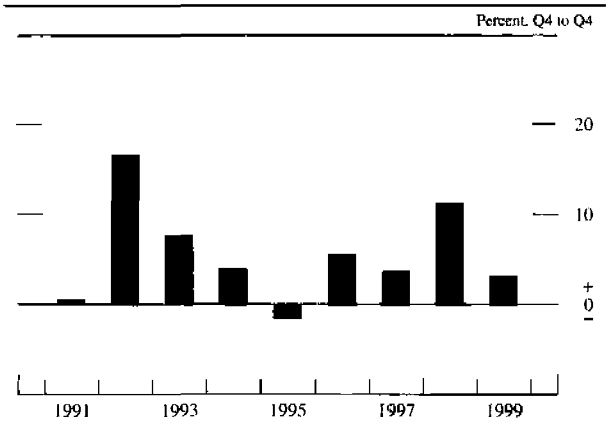
Wealth and saving



1. Ratio of net worth of households to disposable personal income. The data extend through 1999:Q3.

2. The data extend through 1999:Q4.

Change in real residential investment



the purchases of some nondurables toward the end of the year may have reflected precautionary buying by consumers in anticipation of the century date change; it is notable in this regard that grocery store sales were up sharply in December and then fell back in January, according to the latest report on retail sales.

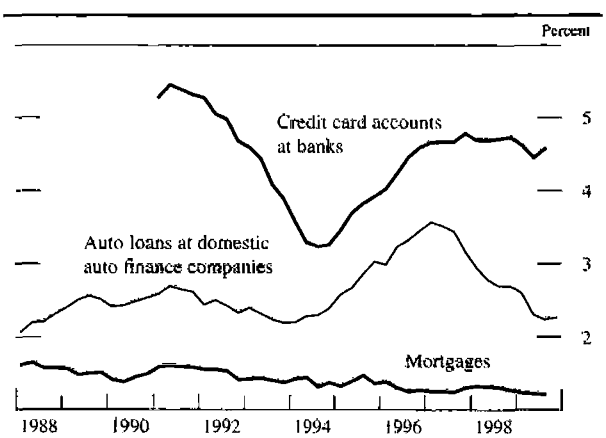
Households also continued to boost their expenditures on residential structures. After having surged 11 percent in 1998, residential investment rose about 3¼ percent over the four quarters of 1999, according to the advance estimate from the Commerce Department. Moderate declines in investment in the second half of the year offset only part of the increases recorded in the first half. As with consumption expenditures, investment in housing was supported by the sizable advances in real income and household net worth, but this spending category was also tempered a little by a rise in mortgage interest rates, which likely was an important factor in the second-half downturn.

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

The increases in consumption and residential investment in 1999 were, in part, financed by an expansion of household debt estimated at 9½ percent, the largest increase in more than a decade. Mortgage debt, which includes the borrowing against owner equity that may be used for purposes other than residential investment, grew a whopping 10¼ percent. Higher interest rates led to a sharp drop in refinancing activity and prompted a shift toward the use of adjustable-rate mortgages, which over the year rose from 10 percent to 30 percent of originations. Consumer credit advanced 7¼ percent, boosted by heavy demand for consumer durables and other big-ticket purchases. Credit supply conditions were also favorable; commercial banks reported in Federal Reserve surveys that they were more willing than in the previous year or two to make consumer installment loans and that they remained quite willing to make mortgage loans.

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

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.

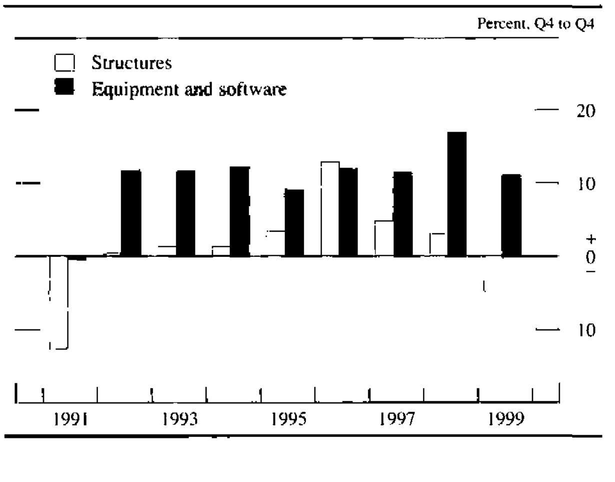
The Business Sector

Private nonresidential fixed investment increased 7 percent during 1999, extending by another year a long run of rapid growth in real investment outlays. Strength in capital investment has been underpinned in recent years by the vigor of the business expansion, by the advance and spread of computer technologies, and by the ability of most businesses to readily obtain funding through the credit and equity markets.

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

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

Change in real nonresidential fixed investment



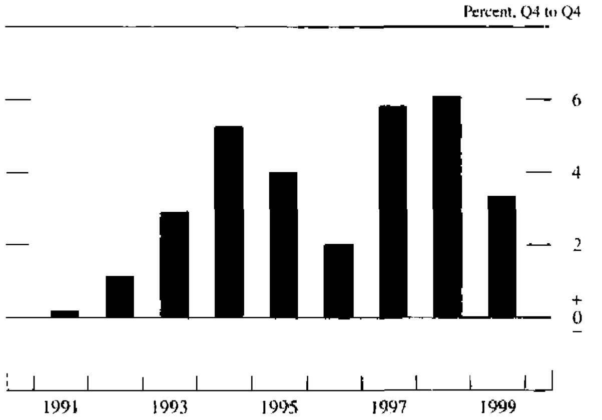
Spending on other types of equipment rose moderately, on balance, in 1999. Outlays for transportation equipment increased substantially, led by advances in business purchases of motor vehicles and aircraft. By contrast, a sharp decline in spending on industrial machinery early in the year held the yearly gain for that category to about 2 percent; over the final three quarters of the year, however, outlays picked up sharply as industrial production strengthened.

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

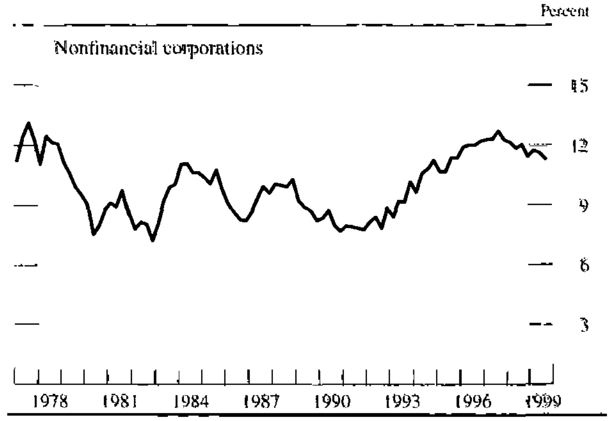
After increasing for two years at a rate of about 6 percent, nonfarm business inventories expanded more slowly this past year—about 3¼ percent according to the advance GDP report. During the year, some businesses indicated that they planned to carry heavier stocks toward year-end to protect themselves against possible Y2K disruptions, and the rate of accumulation did in fact pick up appreciably in the fall. But business final sales remained strong, and the ratio of nonfarm stocks to final sales changed little, holding toward the lower end of the range of the past decade. With the ratio so low, businesses likely did not enter the new year with excess stocks.

After slowing to a 1 percent rise in 1998, the economic profits of U.S. corporations—that is, book profits with inventory valuation and capital consumption adjustments—picked up in 1999. Economic profits over the first three quarters of the year averaged

Change in real private nonfarm inventories



Before-tax profits as a share of GDP

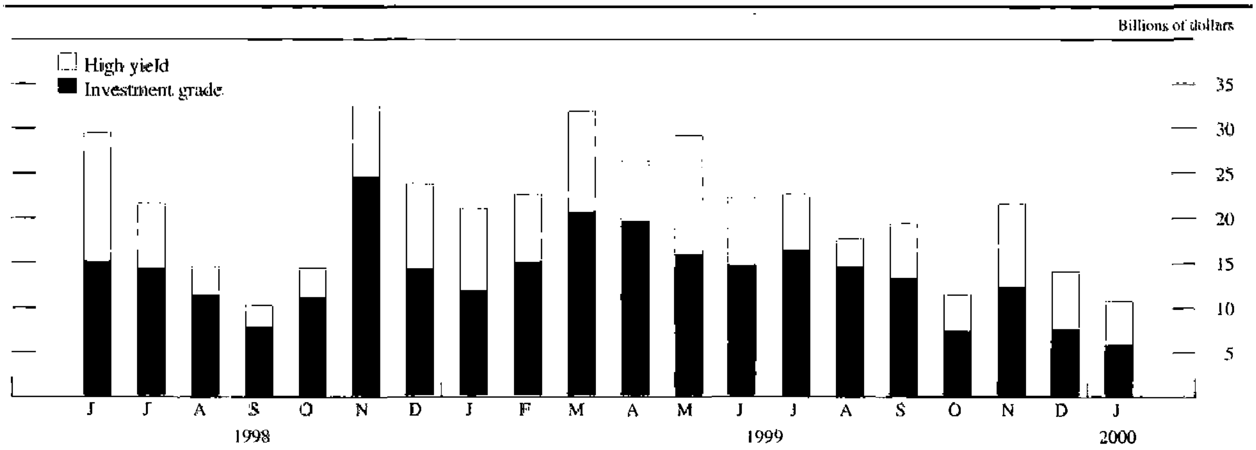


NOTE. Profits from domestic operations, with inventory valuation and capital consumption adjustments, divided by gross domestic product of nonfinancial corporate sector. The data extend through 1999:Q3.

about 3½ percent above the level of a year earlier. The earnings of corporations from their operations outside the United States rebounded in 1999 from a brief but steep decline in the second half of 1998, when financial market disruptions were affecting the world economy. The profits earned by financial corporations on their domestic operations also picked up after having been slowed in 1998 by the financial turmoil; growth of these profits in 1999 would have been greater but for a large payout by insurance companies to cover damage from Hurricane Floyd. The profits that nonfinancial corporations earned on their domestic operations in the first three quarters of 1999 were about 2½ percent above the level of a year earlier; growth of these earnings, which account for about two-thirds of all economic profits, had slowed to just over 2 percent in 1998 after averaging 13 percent at a compound annual rate in the previous six years. Nonfinancial corporations have boosted volume substantially further over the past two years, but profits per unit of output have dropped back somewhat from their 1997 peak. As of the third quarter of last year, economic profits of nonfinancial corporations amounted to slightly less than 11½ percent of the nominal output of these companies, compared with a quarterly peak of about 12¾ percent two years earlier.

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

Gross corporate bond issuance



NOTE. Excludes unrated issues and issues sold abroad.

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

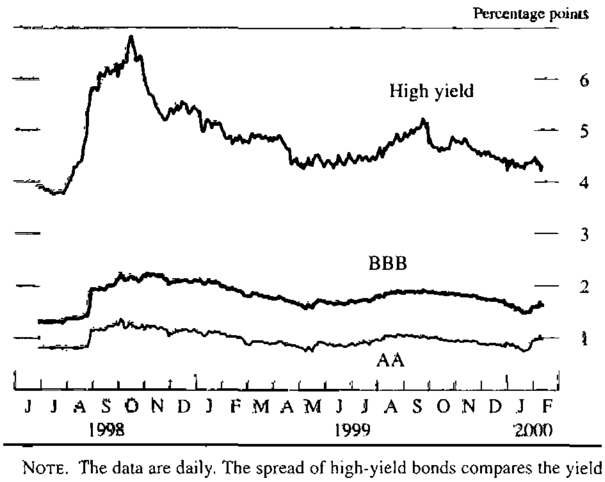
Commercial mortgage borrowing was strong again as well, as real estate prices generally continued to rise, albeit at a slower pace than in 1998, and vacancy rates generally remained near historical lows. The mix of lending shifted back to banks and life insurance companies from commercial mortgage-backed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

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

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

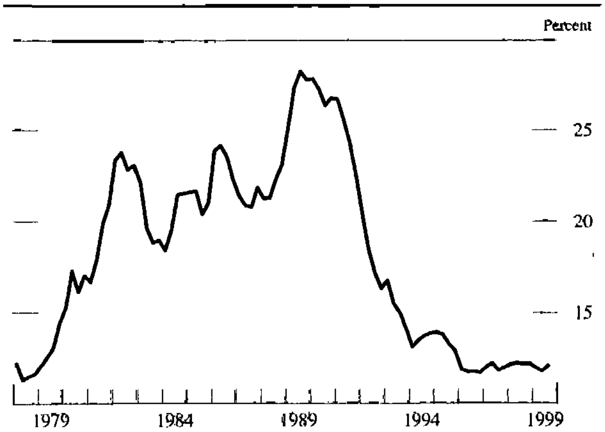
The ratio of net interest payments to cash flow for nonfinancial firms remained in the low range it has occupied for the past few years, but many measures of credit quality nonetheless deteriorated in 1999. Moody's Investors Service downgraded more nonfinancial debt issuers than it upgraded over the year, affecting a net $78 billion of debt. The problems that emerged in the bond market were concentrated mostly among borrowers in the junk sector, and partly reflected a fallout from the large volume of issuance and the generous terms available in 1997 and early 1998; default rates on junk bonds rose to levels not seen since the recession of 1990–91. Delinquency rates on C&I loans at commercial banks ticked up in 1999, albeit from very low levels, while the charge-off rate for those loans continued on its upward trend of the past several years. Business failures edged up last year but remained in a historically low range.

Spreads of corporate bond yields over Treasury security yields



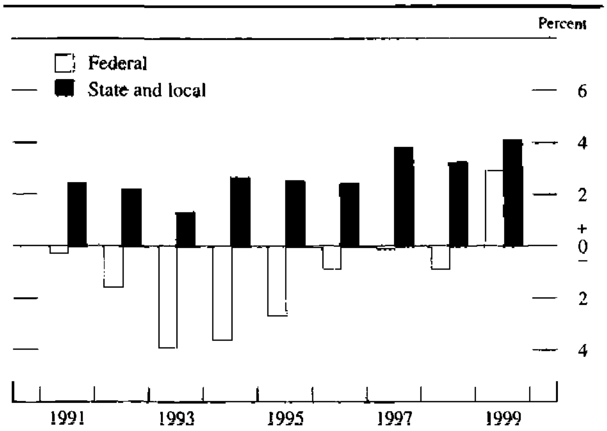
NOTE. The data are daily. The spread of high-yield bonds compares the yield on the Merrill Lynch 175 index with that on a seven-year Treasury; the other two spreads compare yields on the appropriate Merrill Lynch indexes with that on a ten-year Treasury. Last observations are for February 11, 2000.

Net interest payments of nonfinancial corporations relative to cash flow



NOTE. The data are quarterly and extend through 1999:Q3.

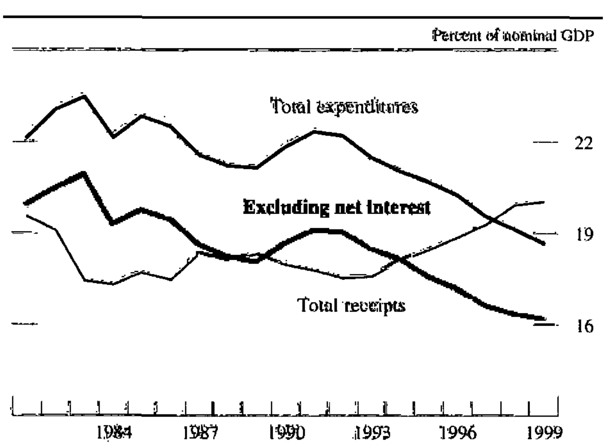
Annual change in real government expenditures on consumption and investment



The Government Sector

Buoyed by rapid increases in receipts and favorable budget balances, the combined real expenditures of federal, state, and local governments on consumption and investment rose about 4¾ percent from the fourth quarter of 1998 to the fourth quarter of 1999. Annual data, which smooth through some of the quarterly noise that is often evident in government outlays, showed a gain in real spending of more than 3½ percent this past year, the largest increase of the expansion. Federal expenditures on consumption and investment were up nearly 3 percent in annual terms; real defense expenditures, which had trended lower through most of the 1990s, rose moderately, and outlays for nondefense consumption and investment increased sharply. Meanwhile, the consumption and investment expenditures of state and local governments rose more than 4 percent in annual terms; growth of these outlays has picked up appreciably as the expansion has lengthened.

Federal receipts and expenditures



NOTE. The data are from the unified budget and are for the fiscal year ended in September.

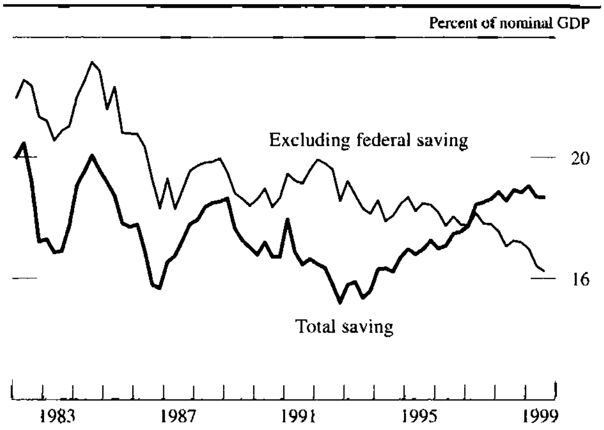
At the federal level, expenditures in the unified budget rose 3 percent in fiscal 1999, just a touch less than the 3¼ percent rise of the preceding fiscal year. Faster growth of nominal spending on items that are included in consumption and investment was offset in the most recent fiscal year by a deceleration in other categories. Net interest outlays fell more than 5 percent—enough to trim total spending growth about ¾ percentage point—and only small increases were recorded in expenditures for social insurance and income security, categories that together account for nearly half of total federal outlays. In contrast, federal expenditures on Medicaid, after having slowed in 1996 and 1997, picked up again in the past two fiscal years. Spending on agriculture doubled in fiscal 1999; the increase resulted both from a step-up in payments under farm safety net programs that were retained in the "freedom to farm" legislation of 1996 and from more recent emergency farm legislation.

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

Federal saving, a measure that results from a translation of the federal budget surplus into terms consistent with the national income and product accounts, amounted to 2¼ percent of nominal GDP in the first three quarters of 1999, up from 1½ percent in 1998 and ½ percent in 1997. Before 1997, federal saving had been negative for seventeen consecutive years, by amounts exceeding 3 percent of nominal GDP in several years—most recently in 1992. The change in the federal government's saving position from 1992 to 1999 more than offset the sharp drop in the personal saving rate and helped lift national saving from less than 16 percent of nominal GDP in 1992 and 1993 to a range of about 18½ percent to 19 percent over the past several quarters.

Federal debt growth has mirrored the turnabout in the government's saving position. In the 1980s and early 1990s, borrowing resulted in large additions to the volume of outstanding government debt. In contrast, with the budget in surplus the past two

National saving

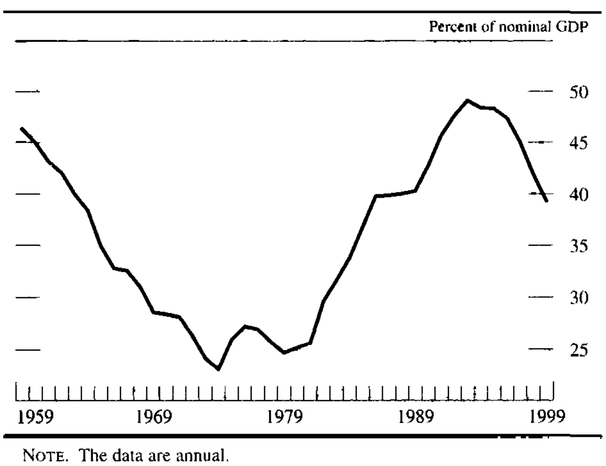


NOTE. National saving includes the gross saving of households, businesses, and governments. The data extend through 1999:Q3.

years, the Treasury has been paying down debt. Without the rise in federal saving and the reversal in borrowing, interest rates in recent years likely would have been higher than they have been, and private capital formation, a key element in the vigorous economic expansion, would have been lower, perhaps appreciably.

The Treasury responded to its lower borrowing requirements in 1999 primarily by reducing the number of auctions of thirty-year bonds from three to two and by trimming auction sizes for notes and Treasury inflation-indexed securities (TIIS). Weekly bill volumes were increased from 1998 levels, however, to help build up cash holdings as a Y2K precaution. For 2000, the Treasury plans major changes in debt management in an attempt to keep down the average maturity of the debt and maintain sufficient auction sizes to support the liquidity and benchmark status of its most recently issued securities, while still retiring large volumes of debt. Alternate quarterly refunding auctions of five- and ten-year notes and semiannual auctions of thirty-year bonds will now be smaller reopenings of existing issues rather than new issues. Thirty-year TIIS will now be auctioned once a year rather than twice, and the two auctions of ten-year TIIS will be modestly reduced. Auctions of one-year Treasury bills will drop from thirteen a year to four, while weekly bill volumes will rise somewhat. Finally, the Treasury plans to enter the market to buy back in "reverse auctions" as much as $30 billion of outstanding securities this year, beginning in March or April.

Federal government debt held by the public



NOTE. The data are annual.

State and local government debt expanded 4¼ percent in 1999, well off the previous year's elevated pace. Borrowing for new capital investment edged up, but the roughly full-percentage-point rise in municipal bond yields over the year led to a sharp drop in advance refundings, which in turn pulled gross issuance below the 1998 level. Tax revenues continued to grow at a robust rate, improving the financial condition of states and localities, as reflected in a ratio of debt rating upgrades to downgrades of more than three to one over the year. The surplus in the current account of state and local governments in the first three quarters of 1999 amounted to about ½ percent of nominal GDP, about the same as in 1998 but otherwise the largest of the past several years.

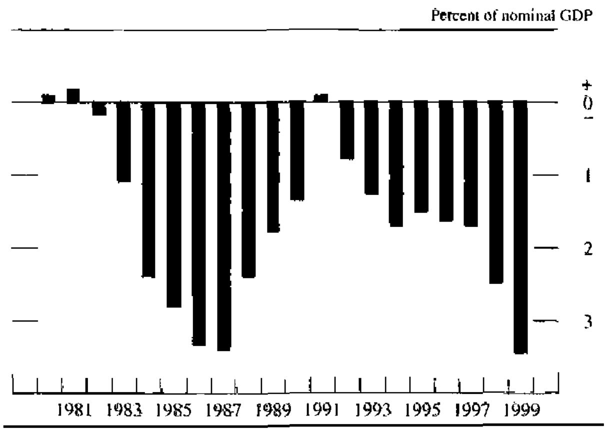
The External Sector

Trade and the Current Account

U.S. external balances deteriorated in 1999 largely because of continued declines in net exports of goods and services and some further weakening of net investment income. The nominal trade deficit for goods and services widened more than $100 billion in 1999, to an estimated $270 billion, as imports expanded faster than exports. For the first three quarters of the year, the current account deficit increased more than one-third, reaching $320 billion at an annual rate, or 3½ percent of GDP. In 1998, the current account deficit was 2½ percent of GDP.

Real imports of goods and services expanded strongly in 1999—about 13 percent according to preliminary estimates—as the rapid import growth during the first half of the year was extended through the second half. The expansion of real imports was fueled by the continued strong growth of U.S. domestic expenditures. Declines in non-oil import prices through most of the year, partly reflecting previous dollar appreciation, contributed as well. All major

U.S. current account

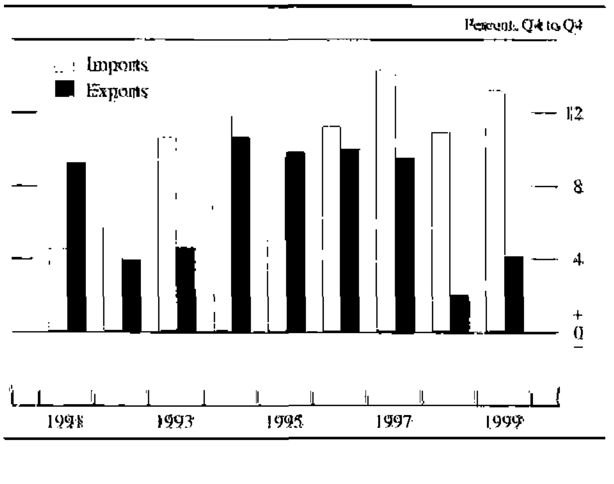


NOTE. The observation for 1999 is the average for the first three quarters of the year.

import categories other than aircraft and oil recorded strong increases. While U.S. consumption of oil rose about 4 percent in 1999, the quantity of oil imported was about unchanged, and inventories were drawn down.

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

Change in real imports and exports of goods and services



Capital Account

U.S. capital flows in 1999 reflected the relatively strong cyclical position of the U.S. economy and the global wave of corporate mergers. Foreign purchases of U.S. securities remained brisk—near the level of the previous two years, in which they had been elevated by the global financial unrest. The composition of foreign securities purchases in 1999 showed a continued shift away from Treasuries, in part because of the U.S. budget surplus and the decline in the supply of Treasuries relative to other securities and, perhaps, to a general increased tolerance of foreign investors for risk as markets calmed after their turmoil of late 1998. Available data indicate that private foreigners sold on net about $20 billion in Treasuries, compared with net purchases of $50 billion in 1998 and $150 billion in 1997. These sales of Treasuries were more than offset by a pickup in foreign purchases of their nearest substitute—government agency bonds—as well as corporate bonds and equities.

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

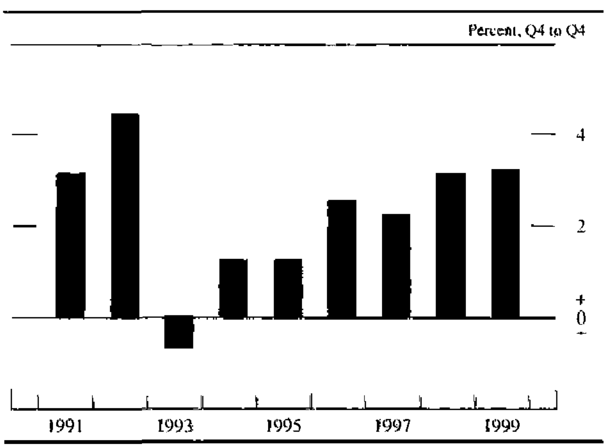
Available data indicate a return to sizable capital inflows from foreign official sources in 1999, following a modest outflow in 1998. The decline in foreign official assets in the United States in 1998 was fairly widespread, as many countries found their currencies under unwanted downward pressure during the turmoil. By contrast, the increase in foreign official reserves in the United States in 1999 was fairly concentrated in a relatively few countries that experienced unwanted upward pressure on their currencies vis-à-vis the U.S. dollar.

The Labor Market

As in other recent years, the rapid growth of aggregate output in 1999 was associated with both strong growth of productivity and brisk gains in employment. According to the initial estimate for 1999, output per hour in the nonfarm business sector rose 3¼ percent over the four quarters of the year, and historical data were revised this past year to show stronger gains than previously reported in the years preceding 1999. As the data stand currently, the average rate of rise in output per hour over the past four years is about 2¾ percent—up from an average of 1½ percent from the mid-1970s to the end of 1995. Some of the step-up in productivity growth since 1995 can be traced to high levels of capital spending and an accompanying faster rate of increase in the amount of capital per worker. Beyond that, the causes are more difficult to pin down quantitatively but are apparently related to increased technological and organizational efficiencies. Firms are not only expanding the stock of capital but are also discovering many new uses for the technologies embodied in that capital, and workers are becoming more skilled at employing the new technologies.

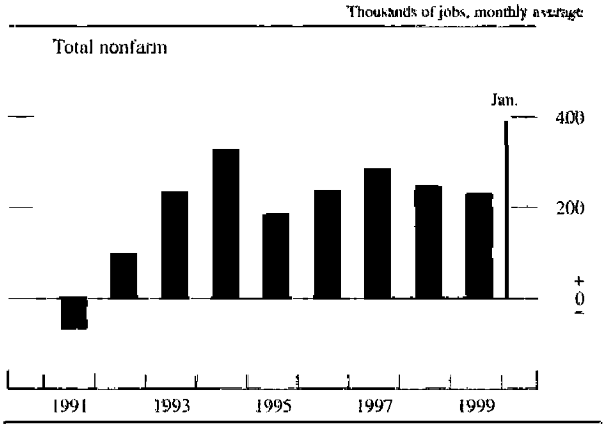
The number of jobs on nonfarm payrolls rose slightly more than 2 percent from the end of 1998 to the end of 1999, a net increase of 2.7 million. Annual job gains had ranged between 2¼ percent and 2¾ percent over the 1996–98 period. Once again in 1999, the private service-producing sector accounted for most of the total rise in payroll employment, led by many of the same categories that had been strong in previous years—transportation and communications, computer services, engineering and management, recreation, and personnel supply. In the construction sector, employment growth remained quite brisk—more than 4 percent from the final quarter of 1998 to the final quarter of 1999. Manufacturing employment, influenced by spillover from the disruptions in foreign economies, continued to decline sharply in the first half of the year, but losses thereafter were small as factory production strengthened. Since the start of the expansion in 1991, the job count in manufacturing has changed little, on net, but with factory productivity rising rapidly, manufacturing output has trended up at a brisk pace.

Change in output per hour

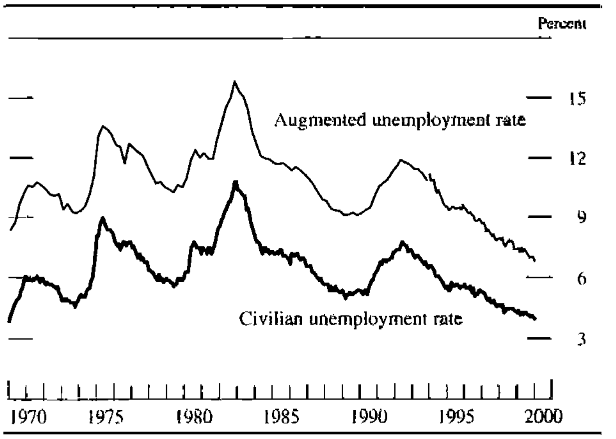


NOTE. Nonfarm business sector.

Change in payroll employment



Measures of labor utilization

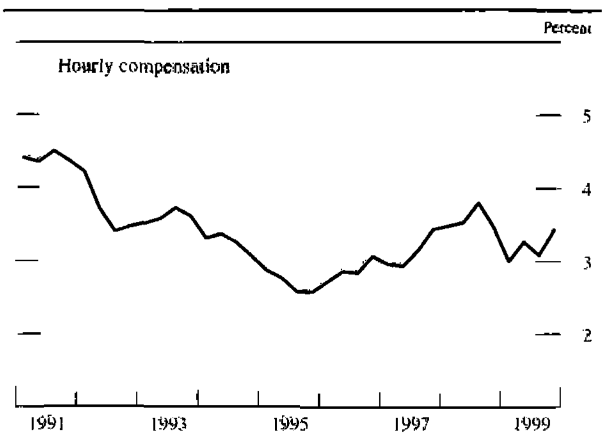


NOTE. The augmented unemployment rate is the number of unemployed plus those who are not in the labor force and want a job, divided by the civilian labor force plus those who are not in the labor force and want a job. The break in data at January 1994 marks the introduction of a redesigned survey; data from that point on are not directly comparable with those of earlier periods. The data extend through January 2000.

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

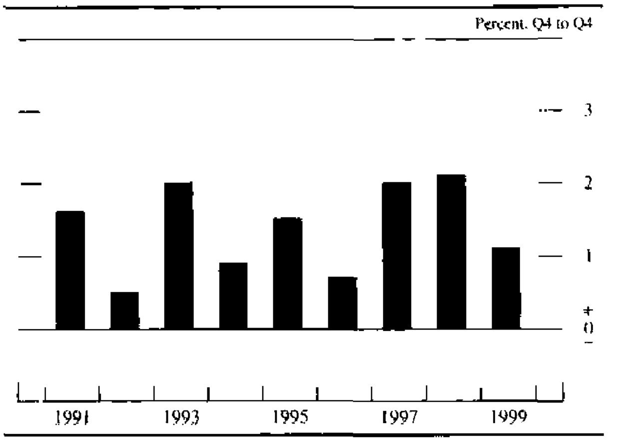
Although the supply–demand balance in the labor market tightened further in 1999, the added pressure did not translate into bigger increases in nominal hourly compensation. The employment cost index for hourly compensation of workers in private nonfarm industries rose 3.4 percent in nominal terms during 1999, little changed from the increase of the previous year, and an alternative measure of hourly compensation from the nonfarm productivity and cost data slowed from a 5¼ percent increase in 1998 to a 4½ percent rise this past year. Compensation gains in 1999 probably were influenced, in part, by the very low inflation rate of 1998, which resulted in unexpectedly large increases in inflation-adjusted pay in that year and probably damped wage increments last year. According to the employment cost index, the hourly wages of workers in private industry rose 3½ percent in nominal terms after having increased

Change in employment cost index



NOTE. Change from one year earlier. Private industry, excluding farm and household workers. Data extend through December 1999.

Change in unit labor costs



NOTE. Nonfarm business sector.

about 4 percent in each of the two previous years. The hourly cost to employers of the nonwage benefits provided to employees also rose 3½ percent in 1999, but this increase was considerably larger than those of the past few years. Much of the pickup in benefit costs came from a faster rate of rise in the costs of health insurance, which were reportedly driven up by several factors: a moderate acceleration in the price of medical care, the efforts of some insurers to rebuild profit margins, and the recognition by employers that an attractive health benefits package was helpful in hiring and retaining workers in a tight labor market.

Because the employment cost index does not capture some forms of compensation that employers have been using more extensively—for example, stock options, signing bonuses, and employee price discounts on in-store purchases—it has likely been understating the true size of workers' gains. The productivity and cost measure of hourly compensation captures at least some of the labor costs that the employment cost index omits, and this broader coverage may explain why the productivity and cost measure has been rising faster. However, it, too, is affected by problems of measurement, some of which would lead to overstatement of the rate of rise in hourly compensation.

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

3. Alternative measures of price change
Percent

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

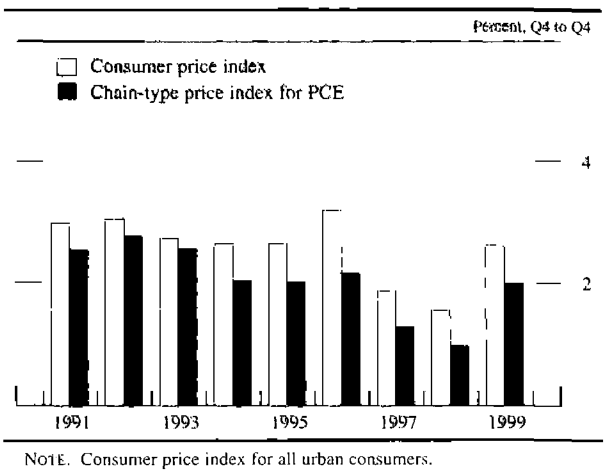
NOTE. Changes are based on quarterly averages and are measured to the fourth quarter of the year indicated from the fourth quarter of the preceding year.

Prices

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

The acceleration in the prices of goods and services purchased was driven in part by a reversal in import prices. In 1998, the chain-type price index for imports of goods and services had fallen 5 percent,

Change in consumer prices



NOTE. Consumer price index for all urban consumers.

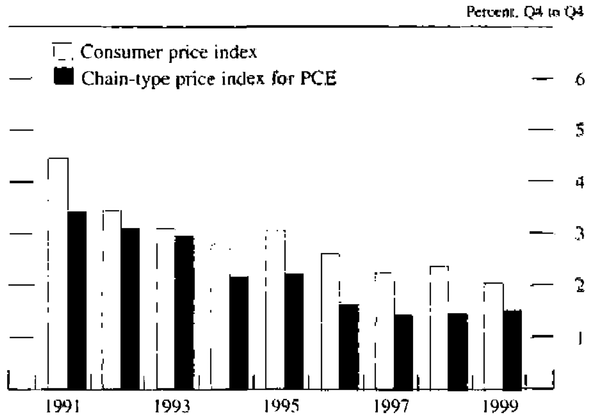
but it rose 3 percent in 1999. A big swing in oil prices—down in 1998 but up sharply in 1999—accounted for a large part of this turnaround. Excluding oil, the prices of imported goods continued to fall in 1999 but, according to the initial estimate, less rapidly than over the three previous years, when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

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

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

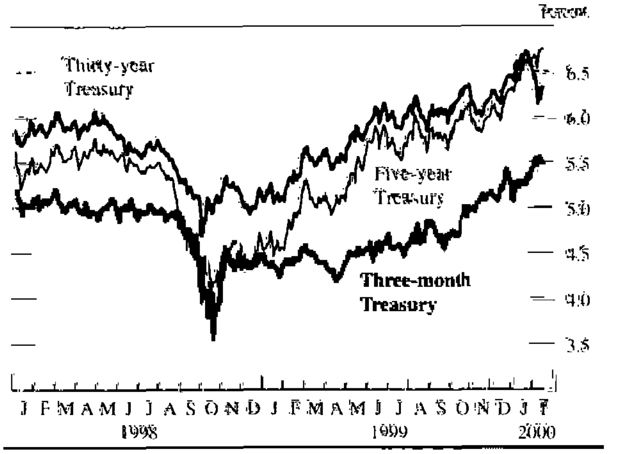
In the national accounts, the chain-type price index for private fixed investment edged up ¼ percent in 1999 after having fallen about ¾ percent in 1998. With construction costs rising, the index for residential investment increased 3¾ percent, its largest advance in several years. By contrast, the price index

Change in consumer prices excluding food and energy



NOTE. Consumer price index for all urban consumers.

Selected Treasury rates, daily data



NOTE. Last observations are for February 11, 2000.

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

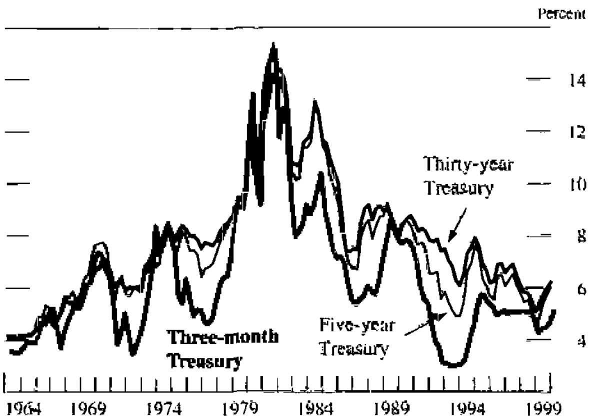
U.S. Financial Markets

Financial markets were somewhat unsettled as 1999 began, with the disruptions of the previous autumn still unwinding and the devaluation of the Brazilian *real* causing some jitters around mid-January. However, market conditions improved into the spring, evidenced in part by increased trading volumes and narrowed bid–asked and credit spreads, as it became increasingly evident that strong growth was continuing in the United States, and that economies abroad were rebounding. In this environment, market participants began to anticipate that the Federal Reserve would reverse the policy easings of the preceding fall, and interest rates rose. Nevertheless, improved profit expectations apparently more than offset the interest rate increases, and equity prices continued to climb until late spring. From May into the fall, both equity prices and longer-term interest rates moved in a choppy fashion, while short-term interest rates moved up with monetary policy tightenings in June, August, and November. Worries about Y2K became pronounced after midyear, and expectations of an acceleration of borrowing ahead of the fourth quarter prompted a resurgence in liquidity and credit premiums. In the closing months of the year, however, the likelihood of outsized demands for credit and liquidity over the year-end subsided, causing spreads to narrow, and stock prices surged once again. After the century date change passed without disruptions, liquidity improved and trading volumes grew, although both bond and equity prices have remained quite volatile so far this year.

Interest Rates

Over the first few months of 1999, short-term Treasury rates moved in a narrow range, anchored by an unchanged stance of monetary policy. Yields on intermediate- and long-term Treasury securities rose, however, as the flight to quality and liquidity of the preceding fall unwound, and incoming data pointed

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 data extend through the fourth quarter of 1999.

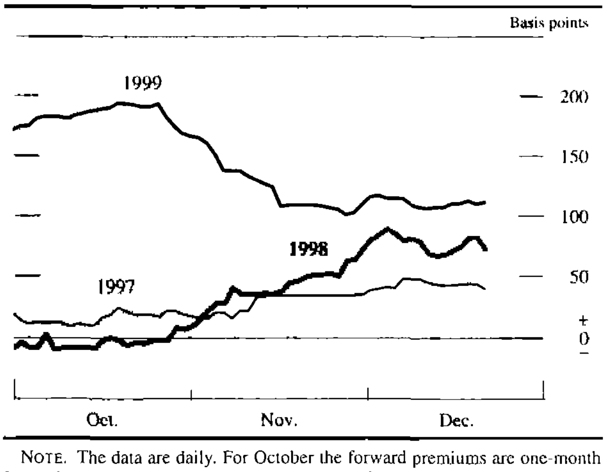
to continued robust economic growth and likely Federal Reserve tightening. Over most of the rest of the year, short-term Treasury rates moved broadly in line with the three quarter-point increases in the target federal funds rate; longer-term yields rose less, as markets had already anticipated some of those policy actions.

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

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

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

Eurodollar deposit forward premium over year-end

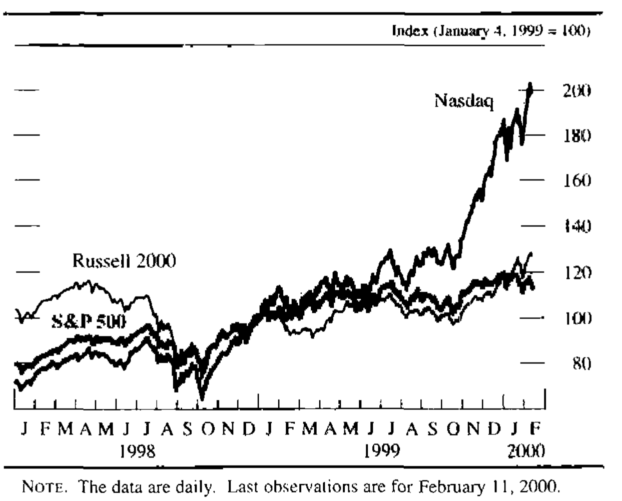


NOTE. The data are daily. For October the forward premiums are one-month forward rates two months ahead less one-month forward rates one month ahead; for November they are one-month forward rates one month ahead less one-month deposit rates; and for December they are three-week forward rates one week ahead less one-week deposit rates. The December forward premiums extend into the third week of December.

Equity Prices

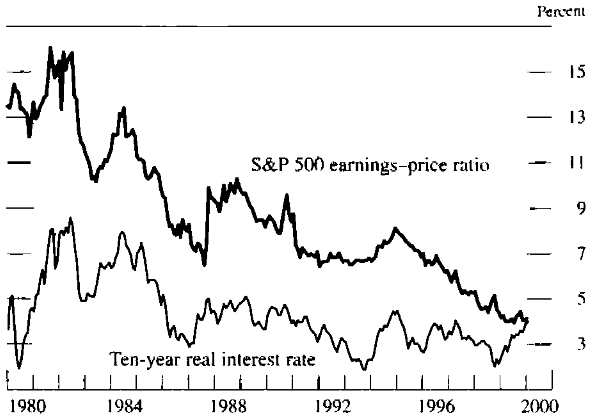
Nearly all major stock indexes ended 1999 in record territory. The Nasdaq composite index paced the advance by soaring 86 percent over the year, and the S&P 500 and Dow Jones Industrial Average posted still-impressive gains of 20 percent and 25 percent.

Major stock price indexes



NOTE. The data are daily. Last observations are for February 11, 2000.

Equity valuation and long-term real interest rate



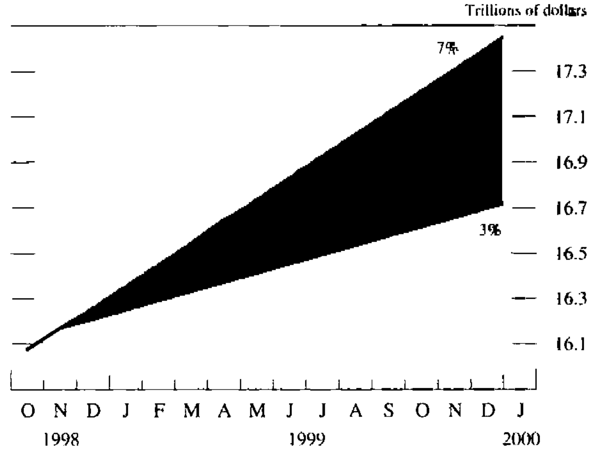
NOTE. The data are monthly and extend through January 2000. The earnings–price ratio is based on the I/B/E/S International, Inc., consensus estimate of earnings over the coming twelve months. The real interest rate is the yield on the ten-year Treasury note less the ten-year inflation expectations from the Federal Reserve Bank of Philadelphia Survey of Professional Forecasters.

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

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

At large firms, stock price gains about kept pace with expected earnings growth in 1999, and the S&P 500 one-year-ahead earnings–price ratio fluctuated around the historically low level of 4 percent even as real interest rates rose. Meanwhile, the Nasdaq composite index's earnings–price ratio (using actual twelve-month trailing earnings) plummeted

Domestic nonfinancial debt: Annual range and actual level



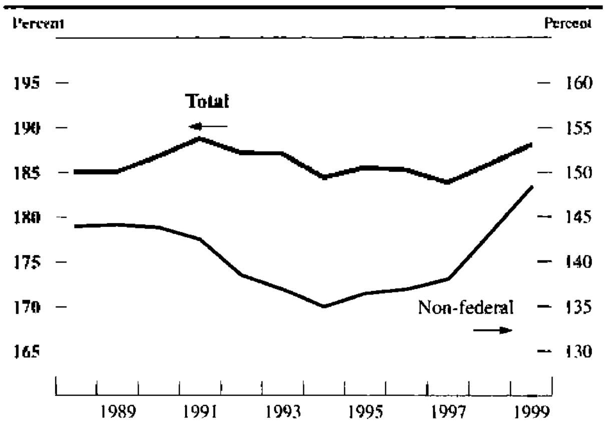
from an already-slim 1¼ percent to ½ percent, suggesting that investors are pricing in expectations of tremendous earnings growth at technology firms relative to historical norms.

Debt and the Monetary Aggregates

Debt and Depository Intermediation

The debt of domestic nonfinancial sectors is estimated to have grown 6½ percent in 1999 on a fourth-quarter-to-fourth-quarter basis, near the upper end of the FOMC's 3 percent to 7 percent range and about a percentage point faster than nominal GDP. As was the case in 1998, robust outlays on consumer durable goods, housing, and business investment, as well as substantial net equity retirements, helped sustain nonfederal sector debt growth at rates above

Domestic nonfinancial debt as a percentage of nominal GDP

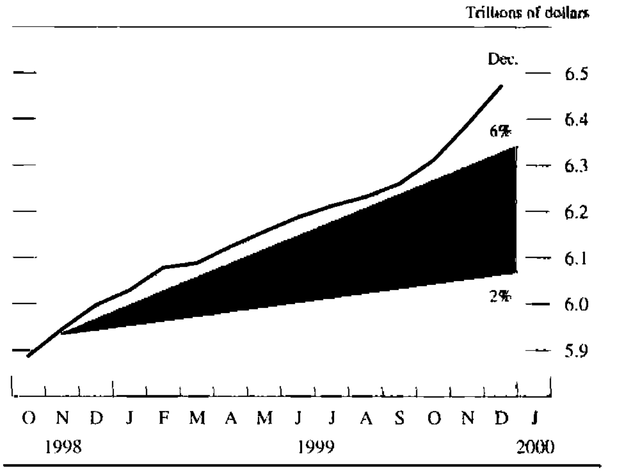


NOTE. The data are annual.

9 percent. Meanwhile, the dramatically increased federal budget surplus allowed the Treasury to reduce its outstanding debt about 2 percent. These movements follow the pattern of recent years whereby increases in the debt of households, businesses, and state and local governments relative to GDP have come close to matching declines in the federal government share, consistent with reduced pressure on available savings from the federal sector facilitating private borrowing.

After increasing for several years, the share of total credit accounted for by depository institutions leveled out in 1999. Growth in credit extended by those institutions edged down to 6½ percent from 6¾ percent in 1998. Adjusted for mark-to-market accounting rules, bank credit growth retreated from 10¼ percent in 1998 to 5½ percent last year, with a considerable portion of the slowdown attributable to an unwinding of the surge in holdings of non-U.S. government securities, business loans, and security loans that had been built up during the market disruptions in the fall of 1998. Real estate loans constituted one of the few categories of bank credit that accelerated in 1999. By contrast, thrift credit swelled 9 percent, up from a 4½ percent gain in 1998, as rising mortgage interest rates led borrowers to opt more frequently for adjustable-rate mortgages, which thrifts tend to keep on their books. The trend toward securitization of consumer loans continued in 1999: Bank originations of consumer loans were up about 5 percent, while holdings ran off at a 1¾ percent pace.

M3: Annual range and actual level



The Monetary Aggregates

Growth of the broad monetary aggregates moderated significantly last year. Nevertheless, as was expected by the FOMC last February and July, both M2 and M3 finished the year above their annual price-stability ranges. M3 rose 7½ percent in 1999, somewhat outside the Committee's range of 2 percent to 6 percent but far below the nearly 11 percent pace of 1998. M3 growth retreated early in 1999, as the surge in depository credit in the final quarter of 1998 unwound and depository institutions curbed their issuance of the managed liabilities included in that aggregate. At that time, the expansion of

4. Growth of money and debt

Percent

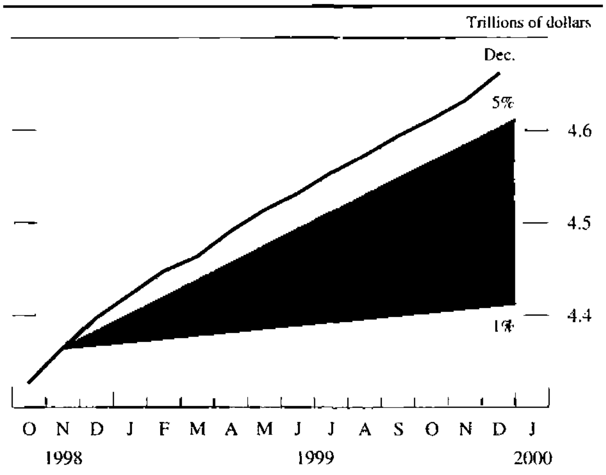
Period	M1	M2	M3	Domestic nonfinancial debt
Annual[1]				
1989	.6	5.2	4.1	7.4
1990	4.2	4.2	1.9	6.7
1991	7.9	3.1	1.1	4.5
1992	14.4	1.8	.6	4.5
1993	10.6	1.4	1.0	4.9
1994	2.5	.6	1.7	4.9
1995	−1.5	3.9	6.1	5.5
1996	−4.5	4.5	6.8	5.4
1997	−1.2	5.6	8.9	5.2
1998	2.2	8.5	10.9	6.7
1999	1.9	6.2	7.5	6.6
Quarterly (annual rate)[2]				
1999:1	1.9	7.5	8.2	6.7
2	2.2	6.0	6.0	6.9
3	−2.0	5.5	5.1	6.0
4	5.3	5.4	10.0	6.2

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

1. From average for fourth quarter of preceding year to average for fourth quarter of year indicated.

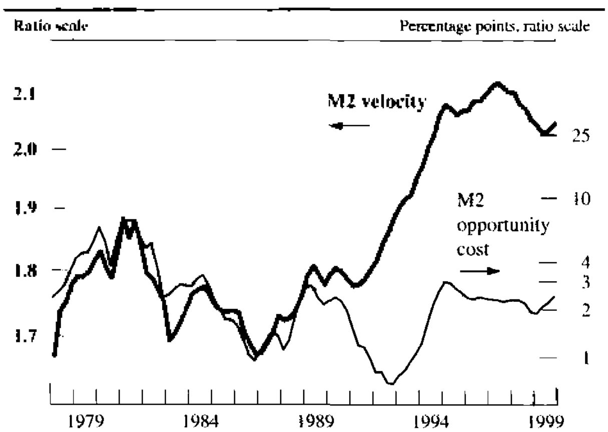
2. From average for preceding quarter to average for quarter indicated.

M2: Annual range and actual level



institution-only money funds also slowed with the ebbing of heightened preferences for liquid assets. However, M3 bulged again in the fourth quarter of 1999, as loan growth picked up and banks funded the increase mainly with large time deposits and other managed liabilities in M3. U.S. branches and agencies of foreign banks stepped up issuance of large certificates of deposit, in part to augment the liquidity of their head offices over the century date change, apparently because it was cheaper to fund in U.S. markets. Domestic banks needed the additional funding because of strong loan growth and a buildup in vault cash for Y2K contingencies. Corporations apparently built up year-end precautionary liquidity in institution-only money funds, which provided a further boost to M3 late

M2 velocity and the opportunity cost of holding M2



NOTE. The data are quarterly and extend through 1999:Q4. The velocity of M2 is the ratio of nominal gross domestic product to the stock of M2. The opportunity cost of M2 is a two-quarter moving average of the difference between the three-month Treasury bill rate and the weighted average return on assets included in M2.

in the year. Early in 2000, these effects began to unwind.

M2 increased 6¼ percent in 1999, somewhat above the FOMC's range of 1 percent to 5 percent. Both the easing of elevated demands for liquid assets that had boosted M2 in the fourth quarter of 1998 and a rise in its opportunity cost (the difference between interest rates on short-term market instruments and the rates available on M2 assets) tended to bring down M2 growth in 1999. That rise in opportunity cost also helped to halt the decline in M2 velocity that had begun in mid-1997, although the 1¾ percent (annual rate) rise in velocity over the second half of 1999 was not enough to offset the drop in the first half of the year. Within M2, currency demand grew briskly over the year as a whole, reflecting booming retail sales and, late in the year, some precautionary buildup for Y2K. Money stock currency grew at an annualized rate of 28 percent in December and then ran off in the weeks after the turn of the year.

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

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

International Developments

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

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

The Brazilian crisis triggered some renewed financial stress in other Latin American economies, and domestic interest rates and Brady bond yield spreads increased sharply from levels already elevated by the Russian crisis. However, as the situation in Brazil improved, financial conditions in the rest of the region stabilized relatively rapidly. Even so, the combination of elevated risk premiums and diminished access to international credit markets tended to depress activity in much of the region in the first half of 1999. Probably the most strongly affected was Argentina, where the exchange rate peg to the dollar was maintained only at the cost of continued high real interest rates that contributed to the decline in real GDP in 1999. In contrast, real GDP in Mexico rose an estimated 6 percent in 1999, aided by higher oil prices and strong export growth to the United States. The peso appreciated against the dollar for the year as a whole, despite a Mexican inflation rate about 10 percentage points higher than in the United States.

The recovery of activity last year in Asian developing countries was earlier, more widespread, and sharper than in Latin America, just as the downturn had been the previous year. After a steep drop in activity in the immediate wake of the financial crises that hit several Asian emerging-market economies in late 1997, the preconditions for a revival in activity were set by measures initiated to stabilize shaky financial markets and banking sectors, often in conjunction with International Monetary Fund programs that provided financial support. Once financial conditions had been stabilized, monetary policies turned accommodative in 1998, and this stimulus, along with the shift toward fiscal deficits and an ongoing boost to net exports provided by the sharp depreciations of their currencies, laid the foundation for last year's strong revival in activity. Korea's recovery was the most robust, with real GDP estimated to have increased more than 10 percent in 1999 after falling 5 percent the previous year. The government continued to make progress toward needed financial and corporate sector reform. However, significant weaknesses remained, as evidenced by the near collapse of Daewoo, Korea's second largest conglomerate. Other Asian developing countries that experienced financial difficulties in late 1997 (Thailand, Malaysia, Indonesia, and the Philippines) also recorded increases in real GDP in 1999 after declines the previous year. Indonesian financial markets were buffeted severely at times during 1999 by concerns about political instability, but the rupiah ended the year with a modest net appreciation against the dollar. The other former crisis countries also saw their currencies stabilize or slightly appreciate against the dollar. Inflation rates in these countries generally declined, despite the pickup in activity and higher prices for oil and other commodities. Inflation was held down by the elevated, if diminishing, levels of excess capacity and unemployment and by a waning of the inflationary impact of previous exchange rate depreciations.

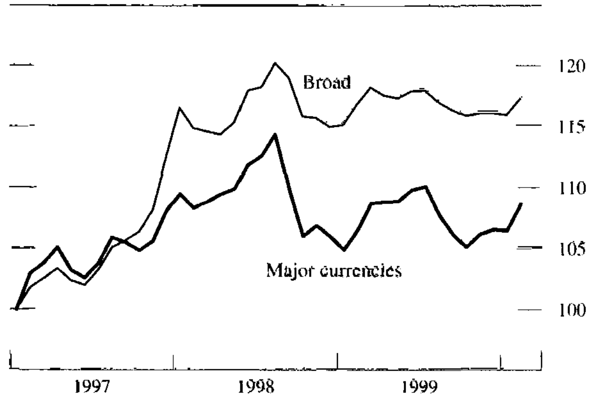
In China, real growth slowed moderately in 1999. Given China's exchange rate peg to the dollar, the sizable depreciations elsewhere in Asia in 1997 and 1998 led to a sharp appreciation of China's real effective exchange rate, and there was speculation last year that the renminbi might be devalued. However,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

In Russia, economic activity increased last year despite persistent and severe structural problems. Real GDP, which had dropped nearly 10 percent in 1998 as a result of the domestic financial crisis, recovered about half the loss last year. Net exports rose strongly, boosted by the lagged effect of the substantial real depreciation of the ruble in late 1998 and by higher oil prices. The inflation rate moderated to about 50 percent, somewhat greater than the depreciation of the ruble over the course of the year.

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

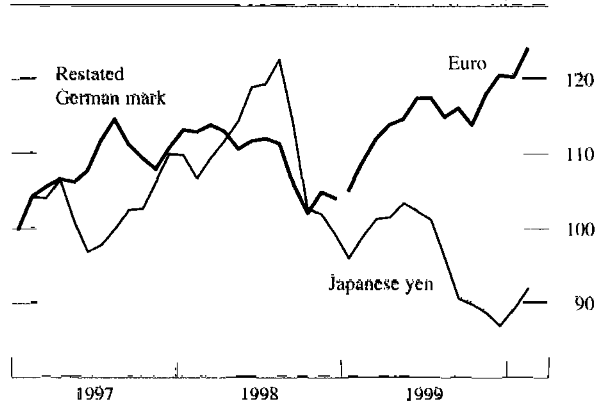
The dollar depreciated 10 percent on balance against the yen over the course of 1999. In the first half of the year, the dollar strengthened slightly relative to the yen, as growth in Japan appeared to remain sluggish and Japanese monetary authorities reduced short-term interest rates to near zero in an effort to jumpstart the economy. However, around midyear, several signs of a revival of activity—particularly the announcement of unanticipated strong growth in real GDP in the first quarter—triggered a depreciation of the dollar relative to the yen amid reports of large inflows of foreign capital into the Japanese stock market. Data releases showing that the U.S. current account deficit had reached record levels in both the second and third quarters of the year also appeared to be associated with depreciations of the dollar against the yen. Concerned that a stronger yen could harm the fledgling recovery, Japanese monetary authorities intervened heavily to weaken the yen on numerous occasions. So far this year, the dollar has firmed

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 two weeks of February 2000.

U.S. dollar exchange rate against the Japanese yen 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 observations are for the first two weeks of February 2000.

about 7 percent against the yen. Japanese real GDP increased somewhat in 1999, following two consecutive years of decline. Growth was concentrated in the first half of the year, when domestic demand surged, led by fiscal stimulus. Later in the year, domestic demand slumped, as the pace of fiscal expansion flagged. Net exports made virtually no contribution to growth for the year as a whole. Japanese consumer prices declined slightly on balance over the course of the year.

The new European currency, the euro, came into operation at the start of 1999, marking the beginning of stage three of European economic and monetary union. The rates of exchange between the euro and the currencies of the eleven countries adopting the new currency were set at the end of 1998; based on these rates, the value of the euro at its creation was just under $1.17. From a technical perspective, the introduction of the euro went smoothly, and on its first day of trading its value moved higher. However, the euro soon started to weaken against the dollar, influenced by indications that euro-area growth would remain very slow. After approaching parity with the dollar in early July, the euro rebounded, partly on gathering signs of European recovery. However, the currency weakened again in the fall, and in early December it reached parity with the dollar, about where it closed the year. The euro's weakness late in the year was attributed in part to concerns about the pace of market-oriented structural reforms in continental Europe and to a political wrangle over the proposed imposition of a withholding tax on investment income. On balance, the dollar appreciated 16 percent relative to the euro over 1999. So far this year, the dollar has strengthened 2 percent further against the euro. Although the euro's foreign exchange value weakened in its first year of operation, the volume of euro-denominated transactions—particularly the issuance of debt securities—expanded rapidly.

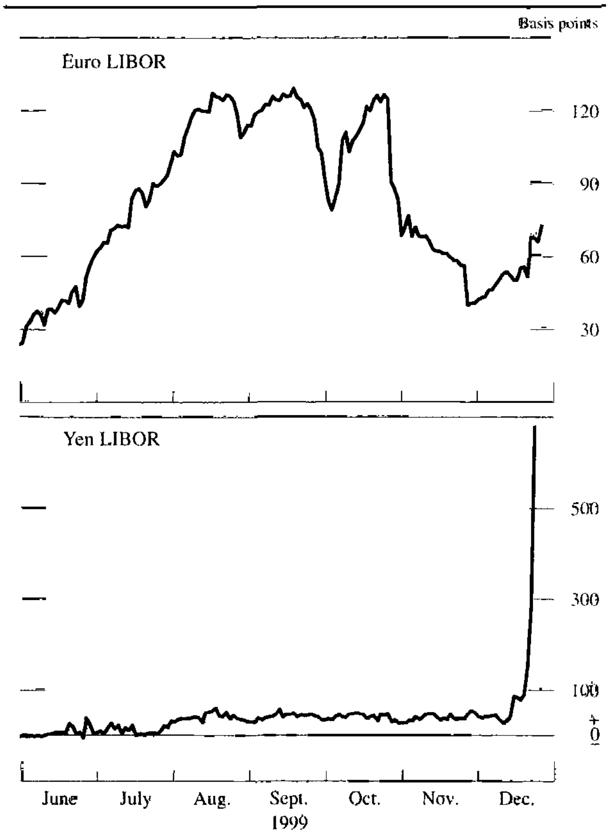
In the eleven European countries that now fix their currencies to the euro, real GDP growth remained weak early in 1999 but strengthened subsequently and averaged an estimated 3 percent rate for the year as a whole. Net exports made a significant positive contribution to growth, supported by a revival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

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

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

Concerns about liquidity and credit risk related to the century date change generated a temporary bulge in year-end premiums in money market rates in the second half of the year in some countries. For the euro, borrowing costs for short-term interbank funding over the year changeover—as measured by the interest rate implied by the forward market for a one-month loan spanning the year-end relative to the rates for neighboring months—started to rise in late summer but then reversed nearly all of this increase in late October and early November before moving up more moderately in December. The sharp October-November decline in the year-changeover funding premium came in response to a series of announcements by major central banks that outlined and clarified the measures these institutions were prepared to undertake to alleviate potential liquidity problems related to the century date change. For yen

Forward premium for deposits over year-end

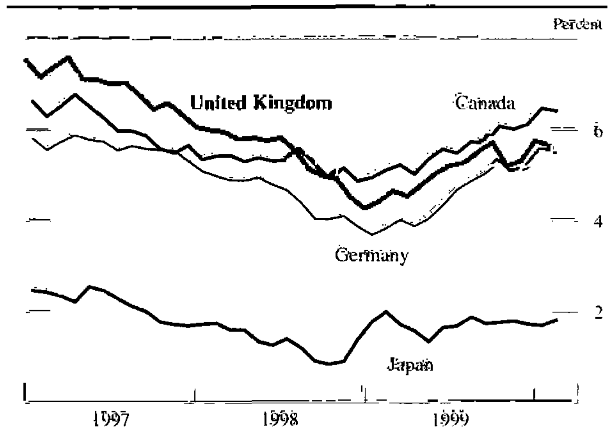


NOTE. The data are daily. Year-end premium measured by the interest rate on a one-month instrument spanning the year-end relative to the rates for neighboring months. Last observation is for December 29, 1999.

funding, the century date change premium moved in a different pattern, fluctuating around a relatively low level before spiking sharply for several days just before the year-end. The late-December jump in the yen funding premium was partly in response to date change-related illiquidity in the Japanese government bond repo market that emerged in early December and persisted into early January. To counter these conditions, toward the end of the year the Bank of Japan infused huge amounts of liquidity into its domestic banking system, which soon brought short-term yen funding costs back down to near zero.

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

Foreign ten-year interest rates

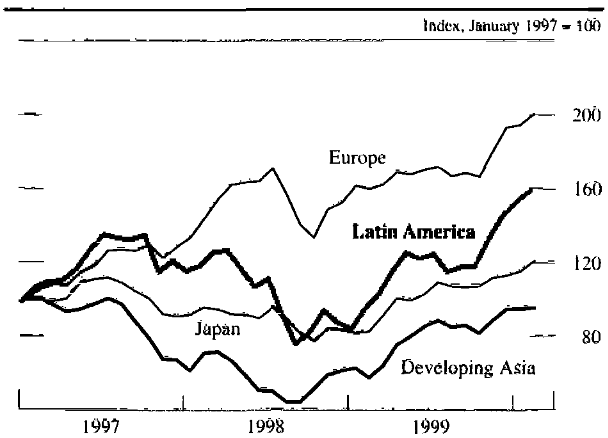


NOTE. The data are monthly. Last observation is for the first two weeks of February 2000.

Equity prices showed strong and widespread increases in 1999, as the pace of global activity quickened and the threat from emerging-market financial crises appeared to recede. In the industrial countries equity prices on average rose sharply, extending the general upward trend of recent years. The average percentage increase of equity prices in developing countries was even larger, as prices recovered from their crisis-related declines of the previous year. The fact that emerging Latin American and Asian equity markets outperformed those in industrial countries lends some support to the view that global investors increased their risk tolerance, especially during the last months of the year.

Oil prices increased dramatically during 1999, fully reversing the declines in the previous two years. The average spot price for West Texas intermediate, the

Foreign equity indexes



NOTE. The data are monthly. Last observation is for the first two weeks of February 2000.

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

The price of gold fluctuated substantially in 1999. The price declined to near a twenty-year low of about $250 per ounce at midyear as several central banks, including the Bank of England and the Swiss National Bank, announced plans to sell a sizable portion of their reserves. The September announcement that fifteen European central banks, including the two just mentioned, would limit their aggregate sales of bullion and curtail leasing activities, saw the price of gold briefly rise above $320 per ounce before turning down later in the year. Recently, the price has moved back up, to above $300 per ounce.

Industrial Production and Capacity Utilization: Recent Developments and the 1999 Revision

Charles Gilbert, Norman Morin, and Richard Raddock, of the Board's Division of Research and Statistics, prepared this article. Matt Wilson provided research assistance.

In late 1999, the Federal Reserve published revised measures of industrial production (IP), capacity, and capacity utilization for the period January 1992 through October 1999. The production index for the third quarter of 1999 is now at 137.7 percent of output in 1992, compared with 135.2 percent reported before the annual revision, and the capacity index is 170.7 percent of output in 1992, compared with 167.9 percent reported previously. The rate of industrial capacity utilization—the ratio of production to capacity—was revised up 0.1 percentage point, to 80.7 percent for the third quarter of 1999. See chart 1. (Summary data as of January 14, 2000, for total industry and manufacturing are shown in appendix tables A.1 and A.2.)

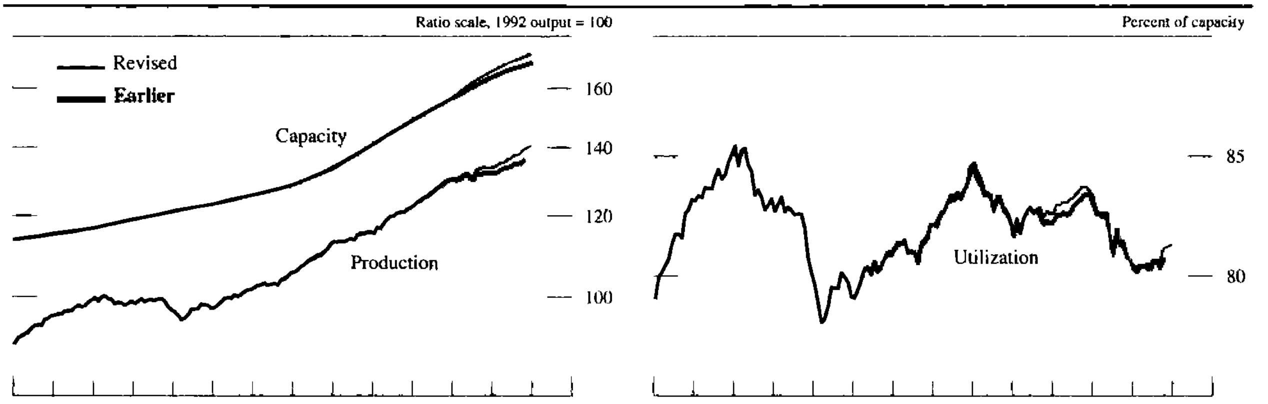
Total industrial output increased at an annual rate of 4.5 percent, on average, over 1995–99. The output of computers, semiconductors, and communications equipment accounted for more than half the growth. The rate of increase in the output and capacity of these industries is now estimated to have been more rapid than previously shown, especially in 1998. Apart from computers and semiconductors, industrial production increased about 2 percent annually over the period, with little change in 1998 and a gain of 1.8 percent in 1999 (table A.3).

The updated measures reflect both the incorporation of newly available, more comprehensive source data typical of annual revisions and the introduction of improved methods for compiling a few series. The new source data are for recent years, primarily from 1997 on, and the modified methods affect data beginning in 1992. In addition, the supplementary series on the gross value of products are now expressed in 1996 dollars; these series begin in 1977.

The updated IP measures included annual data from selected editions of the 1998 Current Industrial Reports of the Bureau of the Census and available preliminary data for about 15 percent of manufacturing from the 1997 Census of Manufactures. Annual data from the U.S. Geological Survey on metallic and nonmetallic minerals (except fuels) for 1997 and 1998 were also introduced. The updating included revisions to the monthly indicator for each industry

NOTE. Other contributors to the revision and this article include the following: Ana Aizcorbe, Cynthia Bansak, William Cleveland, Carol Corrado, Mark Doms, Maura Doyle, Marcello Estevão, Gloria Fennell, Meredith Krug, Marc Lanoue, Susan Polatz, and Dixon Tranum.

1. Industrial production, capacity, and utilization



NOTE. The production indexes and utilization rates are seasonally adjusted. All the revised measures extend through December 1999; the earlier measures extend through October 1999.

(physical product data, production-worker hours, or electric power usage) and revised seasonal factors.

The revision introduced improved methods for measuring the production of computer and office equipment and of motor vehicles. The new monthly production measure for computers is derived from detailed information on the major products produced by the industry. The new measures of motor vehicle production incorporate price weights for the different models of light vehicles; previously, all models of autos were weighted equally and all light trucks were weighted equally in compiling an aggregate figure, which was eventually benchmarked to comprehensive Census data.

The updated capacity and capacity utilization measures incorporated preliminary data on industry utilization rates from the 1998 Survey of Plant Capacity of the Bureau of the Census, which covers manufacturing. Also included were updated data on capacity, expressed in physical units, from the U.S. Geological Survey, the Department of Energy, and other organizations.

The Survey of Plant Capacity is the source of utilization rates for most manufacturing industries. The preliminary results of the 1998 survey, which provided industry utilization rates for the fourth quarter of the year, suggested that manufacturing utilization rates were generally in line with previous Federal Reserve estimates. However, dividing the upwardly revised industrial production indexes for the computer, semiconductor, and communications equipment industries by the Census utilization rates yielded a noticeable upward revision of capacity in those industries.

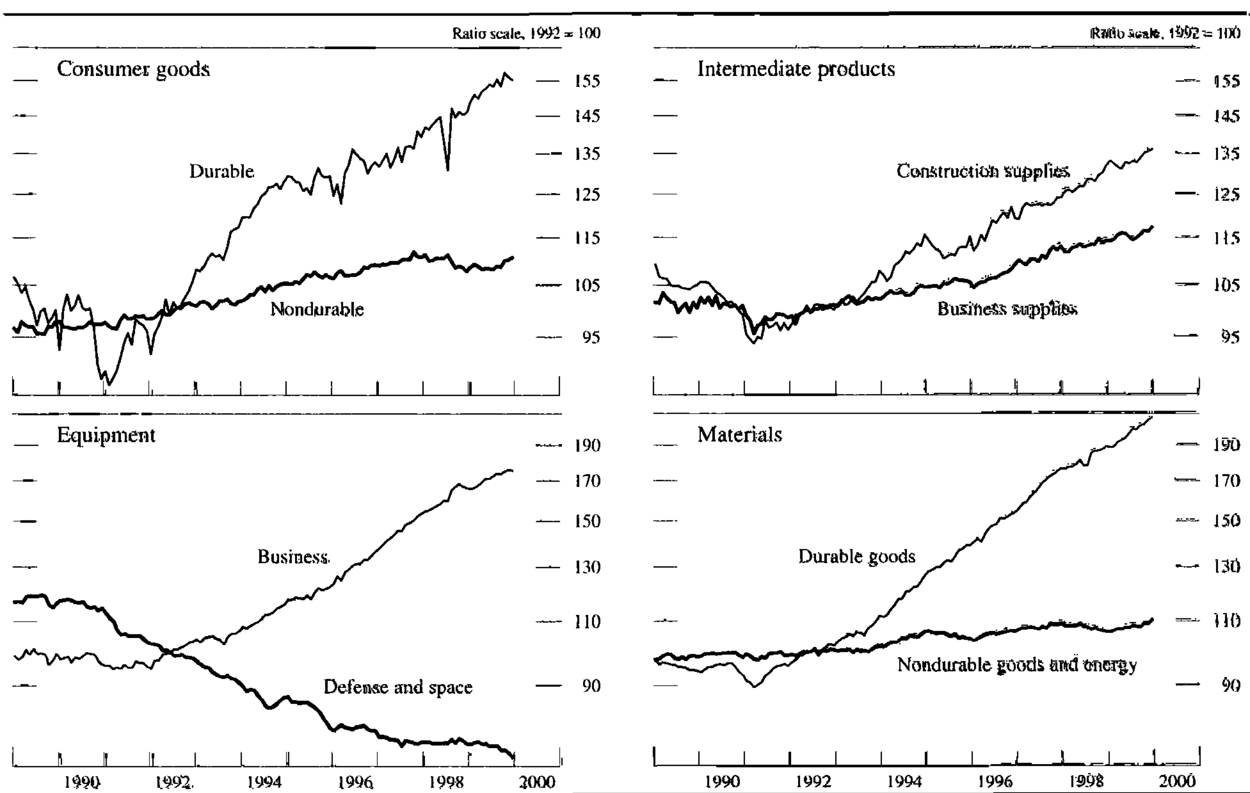
The capacity utilization rate for mining was revised very little; the rate of utilization in electric utilities was revised downward by 1.5 percentage points for the third quarter of 1999.

Production by Market Groups

The rate of increase of industrial production accelerated in 1996 and 1997 and then slowed between 1998:Q1 and 1999:Q1 (table A.1). The slowing reflected the effects of the economic turmoil in Asia on a number of industries, particularly within business equipment, nondurable consumer goods, and materials (chart 2). As Asian economies began to recover in 1999, the economic outlook for some of the weakened U.S. industries brightened as well.

Among major market groups, the revised production index for consumer durable goods has advanced

2. Industrial production, market groups, 1989–99



strongly in recent years, as the low rate of unemployment and rising income have bolstered the demand for consumer goods. The index, which had risen at an annual rate of 5 percent or more during 1997 and 1998, rose at an annual rate of 7.2 percent in 1999. During 1999, the output of automotive products, especially light trucks, continued upward from the high level at the end of 1998. At the same time, the series for household appliances fluctuated at a high level, and the series for carpeting and furniture, on balance, moved upward. After a pause in mid-1997, the production of home electronics, including computers, surged upward at an annual rate of about 45 percent.

The nondurable consumer goods group, which experienced a broadly based decline in the second half of 1998, stabilized in 1999 as an increase in the output of consumer energy products offset ongoing weakness elsewhere. Producers of cigarettes, clothing, and paper products suffered setbacks in the past two years; in addition, the output of consumer chemicals increased slowly, on balance, after strong gains in 1995–97. Despite a weak performance for the year as a whole, the production of some non-energy nondurable consumer goods, including consumer chemicals, picked up noticeably in the fourth quarter of 1999.

The output of business equipment has been boosted by gains in the output of business computers and office equipment that averaged more than 50 percent per year from 1996 on. This market group's increases slowed in 1999 because of declines in the output of industrial equipment, farm equipment, and transit equipment, particularly railroad equipment and commercial aircraft and ships. The production of defense and space equipment resumed its decline in 1999 after an uptick in 1998.

After having risen more slowly in 1997, the output of construction supplies accelerated in 1998 and early 1999, when it was lifted to an elevated level by strong demand for housing and by unusually mild weather, and then flattened in mid-1999. The output of industrial materials slowed in 1998, as increased import competition and decreased foreign demand resulting from the Asian economic crisis reduced output of internationally traded commodities such as steel, paper, and chemicals. Output picked up again in 1999. In contrast, the output of durable materials, which include the fast-growing series for computer parts and semiconductors, advanced 7.3 percent in 1998 and 9.3 percent in 1999. With a solid rebound in the production of chemical and paper materials, the output of nondurable materials, after having declined in 1998, increased 4.9 percent in 1999. The output of energy materials fell about 1 percent in 1998 and had regained only a portion of that decrease by the end of 1999.

Production by Industry Groups

During the past five years, the growth of industrial production continued to be concentrated in durable manufacturing, which advanced 11.4 percent in 1997 before gradually easing to 7.0 percent in 1999 (table A.4). The relatively strong expansion in this sector has been supported by the sustained rapid increases in the output of computers, semiconductors and related electronic components, and communications equipment. Production in these high-technology industries increased, on average, approximately 40 percent per year from 1995 to 1999. The output of other manufacturing industries was unchanged over the four quarters of 1998 and then edged up in 1999. In 1998, the economic troubles in Asia reduced, either through higher import volume or lower export volume, the domestic production of iron and steel, some chemicals, and other internationally traded goods. Although many of these industries began to recover last year, the production of civilian aircraft, which had been a source of strength, declined from late 1998 on. Production in mining and utilities eased in 1998 but showed less weakness in 1999.

Capacity and Capacity Utilization

The annual rate of capacity growth in manufacturing, which averaged 6.1 percent per year in 1996 and 1997, accelerated to 7.0 percent in 1998 and then eased to 4.7 percent in 1999 (table A.5). The most rapid expansions of capacity and the upward revisions of earlier estimates were again concentrated in durable manufacturing, especially in the computer, communications equipment, and semiconductor industries. The capacity increase in these industries averaged more than 40 percent per year over 1995–99. The rest of the manufacturing sector increased capacity approximately 2⅔ percent in 1995 and 1996, 3 percent in 1997 and 1998, and 1⅓ percent in 1999. The capacity expansion in mining and utilities was slower; in particular, the capacity in oil and gas extraction and metal mining declined in 1999, whereas that for utilities increased 1.4 percent. The North American Electric Reliability Council still projects increases in capacity that will fall short of probable increases in demand.

The rate of manufacturing capacity utilization—the ratio of output to capacity—was revised up

0.1 percentage point in the fourth quarter of 1998 and 0.3 percentage point in the third quarter of 1999 (table A.6). Utilization in manufacturing in the fourth quarter of 1999 was 80.3 percent, a level 0.8 percentage point lower than the 1967–98 average. The rates in both primary- and advanced-processing industries fell a few percentage points from the fourth quarter of 1997 to the fourth quarter of 1999.

Utilization in mining fell substantially in 1998 and 1999 because of declines in oil and gas well drilling and in metal mining. In the fourth quarter, utilization rates in mining and gas utilities were at below-average levels; in contrast, the rate of utilization in electric utilities was 95.8 percent, still a high level.

Data Availability

Files containing the revised industrial production and capacity utilization data are available on the Board's web site (www.federalreserve.gov/releases/g17) and on diskettes from Publications Services (telephone 202-452-3245). The revised data are also available through the STAT-USA web site of the Department of Commerce (www.stat-usa.gov). Further information on these revisions is available from the Board's Industrial Output Section (telephone 202-452-3197).

A document with printed tables of the revised estimates of series shown in the G.17 release is available on request to the Industrial Output Section, Mail Stop 82, Division of Research and Statistics, Board of Governors of the Federal Reserve System, Washington, DC 20551.

TECHNICAL ASPECTS OF THE ANNUAL REVISION

The revision incorporated the updating of the comprehensive annual data and of the revised monthly source data used in the estimation of production, capacity, and utilization. More-up-to-date results were obtained from the 1997 Census of Manufactures, the 1998 Survey of Plant Capacity, other annual industry reports, recent information on prices, and revised monthly source data on physical products and on labor and electricity inputs.[1] In addition, the methods for estimating output for several industries were changed; however, the changes in structure in IP leave the number of individual series at 267. Along with the individual production series and seasonal factors, the annual value-added weights used in aggregating the indexes to market and industry groups were updated. (See box "Data Availability.")

Changes to Individual Production Series

Computers

This revision includes a new method for estimating computer production. The index of the computer and office equipment industry (SIC 357) continues to be based on the aggregate of three components: office and computing equipment for business (in the market group for business equipment), office and computing equipment for the home (in consumer durables), and computer parts (in equipment parts within durable goods materials). However, whereas monthly input measures were previously used, quarterly data from Dataquest, covering unit sales and unit values for an average of about 450 distinct computer models in any quarter, are now used to estimate the real output of the computer industry. These new data show a faster rise in output in recent years and indicate that a larger share of output has been sold for home use than indicated by the previously published indexes.

These individual computer series are now calculated from detailed quarterly data on unit sales and unit values for three types of computers: PCs, notebook computers, and computer servers and mainframes. The IP series for home computers is developed from data on PCs and notebooks sold to consumers; for business computers the IP series is developed from data on PCs and notebooks sold to businesses and all sales of servers and mainframes. Data on overall sales of the three types of computers, regardless of the purchaser, are used to estimate the IP series for computer parts.

Each new IP index for computer production is a measure of real output computed using a current dollar estimate of production and a constant-quality price index. The nominal value of production is computed as the sum of the estimated nominal value of production of each relevant computer model destined for a specific market segment. Because the quarterly data from Dataquest cover sales and not production, the estimates of nominal production for each computer model must be derived. Annual production–sales relationships are estimated for all of the major product lines in the industry (IBM notebooks, Dell PCs, Compaq servers, and so on) by

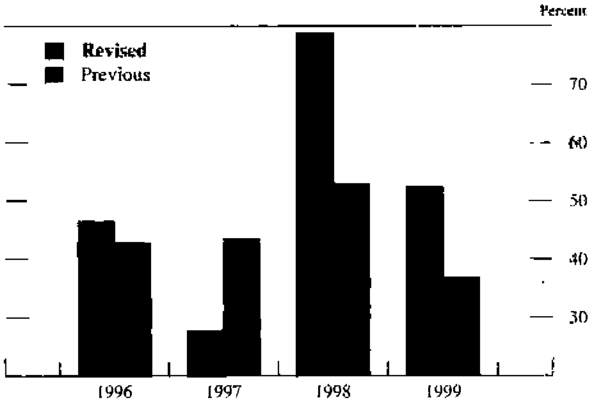
1. Information about the sources of monthly data used to calculate the indexes can be found in table 1 in "Industry structure of industrial production: classification, value-added weights, and description of series" on the Board's web site (http://www.federalreserve.gov/g17/About.htm).

combining the detailed Dataquest data with the Census Bureau's microdata on domestic production of computers in its Longitudinal Research Database. These relationships, available through 1997, are extrapolated and interpolated and then applied to the quarterly data on computer sales.

The constant-quality price indexes for domestic sales of personal computers and servers and mainframes are computed as Fisher price indexes, treating each model of computer as a separate good; a producer price index from the Bureau of Labor Statistics (BLS) was used for notebook computers. The Fisher price indexes computed using the detailed Dataquest data are similar to estimates derived from "hedonic" regressions. These regressions are used to estimate the value of the different features of computers (such as CPU speed, memory, and so on), which are then used to derive a constant-quality price index for computers.

The new quarterly production index for computers (chart 3) rises considerably faster in 1998 and 1999 than previously reported. The surge in 1998 was broad-based across computer platforms. Early in 1999, the production of PCs for home use spiked when demand was spurred by rapidly falling prices. Later in the year, the production of servers increased markedly. In 1999, the expansion of computer production returned to about the same rates that prevailed from 1994 to 1997.

3. Growth in computer output, 1996–99



NOTE. Data are fourth quarter to fourth quarter. The growth for the previous series in 1999 is measured (annualized basis) from 1998:Q4 to October 1999.

Autos and Light Trucks

The method for deriving the output of autos and light trucks (SIC 3711 pt., 3 pt.) was improved to capture in a more timely way shifts in the product mix and relative values. Before this revision, the production indexes for autos and for light trucks were calculated from simple counts of units assembled, and an aggregate index was benchmarked to comprehensive output measures derived from data in the Census of Manufactures and the Annual Survey of Manufactures. In this procedure, variations in relative values, resulting at least in part from shifts in the product mix, were often captured only during the annual revision process.

In this revision, the IP indexes for autos and light trucks from 1992 forward are computed as annually weighted Fisher quantity indexes; the calculations use data for each vehicle model that include the number of units assembled monthly and the list price at the start of the new model year. Compared with the previous index, the revised index shows the output of autos to have increased more slowly and the production of light trucks to have risen more rapidly over 1992–99. These revisions reflect the changes in the product mix that have occurred in the 1990s. In particular, the production and demand for light trucks, especially expensive sport-utility vehicles, skyrocketed over this period, resulting in a pronounced shift in the product composition and in the relative prices of light vehicles. These revisions to the indexes for autos and light trucks were largely offsetting, so the aggregate indexes were little changed.

Changes in Other Series

The monthly indicators for four other series have changed in this revision. Beginning with data for 1992, the series on bolts and fasteners (SIC 345) and on metalworking machinery (SIC 354) use production-worker hours in the respective industry as a monthly indicator; previously, the series had been based on electric power consumption. Effective in 1997, the monthly indicators for railroad equipment (SIC 374) and for flat glass (SIC 321) are also production-worker hours; previously, they were based on quarterly physical product data that are no longer collected. (See box "Source Data in Monthly IP.")

New Annual Data

This annual revision incorporated a smaller increment of new annual data than is usual for an annual revision. A typical revision includes new comprehensive annual source data on the output of all manufacturing industries as well as on the output of the metal mining and nonmetallic minerals industries. In this

Source Data in Monthly IP

The source data for the industrial production index for a month become available over several months (see table). After the first estimate for a month is published—about 15 days after the end of the relevant month—the data are subject to revision for the next three months. The gradual availability of source data accounts for the series of revisions. The major types of source data for the industrial production index are physical product data, production-worker hour data, and electric power use data.

The first estimate of IP for a month includes data on both physical product measures of output (20 percent of the overall index in 1999) and production-worker hours (28 percent of the index). Electric power use data and additional physical product data become available for the second estimate of IP for a month; with this first revision to a month, source data are unavailable only for about 15 percent of IP. Additional monthly and quarterly physical product data become available during the next two months, bringing the physical product content of IP up to 43 percent by the fourth estimate for the month and to 45 percent after an annual revision.

Proportion of industrial production covered by data available in successive monthly estimates, 1999

Percent

Type of data	Month of estimate			
	1st	2nd	3rd	4th
Physical product	20[1]	31	42[2]	43
Production-worker hours	28[3]	28	28	28
Electric power use	0	26	26	26
Federal Reserve estimates[4]	53	15	4	3[5]
Total industrial production	**100**	**100**	**100**	**100**

1. Includes provisional series totaling nearly 13 percent of IP that are derived from weekly data and for which the actual data may lag several months.

2. Includes quarterly data totaling 6 percent of IP that, on average, are received for the third estimate of industrial production. Specifically, data are available for the second estimate of the last month of a quarter, the third estimate of the second month of a quarter, and the fourth estimate of the first month of a quarter.

3. This figure refers only to those individual series that both initially and ultimately are based on the hours data.

4. Estimates for series not yet covered by data for physical product, production-worker hours, or electric power use.

5. Includes monthly and quarterly physical product data totaling 2 percent of IP that typically are available too late for inclusion in the current index.

annual revision, however, additional annual observations were available for only a small number of manufacturing industries because results from the 1997 Census of Manufactures were available for only a portion of manufacturing. In addition, because the primary establishment classification system used by the Census of Manufactures was the new North American Industrial Classification System (NAICS) and data classified by the U.S. Standard Industrial Classification (SIC) were an auxiliary product, the new data covered only about 15 percent of the IP series. A full set of 1997 annual indexes, as well as partial results for 1998, should be incorporated in the annual revision published this year. The Federal Reserve plans to issue IP indexes grouped on a NAICS basis in late 2001.

Weights

The IP index is an annually weighted Fisher index.[2] The weights are expressed as annual unit value added, that is, value added (an annual series in dollars) divided by an IP index for the year. In this revision, the annual value-added data were updated if available (table A.7). For the period after the latest available value-added data, the unit-value-added figures were estimated from available data on producer prices through the most recent year and then extrapolated for the following year.

The available reports from the 1997 Census of Manufactures as well as revenue and expense data reported by the Department of Energy and the American Gas Association provided industry value-added data for selected manufacturing industries and utilities through 1997. The latest value-added data for mining come from selected reports from the Census of Mineral Industries for 1997; otherwise, the 1992 Census was the source.

Revised Monthly and Quarterly Data

The monthly and quarterly physical product data that are used to measure the high-frequency movements of many IP indexes were updated to capture data that became available after the close of the regular four-month reporting window. Monthly data on production-worker hours or sales of electric power in kilowatt-hours to industry groups, along with estimates of trends in output per worker-hour or kilowatt-hour, are used to indicate the monthly change in output for many individual IP indexes. The Bureau of Labor Statistics benchmark of the employment data for March 1998 was incorporated in this revision.

2. The aggregation procedures are described by Carol Corrado, Charles Gilbert, and Richard Raddock in "Industrial Production and Capacity Utilization: Historical Revision and Recent Developments," *Federal Reserve Bulletin*, vol. 83 (February 1997), pp. 67–92.

Revised data on the sales of electricity to industries since 1992 were incorporated as well. Because of offsetting revisions among the component series, through 1997 the annual revisions of the growth of total electric power use were generally small; compared with the pre-revision estimates, electric power use now decreases more in 1998 and falls less rapidly in 1999 (table A.8).[3]

The largest effect of these changes on IP resulted from the incorporation of new data on semiconductor output and prices for 1998. Compared with the previous estimate, the real output of the semiconductor industry is now shown to have risen nearly twice as fast in 1998 and almost one-third faster in 1999. The measure of real output of semiconductors is derived from an estimate of the nominal value of U.S. production and a price index.[4] The revisions to output result primarily from the incorporation of quarterly price data for 1998 for two important types of devices: memory chips and computational microprocessors. These price indexes are calculated once a year when detailed quarterly data for the previous year become available. In the meantime, these price indexes are estimates based on producer price indexes for these devices from the BLS.[5]

Measurement of Capacity

The revisions to capacity and utilization incorporated the revised production indexes, the preliminary results of the 1998 Survey of Plant Capacity, and updated measures of capacity in physical units for selected industries. In addition, improvements in the capital input measures and in the models used to estimate manufacturing capacity were introduced. The new capital flows table for 1992 of the Bureau of Economic Analysis was incorporated into our estimates of capital input.[6] The improved specification of the models better captures advances in technology that are "embodied" in capital goods. In addition, the procedures for estimating capacity series for light vehicles and semiconductors were modified.

Capacity Estimation Procedure

The Federal Reserve Board's capacity indexes attempt to capture the concept of sustainable maximum output—the greatest level of output a plant can maintain within the framework of a realistic work schedule after factoring in normal downtime and assuming sufficient availability of inputs to operate the capital in place. The concept itself generally conforms to that of a full-input point on a production function, with the qualification that capacity represents a sustainable maximum rather than some higher unsustainable short-term maximum. Capacity estimates for most manufacturing industries are based on responses to the Survey of Plant Capacity (SPC), conducted by the Census Bureau and partially funded by the Federal Reserve. These industries account for a little less than 80 percent of total industrial capacity. Capacity and output data reported in physical units from government and trade sources are available for portions of several industries within manufacturing (paper, industrial chemicals, petroleum refining, primary metals, and motor vehicles) as well as for electric utilities and a portion of mining. In the absence of utilization data for some mining series, capacity is based on trends through peaks in production. Overall, capacity indexes are constructed for seventy-eight detailed industries (fifty-five in manufacturing, twenty-one in mining, and two in utilities), which mostly correspond to industries at the two- and three-digit SIC level.

Six general steps are involved in calculating the utilization rates published by the Federal Reserve.

Step 1. Implied capacity indexes ($ICAP_t$) are constructed by dividing a production index (IP_t) by a utilization rate (U_t) for an end-of-year period: $ICAP_t = IP_t/U_t$. For industries whose capacity indexes are based on the SPC, the calculation is done using fourth-quarter data; for other industries, the calculation typically uses December data. These indexes are expressed, like the industrial production indexes, as a

3. Seasonal factors for the electric power series have been reestimated by using data through April 1999. Seasonal factors for worker hours were based on data through October 1999. Factors for the monthly physical product series were based on data through June or later in the summer.

4. The data for the individual devices are aggregated using Fisher aggregation methods. See "Industrial Production and Capacity Utilization: Historical Revision and Recent Developments" for a general description of the methodology.

5. Additionally, the price index for semiconductors was expanded to include information available beginning in 1996 on embedded microprocessors. The market for embedded microprocessors—chips for noncomputer applications, such as cars, video games, and network routers—is relatively small, but it is one of the most rapidly expanding segments of the semiconductor industry.

6. A capital flows table shows the asset composition of each industry's capital spending. See Michael Mohr and Charles Gilbert, "Capital Stock Estimates for Manufacturing Industries: Methods and Data," 1996 (http://www.federalreserve.gov/releases/g17/capital_stock_doclatest.pdf).

percentage of production in a base year, currently 1992.[7]

Revisions to the implied capacity indexes can arise from either revisions to the industrial production index or to the utilization rates. For example, in this revision, the production index for computers (SIC 357) displays faster growth because of an improvement in the methodology for measuring computer output. Consequently, the capacity index for computers required a similar revision. The revised implied capacity index (IP_t/U_t) fully incorporates the revisions to production and the new data on utilization rates.

Step 2. The implied capacity indexes are related to alternative indicators of capacity growth in a regression model. The Federal Reserve's estimates of annual capacity growth at the most detailed level are derived from the fitted values of the regression models that relate the implied capacity indexes to these alternative indicators; in general, the regressions are designed to improve the year-to-year changes in the implied capacities but to leave their trends intact.

For some industries, the alternative indicators include the physical capacity measures and time trends. These regressions essentially re-trend the physical capacity estimates to the trend growth path of the preliminary implied capacity indexes. For industries whose capacity indexes are based on the SPC, the alternative measures of capacity include estimates of industry capital input; trends; occasional dummy variables for level shifts, outliers, or trend breaks; and variables related to the average age of the capital stock.[8] (See box "Modeling Capacity with Utilization Rates from the Survey of Plant Capacity" for more detail.)

For industries whose capacity indexes are based on the SPC, the alternative indicators, such as the capital measures derived from investment data, come from surveys other than the SPC. They should be uncorrelated with the sampling errors for the utilization rates, which would then not be present in the fitted values for the models. The differences between published Federal Reserve capacity measures and implied capacity indexes from the SPC are not predictable from measures of cyclical variation in the overall economy or industry-specific cyclical variation. The differences are, however, correlated with past differences for many industries. The implication is that, generally, the regression procedure smooths through correlated noise without discarding useful SPC information.

The final annual growth rates for the individual FRB capacity series are generally equal to the growth rates for these baseline capacity estimates. The remaining steps translate the baseline estimates into the final monthly individual and aggregate FRB series on capacity and utilization.

Step 3. A monthly time series is formed by interpolating between the fourth-quarter baseline capacity indexes produced by the regression models. A new interpolation procedure, which was introduced in March 1999, allowed capacity growth rates to change smoothly over time; with this revision, the monthly data for 1992 on were reestimated using the new procedure. Previously, monthly capacity figures were computed based on the assumption of a constant growth rate of capacity throughout a year, with potentially abrupt changes in growth rates between the last months of one year and the first months of the next. At the most detailed industry level, the new capacity estimates maintain the same growth rates from fourth quarter to fourth quarter that were calculated under the previous procedure.

Step 4. An adjustment may then be applied to remove capacity that accommodates seasonal swings in output. This adjustment is prominent in the capacity index for electric utility generation, in which the margin for summer peak loads is removed from the equipment's rated capacity.

An adjustment may also be applied to retain consistency with historical utilization levels based on the McGraw-Hill/DRI survey, which was the primary source of the level of utilization rates from 1954 through the mid-1970s. Generally, utilization rates from the Census survey, now the main source for manufacturing utilization rates, were lower, on average, than those of the discontinued McGraw-Hill/DRI survey for the fourteen years they overlapped; thus, to maintain continuity, the Federal Reserve utilization rates for major industry totals and subtotals differ from those issued by the Census Bureau.

Step 5. The monthly capacity aggregates are constructed in three steps: (1) total value added for the aggregate is divided by the sum of the component capacities weighted by unit value added to calculate

7. For example, if the production index in the fourth quarter of 1999 is 150 (150 percent of the average of 1992 production) and the related utilization rate is 80 percent, the implied capacity index is 150/0.8 = 187.5.

8. In the Survey of Plant Capacity, the definitions of capacity have changed somewhat over time. For the 1974–88 period, the utilization rates based on the "preferred capacity" definition are used to construct the implied capacity indexes; for 1989 to the present, those based on the "full production" definition are used.

Modeling Capacity with Utilization Rates from the Survey of Plant Capacity

Capacity indexes for industries that account for nearly 80 percent of total industrial capacity are based on regressions using results from the Survey of Plant Capacity (SPC). The capacity model for an industry relates its implied capacity index ($ICAP_t$), constructed by dividing the Federal Reserve production index for that industry by the time series of the Survey of Plant Capacity utilization rates, to deterministic trends (t), measures of industry capital input (K_t), variables that capture the age profile of the capital stock (A_t), and various dummy variables (the $D_{i,t}$). The natural logarithms of the variables are modeled as

$$\log(ICAP_t) = a_0 + a_1 t + b_1 \log(K_t) + c_1 \log(A_t) + \Sigma d_i D_{i,t} + u_t.$$

If the log of capital input is subtracted from both sides in the expression above, it can be interpreted as a model of capital productivity at capacity:

$$\log(ICAP_t/K_t) = a_0 + a_1 t + (b_1 - 1)\log(K_t) + c_1 \log(A_t) + \Sigma d_i D_{i,t} + u_t.$$

The fitted values from the regression model are used as the baseline estimates of capacity. This procedure attempts to capture the measurable changes in capacity that are reflected in the flow of services from capital formation and in trends in capital productivity, related to, among other things, the age profile of the capital stock.

Previously, capacity was modeled such that capital productivity was a deterministic function of time and of dummy variables:

$$\log(ICAP_t/K_t) = a_0 + \Sigma a_i t^i + \Sigma d_i D_{i,t} + u_t.$$

The new models relax the implicit assumption in the old models of a unit coefficient on b_1 and add the variables related to the age profile of the capital stock. Given estimates of the capital measures, these regressions provide a convenient means of estimating capacity for years beyond the most recent SPC.

The trend terms in the model attempt to capture deterministic growth in capital productivity. Additionally, dummy variables are occasionally included to account for a shift in trend or in level, or to account for an obvious outlier. Several series have a level shift dummy variable for the post-1994 period, when the sample on which the SPC is based increased about 70 percent, to between 16,000 and 17,000 plants.

The capital input measures reflect the flow of services derived from the net stocks of productive assets, which, in turn, are based on estimates of industry investment in the various asset categories. The capital input measures are developed from industry-level investment data from the Census Bureau's Annual Survey of Manufactures and Census of Manufactures; from new business investment and deflators by asset type derived from the BEA's national income and product accounts; and from the BEA's capital flows tables (CFTs), which provide a detailed breakdown of the asset composition of industry-level investment for selected years. Updating estimates of industry-level and asset investment and incorporating the most recent CFT (1992) yielded substantially stronger capital input growth than previous estimates; from 1992 to 1999, the annual average growth in capital input was revised upward about 0.8 percentage point, to 3.2 percent.

The age variable is the ratio of the age of an industry's capital stock relative to its expected service life, given the mix of assets that compose the stock. This measure,

an aggregate annual utilization rate; (2) the resulting annual utilization rate is then divided into the corresponding IP aggregate to calculate an annual capacity index; and (3) the annual capacity index is interpolated using an annually weighted Fisher index of its constituent monthly capacity series to derive the monthly capacity aggregate.[9] For the very recent period, since the latest full year of utilization rate data (1998 in this revision), each monthly capacity aggregate is extrapolated by this same Fisher index, adjusted by a factor that accounts for the differences in their relative growth rates.

9. More detail on the aggregation procedure is available in "Industrial Production and Capacity Utilization: Historical Revision and Recent Developments."

Step 6. Utilization rates for the individual series and aggregates are calculated by dividing the pertinent monthly production index by the related capacity index.

Special Methods for Light Vehicles and Semiconductors

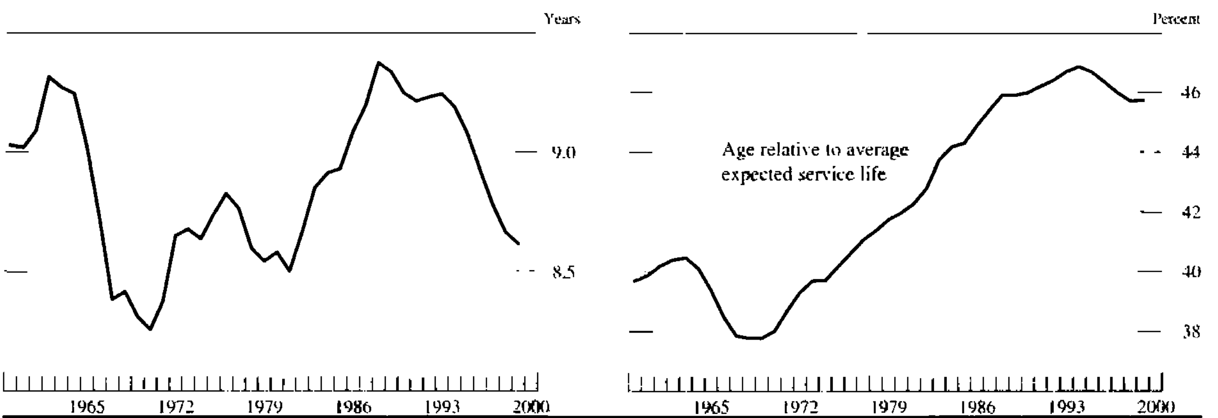
Capacity estimates for autos (SIC 371 pt.) and for light trucks (SIC 371 pt.) are constructed from estimates of the peak historical assembly-line speed and the number of hours that can be worked at each plant in the United States. Annual linespeed data and the number of shifts at individual plants are reported in Ward's Automotive Reports. An annual capacity count for a plant is calculated by multiplying the peak linespeed by the hours per year that the plant could

Modeling Capacity with Utilization Rates—Continued

expressed as a percentage, represents the portion of the aggregate life of a given mix of assets that has been used up. In several studies, age variables have been used to capture the effect of embodied technological change.[1] The idea of embodiment is that productivity-augmenting technological change is vintage specific, that is, it is embedded in the design of new equipment and structures, rather than affecting all existing inputs in the production process. For manufacturing as a whole, the age of the capital stock in years (left panel) peaked in 1988; for the next few years, a shift in the composition of investment spending toward shorter-lived assets helped bring down the average age of the capital stock. On balance, however, the age of the stock of the individual asset classes continued to increase in the early 1990s until a surge in investment in the mid-1990s drove down the age of the capital stock relative to its expected life (right panel).

1. See, for example, Richard McHugh and Julia Lane, "The Age of Capital, the Age of Utilized Capital, and Tests of the Embodiment Hypothesis," *The Review of Economics and Statistics*, vol. 69 (May 1987), pp. 362–67; Richard Nelson, "Aggregate Production Functions and Medium Range Growth Projections," *American Economic Review*, vol. 54 (September 1964), pp. 575–606; and Michael Gort, Byong-Hong Bahk, and Richard A. Wall, "Decomposing Technical Change," *Southern Economic Journal*, vol. 60 (July 1993), pp. 220–34.

Average age of capital, 1959–99



run. Before this revision, all autos and light trucks were weighted equally in compiling the aggregate figures. With this revision, the plant-level data are now aggregated using price weights for the different models of light vehicles. The method adopted in this revision better captures shifts in the composition of vehicles produced. If a plant produces multiple models on one assembly line, the model price attributed to this plant is computed as a weighted average of model prices according to estimated production levels at the plant. The new approach indicates a shift over time toward capacity of more expensive light trucks.

The capacity index for semiconductors (SIC 3674) is estimated slightly differently from the other SPC-based indexes. Semiconductors are treated differently because their IP index exhibits extraordinarily fast growth; therefore, an implied capacity index based on the IP index is difficult to model beyond using an exponential trend. The new capacity model is based on an implied capacity index constructed by dividing the number of chips produced (based on data from the Semiconductor Industry Association and the Bureau of the Census) by the SPC utilization rate. This implied capacity index, instead of the standard one computed using the IP index, is then fitted using the alternative capacity indicators, such as capital input. The fitted values from the regression are then multiplied by the ratio of semiconductor IP to the chip count. The growth of the ratio is a measure of quality change in semiconductors. ❑

Appendix tables begin on page 198.

Appendix A: Summary Tables Based on the G.17 Release, January 14, 2000

A.1. Revised data for industrial production, capacity, and utilization for total industry, 1987–99

Seasonally adjusted data except as noted

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual avg.[1]
	Industrial production (percentage change)																
1987	−.6	1.2	.4	.4	.4	.9	.6	.1	−.1	1.4	.3	.6	4.2	6.7	5.6	7.1	4.6
1988	.1	.3	.0	.6	.1	.1	.7	.5	−.4	.3	.8	.5	3.2	3.1	3.9	3.6	4.5
1989	.6	−.8	.9	.2	−.6	−.2	−1.0	.4	−.2	−.5	.4	.5	3.8	.5	−4.4	−.1	1.8
1990	−.5	.5	.5	−.6	.4	.0	.0	.2	.1	−.6	−1.3	−.6	2.0	.6	1.0	−5.8	−.2
1991	−.5	−.8	−.9	.3	.8	1.2	.1	.1	1.0	−.1	−.1	−.6	−8.3	1.5	6.2	1.1	−2.0
1992	.0	.6	.8	.8	.2	−.1	.7	−.3	.5	.5	.5	.0	.9	6.5	2.8	4.5	3.1
1993	.4	.4	.2	.4	−.5	.3	.1	−.2	1.1	.5	.4	.7	3.7	1.8	1.4	6.6	3.4
1994	.2	.2	.9	.6	.8	.6	.3	.5	.2	.6	.6	.9	5.1	8.1	5.9	6.6	5.5
1995	.6	−.1	.2	−.1	.4	.5	−.4	1.2	.4	−.1	.3	.0	5.7	1.6	3.8	3.0	4.9
1996	−.3	1.2	−.2	1.2	.9	.7	.1	.7	.5	−.1	.7	.3	2.3	9.1	5.8	4.3	4.4
1997	.5	.9	.4	.6	.4	.6	.5	.6	.6	.6	.4	.3	6.5	6.7	6.9	6.9	6.4
1998	.2	−.1	.3	.4	.6	−.7	−.1	1.8	.0	.4	−.2	.0	2.4	3.0	2.9	3.3	4.2
1999	.2	.3	.5	.2	.5	.3	.5	.3	.2	1.0	.4	.4	2.0	4.7	4.8	6.6	3.6
	Industrial production (index)																
1987	90.2	91.2	91.6	92.0	92.4	93.2	93.7	93.8	93.7	95.0	95.3	95.9	91.0	92.5	93.8	95.4	93.2
1988	95.9	96.2	96.3	96.8	96.9	97.0	97.6	98.1	97.8	98.0	98.8	99.3	96.1	96.9	97.8	98.7	97.4
1989	99.8	99.0	100.0	100.2	99.6	99.4	98.4	98.8	98.6	98.2	98.6	99.0	99.6	99.7	98.6	98.6	99.1
1990	98.6	99.1	99.6	99.0	99.4	99.3	99.3	99.5	99.6	99.1	97.7	97.2	99.1	99.2	99.5	98.0	98.9
1991	96.7	95.9	95.0	95.4	96.1	97.2	97.3	97.4	98.4	98.3	98.1	97.5	95.9	96.2	97.7	98.0	97.0
1992	97.6	98.1	98.9	99.7	99.9	99.7	100.5	100.2	100.7	101.2	101.8	101.7	98.2	99.8	100.5	101.6	100.0
1993	102.1	102.6	102.8	103.2	102.7	103.0	103.1	102.9	104.0	104.5	104.9	105.6	102.5	103.0	103.3	105.0	103.4
1994	105.9	106.1	107.0	107.6	108.5	109.2	109.5	110.1	110.3	110.9	111.6	112.7	106.3	108.4	110.0	111.8	109.1
1995	113.3	113.2	113.4	113.3	113.8	114.3	113.8	115.1	115.6	115.5	115.8	115.9	113.3	113.8	114.9	115.7	114.4
1996	115.6	116.9	116.6	118.0	119.0	119.8	119.9	120.7	121.2	121.2	122.1	122.4	116.4	118.9	120.6	121.9	119.4
1997	123.0	124.0	124.5	125.2	125.8	126.6	127.2	128.0	128.8	129.6	130.2	130.6	123.8	125.9	128.0	130.1	127.1
1998	130.9	130.7	131.1	131.7	132.4	131.5	131.3	133.6	133.5	134.1	133.8	133.8	130.9	131.9	132.8	133.9	132.4
1999	134.1	134.5	135.1	135.5	136.2	136.6	137.4	137.7	138.1	139.4	139.9	140.5	134.6	136.1	137.7	139.9	137.2
	Capacity (index)																
1987	114.0	114.1	114.2	114.3	114.4	114.5	114.6	114.7	114.9	115.0	115.1	115.2	114.1	114.4	114.7	115.1	114.6
1988	115.3	115.5	115.6	115.7	115.8	115.9	116.0	116.2	116.3	116.4	116.5	116.7	115.5	115.8	116.2	116.5	116.0
1989	116.8	117.0	117.2	117.4	117.6	117.8	118.0	118.2	118.4	118.6	118.8	119.0	117.0	117.6	118.2	118.8	117.9
1990	119.2	119.3	119.5	119.7	119.9	120.1	120.2	120.4	120.6	120.8	121.0	121.2	119.3	119.9	120.4	121.0	120.2
1991	121.4	121.6	121.7	121.9	122.1	122.2	122.4	122.6	122.7	122.9	123.0	123.2	121.6	122.1	122.6	123.0	122.3
1992	123.4	123.6	123.9	124.1	124.4	124.6	124.8	125.0	125.2	125.4	125.6	125.8	123.6	124.4	125.0	125.6	124.7
1993	126.0	126.2	126.4	126.6	126.8	127.0	127.3	127.5	127.7	128.0	128.3	128.6	126.2	126.8	127.5	128.3	127.2
1994	129.0	129.3	129.7	130.1	130.5	130.9	131.4	131.8	132.3	132.8	133.3	133.8	129.3	130.5	131.8	133.3	131.2
1995	134.3	134.8	135.4	135.9	136.5	137.1	137.7	138.2	138.8	139.4	140.0	140.6	134.8	136.5	138.2	140.0	137.4
1996	141.2	141.9	142.5	143.2	143.9	144.6	145.2	145.8	146.4	147.0	147.6	148.2	141.9	143.9	145.8	147.6	144.8
1997	148.8	149.5	150.1	150.7	151.4	152.1	152.7	153.4	154.1	154.8	155.5	156.3	149.5	151.4	153.4	155.6	152.5
1998	157.1	158.0	158.9	159.8	160.7	161.6	162.4	163.2	163.9	164.6	165.3	166.0	158.0	160.7	163.2	165.3	161.8
1999	166.7	167.4	168.0	168.6	169.2	169.8	170.2	170.7	171.2	171.7	172.3	172.8	167.3	169.2	170.7	172.3	169.9
	Utilization (level, percent)																
1987	79.1	80.0	80.2	80.5	80.7	81.4	81.8	81.8	81.6	82.6	82.8	83.2	79.8	80.8	81.7	82.9	81.3
1988	83.2	83.4	83.3	83.7	83.7	83.6	84.1	84.5	84.1	84.2	84.8	85.1	83.3	83.7	84.2	84.7	84.0
1989	85.4	84.6	85.3	85.3	84.7	84.4	83.4	83.6	83.3	82.8	83.0	83.2	85.1	84.8	83.4	83.0	84.1
1990	82.7	83.0	83.3	82.7	82.9	82.7	82.6	82.6	82.6	82.0	80.8	80.2	83.0	82.8	82.6	81.0	82.3
1991	79.6	78.9	78.1	78.2	78.7	79.6	79.5	79.5	80.2	80.0	79.8	79.2	78.9	78.8	79.7	79.6	79.3
1992	79.1	79.4	79.8	80.3	80.3	80.0	80.5	80.1	80.4	80.7	81.0	80.8	79.4	80.2	80.3	80.8	80.2
1993	81.0	81.3	81.3	81.5	81.0	81.1	81.0	80.7	81.4	81.6	81.7	82.1	81.2	81.2	81.0	81.8	81.3
1994	82.1	82.0	82.5	82.7	83.1	83.4	83.4	83.5	83.4	83.6	83.8	84.2	82.2	83.1	83.4	83.9	83.1
1995	84.4	83.9	83.8	83.3	83.3	83.3	82.7	83.3	83.3	82.9	82.7	82.4	84.0	83.3	83.1	82.7	83.3
1996	81.8	82.4	81.8	82.4	82.7	82.9	82.6	82.8	82.8	82.4	82.7	82.6	82.0	82.6	82.7	82.6	82.5
1997	82.6	83.0	83.0	83.1	83.1	83.2	83.3	83.4	83.6	83.7	83.7	83.5	82.9	83.1	83.4	83.7	83.3
1998	83.3	82.7	82.5	82.4	82.4	81.3	80.8	81.9	81.5	81.5	80.9	80.6	82.8	82.1	81.4	81.0	81.8
1999	80.4	80.4	80.5	80.4	80.5	80.5	80.7	80.7	80.6	81.2	81.2	81.3	80.4	80.5	80.7	81.2	80.7

NOTE. Monthly percentage change figures show change from the previous month; quarterly figures show the change from the previous quarter at a compound annual rate of growth. Production and capacity indexes are expressed as percentages of output in 1992.

Estimates from October 1999 through December 1999 are subject to further revision in the upcoming monthly releases.

1. Annual averages of industrial production are calculated from indexes that are not seasonally adjusted.

A.2. Revised data for industrial production, capacity, and utilization for manufacturing industries, 1987–99

Seasonally adjusted data except as noted

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual avg.[1]
	Industrial production (percentage change)																
1987	−.8	1.6	.2	.5	.3	1.0	.7	−.2	.1	1.3	.5	.6	5.0	7.0	5.5	7.6	5.3
1988	−.2	.4	−.1	1.0	−.1	.0	.7	.3	.2	.2	.9	.6	2.3	4.1	3.7	5.2	4.7
1989	.9	−1.2	.8	.1	−.7	.0	−1.1	.3	−.3	−.6	.4	.1	4.3	−.7	−4.5	−1.4	1.9
1990	−.2	.9	.3	−.8	.4	−.1	.0	.3	−.1	−.6	−1.3	−.6	2.9	−.1	.8	−6.3	−.5
1991	−.9	−.7	−1.1	.3	.7	1.4	.2	.2	1.1	−.1	−.2	−.5	−9.7	1.2	7.8	1.7	−2.4
1992	.2	.8	.9	.7	.4	.0	.7	−.2	.4	.5	.6	−.2	2.3	7.3	3.5	3.9	4.0
1993	.7	.2	.3	.5	−.4	.1	.1	−.4	1.3	.4	.5	.8	4.2	2.4	.8	7.1	3.7
1994	.0	.2	1.1	.8	1.0	.4	.5	.7	.3	.7	.8	.9	5.2	10.0	6.7	8.0	6.1
1995	.7	−.3	.3	−.2	.3	.6	−.6	1.1	.8	−.1	.1	.0	6.1	1.4	3.3	3.6	5.3
1996	−.3	1.1	−.4	1.4	.9	.8	.4	.7	.5	−.1	.8	.4	1.6	9.9	7.7	4.6	4.7
1997	.4	1.0	.5	.5	.5	.8	.4	.8	.6	.6	.6	.4	7.1	7.4	7.8	7.4	7.3
1998	.4	−.1	.2	.6	.5	−.8	−.1	2.0	−.1	.7	.0	.1	3.3	2.6	3.4	5.6	4.9
1999	.1	.5	.3	.3	.6	.3	.4	.4	.3	1.0	.6	.2	2.5	4.9	4.7	7.2	4.3
	Industrial production (index)																
1987	89.6	91.0	91.2	91.6	91.9	92.8	93.4	93.3	93.4	94.6	95.1	95.6	90.6	92.1	93.4	95.1	92.8
1988	95.4	95.8	95.7	96.7	96.6	96.6	97.3	97.5	97.7	97.9	98.9	99.4	95.6	96.6	97.5	98.7	97.1
1989	100.3	99.1	99.9	100.0	99.4	99.4	98.3	98.7	98.4	97.8	98.2	98.3	99.8	99.6	98.5	98.1	99.0
1990	98.1	99.0	99.3	98.6	99.0	98.9	98.8	99.1	99.0	98.4	97.2	96.6	98.8	98.8	99.0	97.4	98.5
1991	95.8	95.1	94.1	94.4	95.0	96.3	96.6	96.8	97.8	97.8	97.6	97.1	95.0	95.2	97.0	97.5	96.2
1992	97.2	98.0	98.8	99.5	99.9	99.9	100.6	100.4	100.8	101.3	101.9	101.7	98.0	99.8	100.6	101.6	100.0
1993	102.4	102.6	102.9	103.5	103.1	103.2	103.3	102.9	104.2	104.7	105.1	106.0	102.7	103.3	103.5	105.3	103.7
1994	106.1	106.3	107.5	108.4	109.4	109.8	110.4	111.1	111.5	112.2	113.1	114.1	106.6	109.2	111.0	113.1	110.0
1995	114.9	114.6	115.0	114.8	115.1	115.7	115.0	116.3	117.2	117.1	117.2	117.3	114.8	115.2	116.2	117.2	115.8
1996	117.0	118.3	117.8	119.4	120.5	121.5	122.0	122.8	123.5	123.4	124.3	124.8	117.7	120.5	122.8	124.1	121.3
1997	125.3	126.5	127.1	127.8	128.4	129.5	130.1	131.1	131.8	132.7	133.5	134.0	126.3	128.6	131.0	133.4	130.1
1998	134.5	134.3	134.5	135.3	135.9	134.8	134.7	137.4	137.3	138.3	138.3	138.4	134.5	135.3	136.5	138.3	136.4
1999	138.6	139.3	139.7	140.2	141.0	141.4	142.0	142.5	142.9	144.3	145.2	145.5	139.2	140.9	142.5	145.0	142.3
	Capacity (index)																
1987	113.2	113.4	113.6	113.8	113.9	114.1	114.2	114.4	114.6	114.7	114.9	115.0	113.4	113.9	114.4	114.9	114.1
1988	115.2	115.3	115.4	115.6	115.7	115.8	116.0	116.1	116.3	116.5	116.6	116.8	115.3	115.7	116.1	116.6	115.9
1989	117.0	117.3	117.5	117.8	118.0	118.3	118.5	118.7	119.0	119.2	119.5	119.7	117.3	118.0	118.7	119.5	118.4
1990	119.9	120.1	120.3	120.5	120.7	120.9	121.1	121.3	121.5	121.7	122.0	122.2	120.1	120.7	121.3	122.0	121.0
1991	122.4	122.6	122.8	123.0	123.1	123.3	123.5	123.7	123.8	124.0	124.2	124.3	122.6	123.1	123.7	124.2	123.4
1992	124.6	124.8	125.1	125.4	125.6	125.9	126.1	126.4	126.6	126.8	127.1	127.3	124.8	125.6	126.4	127.1	126.0
1993	127.5	127.7	127.9	128.2	128.4	128.6	128.9	129.1	129.4	129.7	130.0	130.4	127.7	128.4	129.1	130.0	128.8
1994	130.7	131.1	131.6	132.0	132.5	133.0	133.4	133.9	134.5	135.0	135.6	136.1	131.2	132.5	133.9	135.6	133.3
1995	136.7	137.3	138.0	138.6	139.3	140.0	140.6	141.2	141.9	142.5	143.2	143.9	137.3	139.3	141.2	143.2	140.3
1996	144.6	145.4	146.1	146.9	147.7	148.5	149.2	149.9	150.6	151.3	152.0	152.7	145.4	147.7	149.9	152.0	148.7
1997	153.4	154.1	154.9	155.6	156.4	157.2	157.9	158.7	159.5	160.3	161.2	162.1	154.1	156.4	158.7	161.2	157.6
1998	163.0	164.0	165.0	166.1	167.1	168.2	169.1	170.0	170.8	171.7	172.5	173.3	164.0	167.1	170.0	172.5	168.4
1999	174.1	174.8	175.5	176.2	176.9	177.6	178.2	178.7	179.3	179.9	180.5	181.2	174.8	176.9	178.7	180.6	177.8
	Utilization (level, percent)																
1987	79.1	80.2	80.3	80.6	80.7	81.4	81.8	81.5	81.5	82.5	82.8	83.1	79.9	80.9	81.6	82.8	81.3
1988	82.9	83.1	82.9	83.7	83.5	83.4	83.8	84.0	84.0	84.1	84.8	85.1	83.0	83.5	83.9	84.7	83.8
1989	85.7	84.5	85.0	85.0	84.2	84.1	83.0	83.1	82.7	82.1	82.2	82.1	85.1	84.4	82.9	82.1	83.6
1990	81.8	82.5	82.6	81.8	82.0	81.8	81.6	81.7	81.5	80.9	79.7	79.0	82.3	81.9	81.6	79.9	81.4
1991	78.2	77.5	76.6	76.8	77.1	78.1	78.2	78.2	79.0	78.9	78.6	78.1	77.5	77.3	78.5	78.5	77.9
1992	78.0	78.5	79.0	79.4	79.5	79.3	79.8	79.5	79.6	79.9	80.2	79.9	78.5	79.4	79.6	80.0	79.4
1993	80.3	80.4	80.5	80.7	80.3	80.2	80.2	79.7	80.5	80.7	80.9	81.3	80.4	80.4	80.1	81.0	80.5
1994	81.1	81.1	81.7	82.1	82.6	82.6	82.7	82.9	82.9	83.1	83.4	83.8	81.3	82.4	82.9	83.4	82.5
1995	84.0	83.4	83.3	82.8	82.6	82.7	81.8	82.3	82.6	82.2	81.9	81.5	83.6	82.7	82.3	81.8	82.6
1996	80.9	81.4	80.6	81.3	81.6	81.8	81.8	81.9	82.0	81.6	81.8	81.7	80.9	81.6	81.9	81.7	81.5
1997	81.7	82.1	82.1	82.1	82.1	82.4	82.4	82.6	82.7	82.8	82.8	82.6	81.9	82.2	82.5	82.7	82.4
1998	82.5	81.9	81.5	81.5	81.3	80.1	79.7	80.8	80.4	80.5	80.2	79.9	82.0	81.0	80.3	80.2	80.9
1999	79.6	79.7	79.6	79.5	79.7	79.6	79.7	79.7	79.7	80.2	80.4	80.3	79.6	79.6	79.7	80.3	79.8

NOTE. See general note to table A.1.

1. Annual averages of industrial production are calculated from indexes that are not seasonally adjusted.

A.3. Rates of growth in industrial production, by major market group, 1995–99

Market group	Revised growth rate (percent)					Difference between growth rates: revised less earlier (percentage points)				
	1995	1996	1997	1998	1999	1995	1996	1997	1998	1999
Total index	**3.5**	**5.3**	**6.8**	**2.9**	**4.5**	**.0**	**.0**	**.2**	**1.0**	**.9**
Products, total	1.9	4.3	5.2	2.5	3.1	–.1	.0	.1	.4	.7
Final products	2.4	4.4	5.7	2.3	3.2	–.2	.1	.1	.3	.9
Consumer goods	1.6	2.0	2.8	–.9	2.9	.3	–.2	.1	–.5	.5
Durable	1.6	1.8	5.5	5.0	7.2	1.3	–.5	–1.0	.1	.1
Automotive products	–3.3	2.4	10.3	4.7	2.9	–.8	.4	1.0	.8	–.1
Autos and trucks	–6.3	2.5	13.0	4.2	1.9	–1.6	.0	.7	1.2	–.2
Autos	–12.8	–6.2	3.6	2.7	–6.1	–5.6	–2.4	.2	2.0	–2.2
Trucks	.2	9.2	19.1	5.0	6.1	–1.1	1.1	3.5	.0	.9
Auto parts and allied goods	2.4	2.2	5.9	6.0	4.1	.6	1.1	1.3	–.1	.0
Other durable goods	5.5	1.3	1.8	5.1	11.1	3.0	–1.2	–2.5	–.6	.5
Appliances and electronics	19.2	4.1	1.4	23.8	28.6	10.3	–4.8	–10.4	4.3	–.3
Appliances and air conditioning	–2.1	–.9	–2.2	9.8	3.1	–.1	–.7	–1.7	–1.5	–1.0
Home electronics	42.3	9.4	5.6	39.4	66.1	22.2	–8.9	–18.6	11.6	9.4
Carpeting and furniture	–3.0	3.1	3.0	2.5	6.5	.0	.1	.6	–1.1	1.5
Miscellaneous	.9	–1.3	1.8	–3.3	4.2	–.2	.5	.9	–2.0	1.5
Nondurable	1.6	2.0	2.1	–2.5	1.7	.0	–.2	.4	–.7	.7
Non-energy	.9	1.9	2.1	–2.3	1.1	.0	–.2	.4	–.7	1.2
Foods and tobacco	–.2	1.2	2.2	–1.3	.6	.2	–.2	.9	–1.9	1.2
Clothing	–3.9	–.4	–2.4	–8.1	–1.6	–.4	–.2	–.3	–2.4	4.6
Chemical products	5.0	4.8	2.4	–.2	3.0	–.1	–.1	–.4	2.2	.8
Paper products	1.8	1.4	4.6	–5.4	1.4	–.3	–.4	.7	–.6	–.6
Energy products	6.4	2.5	1.8	–3.9	6.4	.1	.1	.3	–.4	–2.2
Fuels	1.5	3.6	1.8	–.6	.5	.1	.1	.1	.0	–.6
Utilities	8.7	2.0	1.6	–5.1	9.0	.1	.2	.2	–.3	–3.8
Equipment, total	3.7	8.6	10.3	7.3	3.7	–.9	.6	–.1	1.6	1.4
Business equipment	5.7	10.8	12.8	10.0	5.0	–1.3	1.0	–.3	1.7	1.7
Information processing and related	12.2	18.5	16.0	20.0	22.5	–2.8	2.0	–.2	5.6	3.8
Computer and office	31.8	53.5	32.2	77.7	51.7	–12.9	11.6	–11.5	23.0	18.2
Industrial	8.4	1.1	4.8	.7	–2.6	–.1	–.1	–.3	–.8	–1.7
Transit	–10.9	15.8	21.7	10.7	–12.9	–1.4	1.5	–1.1	–1.4	.4
Autos and trucks	–8.2	–3.7	11.7	6.4	–.6	–2.2	–.7	–.6	1.3	–1.5
Other	2.0	6.0	10.7	–1.6	–7.8	.1	.5	.3	–.2	.0
Defense and space equipment	–6.4	–2.5	–4.0	.6	–3.8	.7	–1.6	–.1	.9	.5
Oil and gas well drilling	2.6	7.8	9.6	–25.3	5.9	.2	.3	.3	.0	–2.0
Manufactured homes	7.3	3.8	8.9	6.7	–16.5	–1.3	4.4	9.6	–2.4	1.2
Intermediate products	.5	3.8	3.6	3.0	2.8	.0	.0	.3	.6	.1
Construction supplies	–.4	5.8	2.8	5.6	3.8	–.1	.0	.4	.5	–.6
Business supplies	1.1	2.4	4.1	1.4	2.1	.0	.0	.3	.7	.5
Materials	6.0	6.9	9.2	3.5	6.8	.3	.0	.2	1.9	1.4
Durable	11.4	10.6	14.3	7.3	9.3	.4	.4	1.0	3.5	2.0
Consumer parts	3.0	1.8	9.5	–2.8	5.9	–.6	.6	2.2	–1.4	.5
Equipment parts	28.2	23.4	26.5	22.2	20.1	1.9	.7	.1	10.3	6.4
Semiconductors, printed circuit boards, and other electrical components	71.7	52.2	54.2	56.6	48.4	6.3	2.8	.9	26.8	12.8
Other	2.1	4.0	6.0	–.7	1.6	–.3	.1	1.0	.1	–1.3
Basic metals	.9	4.7	5.5	–5.6	4.8	–.7	.8	1.2	.1	–1.3
Nondurable	–2.6	3.4	4.2	–2.9	4.9	–.1	–.3	–.2	–.1	1.3
Textile	–7.2	2.3	3.1	–9.5	–.2	.0	–.4	–.1	–2.3	2.4
Paper	–2.8	4.3	4.6	–2.6	4.6	.0	–.1	–.2	.0	–.1
Chemical	–1.1	4.6	4.4	–3.5	8.1	–.2	–.5	–.6	.2	3.0
Other	–3.0	.6	4.3	1.6	1.3	–.1	.1	.5	.3	–.9
Energy	.7	.7	.1	–1.0	.2	.1	–.1	–.2	–.3	–1.0
Primary	.4	–.9	–.1	–.4	–.4	.1	–.2	–.3	–.5	–1.1
Converted fuel	1.2	3.7	.4	–2.2	1.4	.1	.1	–.1	.0	–.6
Special aggregates										
Total excluding:										
Autos and trucks	3.9	5.5	6.6	2.8	4.6	.1	.1	.2	1.0	1.0
Motor vehicles and parts	3.8	5.7	6.4	3.0	4.5	.1	.1	.1	1.0	1.0
Computers	2.9	4.6	6.3	1.5	3.3	.0	.0	.4	.7	.5
Computers and semiconductors [1]	1.0	3.0	4.7	–.1	1.8	–.1	.0	.5	–.1	.1
Consumer goods excluding:										
Autos and trucks	2.1	1.9	2.2	–1.2	3.0	.4	–.3	.0	–.6	.5
Energy	1.1	1.9	2.9	–.6	2.6	.3	–.3	.1	–.6	.8
Business equipment excluding:										
Autos and trucks	7.3	12.4	12.9	10.3	5.5	–1.2	1.2	–.3	1.8	2.0
Computers and office equipment	3.4	7.2	10.9	4.0	–.6	–.4	.3	.5	–.2	–.8
Materials excluding:										
Energy	7.2	8.5	11.4	4.5	8.2	.3	.1	.3	2.5	1.9

NOTE. Growth rates are calculated as the percentage change in the seasonally adjusted index from the fourth quarter of the previous year to the fourth quarter of the year specified. For 1999, the differences between growth rates are calculated from annualized growth rates between the fourth quarter of 1998 and the third quarter of 1999.

1. Semiconductors include related electronic components.

A.4. Rates of growth in industrial production, by industry group, 1995–99

Series	SIC code[1]	Revised growth rate (percent)					Difference between growth rates: revised less earlier (percentage points)				
		1995	1996	1997	1998	1999	1995	1996	1997	1998	1999
Total index	...	**3.5**	**5.3**	**6.8**	**2.9**	**3.8**	**.0**	**.0**	**.2**	**1.0**	**.9**
Manufacturing	...	3.6	5.9	7.4	3.7	4.0	.0	.0	.1	1.2	1.2
Primary processing	...	–.5	4.1	4.5	–.5	2.5	–.2	.0	.6	–.2	.0
Advanced processing	...	5.6	6.8	9.0	5.7	4.7	.1	.1	.2	1.8	1.6
Durable manufacturing	...	7.0	8.9	11.4	7.7	7.0	.1	.3	.3	2.4	1.5
Lumber and products	24	.6	1.8	4.5	4.2	–.3	–.2	.0	1.4	.0	–.2
Furniture and fixtures	25	–.8	4.6	3.7	3.3	3.2	.0	–.1	.4	–.1	.9
Stone, clay, and glass products	32	2.6	5.8	3.3	5.0	–.4	–.1	–.5	.7	.0	.4
Primary metals	33	–1.2	5.6	6.0	–6.4	7.5	–1.0	1.0	1.1	.7	–2.0
Iron and steel	331,2	–2.0	5.2	6.1	–11.6	13.7	–1.7	1.6	1.1	.1	–2.3
Raw steel	331pt	–1.1	–.1	7.2	–12.8	10.8	–1.8	1.6	–.1	.1	–2.4
Nonferrous metals	333–6,9	–.2	6.2	6.0	.0	.8	–.1	.3	1.1	1.7	–2.0
Fabricated metal products	34	1.0	4.2	5.9	.0	–.3	–.2	.1	1.4	–.6	–1.3
Industrial machinery and equipment	35	13.7	10.5	11.1	16.1	10.4	–.4	.7	–2.3	3.2	3.4
Computer and office equipment	357	40.2	46.5	27.8	78.9	54.9	–1.4	3.6	–15.8	25.9	15.7
Electrical machinery	36	27.6	23.4	26.2	21.5	23.8	1.7	1.2	2.0	10.1	4.6
Semiconductors and related electronic components	3672–9	63.4	46.9	49.9	48.5	41.8	5.4	2.3	1.3	22.8	10.4
Transportation equipment	37	–4.8	4.8	13.2	2.2	–2.5	–.6	–.1	.1	–.9	.3
Motor vehicles and parts	371	–1.8	–1.4	13.8	1.0	4.1	–1.2	.0	1.0	.3	.1
Autos and light trucks	371pt	–7.1	1.6	11.3	4.0	2.5	–2.0	–.3	.4	1.4	–.6
Aerospace and miscellaneous transportation equipment	372–6,9	–9.4	15.0	12.3	4.1	–11.0	.3	–.3	–1.1	–2.5	.3
Instruments	38	4.2	2.4	3.3	1.9	4.6	.0	–.6	–.3	.0	.1
Miscellaneous manufactures	39	2.5	2.6	3.1	–.6	5.5	.0	–.1	1.7	2.8	1.1
Nondurable manufacturing	...	–.3	2.5	2.9	–1.1	.2	.0	–.1	.3	–.2	.7
Foods	20	.7	.8	1.9	1.8	–1.4	.2	–.3	.0	.0	.7
Tobacco products	21	–4.3	.6	5.3	–18.4	–2.8	.1	.7	6.1	–9.7	3.7
Textile mill products	22	–4.5	1.9	3.8	–6.4	6.2	.1	.0	.3	–3.5	5.3
Apparel products	23	–4.1	–1.2	–2.5	–7.3	–6.2	–.5	–.3	–.5	–1.2	2.1
Paper and products	26	–2.4	3.0	4.1	–1.2	1.8	.1	.0	–.1	.0	–.3
Printing and publishing	27	–.3	1.8	3.9	–1.6	–1.9	–.1	–.1	.3	.2	.0
Chemicals and products	28	1.5	4.7	2.6	–.7	2.2	–.1	–.2	–.5	1.6	.8
Petroleum products	29	.7	4.1	2.7	2.1	.7	.0	.4	.7	.6	–1.1
Rubber and plastic products	30	.2	4.0	4.6	3.1	3.6	.0	.0	.3	–.3	–.1
Leather and products	31	–5.8	2.0	–7.1	–8.2	–8.6	–.2	.7	1.6	–.8	–1.8
Mining	...	–.8	1.9	1.9	–5.0	–2.8	.1	–.1	–.2	–.1	–.7
Metal mining	10	4.5	4.0	2.9	–2.1	–16.9	–.1	–.6	–1.5	–.9	4.1
Coal mining	12	–1.0	2.6	1.9	2.8	–1.0	.4	–1.7	–.3	–.2	.7
Oil and gas extraction	13	–1.4	1.1	1.7	–8.4	–1.9	.0	.1	–.1	.1	–2.3
Stone and earth minerals	14	–1.2	4.8	3.1	3.8	–2.4	–.1	.0	–.3	.3	1.8
Utilities	...	6.4	1.2	2.1	–1.4	6.5	.1	.1	.2	–.3	–1.5
Electric	491,493pt	5.3	1.0	2.9	.8	4.9	.1	.0	.3	–.6	–1.1
Gas	492,493pt	10.9	2.2	–1.8	–12.2	15.5	.1	.4	–.5	1.2	–3.7
Special aggregates											
Computers, communications equipment, and semiconductors[2]	...	43.8	39.1	36.6	43.9	39.6	1.8	2.4	–1.9	17.2	7.7
Manufacturing excluding:											
Motor vehicles and parts	...	4.0	6.4	7.1	3.9	4.0	.1	.0	.2	1.3	1.2
Computers and office equipment	...	2.9	5.1	7.0	2.2	2.6	.0	.0	.5	.8	.7
Computers and semiconductors[2]	...	.6	3.3	5.1	.3	.9	–.2	.0	.5	.0	.2
Computers, communications equipment, and semiconductors[2]	...	.4	3.0	4.7	.0	.3	–.1	.0	.4	–.2	.2

NOTE. Growth rates are calculated as the percentage change in the seasonally adjusted index from the fourth quarter of the previous year to the fourth quarter of the year specified. For 1999, the differences between growth rates are calculated from annualized growth rates between the fourth quarter of 1998 and the third quarter of 1999.

Primary-processing manufacturing includes textile mill products; paper and products; industrial chemicals, synthetic materials, and fertilizers; petroleum products; rubber and plastics products; lumber and products; primary metals; fabricated metals; and stone, clay, and glass products. Advanced-processing manufacturing includes foods, tobacco products, apparel products, printing and publishing, chemical products and other agricultural chemicals, leather and products, furniture and fixtures, industrial and commercial machinery and computer equipment, electrical machinery, transportation equipment, instruments, and miscellaneous manufactures.

1. Standard Industrial Classification; see Executive Office of the President, Office of Management and Budget, *Standard Industrial Classification Manual, 1987* (U.S. Government Printing Office, 1987).

2. Semiconductors include related electronic components.

pt Part of classification.

A.5. Rates of growth in capacity, by industry group, 1995–99

Industry group	SIC code[1]	Revised growth rate (percent)					Difference between growth rates: revised less earlier (percentage points)				
		1995	1996	1997	1998	1999	1995	1996	1997	1998	1999[2]
Total index	...	**5.0**	**5.4**	**5.4**	**6.3**	**4.2**	**–.3**	**–.3**	**.3**	**1.3**	**.8**
Manufacturing	...	5.6	6.1	6.1	7.0	4.7	–.4	–.3	.3	1.4	.9
Primary processing	...	3.1	3.5	3.9	3.8	2.4	–.2	–.3	.0	.8	.4
Advanced processing	...	6.9	7.2	7.0	8.5	5.6	–.5	–.3	.6	1.8	1.2
Durable manufacturing	...	8.8	9.3	8.7	10.7	7.3	–.6	–.4	.2	2.8	1.8
Lumber and products	24	3.3	3.6	3.4	3.1	2.9	.2	–.2	–.8	.2	–.2
Furniture and fixtures	25	4.4	4.3	3.8	3.2	2.0	1.9	–1.6	–1.3	1.3	.1
Stone, clay, and glass products	32	2.0	3.3	3.1	2.8	3.5	–3.7	–1.5	.2	2.1	.7
Primary metals	33	2.5	5.7	3.5	3.5	2.5	–.2	2.1	.0	.1	.9
Iron and steel	331,2	1.9	5.2	3.8	5.2	3.9	–.1	.2	–.1	.1	1.7
Raw steel	331pt	3.2	2.7	6.0	6.2	1.5	.1	.0	.2	–.7	–.7
Nonferrous metals	333–6,9	3.2	6.4	3.1	1.5	.8	–.4	4.4	.3	.1	.1
Primary copper	3331	1.6	–5.1	.7	–.5	–2.2	–.4	–.4	1.3	–1.2	–2.6
Primary aluminum	3334	.0	.4	.0	.0	.0	.0	.0	.0	.0	.0
Fabricated metal products	34	6.0	5.1	6.1	5.8	.3	.8	–.3	–.4	1.6	.0
Industrial machinery and equipment	35	10.0	12.3	14.2	15.8	15.3	–1.5	–.7	2.2	1.2	4.5
Computer and office equipment	357	30.3	42.5	50.9	58.8	61.9	–4.3	–3.6	7.7	–.6	20.6
Electrical machinery	36	29.8	30.9	22.9	30.5	17.3	1.0	.7	–.7	12.2	4.0
Semiconductors and related electronic components	3672–9	63.0	59.1	43.0	61.1	31.6	4.3	2.6	–3.6	27.6	4.2
Transportation equipment	37	2.2	.5	2.4	2.7	–.1	–2.1	–2.0	.4	.6	–.6
Motor vehicles and parts	371	5.3	1.5	3.6	2.8	.2	–3.1	–2.4	.4	.2	–.7
Autos and light trucks	371pt	.2	–4.5	4.2	2.6	–1.7	–4.4	–4.0	3.4	–.2	–1.0
Aerospace and miscellaneous transportation equipment	372–6,9	–1.4	–1.0	.7	2.7	–.7	–1.1	–1.6	.4	1.3	–.5
Instruments	38	2.5	.3	.8	2.2	4.0	–.2	.2	–.5	–.2	.7
Miscellaneous manufactures	39	2.6	2.4	.5	1.4	1.1	.9	.5	–1.4	–.5	–.9
Nondurable manufacturing	...	2.0	2.2	2.6	2.4	1.3	–.1	–.1	.6	–.1	–.1
Foods	20	2.4	2.2	2.3	2.2	1.9	.2	.2	1.1	–.6	.0
Textile mill products	22	2.6	1.9	2.1	.3	.3	.7	–.3	–2.4	–.6	1.4
Apparel products	23	1.6	.3	.6	.6	–.8	–.7	–.4	–1.2	1.3	.8
Paper and products	26	3.0	1.4	3.3	3.1	2.4	.5	–1.5	.9	.1	.0
Pulp and paper	261–3	2.9	1.2	2.3	1.4	1.2	.0	–.4	.8	–.3	.1
Printing and publishing	27	.3	.7	1.9	1.6	–.2	–.4	.4	1.8	–1.5	–.9
Chemicals and products	28	2.5	3.4	2.8	2.9	1.0	–.2	–.1	.1	.4	–.2
Plastics materials	2821	3.0	3.3	1.7	3.7	3.7	–1.9	–2.5	–2.4	.0	.3
Synthetic fibers	2823,4	–.7	–2.0	1.1	.5	1.6	–1.1	–1.7	–1.4	–2.4	–2.0
Petroleum products	29	–.2	1.4	2.3	2.9	1.6	.0	.6	1.0	1.8	.5
Rubber and plastics products	30	4.1	4.2	5.3	5.1	5.4	–.3	–.7	.2	.3	.1
Leather and products	31	–2.2	–1.5	–1.9	–2.8	–4.9	–5.6	–5.0	1.5	–2.4	1.5
Mining	...	–.4	.4	1.6	.9	–.2	.0	.0	.0	.0	–1.2
Metal mining	10	.7	1.6	3.2	1.1	–1.5	.1	–.1	.3	.3	–2.0
Coal mining	12	.3	1.8	.2	.4	.4	–.2	.1	–1.5	–1.3	–1.6
Oil and gas extraction	13	–1.0	–.3	1.2	.6	–.6	.0	–.1	.2	.1	–.7
Oil and gas well drilling	138	–1.6	–1.2	1.0	1.9	–3.1	.0	.0	.1	.0	–2.1
Stone and earth minerals	14	2.3	3.6	4.3	2.9	1.6	.0	.0	–.1	–1.2	–2.6
Utilities	...	1.7	1.8	.2	.7	1.4	.0	–.1	–.1	.0	.9
Electric	491,3pt	2.3	1.9	–.2	.7	1.4	.1	.0	–.1	.0	.8
Gas	492,3pt	.5	1.9	1.5	1.1	1.0	.0	–.2	–.5	–.4	–.4
Special aggregates											
Computers, communications equipment, and semiconductors[3]	...	42.0	45.6	37.9	48.2	35.7	1.1	–.7	.5	13.3	9.4
Manufacturing excluding computers, communications equipment, and semiconductors[3]	...	2.7	2.6	3.0	3.0	1.3	–.5	–.3	.3	.4	–.1

NOTE. See general note to table A.4.

1. Standard Industrial Classification; see table A.4, note 1.

2. Through the fourth quarter of 1999.

3. Semiconductors include related electronic components.

pt Part of classification.

A.6. Capacity utilization rates, by industry group, 1967–99

Item	SIC code[1]	Revised rate (percent of capacity, seasonally adjusted)						Difference between rates: revised less earlier (percentage points)		
		1967–98 avg.	1988–89 high	1990–91 low	1997:Q4	1998:Q4	1999:Q4	1997:Q4	1998:Q4	1999:Q3
Total index	...	**82.1**	**85.4**	**78.1**	**83.7**	**81.0**	**81.2**	**.2**	**.0**	**.1**
Manufacturing	...	81.1	85.7	76.6	82.7	80.2	80.3	.3	.1	.3
Primary processing	...	82.4	88.9	77.7	86.3	82.8	83.6	1.0	.2	.0
Advanced processing	...	80.5	84.2	76.1	81.5	79.4	79.2	.1	.1	.4
Durable manufacturing	...	79.5	84.6	73.1	82.7	80.5	80.2	.7	.3	.2
Lumber and products	24	82.6	93.6	75.5	82.9	83.7	81.5	1.6	1.4	1.3
Furniture and fixtures	25	81.2	86.6	72.5	78.5	78.7	79.8	.6	–.4	.0
Stone, clay, and glass products	32	78.5	83.5	69.7	83.7	85.5	83.7	3.0	1.3	1.0
Primary metals	33	81.2	92.7	73.7	92.0	83.2	86.8	.0	.6	–1.1
Iron and steel	331,2	81.2	95.2	71.8	93.1	78.3	83.9	1.3	1.2	–.8
Raw steel	331pt	80.9	92.7	71.5	90.3	74.2	85.9	.3	.8	.1
Nonferrous metals	333–6,9	81.5	89.3	74.2	90.7	89.3	90.5	–1.6	–.2	–1.6
Primary copper	3331	75.5	86.3	73.5	94.6	86.8	75.0	–.9	.8	6.1
Primary aluminum	3334	88.4	100.4	97.3	86.4	88.6	91.2	.1	.1	–.2
Fabricated metal products	34	78.0	82.0	71.9	79.9	75.5	75.8	1.1	–.5	–1.2
Industrial machinery and equipment	35	81.4	85.4	72.3	83.8	84.1	81.3	–1.6	.0	–.2
Computer and office equipment	357	81.2	86.9	66.9	76.0	85.7	80.7	–7.6	5.5	4.5
Electrical machinery	36	81.1	84.0	75.0	83.7	77.9	81.2	2.0	1.0	.9
Semiconductors and related electronic components	3672–9	79.9	81.1	75.6	85.1	78.5	84.3	1.3	–.4	1.3
Transportation equipment	37	75.9	85.8	68.5	81.1	80.6	77.9	1.0	–.1	.4
Motor vehicles and parts	371	76.7	89.1	55.9	82.0	80.6	83.6	.7	.7	1.3
Autos and light trucks[2]	371pt	...	92.3	53.3	85.9	87.0	89.0	–1.8	–.5	.0
Aerospace and miscellaneous transportation equipment	372–6,9	75.3	87.3	79.2	79.8	80.9	70.6	1.4	–1.5	–1.0
Instruments	38	81.6	81.4	77.2	80.6	80.5	81.1	–.2	.0	–.3
Miscellaneous manufactures	39	75.7	79.0	71.7	80.8	79.1	81.4	1.1	3.5	4.7
Nondurable manufacturing	...	83.4	87.3	80.7	83.2	80.3	81.0	–.1	–.2	.3
Foods	20	82.9	85.4	82.7	80.5	80.2	79.2	–1.6	–1.1	–.6
Textile mill products	22	85.6	90.4	77.7	87.0	81.2	85.5	2.3	–.3	2.1
Apparel products	23	80.9	85.1	75.5	77.1	71.0	68.4	.9	–1.0	–.2
Paper and products	26	89.2	93.5	85.0	89.8	86.1	86.9	.4	.4	.2
Pulp and paper	261–3	92.4	98.0	89.9	94.6	90.7	93.9	–.4	–.1	–.1
Printing and publishing	27	85.7	91.7	79.6	83.8	81.1	82.0	–1.3	.1	.7
Chemicals and products	28	79.5	86.2	79.3	79.8	77.0	79.7	.0	.9	1.5
Plastics materials	2821	86.7	97.0	74.8	92.4	91.7	92.7	–.4	–.3	.1
Synthetic fibers	2823,4	84.8	99.7	77.6	80.0	77.0	83.5	–5.9	–2.2	–2.7
Petroleum products	29	86.8	88.5	85.1	94.8	94.1	92.2	–.4	–1.4	–2.6
Rubber and plastics products	30	84.6	89.6	77.4	86.7	85.0	83.6	1.2	.6	.5
Leather and products	31	81.1	83.3	76.1	74.9	70.7	68.1	8.0	8.5	6.8
Mining	...	87.5	88.0	87.0	88.6	83.3	83.0	–.1	–.2	.1
Metal mining	10	79.5	89.4	79.9	90.6	87.7	78.6	–1.5	–2.6	1.7
Coal mining	12	86.7	91.5	83.4	85.7	87.7	86.0	1.2	2.1	3.5
Oil and gas extraction	13	88.5	88.2	88.7	89.5	81.5	82.3	–.1	–.1	–1.0
Oil and gas well drilling	138	74.2	69.3	60.0	86.3	63.3	69.2	.6	.4	.4
Stone and earth minerals	14	84.8	89.0	79.4	85.0	85.8	85.9	–.5	.8	3.4
Utilities	...	87.4	92.6	83.4	91.3	89.3	91.9	.5	.2	–1.3
Electric	491,3pt	89.3	95.0	87.1	93.6	93.7	95.8	.4	–.2	–1.5
Gas	492,3pt	82.1	85.0	67.1	81.7	70.9	75.5	.6	1.7	.3
Special aggregates										
Computers, communications equipment, and semiconductors[3]	...	80.3	81.9	72.4	81.9	79.5	80.4	–.1	2.4	1.6
Manufacturing excluding computers, communications equipment, and semiconductors[3]	...	81.2	86.1	76.8	83.0	80.5	80.6	.4	–.1	.1

NOTE. The "high" column refers to periods in which utilization generally peaked; the "low" column refers to recession years in which utilization generally bottomed out. The monthly highs and lows are specific to each series, and all did not occur in the same month.

1. Standard Industrial Classification; see table A.4, note 1.
2. Series begins in 1977.
3. Semiconductors include related electronic components.
pt Part of classification.

A.7. Annual proportions in industrial production, by industry group, 1991–98

Item	SIC code[1]	1991	1992	1993	1994	1995	1996	1997	1998
Total index	...	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Manufacturing	...	84.5	85.4	85.9	86.7	86.8	86.8	87.8	88.6
Primary processing	...	26.1	26.6	27.0	28.2	28.0	27.6	27.8	28.0
Advanced processing	...	58.4	58.9	58.9	58.5	58.8	59.2	60.0	60.6
Durable manufacturing	...	44.2	44.9	45.6	46.3	46.8	47.6	48.5	49.3
Lumber and products	24	1.8	2.1	2.2	2.2	2.1	2.1	2.1	2.1
Furniture and fixtures	25	1.3	1.4	1.4	1.4	1.4	1.4	1.4	1.4
Stone, clay, and glass products	32	2.1	2.1	2.1	2.2	2.2	2.3	2.4	2.4
Primary metals	33	3.1	3.1	3.3	3.5	3.5	3.5	3.6	3.6
Iron and steel	331,2	1.7	1.8	1.9	2.0	1.9	1.9	2.0	1.9
Raw steel	331pt	.1	.1	.1	.1	.1	.1	.1	.1
Nonferrous metals	333–6,9	1.4	1.4	1.4	1.6	1.6	1.6	1.6	1.7
Fabricated metal products	34	4.9	5.0	5.1	5.2	5.3	5.4	5.5	5.6
Industrial machinery and equipment	35	7.9	7.8	8.1	8.4	8.9	9.2	9.4	10.0
Computer and office equipment	357	1.6	1.6	1.6	1.6	1.7	1.8	1.9	2.3
Electrical machinery	36	6.8	7.1	7.4	7.8	8.3	8.6	8.8	8.6
Semiconductors and related electronic components	3672–9	2.3	2.5	2.6	2.9	3.4	3.6	3.7	3.5
Transportation equipment	37	9.6	9.4	9.5	9.3	8.9	8.8	9.2	9.4
Motor vehicles and parts	371	4.6	4.7	5.1	5.5	5.4	5.2	5.3	5.1
Autos and light trucks[2]	371pt	2.6	2.5	2.6	2.8	2.7	2.7	2.6	2.6
Aerospace and miscellaneous transportation equipment	372–6,9	5.0	4.7	4.4	3.8	3.5	3.6	3.9	4.3
Instruments	38	5.4	5.4	5.3	4.9	4.8	4.9	4.8	4.9
Miscellaneous manufactures	39	1.3	1.3	1.3	1.3	1.3	1.4	1.4	1.3
Nondurable manufacturing	...	40.3	40.6	40.3	40.4	40.1	39.3	39.3	39.3
Foods	20	9.4	9.6	9.6	9.3	9.2	9.0	8.9	9.0
Tobacco products	21	1.6	1.6	1.1	1.2	1.3	1.3	1.3	1.3
Textile mill products	22	1.7	1.8	1.8	1.8	1.7	1.6	1.6	1.6
Apparel products	23	2.2	2.2	2.1	2.1	2.0	1.9	1.8	1.7
Paper and products	26	3.7	3.5	3.4	3.8	3.9	3.5	3.5	3.5
Printing and publishing	27	6.8	6.8	6.8	6.6	6.6	6.6	6.7	6.8
Chemicals and products	28	9.9	10.0	9.9	10.0	9.9	9.7	9.8	9.8
Petroleum products	29	1.5	1.4	1.5	1.6	1.5	1.6	1.6	1.6
Rubber and plastics products	30	3.3	3.5	3.6	3.8	3.7	3.7	3.8	3.8
Leather and products	31	.3	.3	.3	.2	.2	.2	.2	.2
Mining	...	7.5	6.8	6.4	6.0	6.1	6.5	5.9	5.2
Metal mining	10	.5	.5	.4	.5	.5	.4	.4	.4
Coal mining	12	1.1	1.0	.9	.9	.9	.9	.9	.8
Oil and gas extraction	13	5.3	4.7	4.4	4.0	4.1	4.6	4.1	3.4
Stone and earth minerals	14	.6	.6	.6	.6	.6	.6	.6	.6
Utilities	...	8.0	7.8	7.7	7.4	7.1	6.7	6.3	6.3
Electric	491,3pt	6.5	6.2	6.1	5.8	5.6	5.4	5.2	5.3
Gas	492,3pt	1.5	1.6	1.6	1.5	1.5	1.3	1.1	1.0
Special aggregates									
Computers, communications equipment, and semiconductors[2]	...	5.3	5.7	5.8	6.2	6.9	7.3	7.6	7.8
Manufacturing excluding:									
Motor vehicles and parts	...	80.0	80.7	80.8	81.1	81.4	81.6	82.5	83.4
Computers and office equipment	...	82.9	83.8	84.3	85.0	85.1	85.0	85.9	86.3
Computers and semiconductors[2]	...	80.6	81.3	81.7	82.1	81.7	81.4	82.2	82.8
Computers, communications equipment, and semiconductors[2]	...	79.2	79.8	80.1	80.4	80.0	79.5	80.1	80.7

NOTE. The IP proportion data are estimates of the industries' relative contribution to overall IP growth in the following year. For example, a 1 percent increase in durable goods manufacturing in 1999 would account for a 0.493 percent increase in total IP.

1. Standard Industrial Classification; see table A.4, note 1.
2. Semiconductors include related electronic components.
pt Part of classification.

A.8. Rates of growth in electric power use, 1995–99

Item	SIC code[1]	Revised growth rate (percent)					Difference between growth rates: revised less earlier (percentage points)				
		1995	1996	1997	1998	1999	1995	1996	1997	1998	1999
Total	. . .	**–.8**	**1.5**	**1.2**	**–.9**	**–2.4**	**.0**	**.1**	**.2**	**–.6**	**1.0**
Manufacturing	. . .	–.9	1.4	1.3	–.9	–2.5	.0	.1	.2	–.6	1.0
Durable manufacturing	. . .	.5	–.3	4.7	–1.2	–.4	.0	–.1	1.6	–1.3	.1
Lumber and products	24	1.5	4.1	3.4	1.7	.4	.0	–.2	3.6	–1.4	–.8
Furniture and fixtures	25	–3.7	4.2	1.6	.6	3.8	–.1	–.1	.2	.4	1.5
Stone, clay, and glass products	32	.2	3.5	1.5	2.6	–.8	.0	.1	.8	.0	1.3
Primary metals	33	1.5	–3.8	6.7	–3.8	–.6	–.1	.0	2.6	–2.4	–.4
Fabricated metal products	34	.1	3.7	4.6	–1.2	–.8	.0	.0	1.5	–.8	–1.1
Industrial machinery and equipment	35	.5	1.3	4.2	1.0	–2.5	.1	–.1	1.2	–2.5	–1.1
Electrical machinery	36	1.4	2.4	3.0	–2.0	–3.9	–.1	–.1	.7	–.9	1.1
Transportation equipment	37	–1.9	–.7	5.6	–.8	3.4	.1	–.3	.4	–.8	1.3
Instruments	38	.4	–2.9	1.0	3.8	.7	.0	–.1	.4	2.2	2.6
Miscellaneous manufactures	39	–4.8	7.2	2.1	8.3	2.7	–.1	.3	1.8	6.5	–6.2
Nondurable manufacturing	. . .	–2.0	2.8	–1.4	–.7	–4.1	.0	.2	–.9	.1	1.8
Foods	20	2.5	1.7	3.3	2.3	–2.9	.0	.0	1.1	–.1	–.2
Tobacco products	21	6.4	.0	.7	–1.7	–6.3	.1	.2	.2	.0	–1.5
Textile mill products	22	–3.3	2.7	3.2	–1.4	–2.2	.0	–.2	1.1	–3.3	1.8
Apparel products	23	–6.3	–1.8	–1.7	–3.4	–9.5	.0	.0	.2	–1.0	1.2
Paper and products	26	–.3	1.1	2.4	–.8	–1.1	.3	.7	.2	.8	2.2
Printing and publishing	27	.6	.8	2.9	2.2	–5.4	–.1	.0	–.1	.3	–.1
Chemicals and products	28	–6.5	6.0	–5.6	–2.3	–9.8	–.1	.3	–1.5	.2	2.4
Petroleum products	29	7.4	–3.2	–3.4	–1.2	5.3	.1	.1	–5.9	1.8	3.8
Rubber and plastics products	30	–.5	3.3	1.9	3.6	1.1	.0	–.2	1.3	–1.2	.1
Leather and products	31	–9.3	–1.5	–1.3	–3.8	–8.4	–.1	–.1	.3	–.8	–1.5
Mining	. . .	1.1	3.0	–.2	–.6	–.9	.0	.2	.2	–.9	1.2
Metal mining	10	8.3	2.6	.4	–.1	–2.8	–.1	.1	–.1	–.1	1.6
Coal mining	12	–1.3	.0	.0	1.0	–1.2	.0	.0	.7	–.6	1.1
Oil and gas extraction	13	–5.0	4.5	1.5	–6.6	1.8	.0	.1	.5	–1.3	–.9
Stone and earth minerals	14	6.0	4.4	–4.8	9.5	–2.6	.3	.7	–.6	–2.0	4.4
Supplementary groups											
Total, excluding nuclear nondefense	. . .	.6	1.0	2.4	–1.3	–.4	.0	.1	.2	–.6	1.0
Utilities sales to industry	. . .	–1.1	2.1	1.2	–.8	–2.3	.0	.1	.2	–.6	1.0
Industrial generation	. . .	4.8	–5.7	.7	–1.9	3.9	.0	.0	–.1	–.7	.7

NOTE. Growth rates are calculated as the percentage change in the seasonally adjusted index from the fourth quarter of the previous year to the fourth quarter of the year specified. For 1999, the growth rates are calculated from the fourth quarter of 1998 to the third quarter of 1999 and annualized.

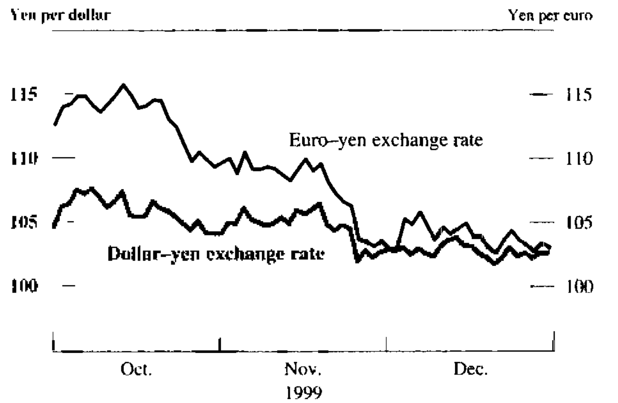
1. Standard Industrial Classification; see table A.4, note 1.

Treasury and Federal Reserve Foreign Exchange Operations

This report, presented by Peter R. Fisher, Executive Vice President, Federal Reserve Bank of New York, and Manager, System Open Market Account, describes the foreign exchange operations of the U.S. Department of the Treasury and the Federal Reserve System for the period from October through December 1999. Deborah L. Leonard was primarily responsible for preparation of the report.

During the fourth quarter of 1999, the dollar depreciated 3.7 percent against the yen and appreciated 6.2 percent against the euro. On an effective trade-weighted basis, the dollar appreciated 0.8 percent. Market expectations for sustained economic growth in the United States provided underlying support for the dollar and U.S. equity markets. Changes in the dollar's value were also influenced by portfolio flows that contributed to the continued appreciation of the yen and depreciation of the euro. Daily foreign exchange trading volumes fell sharply toward the very end of the quarter, although financial markets demonstrated no discernible signs of dislocation before the century date change. The U.S. monetary authorities did not intervene in the foreign exchange markets during the quarter.

1. The dollar and the euro against the Japanese yen, 1999:Q4



NOTE. The data are daily.
SOURCE. Bloomberg L.P.

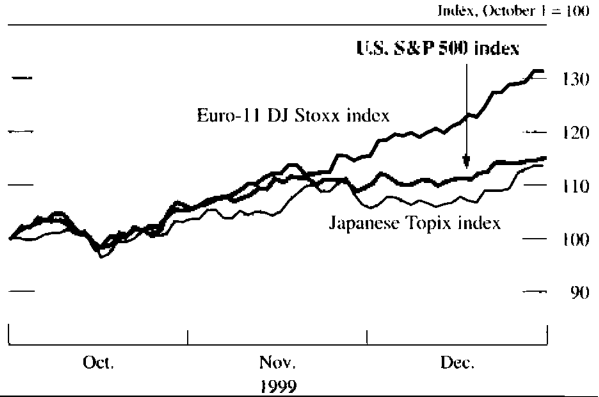
CURRENCY MOVEMENTS DOMINATED BY YEN STRENGTH AND EURO WEAKNESS

Over the course of the fourth quarter, the yen rose steadily to a four-year high of ¥101.64 against the dollar and an all-time high of ¥102.60 against the euro. The yen's appreciation accompanied continued perceptions of economic improvement in Japan, capital flows into Japanese assets, and uncertainty regarding the prospects for additional stimulus by the Bank of Japan. The movement prompted several publicly confirmed interventions in the foreign exchange markets by the Japanese monetary authorities.

Market participants cited modest signs of improvement in several key Japanese economic data reports and revisions to previous reports as evidence that Japan's economic cycle was turning. Tankan business sentiment indexes in September and December of −22 and −17, respectively, reached the survey's highest levels in two years, although the improvement mainly reflected the results for large manufacturing firms. On November 15, Japan's third-quarter industrial production was reported to have risen 3.9 percent since the previous quarter. On December 6, Japan's third-quarter gross domestic product was reported to have contracted 1.0 percent for the quarter; second-quarter GDP growth, however, was revised upward from 0.1 to 1.0 percent. Market participants also noted three consecutive positive reports of the Economic Planning Agency's monthly leading and coincident diffusion indexes. The Japanese government's November 11 announcement of an ¥18 trillion supplementary spending package, including an expected ¥6.5 trillion of actual spending, was perceived as demonstrating an ongoing government commitment to employing fiscal stimulus measures.

At the outset of the quarter, attention focused on the prospects for the Bank of Japan to adopt "quantitative easing" measures to invigorate Japan's economy further. The Bank of Japan's announcements of measures aimed at improving the flexibility of its operations and at providing ample liquidity over the turn of the year were perceived as introducing technical changes that did not alter the stance of Japanese monetary policy. Short-term interest rates in Japan

2. Global benchmark stock indexes, 1999:Q4



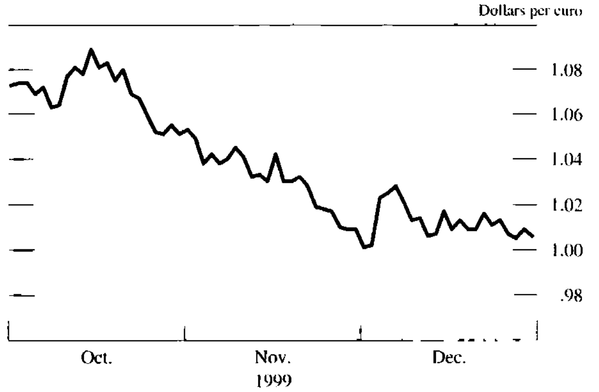
NOTE. The data are daily.
SOURCE. Bloomberg, L.P.

rose marginally over the quarter, at times affected by continued evidence of improving economic conditions, strength in the equity markets, and comments from Bank of Japan officials regarding the extraordinary nature of the zero interest rate policy.

Expressing growing confidence in prospects for an upswing in Japan's economy, foreign investors increased their direct and portfolio capital investments in Japan. The Nikkei rose to a two-year high while broader Japanese equity indexes rose even more sharply, buoyed by evidence of corporate restructuring and the global rally in the equity markets. As foreign portfolio inflows continued, the Ministry of Finance reported that foreign direct investment rose to ¥1.3 trillion during the first half of 1999, more than twice the amount during the same period in 1998. In the meantime, the yen's persistent appreciation continued to reduce the value of unhedged foreign assets for Japanese investors, further encouraging hedging or liquidation of those positions. Some Japanese investors who were reluctant to maintain large overseas exposures amid year-end uncertainty, reportedly repatriated capital or curtailed investment outflows before the century date change, thus creating additional demand for yen.

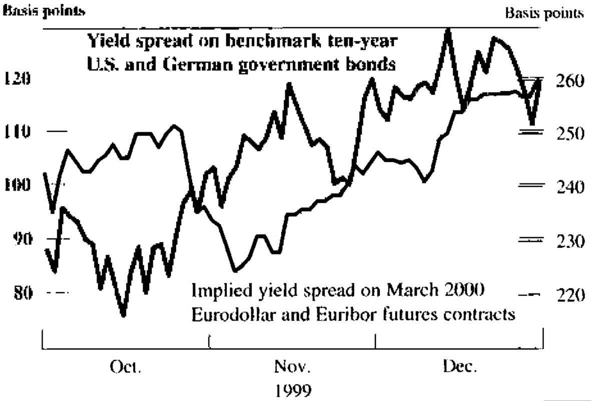
In Europe, perceptions that the euro-area economic outlook had improved, views that there were upside risks of inflation, and commentary from European Central Bank (ECB) officials prompted heightened expectations of an interest rate hike by the ECB during the fourth quarter. Expectations solidified after October 27, when year-on-year M3 money supply in the euro area was reported to have grown 6.1 percent in September, outpacing the ECB's target rate of 4.5 percent. On November 4, the ECB raised its two-week refinancing rate 50 basis points, to 3.00 percent. Commenting after the action, ECB President Duisenberg said that the "timely rise [in interest rates] will avoid the need for a bigger rise later." After the move, the yield implied by the March 2000 Euribor futures contract fell to its period low of 3.46 percent, and European sovereign bond yields fell, as market participants noted that the rate rise helped to mitigate expectations of a sustained cycle of monetary tightening in Europe. Yields rebounded in the second half of the quarter, with ten-year sovereign benchmark bond yields rising approximately 50 basis points but remaining below their period highs, amid global declines in bond prices and as economic data pointed to stronger European growth. Germany's 3.2 percent rise in October manufacturing orders, 1.7 percent rise in industrial production the same month, and a better-than-expected November business climate survey by the German IFO Institute all supported the improved

3. The euro against the dollar, 1999:Q4



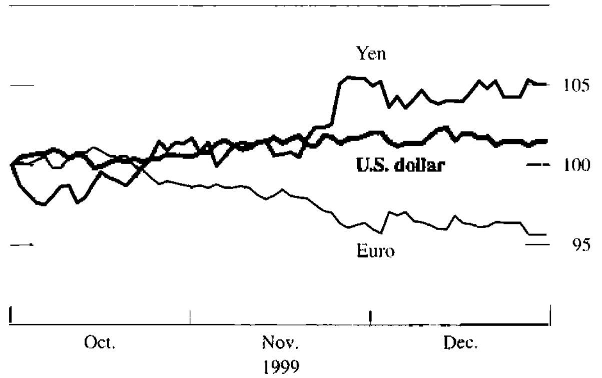
NOTE. The data are daily.
SOURCE. Bloomberg L.P.

4. Spreads between U.S. and European yields, 1999:Q4



NOTE. The data are daily.
SOURCE. Bloomberg L.P.

5. Trade-weighted values for Group of Three currencies, 1999:Q4



NOTE. The data are daily.
SOURCE. Bank of England.

expectations for growth. Annualized third-quarter growth in the euro area of 2.3 percent also exceeded consensus forecasts.

Despite higher domestic interest rates and economic growth prospects, the euro weakened steadily against the dollar and the yen. On December 2 and 3, the euro briefly dipped below $1.00. Throughout the quarter, the effect on the euro of widening U.S.-European yield differentials and reported global portfolio reallocations appeared to outweigh Europe's improving growth outlook and robust gains in its equity markets. In the first half of the quarter, market participants noted sizable euro sales as portfolio managers—who reportedly had relatively high euro weightings relative to their benchmarks—moved toward more neutral currency positions in early preparation for the year-end. Net speculative positions on currency futures exchanges, as well as survey flow data, appeared to show similar patterns. Japanese investors reportedly continued to hedge their European investments to protect against foreign exchange losses on capital investments.

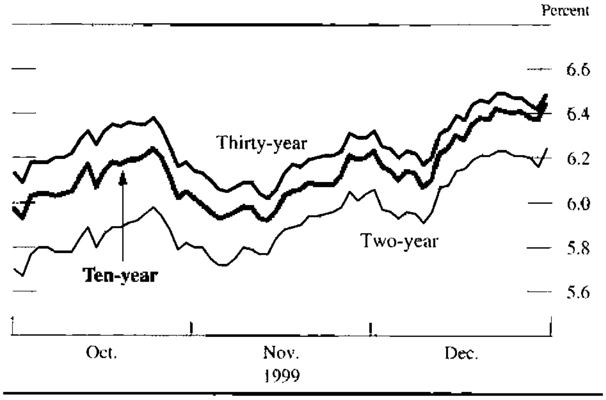
Market participants also noted the resilience of U.S. asset markets and widening yield differentials as factors weighing on the euro. The annualized yield spread between the benchmark ten-year U.S. Treasury and German bund widened from 89 to 119 basis points by the end of the quarter. European sovereign bonds outperformed U.S. Treasury securities as market participants estimated that (1) inflation in Europe would remain relatively low, (2) that moderate European rate hikes in the future were already reflected in prices, and (3) that a more pronounced cycle of monetary tightening in the United States was under way. Lastly, some cited concerns that intervention by European governments in mergers and acquisitions and bankruptcy proceedings could signal a slowing in corporate restructuring efforts in the euro area.

Dollar Supported by Expectations for Sustained U.S. Growth

Despite its mixed performance against the euro and the yen, the dollar's value remained relatively stable on a trade-weighted basis. When measured broadly against the currencies of major trading partners, the dollar appreciated 0.8 percent, while the yen appreciated 6.3 percent, and the euro depreciated 4.4 percent during the fourth quarter. The relative resilience of U.S. asset markets amid tightening monetary conditions in the United States provided underlying support for the dollar.

Yields on U.S. Treasury securities rose to their highest levels in more than two years after the Federal Open Market Committee's (FOMC) adoption of a tightening bias at its October 5 meeting and its decision to raise the federal funds target rate from 5.25 to 5.50 percent on November 16. Data releases throughout the quarter were perceived to show strong, non-inflationary U.S. growth that contributed to a 20-basis-point flattening of the two-to-thirty-year Treasury coupon curve to a fifteen-month low of 23 basis points. While data continued to show somewhat modest upward pressures on earnings, producer prices, and consumer prices, stronger-than-expected growth, and consumption data raised market expectations that subsequent rate hikes would moderate the pace of U.S. growth. The third-quarter employment cost index, reported on October 28, fell from 1.1 percent in the second quarter to 0.8 percent in the fourth quarter. Employment reports released during the quarter generally showed lower-than-expected gains

6. Yields on U.S. Treasury securities, 1999:Q4



NOTE. The data are daily.
SOURCE. Bloomberg L.P.

in nonfarm payrolls and average hourly earnings. However, third-quarter GDP growth of 4.8 percent and a deflator of 0.9 percent, reported on October 28, were revised upward to 5.5 percent and 1.1 percent, respectively, on November 24. September and October retail sales figures, excluding autos, were also higher than expected. Market participants perceived that the tone of the FOMC's December 21 directive was relatively hawkish, even though the Committee maintained its symmetric directive "in light of market uncertainties associated with the century date change." By the end of the quarter, the implied yield on the February federal funds futures contract had risen 37 basis points, to 5.79 percent.

Despite rising bond yields, U.S. and global equity markets surged to record highs as market participants expressed increased confidence in the prospects for sustained global growth and as global liquidity remained high. The Dow Jones Industrial Average and the S&P 500 indexes rose 11.2 and 14.5 percent, respectively, while the Nasdaq skyrocketed 48.2 percent. The momentum contributing to the Nasdaq's performance accelerated after the October 28 release of third-quarter GDP and employment cost figures, as well as Chairman Greenspan's speech on the same day noting the contributions that technology has made to U.S. productivity and recent economic performance.

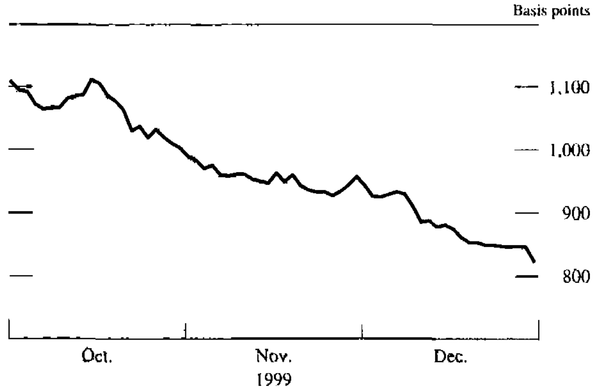
Higher interest rates in the United States did not appear to weigh negatively on sentiment toward emerging-market assets. On the contrary, confidence in global growth prospects fueled investor interest in emerging-market assets throughout the quarter. Spreads between emerging-market sovereign debt and comparable U.S. Treasury securities narrowed, with the spread between J.P. Morgan's Emerging Market Bond Index (EMBI+) sovereign yield and U.S. Treasury securities having fallen 274 basis points, to 824 basis points—its lowest level since August 1998. Moreover, Latin American and Asian telecommunication stocks rallied along with other global technology shares, as growth in those regions continued to improve from technology exports and gains in productivity.

Orderly Financial Markets Before the Y2K Turn

As the year's end approached, uncertainties associated with the century date change did not create any visible distress in the foreign exchange market. Overall, trading volumes reportedly remained within their average ranges for 1999 until well into December—longer than many would have predicted earlier in the year. By December 31, however, trading volumes had ground nearly to a halt as market participants postponed all but absolutely necessary transactions until the new year.

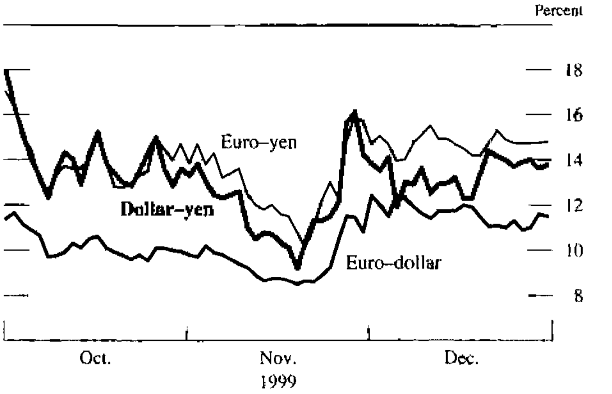
Trading activity appeared orderly throughout the period, although bid–ask spreads on major currency pairs more than doubled in the last trading days of the year. However, volatility implied by currency options remained in recent ranges in the final weeks of the year as spot market activity diminished. Although some portfolio managers who were concerned about year-end liquidity reportedly moved toward more neutral positions relative to their benchmarks early in the period, other indications by the end of the quarter suggested that broadly based risk aversion was not prevalent in the financial markets. Global stock markets rallied amid relatively heavy trading vol-

7. Emerging market bond index (EMBI+) sovereign spread over comparable U.S. Treasury securities, 1999:Q4



NOTE. The data are daily.
SOURCE. J.P. Morgan.

8. Volatility implied by one-month option prices, 1999:Q4



NOTE. The data are daily.
SOURCE. Reuters.

ume through December, confidence in prospects for emerging-market growth prospects improved, and credit and swap spreads narrowed.

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 euro and Japanese yen reserve holdings totaled $16.1 billion for the Federal Reserve System and $16.2 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. To the greatest extent practicable, these investments are split evenly between the Federal Reserve System and the Exchange Stabilization Fund.

A portion of the balances is invested in German and Japanese government securities held directly or under repurchase agreement. Government securities held under repurchase agreement are arranged either through transactions executed directly in the market or through agreements with official institutions. Foreign currency reserves are also invested in deposits at the Bank for International Settlements and facilities at other official institutions. As of December 31, direct holdings of foreign government securities totaled $9.2 billion, split evenly between the two authorities. Foreign government securities held under repurchase agreement totaled $13.7 billion at the end of the quarter and were also split evenly between the two authorities. □

1. Foreign currency holdings of U.S. monetary authorities based on current exchange rates, 1999:Q4

Millions of dollars

Item	Balance, Sept. 30, 1999[1]	Quarterly changes in balances, by source					Balance, Dec. 31, 1999
		Net purchases and sales[2]	Effect of sales[3]	Investment income	Currency valuation adjustments[4]	Interest accrual and other	
FEDERAL RESERVE SYSTEM OPEN MARKET ACCOUNT (SOMA)							
EMU euro	7,221.8	0.0	0.0	38.9	−390.1	0.0	6,870.6
Japanese yen	8,831.9	0.0	0.0	0.7	388.9	0.0	9,221.5
Total	16,053.7	0.0	0.0	39.6	−1.2	0.0	16,092.1
Interest receivables, net[5]	64.5	...	...	...	...	−16.5	48.0
Total	**16,118.2**	**0.0**	**0.0**	**39.6**	**−1.2**	**−16.5**	**16,140.1**
U.S. TREASURY EXCHANGE STABILIZATION FUND (ESF)							
EMU euro	7,219.1	0.0	0.0	39.4	−390.0	0.0	6,868.5
Japanese yen	8,831.8	0.0	0.0	0.7	389.0	0.0	9,221.5
Total	16,050.9	0.0	0.0	40.1	−1.0	0.0	16,090.0
Interest receivables[5]	66.2	...	...	...	...	12.4	78.6
Total	**16,117.1**	**0.0**	**0.0**	**40.1**	**−1.0**	**12.4**	**16,168.6**

NOTE. Earlier period figures have been reclassified to the current presentation.

1. Unearned interest collected in the amounts of $13.4 million and $13.3 million for the Federal Reserve and ESF, respectively, are not included. These amounts are cash flow differences from payment and collection of funds between quarters.

2. Purchases and sales for the purpose of this table include foreign currency sales and purchases related to official activity, swap drawings and repayments, and warehousing.

3. This figure is calculated using marked-to-market exchange rates; it 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 historical cost-of-acquisition exchange rate and the sale exchange rate, are reflected in table 2.

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

5. 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 are net of unearned interest collected.

... Not applicable.

2. Net profits or losses (−) on U.S. Treasury and Federal Reserve foreign exchange operations, based on historical cost of acquisition exchange rates, 1999:Q4

Millions of dollars

Period and item	Federal Reserve System Open Market Account	U.S. Treasury Exchange Stabilization Fund
Valuation profits and losses on outstanding assets and liabilities, Sept. 30, 1999		
EMU euro	−119.9	−336.9
Japanese yen	1,775.8	1,988.0
Total	**1,655.9**	**1,651.1**
Realized profits and losses from foreign currency sales, Sept. 30, 1999–Dec. 31, 1999		
EMU euro	0.0	0.0
Japanese yen	0.0	0.0
Total	**0.0**	**0.0**
Valuation profits and losses on outstanding assets and liabilities, Dec. 31, 1999		
EMU euro	−510.0	−726.9
Japanese yen	2,178.1	2,390.2
Total	**1,668.0**	**1,663.4**

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

3. Currency arrangements, December 31, 1999

Millions of dollars

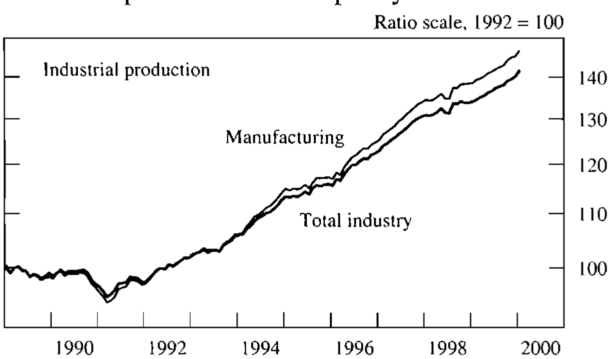
Institution	Amount of facility	Outstanding, Dec. 31, 1999
	Federal Reserve reciprocal currency arrangements	
Bank of Canada	2,000	0.0
Bank of Mexico	3,000	0.0
Total	**5,000**	**0.0**
	U.S. Treasury Exchange Stabilization Fund currency arrangements	
Bank of Mexico	3,000	0.0
Total	**3,000**	**0.0**

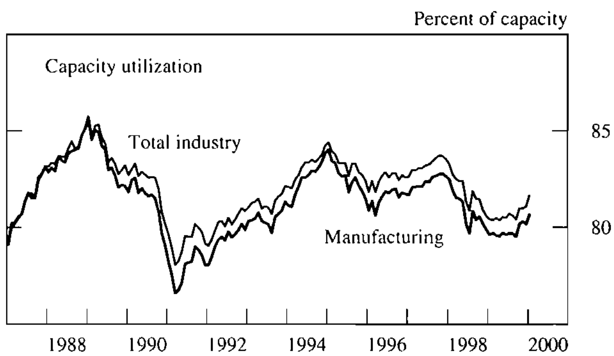
Industrial Production and Capacity Utilization for January 2000

Released for publication February 15

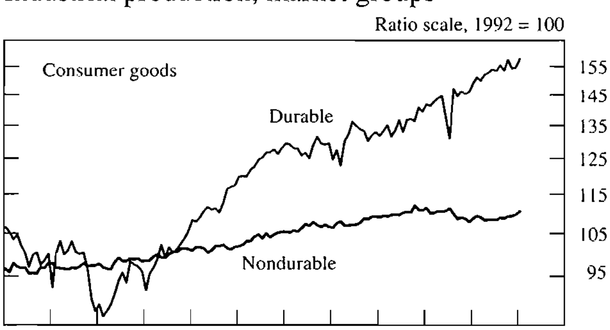
Industrial production increased 1.0 percent in January after advances of 0.3 percent in November and 0.4 percent in December. The output of utilities increased 1.8 percent in January, while output for both manufacturing and mining increased about 1 percent. At 141.5 percent of its 1992 average, industrial production in January was 5.5 percent higher than in January 1999. The rate of capacity utilization for total industry rose 0.5 percentage point, to 81.6 percent, more than 1 percentage point above its level in January 1999.

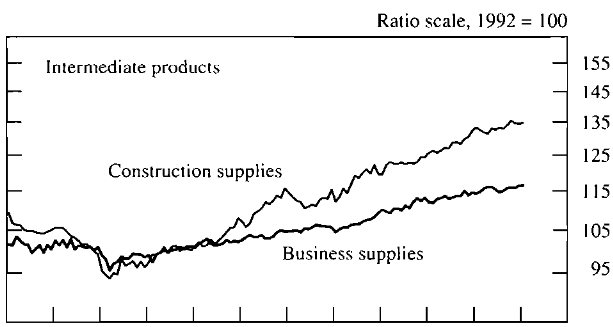
Industrial production and capacity utilization

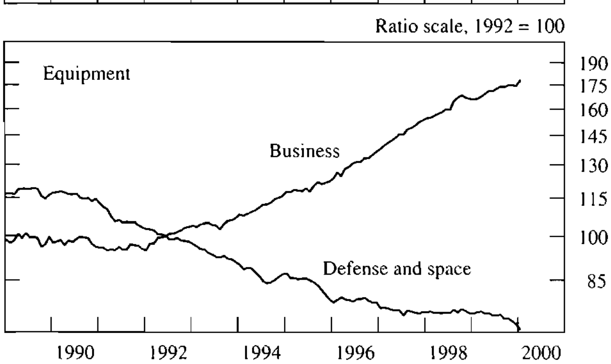


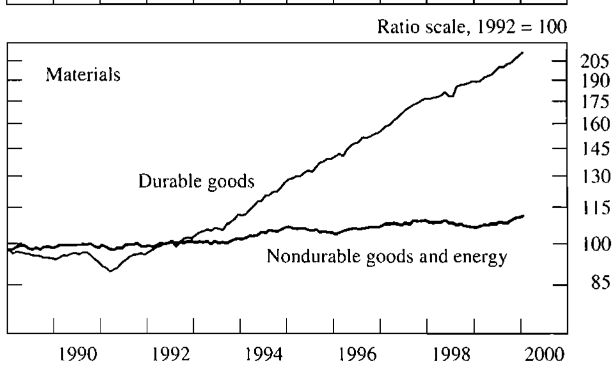


Industrial production, market groups









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

Industrial production and capacity utilization, January 2000

Category	Industrial production, index, 1992=100								
	1999			2000	Percentage change				
					1999[1]			2000	Jan. 1999 to Jan. 2000
	Oct.r	Nov.r	Dec.r	Jan.p	Oct.r	Nov.r	Dec.r	Jan.p	
Total	**139.1**	**139.5**	**140.1**	**141.5**	**.7**	**.3**	**.4**	**1.0**	**5.5**
Previous estimate	139.4	139.9	140.5	. . .	1.0	.4	.4	. . .	. . .
Major market groups									
Products, total[2]	128.5	128.2	128.4	129.6	.7	−.2	.2	1.0	3.3
Consumer goods	118.2	117.7	118.2	119.3	.9	−.4	.3	1.0	2.6
Business equipment	174.8	174.8	174.5	177.8	.6	.0	−.2	1.9	7.2
Construction supplies	135.4	134.7	134.5	134.8	.9	−.5	−.2	.2	1.1
Materials	156.8	158.7	160.1	161.8	.7	1.2	.9	1.0	9.2
Major industry groups									
Manufacturing	144.2	144.9	145.2	146.6	.9	.5	.2	.9	5.8
Durable	176.5	177.2	178.0	180.4	.8	.4	.4	1.3	8.5
Nondurable	113.0	113.6	113.5	113.9	1.0	.6	−.1	.3	2.3
Mining	99.2	99.6	99.6	100.6	.9	.4	.0	1.0	2.7
Utilities	115.2	112.8	117.5	119.7	−2.2	−2.0	4.2	1.8	4.5

Category	Capacity utilization, percent								MEMO Capacity, percentage change, Jan. 1999 to Jan. 2000
	Average, 1967–99	Low, 1982	High, 1988–89	1999	1999			2000	
				Jan.	Oct.r	Nov.r	Dec.r	Jan.p	
Total	**82.0**	**71.1**	**85.4**	**80.4**	**81.0**	**81.0**	**81.1**	**81.6**	**4.0**
Previous estimate	. . .	. .	. . .	. . .	81.2	81.2	81.3	. . .	. . .
Manufacturing	81.1	69.0	85.7	79.6	80.2	80.3	80.2	80.6	4.4
Advanced processing	80.5	70.4	84.2	78.4	79.1	79.1	79.0	79.6	5.4
Primary processing	82.4	66.2	88.9	83.1	83.4	83.9	83.6	83.9	2.2
Mining	87.3	80.3	88.0	81.3	82.6	82.9	82.9	83.9	−.4
Utilities	87.5	75.9	92.6	90.3	89.9	88.0	91.6	93.2	1.4

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.

MARKET GROUPS

The output of consumer goods, which on balance had been flat during November and December, increased about 1 percent in January. The output of durable consumer goods surged 1.9 percent; the production of automotive products jumped 2.9 percent, making up the losses posted in the previous two months. The production of other durable consumer goods also rose strongly; the output of household appliances increased 4 percent, and the index for carpeting and furniture advanced further. The production of non-durable consumer goods also accelerated, rising 0.7 percent. The gain reflected both a further rebound in the output of energy products and an upturn in the output of non-energy consumer products.

The production of business equipment, which had eased over the preceding two months, jumped 1.9 percent in January. The output of transit equipment rebounded 1.9 percent because of an increase in motor vehicle assemblies. The output of industrial equipment, which had flattened late last year, rose 1 percent. The production of information processing and related equipment, for which growth averaged about 1 percent per month during the fourth quarter, rose 2.8 percent in January, led by gains in the output of communication equipment and computers. The output of defense and space equipment fell about 2 percent further in January, to a level 5.6 percent below that of a year earlier.

The output index of construction supplies, which had declined in November and December, edged up 0.2 percent in January to match the high level of the fourth quarter. The output of materials increased 1.0 percent, about the same as the average gain in the preceding three months. The output of durable goods materials rose 1.3 percent, with another strong increase in equipment parts, particularly semiconductors. The output of nondurable goods materials moved up slightly in January, and the output of energy materials, which had increased 1.4 in December, gained an additional 0.9 percent.

Industry Groups

Manufacturing output rose 0.9 percent in January; most major industries posted gains. Production in durable manufacturing gained 1.3 percent after increases of 0.4 percent in both November and December. The output of motor vehicles and parts, which had dropped 1.7 percent in December, rebounded 3.5 percent. The production of electrical machinery surged more than 3 percent, led by a 4 percent gain in semiconductors and related equipment. The production of industrial machinery and equipment increased more than 1 percent. In contrast, the output of aircraft and parts continued to decline, and the output of primary metals and instruments edged down.

After having changed little in December, production in nondurable manufacturing increased 0.3 percent in January, to a level 2.3 percent higher than in January 1999. Among nondurable manufacturing industries, production gains were widespread except for downturns in the output of tobacco and petroleum products.

The factory operating rate rose to 80.6 percent. Utilization in primary-processing industries increased to 83.9 percent, while that for advanced-processing industries advanced 0.6 percentage point, to 79.6 percent.

Output at utilities, which had rebounded 4.2 percent in December, was up another 1.8 percent in January; the operating rate at utilities rose to 93.2 percent. Boosted by the continuing recovery in oil and gas extraction, mine production increased 1.0 percent. The utilization rate at mines increased to 83.9 percent but remained noticeably below its long-term average. □

Statement to the Congress

Statement by Alan Greenspan, Chairman, before the Committee on Banking, Housing, and Urban Affairs, U.S. Senate, January 26, 2000

I want to begin my remarks today by expressing my gratitude to President Clinton for his confidence in me, and to you, Mr. Chairman and members of the committee, for holding hearings on my renomination for a fourth term as Chairman of the Board of Governors of the Federal Reserve System. The Federal Reserve has had a close and productive relationship with this committee over the years. If you and your Senate colleagues afford me the opportunity, I look forward to working with you in the years ahead to build a framework to enable the American people to enjoy the fruits of a sound and efficient financial system in an economy that is delivering the greatest possible sustained increases in standards of living.

We at the Federal Reserve face considerable challenges in carrying out our responsibilities for both the financial system and the overall economy. In many respects, these challenges relate to discerning, and keeping up with the implications of, the accelerating pace of technological change in our society. The Congress took a major step last year in passing legislation that will help the citizens of the United States realize the benefits of the rapid evolution of technology in the delivery of financial services.

The Federal Reserve's challenge now, working with our fellow regulators, is not only to implement the new law but more broadly to design supervisory and regulatory policies that can deal effectively with the changing financial structure. Effective oversight must balance a number of possibly conflicting criteria. It must enable our financial sector to evolve in a way that allows competition and technological change so that financial services are delivered in the least costly, most efficient way possible to the highest possible number of our citizens. It must at the same time foster the fundamental soundness of our financial system and put in place safeguards to protect against the remote possibility that unsound behavior in the financial sector is transmitted beyond the firms involved to the economy more generally. And it must accomplish the latter with minimal use of the government safety net and of implicit or explicit guarantees that tend to reduce accountability and market discipline and foster excessive and destabilizing risk-taking.

For the economy overall, the marked pickup in technological innovation has accelerated productivity and raised standards of living for many—though regrettably not all—Americans. Our challenge in monetary policy is to foster, as best we can, the financial conditions that will allow this economic expansion and technological revolution to continue as long, and as vigorously, as possible. Experience has demonstrated that an essential ingredient in this prosperity, and an ingredient for which the central bank has ultimate responsibility over the long run, is low and stable inflation. Effective price stability removes a major source of uncertainty and distortion that would otherwise interfere with the spending and saving decisions of households and businesses. Maintaining price stability also reduces the likelihood that imbalances could develop that would ultimately undermine economic expansion.

We have also learned that the Federal Reserve's potential contributions to financial and economic stability should not end with making policy decisions. We also need to explain to the public what we are doing and why. Importantly, in our democratic system our explanations provide the members of this committee, your congressional colleagues, and the people you serve with the information necessary to evaluate our actions and to hold us accountable for them. As you know, we have made considerable efforts in recent years to improve the communication of our decisions, our expectations, and their rationales to the public consistent with our mandate to deliver effective monetary policy. This has not always been a straightforward process, in which the consequences of each step could be readily predicted, but it is one that must continue.

Thus the challenges and the opportunities are substantial in a number of the areas in which the Congress has given the Federal Reserve important responsibilities. But in the Federal Reserve, the Congress also has created an institutional structure extraordinarily well suited to address these issues. The combination of a Board of Governors, firmly tied to the national democratic process and providing overall leadership to the System, and regional

Reserve Banks, deeply rooted in their local communities, enables us to bring a unique perspective to the consideration of policy issues.

Our Reserve Banks supply real-time information about developments in their regions, and ongoing observation of, and familiarity with, the financial institutions headquartered there. This information enhances our ability not only to conduct monetary policy but also to supervise financial institutions and deal with emerging problems in the financial sector, and to play a constructive role in regional economic developments. Board members and Reserve Bank presidents can employ these observations, along with their knowledge of the national and international economic and financial situations, to carry out our legislated mandates.

This structure and these responsibilities have attracted to the Federal Reserve System men and women of high intellectual capabilities and deep knowledge of the relevant subjects. Naturally, and fortunately, these people often disagree. Disagreements, however, are largely over evidence and analysis, not goals and objectives. To be sure, Federal Reserve decisions often emerge as a broad consensus of policymakers. But forming that consensus involves considerable give and take, with many people influencing the outcome.

Policymakers are in turn supported by outstanding staff at the Board and the Reserve Banks. Many, perhaps most, of the policymakers and staff could be making substantially more income in the private sector, but, attracted by the character of their colleagues, the nature and importance of issues they deal with, and the atmosphere in which those issues are addressed, they chose to exercise their considerable talents within the Federal Reserve.

The strength of the institutions and structures of the Federal Reserve is perhaps most visible in the work of the Federal Open Market Committee. There, the ability of Reserve Bank presidents to draw on local contacts can reveal significant developments in the economy before they are visible in the national data and can help in understanding the forces behind important economic trends. The Committee is an extraordinary collection of individuals. Among the seventeen people gathered around that table, thirteen have Ph.D.s. The others have the experience, skills, and common sense to prevent the Committee from becoming paralyzed with a surfeit of two-handed economists.

But monetary policy is not the only area in which this unique blend of skills and perspectives is brought to bear. We utilize committees of Board members and Reserve Bank presidents to deal with such responsibilities as our oversight of the payments system and the implications for supervision and regulation of the growing size and complexity of financial institutions.

What success the Federal Reserve has had in carrying out its legislated responsibilities in recent decades derives from many sources. Certainly, we have enjoyed good fortune—dealing with the challenges of a pickup in innovation and productivity is decidedly more enjoyable than the task faced by our predecessors in the 1970s when productivity slowed and stagflation held sway. I believe we have also learned from our past mistakes, and I hope that we will recognize the new misjudgments we will inevitably make quickly enough to prevent them from becoming too serious and disruptive. And we have had help and support from various Congresses and administrations seeking, like us, to promote sound public policies. But our ability to meet the legislative mandates of the Congress rests ultimately on the strength of the institutions of the Federal Reserve and the people who inhabit them.

It has been an extraordinary privilege to be able to serve my country at the Federal Reserve, and I would be honored if the Senate saw fit to enable me to continue this association for another four years. □

Announcements

Action by the Federal Open Market Committee and an Increase in the Discount Rate

The Federal Open Market Committee voted on February 2, 2000, to raise its target for the federal funds rate by 25 basis points to 5¾ percent. In a related action, the Board of Governors approved a 25-basis-point increase in the discount rate to 5¼ percent.

The Committee remains concerned that over time increases in demand will continue to exceed the growth in potential supply, even after taking account of the pronounced rise in productivity growth. Such trends could foster inflationary imbalances that would undermine the economy's record economic expansion.

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

In taking the discount rate action, the Federal Reserve Board approved requests submitted by the boards of directors of the Federal Reserve Banks of Boston, New York, Philadelphia, Cleveland, Richmond, Atlanta, Chicago, St. Louis, Kansas City, and San Francisco. The Board subsequently approved similar actions by the boards of directors of the Federal Reserve Bank of Minneapolis, effective February 3, and of the Federal Reserve Bank of Dallas, effective February 4. The discount rate is the rate charged depository institutions when they borrow short-term adjustment credit from their District Federal Reserve Banks.

Modifications to the Disclosure Procedures of the Federal Open Market Committee

The Federal Open Market Committee (FOMC) announced on January 19, 2000, that it approved modifications to its disclosure procedures at its December 21 meeting.

These modifications, which will take effect as of the February FOMC meeting, are designed to enhance communication to the public. They are summarized here and described in more detail in the accompanying attachment.[1]

First, the Committee determined that a statement will be issued to the public immediately after every FOMC meeting. The previously stated procedure was to release a statement only in the event of a policy action or a major shift in the Committee's view about prospective developments.

Second, the FOMC changed its language describing its assessment of future developments. This new language will describe the FOMC's consensus about the balance of risks to the attainment of its long-run goals of price stability and sustainable economic growth and will be used in the announcement made after each meeting. More specifically, the announcement will indicate how the Committee assesses the risks of heightened inflation pressures or economic weakness in the foreseeable future. This time frame in the new language is intended to cover an interval extending beyond the next FOMC meeting.

Under its prior procedures, which will no longer be used, the FOMC's view about the period ahead (referred to as the "policy tilt" or "policy bias") was couched in terms of the relative chances of an increase or decrease in the intended federal funds rate. The "bias" language voted on by the Committee explicitly referenced the intermeeting period.

The revised disclosure procedures were proposed by the "Working Group on the Directive and Disclosure Policy," which was formed in August 1999 and chaired by Federal Reserve Board Vice Chairman Roger W. Ferguson, Jr. The Working Group also included the following FOMC members: Governors Edward W. Kelley, Jr., Laurence H. Meyer, and Edward M. Gramlich and Federal Reserve Bank Presidents Robert T. Parry (San Francisco), Michael H. Moskow (Chicago), and William Poole (St. Louis).

1. The attachment is available on the Board's web site (www.federalreserve.gov/boarddocs/press/General/2000) and on request from Publications Services, Mail Stop 127, Board of Governors of the Federal Reserve System, Washington, DC 20551.

Appointments of New Members to the Consumer Advisory Council and Designation of a New Chair and Vice Chair for 2000

The Federal Reserve Board on January 5, 2000, named seven new members to its Consumer Advisory Council for three-year terms and designated a new chair and vice chair of the council for 2000.

The council 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.

Dwight Golann was designated chair; his term runs through December 2000. Mr. Golann is Professor of Law for the Suffolk University Law School in Boston, Massachusetts. Previous positions include Chief of the Consumer Protection Division, Deputy Chief of the Public Protection Bureau, and Assistant Attorney General for the Commonwealth of Massachusetts. Lauren Anderson was designated vice chair; her term on the council ends in December 2001. Ms. Anderson is Executive Director of the Neighborhood Housing Services of New Orleans. Previously, she was a project manager for the Department of Housing and Economic Development for Jersey City, New Jersey, and a staff attorney for the American Civil Liberties Union.

The seven new members are the following:

Dorothy Broadman
San Francisco, California

Ms. Broadman is Senior Vice President and Manager of the Community Development Department at Cal Fed Bank, FSB. She is Chairperson of the bank's senior management committee responsible for overseeing Community Reinvestment Act (CRA) activities. Ms. Broadman is the senior officer responsible for CRA at the corporate level. Previously, Ms. Broadman held positions at Citibank and at Wells Fargo Bank. She serves on several boards and advisory councils, including the Executive Committee of the National Association of Affordable Housing Lenders, the CRA Committee of the Consumer Bankers Association, and as chairperson of a Local Initiatives Support Corporation advisory council.

Teresa Bryce
Charlotte, North Carolina

Ms. Bryce is General Counsel of Bank of America Mortgage and General Counsel of Bank of America Corporation. She supports both the mortgage banking division and the Community Development Banking Group. Ms. Bryce oversees compliance with the Community Reinvestment Act, fair lending issues, and consumer protection laws. Previously, Ms. Bryce was with Prudential Home Mortgage, where she promoted affordable housing initiatives. She serves on several boards and committees, including the executive committee of the Research Institute for Housing America and the Mortgage Bankers Association of America's Residential Board of Governors.

Robert M. Cheadle
Ada, Oklahoma

Mr. Cheadle is an attorney and serves as Business Developer for Chickasaw Enterprises, the economic development division of the Chickasaw Nation. He has developed a tribally owned mortgage services firm to lead the effort for community development in the Chickasaw Nation. Previously, he served in other positions for the Chickasaw Nation and also was Senior Counsel at Fannie Mae. In 1999, the Chickasaw Nation received a Social Compact Award and a Housing and Urban Development Best Practices Award for his work in developing a new Chickasaw mortgage loan program.

Lester W. Firstenberger
Middletown, Connecticut

Since 1998, Mr. Firstenberger has been the Senior Vice President and General Counsel of Mortgage Lenders Network USA, Inc., one of the largest subprime lenders in the United States. He handles legal and regulatory matters, corporate firm mergers and acquisitions, and new product development. Previously, he had his own law firm, which focused on consumer lending and related activities for large banks. Mr. Firstenberger also acted as chief counsel for a large bank in developing an electronic check standard for the U.S. Department of Defense.

M. Dean Keyes
St. Louis, Missouri

Ms. Keyes is a Senior Vice President and Director of Corporate/Community Reinvestment Act Initiatives for Mercantile Bancorporation, Inc., where she supports CRA activities in six states. Previously, she was Vice President for Community Investment at Citicorp Mortgage, Inc., where she developed CRA programs to ensure compliance with federal law. Ms. Keyes is a participant on the boards of organizations that serve to promote affordable housing, safe streets, racial equality, jobs, and economic development. She also was instrumental in the initial start-up of the Home Ownership Purchase Services Committee of the Neighborhood Housing Services of St. Louis; the committee focuses on consumer education.

Jeremy Nowak
Philadelphia, Pennsylvania

Mr. Nowak is the Chief Executive Officer of The Reinvestment Fund, a community development financial institution. The organization's mission is to alleviate poverty and revitalize low- and moderate-income neighborhoods by providing capital and technical assistance to community organizations, developers, and businesses. In 1994, Mr. Nowak received The Philadelphia Award, the city's highest civic honor, for his work in advancing the best interests of the community. He is on several boards, including the Public/Private Ventures, the Economic Development Coalition of The Greater Philadelphia First Corporation, and PhAME, Inc.

Russell W. Schrader
Foster City, California

Mr. Schrader is Senior Vice President and Assistant General Counsel of Visa, U.S.A. Inc. He is responsible for regulatory and legislative issues related to the application of consumer banking laws and regulations to credit, debit, and ATM cards and to the e-commerce environment. Before 1996, Mr. Schrader spent twelve years as Vice President and Senior Associate Counsel for The Chase Manhattan Bank, where he was involved with consumer and mortgage lending, legal services to retail banks, and insurance issues.

Council members whose terms continue through 2000 are the following:

Walter J. Boyer, Garland, Texas

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

Robert F. Elliott, Lake Forest, Illinois

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

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

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

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

Daniel W. Morton, Vice President and Senior Counsel, The Huntington National Bank, Columbus, Ohio

David L. Ramp, State of Minnesota, Assistant Attorney General, St. Paul, Minnesota

Robert G. Schwemm, Professor of Law, University of Kentucky, Lexington, Kentucky

David J. Shirk, Senior Manager, Lending Systems Framework, Inc., Tarrytown, New York

Council members whose terms continue through 2001 are the following:

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

Mary Ellen Domeier, President, State Bank & Trust Company of New Ulm, New Ulm, Minnesota

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

Rose Garcia, Executive Director, Tierra del Sol Housing Corporation, Las Cruces, New Mexico

Vincent Giblin, Chief Executive Officer, International Union of Operating Engineers, West Caldwell, New Jersey

Willie Jones, Deputy Director, The Community Builders, Inc., Boston, Massachusetts

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

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

Gary S. Washington, Senior Vice President, ABN AMRO, Chicago, Illinois

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

Adoption of an Interim Rule for Procedures for Electing to Become a Financial Holding Company

The Federal Reserve Board on January 19, 2000, announced its approval of an interim rule setting forth procedures for bank holding companies and foreign banks with U.S. offices to elect to be treated as financial holding companies. Financial holding companies may engage in a broad range of securities, insurance, and other financial activities under Title I of the Gramm–Leach–Bliley Act, which becomes effective on March 11, 2000.

The Board has made the rule effective on March 11, 2000, the effective date of the statute. The Board will also accept public comments on the interim rule that are submitted by March 27, 2000, and will make changes to the rule as appropriate after reviewing the comments.

While the rule will not be effective until March 11, 2000, bank holding companies and foreign banks that meet the relevant qualifications may begin filing elections to become financial holding companies at any time. Elections should be filed with the appropriate Reserve Bank for the bank holding company or foreign bank.

The Federal Reserve System will endeavor on March 13, 2000, which is the first business day after the effective date of the financial holding company provisions of the Gramm–Leach–Bliley Act, to act on all elections filed before February 15, 2000. The System will act on all other elections as quickly as practicable. Any elections filed before March 11, 2000, would not become effective, in the absence of Board action, until the thirty-first day after March 11 (or April 11, 2000).

With respect to foreign banks, the Board believes that the standards and procedures proposed establish a flexible approach that takes account of the statutory requirement for comparability of capital and management standards while ensuring that foreign banks operating in the United States are also offered national treatment and equality of competitive opportunity.

PROPOSED ACTION

The Federal Reserve Board on February 3, 2000, voted to request comment on a new regulation implementing the privacy provisions of the Gramm–Leach–Bliley Act.

Regulation P (Privacy of Consumer Financial Information) would apply to institutions regulated by the Board, including bank holding companies, financial holding companies, state-chartered banks that are members of the Federal Reserve System, and uninsured state-chartered U.S. offices and branches of foreign banks. Comments are requested by March 31, 2000.

APPROVAL OF FEE SCHEDULES FOR PRICED SERVICES OF THE FEDERAL RESERVE BANKS

The Federal Reserve Board on January 6, 2000, announced fee schedules for priced services and electronic connections, as well as the private-sector adjustment factor (PSAF) used in setting the fees.

The Board approved the fee schedules on December 17, 1999. The effective date of the fees was delayed until April 3, 2000, to minimize change during the period surrounding the rollover to 2000.

PRELIMINARY FIGURES AVAILABLE ON OPERATING INCOME OF THE FEDERAL RESERVE BANKS

Preliminary figures indicate that operating income of the Federal Reserve Banks amounted to $29.347 billion during 1999. Net income before payment of dividends, additions to surplus, and payments to the Treasury totaled $26.255 billion. About $25.400 billion of this net income was distributed to the U.S. Treasury during 1999.

Federal Reserve System income 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 $836 million.

Operating expenses of the twelve Reserve Banks totaled $1.904 billion. In addition, the cost of earnings credits granted to depository institutions under the Monetary Control Act of 1980 amounted to $322 million. Assessments against Reserve Banks for Board expenditures totaled $214 million, and the cost of currency amounted to $485 million.

Net deductions from income amounted to $526 million, resulting primarily from unrealized losses on assets denominated in foreign currencies that were revalued to reflect current market exchange rates. Statutory dividends to member banks were $375 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 19, 2000, announced the issuance of an order of assessment of a civil money penalty against Charles A. Drummond, a former president, chief executive officer and director, and an institution-affiliated party of the Professional Bank, Denver, Colorado.

Mr. Drummond, without admitting to any allegations, consented to the issuance of the order for his alleged violations of sections 23A, 23B, and 22(h) of the Federal Reserve Act, 12 U.S.C. §§371c, 371c-1, and 375b, and Regulation O, 12 C.F.R. Part 215, in connection with insider and affiliate transactions at the bank. Mr. Drummond paid a fine of $10,000.

The Federal Reserve Board on January 19, 2000, announced the issuance of a consent order against Solomon King, an institution-affiliated party of the First Western Bank, Cooper City, Florida, a state member bank.

Mr. King, without admitting to any allegations, consented to the order to resolve allegations that he violated the Change in Bank Control Act in connection with his acquisition of beneficial ownership of the shares of the bank.

The Federal Reserve Board on January 19, 2000, announced the issuance of an order of prohibition against Christopher J. Woods, a former assistant vice president and institution-affiliated party of the Midwest Bank and Trust Company, Elmwood Park, Illinois.

Mr. Woods, without admitting to any allegations, consented to the issuance of the order due to his alleged participation in violations of law and unsafe or unsound practices regarding misapplication of bank funds and falsification of the bank's books and records.

Change in Board Staff

The Federal Reserve Board announced the appointment of Edgar A. Martindale as Assistant Director in the Division of Reserve Bank Operations and Payment Systems (RBOPS). Mr. Martindale began working in the System in 1966 and has been in RBOPS as part of the System Interchange Program, on leave of absence from Federal Reserve Information Technology. He received a master's degree from Johns Hopkins University and a bachelor's degree from the University of Baltimore. □

Legal Developments

Orders Issued Under Bank Holding Company Act

Orders Issued Under Section 3 of the Bank Holding Company Act

Old Kent Financial Corporation
Grand Rapids, Michigan

Order Approving Merger of Bank Holding Companies, Merger of Banks, and Establishment of Branches

Old Kent Financial Corporation ("Old Kent"), a bank holding company within the meaning of the Bank Holding Company Act ("BHC Act"), has requested the Board's approval under section 3 of the BHC Act (12 U.S.C. § 1842) to merge with Merchants Bancorp, Inc., ("Merchants"), and thereby acquire Merchants's subsidiary bank, Merchants National Bank of Aurora ("Merchants Bank"), both in Aurora, Illinois. Old Kent Bank, Grand Rapids, Michigan ("Old Kent Bank"), a state member bank, has applied under section 18(c) of the Federal Deposit Insurance Act (12 U.S.C. § 1828(c)) (the "Bank Merger Act") to merge with Merchants Bank, and to retain and operate branches at the locations of the main office and branches of Merchants Bank.[1]

Notice of the proposal, affording interested persons an opportunity to submit comments, has been published (64 *Federal Register* 66,189 (1999)). As required by the Bank Merger Act and the Board's Rules of Procedure (12 C.F.R. 262.3(b)), reports on the competitive effects of the merger were requested from the U.S. Attorney General and the other federal banking agencies. The time for filing comments has expired, and the Board has considered the proposal in light of the factors set forth in section 3 of the BHC Act and the Bank Merger Act.

Old Kent, with total consolidated assets of $17.7 billion, is the 47th largest commercial banking organization in the United States, controlling less than 1 percent of the total assets of insured commercial banks in the United States.[2] Old Kent operates in Michigan, Illinois, and Indiana. Old Kent is the seventh largest depository institution in Illinois, controlling deposits of $4.2 billion, representing approximately 2 percent of total deposits in depository institutions in the state.[3]

Merchants, with total consolidated assets of $987.9 million, is the 43rd largest depository institution in Illinois, controlling deposits of $686.3 million, representing less than 1 percent of total deposits in depository institutions in the state.

After consummation of the proposal, Old Kent would become the 44th largest commercial banking organization in the United States, with total consolidated assets of $18.7 billion, representing less than 1 percent of total banking assets. Old Kent would become the fifth largest depository institution in Illinois, controlling deposits of $4.9 billion, representing approximately 2.3 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 Old Kent is Michigan, and Old Kent proposes to acquire Merchants Bank, which is located in Illinois. All 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 Factors

Section 3 of the BHC Act and the Bank Merger Act prohibit the Board from approving a proposal that would

1. Old Kent proposes to merge a wholly owned acquisition subsidiary with and into Merchants, with Merchants as the surviving corporation. Immediately thereafter, Merchants would be liquidated and Merchants Bank would be merged with and into Old Kent Bank, with Old Kent Bank as the surviving depository institution.

2. All asset data are as of September 30, 1999, and all deposit data are as of June 30, 1998.

3. In this context, depository institutions include commercial banks, savings banks, and savings associations.

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

5. 12 U.S.C. §§ 1842(d)(1)(A) and (B) and 1842(d)(2)(A) and (B). Old Kent meets the capital and managerial requirements established under applicable law. Merchants Bank has been in existence and operated for the minimum period of time required by applicable state law. On consummation, Old Kent 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 total deposits held by insured depository institutions in Illinois, the state in which Old Kent and Merchants both operate insured depository institutions. *See* 205 Ill. Comp. Stat. 5/21.3 (West 1999). All other requirements under section 3(d) of the BHC Act would be met on consummation of the proposal.

result in a monopoly or be in furtherance of a monopoly. Both the BHC Act and the Bank Merger Act also prohibit the Board from approving a proposal that would substantially lessen competition in any relevant banking market unless the anticompetitive effects of the proposal in that banking market are clearly outweighed in the public interest by the probable effect of the proposal in meeting the convenience and needs of the community to be served.[6]

Old Kent and Merchants compete directly in the Aurora, Illinois banking market.[7] Old Kent is the fifth largest depository institution in the Aurora banking market, controlling deposits of $205.6 million, representing approximately 5.7 percent of total deposits in the market ("market deposits").[8] Merchants is the second largest depository institution in the Aurora banking market, controlling deposits of $641.2 million, representing approximately 17.7 percent of market deposits. On consummation of the proposal, Old Kent would become the largest depository institution in the Aurora banking market, controlling $846.7 million of deposits, representing 23.3 percent of market deposits. The change in market concentration, as measured by the Herfindahl–Hirschman Index ("HHI"), is consistent with prior Board precedent and the Department of Justice Merger Guidelines ("DOJ Guidelines").[9]

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 Aurora banking market.

Based on these and all other facts of record, the Board concludes that consummation of the proposal would not result in any significantly adverse effects on competition or on the concentration of banking resources in the Aurora banking market or any other relevant banking market.

6. *See* 12 U.S.C. § 1842(c).

7. The Aurora banking market is defined as the southern part of Kane County; Plano, Bristol, Oswego, Fox, and Kendall Townships in Kendall County; and Sandwich Township in DeKalb County, all in Illinois.

8. Market share data are based on calculations that include the deposits of thrift institutions, which include savings banks and savings associations, weighted at 50 percent. The Board previously has indicated that thrift institutions have become, or have the potential to become, significant competitors of commercial banks. *See, e.g., Midwest Financial Group*, 75 *Federal Reserve Bulletin* 386 (1989); *National City Corporation*, 70 *Federal Reserve Bulletin* 743 (1984). Thus, the Board regularly has 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).

9. Under the DOJ Guidelines (49 *Federal Register* 26,923 (June 29, 1984)), a market in which the post-merger HHI is more than 1000 and less than 1800 is considered to be moderately concentrated. The Department of Justice has informed the Board that a bank merger or acquisition generally will not be challenged (in the absence of other factors indicating anticompetitive effects) unless the post-merger HHI is at least 1800 and the merger increases the HHI by more than 200 points. The Department of Justice has stated that the higher than normal HHI thresholds for screening bank mergers for anticompetitive effects implicitly recognize the competitive effects of limited-purpose lenders and other nondepository financial institutions. On consummation of this proposal, the HHI would increase by 199 points to 1315 and the Aurora banking market would remain moderately concentrated, as measured by the HHI.

Other Factors

Both the BHC Act and the Bank Merger Act require the Board to consider the financial and managerial resources and future prospects of the companies and banks involved in the proposal and certain other supervisory factors. The Board has reviewed these factors in light of all the facts of record, including reports of examination, other confidential supervisory information assessing the financial and managerial resources of the organizations, and financial information provided by Old Kent. The Board notes that Old Kent and Merchants and their subsidiary banks currently are well capitalized and are expected to remain so on consummation of the proposal. Based on all the facts of record, the Board concludes that the financial and managerial resources and the future prospects of Old Kent, Merchants, and their respective subsidiary banks, are consistent with approval, as are the other supervisory factors the Board must consider under section 3 of the BHC Act and the Bank Merger Act.

In addition, the Board is required to consider the effect of the proposal on the convenience and needs of the communities to be served. The Board has carefully considered the effect of the proposal on the convenience and needs of the communities to be served in light of all the facts of record, including the records of performance of the depository institutions of Old Kent under the Community Reinvestment Act (12 U.S.C. § 2901 *et seq.*) ("CRA"),[10] the lending records of Old Kent Bank and its subsidiaries, the policies and programs designed to ensure compliance with the fair lending laws, recent data provided by Old Kent's depository institutions in regulatory reports, confidential supervisory information, and information provided by Old Kent. Based on all the facts of record, the Board concludes that considerations relating to the convenience and needs factor 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 Old Kent with all the commitments made in connection with these applications, and on the receipt by Old Kent of all necessary

10. The Interagency Questions and Answers Regarding Community Reinvestment provides that an institution's most recent CRA performance evaluation is an important and often controlling factor in the consideration of an institution's CRA record because it represents a detailed evaluation of the institution's overall record of performance under the CRA by its appropriate federal banking supervisor. 64 *Federal Register* 23,618 and 23,641 (1999). Old Kent Bank received a "satisfactory" rating at its most recent CRA performance examination by the Federal Reserve Bank of Chicago, as of August 1997. Old Kent Bank, National Association, Jonesville, Michigan, received a "satisfactory" rating at its most recent CRA performance examination by the Office of the Comptroller of the Currency, as of April 1999.

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

The acquisition of Merchants shall not be consummated before the fifteenth calendar day following the effective date of this order, or later than three months after the effective date of this order, unless such period is extended for good cause by the Board or by the Federal Reserve Bank of Chicago, acting pursuant to delegated authority.

By order of the Board of Governors, effective January 27, 2000.

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

ROBERT DEV. FRIERSON
Associate Secretary of the Board

Orders Issued Under Section 4 of the Bank Holding Company Act

First National Corp. of Ardmore, Inc. Ardmore, Oklahoma

Order Approving Notice to Engage in Nonbanking Activities

First National Corp. of Ardmore, Inc. ("FNC"), 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 225.23 of the Board's Regulation Y (12 C.F.R. 225.23) to acquire 33.3 percent of the outstanding voting shares of Southern Land Title Services, Inc., Ardmore, Oklahoma ("Southern"),[1] and thereby engage in real estate settlement and title abstracting activities.[2] FNC, with total consolidated assets of approximately $243.9 million, controls one subsidiary bank in Oklahoma.[3]

The Board previously has determined by order that real estate settlement and title abstracting activities are closely related to banking and permissible for bank holding companies under section 4(c)(8) of the BHC Act.[4] Notificant has committed that it will conduct these activities in accordance with the limitations set forth in Regulation Y and the Board's orders and interpretations relating to these activities.

In order to approve the proposal, the Board also must determine that performance of the proposed activities is a proper incident to banking, that is, that the performance of the proposed activity by FNC "can reasonably be expected to produce benefits to the public . . . that outweigh possible adverse effects, such as undue concentration of resources, decreased or unfair competition, conflicts of interests, or unsound banking practices."[5]

As part of its evaluation of these factors, the Board has considered the financial and managerial resources of FNC and the effect of the transaction on those resources. Management of Southern would not change as a result of this transaction, and the acquisition would not require additional managerial resources from FNC. There is no evidence in the record indicating that consummation of this proposal is likely to result in significantly adverse effects, such as undue concentration of resources, decreased or unfair competition, conflicts of interests, or unsound banking practices.

FNC has indicated that combining the resources and operations of FNC with the real estate settlement and title abstracting activities of Southern, Carter and Executive will result in enhanced real estate settlement and title abstracting services, including better recordkeeping of real estate related transactions. In addition, as the Board has previously noted, there are public benefits to be derived from permitting capital markets to operate so that bank holding companies can make potentially profitable investments in nonbanking companies and from permitting banking organizations to allocate their resources in the manner they consider to be most efficient when such investments and actions are consistent, as in this case, with the relevant considerations under the BHC Act.[6]

Based on the foregoing and all the other facts of record, including the commitments made by FNC, the Board has determined that the performance of the proposed activity by FNC can reasonably be expected to produce benefits to the public that would outweigh any likely adverse effects under the proper incident to banking standard of section 4(c)(8) of the BHC Act.

1. Southern owns four subsidiaries, Ardmore Abstract Company ("Ardmore"), Carter County Abstract Company ("Carter"), Executive Escrow and Closing Services, Inc. ("Executive"), and Consolidated Abstract Company, Inc. ("Consolidated"), all in Ardmore, Oklahoma. FNC proposes to acquire Southern, Carter, and Executive, which would provide abstracting and real estate settlement services to the public without preference for customers of FNC. FNC would also acquire Consolidated, which is inactive and would remain so after consummation of this proposal. The current owners of Southern would retain Ardmore, which would provide title insurance, and neither FNC nor Southern would have any ownership interest in Ardmore or provide title insurance. In addition, neither NFC nor Southern would provide any insurance against title defects, guarantee any title, provide any certification with respect to a title, or be responsible for any defects in a title.

2. Real estate title abstracting, as proposed by Notificant, is limited to reporting factual information concerning the interests in or ownership of selected real property.

3. Banking data are as of September 30, 1999.

4. *See*, 12 C.F.R. 225.28(b)(2), and *The First National Company*, 81 *Federal Reserve Bulletin* 805 (1995).

5. 12 U.S.C. § 1843(c)(8).

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

Based on all the facts of record, including the commitments and representations made by FNC, and subject to the terms and conditions set forth in this order, the Board has determined that the notice should be, and hereby is, approved. This determination is subject to all the conditions set forth in the Board's Regulation Y, including those in sections 225.7 and 225.25(c) (12 C.F.R. 225.7 and 225.25(c)), the conditions in related orders governing the proposed activities, and the Board's authority to require modification or termination of the activity 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 the notice, including the commitments and conditions discussed in this order. The commitments and conditions relied on in reaching this decision shall be deemed to be conditions imposed in writing by the Board in connection with its findings and decision and, as such, may be enforced in proceedings under applicable law.

The 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 Federal Reserve Bank of Kansas City, acting pursuant to delegated authority.

By order of the Board of Governors, effective January 10, 2000.

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

ROBERT DEV. FRIERSON
Associate Secretary of the Board

North Fork Bancorporation, Inc. Melville, New York

Order Approving the Acquisition of a Savings Association

North Fork Bancorporation, Inc., Melville, New York ("North Fork"), a bank holding company within the meaning of the Bank Holding Company Act ("BHC Act"), has requested the Board's approval under section 4(c)(8) of the BHC Act (12 U.S.C. § 1843(c)(8)) and section 225.24 of the Board's Regulation Y (12 C.F.R. 225.24) to acquire all the voting shares of JSB Financial, Inc. ("JSB") and thereby acquire JSB's wholly owned subsidiary, Jamaica Savings Bank FSB ("Jamaica Savings"), both of Lynbrook, New York.[1]

Notice of the proposal, affording interested persons an opportunity to submit comments, has been published (64 *Federal Register* 56,791 (1999)). 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.

North Fork, with total consolidated assets of $11.5 billion, is the 15th largest depository institution in New York, controlling deposits of approximately $6.3 billion, representing 1.5 percent of total deposits in depository institutions in the state ("state deposits").[2] JSB is the 39th largest depository institution in New York, controlling deposits of $1.2 billion, representing less than 1 percent of state deposits. On consummation of the proposal and the Reliance transaction, North Fork would become the 11th largest depository institution in New York, controlling deposits of approximately $9.1 billion, representing approximately 2.2 percent of state deposits.

The Board previously has determined by regulation that the operation of a savings association by a bank holding company is closely related to banking for purposes of section 4(c)(8) of the BHC Act.[3] The Board requires that savings associations acquired by bank holding companies conform their direct and indirect activities to those permissible for bank holding companies under section 4 of the BHC Act. North Fork has committed to conform all the activities of Jamaica Savings to those permissible under section 4(c)(8) of the BHC Act and Regulation Y.

Competitive Considerations

In order to approve the proposal, the Board also is required by section 4(c)(8) of the BHC Act to determine that the acquisition of JSB by North Fork "can reasonably be expected to produce benefits to the public . . . that outweigh possible adverse effects, such as undue concentration of resources, decreased or unfair competition, conflicts of interest, or unsound banking practices."[4] As part of its consideration of these factors, the Board has considered carefully the competitive effects of the proposal in light of all the facts of record.[5]

North Fork and JSB compete directly in the Metropolitan New York/New Jersey banking market.[6] On consum-

1. North Fork's wholly owned subsidiary bank, North Fork Bank, Mattituck, New York, would merge with Jamaica Savings, and North Fork Bank would be the surviving institution. The merger is subject to approval by the Federal Deposit Insurance Corporation ("FDIC") under section 18(c) of the Federal Deposit Insurance Act (12 U.S.C. § 1828(c)) ("Bank Merger Act") and by the New York State Banking Department ("NYSBD"). In addition, North Fork has filed a separate notice with the Board to merge with Reliance Bancorp, Inc. ("Reliance") and thereby acquire Reliance Federal Savings Bank ("Reliance Savings"), both of Garden City, New York ("the Reliance transaction").

2. Asset data are as of June 30, 1999, and state deposit data are as of June 30, 1998. In this context, depository institutions include commercial banks, savings banks, and savings associations.

3. 12 C.F.R. 225.28(b)(4).

4. 12 U.S.C. § 1843(c)(8).

5. *See First Hawaiian, Inc.*, 79 *Federal Reserve Bulletin* 966 (1993).

6. The Metropolitan New York/New Jersey banking market includes Bronx, Dutchess, Kings, Nassau, New York, Orange, Putnam, Queens, Richmond, Rockland, Suffolk, Sullivan, Ulster, and Westchester Counties in New York; Bergen, Essex, Hudson, Hunter-

mation of the proposal and the Reliance transaction, North Fork would be the 10th largest depository institution in the Metropolitan New York/New Jersey banking market, controlling deposits of $9.3 billion, representing approximately 2.2 percent of market deposits.[7] The Herfindahl–Hirschman Index ("HHI") would decrease by 3 points to 783, and numerous competitors would remain in the market.[8] Based on these and all other facts of record, the Board concludes that consummation of the proposal would not result in any significantly adverse effects on competition or on the concentration of banking resources in the New York banking market or any other relevant banking market.

Record of Performance Under the Community Reinvestment Act

In acting on notices to acquire a savings association, the Board reviews the records of performance of the relevant depository institutions under the Community Reinvestment Act (12 U.S.C. § 2901 *et seq.*) ("CRA").[9] The Board has reviewed the record of performance of North Fork Bank in light of all the facts of record, including comments received from Inner City Press/Community on the Move ("ICP"). ICP contends that the number and volume of small business loans made by North Fork Bank in the Bronx and in predominantly minority and low- and moderate-income ("LMI") areas of New York City are inadequate in comparison to North Fork Bank's market share of deposits in these areas and in comparison to North Fork Bank's lending record in other parts of its assessment area. ICP also maintains, based primarily on data filed under the Home Mortgage Disclosure Act (12 U.S.C. § 2801 *et seq.*) ("HMDA"), that North Fork Bank's record of home mortgage lending indicates disparities in the bank's treatment of minorities in New York City and in Nassau and Suffolk Counties.

A. CRA Performance Examinations

As provided in the CRA, the Board evaluates an institution's record of performance in light of examinations for CRA performance conducted by the appropriate federal supervisors. An institution's most recent CRA performance evaluation is a particularly important consideration in the application process, because it represents a detailed on-site evaluation of the institution's overall record of performance under the CRA by its appropriate federal supervisor.[10]

North Fork Bank received an overall rating of "satisfactory" from its primary federal supervisor, the FDIC, at its most recent evaluation for CRA performance, as of March 1997 ("1997 Examination"). As of the same date, the NYSBD rated as "satisfactory" North Fork Bank's performance in helping to meet the credit needs of its entire community pursuant to New York law ("State Examination").[11] Jamaica Savings also received an overall rating of "satisfactory" from its primary federal supervisor, the Office of Thrift Supervision, at its most recent evaluation for CRA performance, as of August, 1996.

B. Lending Record of North Fork Bank

During 1998, the Board twice reviewed North Fork's record of CRA performance in light of comments submitted by ICP.[12] For reasons set forth in detail in those orders, the Board concluded that the CRA performance record of North Fork was consistent with approval under the BHC Act.[13]

The 1997 Examination commended North Fork Bank for its record of lending in LMI areas and to LMI individuals, based on HMDA data for 1995 and 1996. In 1997 and 1998, North Fork Bank continued to make a higher per-

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don, Middlesex, Monmouth, Morris, Ocean, Passaic, Somerset, Sussex, Union, Warren, and a portion of Mercer Counties in New Jersey; Pike County in Pennsylvania; and portions of Fairfield and Litchfield Counties in Connecticut.

7. Market share data are as of June 30, 1998, and are based on calculations in which the deposits of thrift institutions, other than Jamaica Savings and Reliance Savings, are included at 50 percent. The Board previously has indicated that thrift institutions have become, or have the potential to become, significant competitors of commercial banks. *See WM Bancorp*, 76 *Federal Reserve Bulletin* 788 (1990); *National City Corporation*, 70 *Federal Reserve Bulletin* 743 (1984). Because the Board has analyzed the competitive factors in this case as if North Fork Bank, Jamaica Savings, and Reliance Savings were a combined entity, the deposits of Jamaica Savings and Reliance Savings are included at 100 percent in the calculation of *pro forma* market share. *See Norwest Corporation*, 78 *Federal Reserve Bulletin* 452 (1992); *First Banks, Inc.*, 76 *Federal Reserve Bulletin* 669 (1990).

8. Under the revised Department of Justice Merger Guidelines, 49 *Federal Register* 26,823 (June 29, 1984), a market in which the post- merger HHI is less than 1000 is considered to be unconcentrated. The Department of Justice has informed the Board that, as a general matter, a bank merger or acquisition 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 or acquisition increases the HHI by 200 points. The Department of Justice has stated that the higher than average HHI thresholds for screening bank mergers for anticompetitive effects implicitly recognize the competitive effects of limited-purpose lenders and other nondepository financial entities.

9. *See, e.g., Banc One Corporation*, 83 *Federal Reserve Bulletin* 602 (1997).

10. Interagency Questions and Answers Regarding Community Reinvestment, 64 *Federal Register* 23,618 and 23,641 (1999) ("Interagency Questions and Answers").

11. N.Y. Banking Law § 28-b.

12. *See North Fork Bancorporation, Inc.*, 84 *Federal Reserve Bulletin* 290 (1998) ("*New York Bancorp Order*"); *North Fork Bancorporation, Inc.*, 84 *Federal Reserve Bulletin* 477 (1998) (acquisition of up to 9.9 percent of the voting shares of Long Island Bancorp, Inc.).

13. In the *New York Bancorp Order*, the Board stated that it expected North Fork to address the lending areas criticized by the NYSBD in the State Examination, and that the Board would consider North Fork's progress in this regard when considering future applications by North Fork. The Board has reviewed information received from other supervisory agencies on North Fork Bank's efforts in these areas, including North Fork Bank's progress in fulfilling its commitments to the NYSBD. Based on all the facts of record, the Board concludes that North Fork Bank's progress in the lending areas noted in the *New York Bancorp Order* is consistent with approval of this notice.

centage of HMDA-related loans[14] in LMI census tracts than did lenders in the aggregate.[15] In 1998, North Fork Bank made 30.9 percent of its HMDA-related loans in LMI census tracts, compared with 14.1 percent by lenders in the aggregate.[16] North Fork Bank also increased the percentage of its HMDA-related loans that it made to LMI individuals from 17 percent in 1995 to 22 percent in each of 1997 and 1998.[17]

Mortgage loans on multifamily rental dwellings ("multifamily loans") constituted a primary credit product offered by North Fork Bank to address housing-related credit needs in its assessment area. The State Examination of North Fork Bank found that multifamily loans represented 71 percent by dollar volume of all HMDA-related loans made by the bank in 1996. In 1998, North Fork Bank originated $293 million in multifamily loans, which accounted for 49.3 percent by dollar volume of all North Fork Bank's HMDA-related loans for the year.[18] Also in 1998, North Fork Bank originated 48 percent of its multifamily loans in LMI census tracts, and 43 percent of its multifamily loans in minority census tracts.

North Fork Bank engages in a significant amount of small business lending. In 1998, North Fork Bank made 2,075 loans to small businesses.[19] Of those loans, 23 percent were made in LMI census tracts in North Fork Bank's assessment area, compared with 17 percent for lenders in the aggregate. In 1998, North Fork Bank also increased its loans to small businesses in minority census tracts in its assessment area, to 136, from 104 in 1997.[20]

ICP alleges that HMDA data from North Fork Bank indicate that the bank discriminates against minorities in violation of fair lending laws. North Fork denies these allegations and has provided HMDA data and other information on its lending programs designed to serve minority and LMI communities. In 1998 in North Fork Bank's assessment area in the New York City Metropolitan Statistical Area, for example, North Fork Bank's denial disparity ratio for African Americans was 1.32:1, compared with 1.69:1 for lenders in the aggregate, and North Fork Bank's denial disparity ratio for Hispanics was 0.9:1, compared with 1.52:1 for lenders in the aggregate.[21] In the Nassau-Suffolk Metropolitan Statistical Area, however, North Fork Bank's denial disparity ratios in 1998 were 2.27:1 for African Americans and 2.92:1 for Hispanics, compared with denial disparity ratios of 1.82:1 and 1.48:1, respectively, for lenders in the aggregate. For its assessment area overall, North Fork Bank's 1998 denial disparity ratios were 1.70:1 for African Americans and 1.81:1 for Hispanics, compared with 1.74:1 and 1.52:1 for lenders in the aggregate.[22]

The Board is concerned when an institution's record indicates any such disparities and believes that all banks are obligated to ensure that their lending practices are based on criteria that assure not only safe and sound banking, but also equal access to credit by creditworthy applicants regardless of race. The Board recognizes, however, that HMDA data alone provide an incomplete measure of an institution's lending in its community and have limitations that make the data an inadequate basis, absent other information, for concluding that an institution has engaged in illegal discrimination in making lending decisions.[23]

Because of the limitations of HMDA data, the Board has carefully reviewed other information concerning North Fork Bank's record of lending to minority and LMI individuals. In particular, the Board has carefully reviewed

14. HMDA-related loans include loans reported under HMDA as well as modification, extension, and consolidation agreements ("MECA loans") for HMDA-reported loans. MECA loans are not reported under HMDA, but may be considered in evaluating an institution's CRA performance. *See* Interagency Questions and Answers, 64 *Federal Register* at 23,634.

15. The aggregate represents the cumulative lending for all institutions that have reported HMDA data in a given market.

16. LMI census tracts comprise approximately 28 percent of the total number of census tracts in North Fork Bank's current assessment area.

17. Lenders in the aggregate in North Fork Bank's assessment area made 16.2 percent of their HMDA-related loans to LMI individuals in 1998.

18. In 1998, North Fork Bank originated $76 million of multifamily loans in the Bronx, accounting for 26 percent of all multifamily loans made by North Fork Bank in its assessment area.

19. For purposes of this order, a loan to a small business means a loan made to a business with gross annual revenues of $1 million of less.

20. ICP contends that North Fork Bank gathers deposits in less affluent and predominantly minority areas, such as the Bronx, and concentrates its loans and investments in more affluent and nonminority areas. In ICP's view, North Fork Bank should be required to increase its small business lending in the Bronx and similar areas to reflect more closely its level of deposits in those areas. The Board has reviewed North Fork Bank's record of lending to small businesses throughout its assessment area, including minority and LMI census tracts in all portions of its assessment area. While North Fork Bank's lending to small businesses in specific segments of its assessment area may not closely correspond to the bank's market share of deposits in those segments at a particular point in time, small business lending is not the only use made of deposits. As explained above, the Board also has considered that North Fork Bank provides significant multifamily housing credit and provides other types of credit, including consumer loans and single family housing loans, throughout North Fork Bank's assessment area.

21. North Fork Bank's assessment area in the New York City Metropolitan Statistical Area is composed of the entire metropolitan statistical area except for Putnam County, New York.

22. The record also reflects that North Fork Bank received a significantly smaller percentage of HMDA-related loan applications from minority and LMI individuals than did lenders in the aggregate, and that the bank made a correspondingly smaller percentage of its HMDA-related loans to minority and LMI borrowers. For example, in 1998, North Fork Bank made 3.3 percent of its HMDA-related loans to African Americans and 2.6 percent of such loans to Hispanics, compared with rates of 10 percent and 5.8 percent, respectively, for lenders in the aggregate. As discussed in this order, however, in 1998 North Fork Bank made approximately half of its HMDA-related loans by dollar volume as multifamily loans rather than as 1- to 4-family home mortgage loans, and 43 percent of its multifamily loans were made in minority census tracts.

23. The data, for example, do not provide a basis for an independent assessment of whether an applicant who was denied credit was, in fact, creditworthy. Information about credit history problems and excessive debt levels relative to income (reasons most frequently cited for a credit denial) are not available from HMDA data.

examination reports, which provide on-site evaluations of compliance by North Fork Bank with the fair lending laws. In the 1997 Examination, FDIC examiners found no evidence of prohibited discriminatory practices or of any practices intended to discourage applications for the types of credit set forth in the bank's CRA statement.[24] NYSBD examiners also found no evidence of any prohibited discriminatory or illegal credit practices in their 1997 evaluation of North Fork Bank. In addition, FDIC examiners concluded that North Fork Bank's management had demonstrated a commitment to making loans in LMI census tracts and to LMI individuals and favorably noted that the bank had a formal "second review" process for all residential mortgage loan applications before issuing an adverse action letter.

The Board also has considered the quarterly reports concerning the lending activity of North Fork Bank during 1998 and the first quarter of 1999 that were submitted by North Fork to the Federal Reserve Bank of New York as required in the *New York Bancorp Order*, and confidential information provided by the FDIC and the NYSBD concerning North Fork Bank's lending activities. These reports and information also indicate in general that North Fork Bank continues to address the disparities in its lending record.

North Fork Bank also is involved in several initiatives to assist in meeting the credit needs of LMI communities and individuals. North Fork Bank continues to offer mortgage loans through State of New York Mortgage Agency programs, originating a total of 48 such loans in 1998 and the first three quarters of 1999. North Fork Bank also originated 171 loans during the first three quarters of 1999 through its proprietary Affordable Housing Programs, which provide below market interest rate loans to LMI borrowers, and reduced private mortgage insurance requirements. North Fork Bank also has invested $4.2 million in the Community Preservation Corporation, a private, nonprofit lender focusing on financing LMI housing, and has outstanding commitments of $800,000 to Neighborhood Housing Services of New York City, which assists in creating and preserving affordable housing in New York City neighborhoods.

C. Branch Closings

ICP also expresses concern that consummation of the proposal would result in branch closings. North Fork has stated that the proposal is likely to result in some consolidation involving pairs of newly acquired and existing North Fork Bank branches. North Fork has submitted preliminary and confidential information identifying these branches and has indicated that it has not made a final determination on the consolidation of any branch.[25]

The Board has carefully considered all the facts of record concerning branch closings, including the preliminary branch consolidation information submitted by North Fork and North Fork's record in opening and closing branches. The Board notes that only one pair of branches under consideration for consolidation is in an LMI area. Furthermore, examiners at the most recent CRA examination of North Fork Bank reviewed its record of opening and closing branches and found that none of the branches closed from 1995 to 1997 were in an LMI census tract. Examiners also found that in all instances of branch closings, North Fork Bank had an existing branch near the closed branch. The Board notes that any branches closed would be closed pursuant to North Fork Bank's branch closing policy, which requires consideration of the community's needs and the impact of the closing on the neighborhood. The FDIC has reviewed North Fork Bank's branch closing policy and found it satisfactory.

The Board also has considered that federal banking law provides a specific mechanism for addressing branch closings. Federal law requires an insured depository institution to provide notice to the public and to the appropriate federal supervisory agency before closing a branch.[26] The law does not authorize federal regulators to prevent the closing of any branch. Any branch closings resulting from the proposal will be considered by the appropriate federal supervisor at the next CRA examination of the relevant subsidiary depository institution.

D. Conclusion on CRA Performance Records

The Board has carefully considered all the facts of record, including ICP's comments, in reviewing the CRA performance records of the institutions involved. Based on a review of the entire record, and for the reasons discussed above, the Board concludes that the CRA performance records of the institutions involved, including North Fork Bank, are consistent with approval of the proposal.

Other Considerations

In connection with its review of the public interest factors under section 4 of the BHC Act, the Board also has

24. As noted in the *New York Bancorp Order*, FDIC examiners identified certain technical violations of the fair lending laws during the 1997 Examination, but stated that these matters were addressed by the bank's management during that examination.

25. ICP asserts that North Fork should make public a list of branches under consideration for consolidation or closure. The release of preliminary branch closing data may cause competitive harm to North Fork, and such data is exempt from public disclosure under the Freedom of Information Act (5 U.S.C. § 552(b)(4)) and the Board's Rules Regarding Availability of Information (12 C.F.R. 261.14(a)(4)).

26. Section 42 of the Federal Deposit Insurance Act (12 U.S.C. § 1831r-1), as implemented by the Joint Policy Statement Regarding Branch Closings (64 *Federal Register* 34,844 (1999)), requires that a bank provide the public with at least 30 days notice and the appropriate federal supervisory agency with at least 90 days notice before the date of the proposed branch closing. The bank also is required to provide reasons and other supporting data for the closure, consistent with the institution's written policy for branch closings.

carefully reviewed the financial and managerial resources of North Fork and JSB and their respective subsidiaries and the effect the transaction would have on such resources in light of all the facts of record.[27] The Board has reviewed, among other things, confidential reports of examination and other supervisory information received from the primary federal supervisors of the organizations. Based on all the facts of record, the Board concludes that the financial and managerial resources of the organizations involved in the proposal are consistent with approval.

The record indicates that consummation of the proposal would result in benefits to consumers and businesses. The proposal would enable North Fork to provide Jamaica Savings' customers with access to a broad array of products and services, including commercial bank products, throughout an expanded service area. Additionally, there are public benefits to be derived from permitting capital markets to operate so that bank holding companies may make potentially profitable investments in nonbanking companies and from permitting banking organizations to allocate their resources in the manner they believe is most efficient when, as in this case, those investments are consistent with the relevant considerations under the BHC Act. Based on all the facts of record, the Board has determined that consummation of this proposal can reasonably be expected to produce public benefits that would outweigh any likely adverse effects under the proper incident to banking standard of section 4(c)(8) of the BHC Act.

Conclusion

Based on the foregoing and all the facts of record, the Board has determined that the notice should be, and hereby is, approved. The Board's approval of the proposal is specifically conditioned on compliance by North Fork with the commitments made in connection with this notice. The Board's determination also is subject to all the conditions 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 such modification or termination of the activities of a 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 commitments and conditions relied on by the Board in reaching this decision shall be deemed to be conditions imposed in writing by the Board in connection with its findings and decision and, as such, may be enforced in proceedings under applicable law.

This transaction 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 Federal Reserve Bank of New York, acting pursuant to delegated authority.

By order of the Board of Governors, effective January 10, 2000.

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

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

ROBERT DEV. FRIERSON
Associate Secretary of the Board

North Fork Bancorporation, Inc.
Melville, New York

Order Approving the Acquisition of a Savings Association

North Fork Bancorporation, Inc., Melville, New York ("North Fork"), a bank holding company within the meaning of the Bank Holding Company Act ("BHC Act"), has requested the Board's approval under section 4(c)(8) of the BHC Act (12 U.S.C. § 1843(c)(8)) and section 225.24 of the Board's Regulation Y (12 C.F.R. 225.24) to acquire all the voting shares of Reliance Bancorp, Inc. ("Reliance") and thereby acquire Reliance's wholly owned subsidiary, Reliance Federal Savings Bank ("Reliance Savings"), both of Garden City, New York.[1]

Notice of the proposal, affording interested persons an opportunity to submit comments, has been published (64 *Federal Register* 56,791 (1999)). 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.

North Fork, with total consolidated assets of $11.5 billion, is the 15th largest depository institution in New York, controlling deposits of approximately $6.3 billion, representing 1.5 percent of total deposits in depository institutions in the state ("state deposits").[2] Reliance is the 32nd largest depository institution in New York, controlling deposits of $1.6 billion, representing less than 1 percent of state deposits. On consummation of the proposal and the JSB transaction, North Fork would become the 11th largest depository institution in New York, controlling deposits of approximately $9.1 billion, representing approximately 2.2 percent of state deposits.

The Board previously has determined by regulation that the operation of a savings association by a bank holding company is closely related to banking for purposes of section 4(c)(8) of the BHC Act.[3] The Board requires that savings associations acquired by bank holding companies

1. North Fork's wholly owned subsidiary bank, North Fork Bank, Mattituck, New York, would merge with Reliance Savings, and North Fork Bank would be the surviving institution. The merger is subject to approval by the Federal Deposit Insurance Corporation ("FDIC") under section 18(c) of the Federal Deposit Insurance Act (12 U.S.C. § 1828(c)) ("Bank Merger Act") and by the New York State Banking Department ("NYSBD"). In addition, North Fork has filed a separate notice with the Board to merge with JSB Financial, Inc. ("JSB") and thereby acquire Jamaica Savings FSB ("Jamaica Savings"), both of Lynbrook, New York ("the JSB transaction").

2. Asset data are as of June 30, 1999, and state deposit data are as of June 30, 1998. In this context, depository institutions include commercial banks, savings banks, and savings associations.

3. 12 C.F.R. 225.28(b)(4).

conform their direct and indirect activities to those permissible for bank holding companies under section 4 of the BHC Act. North Fork has committed to conform all the activities of Jamaica Savings to those permissible under section 4(c)(8) of the BHC Act and Regulation Y.

In order to approve the proposal, the Board also is required by section 4(c)(8) of the BHC Act to determine that that the acquisition of Reliance by North Fork "can reasonably be expected to produce benefits to the public . . . that outweigh possible adverse effects, such as undue concentration of resources, decreased or unfair competition, conflicts of interest, or unsound banking practices."[4] As part of its consideration of these factors, the Board has considered carefully the competitive effects of the proposal in light of all the facts of record.[5]

North Fork and Reliance compete directly in the Metropolitan New York/New Jersey banking market.[6] On consummation of the proposal and the JSB transaction, North Fork would be the 10th largest depository institution in the Metropolitan New York/New Jersey banking market, controlling deposits of $9.3 billion, representing approximately 2.2 percent of market deposits.[7] The Herfindahl–Hirschman Index ("HHI") would decrease by 3 points to 783, and numerous competitors would remain in the market.[8] Based on these and all other facts of record, the Board concludes that the consummation of the proposal would not result in any significantly adverse effects on competition or on the concentration of banking resources in the New York banking market or any other relevant banking market.

In acting on notices to acquire a savings association, the Board also reviews the records of performance of the relevant depository institutions under the Community Reinvestment Act (12 U.S.C. § 2901 *et seq.*) ("CRA").[9] In its order approving the notice filed by North Fork in connection with the JSB transaction ("*JSB Order*"), the Board reviewed the record of CRA performance of North Fork Bank in light of all the facts of record, including comments received from Inner City Press/Community on the Move ("ICP"). The comments received from ICP on this proposal are identical to the comments filed with the Board in connection with the JSB transaction. Accordingly, for reasons set forth in detail in the *JSB Order*, and after considering the CRA record of Reliance Savings, the Board concludes that the CRA performance records of North Fork Bank and Reliance Savings are consistent with approval of the proposal.[10]

In connection with its review of the public interest factors under section 4 of the BHC Act, the Board also has carefully reviewed the financial and managerial resources of North Fork and Reliance and their respective subsidiaries and the effect the transaction would have on such resources in light of all the facts of record.[11] The Board has reviewed, among other things, confidential reports of examination and other supervisory information received from the primary federal supervisors of the organizations. Based on all the facts of record, the Board concludes that the financial and managerial resources of the organizations involved in the proposal are consistent with approval.

The record indicates that consummation of the proposal would result in benefits to consumers and businesses. The proposal would enable North Fork to provide Reliance Savings' customers with access to a broad array of products and services, including commercial bank products, throughout an expanded service area. Additionally, there are public benefits to be derived from permitting capital markets to operate so that bank holding companies may make potentially profitable investments in nonbanking companies and from permitting banking organizations to allocate their resources in the manner they believe is most efficient when, as in this case, those investments are consistent with the relevant considerations under the BHC Act. Based on all the facts of record, the Board has determined that consummation of this proposal can reasonably be expected to produce public benefits that would outweigh any likely adverse effects under the proper incident to banking standard of section 4(c)(8) of the BHC Act.

4. 12 U.S.C. § 1843(c)(8).

5. *See First Hawaiian, Inc.*, 79 *Federal Reserve Bulletin* 966 (1993).

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

7. Market share data are as of June 30, 1998, and are based on calculations in which the deposits of thrift institutions, other than Jamaica Savings and Reliance Savings, are included at 50 percent. The Board previously has indicated that thrift institutions have become, or have the potential to become, significant competitors of commercial banks. *See WM Bancorp*, 76 *Federal Reserve Bulletin* 788 (1990); *National City Corporation*, 70 *Federal Reserve Bulletin* 743 (1984). Because the Board has analyzed the competitive factors in this case as if North Fork Bank, Jamaica Savings, and Reliance Savings were a combined entity, the deposits of Jamaica Savings and Reliance Savings are included at 100 percent in the calculation of *pro forma* market share. *See Norwest Corporation*, 78 *Federal Reserve Bulletin* 452 (1992); *First Banks, Inc.*, 76 *Federal Reserve Bulletin* 669 (1990).

8. Under the revised Department of Justice Merger Guidelines, 49 *Federal Register* 26,823 (June 29, 1984), a market in which the post- merger HHI is less than 1000 is considered to be unconcentrated. The Department of Justice has informed the Board that, as a general matter, a bank merger or acquisition 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 or acquisition increases the HHI by 200 points. The Department of Justice has stated that the higher than average HHI thresholds for screening bank mergers for anticompetitive effects implicitly recognize the competitive effects of limited-purpose lenders and other nondepository financial entities.

9. *See, e.g., Banc One Corporation*, 83 *Federal Reserve Bulletin* 602 (1997).

10. The Board also notes that Reliance Savings received an overall rating of "satisfactory" from its primary federal supervisor, the Office of Thrift Supervision, at its most recent evaluation for CRA performance, as of November, 1998.

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

Based on the foregoing and all the facts of record, the Board has determined that the notice should be, and hereby is, approved. The Board's approval of the proposal is specifically conditioned on compliance by North Fork with the commitments made in connection with this notice. The Board's determination also is subject to all the conditions 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 such modification or termination of the activities of a 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 commitments and conditions relied on by the Board in reaching this decision shall be deemed to be conditions imposed in writing by the Board in connection with its findings and decision and, as such, may be enforced in proceedings under applicable law.

This transaction 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 Federal Reserve Bank of New York, acting pursuant to delegated authority.

By order of the Board of Governors, effective January 10, 2000.

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

ROBERT DEV. FRIERSON
Associate Secretary of the Board

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

Centura Banks, Inc.
Rocky Mount, North Carolina

Centura Bank
Rocky Mount, North Carolina

Order Approving the Acquisition of a Bank Holding Company, Merger of Banks, and Establishment of Branches

Centura Banks, Inc. ("CBI"), a bank holding company within the meaning of the Bank Holding Company Act ("BHC Act"), has requested the Board's approval under section 3 of the BHC Act (12 U.S.C. § 1842) to merge with Triangle Bancorp, Inc., Raleigh, North Carolina ("Triangle"), and thereby acquire Triangle's wholly owned subsidiary banks, Triangle Bank, Raleigh, and Bank of Mecklenburg ("Mecklenburg"), Charlotte, both in North Carolina. CBI's lead bank, Centura Bank, a state member bank, has applied under section 18(c) of the Federal Deposit Insurance Act (12 U.S.C. § 1828(c)) (the "Bank Merger Act") to merge with Triangle Bank and Mecklenburg, with Centura Bank as the survivor. Centura Bank has also applied under section 9 of the Federal Reserve Act (12 U.S.C. § 321) to retain and operate branches at the locations of the main offices and branches of Triangle Bank and Mecklenburg.

In addition, CBI has requested the Board's approval under section 4(c)(8) of the BHC Act (12 U.S.C. § 1843(c)(8)) to acquire Triangle's wholly owned nonbanking subsidiary, Coastal Leasing, L.L.C., Greenville, North Carolina ("Coastal Leasing"), and thereby engage in leasing activities in accordance with section 225.28(b)(3) of Regulation Y.

Notice of the applications, affording interested persons an opportunity to submit comments, has been published (64 *Federal Register* 63,814 (1999)). As required by the Bank Merger Act and the Board's Rules of Procedure (12 C.F.R. 262.3(b)), reports on the competitive effects of the merger were requested from the U.S. Attorney General and the other federal banking agencies. The time for filing comments has expired, and the Board has considered the applications and all the facts of record in light of the factors set forth in sections 3 and 4 of the BHC Act, the Bank Merger Act, and section 9 of the Federal Reserve Act.

CBI, with consolidated assets of approximately $8.8 billion, is the 64th largest commercial banking organization in the United States.[1] CBI is the sixth largest commercial banking organization in North Carolina, controlling deposits of $5.5 billion, representing 5.5 percent of the total deposits in commercial banking organizations in North Carolina. Triangle, with consolidated assets of approximately $2.3 billion, is the 144th largest commercial banking organization in the United States. Triangle is the eighth largest commercial banking organization in North Carolina, controlling deposits of $1.8 billion, representing 1.7 percent of the total deposits in commercial banking organizations in North Carolina.

After consummation of the proposal, CBI would become the 58th largest commercial banking organization in the United States, with consolidated assets of approximately $11 billion and would remain the sixth largest commercial banking organization in North Carolina, controlling deposits of $7 billion, representing 6.9 percent of the total deposits in commercial banking organizations in North Carolina.

Competitive Considerations

Section 3 of the BHC Act prohibits the Board from approving a proposal that would result in a monopoly or be in furtherance of an attempt to monopolize the business of banking. The BHC Act also prohibits the Board from approving a proposal that would substantially lessen competition in any relevant banking market unless the anticompetitive effects of the proposal in that banking market are clearly outweighed in the public interest by the probable

1. Asset data are as of September 30, 1999, and deposit data are as of June 30, 1998.

effect of the proposal in meeting the convenience and needs of the community to be served.[2]

CBI and Triangle compete directly in eighteen banking markets.[3] The Board has carefully reviewed the competitive effects of the proposal in each of these banking markets in light of all the facts of record, including the number of competitors that would remain in the market, the share of total deposits in depository institutions[4] in the market ("market deposits") controlled by each competitor in the market, the concentration level of market deposits in the market and the increase in this level as measured by the Herfindahl–Hirschman Index ("HHI") under the Department of Justice Merger Guidelines ("DOJ Guidelines"),[5] and other characteristics of the market.

Banking Markets without Divestitures. Consummation of the proposal without divestitures would be consistent with Board precedent and the DOJ Guidelines in eleven banking markets: Charlotte-Rock Hill, Durham-Chapel Hill, Fayetteville, Goldsboro, Greenville, New Bern, Raleigh, Richmond County, Robeson County, Wilmington, and Sanford.[6] In these markets, the Board has determined, in light of the number of competitors that would remain in each market, the characteristics of each market, the projected increase in the concentration of total deposits in depository institutions in each market, and the resulting market share, that consummation of the proposal would not likely result in a significantly adverse effect on competition.

Banking Markets with Proposed Divestitures. In the seven remaining banking markets in which CBI and Triangle directly compete, the resulting HHI would exceed the DOJ Guidelines. In order to mitigate the potential anticompetitive effects of the proposal in five of these markets (Columbus County, Granville County, Roanoke Rapids, Warren County, and Washington County), CBI has committed to divest a total of eight branches, controlling $129.5 million in deposits.[7] After accounting for the proposed divestitures, consummation of the proposal would be consistent with Board precedents and the DOJ Guidelines in these five markets.[8]

Taking into account market size, the number of competitors in each market and the share of total deposits in depository institutions in each market controlled by each competitor, consummation of the proposal would not likely result in a significantly adverse effect on competition in any of the five markets.

Rocky Mount and Duplin County Markets. Consummation of the proposal in the Rocky Mount and Duplin County markets would exceed the DOJ Guidelines. In both markets, the Board has considered whether other factors either mitigate the competitive effects of the proposal in the markets or indicate that the proposal would have a significantly adverse effect on competition.[9] In the Rocky Mount market, CBI has committed to divest ten Triangle Bank branches that control a total of $188.1 million in deposits to two in-market competitors. With these divestitures, the *pro forma* HHI increase in the banking market would exceed DOJ Guidelines by a moderate amount.

Centura Bank is the largest depository institution in the Rocky Mount market, controlling deposits of $733 million, representing approximately 34.4 percent of market deposits. Triangle Bank is the fourth largest depository institution in the market, controlling deposits of $284.9 million, representing approximately 13.4 percent of market deposits. On consummation of the proposal, and after accounting for the proposed divestitures, Centura Bank would remain the largest depository institution in the market, controlling deposits of $829.8 million, representing approximately 39 percent of market deposits. The HHI would increase 277 points to 2323.

A number of factors indicate that the competitive effects of the proposal are not likely to be significantly adverse in the Rocky Mount market. After consummation of the proposal and the divestitures, ten depository institutions would operate in the market. Two depository institutions other than Centura Bank each would control more than 10 percent of market deposits and another three institutions each

2. *See* 12 U.S.C. § 1842(c).

3. These banking markets are described in Appendix A.

4. In this context, depository institutions include commercial banks, savings banks, and savings associations. Market share data are based on calculations that include the deposits of thrift institutions at 50 percent. The Board previously has indicated that thrift institutions have become, or have the potential to become, significant competitors of commercial banks. *See, e.g., Midwest Financial Group* 75 *Federal Reserve Bulletin* 386 (1989); *National City Corporation*, 70 *Federal Reserve Bulletin* 743 (1983). 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).

5. Under the DOJ Guidelines, 49 *Federal Register* 26,923 (1984), a market is considered moderately concentrated when the post-merger HHI is between 1000 and 1800, and is considered highly concentrated when the post-merger HHI is more than 1800. The Department of Justice has informed the Board that a bank merger or acquisition generally will not be challenged (in the absence of other factors indicating anticompetitive effects) unless the post-merger HHI is at least 1800 and the merger increases the HHI by more than 200 points. The Department of Justice has stated that the higher than normal HHI thresholds for screening bank mergers for anitcompetitive effects implicitly recognize the competitive effects of limited-purpose lenders and other nondepository financial institutions.

6. The effects of the proposal on the concentration of banking resources in these markets are described in Appendix B.

7. The competitive effects of the proposal in the Granville County, Washington County, Roanoke Rapids, Columbus County, and Warren County markets are summarized in Appendix B.

8. Centura has committed that, if it is unsuccessful in completing the divestitures within the 180-day period, it will transfer the unsold branch(es) to an independent trustee that is acceptable to the Board and will instruct the trustee to sell the branch(es) promptly to an alternative purchaser, or alternative purchasers, acceptable to the Board. *See BankAmerica Corporation*, 78 *Federal Reserve Bulletin* 338 (1992); *United New Mexico Financial Corporation*, 77 *Federal Reserve Bulletin* 484 (1991).

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

would control more than 5 percent of market deposits. In addition, the Rocky Mount banking market appears to be attractive for entry. In December 1998, a *de novo* savings bank began operations in the banking market, and another commercial savings bank has received a charter and plans to open in February 2000.

CBI does not propose any divestitures in the Duplin County market, and the post-consummation increase in the HHI would exceed the DOJ Guidelines by a small margin. Centura Bank is the second largest depository institution in the Duplin County market, controlling deposits of $46.7 million, representing approximately 15.8 percent of market deposits. Triangle Bank is the sixth largest depository institution in the market, controlling deposits of $19 million, representing approximately 6.5 percent of market deposits. After consummation of the proposal, Centura Bank would become the second largest depository institution in the market, controlling deposits of $65.7 million, representing 22.3 percent of market deposits. The HHI would increase 204 points to 2910, and the market would remain highly concentrated.

Although consummation of this proposal would eliminate some existing competition, certain factors indicate that the competitive effects of the proposal are not likely to be significantly adverse. After consummation of the proposal, five depository institutions would remain in the Duplin County market, including a depository institution other than Centura Bank that would control 45.1 percent of market deposits. Two other depository institutions in the market would each control more than 10 percent of market deposits, and one would have a market share of more than 7 percent.

The Department of Justice has reviewed the proposal, including its effects on the Rocky Mount and Duplin County banking markets, and advised the Board that, in light of the proposed divestitures, consummation of the proposal likely would not have a significantly adverse effect on competition in any relevant banking market. The Office of the Comptroller of the Currency and the Federal Deposit Insurance Corporation have been afforded an opportunity to comment and have not objected to consummation of the proposal.

After carefully reviewing all the facts of record, including CBI's divestiture commitments and other the mitigating factors in the Rocky Mount and Duplin County banking markets, the Board concludes that consummation of the proposal would not result in any significantly adverse effects on competition or on the concentration of banking resources in the banking markets in which CBI and Triangle directly compete or in any other relevant banking market.

Other Considerations

In reviewing this proposal under the BHC Act and section 9 of the Federal Reserve Act the Board also has considered the financial and managerial resources and future prospects of the companies and banks involved, the convenience and needs of the communities to be served, and certain other supervisory factors. The Board has reviewed these factors in light of the record, including supervisory reports of examination assessing the financial and managerial resources of the organizations and financial information provided by CBI. Based on all the facts of record, the Board concludes that the financial and managerial resources and the future prospects of CBI, Triangle, and their respective subsidiary banks are consistent with approval, as are the other supervisory factors the Board must consider. In addition, considerations related to the convenience and needs of the communities to be served,[10] including the records of performance of the institutions involved under the Community Reinvestment Act (12 U.S.C. § 2901 *et seq.*), are consistent with approval of the proposal.[11]

Nonbanking Activities

CBI also has filed a notice under section 4(c)(8) of the BHC Act to acquire Triangle's wholly owned nonbanking subsidiary, Coastal Leasing, and thereby engage in leasing activities. The Board has determined by regulation that leasing is closely related to banking for the purposes of the BHC Act.[12] CBI has committed to conduct this nonbanking activity in accordance with the limitations set forth in Regulation Y and the Board's orders and interpretations governing leasing activities.

In order to approve a notice under section 4(c)(8) of the BHC Act, the Board also must determine that the proposed activities are a proper incident to banking, that is, that the proposal "can reasonably be expected to produce benefits to the public, 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 evaluation of these factors, the Board considers the financial and managerial resources of the notificant and its subsidiaries, including the companies to be acquired, and the effect of the proposed transaction on

10. The Board received comments from the Southern Rural Development Initiative ("SRDI") and the Community Reinvestment Association of North Carolina ("CRANC"), both in Raleigh, North Carolina. CRANC commented favorably on the records of CBI and Centura Bank in meeting the credit needs of communities in North Carolina, and commended CBI's interest in maintaining a presence in rural North Carolina banking markets. Both commenters stated that they were not protesting the proposal; nevertheless, they expressed concern about CBI's minority equity interest in a subprime lender. SRDI and CRANC noted, however, that CBI and the subprime lender appeared committed to conducting their operations in accordance with applicable law. CRANC also encouraged Centura Bank to improve its lending record to African Americans and in low-income communities, and noted that the bank intended to work with community groups to address concerns in these areas.

11. Centura Bank, Triangle Bank, and Mecklenburg each received a rating of "satisfactory" at their most recent CRA performance evaluations as of January 20, 1998, September 15, 1997, and September 14, 1998, respectively.

12. *See* 12 C.F.R. 225.28(b)(3).

13. 12 U.S.C. § 1843(c)(8).

those resources. For the reasons noted above, and based on all the facts of record, the Board has concluded that financial and managerial considerations are consistent with approval of the notice.

The Board also has considered the competitive effects of the proposed acquisition by CBI of Coastal Leasing. Because CBI does not currently compete with Coastal Leasing in its marketing area, the Board concludes that it is unlikely that significantly adverse competitive effects would result from the nonbanking acquisition proposed in the transaction.

The Board expects that the proposed transaction would give CBI an increased ability to serve the needs of its customers. In addition, there are public benefits to be derived from permitting capital markets to operate so that bank holding companies can make potentially profitable investments in nonbanking companies and from permitting banking organizations to allocate their resources in the manner they consider to be most efficient when such investments are consistent, as in this case, with the relevant considerations under the BHC Act.

The Board also concludes that the conduct of the proposed nonbanking activity within the framework of Regulation Y and Board precedent is not likely to result in adverse effects, such as undue concentration of resources, decreased or unfair competition, conflicts of interests, or unsound banking practices, that would outweigh the public benefits of the proposal, such as increased customer convenience and gains in efficiency. Accordingly, based on all the facts of record, the Board has determined that the balance of public interest factors that the Board must consider under the proper incident to banking standard of section 4(c)(8) of the BHC Act is favorable and consistent with approval of this proposal.

Conclusion

Based on the foregoing and all the facts of record, the Board has determined that the applications and notice should be, and hereby are, approved. The Board's approval is specifically conditioned on compliance by CBI with all the commitments made in connection with this application and with the conditions in this order, including CBI's divestiture commitments. The Board's determination on the nonbanking activity 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 such modification or termination of the activities of a bank holding company or any of its subsidiaries as the Board finds necessary to ensure compliance with, and to prevent evasion of, the provisions of the BHC Act and the Board's regulations and orders thereunder. For purposes of this action, the commitments and conditions relied on by the Board in reaching its decision are deemed to be conditions imposed in writing by the Board in connection with its findings and decision and, as such, may be enforced in proceedings under applicable law.

The banking acquisitions shall not be consummated before the fifteenth calendar day following the effective date of this order, and the proposal shall not be consummated later than three months after the effective date of this order, unless such period is extended for good cause by the Board or by the Federal Reserve Bank of Richmond, acting pursuant to delegated authority.

By order of the Board of Governors, effective January 27, 2000.

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

ROBERT DEV. FRIERSON
Associate Secretary of the Board

Appendix A
North Carolina Banking Markets in Which CBI and Triangle Directly Compete

Charlotte: Charlotte, North and South Carolina Rand McNally Marketing Area ("RMA").
Columbus County: Columbus County.
Duplin County: Duplin County.
Durham: Durham, North Carolina RMA and the non-RMA portions of Durham and Orange Counties, and Chatham County.
Fayetteville: Fayetteville, North Carolina RMA and the non-RMA portion of Cumberland County.
Goldsboro: Goldsboro, North Carolina RMA and the non-RMA portion of Wayne County.
Granville County: Granville County, excluding the Durham RMA.
Greenville: Greenville, North Carolina RMA and the non-RMA portion of Pitt County.
New Bern: Craven, Pamlico, and Carteret Counties, and the eastern half of Jones County.
Raleigh: Raleigh, North Carolina RMA and the non-RMA portions of Franklin, Johnston, Wake, and Harnett Counties, excluding the Fayetteville RMA.
Richmond County: Richmond County.
Roanoke Rapids: Halifax and Northampton Counties.
Robeson County: Robeson County.
Rocky Mount: the Rocky Mount RMA, and the non-RMA portions of Edgecombe, Nash, and Wilson Counties.
Sanford: Lee County.
Warren County: Warren County.
Washington County: Washington County.
Wilmington: Wilmington, North Carolina RMA and the non-RMA portion of Brunswick County, excluding the Myrtle Beach-Conway RMA, and Pender County.

Appendix B
Summary of Pro Forma Market Structure

A. Banking Markets Without Divestitures and HHIs Within DOJ Guidelines

Charlotte

CBI is the tenth largest depository institution in the market, controlling deposits of approximately $252.3 million, representing less than 1 percent of market deposits. Triangle is the eleventh largest depository institution in the market, controlling approximately $196.7 million in deposits, representing less than 1 percent of market deposits. After consummation of the proposal, CBI would be the ninth largest depository institution in the market, controlling approximately $449 million, representing 1.7 percent of market deposits. The HHI would increase 1 point to 3534.

Durham

CBI is the sixth largest depository institution in the market, controlling deposits of approximately $197.1 million, representing 5.1 percent of market deposits. Triangle is the seventh largest depository institution in the market, controlling approximately $160.6 million in deposits, representing 4.1 percent of market deposits. After consummation of the proposal, CBI would be the fifth largest depository institution in the market, controlling approximately $357.6 million, representing 9.2 percent of market deposits. The HHI would increase 42 points to 1710.

Fayetteville

CBI is the fourth largest depository institution in the market, controlling deposits of approximately $160.3 million, representing 10.8 percent of market deposits. Triangle is the eighth largest depository institution in the market, controlling approximately $30.2 million in deposits, representing 2 percent of market deposits. After consummation of the proposal, CBI would be the third largest depository institution in the market, controlling approximately $190.4 million, representing 12.8 percent of market deposits. The HHI would increase 44 points to 1942.

Goldsboro

CBI is the fourth largest depository institution in the market, controlling deposits of approximately $88.4 million, representing 9.8 percent of market deposits. Triangle is the fifth largest depository institution in the market, controlling approximately $72.1 million in deposits, representing 8 percent of market deposits. After consummation of the proposal, CBI would be the third largest depository institution in the market, controlling $160.5 million, representing approximately 17.9 percent of market deposits. The HHI would increase 157 points to 2215.

Greenville

CBI is the fifth largest depository institution in the market, controlling deposits of approximately $100.3 million, representing 10 percent of market deposits. Triangle is the sixth largest depository institution in the market, controlling approximately $47.9 million in deposits, representing 4.8 percent of market deposits. After consummation of the proposal, CBI would be the third largest depository institution in the market, controlling $148.2 million, representing 14.8 percent of market deposits. The HHI would increase 95 points to 1754.

New Bern

CBI is the fifth largest depository institution in the market, controlling deposits of approximately $85.6 million, representing 6.2 percent of market deposits. Triangle is the sixth largest depository institution in the market, controlling approximately $58.6 million in deposits, representing 4.2 percent of market deposits. After consummation of the proposal, CBI would be the fourth largest depository institution in the market, controlling $144.2 million, representing 10.4 percent of market deposits. The HHI would increase 51 points to 2123.

Raleigh

CBI is the seventh largest depository institution in the market, controlling deposits of approximately $484.7 million, representing 6.4 percent of market deposits. Triangle is the eighth largest depository institution in the market, controlling approximately $350.9 million in deposits, representing 4.7 percent of market deposits. After consummation of the proposal, CBI would be the fourth largest depository institution in the market, controlling $835.6 million, representing 11.1 percent of market deposits. The HHI would increase 60 points to 1217.

Richmond County

CBI is the third largest depository institution in the market, controlling deposits of approximately $50.7 million, representing 15 percent of market deposits. Triangle is the sixth largest depository institution in the market, controlling approximately $16.3 million in deposits, representing 4.8 percent of market deposits. After consummation of the proposal, CBI would be the third largest depository institution in the market, controlling $67 million, representing 19.8 percent of market deposits. The HHI would increase 144 points to 2379.

Robeson County

CBI is the sixth largest depository institution in the market, controlling deposits of approximately $36.1 million, representing 5.5 percent of market deposits. Triangle is the fourth largest depository institution in the market, controlling approximately $78.9 million in deposits, representing 11.9 percent of market deposits. After consummation of the proposal, CBI would be the third largest depository institution in the market, controlling $115 million, representing 17.4 percent of market deposits. The HHI would increase 130 point to 2403.

Sanford

CBI is the second largest depository institution in the market, controlling deposits of approximately $106.1 million, representing 19.6 percent of market deposits. Triangle is the eighth largest depository institution in the market, controlling approximately $13.6 million in deposits, representing 2.5 percent of market deposits. After consummation of the proposal, CBI would be the second largest depository institution in the market, controlling $119.7 million, representing 22.1 percent of market deposits. The HHI would increase 99 points to 2174.

Wilmington

CBI is the fifth largest depository institution in the market, controlling deposits of approximately $227.9 million, representing 8.9 percent of market deposits. Triangle is the twelfth largest depository institution in the market, controlling approximately $31.4 million in deposits, representing 1.2 percent of market deposits. After consummation of the proposal, CBI would be the fifth largest depository institution in the market, controlling $259.3 million, representing approximately 10.2 percent of market deposits. The HHI would increase 22 points to 1539.

B. Banking Markets With Divestitures and HHIs Within DOJ Guidelines.

Columbus County

CBI is the second largest depository institution in the market, controlling deposits of $66.6 million, representing approximately 14.4 percent of market deposits. Triangle is the fourth largest depository institution in the market, controlling deposits of $47.2 million, representing approximately 10.2 percent of market deposits. CBI proposes to divest one branch with total deposits of approximately $24.5 million to an in-market competitor. On consummation of the proposal, and after accounting for the proposed divestiture, CBI would remain the second largest depository institution in the market, controlling deposits of $89.3 million, representing approximately 19.3 percent of market deposits. The HHI would increase 146 points to 3739.

Granville County

CBI is the third largest depository institution in the market, controlling deposits of $50.6 million, representing approximately 20.2 percent of market deposits. Triangle is the fourth largest depository institution in the market, controlling deposits of $40.1 million, representing approximately 16 percent of market deposits. CBI proposes to divest Triangle's two branches in the market to an out-of-market competitor. On consummation of the proposal, and after accounting for the proposed divestitiures, CBI would remain the third largest depository institution in the market, controlling deposits of $50.6 million, representing approximately 20.2 percent of market deposits. The HHI would remain unchanged at 2338.

Roanoke Rapids

CBI is the largest depository institution in the market, controlling deposits of $190.7 million, representing approximately 36.3 percent of market deposits. Triangle is the fourth largest depository institution in the market, controlling deposits of $39.1 million, representing approximately 7.4 percent of market deposits. CBI proposes to divest two branches with total deposits of approximately $23.9 million to an out-of-market competitor. On consummation of the proposal, and after accounting for the proposed divestitures, CBI would remain the largest depository institution in the market, controlling deposits of $205.9 million, representing approximately 39.2 percent of market deposits. The HHI would increase 183 points to 2772.

Warren County

CBI is the second largest depository institution in the market, controlling deposits of $20.9 million, representing approximately 20.3 percent of market deposits. Triangle is the fourth largest depository institution in the market, controlling deposits of $11.1 million, representing approximately 10.8 percent of market deposits. CBI proposes to divest Triangle's one branch in the market to an out-of-market competitor. On consummation of the proposal, and after accounting for the proposed divestiture, CBI would remain the second largest depository institution in the market, controlling deposits of $20.9 million, representing approximately 20.3 percent of market deposits. The HHI would remain unchanged 3500.

Washington County

CBI is the third largest depository institution in the market, controlling deposits of $26.4 million, representing approximately 23.8 percent of market deposits. Triangle is the second largest depository institution in the market, controlling deposits of $30 million, representing approximately 27.1 percent of market deposits. CBI proposes to divest Triangle's two branches in the market to an out-of-market competitor. On consummation of the proposal, and after accounting for the proposed divestitures, CBI would remain the third largest depository institution in the market, controlling deposits of $26.4 million, representing approximately 23.8 percent of market deposits. The HHI would remain unchanged at 2469.

ORDERS ISSUED UNDER INTERNATIONAL BANKING ACT

E. Sun Commercial Bank, Limited Taipei, Taiwan

Order Approving Establishment of a Branch

E. Sun Commercial Bank, Limited ("Bank"), Taipei, Taiwan, a foreign bank within the meaning of the International Banking Act ("IBA"), has applied under section 7(d) of the IBA (12 U.S.C. § 3105(d)) to establish a state-licensed branch in Los Angeles, California. The Foreign Bank Supervision Enhancement Act of 1991, which amended the IBA, provides that a foreign bank must obtain the approval of the Board to establish a branch in the United States.

Notice of the application, affording interested persons an opportunity to comment, has been published in a newspaper of general circulation in Los Angeles, California (*San Gabriel Valley Tribune*, July 12, 1999). The time for filing comments has expired, and the Board has considered the application and all comments received.

Bank, with total consolidated assets of approximately $6.3 billion, is a full-service commercial bank.[1] Its shares are publicly traded and widely held. Bank operates 37 branches and an overseas banking unit in Taiwan, and representative offices in The Philippines and Hong Kong. Bank currently does not have any operations in the United States.

The purpose of the proposed branch is to allow Bank to better serve the needs of its customers that have business interests in the United States. In addition, the proposed office would seek to develop new customers among U.S. businesses and individuals who have business interests in Taiwan. The activities of the proposed branch office would include commercial lending, mortgage lending, syndicated and participation loans, purchasing and selling interbank funds, maintaining credit balances and deposit accounts, and letter of credit services. Bank would be a qualifying foreign business organization within the meaning of Regulation K (12 C.F.R. 211.23(b)).

In order to approve an application by a foreign bank to establish a branch in the United States, the IBA and Regulation K require the Board to determine that the foreign bank applicant engages directly in the business of banking outside of the United States, and has furnished to the Board the information it needs to assess the application adequately. The Board also shall take into account whether the foreign bank and any foreign bank parent is subject to comprehensive supervision or regulation on a consolidated basis by its home country supervisor (12 U.S.C. § 3105(d)(2); 12 C.F.R. 211.24).[2] The Board may also take into account additional standards as set forth in the IBA and Regulation K (12 U.S.C. § 3105(d)(3)-(4); 12 C.F.R. 211.24(c)(2)-(3)).

As noted above, Bank engages directly in the business of banking outside the United States. Bank also has provided the Board with information necessary to assess the application through submissions that address the relevant issues. With respect to supervision by home country authorities, the Board previously has determined, in connection with applications involving other banks in Taiwan, that those banks were subject to home country supervision on a consolidated basis.[3] Bank is supervised by the Ministry of Finance ("Ministry") and the Taiwan central bank on substantially the same terms and conditions as those other banks. Based on all the facts of record, the Board has determined that Bank is subject to comprehensive supervision on a consolidated basis by its home country supervisors.

The Board has also taken into account the additional standards set forth in section 7 of the IBA and Regulation K (*see* 12 U.S.C. § 3105(d)(3)-(4); 12 C.F.R. 211.24(c)(2)). The Ministry has no objection to the establishment of the proposed branch.

Bank must comply with the minimum capital standards of the Basel Capital Accord, as implemented by Taiwan. Bank's capital exceeds these minimum standards and can be considered equivalent to capital that would be required of a U.S. banking organization. Managerial and other financial resources of Bank are also considered consistent with approval, and Bank appears to have the experience and capacity to support the proposed branch. Bank has established controls and procedures for the proposed branch to ensure compliance with U.S. law, as well as controls and procedures for its worldwide operations generally.

With respect to access to information about Bank's operations, the Board has reviewed the restrictions on

1. All data are as of June 30, 1999.

2. In assessing this standard, the Board considers, among other factors, the extent to which the home country supervisors:

(i) Ensure that the bank has adequate procedures for monitoring and controlling its activities worldwide;

(ii) Obtain information on the condition of the bank and its subsidiaries and offices through regular examination reports, audit reports, or otherwise;

(iii) Obtain information on the dealings with and relationship between the bank and its affiliates, both foreign and domestic;

(iv) Receive from the bank financial reports that are consolidated on a worldwide basis or comparable information that permits analysis of the bank's financial condition on a worldwide consolidated basis;

(v) Evaluate prudential standards, such as capital adequacy and risk asset exposure, on a worldwide basis. These are indicia of comprehensive, consolidated supervision. No single factor is essential, and other elements may inform the Board's determination.

3. *See Taipei Bank*, 79 *Federal Reserve Bulletin* 143 (1993); *United World Chinese Commercial Bank*, 79 *Federal Reserve Bulletin* 146 (1993); *Bank of Taiwan*, 79 *Federal Reserve Bulletin* 541 (1993); *Chiao Tung Bank*, 79 *Federal Reserve Bulletin* 543 (1993); *Medium Business Bank of Taiwan*, 79 *Federal Reserve Bulletin* 807 (1993); *The Farmers Bank of China*, 81 *Federal Reserve Bulletin* 620 (1995); *Taiwan Business Bank*, 81 *Federal Reserve Bulletin* 746 (1995); *First Commercial Bank*, 83 *Federal Reserve Bulletin* 315 (1997); *Land Bank of Taiwan*, 83 *Federal Reserve Bulletin* 336 (1997); *Bank SinoPac*, 83 *Federal Reserve Bulletin* 669 (1997); *Chinatrust Commercial Bank, Ltd.*, 84 *Federal Reserve Bulletin* 1121 (1998).

disclosure in relevant jurisdictions in which Bank operates and has communicated with relevant government authorities regarding access to information. Bank has committed to make available to the Board such information on the operations of Bank and any of its affiliates that the Board deems necessary to determine and enforce compliance with the IBA, the Bank Holding Company Act of 1956, as amended, and other applicable federal law. To the extent that the provision of such information to the Board may be prohibited by law, Bank has committed to cooperate with the Board to obtain any necessary consents or waivers that might be required from third parties for disclosure of such information. In addition, subject to certain conditions, the Ministry may share information on Bank's operations with other supervisors, including the Board. In light of these commitments and other facts of record, and subject to the condition described below, the Board concludes that Bank has provided adequate assurances of access to any necessary information that the Board may request.

On the basis of all the facts of record, and subject to the commitments made by Bank, as well as the terms and conditions set forth in this order, the Board has determined that Bank's application to establish a branch should be, and hereby is, approved. Should any restrictions on access to information on the operations or activities of Bank and its affiliates subsequently interfere with the Board's ability to obtain information to determine and enforce compliance by Bank or its affiliates with applicable federal statutes, the Board may require termination of any of Bank's direct or indirect activities in the United States. Approval of this application also is specifically conditioned on compliance by Bank with the commitments made in connection with this application and with the conditions in this order.[4] The commitments and conditions referred to above are conditions imposed in writing by the Board in connection with its decision and may be enforced in proceedings under 12 U.S.C. § 1818 against Bank and its affiliates.

By order of the Board of Governors, effective January 24, 2000.

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

ROBERT DEV. FRIERSON
Associate Secretary of the Board

4. The Board's authority to approve the establishment of the proposed branch parallels the continuing authority of the State of California to license offices of a foreign bank. The Board's approval of this application does not supplant the authority of the State of California and the State of California Department of Financial Institutions ("Department") to license the proposed office of Bank in accordance with any terms or conditions that the Department may impose.

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

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

Section 3

Applicant(s)	Bank(s)	Effective Date
Wachovia Corporation, Winston-Salem, North Carolina	B C Bankshares, Inc., Canton, Georgia Bank of Canton, Canton, Georgia	January 3, 2000

Sections 3 and 4

Applicant(s)	Bank(s)	Effective Date
Old National Bancorp, Evansville, Indiana	ANB Corporation, Muncie, Indiana American National Bank and Trust Company, Muncie, Indiana Peoples Loan and Trust Bank, Winchester, Indiana Farmers State Bank of Union City, Union City, Ohio American National Trust and Investment Management Company, Muncie, Indiana	January 27, 2000

APPLICATIONS APPROVED UNDER BANK HOLDING COMPANY ACT
By Federal Reserve Banks

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

Section 3

Applicant(s)	Bank(s)	Reserve Bank	Effective Date
Arvest Bank Group, Inc., Bentonville, Arkansas	P & W Bancshares, Inc., Little Rock, Arkansas Central Bank & Trust, Little Rock, Arkansas	St. Louis	December 22, 1999
ASB Management Corp., Anna, Illinois	Anna State Bank, Anna, Illinois	St. Louis	January 7, 2000
Associated Community Bancorp, Inc., Greenwich, Connecticut	The Greenwich Bank and Trust Company, Greenwich, Connecticut Westport National Bank, Westport, Connecticut	New York	January 11, 2000
Banco Santander Central Hispano, S.A., Madrid, Spain	The Royal Bank of Scotland Group, plc, Edinburgh, Scotland	New York	January 11, 2000
Banque Nationale de Paris, Paris, France	BancWest Corporation, Honolulu, Hawaii Bank of the West, San Francisco, California First Hawaiian Bank, Honolulu, Hawaii	San Francisco	January 13, 2000
Belvedere Capital Partners, LLC, San Francisco, California California Community Financial Institutions Fund Limited Partnership, San Francisco, California	Sacramento Commercial Bank, Sacramento, California Sacramento Capital Co., San Francisco, California	San Francisco	January 3, 2000
Bruning Bancshares, Inc., Bruning, Nebraska	The Commercial State Bank, Clay Center, Nebraska	Kansas City	January 13, 2000

Section 3—Continued

Applicant(s)	Bank(s)	Reserve Bank	Effective Date
Bryan-Heritage Limited Partnership, Bryan, Texas Bryan Family Management Trust, Bryan, Texas	The First National Bank of Bryan, Bryan, Texas	Dallas	January 14, 2000
Chestatee Bancshares, Inc., Dawsonville, Georgia	Chestatee State Bank, Dawsonville, Georgia	Atlanta	January 19, 2000
Clintonville Bancshares, Inc., Clintonville, Wisconsin	Nichols Bancorp, Inc., Nichols, Wisconsin Neighborhood State Bank, Nichols, Wisconsin	Chicago	December 29, 1999
Community National Bancorporation, Ashburn, Georgia	Tarpon Financial Corporation, Tarpon Springs, Florida	Atlanta	January 14, 2000
Dacotah Banks, Inc., Aberdeen, South Dakota	Rolla Holding Company, Inc., Rolla, North Dakota	Minneapolis	January 6, 2000
Ellis Bankshares, Inc., Eagle River, Wisconsin	First National Bank of Eagle River, Eagle River, Wisconsin	Minneapolis	December 28, 1999
First Banks Inc., St. Louis, Missouri First Banks, America, Inc., St. Louis, Missouri	Lippo Bank, San Francisco, California	St. Louis	January 5, 2000
First National Bancshares, Inc., Spartanburg, South Carolina	First National Bank of Spartanburg, Spartanburg, South Carolina	Richmond	January 6, 2000
First State Bank of Rushmore KSOP Plan and Trust, Worthington, Minnesota	First Rushmore Bancorporation, Inc., Worthington, Minnesota	Minneapolis	January 7, 2000
Glenwood Bancorporation, Glenwood, Iowa	Frontier Savings Bank, Council Bluffs, Iowa	Chicago	January 14, 2000
Grand Valley Corporation, Grand Junction, Colorado	Heber Valley National Bank, Heber City, Utah	Kansas City	January 6, 2000
Gulf Coast Community Bancshares, Inc., Wewahitchka, Florida	Wewahitchka State Bank, Wewahitchka, Florida	Atlanta	January 4, 2000
Gwinnett Commercial Group, Inc., Lawrenceville, Georgia	First Bank of Gwinnett, Lawrenceville, Georgia	Atlanta	January 4, 2000
Harleysville Savings Financial Corporation, Harleysville, Pennsylvania	Harleysville Savings Bank, Harleysville, Pennsylvania	Philadelphia	January 6, 2000
Hunter Holding Company, Hunter, North Carolina	Coteau Holding Company, Gackle, North Dakota First State Bank of Gackle, Gackle, North Dakota	Minneapolis	January 12, 2000
Iowa State Financial Services Corporation, Fairfield, Iowa	Iowa State Bank & Trust Company, Fairfield, Iowa	Chicago	January 21, 2000
Iowa State Financial Services Corporation, Fairfield, Iowa	North Linn Corporation, Coggon, Iowa Linn County State Bank, Coggon, Iowa	Chicago	January 21, 2000
NCT Holdings, Inc., Greensboro, North Carolina	U.S. Trust Company of North Carolina, Greensboro, North Carolina	New York	January 20, 2000
Oak Financial, Inc., Madison, Wisconsin	Oak Bank, Fitchburg, Wisconsin	Chicago	January 6, 2000

Section 3—Continued

Applicant(s)	Bank(s)	Reserve Bank	Effective Date
Otto Bremer Foundation, St. Paul, Minnesota Bremer Financial Corporation, St. Paul, Minnesota	Northwest Equity Corporation, Amery, Wisconsin Northwest Savings Bank, Amery, Wisconsin	Minneapolis	January 19, 2000
Panola National Bancshares, Inc., Carthage, Texas Panola National Bancshares of Delaware, Inc., Wilmington, Delaware	Panola National Bank, Carthage, Texas	Dallas	December 29, 1999
Pinnacle Bancorp, Inc., Central City, Nebraska	Burns National Bank of Durango, Durango, Colorado Western Bank, Gallup, New Mexico	Kansas City	December 31, 1999
Ridgeway Bancshares, Inc., Ridgeway, South Carolina	Bank of Ridgeway, Ridgeway, South Carolina	Richmond	December 24, 1999
Rivers Ridge Holding Company, Edina, Minnesota	BankVista, Sartell, Minnesota	Minneapolis	December 30, 1999
Sacramento Capital Co., San Francisco, California	Sacramento Commercial Bank, Sacramento, California	San Francisco	January 3, 2000
Spectrum Bancorporation, Inc., Omaha, Nebraska	Citizens Bank, Carlisle, Iowa	Chicago	January 14, 2000
Team Financial Acquisition Subsidiary, Inc., Paola, Kansas Team Financial, Inc., Paola, Kansas Team Financial Employees Stock Ownership Plan, Paola, Kansas	Fort Calhoun Investment Company, Fort Calhoun, Nebraska Fort Calhoun State Bank, Fort Calhoun, Nebraska	Kansas City	January 13, 2000
U.S. Trust Corporation, New York, New York NCT Holdings, Inc., Greensboro, North Carolina	U.S. Trust Company of North Carolina, Greensboro, North Carolina	New York	January 20, 2000
Utah Bancshares, Inc. Ephraim, Utah	Bank of Ephraim, Ephraim, Utah	San Francisco	January 12, 2000
Virginia Commonwealth Financial Corporation, Culpeper, Virginia	Caroline Savings Bank, Bowling Green, Virginia	Richmond	January 14, 2000
Whitney Holding Corporation, New Orleans, Louisiana	Bank of Houston, Houston, Texas	Atlanta	January 13, 2000

Section 4

Applicant(s)	Nonbanking Activity/Company	Reserve Bank	Effective Date
Associated Banc-Corp, Green Bay, Wisconsin	BNC Financial Corporation, St. Cloud, Minnesota	Chicago	December 23, 1999
Bar Harbor Bankshares, Bar Harbor, Maine	Dirigo Investments Inc., Bar Harbor, Maine Bar Harbor Banking and Trust Company, Bar Harbor, Maine	Boston	January 3, 2000

Section 4—Continued

Applicant(s)	Nonbanking Activity/Company	Reserve Bank	Effective Date
Bayerische Hypo- und Vereinsbank AG, Munich, Germany	Babcock & Brown LP, San Francisco, California Babcock, Brown Operating Partnership LP, San Francisco, California Babcock & Brown Holdings Inc., San Francisco, California Babcock & Brown Inc., San Francisco, California	New York	January 7, 2000
Bootheel Bancorp, Inc., Bernie, Missouri	Poplar Bluff Computer Service Center, Inc., Poplar Bluff, Missouri	St. Louis	December 30, 1999
Century South Banks, Inc., Dahlonega, Georgia	Haywood Bancshares, Inc., Waynesville, North Carolina Haywood Savings Bank, Inc., SSB, Waynesville, North Carolina	Atlanta	December 31, 1999
Cera Foundation VZW, Leuven, Belgium Cera Management N.V., Leuven, Belgium Cera Holding, C.V., Leuven, Belgium Cera Ancora N.V., Leuven, Belgium Almanij, N.V., Antwerp, Belgium KBC Bank & Insurance Company, N.V., Brussels, Belgium KBC Bank, N.V., Brussels, Belgium	KBC Financial Products (USA), Inc., New York, New York	New York	January 14, 2000
Citizen's Community Bancorp, Inc., Marco Island, Florida	To engage *de novo* in originating mortgage loans	Atlanta	January 21, 2000
Concord EFS, Inc., Memphis, Tennessee	National Payment Systems, Inc., New York, New York	St. Louis	January 20, 2000
Iowa State Financial Services Corporation, Fairfield, Iowa	Sisler Insurance Agency, Inc., Coggon, Iowa North Linn Corporation, Coggon, Iowa	Chicago	January 21, 2000
NCT Holdings, Inc., Greensboro, North Carolina	NCT Opportunities Inc., Greensboro, North Carolina	New York	January 20, 2000
Sherman County Management, Inc., Loup City, Nebraska	To engage in agency transactional services for customer investments and futures commission merchant activities	Kansas City	December 28, 1999

Section 4—Continued

Applicant(s)	Nonbanking Activity/Company	Reserve Bank	Effective Date
Stichting Prioriteit ABN AMRO Holding, Amsterdam, the Netherlands Stichting Administratiekantoor ABN AMRO Holding, Amsterdam, the Netherlands ABN AMRO Holding N.V., Amsterdam, the Netherlands ABN AMRO Bank, N.V. Amsterdam, the Netherlands ABN AMRO North America, Inc., Chicago, Illinois	ABN AMRO Mortgage Group, Jacksonville, Florida Atlantic Mortgage & Investment Corporation, Jacksonville, Florida	Chicago	January 3, 2000
Susquehanna Bancshares, Inc. Lititz, Pennsylvania	Boston Service Company, Jamesburg, New Jersey	Philadelphia	January 12, 2000
The Toronto-Dominion Bank, Toronto, Canada	CTUSA, F.S.B., Naples, Florida	New York	January 18, 2000
Tri County Investment Company, Inc., Pine Island, Minnesota	Duane Klingsporn Insurance Agency, Pine Island, Minnesota	Minneapolis	January 5, 2000
UBS AG, Zurich, Switzerland North Street Finance LLC, New York, New York	Lucent Technologies Consumer Products L.P., Murray Hill, New Jersey	New York	January 13, 2000
United Financial Holdings, Inc., St. Petersburg, Florida	United Insurance Holdings, Inc., St. Petersburg, Florida	Atlanta	January 7, 2000
Westdeutsche Landesbank Girozentrale, Dusseldorf, Germany	WestLB Panmure Securities Inc., New York, New York	New York	December 30, 1999

Sections 3 and 4

Applicant(s)	Nonbanking Activity/Company	Reserve Bank	Effective Date
Farmers Bancshares, Inc., Hardinsburg, Kentucky	Leitchfield Deposit Bancshares, Inc., Leitchfield, Kentucky Leitchfield Deposit Bank and Trust Company, Leitchfield, Kentucky Leitchfield Bancshares Insurance, Inc., Leitchfield, Kentucky	St. Louis	December 27, 1999
Summit Bancorp, Princeton, New Jersey	NMBT Corp., New Milford, Connecticut NMBT, New Milford, Connecticut	New York	December 30, 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
Bank of Colorado, Fort Lupton, Colorado	Burns National Bank of Durango, Durango, Colorado	Kansas City	December 31, 1999
CivicBank of Commerce, Oakland, California	East County Bank, Antioch, California	San Francisco	December 28, 1999
Gold Bank, Leawood, Kansas	Linn County Bank, La Cygne, Kansas	Kansas City	January 20, 2000
Pinnacle Bank, Papillion, Nebraska	Pinnacle Bank, Lincoln, Nebraska Crete State Bank, Crete, Nebraska	Kansas City	January 13, 2000
United States Trust Company of New York, New York, New York	U.S. Trust Company of New Jersey, West Windsor, New Jersey	New York	January 6, 2000

PENDING CASES INVOLVING THE BOARD OF GOVERNORS

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

Toland v. Federal Reserve System, No. CV-S-99-1769-JBR-RJJ (D. Nevada, filed December 29, 1999). Challenge to income taxation and Federal Reserve notes.

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

Wasserman v. Federal Reserve Bank, No. 99-6280 (2d Cir., filed August 26, 1999). Appeal of district court dismissal of case challenging refusal by the Board and the Federal Reserve Bank of New York to investigate certain matters. On January 19, 2000, the court dismissed the appeal.

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

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

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

Sedgwick v. Board of Governors, No. Civ 99 0702 (D. Arizona, filed April 14, 1999). Action under Federal Tort Claims Act alleging violation of bank supervision requirements. The Board filed a motion to dismiss on June 15, 1999.

Hunter v. Board of Governors, No. 1:98CV02994 (ESH) (D.D.C., filed December 9, 1998). Action under the Freedom of Information Act and the Privacy Act. The Board filed a motion to dismiss or for summary judgment on July 22, 1999.

Folstad v. Board of Governors, No. 1:99 CV 124 (W.D. Mich., filed February 17, 1999). Freedom of Information Act complaint. On November 16, 1999, the district court granted the Board's motion for summary judgment and dismissed the action. On January 14, 2000, the plaintiff filed a notice of appeal.

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

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

Independent Community Bankers 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. On November 2, 1999, the court affirmed the Board's order.

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 appointthe Sixth Amendment to the United States Constitution.[4] Indeed, perhaps in recognition of the fact that the Sixth Amendment applies only to criminal prosecutions, *Hannah v. Larche*, 363 U.S. 420, 440 n.16 (1960), Respondents now merely allege that Enforcement Counsel's investigatory techniques "impaired the effectiveness" of their attorney-client relationship with their former counsel. Joint Request for Interlocutory Review, August 18, 1999, at 12. Again, nothing they cite suggests that substantial grounds exist for a difference of opinion on whether such a claim states a valid affirmative defense. Respondents currently are represented by counsel who are presumably well able to present their defense. No suggestion of interference with that relationship has been made. Enforcement Counsel's alleged interactions with Respondents' former counsel do not implicate any rights of Respondents that would vitiate the charges against them.

Finally, Respondents have also failed to establish any of the remaining prerequisites for interlocutory review with respect to the August 4 Order. Respondents claim that their stricken affirmative defenses will materially advance the termination of these proceedings by permitting them to obtain discovery that will lead to a motion for summary disposition. But as they have provided no legal authority to suggest that their claims, if substantiated, would provide a basis for summary disposition, this argument fails. Moreover, the Board has already rejected the argument that avoidance of unnecessary litigation is enough to warrant interlocutory review of a pretrial order. *Clifford & Altman I*, slip op. at 36, citing *United States v. Taylor*, 881 F.2d 840, 843–44 (9th Cir. 1989), *Laurel Lines S.R.L. v. Chasser*, 490 U.S. 495, 499 (1989).

The Board also rejects Respondents' claim that termination of the proceedings will be materially advanced because the charges against them are based upon "inaccurate and incomplete information" provided by Respondents' former attorneys during the investigation. Joint Reply, September 9, 1999, at 6. Even if Respondents could establish that the attorney-client privilege was breached in providing this information, that would not establish that the information itself was in fact inaccurate or incomplete. At the hearing in this matter, the Respondents will have the opportunity to present any evidence refuting or supplementing in an exculpatory manner the evidence of wrongdoing introduced by Enforcement Counsel. Exploration of the manner in which Enforcement Counsel obtained the information it presents will not advance the resolution of this matter, but would be a needless diversion. *See In the Matter of Northwest Indiana Bancshares, Inc.*, Docket No. 89–001-CMP I1-I7 (September 7, 1990), slip op. at 9–10 (personal motives of examiner who identified violations are irrelevant where documentary evidence substantiates charges), *aff'd sub nom., Stanley v. Board of Governors*, 940 F.2d 267 (7th Cir. 1991); *Towe v. Board of Governors*, 1999 U.S. App. LEXIS 3078 *9 (9th Cir. 1999) (same).

Respondents have also failed to establish that subsequent modification of the ruling at issue would be an "inadequate remedy" or would "cause unusual delay or expense." Unlike a defense based on double jeopardy, where " 'the legal and practical value of the right asserted would be destroyed if not vindicated before trial,' " *Clifford & Altman I* at 33 (quoting *United States v. Ivory*, 29 F.3d 1307, 1311 (8th Cir. 1994)), there is nothing legally inadequate about a subsequent order reversing the ALJ on the issue of these asserted affirmative defenses. Nor would such a reversal result in unusual delay or expense beyond that inherent in any post-trial appeal. Indeed, the issues raised in the stricken defenses are ancillary to the factual record that must be developed and presented at hearing. If at the conclusion of the hearing in these proceedings the Board were to remand the matter for fuller exploration of these issues, the remand would be a limited one, and would not, as Respondents contend, require an entirely new trial.[5]

For these reasons, the Board finds that Respondents have failed to establish any of the necessary prerequisites for interlocutory review. Accordingly, the request for interlocutory review of the August 4 Order is denied.

B. Discovery Orders

Following the issuance of the Notice of Charges, Respondents propounded a 92-item request for production of documents. Enforcement Counsel, while producing over 30 boxes of documents, moved to limit the scope of certain requests and to strike others. The ALJ granted the motion in part by Order of August 12, 1999. In an Order dated September 10, 1999, the ALJ granted Enforcement Counsel's motion to strike Respondents' Second Request for Production of Documents. Finally, in an Order dated September 13, 1999, the ALJ denied Respondents' motion to compel disclosure of documents as to which Enforcement Counsel had claimed a variety of privileges. Respondents seek interlocutory review, in whole or in part, of these three orders.

Discovery orders rarely satisfy the requirements for interlocutory review. *Church of Scientology of California v. United States*, 506 U.S. 9, 18 n.11 (1992). First, a discovery ruling "is committed to the [trial judge's] discretion, and an allegation of abuse does not create a legal issue." *White v. Nix*, 43 F.3d 374, 376 (8th Cir. 1994); *accord, North Carolina Assoc. of Black Lawyers v. North Carolina Board of Law Examiners*, 538 F.2d 547, 548–49 (4th Cir. 1976); *Atlantic City Electric Co. v. A.B. Chance Co.*, 313

4. Respondents do not separately support with argument or citation their claim that Enforcement Counsel's actions amounted to an "abuse of process."

5. Moreover, Respondents claim that the evidence that supports their stricken affirmative defenses also supports their other affirmative defenses. Joint Request, August 18, 1999, at 16. To the extent this is the case, no additional hearing would be necessary at all on a remand to consider the stricken affirmative defenses.

F.2d 431, 434 (2d Cir. 1963).[6] Second, as the Board has previously stated,

> such orders cannot be said to be "controlling" because it is impossible to know whether and to what extent they might control the outcome of the proceeding absent the holding of the hearing, a ruling in the context of that hearing, and the issuance of a recommended decision. "If the final decision is favorable to [Respondents], they [the discovery orders] may never become the subject of an appeal. For these reasons and others, discovery orders are not usually appealable until the litigation has finally ended."

In the Matter of Clifford & Altman, Order On Respondents' Motion for Interlocutory Review of Administrative Law Judge's Order, February 14, 1997, slip op. at 6, quoting *McKesson Corp. v. Islamic Republic of Iran*, 52 F.3d 346, 353 (D.C. Cir. 1995), *cert. denied*, 116 S. Ct. 704 (1996); *accord In the Matter of Pharaon*, No. 91–037-E- I1, Order Denying Motion for Interlocutory Review, September 12, 1995, at 3 (order excluding evidence from the hearing does not involve a controlling question of law or policy).[7]

For the reasons stated below, the Board finds that Respondents have not met their burden under Rule 28 to justify interlocutory review of any of the challenged discovery orders.

1. August 12 Order

Respondents seek interlocutory review of three aspects of the August 12 Order. First, they assert that the ALJ erred in striking, in the absence of evidence making out a *prima facie* case of discrimination, their requests for documents relevant to their affirmative defense that the Board has treated them in a discriminatory manner relative to others who allegedly violated similar provisions of law.[8] Second, they argue that they should be entitled to information relating to the operations of Laredo National Bankshares, Inc. and its subsidiaries, Laredo National Bank and South Texas National Bank, because this information assertedly establishes their good faith, a matter relevant to the determination of the amount of any penalty ultimately assessed. Third, they challenge that part of the August 12 Order that limited their access to information regarding Enforcement Counsel's contact with other government agencies during the investigation to information regarding only those contacts relating to the Notice of Charges.

Respondents have failed to make any of the showings required by Rule 28 to justify interlocutory review with respect to any of these issues. Even if it could be said that the issue of Respondents' right to discovery on a selective prosecution claim absent a *prima facie* showing of discrimination was a "controlling question of law or policy" — and we do not believe that it is—Respondents have not established that "substantial grounds exist for a difference of opinion" on that question.[9] Enforcement Counsel has pointed out that criminal defendants alleging discriminatory prosecution must come forward with evidence of discriminatory treatment before obtaining discovery on the issue. *United States v. Armstrong*, 517 U.S. 456 (1996). Respondents have provided no basis for their argument that in the civil enforcement context they should be permitted discovery with a lesser showing, and have thus failed to establish that "substantial grounds" exist for a "difference of opinion" on this issue.[10] Respondents have similarly failed to establish that interlocutory review of this issue would advance the ultimate termination of the proceeding or that later modification would be an inadequate remedy or cause unusual delay or expense. As discussed above,

6. The Board generally defers to the discovery rulings of administrative law judges, in the same way that district court judges are accorded wide discretion in dealing with such matters. *See In the Matter of Greenberg*, OCC Docket No. AA-EC-90–45 (Board decision dated October 28, 1991), *aff'd*, 968 F.2d 164 (2d Cir. 1992).

7. One exception to this general rule involves orders requiring the production of purportedly privileged information, given the difficulty of vindicating the rights involved in withholding privileged information once disclosed. The Board's Rules include a provision precluding the ALJ from requiring production of documents withheld on grounds of privilege if the party withholding the documents has indicated its intent to move for interlocutory review. 12 C.F.R. § 263.25(g). None of the orders involved in the present requests required production of assertedly privileged material.

8. The documents sought in this connection included, *inter alia*, all minutes of Board meetings in which foreign ownership of United States banks or bank holding companies was referred to; all policy statements, memoranda, advisory opinions, or other writings that refer to the criteria employed by the Board in considering merger applications; and all documents that identify any Order of Investigation, or relate to any ruling or order, involving allegations of violations of the statutory and regulatory provisions at issue in this case.

9. The Board rejects Respondents' alternative assertion that they have met their burden of showing a prima facie case of discriminatory treatment. Their evidence in this regard consists of an affidavit by their counsel, which recounts that he has interviewed unnamed "potential witnesses" who "are familiar" with a named individual who allegedly claimed to these potential witnesses that he had been retained by the Federal Reserve Bank of New York in connection with an application filed by Respondent Hank Rhon. According to the affidavit, this individual allegedly told these potential witnesses that "there was no way the Federal Reserve Board would allow Carlos Hank Rhon or any other Mexican to control an institution the size of LNB." Affidavit of John M. Dowd in Support of Respondents' Joint Opposition to Enforcement Counsel's Motion to Strike Respondents' Second Joint Request for Production of Documents, dated August 17, 1999. This is double hearsay at least, and provides no probative evidence whatever concerning any discriminatory motive in initiating the charges against the Respondents here.

10. Respondents merely cite to the general discovery provision in the Board's Rules permitting discovery of documents having "material relevance to the merits of the pending action." 12 C.F.R. § 263.24(b). This standard is considerably more limited than the analogous provision in Rule 26(b) of the Federal Rules of Civil Procedure permitting discovery of information "relevant to the subject matter involved in the pending action." *See* 61 *Federal Register* 20,338, 20,340 (1996). Accordingly, recitation of this standard does not advance Respondents' position that the Rules permit discovery on an unsubstantiated charge of discriminatory prosecution. Indeed, it is far from obvious that such a charge has any "relevance to the merits of the pending action," a phrase that deliberately focuses on the particular charges brought against the respondents in a given case.

these kinds of errors, if established, can be corrected upon review of the ALJ's recommended decision.

Respondents' arguments with respect to the ALJ's limitation on discovery of documents relating to the operations of Laredo National Bankshares and its subsidiaries, and with respect to Enforcement Counsel's contacts with other government agencies, do not bear extended discussion. Respondents have not established that either of these rulings involved a controlling question of law, or that reversal of these rulings would materially advance the termination of this case. The documents relating to Laredo National Bankshares and its subsidiaries relate solely to the factor of Respondents' "good faith" that might mitigate any civil money penalty ultimately assessed after a hearing, 12 U.S.C. § 1818(i)(2)(G). These documents thus would not tend to advance the termination of this case at all, since they would be irrelevant prior to the conclusion of the hearing. Respondents' stated purpose in seeking to expand discovery into Enforcement Counsel's contacts with other agencies is "so that Respondents may properly serve subpoenas on these agencies," but the ALJ has already required Enforcement Counsel to identify agencies with which Board staff had contact about the Notice of Charges, so additional discovery is unnecessary for that purpose. Nor do Respondents establish any other basis to justify interlocutory review of these discovery orders.

2. September 10 Order

With respect to the September 10 Order, Respondents challenge the ALJ's denial of access to documents pertaining to an individual who apparently provided information to the Federal Reserve concerning Respondents and who may have sparked the investigation that led to the Notice of Charges, but who will not be called as a witness by Enforcement Counsel.[11] Again, Respondents have failed to establish any of the requisite factors for interlocutory review on the issue of their access to this material. The question at the hearing will be whether the charges in the Notice are established by substantial evidence in the record; thus, information bearing on that issue is of "material relevance to the merits of the pending action" and a proper subject of discovery. 12 C.F.R. § 263.24(b). Such documents were sought and provided in connection with Respondents' initial document request. The source of the Board's interest in Respondents' activities is simply irrelevant to whether the charges can be sustained. *[See In the Matter of Northwest Indiana Bancshares, supra; Towe v. Board of Governors, supra].*

3. September 13 Order

Finally, Respondents seek interlocutory review of the ALJ's determination in the September 13 Order that approved the manner in which Enforcement Counsel invoked various privileges to withhold a number of documents. This is a typical discovery matter that is appropriately dealt with at the conclusion of a case and not through interlocutory review. Respondents have suggested no reason why resolution of this issue now would materially advance the ultimate termination of this case, or why subsequent modification would be an inadequate remedy or cause unusual delay or expense. Nor can the manner in which the privileges were asserted be considered a "controlling" question of law in these enforcement proceedings.

For these reasons, Respondents' requests for interlocutory review of the Orders of August 12, September 10, and September 13, 1999, are denied.

So ordered, this 10th day of January, 2000.

BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM

JENNIFER J. JOHNSON
Secretary of the Board

11. The documents sought included all documents that relate to any communication between this individual and Board employees; all documents that relate to this individual's communications with anyone concerning the Respondents; and this individual's personnel file.

FINAL ENFORCEMENT ORDERS ISSUED BY THE BOARD OF GOVERNORS

Charles A. Drummond
Denver, Colorado

The Federal Reserve Board announced on January 19, 2000, the issuance of an Order of Assessment of a Civil Money Penalty against Charles A. Drummond, a former president, chief executive officer and director, and an institution-affiliated party of the Professional Bank, Denver, Colorado.

Solomon King
Cooper City, Florida

The Federal Reserve Board announced on January 19, 2000, the issuance of a Consent Order against Solomon King, an institution-affiliated party of the First Western Bank, Cooper City, Florida, a state member bank.

Christopher J. Woods
Elmwood Park, Illinois

The Federal Reserve Board announced on January 19, 2000, the issuance of an Order of Prohibition against Christopher J. Woods, a former assistant vice president and institution-affiliated party of the Midwest Bank and Trust Company, Elmwood Park, Illinois.

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
RHS	Rural Housing Service
RP	Repurchase agreement
RTC	Resolution Trust Corporation
SCO	Securitized credit obligation
SDR	Special drawing right
SIC	Standard Industrial Classification
VA	Department of Veterans Affairs

GENERAL INFORMATION

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

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

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

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

1.10 RESERVES, MONEY STOCK, AND DEBT MEASURES

Percent annual rate of change, seasonally adjusted[1]

Monetary or credit aggregate	1999				1999				
	Q1	Q2	Q3	Q4	Aug.	Sept.	Oct.	Nov.	Dec.
Reserves of depository institutions[2]									
1 Total	−1.2	−6.6	−15.4	−7.9	2.5	1.3	−33.3	7.5[r]	9.7
2 Required	1.0	−5.6	−15.0	−9.4	1.1	−.6	−33.0	2.2[r]	10.7
3 Nonborrowed	−1.3	−6.7	−17.1	−7.4	1.6	1.5	−32.0	8.9[r]	7.3
4 Monetary base[3]	9.1	10.1	8.5	20.0	7.1	11.3	16.6	26.3	44.2
Concepts of money and debt[4]									
5 M1	2.8	3.5	−2.2	4.4	3.2	−9.7	5.5[r]	10.3[r]	18.4
6 M2	7.2	5.8	5.3	5.8	5.8	5.1	5.2	5.5	9.1
7 M3	7.6	5.8	5.5	10.9	4.6[r]	6.0	9.4[r]	16.8[r]	18.8
8 Debt	6.7	6.9[r]	6.0	n.a.	6.7	7.0[r]	6.1[r]	4.6	n.a.
Nontransaction components									
9 In M2[5]	8.7	6.5	7.8	6.2	6.7	9.8	5.1	4.0	6.2
10 In M3 only[6]	8.7	5.8	5.9[r]	25.1	1.5	8.4[r]	21.0[r]	47.8[r]	44.3
Time and savings deposits									
Commercial banks									
11 Savings, including MMDAs	11.6	9.7	11.7	5.1	8.0	14.5[r]	4.2	−1.4[r]	−1.2
12 Small time[7]	−5.5	−3.3	1.7[r]	7.7	4.3	8.0[r]	7.4[r]	9.8	6.9
13 Large time[8,9]	.0	−3.1	3.1[r]	43.5	−13.6[r]	20.3	53.2[r]	65.0[r]	60.3
Thrift institutions									
14 Savings, including MMDAs	12.8	14.6	15.0	−1.7	4.2	4.5	−3.4	−6.3	−5.3
15 Small time[7]	−6.5	−7.1	−3.9	5.7	1.9	4.2	5.3	9.1	6.4
16 Large time[8]	7.6	−7.0	4.2	3.1	6.8	9.4	−8.0	12.1[r]	2.7
Money market mutual funds									
17 Retail	20.5	10.7	6.9	11.5	9.9	8.7	9.6	11.7	23.4
18 Institution-only	17.9	14.5	7.5	25.2	22.9	6.3	25.1	37.4	36.5
Repurchase agreements and Eurodollars									
19 Repurchase agreements[10]	14.1	−2.9	16.2	10.4	7.0	−1.2	−12.0[r]	39.0	46.5
20 Eurodollars[10]	−.8	32.0	−7.7	4.6	−33.3	−6.0	−22.5[r]	62.6[r]	31.9
Debt components[4]									
21 Federal	−3.1	−2.3	−.3	n.a.	1.0	−4.2	−5.8	−7.7	n.a.
22 Nonfederal	9.6	9.7	7.7[r]	n.a.	8.3	10.2	9.3[r]	8.0	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, 1999, Oct.	Nov.	Dec.	Average of daily figures for week ending on date indicated, 1999, Nov. 17	Nov. 24	Dec. 1	Dec. 8	Dec. 15	Dec. 22	Dec. 29
SUPPLYING RESERVE FUNDS										
1 Reserve Bank credit outstanding	542,985	561,178	595,910	561,722	562,828	573,544	574,556	584,129	594,424	618,787
U.S. government securities[2]										
2 Bought outright—System account[3]	490,849	492,811	492,467	492,677	494,001	493,577	493,998	495,734	494,597	489,170
3 Held under repurchase agreements	428	0	0	0	0	0	0	0	0	0
Federal agency obligations										
4 Bought outright	206	183	181	181	181	181	181	181	181	181
5 Held under repurchase agreements	1,916	0	0	0	0	0	0	0	0	0
6 Repurchase agreements—triparty[4]	14,248	33,382	68,012	33,669	35,095	46,103	45,754	53,343	64,415	93,154
7 Acceptances	0	0	0	0	0	0	0	0	0	0
Loans to depository institutions										
8 Adjustment credit	35	172	160	435	69	59	21	167	83	361
9 Seasonal credit	224	65	69	59	59	65	61	60	80	78
10 Special Liquidity Facility credit	3	12	74	4	6	8	10	43	25	223
11 Extended credit	0	0	0	0	0	0	0	0	0	0
12 Float	482	416	762	415	329	201	1,222	648	615	635
13 Other Federal Reserve assets	34,594	34,138	34,186	34,281[r]	33,088	33,350	33,310	33,952	34,429	34,984
14 Gold stock	11,050	11,049	11,048	11,049	11,049	11,049	11,048	11,049	11,049	11,048
15 Special drawing rights certificate account	7,200	7,200	6,652	7,200	7,200	7,200	7,200	7,057	6,200	6,200
16 Treasury currency outstanding	27,546	27,747	27,928	27,739	27,785	27,831	27,872	27,908	27,943	27,978
ABSORBING RESERVE FUNDS										
17 Currency in circulation	550,941	569,656	601,159	568,348	573,274	580,664	585,216	592,106	602,552	619,311
18 Reverse repurchase agreements—triparty[4]	0	0	0	0	0	0	0	0	0	0
19 Treasury cash holdings	94	93	110	95	95	89	112	108	109	109
Deposits, other than reserve balances, with Federal Reserve Banks										
20 Treasury	5,179	5,055	8,250	4,726	5,340	5,107	4,800	5,273	6,206	12,138
21 Foreign	182	213	136	264	203	211	186	214	58	99
22 Service-related balances and adjustments	7,165	7,176	7,513	7,085	7,162	7,294	7,093	7,338	7,770	7,783
23 Other	278	252	248	256	255	245	224	222	213	195
24 Other Federal Reserve liabilities and capital	18,362	18,384	18,505	18,369	18,437	18,393	18,345	18,643	18,663	18,625
25 Reserve balances with Federal Reserve Banks[5]	6,580	6,346	5,616	8,568	4,095[r]	7,621	4,701	6,238	4,044	5,752

Factor	End-of-month figures, Sept.	Oct.	Nov.	Wednesday figures, Nov. 17	Nov. 24	Dec. 1	Dec. 8	Dec. 15	Dec. 22	Dec. 29
SUPPLYING RESERVE FUNDS										
1 Reserve Bank credit outstanding	548,919	575,843	653,561	564,024	570,798	576,255	578,314	592,187	603,648	644,631
U.S. government securities[2]										
2 Bought outright—System account[3]	490,738	492,910	477,963	493,096	494,529	493,474	494,744	494,927	494,391	483,417
3 Held under repurchase agreements	0	0	0	0	0	0	0	0	0	0
Federal agency obligations										
4 Bought outright	188	181	181	181	181	181	181	181	181	181
5 Held under repurchase agreements	0	0	0	0	0	0	0	0	0	0
6 Repurchase agreements—triparty[4]	22,560	49,440	140,640	35,320	41,455	49,505	47,025	60,665	73,085	122,870
7 Acceptances	0	0	0	0	0	0	0	0	0	0
Loans to depository institutions										
8 Adjustment credit	41	8	140	2,115	299	8	32	1,010	112	1,609
9 Seasonal credit	123	65	47	64	64	70	55	72	78	76
10 Special Liquidity Facility credit	10	5	47	5	9	7	11	236	28	1,187
11 Extended credit	0	0	0	0	0	0	0	0	0	0
12 Float	−297	122	−237	570	939	15	2,666	809	1,088	113
13 Other Federal Reserve assets	35,556	33,111	34,781	32,672[r]	33,321	32,995	33,600	34,287	34,685	35,178
14 Gold stock	11,049	11,049	11,048	11,049	11,049	11,048	11,048	11,049	11,048	11,048
15 Special drawing rights certificate account	7,200	7,200	6,200	7,200	7,200	7,200	7,200	6,200	6,200	6,200
16 Treasury currency outstanding	27,636	27,831	28,013	27,739	27,785	27,831	27,872	27,908	27,943	27,978
ABSORBING RESERVE FUNDS										
17 Currency in circulation	555,720	583,103	628,359	571,300	578,777	584,020	589,133	597,616	611,834	628,587
18 Reverse repurchase agreements—triparty[4]	0	0	0	0	0	0	0	0	0	0
19 Treasury cash holdings	94	85	109	97	85	113	108	109	109	109
Deposits, other than reserve balances, with Federal Reserve Banks										
20 Treasury	4,527	5,025	28,402	5,228	4,525	5,082	5,127	7,777	4,741	25,923
21 Foreign	189	501	71	171	171	162	178	496	88	234
22 Service-related balances and adjustments	7,276	7,294	7,866	7,085	7,162	7,294	7,093	7,338	7,770	7,783
23 Other	202	221	1,261	247	253	236	214	224	210	183
24 Other Federal Reserve liabilities and capital	18,401	18,618	17,256	18,141	18,196	17,992	18,142	18,347	18,372	18,284
25 Reserve balances with Federal Reserve Banks[5]	8,395	7,076[r]	15,498	7,743	7,662	7,435	4,440	5,437	5,715	8,753

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

1.12 RESERVES AND BORROWINGS Depository Institutions[1]

Millions of dollars

Reserve classification	1997 Dec.	1998 Dec.	1999 Dec.	1999 June	1999 July	1999 Aug.	1999 Sept.	1999 Oct.	1999 Nov.	1999 Dec.
	Prorated monthly averages of biweekly averages									
1 Reserve balances with Reserve Banks[2]	10,664	9,021	5,259	8,539	7,797	7,802	7,698	6,768	6,285	5,259
2 Total vault cash[3]	44,740	44,305	60,478	42,632	44,059	44,664	44,519	47,017[r]	50,735	60,478
3 Applied vault cash[4]	37,255	35,997	36,396	33,856	34,005	34,069	34,089	33,933	34,660	36,396
4 Surplus vault cash[5]	7,485	8,308	24,082	8,776	10,054	10,595	10,430	13,084[r]	16,076	24,082
5 Total reserves[6]	47,920	45,018	41,656	42,394	41,802	41,871	41,787	40,702	40,944	41,656
6 Required reserves	46,235	43,435	40,344	41,133	40,726	40,742	40.590	39,549	39,610	40,344
7 Excess reserve balances at Reserve Banks[7]	1,685	1,583	1,311	1,261	1,076	1,129	1,197	1,153	1,334	1,311
8 Total borrowing at Reserve Banks	324	117	320	145	309	344	338	281	236	320
9 Adjustment	245	101	179	18	83	72	56	52	157	179
10 Seasonal	79	15	67	127	226	271	282	221	71	67
11 Special Liquidity Facility[8]	..	...	74	..	...	..	0	8	7	74
12 Extended credit[9]	0	0	0	0	0	0	0	0	0	0

Reserve classification	1999 Sept. 8	1999 Sept. 22	1999 Oct. 6	1999 Oct. 20	1999 Nov. 3	1999 Nov. 17	1999 Dec. 1[r]	1999 Dec. 15	1999 Dec. 29	2000 Jan. 12
	Biweekly averages of daily figures for two week periods ending on dates indicated									
1 Reserve balances with Reserve Banks[2]	8,470	7,440	7,380	6,544	6,721	6,524	5,927	5,434	4,887	6,309
2 Total vault cash[3]	43,774	44,556	45,199	47,350	47,586[r]	49,503[r]	52,790	56,674	63,636	68,849
3 Applied vault cash[4]	34,126	34,327	33,636	33,998	34,014	34,046	35,470	35,346	37,321	37,741
4 Surplus vault cash[5]	9,648	10,229	11,563	13,352	13,572[r]	15,457[r]	17,320	21,329	26,315	31,108
5 Total reserves[6]	42,596	41,766	41,016	40,542	40,735	40,569	41,397	40,780	42,208	44,050
6 Required reserves	41,388	40,744	39,524	39,408	39,742	39,196	40,027	39,682	40,947	40,926
7 Excess reserve balances at Reserve Banks[7]	1,207	1,022	1,491	1,133	993	1,373	1,370	1,098	1,261	3,124
8 Total borrowing at Reserve Banks	318	323	385	265	246	329	133	181	425	657
9 Adjustment	35	48	91	21	72	263	64	94	222	530
10 Seasonal	284	276	294	244	153	62	62	61	79	38
11 Special Liquidity Facility[8]	..	..	1	1	22	5	7	27	124	90
12 Extended credit[9]	0	0	0	0	0	0	0	0	0	0

1. Data in this table also appear in the Board's H.3 (502) weekly statistical release. For ordering address, see inside front cover. Data are not break-adjusted or seasonally adjusted.
2. Excludes required clearing balances and adjustments to compensate for float and includes other off-balance-sheet "as-of" adjustments.
3. Vault cash eligible to satisfy reserve requirements. It includes only vault cash held by those banks and thrift institutions that are not exempt from reserve requirements. Dates refer to the maintenance periods in which the vault cash can be used to satisfy reserve requirements.
4. All vault cash held during the lagged computation period by "bound" institutions (that is, those whose required reserves exceed their vault cash) plus the amount of vault cash applied during the maintenance period by "nonbound" institutions (that is, those whose vault cash exceeds their required reserves) to satisfy current reserve requirements.
5. Total vault cash (line 2) less applied vault cash (line 3).
6. Reserve balances with Federal Reserve Banks (line 1) plus applied vault cash (line 3).
7. Total reserves (line 5) less required reserves (line 6).
8. Borrowing at the discount window under the terms and conditions established for the Century Date Change Special Liquidity Facility in effect from October 1, 1999 through April 7, 2000.
9. Consists of borrowing at the discount window under the terms and conditions established for the extended credit program to help depository institutions deal with sustained liquidity pressures. Because there is not the same need to repay such borrowing promptly as with traditional short-term adjustment credit, the money market effect of extended credit is similar to that of nonborrowed reserves.

1.14 FEDERAL RESERVE BANK INTEREST RATES

Percent per year

Current and previous levels

Federal Reserve Bank	Adjustment credit[1]			Seasonal credit[2]			Extended credit[3]			Special Liquidity Facility credit[4]		
	On 2/4/00	Effective date	Previous rate	On 2/4/00	Effective date	Previous rate	On 2/4/00	Effective date	Previous rate	On 2/4/00	Effective date	Previous rate
Boston	5.25	2/2/00	5.00	5.75	1/27/00	5.55	6.25	1/27/00	6.05	7.25	2/2/00	7.00
New York		2/2/00										
Philadelphia		2/2/00										
Cleveland		2/2/00										
Richmond		2/2/00										
Atlanta		2/2/00										
Chicago		2/2/00										
St. Louis		2/2/00										
Minneapolis		2/3/00										
Kansas City		2/2/00										
Dallas		2/4/00										
San Francisco	5.25	2/2/00	5.00	5.75	1/27/00	5.55	6.25	1/27/00	6.05	7.25	2/2/00	7.00

Range of rates for adjustment credit in recent years[5]

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
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

Effective date	Range (or level)—All F.R. Banks	F.R. Bank of N.Y.
1982—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
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

Effective date	Range (or level)—All F.R. Banks	F.R. Bank of N.Y.
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
16	4.75	4.75
Nov. 17	4.50–4.75	4.50
19	4.50	4.50
1999—Aug. 24	4.50–4.75	4.75
26	4.75	4.75
Nov. 16	4.75–5.00	4.75
18	5.00	5.00
2000—Feb. 2	5.00–5.25	5.25
4	5.25	5.25
In effect Feb. 4, 2000	5.25	5.25

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. Available in the period between October 1, 1999, and April 7, 2000, to help depository institutions in sound financial condition meet unusual needs for funds in the period around the century date change. The interest rate on loans from the special facility is the Federal Open Market Committee's intended federal funds rate plus 150 basis points.

5. 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–\$44.3 million[3]	3	12/30/99
2 More than \$44.3 million[4]	10	12/30/99
3 Nonpersonal time deposits[5]	0	12/27/90
4 Eurocurrency liabilities[6]	0	12/27/90

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

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

3. The Monetary Control Act of 1980 requires that the amount of transaction accounts against which the 3 percent reserve requirement applies be modified annually by 80 percent of the percentage change in transaction accounts held by all depository institutions, determined as of June 30 of each year. Effective with the reserve maintenance period beginning December 30, 1999, for depository institutions that report weekly, and with the period beginning January 20, 2000, for institutions that report quarterly, the amount was decreased from \$46.5 million to \$44.3 million.

Under the Garn-St Germain Depository Institutions Act of 1982, the Board adjusts the amount of reservable liabilities subject to a zero percent reserve requirement each year for the succeeding calendar year by 80 percent of the percentage increase in the total reservable liabilities of all depository institutions, measured on an annual basis as of June 30. No corresponding adjustment is made in the event of a decrease. The exemption applies only to accounts that would be subject to a 3 percent reserve requirement. Effective with the reserve maintenance period beginning December 30, 1999, for depository institutions that report weekly, and with the period beginning January 20, 2000, for institutions that report quarterly, the exemption was raised from \$4.9 million to \$5.0 million.

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

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

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

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

1.17 FEDERAL RESERVE OPEN MARKET TRANSACTIONS[1]

Millions of dollars

	Type of transaction and maturity	1996	1997	1998	1999 May	1999 June	1999 July	1999 Aug.	1999 Sept.	1999 Oct.	1999 Nov.
	U.S. TREASURY SECURITIES[2]										
	Outright transactions (excluding matched transactions)										
	Treasury bills										
1	Gross purchases	9,901	9,147	3,550	0	0	0	0	0	0	0
2	Gross sales	0	0	0	0	0	0	0	0	0	0
3	Exchanges	426,928	436,257	450,835	37,107	35,045	42,037	37,052	42,643	35,844	36,882
4	For new bills	426,928	435,907	450,835	37,107	35,045	42,037	37,052	42,643	35,844	36,882
5	Redemptions	0	0	2,000	0	0	0	0	0	0	0
	Others within one year										
6	Gross purchases	524	5,549	6,297	1,421	880	951	429	960	0	964
7	Gross sales	0	0	0	0	0	0	0	0	0	0
8	Maturity shifts	30,512	41,716	46,062	3,768	2,740	3,279	7,669	3,468	3,831	6,675
9	Exchanges	−41,394	−27,499	−49,434	−4,607	−5,540	−368	−10,798	−2,125	−368	−10,150
10	Redemptions	2,015	1,996	2,676	0	0	41	0	0	170	0
	One to five years										
11	Gross purchases	3,898	20,080	12,901	4,442	948	0	1,272	0	0	1,014
12	Gross sales	0	0	0	0	0	0	0	0	0	0
13	Maturity shifts	−25,022	−37,987	−37,777	−3,768	−2,740	−3,279	−4,751	−3,468	−3,831	−3,685
14	Exchanges	31,459	20,274	37,154	2,562	5,540	0	8,433	2,125	0	8,015
	Five to ten years										
15	Gross purchases	1,116	3,449	2,294	1,584	65	0	447	0	0	0
16	Gross sales	0	0	0	0	0	0	0	0	0	0
17	Maturity shifts	−5,469	−1,954	−5,908	0	0	0	−2,918	0	0	−2,273
18	Exchanges	6,666	5,215	7,439	2,045	0	373	1,290	0	0	2,135
	More than ten years										
19	Gross purchases	1,655	5,897	4,884	2,890	0	0	1,075	0	0	925
20	Gross sales	0	0	0	0	0	0	0	0	0	0
21	Maturity shifts	−20	−1,775	−2,377	0	0	0	0	0	0	−717
22	Exchanges	3,270	2,360	4,842	0	0	0	1,075	0	374	0
	All maturities										
23	Gross purchases	17,094	44,122	29,926	10,337	1,893	951	3,223	960	0	2,903
24	Gross sales	0	0	0	0	0	0	0	0	0	0
25	Redemptions	2,015	1,996	4,676	0	0	41	0	0	170	0
	Matched transactions										
26	Gross purchases	3,092,399	3,577,954	4,395,430	356,960	380,872	347,067	374,032	348,014	332,708	317,537
27	Gross sales	3,094,769	3,580,274	4,399,330	358,362	380,464	346,747	373,159	350,151	330,856	318,294
	Repurchase agreements										
28	Gross purchases	457,568	810,485	512,671	27,605	17,710	27,707	23,097	29,369	100	0
29	Gross sales	450,359	809,268	514,186	30,531	14,614	33,612	23,717	24,337	7,707	0
30	Net change in U.S. Treasury securities	19,919	41,022	19,835	6,008	5,397	−4,675	3,476	3,855	−5,924	2,146
	FEDERAL AGENCY OBLIGATIONS										
	Outright transactions										
31	Gross purchases	0	0	0	0	0	0	0	0	0	0
32	Gross sales	0	0	25	0	0	0	0	0	0	0
33	Redemptions	409	1,540	322	0	52	10	11	0	50	7
	Repurchase agreements										
34	Gross purchases	75,354	160,409	284,316	38,167	32,786	46,941	61,968	53,224	9,636	0
35	Gross sales	74,842	159,369	276,266	36,962	32,104	48,840	56,053	47,963	24,092	0
36	Net change in federal agency obligations	103	500	7,703	1,205	630	1,909	5,904	5,261	−14,506	−7
	Reverse repurchase agreements										
37	Gross purchases	0	0	0	0	0	0	0	0	0	0
38	Gross sales	0	0	0	0	0	0	0	0	0	0
	Repurchase agreements										
39	Gross purchases	0	0	0	0	0	0	0	0	68,061	81,350
40	Gross sales	0	0	0	0	0	0	0	0	45,501	54,470
41	Net change in triparty obligations	0	0	0	0	0	0	0	0	22,560	26,880
42	**Total net change in System Open Market Account**	**20,021**	**40,522**	**27,538**	**7,213**	**6,028**	**−6,584**	**9,380**	**9,116**	**2,130**	**29,019**

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

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

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

Millions of dollars

Account	Wednesday					End of month		
	1999					1999		
	Dec. 1	Dec. 8	Dec. 15	Dec 22	Dec. 29	Oct. 31	Nov. 30	Dec. 31
	Consolidated condition statement							
ASSETS								
1 Gold certificate account	11,048	11,048	11,049	11,048	11,048	11,049	11,049	11,048
2 Special drawing rights certificate account	7,200	7,200	6,200	6,200	6,200	7,200	7,200	6,200
3 Coin	230	228	231	238	203	331	237	207
Loans								
4 To depository institutions	85	98	1,319	218	2,872	173	78	233
5 Other	0	0	0	0	0	0	0	0
6 Acceptances held under repurchase agreements	0	0	0	0	0	0	0	0
Triparty Obligations								
7 Repurchase agreements—triparty[2]	49,505	47,025	60,665	73,085	122,870	22,560	49,440	140,640
Federal agency obligations[3]								
8 Bought outright	181	181	181	181	181	188	181	181
9 Held under repurchase agreements	0	0	0	0	0	0	0	0
10 **Total U.S. Treasury securities**[3]	**493,474**	**494,744**	**494,927**	**494,391**	**483,417**	**490,738**	**492,910**	**477,963**
11 Bought outright[4]	493,474	494,744	494,927	494,391	483,417	490,738	492,910	477,963
12 Bills	198,841	199,233	197,194	193,834	181,973	199,035	198,278	176,517
13 Notes	213,271	213,273	214,756	217,580	218,466	211,273	213,270	218,467
14 Bonds	81,362	82,238	82,977	82,977	82,978	80,430	81,362	82,978
15 Held under repurchase agreements	0	0	0	0	0	0	0	0
16 **Total loans and securities**	**543,245**	**542,048**	**557,092**	**567,876**	**609,340**	**513,659**	**542,609**	**619,017**
17 Items in process of collection	8,038	8,958	8,925	8,896	6,925	4,726	9,245	6,524
18 Bank premises	1,353	1,354	1,355	1,356	1,356	1,344	1,353	1,365
Other assets								
19 Denominated in foreign currencies[5]	16,191	16,195	16,199	16,203	16,176	16,251	16,292	16,140
20 All other[6]	15,361	15,886	16,594	17,139	17,657	17,678	15,297	17,294
21 **Total assets**	**602,666**	**602,917**	**617,645**	**628,957**	**668,906**	**572,239**	**603,282**	**677,795**
LIABILITIES								
22 Federal Reserve notes	556,532	561,596	570,047	584,238	600,921	528,509	555,595	600,662
23 Reverse repurchase agreements—triparty[2]	0	0	0	0	0	0	0	0
24 **Total deposits**	**20,420**	**15,709**	**21,323**	**18,366**	**43,069**	**20,420**	**20,517**	**53,760**
25 Depository institutions	14,939	10,189	12,827	13,327	16,729	15,502	14,771	24,027
26 U.S. Treasury—General account	5,082	5,127	7,777	4,741	25,923	4,527	5,025	28,402
27 Foreign—Official accounts	162	178	496	88	234	189	501	71
28 Other	236	214	224	210	183	202	221	1,261
29 Deferred credit items	7,722	7,469	7,927	7,980	6,632	4,909	8,552	6,117
30 Other liabilities and accrued dividends[7]	4,457	4,457	4,616	4,605	4,478	4,455	4,600	4,392
31 **Total liabilities**	**589,131**	**589,232**	**603,914**	**615,190**	**655,099**	**558,293**	**589,265**	**664,931**
CAPITAL ACCOUNTS								
32 Capital paid in	6,374	6,412	6,398	6,425	6,432	6,355	6,372	6,432
33 Surplus	5,952	5,952	5,952	5,952	5,952	5,952	5,952	6,432
34 Other capital accounts	1,209	1,320	1,381	1,390	1,422	1,639	1,694	0
35 **Total liabilities and capital accounts**	**602,666**	**602,917**	**617,645**	**628,957**	**668,906**	**572,239**	**603,282**	**677,795**
MEMO								
36 Marketable U.S. Treasury securities held in custody for foreign and international accounts	n.a.	n.a	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	Federal Reserve note statement							
37 Federal Reserve notes outstanding (issued to Banks)	825,329	824,756	824,510	823,577	822,441	827,249	825,379	821,959
38 LESS: Held by Federal Reserve Banks	268,797	263,160	254,463	239,339	221,520	298,740	269,785	221,297
39 Federal Reserve notes, net	556,532	561,596	570,047	584,238	600,921	528,509	555,595	600,662
Collateral held against notes, net								
40 Gold certificate account	11,048	11,048	11,049	11,048	11,048	11,049	11,049	11,048
41 Special drawing rights certificate account	7,200	7,200	6,200	6,200	6,200	7,200	7,200	6,200
42 Other eligible assets	0	1,398	0	0	0	0	0	0
43 U.S. Treasury and agency securities	538,284	541,950	552,799	566,990	583,673	510,261	537,346	583,414
44 **Total collateral**	**556,532**	**561,596**	**570,047**	**584,238**	**600,921**	**528,509**	**555,595**	**600,662**

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

1.19 FEDERAL RESERVE BANKS Maturity Distribution of Loan and Security Holding

Millions of dollars

Type of holding and maturity	Wednesday					End of month		
	1999					1999		
	Dec. 1	Dec. 8	Dec. 15	Dec. 22	Dec. 29	Oct. 31	Nov. 30	Dec. 31
1 **Total loans**	**85**	**98**	**1,319**	**218**	**2,872**	**173**	**78**	**233**
2 Within fifteen days[1]	27	52	1,039	204	2,851	106	46	207
3. Sixteen days to ninety days	56	43	51	7	10	66	31	20
4. 91 days to 1 year	2	3	229	8	11			7
5 **Total U.S. Treasury securities**[2]	**493,474**	**494,744**	**494,927**	**494,391**	**483,417**	**490,738**	**492,910**	**477,963**
6 Within fifteen days[1]	11,438	15,145	10,891	12,871	15,634	7,085	8,277	4,632
7 Sixteen days to ninety days	103,422	105,402	102,817	97,667	83,448	105,645	102,802	91,919
8 Ninety-one days to one year	140,670	135,375	140,175	141,435	141,030	141,442	143,889	139,866
9 One year to five years	122,414	122,414	123,671	125,044	125,929	121,201	122,413	124,169
10 Five years to ten years	50,520	50,521	51,104	51,105	51,106	50,212	50,520	51,107
11 More than ten years	65,010	65,886	66,269	66,269	66,270	65,153	65,010	66,270
12 **Total federal agency obligations**	**181**	**181**	**181**	**181**	**181**	**188**	**181**	**181**
13 Within fifteen days[1]	0	0	0	0	0	7	0	0
14 Sixteen days to ninety days	31	31	31	31	31	6	31	31
15 Ninety-one days to one year	20	20	20	20	20	45	20	20
16 One year to five years	10	10	10	10	10	10	10	10
17 Five years to ten years	120	120	120	120	120	120	120	120
18 More than ten years	0	0	0	0	0	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	1996 Dec.	1997 Dec.	1998 Dec.	1999 Dec.	1999 May	June	July	Aug.	Sept.	Oct.	Nov.[r]	Dec.
	Seasonally adjusted											
ADJUSTED FOR CHANGES IN RESERVE REQUIREMENTS[2]												
1 Total reserves[3]	50.16	46.86	44.90	41.53	44.36	42.87	41.98	42.07	42.11	40.94	41.20	41.53
2 Nonborrowed reserves[4]	50.01	46.54	44.79	41.21	44.23	42.72	41.67	41.72	41.77	40.66	40.96	41.21
3 Nonborrowed reserves plus extended credit[5]	50.01	46.54	44.79	41.21	44.23	42.72	41.67	41.72	41.77	40.66	40.96	41.21
4 Required reserves	48.75	45.18	43.32	40.22	43.11	41.61	40.90	40.94	40.92	39.79	39.86	40.22
5 Monetary base[6]	451.37	478.88	512.32	590.32	534.86	537.63	541.20	544.42	549.56	557.15[r]	569.35	590.32
	Not seasonally adjusted											
6 Total reserves[7]	51.45	48.01	45.12	41.73	44.91	42.43	41.85	41.92	41.85	40.77	41.02	41.73
7 Nonborrowed reserves	51.30	47.69	45.00	41.41	44.78	42.29	41.54	41.58	41.51	40.49	40.78	41.41
8 Nonborrowed reserves plus extended credit[5]	51.30	47.69	45.00	41.41	44.78	42.29	41.54	41.58	41.51	40.49	40.78	41.41
9 Required reserves[8]	50.04	46.33	43.54	40.42	43.65	41.17	40.77	40.79	40.65	39.62	39.68	40.42
10 Monetary base[9]	456.63	484.98	518.28	600.29	533.12	535.88	540.98	543.87	548.13	555.51	571.82	600.29
NOT ADJUSTED FOR CHANGES IN RESERVE REQUIREMENTS[10]												
11 Total reserves[11]	51.17	47.92	45.02	41.66	44.88	42.39	41.80	41.87	41.79	40.70	40.94	41.66
12 Nonborrowed reserves	51.02	47.60	44.90	41.34	44.75	42.25	41.49	41.53	41.45	40.42	40.71	41.34
13 Nonborrowed reserves plus extended credit[5]	51.02	47.60	44.90	41.34	44.75	42.25	41.49	41.53	41.45	40.42	40.71	41.34
14 Required reserves	49.76	46.24	43.44	40.34	43.62	41.13	40.73	40.74	40.59	39.55	39.61	40.34
15 Monetary base[12]	463.40	491.79	525.06	607.76	539.98	542.82	548.07	550.86	555.19	562.64	578.94	607.76
16 Excess reserves[13]	1.42	1.69	1.58	1.31	1.26	1.26	1.08	1.13	1.20	1.15	1.33	1.31
17 Borrowings from the Federal Reserve	.16	.32	.12	.32	.13	.15	.31	.34	.34	.28	.24	.32

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

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

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

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

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

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

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

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

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

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

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

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

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

1.21 MONEY STOCK AND DEBT MEASURES[1]

Billions of dollars, averages of daily figures

Item	1996 Dec.	1997 Dec.	1998 Dec.	1999 Dec.	1999 Sept.	1999 Oct.	1999 Nov.	1999 Dec.
	Seasonally adjusted							
Measures[2]								
1 M1	1,081.6	1,075.2	1,093.7	1,125.4	1,094.0	1,099.0[r]	1,108.4[r]	1,125.4
2 M2	3,824.2	4,046.7	4,401.4	4,662.6	4,586.5	4,606.4	4,627.4[r]	4,662.6
3 M3	4,955.8	5,403.4	5,995.7	6,484.7	6,247.4[r]	6,296.3[r]	6,384.6[r]	6,484.7
4 Debt	14,463.6	15,227.9	16,250.4	n.a.	17,066.8[r]	17,152.9[r]	17,218.9	n.a.
M1 components								
5 Currency[3]	394.1	424.5	459.2	516.9	495.0	499.2	505.2	516.9
6 Travelers checks[4]	8.3	8.1	8.2	8.2	8.7	8.5	8.2	8.2
7 Demand deposits[5]	403.0	396.5	377.5	358.8	352.9	354.5[r]	357.2[r]	358.8
8 Other checkable deposits[6]	276.2	246.2	248.8	241.4	237.4	236.8	237.7	241.4
Nontransaction components								
9 In M2[7]	2,742.6	2,971.5	3,307.6	3,537.1	3,492.5	3,507.3	3,519.0[r]	3,537.1
10 In M3 only[8]	1,131.6	1,356.7	1,594.3	1,822.1	1,660.9[r]	1,689.9[r]	1,757.2[r]	1,822.1
Commercial banks								
11 Savings deposits, including MMDAs	905.2	1,022.9	1,189.8	1,286.2	1,284.5[r]	1,289.0[r]	1,287.5	1,286.2
12 Small time deposits[9]	593.7	626.1	626.0	632.1	619.6[r]	623.4	628.5	632.1
13 Large time deposits[10, 11]	414.7	489.9	540.4	625.4	540.9[r]	564.9[r]	595.5[r]	625.4
Thrift institutions								
14 Savings deposits, including MMDAs	367.1	377.3	415.2	452.6	458.3	457.0	454.6	452.6
15 Small time deposits[9]	353.8	343.2	325.9	320.2	314.7	316.1	318.5	320.2
16 Large time deposits[10]	78.4	85.9	89.1	90.4	89.9	89.3	90.2[r]	90.4
Money market mutual funds								
17 Retail	522.8	602.0	750.7	846.1	815.4	821.9	829.9	846.1
18 Institution-only	313.3	379.9	516.2	606.7	559.3	571.0	588.8	606.7
Repurchase agreements and Eurodollars								
19 Repurchase agreements[12]	211.3	251.7	297.8	329.6	310.4	307.3[r]	317.3[r]	329.6
20 Eurodollars[12]	113.9	149.3	150.7	169.9	160.3	157.3[r]	165.5[r]	169.9
Debt components								
21 Federal debt	3,781.3	3,800.3	3,750.8	n.a.	3,698.1	3,680.1	3,656.5	n.a.
22 Nonfederal debt	10,682.3	11,427.6	12,499.6	n.a.	13,368.8[r]	13,472.7[r]	13,562.3	n.a.
	Not seasonally adjusted							
Measures[2]								
23 M1	1,105.1	1,097.8	1,115.7	1,147.9	1,088.6	1,096.3[r]	1,112.7[r]	1,147.9
24 M2	3,844.0	4,064.9	4,418.2	4,679.4	4,572.2	4,590.9	4,626.3[r]	4,679.4
25 M3	4,972.7	5,419.6	6,011.8	6,501.7	6,219.2[r]	6,279.3[r]	6,389.6[r]	6,501.7
26 Debt	14,460.3	15,224.9	16,247.2	n.a.	17,016.9[r]	17,102.1[r]	17,198.0	n.a.
M1 components								
27 Currency[3]	397.9	428.9	464.2	523.1	493.4	499.0	506.4	523.1
28 Travelers checks[4]	8.6	8.3	8.4	8.4	8.5	8.4	8.3	8.4
29 Demand deposits[5]	419.9	412.3	392.4	373.1	350.9[r]	353.9[r]	361.0[r]	373.1
30 Other checkable deposits[6]	278.8	248.3	250.7	243.3	235.7	234.9	237.1	243.3
Nontransaction components								
31 In M2[7]	2,738.9	2,967.2	3,302.5	3,531.5	3,483.6	3,494.6	3,513.6	3,531.5
32 In M3 only[8]	1,128.7	1,354.7	1,593.6	1,822.3	1,647.0[r]	1,688.4[r]	1,763.2[r]	1,822.3
Commercial banks								
33 Savings deposits, including MMDAs	903.3	1,020.4	1,186.8	1,282.8	1,277.5	1,279.5	1,283.4	1,282.8
34 Small time deposits[9]	592.7	625.3	625.4	631.5	619.3	624.2	628.9	631.5
35 Large time deposits[10, 11]	413.2	487.3	536.8	620.7	541.3[r]	567.8[r]	597.4[r]	620.7
Thrift institutions								
36 Savings deposits, including MMDAs	366.3	376.4	414.1	451.4	455.8	453.6	453.2	451.4
37 Small time deposits[9]	353.2	342.8	325.6	319.9	314.5	316.5	318.7	319.9
38 Large time deposits[10]	78.1	85.4	88.5	89.7	90.0	89.8	90.4	89.7
Money market mutual funds								
39 Retail	523.2	602.3	750.6	845.8	816.4	820.7	829.4	845.8
40 Institution-only	316.0	384.5	523.3	615.2	547.5	566.7	591.0	615.2
Repurchase agreements and Eurodollars								
41 Repurchase agreements[12]	205.7	245.1	290.5	322.1	309.1	305.9[r]	318.2[r]	322.1
42 Eurodollars[12]	115.7	152.3	154.5	174.6	159.1	158.1[r]	166.3[r]	174.6
Debt components								
43 Federal debt	3,787.9	3,805.8	3,754.9	n.a.	3,655.8	3,635.4	3,641.4	n.a.
44 Nonfederal debt	10,672.4	11,419.2	12,492.3	n.a.	13,361.0	13,466.7[r]	13,556.6	n.a.

Footnotes appear on following page.

NOTES TO TABLE 1.21

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

12. Includes both overnight and term.

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

A. All commercial banks

Billions of dollars

Account	Monthly averages								Wednesday figures			
	1998	1999[r]							1999			
	Dec.	June	July	Aug.	Sept.	Oct.	Nov	Dec.	Dec. 8	Dec. 15	Dec. 22	Dec. 29
	Seasonally adjusted											
Assets												
1 Bank credit	4,548.8[r]	4,553.8	4,549.7	4,582.9	4,607.6	4,636.5	4,704.0	4,782.8	4,754.8	4,784.8	4,803.1	4,796.7
2 Securities in bank credit	1,226.5	1,211.7	1,227.0	1,242.4	1,246.6	1,253.5	1,249.2	1,267.6	1,260.0	1,264.4	1,272.4	1,277.3
3 U.S. government securities	793.2[r]	811.2	814.4	820.1	817.6	812.6	798.8	803.7	798.4	803.5	805.2	809.5
4 Other securities	433.4	400.5	412.7	422.3	428.9	440.9	450.4	463.9	461.6	460.8	467.2	467.8
5 Loans and leases in bank credit[2]	3,322.2	3,342.1	3,322.7	3,340.5	3,361.1	3,383.0	3,454.8	3,515.1	3,494.8	3,520.5	3,530.7	3,519.3
6 Commercial and industrial	952.6[r]	963.4	965.3	972.7	980.8	986.1	1,005.8	1,008.1	1,012.0	1,009.8	1,007.7	1,005.5
7 Real estate	1,338.1[r]	1,366.2	1,367.7	1,379.9	1,396.5	1,419.0	1,433.6	1,471.6	1,464.8	1,469.1	1,475.8	1,477.1
8 Revolving home equity	102.4	103.8	98.0	98.7	98.4	99.0	100.6	106.1	104.2	105.8	106.9	107.4
9 Other	1,235.7[r]	1,262.4	1,269.6	1,281.3	1,298.1	1,320.1	1,333.0	1,365.5	1,360.5	1,363.3	1,368.9	1,369.7
10 Consumer	497.8	491.1	481.2	480.1	481.0	481.5	485.1	495.6	489.3	494.9	498.3	499.7
11 Security[3]	150.7	131.0	122.4	122.4	116.2	111.0	134.0	155.3	148.2	161.3	161.8	153.4
12 Other loans and leases	383.0	390.5	386.2	385.3	386.6	385.4	396.3	384.5	380.5	385.3	387.1	383.7
13 Interbank loans	217.6	224.8	224.3	215.0	207.8	218.6	214.3	218.3	212.5	221.6	216.9	225.5
14 Cash assets[4]	252.7	260.7	257.8	252.4	262.5	269.7	276.3	290.6	298.7	283.4	304.4	280.4
15 Other assets[5]	341.8	345.7	347.2	344.9	355.4	358.1	365.9	370.7	373.2	369.8	373.5	364.7
16 **Total assets**[6]	**5,302.9**	**5,326.3**	**5,320.9**	**5,336.6**	**5,374.2**	**5,423.6**	**5,501.0**	**5,602.3**	**5,579.4**	**5,599.6**	**5,637.7**	**5,607.1**
Liabilities												
17 Deposits	3,338.3	3,377.2	3,389.8	3,384.3	3,394.9	3,435.0	3,479.9	3,531.7	3,523.5	3,548.0	3,551.8	3,505.3
18 Transaction	671.6	655.7	648.6	635.9	634.0	631.1	623.9	631.7	627.6	632.8	653.2	624.5
19 Nontransaction	2,666.7	2,721.5	2,741.2	2,748.4	2,760.9	2,803.9	2,855.9	2,900.0	2,896.0	2,915.2	2,898.6	2,880.9
20 Large time	717.4	718.8	721.1	717.9	728.3	766.8	804.6	834.7	825.9	837.4	837.0	835.6
21 Other	1,949.3	2,002.7	2,020.2	2,030.4	2,032.6	2,037.1	2,051.3	2,065.3	2,070.1	2,077.7	2,061.6	2,045.2
22 Borrowings	1,021.7	1,017.9	1,019.4	1,026.3	1,045.7	1,048.9	1,064.1	1,125.1	1,088.5	1,118.4	1,131.7	1,164.4
23 From banks in the U.S.	319.6	336.5	337.1	336.5	340.5	350.1	352.1	349.2	340.2	343.3	342.9	367.0
24 From others	702.0	681.4	682.3	689.8	705.2	698.8	712.0	775.9	748.2	775.1	788.8	797.5
25 Net due to related foreign offices	213.9	210.2	217.0	222.5	218.3	219.6	226.1	218.4	220.1	217.7	220.7	218.1
26 Other liabilities	306.9	279.6	273.7	279.7	282.6	289.9	295.7	299.0	300.4	290.5	303.7	301.7
27 **Total liabilities**	**4,880.7**	**4,884.9**	**4,899.9**	**4,912.7**	**4,941.5**	**4,993.4**	**5,065.7**	**5,174.2**	**5,132.5**	**5,174.6**	**5,207.9**	**5,189.5**
28 Residual (assets less liabilities)[7]	422.2	441.4	420.9	423.9	432.7	430.2	435.3	428.2	446.9	425.0	429.8	417.6
	Not seasonally adjusted											
Assets												
29 Bank credit	4,564.1	4,547.6	4,533.7	4,561.9	4,597.7	4,641.1	4,718.1	4,799.1	4,758.5	4,799.9	4,821.0	4,823.5
30 Securities in bank credit	1,228.3[r]	1,208.4	1,215.9	1,229.5	1,235.4	1,250.1	1,255.7	1,271.7	1,267.4	1,269.3	1,273.7	1,278.4
31 U.S. government securities	794.0	810.7	806.5	808.3	807.5	807.0	800.9	805.0	803.6	806.4	804.6	806.9
32 Other securities	434.3	397.7	409.4	421.2	428.0	443.1	454.7	466.6	463.9	463.0	469.1	471.5
33 Loans and leases in bank credit[2]	3,335.8	3,339.2	3,317.8	3,332.4	3,362.3	3,391.0	3,462.4	3,527.4	3,491.1	3,530.6	3,547.3	3,545.0
34 Commercial and industrial	952.6[r]	963.6	962.9	964.1	976.8	987.2	1,005.8	1,007.2	1,004.8	1,005.8	1,008.9	1,010.8
35 Real estate	1,340.1[r]	1,366.7	1,368.7	1,382.5	1,400.1	1,422.7	1,438.3	1,474.1	1,469.3	1,472.5	1,476.1	1,479.6
36 Revolving home equity	102.8	103.4	97.9	98.8	99.1	99.7	101.4	106.5	104.7	106.2	107.3	107.9
37 Other	1,237.3[r]	1,263.3	1,270.8	1,283.7	1,301.0	1,323.0	1,336.9	1,367.6	1,364.6	1,366.3	1,368.8	1,371.7
38 Consumer	503.1	488.4	478.8	481.3	484.0	482.2	485.3	500.6	489.8	498.1	505.7	508.4
39 Security[3]	152.8	130.4	120.4	118.7	112.8	111.9	135.4	157.4	148.3	166.5	165.5	154.0
40 Other loans and leases	387.3	390.1	387.1	385.8	388.5	387.1	397.5	388.2	378.9	387.7	391.1	392.2
41 Interbank loans	225.8	222.1	218.1	207.3	204.3	215.1	220.9	224.8	220.5	231.4	220.3	229.6
42 Cash assets[4]	267.8	256.2	250.0	242.0	259.8	270.0	283.5	307.3	290.5	301.4	315.1	323.1
43 Other assets[5]	342.6	351.6	349.9	347.7	357.4	355.5	364.5	371.6	371.9	371.0	371.7	370.5
44 **Total assets**[6]	**5,342.5**[r]	**5,318.7**	**5,293.5**	**5,300.1**	**5,359.9**	**5,422.4**	**5,527.2**	**5,642.6**	**5,581.4**	**5,643.6**	**5,667.9**	**5,686.6**
Liabilities												
45 Deposits	3,372.1	3,375.2	3,373.5	3,370.4	3,393.5	3,437.5	3,506.2	3,564.1	3,541.4	3,582.2	3,568.9	3,561.7
46 Transaction	705.8	650.8	637.9	619.6	628.2	622.9	633.6	664.3	630.9	664.7	677.0	691.8
47 Nontransaction	2,666.3	2,724.4	2,735.6	2,750.8	2,765.3	2,814.7	2,872.6	2,899.8	2,910.5	2,917.6	2,891.9	2,869.9
48 Large time	722.0	716.1	714.4	715.3	729.7	768.4	809.8	840.5	833.7	844.3	843.4	839.9
49 Other	1,944.3	2,008.3	2,021.3	2,035.5	2,035.5	2,046.3	2,062.8	2,059.3	2,076.8	2,073.2	2,048.6	2,030.1
50 Borrowings	1,024.2	1,021.5	1,010.1	1,002.8	1,040.6	1,051.7	1,071.0	1,127.7	1,077.2	1,118.7	1,146.3	1,171.1
51 From banks in the U.S.	325.5	336.4	332.5	329.3	336.8	347.8	356.5	355.7	343.7	349.1	353.3	374.1
52 From others	698.6	685.1	677.6	673.5	703.8	703.9	714.5	772.1	733.5	769.6	793.0	797.0
53 Net due to related foreign offices	219.1	204.4	209.2	217.4	214.3	221.3	227.8	223.9	224.9	221.3	225.2	231.4
54 Other liabilities	307.6	279.0	272.9	279.6	281.6	288.4	295.9	299.8	301.4	291.6	303.8	302.7
55 **Total liabilities**	**4,922.9**	**4,880.1**	**4,865.7**	**4,870.2**	**4,929.9**	**4,998.9**	**5,100.9**	**5,215.6**	**5,144.9**	**5,213.7**	**5,244.2**	**5,266.9**
56 Residual (assets less liabilities)[7]	419.6[r]	438.6	427.8	429.9	430.0	423.5	426.3	427.1	436.4	429.9	423.7	419.7
MEMO												
57 Revaluation gains on off-balance-sheet items[8]	116.5	93.0	92.0	96.5	98.5	100.3	100.4	104.3	104.3	102.9	105.1	105.2
58 Revaluation losses on off-balance-sheet items[8]	114.7	94.7	92.6	98.8	97.3	98.1	99.2	102.6	102.4	101.4	103.6	103.7

Footnotes appear on p. A21.

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

B. Domestically chartered commercial banks

Billions of dollars

Account	Monthly averages								Wednesday figures			
	1998	1999[r]							1999			
	Dec.	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Dec. 8	Dec. 15	Dec. 22	Dec. 29
	Seasonally adjusted											
Assets												
1 Bank credit	3,950.2	4,020.6	4,027.0	4,058.9	4,088.4	4,108.7	4,155.3	4,226.9	4,197.2	4,227.2	4,246.4	4,243.8
2 Securities in bank credit	1,012.7	1,015.0[r]	1,036.6	1,052.3	1,057.1	1,060.3	1,051.3	1,062.2	1,057.1	1,059.7	1,063.2	1,070.6
3 U.S. government securities	709.5	724.5	728.1	736.0	735.9	730.5	719.1	722.0	718.6	722.2	721.2	727.0
4 Other securities	303.2	290.5[r]	308.5	316.3	321.2	329.8	332.2	340.2	338.5	337.6	342.1	343.6
5 Loans and leases in bank credit[2]	2,937.5	3,005.7[r]	2,990.4	3,006.5	3,031.3	3,048.5	3,104.0	3,164.7	3,140.1	3,167.5	3,183.1	3,173.2
6 Commercial and industrial	734.2[r]	766.7[r]	771.8	777.1	783.5	787.0	804.8	812.6	815.4	812.1	812.1	812.8
7 Real estate	1,316.7[r]	1,347.0[r]	1,349.1	1,362.3	1,378.9	1,401.2	1,416.1	1,454.3	1,447.5	1,451.7	1,458.4	1,459.8
8 Revolving home equity	102.4	103.8[r]	98.0	98.7	98.4	99.0	100.6	106.1	104.2	105.8	106.9	107.4
9 Other	1,214.2[r]	1,243.2	1,251.1	1,263.6	1,280.5	1,302.3	1,315.6	1,348.2	1,343.3	1,345.9	1,351.4	1,352.4
10 Consumer	497.8	491.1[r]	481.2	480.1	481.0	481.5	485.1	495.6	489.3	494.9	498.3	499.7
11 Security[3]	84.4	79.0	69.6	67.5	64.7	56.2	68.7	88.5	77.6	94.0	98.0	88.8
12 Other loans and leases	304.4	321.9[r]	318.7	319.5	323.2	322.5	329.3	313.8	310.3	314.8	316.3	312.2
13 Interbank loans	189.6	200.3[r]	196.8	189.3	184.9	195.6	191.5	192.8	188.5	195.6	191.4	199.2
14 Cash assets[4]	217.1	227.2[r]	222.6	214.3	221.7	225.6	225.9	236.0	245.5	227.0	249.5	226.0
15 Other assets[5]	303.4	312.1	314.9	315.9	326.1	326.3	331.1	333.2	337.2	332.6	333.6	327.5
16 **Total assets[6]**	**4,602.6**	**4,701.8[r]**	**4,703.4**	**4,720.0**	**4,762.2**	**4,797.2**	**4,844.5**	**4,929.2**	**4,908.8**	**4,922.7**	**4,961.0**	**4,936.5**
Liabilities												
17 Deposits	3,029.9	3,071.5	3,080.7	3,075.4	3,084.0	3,102.8	3,121.0	3,152.2	3,149.4	3,163.9	3,171.6	3,129.2
18 Transaction	660.2	644.8	637.7	624.9	623.1	619.5	612.6	620.1	615.9	621.5	641.5	612.7
19 Nontransaction	2,369.7	2,426.6	2,443.0	2,450.5	2,460.8	2,483.2	2,508.3	2,532.1	2,533.5	2,542.4	2,530.1	2,516.5
20 Large time	421.1	426.2	425.7	424.0	433.4	447.9	458.9	467.7	464.5	465.8	468.5	471.9
21 Other	1,948.6	2,000.5	2,017.3	2,026.4	2,027.4	2,035.4	2,049.5	2,064.4	2,069.0	2,076.7	2,061.6	2,044.7
22 Borrowings	817.7	836.0	846.1	853.4	875.9	873.3	879.8	945.6	906.9	941.0	956.1	982.4
23 From banks in the U.S.	292.8	309.0	312.7	312.9	315.3	327.3	325.1	323.8	315.1	319.4	319.5	338.0
24 From others	524.9	527.1	533.5	540.5	560.6	546.0	554.7	621.8	591.8	621.6	636.6	644.4
25 Net due to related foreign offices	112.4	145.6	145.2	150.5	152.2	166.2	182.0	181.3	179.1	181.5	179.6	185.9
26 Other liabilities	229.7	214.1	211.0	218.0	218.0	224.1	228.4	228.5	231.2	219.1	232.5	230.2
27 **Total liabilities**	**4,189.7**	**4,267.2**	**4,283.0**	**4,297.2**	**4,330.1**	**4,366.4**	**4,411.2**	**4,507.6**	**4,466.7**	**4,505.5**	**4,539.8**	**4,527.7**
28 Residual (assets less liabilities)[7]	412.9	434.6[r]	420.4	422.8	432.1	430.8	433.3	421.6	442.1	417.3	421.2	408.9
	Not seasonally adjusted											
Assets												
29 Bank credit	3,962.6	4,017.6	4,014.1	4,041.5	4,079.4	4,109.2	4,166.2	4,240.0	4,202.2	4,241.3	4,261.4	4,261.4
30 Securities in bank credit	1,015.8	1,012.6[r]	1,027.0	1,040.7	1,046.6	1,054.1	1,054.6	1,067.2	1,064.3	1,065.9	1,067.2	1,072.5
31 U.S. government securities	710.1	723.6	720.8	725.2	726.6	724.9	720.8	723.0	722.7	724.7	721.0	724.1
32 Other securities	305.7	289.0[r]	306.3	315.5	320.0	329.2	333.8	344.2	341.6	341.3	346.2	348.4
33 Loans and leases in bank credit[2]	2,946.8	3,005.0[r]	2,987.1	3,000.9	3,032.8	3,055.1	3,111.6	3,172.8	3,137.9	3,175.3	3,194.2	3,188.9
34 Commercial and industrial	731.4[r]	768.6	770.2	770.2	779.9	787.0	803.5	808.9	807.7	806.6	809.7	812.8
35 Real estate	1,318.6[r]	1,347.8[r]	1,350.3	1,365.0	1,382.5	1,404.7	1,420.7	1,456.7	1,452.0	1,455.0	1,458.7	1,462.3
36 Revolving home equity	102.8	103.4[r]	97.9	98.8	99.1	99.7	101.4	106.5	104.7	106.2	107.3	107.9
37 Other	1,215.7[r]	1,244.4	1,252.5	1,266.1	1,283.4	1,305.0	1,319.3	1,350.2	1,347.3	1,348.8	1,351.4	1,354.4
38 Consumer	503.1	488.4[r]	478.8	481.3	484.0	482.2	485.3	500.6	489.8	498.1	505.7	508.4
39 Security[3]	86.0	78.2	68.0	63.7	61.2	57.3	70.9	90.2	79.1	98.6	101.0	87.4
40 Other loans and leases	307.7	322.0[r]	319.8	320.8	325.1	323.9	331.1	316.5	309.3	317.0	319.1	317.9
41 Interbank loans	197.9	197.6[r]	190.5	181.6	181.4	192.2	198.0	199.3	196.5	205.4	194.9	203.2
42 Cash assets[4]	230.7	221.9[r]	214.9	204.3	219.2	225.3	232.3	250.4	236.2	242.9	257.1	265.5
43 Other assets[5]	302.8	319.0	318.3	318.1	327.7	323.8	329.5	332.6	333.7	331.8	330.5	332.6
44 **Total assets[6]**	**4,636.3**	**4,697.5[r]**	**4,680.0**	**4,687.0**	**4,748.7**	**4,791.5**	**4,866.7**	**4,962.5**	**4,908.8**	**4,961.5**	**4,984.0**	**5,002.9**
Liabilities												
45 Deposits	3,060.0	3,068.8	3,066.9	3,064.1	3,083.0	3,105.3	3,147.9	3,180.3	3,165.2	3,194.4	3,181.9	3,178.4
46 Transaction	693.9	640.1	627.1	608.7	616.8	611.4	622.4	652.4	619.4	652.9	664.7	679.2
47 Nontransaction	2,366.1	2,428.6	2,439.8	2,455.4	2,466.2	2,493.9	2,525.5	2,527.9	2,545.8	2,541.5	2,517.2	2,499.2
48 Large time	423.6	422.6	420.8	422.2	433.0	449.9	464.9	470.9	471.2	470.5	470.9	471.3
49 Other	1,942.5	2,006.0	2,019.0	2,033.2	2,033.3	2,044.0	2,060.6	2,057.0	2,074.6	2,071.0	2,046.3	2,027.9
50 Borrowings	820.2	839.6	836.8	829.9	870.8	876.1	886.8	948.2	895.6	941.3	970.7	989.0
51 From banks in the U.S.	298.7	308.8	308.1	305.8	311.6	325.0	329.6	330.2	318.5	325.2	329.9	345.1
52 From others	521.5	530.8	528.7	524.1	559.2	551.1	557.2	618.0	577.1	616.1	640.8	643.9
53 Net due to related foreign offices	111.4	141.2	139.9	147.5	149.8	166.1	181.0	181.8	183.5	180.3	178.9	188.7
54 Other liabilities	229.1	213.9	211.1	217.8	217.3	223.3	227.7	227.9	230.7	218.3	231.4	229.7
55 **Total liabilities**	**4,220.7**	**4,263.4**	**4,254.7**	**4,259.3**	**4,320.9**	**4,370.7**	**4,443.4**	**4,538.1**	**4,475.1**	**4,534.3**	**4,563.0**	**4,585.7**
56 Residual (assets less liabilities)[7]	415.6	434.1[r]	425.3	427.7	427.7	420.8	423.3	424.4	433.7	427.2	421.1	417.2
MEMO												
57 Revaluation gains on off-balance-sheet items[8]	68.0	54.6	54.4	58.4	60.1	60.9	59.8	64.5	63.7	63.3	66.0	65.2
58 Revaluation losses on off-balance-sheet items[8]	69.6	57.1	56.3	62.5	59.8	60.0	59.8	63.9	63.4	62.9	65.2	64.5
59 Mortgage-backed securities[9]	345.7	333.9[r]	339.1	343.1	345.9	346.7	348.2	348.1	349.1	347.8	347.0	347.8

Footnotes appear on p. A21.

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

C. Large domestically chartered commercial banks

Billions of dollars

Account	Monthly averages								Wednesday figures			
	1998	1999[r]							1999			
	Dec.	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Dec. 8	Dec. 15	Dec. 22	Dec. 29
	Seasonally adjusted											
Assets												
1 Bank credit	2,494.1	2,496.4	2,487.7	2,505.4	2,521.1	2,520.1	2,561.7	2,621.6	2,597.0	2,624.1	2,639.5	2,634.9
2 Securities in bank credit	588.1	566.0	583.7	597.3	600.4	601.3	597.3	610.1	604.5	608.8	611.7	617.8
3 U.S. government securities	390.9	390.9	391.1	398.8	397.1	391.0	385.0	391.4	386.8	392.6	391.4	396.7
4 Trading account	23.0	25.1	22.7	23.3	20.9	20.0	18.0	19.4	16.7	19.0	18.2	24.1
5 Investment account	367.9	365.8	368.4	375.5	376.2	371.0	367.0	372.0	370.1	373.5	373.2	372.6
6 Other securities	197.2	175.1	192.6	198.5	203.3	210.3	212.4	218.7	217.7	216.2	220.3	221.1
7 Trading account	100.2	71.1	73.6	77.5	78.1	81.7	82.4	87.1	85.9	85.5	89.0	88.5
8 Investment account	97.0	104.0	119.0	121.0	125.2	128.5	129.9	131.7	131.8	130.7	131.4	132.7
9 State and local government	24.8	25.3	25.4	25.7	25.7	25.8	26.4	26.4	26.3	26.3	26.6	26.3
10 Other	72.2	78.7	93.5	95.3	99.5	102.7	103.5	105.3	105.5	104.4	104.7	106.4
11 Loans and leases in bank credit[2]	1,906.0	1,930.4	1,904.0	1,908.1	1,920.8	1,918.8	1,964.3	2,011.5	1,992.5	2,015.3	2,027.8	2,017.1
12 Commercial and industrial	545.9	567.1	569.5	573.1	576.5	574.3	589.2	595.5	599.0	595.2	594.8	595.6
13 Bankers acceptances	1.3	1.0	1.0	1.1	1.2	1.1	1.1	1.1	1.2	1.1	1.1	1.1
14 Other	544.6	566.2	568.6	572.0	575.3	573.2	588.0	594.4	597.9	594.1	593.7	594.5
15 Real estate	740.4	736.4	731.2	736.3	747.6	758.5	767.1	799.0	793.9	797.0	802.1	804.1
16 Revolving home equity	74.4	74.7	68.7	69.3	69.1	69.1	70.5	75.4	73.7	75.2	76.3	76.6
17 Other	666.1	661.7	662.5	667.1	678.5	689.4	696.6	723.6	720.2	721.9	725.8	727.5
18 Consumer	306.3	296.1	286.6	284.2	282.2	281.0	284.9	290.5	288.1	290.4	292.3	291.6
19 Security[3]	78.8	74.3	64.7	62.6	59.8	51.3	63.3	83.2	72.0	88.5	92.9	83.8
20 Federal funds sold to and repurchase agreements with broker–dealers	62.9	55.8	47.0	45.4	42.2	34.2	45.2	63.4	51.0	69.7	71.9	64.6
21 Other	15.9	18.5	17.8	17.2	17.6	17.0	18.1	19.8	21.0	18.8	21.0	19.3
22 State and local government	11.7	11.8	12.0	12.2	12.3	12.3	12.2	12.1	12.1	12.1	12.0	12.0
23 Agricultural	9.1	8.7	8.6	8.9	9.2	9.6	9.6	9.6	9.6	9.6	9.7	9.6
24 Federal funds sold to and repurchase agreements with others	17.2	16.4	4.8	7.9	11.2	10.0	12.3	11.8	10.2	12.3	11.2	13.3
25 All other loans	90.0	99.4	104.5	99.6	97.2	94.8	96.7	79.7	77.7	80.3	82.7	76.9
26 Lease-financing receivables	106.5	120.2	121.9	123.3	124.7	127.0	129.2	130.0	129.8	129.9	130.2	130.2
27 Interbank loans	129.8	148.9	143.7	138.3	136.4	149.8	141.3	141.5	137.7	142.6	139.0	148.9
28 Federal funds sold to and repurchase agreements with commercial banks	80.0	90.3	91.9	86.7	83.8	92.4	73.8	70.9	68.1	71.8	68.2	77.5
29 Other	49.8	58.7	51.8	51.5	52.5	57.4	67.6	70.7	69.6	70.8	70.9	71.4
30 Cash assets[4]	149.9	157.2	151.4	143.3	149.9	154.1	153.2	159.8	168.4	151.1	169.4	152.4
31 Other assets[5]	236.2	238.5	238.2	236.7	246.9	243.2	248.8	250.1	252.1	250.9	249.7	246.9
32 **Total assets**[6]	**2,971.3**	**3,002.2**	**2,982.3**	**2,985.0**	**3,015.3**	**3,028.2**	**3,066.0**	**3,133.9**	**3,116.1**	**3,129.6**	**3,158.5**	**3,143.8**
Liabilities												
33 Deposits	1,726.9	1,722.7	1,719.9	1,706.7	1,712.7	1,713.6	1,721.3	1,735.0	1,738.2	1,745.1	1,746.7	1,715.3
34 Transaction	381.6	363.7	357.0	342.5	343.4	339.8	335.5	344.1	343.0	345.1	358.8	337.0
35 Nontransaction	1,345.2	1,359.0	1,362.9	1,364.2	1,369.3	1,373.8	1,385.8	1,390.9	1,395.2	1,400.0	1,387.9	1,378.3
36 Large time	234.7	230.2	231.7	227.2	235.1	245.1	252.1	258.9	256.9	257.2	259.2	262.4
37 Other	1,110.6	1,128.8	1,131.2	1,136.9	1,134.2	1,128.7	1,133.6	1,132.0	1,138.4	1,142.8	1,128.8	1,115.9
38 Borrowings	646.7	647.9	647.0	652.4	669.9	667.1	674.8	733.3	699.9	732.7	743.8	763.0
39 From banks in the U.S.	211.5	221.4	218.2	219.7	221.8	237.5	237.3	236.4	231.2	234.3	231.0	246.1
40 From others	435.1	426.5	428.8	432.7	448.1	429.5	437.5	496.9	468.7	498.4	512.9	516.9
41 Net due to related foreign offices	108.8	141.5	140.9	147.0	148.8	161.9	177.5	176.8	174.9	177.2	175.4	180.6
42 Other liabilities	200.2	182.2	179.9	185.1	184.0	189.9	194.4	194.3	196.1	184.7	198.3	196.4
43 **Total liabilities**	**2,682.6**	**2,694.3**	**2,687.7**	**2,691.2**	**2,715.4**	**2,732.5**	**2,767.9**	**2,839.3**	**2,809.2**	**2,839.7**	**2,864.3**	**2,855.3**
44 Residual (assets less liabilities)[7]	288.7	307.8	294.7	293.8	299.9	295.7	298.1	294.5	306.9	289.9	294.3	288.5

Footnotes appear on p. A21.

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

C. Large domestically chartered commercial banks—Continued

Account	Monthly averages								Wednesday figures			
	1998	1999[r]							1999			
	Dec.	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Dec. 8	Dec. 15	Dec. 22	Dec. 29
	Not seasonally adjusted											
Assets												
45 Bank credit	2,508.3	2,486.3	2,473.7	2,485.9	2,508.9	2,521.9	2,575.6	2,636.6	2,607.8	2,641.0	2,654.3	2,650.1
46 Securities in bank credit	591.6	561.8	575.9	587.2	592.2	598.2	602.9	615.2	613.5	615.0	615.2	618.7
47 U.S. government securities	391.6	388.1	385.3	389.8	389.7	388.4	389.0	392.3	391.9	394.7	390.6	393.0
48 Trading account	23.7	23.5	20.9	22.2	20.7	20.8	19.9	20.0	19.5	20.5	18.4	22.0
49 Investment account	367.9	364.6	364.4	367.6	369.0	367.5	369.1	372.3	372.4	374.2	372.2	371.0
50 Mortgage-backed securities	263.4	240.3	239.0	242.8	245.9	244.0	244.4	244.1	245.3	244.3	243.3	243.6
51 Other	104.5	124.3	125.3	124.9	123.0	123.5	124.6	128.2	127.2	129.9	128.9	127.4
52 One year or less	27.7	25.6	25.5	25.2	24.7	25.6	23.9	25.2	24.7	26.6	25.6	24.2
53 One to five years	40.0	58.4	59.6	59.8	59.0	59.8	60.5	61.4	61.8	62.1	61.0	61.0
54 More than five years	36.8	40.4	40.2	39.9	39.3	38.2	40.3	41.6	40.6	41.2	42.3	42.3
55 Other securities	200.0	173.7	190.6	197.4	202.6	209.8	213.9	222.9	221.6	220.3	224.6	225.6
56 Trading account	100.2	71.1	73.6	77.5	78.1	81.7	82.4	87.1	85.9	85.5	89.0	88.5
57 Investment account	99.8	102.6	117.0	120.0	124.5	128.1	131.5	135.8	135.7	134.8	135.6	137.2
58 State and local government	25.0	25.1	25.0	25.4	25.6	25.9	26.6	26.6	26.4	26.5	26.8	26.7
59 Other	74.8	77.5	92.0	94.6	98.9	102.2	104.9	109.2	109.3	108.4	108.8	110.5
60 Loans and leases in bank credit[2]	1,916.7	1,924.5	1,897.8	1,898.7	1,916.7	1,923.7	1,972.7	2,021.4	1,994.3	2,026.0	2,039.1	2,031.5
61 Commercial and industrial	544.0	567.2	568.1	567.3	574.0	575.8	589.5	592.8	593.2	591.2	593.1	595.4
62 Bankers acceptances	1.3	1.0	1.0	1.1	1.2	1.1	1.1	1.1	1.2	1.1	1.1	1.1
63 Other	542.7	566.2	567.1	566.2	572.8	574.6	588.3	591.7	592.0	590.0	592.0	594.4
64 Real estate	744.0	734.4	730.3	736.9	747.9	760.5	771.2	803.3	800.4	802.3	804.3	807.5
65 Revolving home equity	74.6	74.5	68.8	69.6	69.6	69.7	71.1	75.6	74.0	75.4	76.3	76.8
66 Other	419.5	400.7	402.0	406.8	411.7	418.4	424.7	449.2	449.7	448.6	448.9	451.3
67 Commercial	249.9	259.2	259.5	260.6	266.6	272.4	275.4	278.5	276.7	278.3	279.1	279.4
68 Consumer	309.6	294.1	284.8	284.8	284.1	281.0	284.7	293.7	287.9	292.2	296.5	297.8
69 Security[3]	80.4	73.5	63.1	58.8	56.3	52.4	65.5	84.9	73.5	93.2	95.8	82.5
70 Federal funds sold to and repurchase agreements with broker–dealers	64.2	54.2	45.4	41.9	38.9	35.3	47.5	64.6	53.7	73.5	73.2	62.4
71 Other	16.3	19.3	17.7	16.9	17.4	17.1	18.0	20.2	19.8	19.8	22.6	20.0
72 State and local government	11.8	11.7	12.0	12.3	12.4	12.4	12.3	12.2	12.3	12.3	12.1	12.1
73 Agricultural	9.1	8.8	8.9	9.1	9.4	9.7	9.6	9.6	9.5	9.5	9.5	9.7
74 Federal funds sold to and repurchase agreements with others	17.2	16.4	4.8	7.9	11.2	10.0	12.3	11.8	10.2	12.3	11.2	13.3
75 All other loans	94.4	97.9	104.3	98.8	97.8	95.8	99.8	83.6	78.9	84.2	87.1	82.4
76 Lease-financing receivables	106.1	120.5	121.6	122.8	123.5	126.0	127.8	129.5	128.4	128.8	129.5	130.7
77 Interbank loans	133.0	149.3	141.6	133.2	134.0	145.2	142.0	144.1	137.0	147.5	140.7	152.9
78 Federal funds sold to and repurchase agreements with commercial banks	83.8	89.4	88.4	81.9	81.9	88.6	76.6	74.5	69.8	78.4	70.1	81.2
79 Other	49.2	59.9	53.2	51.3	52.2	56.6	65.5	69.6	67.2	69.1	70.6	71.6
80 Cash assets[4]	160.2	153.0	145.5	136.4	148.8	154.5	157.4	170.6	160.8	163.4	175.9	182.2
81 Other assets[5]	235.6	243.8	240.4	238.3	248.1	240.6	245.5	249.5	248.9	250.1	248.9	249.9
82 **Total assets[6]**	**2,998.4**	**2,993.3**	**2,962.4**	**2,954.8**	**3,000.6**	**3,023.4**	**3,081.3**	**3,161.6**	**3,115.0**	**3,162.6**	**3,180.6**	**3,196.2**
Liabilities												
83 Deposits	1,751.0	1,716.7	1,708.6	1,696.8	1,708.7	1,712.3	1,735.6	1,758.5	1,747.7	1,771.2	1,758.9	1,756.5
84 Transaction	404.6	360.1	350.3	333.2	340.0	334.7	341.6	365.9	342.1	367.4	375.0	384.3
85 Nontransaction	1,346.4	1,356.6	1,358.3	1,363.6	1,368.7	1,377.6	1,393.9	1,392.6	1,405.6	1,403.8	1,383.9	1,372.3
86 Large time	237.2	226.6	226.9	225.4	234.6	247.2	258.2	262.2	263.6	261.9	261.5	261.9
87 Other	1,109.2	1,129.9	1,131.5	1,138.1	1,134.1	1,130.5	1,135.8	1,130.4	1,142.0	1,141.9	1,122.4	1,110.4
88 Borrowings	647.2	650.3	637.9	628.9	662.2	667.0	679.5	733.9	689.9	730.7	752.3	766.5
89 From banks in the U.S.	215.5	221.1	214.4	213.3	217.7	233.3	239.9	240.7	234.0	238.1	237.7	250.4
90 From nonbanks in the U.S.	431.8	429.3	423.5	415.6	444.5	433.7	439.5	493.1	456.0	492.6	514.7	516.2
91 Net due to related foreign offices	107.8	137.1	135.7	144.0	146.4	161.8	176.5	177.3	179.4	176.0	174.7	183.4
92 Other liabilities	200.2	182.2	179.9	185.1	184.0	189.9	194.4	194.3	196.1	184.7	198.3	196.4
93 **Total liabilities**	**2,706.3**	**2,686.2**	**2,662.1**	**2,654.8**	**2,701.2**	**2,731.0**	**2,785.9**	**2,863.9**	**2,813.1**	**2,862.6**	**2,884.2**	**2,902.9**
94 Residual (assets less liabilities)[7]	292.1	307.1	300.4	300.0	299.4	292.4	295.4	297.7	301.9	300.0	296.4	293.3
MEMO												
95 Revaluation gains on off-balance-sheet items[8]	68.0	54.6	54.4	58.4	60.1	60.9	59.8	64.5	63.7	63.3	66.0	65.2
96 Revaluation losses on off-balance-sheet items[8]	69.6	57.1	56.3	62.5	59.8	60.0	59.8	63.9	63.4	62.9	65.2	64.5
97 Mortgage-backed securities[9]	293.3	269.2	273.9	278.3	280.7	279.1	281.8	281.8	282.8	281.7	281.1	281.5
98 Pass-through securities	199.1	177.2	183.3	186.9	185.5	184.8	187.9	188.9	189.6	189.1	188.0	188.5
99 CMOs, REMICs, and other mortgage-backed securities	94.2	92.0	90.6	91.4	95.2	94.2	93.9	92.9	93.1	92.6	93.1	93.0
100 Net unrealized gains (losses) on available-for-sale securities[10]	3.0	.0	−3.3	−4.2	−4.9	−5.6	−5.8	−6.0	−5.7	−5.8	−6.0	−6.1
101 Offshore credit to U.S. residents[11]	38.5	37.0	36.3	32.2	27.8	26.7	24.8	24.0	24.3	24.3	24.5	23.3

Footnotes appear on p. A21.

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

D. Small domestically chartered commercial banks

Billions of dollars

Account	Monthly averages								Wednesday figures			
	1998	1999[r]							1999			
	Dec	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Dec. 8	Dec. 15	Dec. 22	Dec. 29
	Seasonally adjusted											
Assets												
1 Bank credit	1,456.1	1,524.2	1,539.2	1,553.5	1,567.3	1,588.6	1,593.7	1,605.3	1,600.1	1,603.1	1,606.8	1,608.9
2 Securities in bank credit	424.6	448.9	452.9	455.0	456.7	459.0	454.0	452.1	452.5	450.9	451.5	452.8
3 U.S. government securities	318.6	333.6	337.0	337.2	338.8	339.5	334.1	330.6	331.7	329.6	329.8	330.4
4 Other securities	106.0	115.4	115.9	117.8	117.9	119.5	119.9	121.5	120.8	121.3	121.7	122.5
5 Loans and leases in bank credit[2]	1,031.5	1,075.3	1,086.3	1,098.4	1,110.6	1,129.6	1,139.7	1,153.2	1,147.6	1,152.1	1,155.3	1,156.1
6 Commercial and industrial	188.3	199.5	202.3	204.1	207.0	212.7	215.6	217.0	216.3	216.9	217.3	217.2
7 Real estate	576.2	610.6	617.9	625.9	631.3	642.7	649.1	655.2	653.6	654.6	656.3	655.7
8 Revolving home equity	28.1	29.1	29.3	29.4	29.3	29.8	30.1	30.7	30.6	30.6	30.7	30.8
9 Other	548.1	581.5	588.6	596.6	602.0	612.9	619.0	624.5	623.1	624.0	625.6	624.9
10 Consumer	191.5	195.0	194.6	195.9	198.8	200.5	200.1	205.1	201.2	204.6	206.0	208.1
11 Security[3]	5.6	4.7	4.9	4.9	4.9	4.9	5.4	5.3	5.6	5.4	5.1	5.0
12 Other loans and leases	69.9	65.4	66.7	67.6	68.5	68.8	69.5	70.6	70.9	70.6	70.7	70.2
13 Interbank loans	59.9	51.3	53.1	51.0	48.6	45.9	50.1	51.3	50.8	53.0	52.4	50.3
14 Cash assets[4]	67.1	69.9	71.3	71.1	71.7	71.6	72.7	76.2	77.1	75.9	80.1	73.6
15 Other assets[5]	67.2	73.6	76.8	79.1	79.2	83.1	82.3	83.1	85.0	81.7	83.9	80.7
16 **Total assets**[6]	**1,631.3**	**1,699.6**	**1,721.1**	**1,735.0**	**1,746.9**	**1,769.0**	**1,778.5**	**1,795.3**	**1,792.7**	**1,793.2**	**1,802.5**	**1,792.7**
Liabilities												
17 Deposits	1,303.0	1,348.7	1,360.8	1,368.7	1,371.3	1,389.1	1,399.7	1,417.2	1,411.2	1,418.8	1,424.9	1,413.9
18 Transaction	278.6	281.1	280.8	282.4	279.7	279.7	277.1	276.0	273.0	276.3	282.7	275.7
19 Nontransaction	1,024.5	1,067.6	1,080.1	1,086.3	1,091.6	1,109.4	1,122.6	1,141.2	1,138.3	1,142.5	1,142.2	1,138.2
20 Large time	186.5	196.0	193.9	196.8	198.4	202.7	206.7	208.8	207.6	208.6	209.4	209.4
21 Other	838.0	871.7	886.2	889.5	893.2	906.7	915.8	932.4	930.6	933.9	932.8	928.8
22 Borrowings	171.0	188.1	199.2	200.9	206.0	206.2	205.0	212.3	207.0	208.3	212.2	219.4
23 From banks in the U.S.	81.3	87.5	94.5	93.2	93.5	89.8	87.8	87.4	83.9	85.1	88.5	91.9
24 From others	89.7	100.6	104.6	107.8	112.5	116.5	117.2	124.9	123.1	123.2	123.7	127.5
25 Net due to related foreign offices	3.6	4.1	4.3	3.5	3.4	4.3	4.5	4.5	4.2	4.3	4.2	5.3
26 Other liabilities	29.5	31.9	31.1	32.9	34.0	34.2	34.0	34.2	35.1	34.4	34.2	33.8
27 **Total liabilities**	**1,507.1**	**1,572.9**	**1,595.4**	**1,606.1**	**1,614.6**	**1,633.9**	**1,643.3**	**1,668.2**	**1,657.5**	**1,665.8**	**1,675.6**	**1,672.4**
28 Residual (assets less liabilities)[7]	124.2	126.7	125.7	129.0	132.2	135.1	135.2	127.1	135.2	127.4	126.9	120.3
	Not seasonally adjusted											
Assets												
29 Bank credit	1,454.4	1,531.3	1,540.5	1,555.6	1,570.5	1,587.4	1,590.6	1,603.4	1,594.4	1,600.3	1,607.1	1,611.2
30 Securities in bank credit	424.2	450.8	451.2	453.4	454.4	455.9	451.7	452.0	450.8	450.9	452.0	453.8
31 U.S. government securities	318.5	335.4	335.5	335.4	337.0	336.5	331.8	330.7	330.8	330.0	330.4	331.0
32 Other securities	105.7	115.3	115.7	118.0	117.4	119.4	119.9	121.3	120.0	120.9	121.6	122.8
33 Loans and leases in bank credit[2]	1,030.2	1,080.5	1,089.3	1,102.2	1,116.1	1,131.5	1,138.9	1,151.4	1,143.6	1,149.4	1,155.1	1,157.4
34 Commercial and industrial	187.4	201.4	202.1	202.9	205.9	211.2	214.1	216.1	214.5	215.4	216.7	217.4
35 Real estate	574.5	613.4	620.0	628.1	634.6	644.2	649.5	653.4	651.6	652.7	654.4	654.8
36 Revolving home equity	28.3	28.9	29.1	29.2	29.6	30.0	30.4	30.9	30.7	30.8	30.9	31.1
37 Other	546.3	584.5	590.9	598.8	605.1	614.1	619.2	622.5	620.9	621.9	623.5	623.7
38 Consumer	193.5	194.3	194.0	196.5	199.9	201.2	200.6	206.9	201.9	205.9	209.2	210.6
39 Security[3]	5.6	4.7	4.9	4.9	4.9	4.9	5.4	5.3	5.6	5.4	5.1	5.0
40 Other loans and leases	69.1	66.7	68.3	69.9	70.7	70.0	69.3	69.8	70.0	69.9	69.7	69.7
41 Interbank loans	64.9	48.3	49.0	48.4	47.4	47.0	56.0	55.2	59.5	58.0	54.2	50.4
42 Cash assets[4]	70.5	68.9	69.4	67.9	70.4	70.7	74.9	79.8	75.4	79.5	81.2	83.3
43 Other assets[5]	67.1	75.2	78.0	79.8	79.6	83.1	84.0	83.1	84.8	81.6	81.6	82.6
44 **Total assets**[6]	**1,637.9**	**1,704.2**	**1,717.6**	**1,732.1**	**1,748.0**	**1,768.1**	**1,785.4**	**1,800.9**	**1,793.8**	**1,798.9**	**1,803.4**	**1,806.7**
Liabilities												
45 Deposits	1,309.1	1,352.1	1,358.3	1,367.4	1,374.3	1,393.0	1,412.3	1,421.8	1,417.5	1,423.3	1,423.0	1,421.8
46 Transaction	289.3	280.0	276.8	275.5	276.8	276.7	280.8	286.4	277.3	285.5	289.7	294.9
47 Nontransaction	1,019.7	1,072.1	1,081.4	1,091.8	1,097.6	1,116.3	1,131.5	1,135.4	1,140.2	1,137.7	1,133.3	1,126.9
48 Large time	186.5	196.0	193.9	196.8	198.4	202.7	206.7	208.8	207.6	208.6	209.4	209.4
49 Other	833.3	876.1	887.5	895.0	899.2	913.6	924.8	926.6	932.6	929.1	923.9	917.5
50 Borrowings	172.9	189.3	199.0	201.0	208.7	209.1	207.3	214.3	205.7	210.5	218.4	222.5
51 From banks in the U.S.	83.3	87.8	93.7	92.4	94.0	91.7	89.6	89.5	84.6	87.1	92.2	94.7
52 From others	89.7	101.5	105.3	108.5	114.7	117.4	117.7	124.9	121.1	123.4	126.1	127.7
53 Net due to related foreign offices	3.6	4.1	4.3	3.5	3.4	4.3	4.5	4.5	4.2	4.3	4.2	5.3
54 Other liabilities	28.9	31.7	31.2	32.7	33.3	33.4	33.3	33.6	34.6	33.6	33.1	33.3
55 **Total liabilities**	**1,514.5**	**1,577.2**	**1,592.7**	**1,604.5**	**1,619.7**	**1,639.8**	**1,657.5**	**1,674.2**	**1,662.0**	**1,671.7**	**1,678.7**	**1,682.8**
56 Residual (assets less liabilities)[7]	123.5	127.0	124.9	127.7	128.3	128.4	127.9	126.6	131.8	127.2	124.7	123.9
MEMO												
57 Mortgage-backed securities[9]	52.4	64.7	65.2	64.8	65.2	67.6	66.3	66.3	66.3	66.2	65.9	66.3

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			
	1998	1999[r]							1999			
	Dec.	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Dec. 8	Dec. 15	Dec. 22	Dec. 29
	Seasonally adjusted											
Assets												
1 Bank credit	598.6	533.2	522.7	524.1	519.2	527.8	548.7	555.8	557.6	557.7	556.7	552.9
2 Securities in bank credit	213.9[r]	196.8	190.5	190.1	189.5	193.2	197.9	205.4	202.9	204.6	209.1	206.8
3 U.S. government securities	83.7[r]	86.7	86.2	84.1	81.8	82.2	79.7	81.7	79.8	81.4	84.0	82.5
4 Other securities	130.2	110.0	104.2	106.0	107.7	111.1	118.2	123.7	123.1	123.3	125.1	124.3
5 Loans and leases in bank credit[2]	384.8	336.4	332.3	334.0	329.7	334.6	350.8	350.4	354.7	353.0	347.6	346.1
6 Commercial and industrial	218.4	196.7	193.4	195.6	197.3	199.1	201.0	195.6	196.6	197.6	195.7	192.7
7 Real estate	21.5	19.2	18.5	17.6	17.6	17.8	17.4	17.3	17.2	17.4	17.4	17.3
8 Security[3]	66.3	52.0	52.8	55.0	51.4	54.8	65.3	66.8	70.7	67.4	63.7	64.6
9 Other loans and leases	78.6	68.5	67.5	65.8	63.4	62.9	67.0	70.7	70.2	70.6	70.7	71.5
10 Interbank loans	27.9	24.5	27.5	25.7	22.9	22.9	22.8	25.5	24.0	26.0	25.5	26.4
11 Cash assets[4]	35.6	33.5	35.2	38.0	40.9	44.1	50.4	54.6	53.2	56.4	54.9	54.4
12 Other assets[5]	38.4	33.6	32.3	29.0	29.3	31.8	34.8	37.6	36.1	37.1	39.9	37.2
13 **Total assets[6]**	**700.3**	**624.6**	**617.5**	**616.6**	**612.0**	**626.4**	**656.5**	**673.2**	**670.6**	**676.9**	**676.7**	**670.5**
Liabilities												
14 Deposits	308.4	305.7	309.1	308.9	310.9	332.2	358.9	379.5	374.1	384.1	380.2	376.1
15 Transaction	11.4	10.9	10.9	11.0	10.9	11.5	11.3	11.5	11.6	11.4	11.7	11.8
16 Nontransaction	296.9	294.8	298.2	297.9	300.0	320.7	347.6	367.9	362.5	372.7	368.5	364.3
17 Borrowings	204.0	181.9	173.2	172.9	169.8	175.6	184.2	179.5	181.5	177.4	175.6	182.1
18 From banks in the U.S.	26.8	27.5	24.4	23.6	25.2	22.9	26.9	25.4	25.1	23.9	23.4	29.0
19 From others	177.2	154.4	148.8	149.4	144.6	152.7	157.3	154.1	156.4	153.5	152.2	153.1
20 Net due to related foreign offices	101.5	64.6	71.9	72.0	66.1	53.4	44.1	37.1	41.0	36.2	41.0	32.2
21 Other liabilities	77.1	65.6	62.7	61.7	64.6	65.8	67.3	70.5	69.2	71.5	71.2	71.5
22 **Total liabilities**	**691.0**	**617.7**	**616.9**	**615.5**	**611.4**	**627.0**	**654.5**	**666.6**	**665.8**	**669.2**	**668.0**	**661.8**
23 Residual (assets less liabilities)[7]	9.4[r]	6.8	.6	1.1	.6	−.6	2.0	6.6	4.8	7.7	8.6	8.7
	Not seasonally adjusted											
Assets												
24 Bank credit	601.5	530.0	519.5	520.3	518.3	531.8	551.8	559.0	556.4	558.6	559.6	562.1
25 Securities in bank credit	212.5[r]	195.8	188.8	188.8	188.8	196.0	201.0	204.5	203.1	203.4	206.5	205.9
26 U.S. government securities	83.9[r]	87.1	85.7	83.1	80.8	82.1	80.1	82.0	80.8	81.7	83.6	82.8
27 Trading account	17.4	21.9	20.0	17.3	15.6	14.9	9.2	7.7	7.3	7.2	8.4	8.1
28 Investment account	66.5[r]	65.2	65.8	65.8	65.2	67.2	70.9	74.4	73.5	74.5	75.2	74.7
29 Other securities	128.6	108.7	103.1	105.7	108.0	114.0	120.9	122.4	122.3	121.7	122.9	123.1
30 Trading account	77.7	65.3	60.8	64.9	69.7	75.0	80.7	80.6	81.0	80.5	80.5	80.6
31 Investment account	50.9	43.4	42.3	40.9	38.2	39.0	40.2	41.9	41.3	41.2	42.5	42.5
32 Loans and leases in bank credit[2]	389.0	334.2	330.7	331.5	329.5	335.8	350.8	354.5	353.3	355.2	353.1	356.1
33 Commercial and industrial	221.1	195.0	192.6	193.9	197.0	200.2	202.3	198.3	197.1	199.2	199.1	198.0
34 Real estate	21.6	19.0	18.3	17.5	17.6	18.0	17.6	17.4	17.3	17.5	17.4	17.3
35 Security[3]	66.8	52.2	52.4	55.0	51.6	54.5	64.5	67.3	69.3	67.9	64.6	66.6
36 Other loans and leases	79.5	68.0	67.3	65.1	63.4	63.2	66.4	71.6	69.6	70.7	72.0	74.3
37 Interbank loans	27.9	24.5	27.5	25.7	22.9	22.9	22.8	25.5	24.0	26.0	25.5	26.4
38 Cash assets[4]	37.1	34.3	35.1	37.7	40.6	44.7	51.2	56.9	54.3	58.5	57.9	57.6
39 Other assets[5]	39.8	32.5	31.6	29.6	29.7	31.7	35.0	39.0	38.2	39.3	41.1	37.9
40 **Total assets[6]**	**706.2[r]**	**621.2**	**613.4**	**613.1**	**611.2**	**630.9**	**660.5**	**680.1**	**672.6**	**682.1**	**683.9**	**683.7**
Liabilities												
41 Deposits	312.0	306.4	306.7	306.3	310.4	332.2	358.3	383.8	376.2	387.8	387.0	383.4
42 Transaction	11.9	10.7	10.8	10.9	11.4	11.5	11.2	11.9	11.5	11.8	12.3	12.6
43 Nontransaction	300.2	295.7	295.9	295.4	299.1	320.7	347.1	371.9	364.8	376.0	374.7	370.8
44 Borrowings	204.0	181.9	173.2	172.9	169.8	175.6	184.2	179.5	181.5	177.4	175.6	182.1
45 From banks in the U.S.	26.8	27.5	24.4	23.6	25.2	22.9	26.9	25.4	25.1	23.9	23.4	29.0
46 From others	177.2	154.4	148.8	149.4	144.6	152.7	157.3	154.1	156.4	153.5	152.2	153.1
47 Net due to related foreign offices	107.7	63.2	69.3	69.9	64.5	55.2	46.8	42.2	41.4	40.9	46.3	42.8
48 Other liabilities	78.5	65.1	61.8	61.8	64.3	65.2	68.2	71.9	70.7	73.3	72.4	73.1
49 **Total liabilities**	**702.2**	**616.6**	**610.9**	**610.9**	**609.0**	**628.2**	**657.5**	**677.4**	**669.8**	**679.5**	**681.3**	**681.2**
50 Residual (assets less liabilities)[7]	4.0	4.5	2.5	2.2	2.2	2.7	3.0	2.7	2.8	2.7	2.6	2.5
MEMO												
51 Revaluation gains on off-balance-sheet items[8]	48.5	38.4	37.5	38.1	38.4	39.4	40.6	39.8	40.7	39.6	39.1	40.0
52 Revaluation losses on off-balance-sheet items[8]	45.1	37.6	36.2	36.3	37.4	38.1	39.4	38.7	38.9	38.5	38.4	39.2

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					1999					
	1994	1995	1996	1997	1998	June	July	Aug.	Sept.	Oct.	Nov.
1 **All issuers**	**595,382**	**674,904**	**775,371**	**966,699**	**1,163,303**	**1,221,020**	**1,242,107**	**1,257,658**	**1,274,726**	**1,321,163**	**1,369,100**
Financial companies[1]											
2 Dealer-placed paper, total[2]	223,038	275,815	361,147	513,307	614,142	705,603	712,718	710,320	718,380	751,245	802,194
3 Directly placed paper, total[3]	207,701	210,829	229,662	252,536	322,030	272,014	277,570	290,228	293,381	296,998	299,777
4 Nonfinancial companies[4]	164,643	188,260	184,563	200,857	227,132	243,404	251,819	257,110	262,965	272,920	267,128

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	1996	1997	1998	1999
1 **Total amount of reporting banks' acceptances in existence**	**25,832**	**25,774**	**14,363**	**10,094**
2 Amount of other banks' eligible acceptances held by reporting banks	709	736	523	461
3 Amount of own eligible acceptances held by reporting banks (included in item 1)	7,770	6,862	4,884	4,261
4 Amount of eligible acceptances representing goods stored in, or shipped between, foreign countries (included in item 1)	9,361	10,467	5,413	3,498

1. Includes eligible, dollar-denominated bankers acceptances legally payable in the United States. Eligible acceptances are those that are eligible for discount by Federal Reserve Banks; that is, those acceptances that meet the criteria of Paragraph 7 of Section 13 of the Federal Reserve Act (12 U.S.C. §372).
2. Data on bankers dollar acceptances are gathered from approximately 55 institutions; includes U.S. chartered 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
1997—Jan. 1	8.25	1997	8.44	1998—Jan.	8.50	1999—Jan.	7.75
Mar. 26	8.50	1998	8.35	Feb.	8.50	Feb.	7.75
		1999	8.00	Mar.	8.50	Mar.	7 75
1998—Sept 30	8.25			Apr.	8.50	Apr.	7.75
Oct. 16	8.00	1997—Jan.	8.25	May	8.50	May	7.75
Nov. 18	7.75	Feb.	8.25	June	8.50	June	7.75
		Mar.	8.30	July	8.50	July	8.00
1999—July 1	8.00	Apr.	8.50	Aug.	8.50	Aug.	8.06
Aug. 25	8.25	May	8.50	Sept.	8.49	Sept.	8.25
Nov. 17	8.50	June	8.50	Oct.	8.12	Oct.	8.25
		July	8.50	Nov	7.89	Nov.	8.37
2000—Feb. 3	8.15	Aug.	8.50	Dec	7.75	Dec.	8.50
		Sept.	8.50				
		Oct.	8.50			2000—Jan.	8.50
		Nov.	8.50				
		Dec.	8.50				

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

1.35 INTEREST RATES Money and Capital Markets

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

Item	1997	1998	1999	1999				1999, week ending				
				Sept.	Oct.	Nov.	Dec.	Dec. 3	Dec 10	Dec. 17	Dec. 24	Dec 31
MONEY MARKET INSTRUMENTS												
1 Federal funds[1,2,3]	5.46	5.35	4.97	5.22	5.20	5.42	5.30	5.63	5.45	5.44	5.46	5.01
2 Discount window borrowing[2,4]	5.00	4.92	4.62	4.75	4.75	4.86	5.00	5.00	5.00	5.00	5.00	5.00
Commercial paper[3,5,6]												
Nonfinancial												
3 1-month	5.57	5.40	5.09	5.28	5.28	5.37	5.97	5.63	5.88	6.16	6.33	5.71
4 2-month	5.57	5.38	5.14	5.29	5.30	5.82	5.91	5.89	5.86	6.01	6.07	5.73
5 3-month	5.56	5.34	5.18	5.32	5.88	5.81	5.87	5.83	5.84	5.89	6.00	5.78
Financial												
6 1-month	5.59	5.42	5.11	5.29	5.29	5.38	6.02	5.65	5.95	6.23	6.40	5.74
7 2-month	5.59	5.40	5.16	5.31	5.32	5.85	5.95	5.91	5.96	6.05	6.08	5.77
8 3-month	5.60	5.37	5.22	5.32	5.93	5.85	5.93	5.88	5.90	5.98	6.04	5.83
Commercial paper (historical)[3,5,7]												
9 1-month	5.54	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
10 3-month	5.58	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
11 6-month	5.62	n.a	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Finance paper, directly placed (historical)[3,5,8]												
12 1-month	5.44	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
13 3-month	5.48	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
14 6-month	5.48	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a
Bankers acceptances[3,5,9]												
15 3-month	5.54	5.39	5.24	5.37	6.02	5.94	6.00	5.92	5.99	5.98	6.08	6.00
16 6-month	5.57	5.30	5.30	5.75	5.89	5.83	5.94	5.83	5.93	5.90	6.00	5.99
Certificates of deposit, secondary market[3,10]												
17 1-month	5.54	5.49	5.19	5.34	5.36	5.50	6.34	6.24	6.39	6.44	6.48	6.05
18 3-month	5.62	5.47	5.33	5.50	6.13	6.00	6.05	6.00	6.03	6.08	6.16	6.00
19 6-month	5.73	5.44	5.46	5.89	6.04	5.97	6.07	6.01	6.03	6.07	6.14	6.07
20 Eurodollar deposits, 3-month[3,11]	5.61	5.45	5.31	5.48	6.09	5.97	6.06	6.05	6.04	6.05	6.14	6.02
U.S. Treasury bills												
Secondary market[3,5]												
21 3-month	5.06	4.78	4.64	4.68	4.86	5.07	5.20	5.13	5.09	5.23	5.38	5.17
22 6-month	5.18	4.83	4.75	4.88	4.98	5.20	5.44	5.33	5.33	5.48	5.56	5.47
23 1-year	5.32	4.80	4.81	4.96	5.12	5.24	5.51	5.39	5.37	5.51	5.62	5.60
Auction high[3,5,12]												
24 3-month	5.07	4.81	4.66	4.73	4.88	5.07	5.23	5.20	5.05	5.21	5.40	5.30
25 6-month	5.18	4.85	4.76	4.91	4.98	5.17	5.43	5.33	5.29	5.41	5.60	5.51
26 1-year	5.36	4.85	4.78	5.00	5.12	5.17	5.35	n.a.	5.35	n.a.	n.a.	n.a.
U.S. TREASURY NOTES AND BONDS												
Constant maturities[13]												
27 1-year	5.63	5.05	5.08	5.25	5.43	5.55	5.84	5.73	5.69	5.85	5.97	5.95
28 2-year	5.99	5.13	5.43	5.66	5.86	5.86	6.10	6.03	5.96	6.09	6.23	6.22
29 3-year	6.10	5.14	5.49	5.75	5.94	5.92	6.14	6.08	6.00	6.11	6.26	6.26
30 5-year	6.22	5.15	5.55	5.80	6.03	5.97	6.19	6.13	6.03	6.14	6.30	6.33
31 7-year	6.33	5.28	5.79	6.12	6.33	6.17	6.38	6.31	6.21	6.33	6.51	6.52
32 10-year	6.35	5.26	5.65	5.92	6.11	6.03	6.28	6.20	6.13	6.24	6.39	6.41
33 20-year	6.69	5.72	6.20	6.50	6.66	6.48	6.69	6.64	6.54	6.67	6.82	6.80
34 30-year	6.61	5.58	5.87	6.07	6.26	6.15	6.35	6.30	6.22	6.32	6.46	6.46
Composite												
35 More than 10 years (long-term)	6.67	5.69	6.14	6.43	6.60	6.42	6.63	6.58	6.48	6.60	6.76	6.75
STATE AND LOCAL NOTES AND BONDS												
Moody's series[14]												
36 Aaa	5.32	4.93	5.28	5.56	5.78	5.77	5.82	5.80	5.78	5.83	5.85	5.85
37 Baa	5.50	5.14	5.70	6.06	6.23	6.23	6.25	6.24	6.20	6.24	6.28	6.29
38 *Bond Buyer* series[15]	5.52	5.09	5.43	5.69	5.92	5.86	5.95	5.91	5.89	5.96	6.00	6.00
CORPORATE BONDS												
39 Seasoned issues, all industries[16]	7.54	6.87	7.45	7 78	7.93	7.73	7.87	7.83	7.74	7.74	7.98	7 96
Rating group												
40 Aaa	7.27	6.53	7.05	7.39	7.55	7.36	7.55	7.50	7.42	7.52	7.66	7.64
41 Aa	7.48	6.80	7.36	7.68	7.79	7.62	7.78	7.72	7.64	7.75	7.89	7.88
42 A	7.54	6.93	7.53	7.84	7.99	7.79	7.96	7.91	7.83	7.93	8.07	8.06
43 Baa	7.87	7.22	7.88	8.20	8.38	8.15	8.19	8.17	8.08	8.17	8.29	8.24
MEMO												
Dividend–price ratio[17]												
44 Common stocks	1.77	1.49	1.25	1.27	1.28	1.21	1.18	1.20	1.18	1.18	1.17	1.15

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	1997	1998	1999	1999 Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
	Prices and trading volume (averages of daily figures)[1]											
Common stock prices (indexes)												
1 New York Stock Exchange (Dec. 31, 1965 = 50)	456.99	550.65	619.52	627.75	635.62	629.53	648.83	621.03	607.87	599.04	634.22	638.17
2 Industrial	574.97	684.35	775.29	780.84	791.72	783.96	809.33	778.82	769.47	753.94	791.41	808.28
3 Transportation	415.08	468.61	491.62	523.08	537.88	520.66	528.72	492.13	462.33	450.13	474.78	461.04
4 Utility	143.87	190.52	284.82	228.48	242.98	241.36	250.50	241.84	237.71	285.16	502.58	511.78
5 Finance	424.84	516.65	530.97	564.99	562.66	546.43	557.92	521.59	493.37	490.92	539.20	510.99
6 Standard & Poor's Corporation (1941–43 = 10)[2]	873.43	1,085.50	1,327.33	1,334.76	1,332.07	1,322.55	1,380.99	1,327.49	1,318.17	1,300.01	1,390.99	1,428.68
7 American Stock Exchange (Aug. 31, 1973 = 50)[3]	628.34	682.69	770.90	748.29	787.02	772.01	803.75	781.33	788.74	786.96	819.60	838.24
Volume of trading (thousands of shares)												
8 New York Stock Exchange	523,254	666,534	799,554	874,818	785,778	723,025	721,294	709,569	772,627	882,422	866,281	884,141
9 American Stock Exchange	24,390	28,870	n.a.	38,895	35,241	28,806	25,754	27,795	32,540	35,762	33,330	41,076
	Customer financing (millions of dollars, end-of-period balances)											
10 **Margin credit at broker–dealers**[4]	**126,090**	**140,980**	**228,530**	**172,880**	**177,984**	**176,930**	**178,360**	**176,390**	**179,316**	**182,272**	**206,280**	**228,530**
Free credit balances at brokers[5]												
11 Margin accounts[6]	31,410	40,250	55,130	41,200	41,250	42,865	44,330	44,230	47,125	51,040	49,480	55,130
12 Cash accounts	52,160	62,450	79,070	60,870	61,665	64,100	60,000	62,600	62,810	61,085	68,200	79,070

Indicator	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					
				1999					
	1997	1998	1999	July	Aug.	Sept.	Oct.	Nov.	Dec.
U.S. budget[1]									
1 Receipts, total	1,579,292	1,721,798	1,827,454	121,923	126,324	200,396	121,035	121,375	201,196
2 On-budget	1,187,302	1,305,999	1,382,986	87,959	91,554	161,304	89,009	86,909	162,772
3 Off-budget	391,990	415,799	444,468	33,964	34,770	39,092	32,026	34,466	38,424
4 Outlays, total	1,601,235	1,652,552	1,703,040	147,086	129,127	142,341	147,701	148,408	168,114
5 On-budget	1,290,609	1,335,948	1,382,262	117,652	97,984	107,222	119,506	116,388	165,504
6 Off-budget	310,626	316,604	320,778	29,434	31,143	35,119	28,196	32,020	2,611
7 Surplus or deficit (−), total	−21,943	69,246	124,414	−25,164	−2,803	58,055	−26,667	−27,032	33,081
8 On-budget	−103,307	−29,949	724	−29,693	−6,430	54,082	−30,497	−29,479	−2,732
9 Off-budget	81,364	99,195	123,690	4,530	3,627	3,973	3,830	2,446	35,813
Source of financing (total)									
10 Borrowing from the public	38,171	−51,211	−88,304	1,193	26,470	−47,718	5,754	6,132	35,749
11 Operating cash (decrease, or increase (−))	604	4,743	−17,580	13,553	3,160	−20,069	8,891	41,488	−77,248
12 Other[2]	−16,832	−22,778	−18,530	10,418	−26,827	9,732	12,022	−20,588	8,418
MEMO									
13 Treasury operating balance (level, end of period)	43,621	38,878	56,458	39,549	36,389	56,458	47,567	6,079	83,327
14 Federal Reserve Banks	7,692	4,952	6,641	4,984	5,559	6,641	4,527	5,025	28,402
15 Tax and loan accounts	35,930	33,926	49,817	34,565	30,831	49,817	43,040	1,054	54,925

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 1998	Fiscal year 1999	Calendar year 1998 H1	Calendar year 1998 H2	Calendar year 1999 H1	Calendar year 1999 H2	Calendar year 1999 Oct.	Calendar year 1999 Nov.	Calendar year 1999 Dec
RECEIPTS									
1 **All sources**	**1,721,798**	**1,827,454**	**922,630**	**825,057**	**966,045**	**892,249**	**121,035**	**121,375**	**201,196**
2 Individual income taxes, net	828,586	879,480	447,514	392,332	481,527	425,451	63,505	57,477	94,535
3 Withheld	646,483	693,940	316,309	339,144	351,068	372,012	57,596	59,668	88,311
4 Nonwithheld	281,527	308,185	219,136	65,204	240,278	68,302	7,129	2,298	7,373
5 Refunds	99,476	122,706	87,989	12,032	109,467	14,841	1,221	4,490	1,149
Corporation income taxes									
6 Gross receipts	213,008	216,324	109,353	104,163	106,861	110,111	7,175	3,461	46,486
7 Refunds	24,593	31,645	14,220	14,250	17,092	13,996	4,995	1,809	1,540
8 Social insurance taxes and contributions, net	571,831	611,833	312,713	268,466	324,831	292,551	43,879	49,013	48,421
9 Employment taxes and contributions[2]	540,014	580,880	293,520	256,142	306,235	280,059	42,412	45,759	47,742
10 Unemployment insurance	27,484	26,480	17,080	10,121	16,378	10,173	1,049	2,868	266
11 Other net receipts[3]	4,333	4,473	2,112	2,202	2,216	2,319	418	386	412
12 Excise taxes	57,673	70,414	29,922	33,366	31,015	34,249	4,181	6,072	5,709
13 Customs deposits	18,297	18,336	8,546	9,838	8,440	10,287	1,788	1,621	1,612
14 Estate and gift taxes	24,076	27,782	12,971	12,359	14,915	14,001	2,554	2,465	2,575
15 Miscellaneous receipts[4]	32,658	34,929	15,829	18,735	15,140	19,565	2,948	3,075	3,398
OUTLAYS									
16 **All types**	**1,652,552**	**1,703,040**	**815,884**	**877,414**	**817,235**	**882,777**	**147,701**	**148,408[r]**	**168,114**
17 National defense	268,456	274,873	129,351	140,196	134,414	149,820	24,036	23,224	31,261
18 International affairs	13,109	15,243	4,610	8,297	6,879	8,530	1,000	1,522	3,527
19 General science, space, and technology	18,219	18,125	9,426	10,142	9,319	10,089	1,524	1,661	1,853
20 Energy	1,270	912	957	699	797	−90	−311	−199	32
21 Natural resources and environment	22,396	23,968	10,051	12,671	10,351	12,098	1,528	2,078	2,350
22 Agriculture	12,206	23,011	2,387	16,757	9,803	20,887	6,759	7,401	4,362
23 Commerce and housing credit	1,014	2,647	−2,483	4,046	−1,629	7,351	1,698	505[r]	−696
24 Transportation	40,332	42,531	16,196	20,836	17,082	22,971	3,750	3,890	3,858
25 Community and regional development	9,720	11,870	4,863	6,972	5,368	7,135	1,627	1,244	1,300
26 Education, training, employment, and social services	54,919	56,402	25,928	27,762	29,003	27,532	5,175	4,070	5,593
27 Health	131,440	141,079	65,053	67,838	69,320	74,490	12,229	12,124	13,462
28 Social security and Medicare	572,047	580,488	286,305	316,809	261,146	295,030	48,179	48,686	52,720
29 Income security	233,202	237,707	125,196	109,481	126,552	113,504	17,607	18,216	23,747
30 Veterans benefits and services	41,781	43,212	19,615	22,750	20,105	23,412	3,657	3,795	5,320
31 Administration of justice	22,832	25,924	11,287	12,041	13,149	13,459	2,127	2,579	2,163
32 General government	13,444	15,758	6,139	9,136	6,650	6,993	1,117	646	1,974
33 Net interest[5]	243,359	229,735	122,345	116,954	116,655	112,420	18,894	20,410	18,328
34 Undistributed offsetting receipts[6]	−47,194	−40,445	−21,340	−25,793	−17,724	−22,850	−2,896	−3,441	−3,040

1. Functional details do not sum to total outlays for calendar year data because revisions to monthly totals have not been distributed among functions. Fiscal year total for receipts and outlays do not correspond to calendar year data because revisions from the *Budget* have not been fully distributed across months.
2. Old-age, disability, and hospital insurance, and railroad retirement accounts.
3. Federal employee retirement contributions and civil service retirement and disability fund.
4. Deposits of earnings by Federal Reserve Banks and other miscellaneous receipts.
5. Includes interest received by trust funds.
6. Rents and royalties for the outer continental shelf, U.S. government contributions for employee retirement, and certain asset sales.

SOURCE. Fiscal year totals: U.S Office of Management and Budget, *Budget of the U.S. Government, Fiscal Year 2001*; monthly and half-year totals: U.S. Department of the Treasury, *Monthly Treasury Statement of Receipts and Outlays of the U.S. Government.*

1.40 FEDERAL DEBT SUBJECT TO STATUTORY LIMITATION

Billions of dollars, end of month

Item	1997	1998				1999			
	Dec 31	Mar. 31	June 30	Sept. 30	Dec. 31	Mar. 31	June 30	Sept. 30	Dec. 31
1 **Federal debt outstanding**	**5,536**	**5,573**	**5,578**	**5,556**	**5,643**	**5,681**	**5,668**	**5,685**	**29**
2 Public debt securities	5,502	5,542	5,548	5,526	5,614	5,652	5,639	5,656	5,776
3 Held by public	3,847	3,872	3,790	3,761	3,787	3,795	3,685	3,667	n.a.
4 Held by agencies	1,656	1,670	1,758	1,766	1,827	1,857	1,954	1,989	n.a.
5 Agency securities	34	31	30	29	29	29	29	29	29
6 Held by public	27	26	26	26	29	28	28	28	n.a.
7 Held by agencies	7	5	4	4	1	1	1	1	n.a.
8 **Debt subject to statutory limit**	**5,417**	**5,457**	**5,460**	**5,440**	**5,530**	**5,566**	**5,552**	**5,568**	**5,687**
9 Public debt securities	5,416	5,456	5,460	5,439	5,530	5,566	5,552	5,568	5,687
10 Other debt[1]	0	0	0	0	0	0	0	0	0
MEMO									
11 Statutory debt limit	5,950	5,950	5,950	5,950	5,950	5,950	5,950	5,950	5,950

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

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

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

Billions of dollars, end of period

Type and holder	1996	1997	1998	1999	1999			
					Q1	Q2	Q3	Q4
1 **Total gross public debt**	**5,323.2**	**5,502.4**	**5,614.2**	**.0**	**5,651.6**	**5,638.8**	**5,656.3**	**5,776.09**
By type								
2 Interest-bearing	5,317.2	5,494.9	5,605.4	5,766.1	5,643.1	5,629.5	5,647.2	5,766.1
3 Marketable	3,459.7	3,456.8	3,355.5	3,281.0	3,361.3	3,248.5	3,233.0	3,281.0
4 Bills	777.4	715.4	691.0	737.1	725.5	647.8	653.2	737.1
5 Notes	2,112.3	2,106.1	1,960.7	1,784.5	1,912.0	1,868.5	1,828.8	1,784.5
6 Bonds	555.0	587.3	621.2	643.7	632.5	632.5	643.7	643.7
7 Inflation-indexed notes and bonds[1]	n.a.	33.0	50.6	68.2	59.2	59.9	67.6	68.2
8 Nonmarketable[2]	1,857.5	2,038.1	2,249.9	2,485.1	2,281.8	2,381.0	2,414.2	2,485.1
9 State and local government series	101.3	124.1	165.3	165.7	167.5	172.6	168.1	165.7
10 Foreign issues[3]	37.4	36.2	34.3	31.3	33.5	30.9	31.0	31.3
11 Government	47.4	36.2	34.3	31.3	33.5	30.9	31.0	31.3
12 Public	.0	.0	.0	.0	.0	.0	.0	.0
13 Savings bonds and notes	182.4	181.2	180.3	179.4	180.6	180.0	180.0	179.4
14 Government account series[4]	1,505.9	1,666.7	1,840.0	2,078.7	1,870.2	1,967.5	2,005.2	2,078.7
15 Non-interest-bearing	6.0	7.5	8.8	10.0	8.5	9.3	9.0	10.0
By holder[5]								
16 U.S. Treasury and other federal agencies and trust funds	1,497.2	1,655.7	1,826.8		1,857.1	1,953.6	1,989.1	
17 Federal Reserve Banks	410.9	451.9	471.7		464.5	493.8	496.5	
18 Private investors	3,431.2	3,414.6	3,334.0		3,327.6	3,199.3	3,175.6	
19 Depository institutions	296.6	300.3	237.3		247.7	243.0	n.a.	
20 Mutual funds	315.8	321.5	343.2		351.1	328.1	n.a.	
21 Insurance companies	214.1	176.6	144.6	n.a.	143.8	141.8	n.a.	n.a.
22 State and local treasuries[6]	257.0	239.3	269.3		272.5	279.1	n.a.	
Individuals								
23 Savings bonds	187.0	186.5	186.7		186.6	186.6	186.3	
24 Pension funds	392.7	421.0	434.7		437.2	439.5	n.a.	
25 Private	189.2	204.1	218.1		220.0	226.6	n.a.	
26 State and Local	203.5	216.9	216.6		217.2	212.9	n.a.	
27 Foreign and international[7]	1,102.1	1,241.6	1,278.7		1,272.1	1,258.6	1,281.3	
28 Other miscellaneous investors[6,8]	665.9	527.9	439.6		416.6	322.6	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. In March 1996, in a redefinition of series, fully defeased debt backed by nonmarketable federal securities was removed from "Other miscellaneous investors" and added to "State and local treasuries." The data shown here have been revised accordingly.
7. Includes nonmarketable foreign series treasury securities and treasury deposit funds. Excludes treasury securities held under repurchase agreements in custody accounts at the Federal Reserve Bank of New York.
8. Includes individuals, government-sponsored enterprises, brokers and dealers, bank personal trusts and estates, corporate and noncorporate businesses, and other investors

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

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

Millions of dollars, daily averages

Item	1999			1999, week ending								
	Sept.	Oct.	Nov.	Nov. 3	Nov. 10	Nov. 17	Nov. 24	Dec. 1	Dec. 8	Dec. 15	Dec. 22	Dec. 29
OUTRIGHT TRANSACTIONS[2]												
By type of security												
1 U.S. Treasury bills	27,445	23,806	33,394	24,326	37,437	35,985	23,983	43,667	33,708	27,468	31,651	34,003
Coupon securities, by maturity												
2 Five years or less	82,426	90,839	100,867	95,703	114,337	110,793	90,562	88,378	84,403	81,589	82,090	37,615
3 More than five years	54,516	57,462	64,960	65,940	73,508	66,208	55,396	63,933	54,023	48,984	44,004	16,996
4 Inflation-indexed	586	1,096	750	460	989	722	782	666	572	575	315	318
Federal agency												
5 Discount notes	46,570	45,499	48,022	43,062	44,939	57,105	47,022	45,494	49,761	43,040	41,715	43,577
Coupon securities, by maturity												
6 One year or less	1,018	847	793	498	314	818	1,229	1,035	910	695	971	589
7 More than one year, but less than or equal to five years	5,858	6,420	5,878	7,009	7,963	5,719	4,170	4,758	6,739	3,972	4,506	2,071
8 More than five years	4,593	3,874	4,092	7,220	2,895	3,474	5,246	2,574	2,961	6,025	2,159	894
9 Mortgage-backed	64,305	63,248	55,736	45,512	101,830	53,088	33,059	37,444	86,488	49,435	28,244	10,951
By type of counterparty												
With interdealer broker												
10 U.S. Treasury	88,466	93,305	107,232	99,241	124,018	111,932	91,447	106,097	94,137	83,392	81,486	45,922
11 Federal agency	4,534	4,969	4,907	4,606	5,295	5,922	4,356	4,066	5,093	3,884	3,690	2,597
12 Mortgage-backed	23,835	21,540	20,443	17,991	33,378	19,791	12,852	16,416	32,077	18,734	11,990	3,223
With other												
13 U.S. Treasury	76,506	79,898	92,740	87,188	102,253	101,777	79,276	90,548	78,569	75,224	76,573	43,008
14 Federal agency	53,504	51,671	53,879	53,183	50,816	61,193	53,311	49,796	55,277	49,848	45,660	44,533
15 Mortgage-backed	40,469	41,708	35,294	27,521	68,452	33,298	20,207	21,029	54,411	30,701	16,254	7,728
FUTURES TRANSACTIONS[3]												
By type of deliverable security												
16 U.S. Treasury bills	0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Coupon securities, by maturity												
17 Five years or less	2,226	2,543	3,290	2,247	4,375	2,016	2,451	5,355	5,427	4,078	3,085	668
18 More than five years	13,642	12,576	16,051	14,719	14,753	12,676	16,092	22,842	17,396	11,562	13,542	4,105
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	842	1,039	1,823	1,617	1,943	2,692	1,316	1,376	1,496	677	1,466	456
27 More than five years	3,440	3,802	4,785	5,507	5,648	4,201	4,539	4,203	3,380	3,663	4,932	2,787
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	917	498	671	841	1,172	552	436	361	761	555	503	312

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

Dealers report cumulative transactions for each week ending Wednesday.

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

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

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

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

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

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

Millions of dollars

Item	1999			1999, week ending							
	Sept.	Oct.	Nov.	Nov. 3	Nov. 10	Nov. 17	Nov. 24	Dec. 1	Dec. 8	Dec. 15	Dec. 22
	Positions[2]										
NET OUTRIGHT POSITIONS[3]											
By type of security											
1 U.S. Treasury bills	1,862	7,071	9,579	6,450	18,382	−107	10,738	10,823	19,084	27,359	23,356
Coupon securities, by maturity											
2 Five years or less	−33,167	−33,679	−28,880	−34,706	−31,322	−29,763	−22,671	−29,331	−29,504	−25,835	−18,437
3 More than five years	−14,651	−22,651	−23,250	−25,412	−22,166	−24,574	−19,961	−25,728	−31,604	−26,904	−29,629
4 Inflation-indexed	3,758	3,781	3,164	3,489	3,421	3,201	2,845	3,030	2,814	2,577	2,317
Federal agency											
5 Discount notes	38,620	40,900	43,941	48,044	49,010	40,261	41,032	43,663	47,233	46,687	40,705
Coupon securities, by maturity											
6 One year or less	5,158	6,085	6,270	5,837	5,310	5,385	7,378	7,344	5,753	5,256	5,495
7 More than one year, but less than or equal to five years	6,989	4,438	4,533	4,749	5,362	4,505	4,595	3,416	4,147	2,822	368
8 More than five years	2,346	2,913	3,464	4,028	3,958	3,010	3,235	3,403	3,123	2,855	2,305
9 Mortgage-backed	18,585	20,356	23,743	23,680	26,743	27,531	18,912	21,490	24,714	27,783	24,679
NET FUTURES POSITIONS[4]											
By type of deliverable security											
10 U.S. Treasury bills	0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	0	n.a.
Coupon securities, by maturity											
11 Five years or less	7,803	10,122	4,304	7,435	2,222	2,345	3,937	7,879	8,087	5,950	6,602
12 More than five years	−420	9,652	324	5,893	284	484	−1,932	30	189	−2,441	1,360
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	−57	−1,669	−594	−692	148	193	−1,051	−1,794	−1,663	−920	−2,237
21 More than five years	−1,552	−3,571	−1,103	−2,863	−587	−1,132	−965	−951	253	526	−655
22 Inflation-indexed	0	0	0	0	0	0	0	0	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	n.a.	69	175	70	n.a.	n.a.	220	n.a.	n.a.	n.a.	n.a.
26 More than five years	n.a.	28	29	6	n.a.	39	n.a.	n.a.	n.a.	n.a.	n.a.
27 Mortgage-backed	2,105	1,011	−272	1,062	−726	−880	−472	535	1,117	1,005	1,439
	Financing[5]										
Reverse repurchase agreements											
28 Overnight and continuing	290,610	288,446	288,146	301,622	259,922	313,198	271,979	303,968	273,027	272,027	250,497
29 Term	792,662	806,146	799,629	837,974	894,097	727,327	785,895	770,619	825,534	861,296	884,556
Securities borrowed											
30 Overnight and continuing	250,667	255,880	239,510	253,642	239,261	246,802	228,406	237,180	232,345	229,317	216,402
31 Term	91,796	96,565	97,728	98,985	103,531	91,623	99,226	95,703	99,839	109,328	128,040
Securities received as pledge											
32 Overnight and continuing	n.a.	2,395	1,965	2,351	n.a.	1,907	1,977	1,825	1,674	1,588	1,653
33 Term	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Repurchase agreements											
34 Overnight and continuing	692,032	694,423	673,755	712,610	647,053	711,383	625,619	697,741	670,499	682,401	644,426
35 Term	680,923	683,085	715,763	720,925	811,122	628,116	729,611	688,027	727,690	762,671	795,103
Securities loaned											
36 Overnight and continuing	9,063	9,040	9,049	9,329	9,454	9,199	8,706	8,661	8,599	8,949	9,086
37 Term	7,026	7,090	6,744	7,032	7,005	6,743	6,455	6,633	6,642	7,055	7,277
Securities pledged											
38 Overnight and continuing	53,966	54,712	50,099	50,756	50,163	49,651	50,473	49,781	49,688	52,467	48,797
39 Term	8,116	8,382	6,745	8,379	7,927	6,116	6,138	5,989	6,746	8,343	13,601
Collateralized loans											
40 Total	23,284	25,763	23,590	30,725	25,868	23,329	22,760	18,639	8,831	9,742	13,434

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

2. Securities positions are reported at market value.

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

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

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

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

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

1.44 FEDERAL AND FEDERALLY SPONSORED CREDIT AGENCIES Debt Outstanding

Millions of dollars, end of period

Agency	1995	1996	1997	1998	1999				
					June	July	Aug.	Sept.	Oct.
1 **Federal and federally sponsored agencies**	**844,611**	**925,823**	**1,022,609**	**1,296,477**	**1,425,396**	**1,457,925**	**1,491,900**	**1,525,916**	↑
2 Federal agencies	37,347	29,380	27,792	26,502	26,370	26,204	26,107	26,384	
3 Defense Department[1]	6	6	6	6	6	6	6	6	
4 Export-Import Bank[2,3]	2,050	1,447	552	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5 Federal Housing Administration[4]	97	84	102	205	99	105	109	114	
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.	
7 Postal Service[6]	5,765	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	
8 Tennessee Valley Authority	29,429	27,853	27,786	26,496	26,364	26,198	26,101	26,378	
9 United States Railway Association[6]	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	↓
10 Federally sponsored agencies[7]	807,264	896,443	994,817	1,269,975	1,399,026	1,431,721	1,465,793	1,499,532	n.a.
11 Federal Home Loan Banks	243,194	263,404	313,919	382,131	437,109	444,775	458,320	481,639	489,401
12 Federal Home Loan Mortgage Corporation	119,961	156,980	169,200	287,396	314,412	334,575	340,972	341,144	352,487
13 Federal National Mortgage Association	299,174	331,270	369,774	460,291	499,897	502,653	517,200	524,880	527,403
14 Farm Credit Banks[8]	57,379	60,053	63,517	63,488	67,749	66,922	67,269	67,938	68,338
15 Student Loan Marketing Association[9]	47,529	44,763	37,717	35,399	37,959	40,843	40,310	41,921	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]	**78,681**	**58,172**	**49,090**	**44,129**	**40,585**	**39,901**	**39,341**	**43,116**	n.a.
Lending to federal and federally sponsored agencies									
20 Export-Import Bank[3]	2,044	1,431	552	↑	↑	↑	↑	↑	↑
21 Postal Service[6]	5,765	n.a.	n.a.						
22 Student Loan Marketing Association	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	
23 Tennessee Valley Authority	3,200	n.a.	n.a.						n.a.
24 United States Railway Association[6]	n.a.	n.a.	n.a.	↓	↓	↓	↓	↓	
Other lending[14]									
25 Farmers Home Administration	21,015	18,325	13,530	9,500	7,935	7,445	7,270	7,125	
26 Rural Electrification Administration	17,144	16,702	14,898	14,091	13,877	13,944	13,969	13,885	
27 Other	29,513	21,714	20,110	20,538	18,773	18,512	18,102	22,106	↓

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

1.45 NEW SECURITY ISSUES Tax-Exempt State and Local Governments

Millions of dollars

Type of issue or issuer, or use	1996	1997	1998	1999							
				May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1 **All issues, new and refunding**[1]	**171,222**	**214,694**	**262,342**	**16,234**	**23,428**	**18,671**	**15,746**	**18,433**	**17,497**	**17,428**	**14,751**
By type of issue											
2 General obligation	60,409	69,934	87,015	5,294	10,997	6,206	4,268	5,171	4,183	4,996	3,715
3 Revenue	110,813	134,989	175,327	10,941	12,431	12,465	11,478	13,262	13,314	12,433	11,035
By type of issuer											
4 State	13,651	18,237	23,506	1,220	1,236	2,194	911	2,341	1,753	929	834
5 Special district or statutory authority[2]	113,228	134,919	178,421	11,279	18,414	13,572	11,578	13,449	12,186	12,613	10,640
6 Municipality, county, or township	44,343	70,558	60,173	3,735	3,779	2,906	3,257	2,642	3,557	3,886	3,277
7 **Issues for new capital**	**112,298**	**135,519**	**160,568**	**12,149**	**19,509**	**12,172**	**12,530**	**14,973**	**14,908**	**14,084**	**11,475**
By use of proceeds											
8 Education	26,851	31,860	36,904	2,795	3,793	3,415	2,842	2,885	2,049	2,732	3,095
9 Transportation	12,324	13,951	19,926	1,791	1,650	1,264	1,955	1,886	1,674	892	1,201
10 Utilities and conservation	9,791	12,219	21,037	603	1,594	535	1,038	1,976	1,176	1,893	1,008
11 Social welfare	24,583	27,794	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
12 Industrial aid	6,287	6,667	8,594	1,058	739	850	585	1,271	726	668	707
13 Other purposes	32,462	35,095	42,450	3,760	7,195	2,729	3,255	3,941	4,509	5,213	3,141

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

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

1.46 NEW SECURITY ISSUES U.S. Corporations

Millions of dollars

Type of issue, offering, or issuer	1996	1997	1998	1999							
				Apr.	May	June	July	Aug.	Sept.	Oct.[r]	Nov.
1 **All issues**[1]	**773,110**	**929,256**	**1,128,491**	**85,862**	**110,475**	**96,608**	**96,608**	**83,466**	**82,414**	**58,613**	**84,932**
2 **Bonds**[2]	**651,104**	**811,376**	**1,001,736**	**76,721**	**94,713**	**88,338**	**83,546**	**75,708**	**75,807**	**47,103**	**61,033**
By type of offering											
3 Sold in the United States	567,671	708,188	923,771	65,886	86,730	79,031	69,451	63,383	65,679	37,721	53,908
4 Sold abroad	83,433	103,188	77,965	10,834	7,983	9,306	14,095	12,325	10,128	9,382	7,125
MEMO											
5 Private placements, domestic	43,688	54,990	37,845	2,935	5,022	6,441	2,133	1,670	1,372	1,467	n.a.
By industry group											
6 Nonfinancial	167,904	222,603	307,935	30,676	32,843	24,531	25,526	22,704	20,655	13,990	24,283
7 Financial	483,200	588,773	693,801	46,045	61,870	63,807	58,020	53,005	55,151	33,112	36,750
8 **Stocks**[3]	**122,006**	**117,880**	**126,755**	**9,141**	**15,762**	**8,270**	**13,062**	**7,758**	**6,607**	**11,510**	**23,899**
By type of offering											
9 Public	122,006	117,880	126,755	9,141	15,762	8,270	13,062	7,758	6,607	11,510	23,899
10 Private placement[4]	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
By industry group											
11 Nonfinancial	80,460	60,386	74,113	7,640	10,425	6,436	11,589	6,379	5,647	10,961	22,667
12 Financial	41,546	57,494	52,642	1,501	5,337	1,834	1,473	1,379	960	549	1,232

1. Figures represent gross proceeds of issues maturing in more than one year; they are the principal amount or number of units calculated by multiplying by the offering price. Figures exclude secondary offerings, employee stock plans, investment companies other than closed-end, intracorporate transactions, and Yankee bonds. Stock data include ownership securities issued by limited partnerships.
2. Monthly data include 144(a) offerings.
3. Monthly data cover only public offerings.
4. Data are not available.

SOURCE. Securities Data Company and the Board of Governors of the Federal Reserve System.

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

Millions of dollars

Item	1998	1999	1999 May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1 **Sales of own shares**[2]	**1,461,430**	**1,790,491**	**140,422**	**138,502**	**140,926**	**132,991**	**132,226**	**140,738**	**155,490**	**184,495**
2 Redemptions of own shares	1,217,022	1,621,289	127,800	117,953	128,173	125,908	126,207	124,052	143,688	178,157
3 Net sales[3]	244,408	169,202	12,622	20,550	12,754	7,084	6,019	16,686	11,801	6,338
4 **Assets**[4]	**4,173,531**	**5,231,073**	**4,442,880**	**4,650,385**	**4,585,131**	**4,548,784**	**4,498,964**	**4,705,746**	**4,874,733**	**5,231,073**
5 Cash[5]	191,393	219,594	211,580	214,779	209,061	209,349	209,709	225,762	214,751	219,594
6 Other	3,982,138	5,011,479	4,231,300	4,435,607	4,376,070	4,339,435	4,289,255	4,479,985	4,659,982	5,011,479

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

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

1.48 CORPORATE PROFITS AND THEIR DISTRIBUTION

Billions of dollars; quarterly data at seasonally adjusted annual rates

Account	1996	1997	1998	1997 Q4	1998 Q1	1998 Q2	1998 Q3	1998 Q4	1999 Q1	1999 Q2	1999 Q3
1 Profits with inventory valuation and capital consumption adjustment	753.9	837.9	846.1	853.5	858.3	847.9	843.8	834.3	882.0	875.5	879.2
2 Profits before taxes	726.3	795.9	781.9	811.6	788.9	792.0	780.1	766.7	818.1	835.8	853.8
3 Profits-tax liability	223.6	238.3	240.2	244.1	239.9	241.1	244.3	235.6	248.0	254.4	259.4
4 Profits after taxes	502.7	557.6	541.7	567.4	548.9	550.9	535.8	531.0	570.1	581.4	594.3
5 Dividends	297.7	333.7	348.6	344.8	346.5	347.3	348.4	352.2	356.4	361.5	367.3
6 Undistributed profits	205.0	223.9	193.1	222.6	202.5	203.6	187.4	178.8	213.7	219.9	227.0
7 Inventory valuation	3.1	7.4	20.9	4.0	29.5	13.6	19.8	20.8	13.3	−13.6	−26.7
8 Capital consumption adjustment	24.4	34.6	43.3	38.0	39.9	42.4	43.9	46.9	50.6	53.2	52.1

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	1997	1998	1999	1998 Q2	1998 Q3	1998 Q4	1999 Q1	1999 Q2	1999 Q3
ASSETS									
1 Accounts receivable, gross[2]	663.3	711.7	n.a.	676.0	687.6	711.7	733.8	756.5	776.5
2 Consumer	256.8	261.8	n.a.	251.3	254.0	261.8	261.7	269.2	271.3
3 Business	318.5	347.5	n.a.	334.9	335.1	347.5	362.8	373.7	382.9
4 Real estate	87.9	102.3	n.a.	89.9	98.5	102.3	109.2	113.5	122.3
5 LESS: Reserves for unearned income	52.7	56.3	n.a.	53.2	52.4	56.3	52.9	53.4	54.0
6 Reserves for losses	13.0	13.8	n.a.	13.2	13.2	13.8	13.4	13.4	13.6
7 Accounts receivable, net	597.6	641.6	n.a.	609.6	622.0	641.6	667.6	689.7	708.8
8 All other	312.4	337.9	n.a.	340.1	313.7	337.9	363.3	373.2	368.6
9 **Total assets**	**910.0**	**979.5**	n.a.	**949.7**	**935.7**	**979.5**	**1,030.8**	**1,062.9**	**1,077.4**
LIABILITIES AND CAPITAL									
10 Bank loans	24.1	26.3	n.a.	22.3	24.9	26.3	24.8	25.1	27.0
11 Commercial paper	201.5	231.5	n.a.	225.9	226.9	231.5	222.9	231.0	205.3
Debt									
12 Owed to parent	64.7	61.8	n.a.	60.0	58.3	61.8	64.6	65.4	84.7
13 Not elsewhere classified	328.8	339.7	n.a.	348.7	337.6	339.7	366.7	383.1	396.2
14 All other liabilities	189.6	203.2	n.a.	188.9	185.4	203.2	220.3	226.1	216.0
15 Capital, surplus, and undivided profits	101.3	117.0	n.a.	103.9	103.6	117.0	131.5	132.2	148.2
16 **Total liabilities and capital**	**910.0**	**979.5**	n.a.	**949.7**	**936.6**	**979.5**	**1,030.8**	**1,062.9**	**1,077.4**

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

1.52 DOMESTIC FINANCE COMPANIES Owned and Managed Receivables[1]

Billions of dollars, amounts outstanding

Type of credit	1996	1997	1998	1999 June	1999 July	1999 Aug.	1999 Sept.	1999 Oct.	1999 Nov.
	Seasonally adjusted								
1 **Total**	**762.4**	**810.5**	**875.8**	**938.1**	**954.7**	**967.4**	**972.8**	**978.5[r]**	**984.4**
2 Consumer	307.6	327.9	352.8	372.4	375.9	380.8	381.9	384.0[r]	385.2
3 Real estate	111.9	121.1	131.4	141.2	144.2	146.7	148.9	149.3	152.7
4 Business	342.9	361.5	391.6	424.5	434.6	439.9	442.0	445.1[r]	446.5
	Not seasonally adjusted								
5 **Total**	**769.7**	**818.1**	**884.0**	**942.9**	**948.9**	**962.2**	**968.4**	**976.7[r]**	**985.9**
6 Consumer	310.6	330.9	356.1	374.6	378.1	382.0	383.1	384.5[r]	386.5
7 Motor vehicles loans	86.7	87.0	103.1	108.6	108.5	112.7	109.5	110.2[r]	111.6
8 Motor vehicle leases	92.5	96.8	93.3	95.6	97.0	98.3	98.1	98.4[r]	99.1
9 Revolving[2]	32.5	38.6	32.3	32.4	32.8	33.0	30.7	31.5	30.5
10 Other[3]	33.2	34.4	33.1	32.6	32.0	31.6	32.8	32.4	33.2
Securitized assets[4]									
11 Motor vehicle loans	36.8	44.3	54.8	65.3	68.3	68.0	73.5	74.1	74.6
12 Motor vehicle leases	8.7	10.8	12.7	11.3	11.1	10.8	10.6	10.3	10.0
13 Revolving	.0	.0	8.7	9.7	9.9	9.4	10.2	10.1	10.2
14 Other	20.1	19.0	18.1	19.0	18.4	18.1	17.8	17.6	17.4
15 Real estate	111.9	121.1	131.4	141.2	144.2	146.7	148.9	149.3	152.7
16 One- to four-family	52.1	59.0	75.7	80.5	83.6	86.0	87.7	87.7	89.4
17 Other	30.5	28.9	26.6	33.0	33.1	33.7	34.6	35.1	37.1
Securitized real estate assets[4]									
18 One- to four-family	28.9	33.0	29.0	27.5	27.2	26.8	26.5	26.2	25.9
19 Other	.4	.2	.1	.2	.2	.2	.2	.2	.2
20 Business	347.2	366.1	396.5	427.1	426.7	433.5	436.3	442.9[r]	446.6
21 Motor vehicles	67.1	63.5	79.6	82.8	78.8	78.6	80.3	84.3	85.4
22 Retail loans	25.1	25.6	28.1	30.9	31.7	33.3	34.5	34.9	33.7
23 Wholesale loans[5]	33.0	27.7	32.8	32.7	27.9	26.8	26.8	30.3	32.6
24 Leases	9.0	10.2	18.7	19.2	19.3	18.5	19.0	19.1	19.2
25 Equipment	194.8	203.9	198.0	208.3	208.5	210.5	208.0	210.7[r]	210.8
26 Loans	59.9	51.5	50.4	53.3	52.9	53.1	48.2	49.4	49.1
27 Leases	134.9	152.3	147.6	155.1	155.6	157.4	159.8	161.3[r]	161.6
28 Other business receivables[6]	47.6	51.1	69.9	82.6	89.2	92.7	94.7	97.1	98.2
Securitized assets[4]									
29 Motor vehicles	24.0	33.0	29.2	32.1	28.4	30.4	31.0	28.8	30.6
30 Retail loans	2.7	2.4	2.6	2.9	2.8	2.7	2.6	2.5	3.0
31 Wholesale loans	21.3	30.5	24.7	27.2	23.5	25.7	26.4	24.3	25.6
32 Leases	.0	.0	1.9	2.0	2.0	2.0	2.0	2.0	2.0
33 Equipment	11.3	10.7	13.0	13.3	13.8	13.5	14.6	14.3	14.0
34 Loans	4.7	4.2	6.6	6.7	7.1	6.9	7.7	7.6	7.4
35 Leases	6.6	6.5	6.4	6.6	6.7	6.6	6.9	6.8	6.6
36 Other business receivables[6]	2.4	4.0	6.8	8.0	7.9	7.8	7.7	7.7	7.7

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

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

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

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

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

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

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

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

1.53 MORTGAGE MARKETS Mortgages on New Homes

Millions of dollars except as noted

Item	1997	1998	1999	1999 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)	180.1	195.2	210.7	211.0	207.6	213.8	210.3	214.4	220.8	216.3
2 Amount of loan (thousands of dollars)	140.3	151.1	161.7	162.0	158.2	163.1	161.8	165.1	167.0	167.2
3 Loan-to-price ratio (percent)	80.4	80.0	78.7	79.0	78.6	78.3	78.8	79.0	77.4	78.6
4 Maturity (years)	28.2	28.4	28.8	28.6	28.5	28.5	29.1	29.1	29.0	29.0
5 Fees and charges (percent of loan amount)[2]	1.02	.89	.77	.72	.83	.68	.64	.71	.73	.71
Yield (percent per year)										
6 Contract rate[1]	7.57	6.95	6.94	6.92	7.16	6.99	6.99	7.06	7.13	7.18
7 Effective rate[1,3]	7.73	7.08	7.06	7.03	7.29	7.09	7.09	7.17	7.24	7.28
8 Contract rate (HUD series)[4]	7.76	7.00	7.45	7.59	7.75	7.87	7.76	7.77	7.79	7.95
SECONDARY MARKETS										
Yield (percent per year)										
9 FHA mortgages (Section 203)[5]	7.89	7.04	7.74	8.13	8.00	8.10	8.05	8.02	8.06	8.55
10 GNMA securities[6]	7.26	6.43	7.03	7.21	7.28	7.53	7.42	7.52	7.37	7.58
	Activity in secondary markets									
FEDERAL NATIONAL MORTGAGE ASSOCIATION										
Mortgage holdings (end of period)										
11 Total	316,678	414,515	523,941	473,315	480,651	495,302	504,938	509,990	518,337	523,941
12 FHA/VA insured	31,925	33,770	55,318	41,143	44,132	47,846	49,456	50,639	52,632	55,318
13 Conventional	284,753	380,745	468,623	432,172	436,519	447,456	455,482	459,351	465,705	468,623
14 Mortgage transactions purchased (during period)	70,465	188,448	195,210	15,934	14,004	21,094	15,200	10,057	14,683	11,416
Mortgage commitments (during period)										
15 Issued[7]	69,965	193,795	187,948	19,507	12,966	18,153	7,998	10,480	12,050	9,931
16 To sell[8]	1,298	1,880	5,900	351	260	478	609	1,710	381	1,592
FEDERAL HOME LOAN MORTGAGE CORPORATION										
Mortgage holdings (end of period)[8]										
17 Total	164,421	255,010	324,443	299,184	300,093	306,214	315,968	318,682	323,027	324,443
18 FHA/VA insured	177	785	1,848	1,726	1,735	1,708	1,689	1,744	1,848[r]	1,848
19 Conventional	164,244	254,225	322,595	297,458	298,358	304,506	314,279	316,938	321,179[r]	322,595
Mortgage transactions (during period)										
20 Purchases	117,401	267,402	239,793	21,950	17,602	18,674	15,238	13,323	11,869	9,335
21 Sales	114,258	250,565	233,031	20,349	16,835	17,468	14,153	12,671	11,129	8,589
22 Mortgage commitments contracted (during period)[9]	120,089	281,899	228,432	21,610	14,988	18,951	14,608	10,810	10,501	11,587

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

1.54 MORTGAGE DEBT OUTSTANDING[1]

Millions of dollars, end of period

Type of holder and property	1995	1996	1997	1998 Q3	1998 Q4	1999 Q1	1999 Q2	1999 Q3[p]
1 **All holders**	**4,603,981**	**4,901,568**	**5,216,785**	**5,574,398**	**5,728,167**	**5,867,271**	**6,019,110**	**6,181,073**
By type of property								
2 One- to four-family residences	3,510,319	3,721,917	3,959,565	4,223,398	4,328,434	4,420,931	4,533,159	4,647,881
3 Multifamily residences	277,002	294,783	310,456	330,595	340,773	351,643	359,275	372,474
4 Nonfarm, nonresidential	732,100	797,734	856,464	926,039	962,454	997,294	1,027,022	1,058,954
5 Farm	84,561	87,134	90,299	94,366	96,506	97,404	99,655	101,764
By type of holder								
6 Major financial institutions	1,900,089	1,981,885	2,083,978	2,137,438	2,194,814	2,202,241	2,242,515	2,321,982
7 Commercial banks[2]	1,090,189	1,145,389	1,245,315	1,295,828	1,337,217	1,336,669	1,361,355	1,418,510
8 One- to four-family	646,545	677,603	745,510	770,340	797,196	782,128	790,125	824,677
9 Multifamily	42,521	45,451	49,670	52,205	52,871	56,170	58,572	63,130
10 Nonfarm, nonresidential	377,293	397,452	423,148	444,596	458,115	468,859	482,115	499,327
11 Farm	23,830	24,883	26,986	28,688	29,035	29,512	30,544	31,377
12 Savings institutions[3]	596,763	628,335	631,822	634,251	643,957	646,510	656,518	676,260
13 One- to four-family	482,353	513,712	520,672	525,844	533,792	534,772	544,832	560,447
14 Multifamily	61,987	61,570	59,543	56,696	56,825	56,763	55,020	57,285
15 Nonfarm, nonresidential	52,135	52,723	51,252	51,312	52,923	54,539	56,222	58,070
16 Farm	288	331	354	399	417	435	443	459
17 Life insurance companies	213,137	208,161	206,841	207,359	213,640	219,063	224,642	227,212
18 One- to four-family	8,890	6,977	7,187	6,594	6,590	6,956	7,295	7,548
19 Multifamily	28,714	30,750	30,402	30,565	31,522	31,528	31,813	32,120
20 Nonfarm, nonresidential	165,876	160,314	158,780	159,189	164,004	168,862	173,568	175,242
21 Farm	9,657	10,120	10,472	11,011	11,524	11,717	11,966	12,302
22 Federal and related agencies	308,757	295,192	286,167	287,125	292,636	288,216	288,038	289,159
23 Government National Mortgage Association	2	2	8	7	7	6	8	8
24 One- to four-family	2	2	8	7	7	6	8	8
25 Multifamily	0	0	0	0	0	0	0	0
26 Farmers Home Administration[4]	41,791	41,596	41,195	40,907	40,851	40,691	40,766	40,766
27 One- to four-family	17,705	17,303	17,253	17,025	16,895	16,777	16,653	16,653
28 Multifamily	11,617	11,685	11,720	11,736	11,739	11,731	11,735	11,735
29 Nonfarm, nonresidential	6,248	6,841	7,370	7,566	7,705	7,769	7,943	7,943
30 Farm	6,221	5,768	4,852	4,579	4,513	4,413	4,435	4,435
31 Federal Housing and Veterans' Administrations	9,809	6,244	3,821	3,405	3,674	3,578	3,490	3,889
32 One- to four-family	5,180	3,524	1,767	1,550	1,849	1,753	1,623	2,013
33 Multifamily	4,629	2,719	2,054	1,855	1,825	1,825	1,867	1,876
34 Resolution Trust Corporation	1,864	0	0	0	0	0	0	0
35 One- to four-family	691	0	0	0	0	0	0	0
36 Multifamily	647	0	0	0	0	0	0	0
37 Nonfarm, nonresidential	525	0	0	0	0	0	0	0
38 Farm	0	0	0	0	0	0	0	0
39 Federal Deposit Insurance Corporation	4,303	2,431	724	482	361	315	189	163
40 One- to four-family	492	365	109	72	54	47	28	24
41 Multifamily	428	413	123	82	61	54	32	28
42 Nonfarm, nonresidential	3,383	1,653	492	328	245	214	129	111
43 Farm	0	0	0	0	0	0	0	0
44 Federal National Mortgage Association	178,807	168,813	161,308	159,104	157,675	157,185	155,637	154,420
45 One- to four-family	163,648	155,008	149,831	149,069	147,594	147,063	145,033	142,982
46 Multifamily	15,159	13,805	11,477	10,035	10,081	10,122	10,604	11,438
47 Federal Land Banks	28,428	29,602	30,657	32,009	32,983	33,128	33,666	34,218
48 One- to four-family	1,673	1,742	1,804	1,883	1,941	1,949	1,981	2,013
49 Farm	26,755	27,860	28,853	30,126	31,042	31,179	31,685	32,205
50 Federal Home Loan Mortgage Corporation	43,753	46,504	48,454	51,211	57,085	53,313	54,282	55,695
51 One- to four-family	39,901	41,758	42,629	44,254	49,106	44,140	43,574	44,010
52 Multifamily	3,852	4,746	5,825	6,957	7,979	9,173	10,708	11,685
53 Mortgage pools or trusts[5]	1,863,210	2,064,882	2,273,022	2,548,301	2,632,829	2,762,733	2,861,115	2,928,475
54 Government National Mortgage Association	472,283	506,340	536,879	541,540	537,446	543,280	553,242	569,155
55 One- to four-family	461,438	494,158	523,225	527,043	522,498	527,886	537,333	552,787
56 Multifamily	10,845	12,182	13,654	14,497	14,948	15,395	15,909	16,368
57 Federal Home Loan Mortgage Corporation	515,051	554,260	579,385	635,726	646,459	687,179	718,085	738,581
58 One- to four-family	512,238	551,513	576,846	633,124	643,465	684,240	714,844	735,088
59 Multifamily	2,813	2,747	2,539	2,602	2,994	2,939	3,241	3,493
60 Federal National Mortgage Association	582,959	650,780	709,582	798,460	834,518	881,815	911,435	938,484
61 One- to four-family	569,724	633,210	687,981	770,979	804,205	849,513	877,863	903,531
62 Multifamily	13,235	17,570	21,601	27,481	30,313	32,302	33,572	34,953
63 Farmers Home Administration[4]	11	3	2	2	1	1	1	1
64 One- to four-family	2	0	0	0	0	0	0	0
65 Multifamily	0	0	0	0	0	0	0	0
66 Nonfarm, nonresidential	5	0	0	0	0	0	0	0
67 Farm	4	3	2	2	1	1	1	1
68 Private mortgage conduits	292,906	353,499	447,173	572,573	614,405	650,459	678,353	682,254
69 One- to four-family[6]	227,800	261,900	318,000	391,736	410,900	430,653	447,938	438,676
70 Multifamily	15,584	21,967	29,218	40,895	44,644	48,393	50,679	52,851
71 Nonfarm, nonresidential	49,522	69,633	99,955	139,942	158,861	171,413	179,736	190,727
72 Farm	0	0	0	0	0	0	0	0
73 Individuals and others[7]	531,926	559,609	573,619	601,534	607,888	614,081	627,442	641,457
74 One- to four-family	372,037	363,143	366,744	383,877	392,343	393,047	404,028	417,424
75 Multifamily	64,970	69,179	72,629	74,987	74,971	75,249	75,524	75,512
76 Nonfarm, nonresidential	77,112	109,119	115,467	123,107	120,600	125,638	127,310	127,536
77 Farm	17,806	18,169	18,779	19,562	19,974	20,147	20,580	20,985

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

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

1.55 CONSUMER CREDIT[1]

Millions of dollars, amounts outstanding, end of period

Holder and type of credit	1996	1997	1998	1999 June	July	Aug.	Sept.	Oct.r	Nov.
	Seasonally adjusted								
1 **Total**	**1,182,439**	**1,234,122**	**1,300,491**	**1,347,831**	**1,356,404**	**1,363,184**	**1,366,575r**	**1,371,818**	**1,387,432**
2 Revolving	499,532	531,295	560,653	578,530	583,309	584,523	584,512r	584,287	588,707
3 Nonrevolving[2]	682,907	702,828	739,838	769,301	773,096	778,661	782,063r	787,531	798,726
	Not seasonally adjusted								
4 **Total**	**1,211,590**	**1,264,103**	**1,331,742**	**1,340,414**	**1,349,610**	**1,364,404**	**1,370,079r**	**1,376,935**	**1,394,096**
By major holder									
5 Commercial banks	526,769	512,563	508,932	477,774	477,908	476,561	472,524	473,507	482,392
6 Finance companies	152,391	160,022	168,491	173,617	173,374	177,331	172,956	174,081	175,296
7 Credit unions	144,148	152,362	155,406	158,177	159,920	162,412	164,055	165,912	167,704
8 Savings institutions	44,711	47,172	51,611	57,161	58,126	59,091	60,055	61,020	61,984
9 Nonfinancial business	77,745	78,927	74,877	68,042	68,235	68,896	67,456r	67,961	70,316
10 Pools of securitized assets[3]	265,826	313,057	372,425	405,643	412,047	420,113	433,033	434,454	436,404
By major type of credit[4]									
11 Revolving	522,860	555,858	586,528	572,463	575,499	580,691	581,361r	583,055	591,078
12 Commercial banks	228,615	219,826	210,346	178,031	175,928	170,272	168,882	167,469	172,345
13 Finance companies	32,493	38,608	32,309	32,408	32,846	33,014	30,731	31,453	30,512
14 Credit unions	17,826	19,552	19,930	18,856	19,054	19,335	19,489	19,452	19,727
15 Savings institutions	10,313	11,441	12,450	12,775	13,004	13,233	13,461	13,690	13,918
16 Nonfinancial business	44,901	44,966	39,166	34,618	34,830	35,421	34,156r	34,541	36,041
17 Pools of securitized assets[3]	188,712	221,465	272,327	295,775	299,837	309,416	314,642	316,450	318,535
18 Nonrevolving	688,730	708,245	745,214	767,951	774,111	783,713	788,718r	793,880	803,018
19 Commercial banks	298,154	292,737	298,586	299,743	301,980	306,289	303,642	306,038	310,047
20 Finance companies	119,898	121,414	136,182	141,209	140,528	144,317	142,225	142,628	144,784
21 Credit unions	126,322	132,810	135,476	139,321	140,866	143,077	144,566	146,460	147,977
22 Savings institutions	34,398	35,731	39,161	44,386	45,122	45,858	46,594	47,330	48,066
23 Nonfinancial business	32,844	33,961	35,711	33,424	33,405	33,475	33,300r	33,420	34,275
24 Pools of securitized assets[3]	77,114	91,592	100,098	109,868	112,210	110,697	118,391	118,004	117,869

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 motor vehicle loans, mobile home loans, and all other loans that are not included in revolving credit, such as loans for education, boats, trailers, or vacations. These loans may be secured or unsecured.
3. Outstanding balances of pools upon which securities have been issued; these balances are no longer carried on the balance sheets of the loan originator.
4. Totals include estimates for certain holders for which only consumer credit totals are available.

1.56 TERMS OF CONSUMER CREDIT[1]

Percent per year except as noted

Item	1996	1997	1998	1999 May	June	July	Aug.	Sept.	Oct.	Nov.
INTEREST RATES										
Commercial banks[2]										
1 48-month new car	9.05	9.02	8.72	8.30	n.a.	n.a.	8.44	n.a.	n.a.	8.66
2 24-month personal	13.54	13.90	13.74	13.26	n.a.	n.a.	13.38	n.a.	n.a.	13.52
Credit card plan										
3 All accounts	15.63	15.77	15.71	15.21	n.a.	n.a.	15.08	n.a.	n.a.	15.13
4 Accounts assessed interest	15.50	15.57	15.59	14.94	n.a.	n.a.	14.79	n.a.	n.a.	14.77
Auto finance companies										
5 New car	9.84	7.12	6.30	6.57	6.60	6.68	6.28	6.47	7.07	7.44
6 Used car	13.53	13.27	12.64	12.16	12.31	12.67	12.96	13.13	13.28	13.27
OTHER TERMS[3]										
Maturity (months)										
7 New car	51.6	54.1	52.1	52.4	52.3	52.0	51.7	52.1	53.2	53.9
8 Used car	51.4	51.0	53.5	56.1	56.0	56.1	55.8	55.9	55.8	55.8
Loan-to-value ratio										
9 New car	91	92	92	92	92	92	92	92	92	91
10 Used car	100	99	99	99	99	99	100	100	100	99
Amount financed (dollars)										
11 New car	16,987	18,077	19,083	19,539	19,722	19,873	20,012	20,154	20,335	20,517
12 Used car	12,182	12,281	12,691	13,700	13,816	13,609	13,374	13,449	13,613	13,777

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	1994	1995	1996	1997	1998	1998				1999		
						Q1	Q2	Q3	Q4	Q1	Q2	Q3
	Nonfinancial sectors											
1 **Total net borrowing by domestic nonfinancial sectors**	**575.8**	**721.0**	**745.4**	**787.1**	**1,024.1**	**1,077.3**	**1,044.2**	**900.6**	**1,074.2**	**1,288.1**	**886.6**	**1,130.9**
By sector and instrument												
2 Federal government	155.8	144.4	145.0	23.1	−52.6	−14.5	−28.4	−113.5	−54.1	−75.2	−112.2	−83.1
3 Treasury securities	155.7	142.9	146.6	23.2	−54.6	−12.1	−26.9	−113.1	−66.3	−73.7	−112.8	−83.2
4 Budget agency securities and mortgages	.2	1.5	−1.6	−.1	2.0	−2.4	−1.4	−.4	12.2	−1.5	.6	.0
5 Nonfederal	420.0	576.6	600.3	764.0	1,076.7	1,091.8	1,072.6	1,014.1	1,128.3	1,363.3	998.7	1,214.1
By instrument												
6 Commercial paper	21.4	18.1	−.9	13.7	24.4	51.1	3.8	85.6	−43.0	64.4	3.4	55.8
7 Municipal securities and loans	−35.9	−48.2	2.6	71.4	96.8	113.5	101.3	82.9	89.6	100.7	48.0	74.8
8 Corporate bonds	23.3	91.1	116.3	150.5	218.7	278.8	294.8	108.0	193.2	274.0	287.6	202.8
9 Bank loans n.e.c.	75.2	103.7	70.5	106.5	108.2	35.0	169.2	107.8	120.9	70.0	22.2	107.4
10 Other loans and advances	34.0	67.2	33.5	69.1	74.3	76.3	40.8	77.7	102.5	151.0	−16.7	85.9
11 Mortgages	177.0	205.7	289.7	300.2	486.6	478.2	400.7	472.6	595.1	573.9	594.1	611.9
12 Home	183.4	180.4	245.3	237.6	367.9	378.3	289.1	375.2	429.1	415.1	422.9	436.0
13 Multifamily residential	−2.1	7.6	11.5	10.8	22.4	21.6	21.1	16.1	30.6	35.9	34.7	49.6
14 Commercial	−6.5	16.2	30.4	48.7	90.2	74.1	83.8	75.9	126.8	119.3	127.5	117.9
15 Farm	2.2	1.6	2.6	3.2	6.2	4.1	6.7	5.5	8.6	3.6	9.0	8.4
16 Consumer credit	124.9	138.9	88.8	52.5	67.6	58.9	62.1	79.6	69.9	129.2	60.1	75.4
By borrowing sector												
17 Household	316.3	350.9	354.0	327.3	471.9	465.1	420.3	473.4	528.6	556.4	517.1	566.0
18 Nonfinancial business	150.0	277.2	253.2	380.6	524.5	532.5	570.3	470.7	524.6	719.5	445.9	595.3
19 Corporate	142.3	243.7	164.6	297.0	418.5	426.9	467.4	365.8	413.7	611.2	332.6	469.3
20 Nonfarm noncorporate	3.3	30.6	83.8	77.4	98.4	97.1	95.4	97.6	103.3	101.6	114.2	115.5
21 Farm	4.4	2.9	4.8	6.2	7.7	8.4	7.5	7.3	7.5	6.6	−.9	10.5
22 State and local government	−46.2	−51.5	−6.8	56.1	80.3	94.2	82.0	70.0	75.1	87.4	35.7	52.8
23 Foreign net borrowing in United States	−13.9	71.1	77.2	57.6	33.6	95.0	97.9	−19.6	−38.9	17.3	−36.4	62.6
24 Commercial paper	−26.1	13.5	11.3	3.7	7.8	55.3	−25.5	6.2	−4.7	18.3	−27.1	41.4
25 Bonds	12.2	49.7	55.8	47.2	25.1	42.5	119.2	−27.2	−34.2	.9	−12.6	29.4
26 Bank loans n.e.c.	1.4	8.5	9.1	8.5	6.7	5.2	8.4	3.6	9.8	.9	5.6	−6.6
27 Other loans and advances	−1.4	−.5	1.0	−1.8	−6.0	−8.0	−4.2	−2.2	−9.7	−2.8	−2.3	−1.6
28 **Total domestic plus foreign**	**561.9**	**792.1**	**822.6**	**844.7**	**1,057.7**	**1,172.3**	**1,142.1**	**881.0**	**1,035.3**	**1,305.4**	**850.1**	**1,193.5**
	Financial sectors											
29 **Total net borrowing by financial sectors**	**468.4**	**453.9**	**548.9**	**652.2**	**1,068.8**	**931.3**	**988.9**	**1,056.3**	**1,298.7**	**1,214.2**	**1,042.9**	**1,046.5**
By instrument												
30 Federal government-related	287.5	204.1	231.5	212.8	470.9	249.2	405.4	555.8	673.3	592.2	579.1	653.2
31 Government-sponsored enterprise securities	176.9	105.9	90.4	98.4	278.3	142.5	166.4	294.0	510.5	193.0	304.7	407.1
32 Mortgage pool securities	115.4	98.2	141.1	114.5	192.6	106.7	239.0	261.7	162.8	399.2	274.4	246.2
33 Loans from U.S. government	−4.8	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
34 Private	180.9	249.8	317.5	439.4	597.9	682.1	583.5	500.5	625.4	622.0	463.8	393.2
35 Open market paper	40.5	42.7	92.2	166.7	161.0	236.7	135.6	141.0	130.7	78.3	57.8	89.8
36 Corporate bonds	121.8	195.9	176.9	209.0	291.8	346.3	361.8	177.4	281.9	490.8	289.8	148.1
37 Bank loans n.e.c.	−13.7	2.5	12.6	13.2	30.1	57.3	−9.7	60.2	12.4	−8.8	10.5	−1.2
38 Other loans and advances	22.6	3.4	27.9	35.6	90.2	32.7	76.0	82.3	169.9	41.6	117.9	147.2
39 Mortgages	9.8	5.3	7.9	14.9	24.8	9.1	19.9	39.6	30.6	20.1	−12.3	9.4
By borrowing sector												
40 Commercial banking	20.1	22.5	13.0	46.1	72.9	82.8	80.8	61.7	66.3	31.1	72.7	111.4
41 Savings institutions	12.8	2.6	25.5	19.7	52.2	10.6	31.2	63.7	103.2	58.0	58.6	55.2
42 Credit unions	.2	−.1	.1	.1	.6	.5	.2	1.0	.4	1.5	1.4	2.8
43 Life insurance companies	.3	−.1	1.1	.2	.7	.0	−.6	1.6	1.8	3.3	3.0	1.1
44 Government-sponsored enterprises	172.1	105.9	90.4	98.4	278.3	142.5	166.4	294.0	510.5	193.0	304.7	407.1
45 Federally related mortgage pools	115.4	98.2	141.1	114.5	192.6	106.7	239.0	261.7	162.8	399.2	274.4	246.2
46 Issuers of asset-backed securities (ABSs)	76.5	142.4	153.9	200.7	316.3	283.0	352.4	294.2	335.7	300.5	335.8	190.5
47 Finance companies	48.7	50.2	45.9	48.7	43.0	74.6	91.9	−12.0	17.8	71.2	88.4	−22.7
48 Mortgage companies	−11.5	−2.2	4.1	−4.6	1.6	29.4	−28.2	2.3	3.0	−4.6	5.1	−1.1
49 Real estate investment trusts (REITs)	10.2	4.5	11.9	39.6	62.7	63.1	64.4	79.3	44.0	25.6	−19.7	7.9
50 Brokers and dealers	.5	−5.0	−2.0	8.1	7.2	−1.0	20.0	−2.6	12.4	−31.1	−17.4	16.9
51 Funding corporations	23.1	34.9	64.1	80.7	40.7	139.2	−28.6	11.2	40.9	166.5	−63.8	31.2

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

Transaction category or sector	1994	1995	1996	1997	1998	1998 Q1	1998 Q2	1998 Q3	1998 Q4	1999 Q1	1999 Q2	1999 Q3
	All sectors											
52 **Total net borrowing, all sectors**	**1,030.3**	**1,246.0**	**1,371.5**	**1,496.9**	**2,126.5**	**2,103.6**	**2,131.0**	**1,937.3**	**2,334.0**	**2,519.6**	**1,893.0**	**2,240.0**
53 Open market paper	35.7	74.3	102.6	184.1	193.1	343.0	113.8	232.7	83.0	161.1	34.1	187.0
54 U.S. government securities	448.1	348.5	376.5	235.9	418.3	234.7	377.1	442.3	619.1	517.0	467.0	570.1
55 Municipal securities	−35.9	−48.2	2.6	71.4	96.8	113.5	101.3	82.9	89.6	100.7	48.0	74.8
56 Corporate and foreign bonds	157.3	336.7	348.9	406.7	535.6	667.6	775.8	258.2	440.9	765.7	564.8	380.2
57 Bank loans n.e.c.	62.9	114.7	92.1	128.2	145.0	97.6	167.9	171.6	143.0	62.1	38.3	99.6
58 Other loans and advances	50.4	70.1	62.5	102.8	158.5	101.0	112.5	157.8	262.7	189.8	98.9	231.5
59 Mortgages	186.8	211.0	297.6	315.1	511.4	487.3	420.5	512.2	625.7	594.0	581.8	621.3
60 Consumer credit	124.9	138.9	88.8	52.5	67.6	58.9	62.1	79.6	69.9	129.2	60.1	75.4
	Funds raised through mutual funds and corporate equities											
61 **Total net issues**	**113.4**	**131.5**	**209.1**	**165.6**	**75.2**	**215.2**	**262.0**	**−166.7**	**−9.8**	**121.3**	**113.2**	**57.0**
62 Corporate equities	12.8	−16.0	−28.5	−99.6	−199.4	−107.1	−115.8	−340.1	−234.6	−132.0	−94.9	−69.6
63 Nonfinancial corporations	−44.9	−58.3	−69.5	−114.4	−267.0	−139.2	−129.1	−308.4	−491.3	−65.7	−374.0	−153.0
64 Foreign shares purchased by U.S. residents	48.1	50.4	60.0	42.0	77.8	14.0	12.3	−32.8	317.4	−33.4	270.9	76.7
65 Financial corporations	9.6	−8.1	−19.0	−27.1	−10.2	18.1	1.0	1.0	−60.8	−32.9	8.2	6.7
66 Mutual fund shares	100.6	147.4	237.6	265.1	274.6	322.3	377.8	173.4	224.8	253.3	208.2	126.7

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	1994	1995	1996	1997	1998	1998				1999		
							Q1	Q2	Q3	Q4	Q1	Q2	Q3
	NET LENDING IN CREDIT MARKETS[2]												
1	**Total net lending in credit markets**	**1,030.3**	**1,246.0**	**1,371.5**	**1,496.9**	**2,126.5**	**2,103.6**	**2,131.0**	**1,937.3**	**2,334.0**	**2,519.6**	**1,893.0**	**2,240.0**
2	Domestic nonfederal nonfinancial sectors	231.2	−89.4	24.8	−67.9	73.3	−39.5	521.8	111.1	−300.4	310.0	346.5	106.1
3	Household	268.0	6.1	63.7	−65.2	−28.1	−54.0	395.4	−28.3	−425.5	261.1	288.9	140.4
4	Nonfinancial corporate business	17.7	−8.8	−.8	−2.3	1.9	8.4	−47.9	13.7	33.3	−3.6	4.5	−19.8
5	Nonfarm noncorporate business	.6	4.7	−4.3	−.6	.0	.0	.0	.0	.0	.4	−.2	−.6
6	State and local governments	−55.0	−91.4	−33.7	.1	99.5	6.1	174.3	125.7	91.7	52.2	53.3	−13.9
7	Federal government	−27.4	−.2	−7.4	5.1	13.5	15.7	12.9	13.8	11.7	17.1	6.7	16.6
8	Rest of the world	132.3	273.9	414.4	310.7	249.3	223.8	321.8	60.8	390.7	250.2	35.1	372.1
9	Financial sectors	694.1	1,061.7	939.7	1,249.0	1,790.4	1,903.6	1,274.6	1,751.5	2,232.1	1,942.2	1,504.8	1,745.1
10	Monetary authority	31.5	12.7	12.3	38.3	21.1	27.6	11.5	41.6	3.5	71.8	62.4	34.1
11	Commercial banking	163.4	265.9	187.5	324.3	305.2	306.7	132.7	250.1	531.5	68.9	135.4	435.1
12	U.S.-chartered banks	148.1	186.5	119.6	274.9	312.0	268.4	130.0	309.2	540.2	134.1	231.5	410.1
13	Foreign banking offices in United States	11.2	75.4	63.3	40.2	−11.9	17.5	15.2	−68.1	−12.1	−54.9	−105.7	30.7
14	Bank holding companies	.9	−.3	3.9	5.4	−.9	15.3	−17.6	6.0	−7.4	−6.0	.4	−12.4
15	Banks in U.S.-affiliated areas	3.3	4.2	.7	3.7	6.0	5.5	5.1	2.9	10.7	−4.4	9.2	6.6
16	Savings institutions	6.7	−7.6	19.9	−4.7	36.3	11.8	2.1	17.9	113.3	102.7	88.8	61.0
17	Credit unions	28.1	16.2	25.5	16.8	19.0	16.1	22.7	21.0	16.0	34.7	32.1	38.8
18	Bank personal trusts and estates	7.1	−8.3	−7.7	−25.0	−12.8	−10.5	−11.3	−16.0	−13.5	−7.6	−8.4	−8.6
19	Life insurance companies	72.0	100.0	69.6	104.8	76.9	92.5	63.4	65.6	86.0	82.2	84.0	68.9
20	Other insurance companies	24.9	21.5	22.5	25.2	20.4	23.4	−1.5	−7.7	67.6	−19.7	26.7	−8.6
21	Private pension funds	46.1	56.0	52.3	65.5	118.7	74.5	130.1	95.6	174.4	60.5	150.0	45.4
22	State and local government retirement funds	30.9	33.6	37.3	63.8	65.0	67.4	78.4	65.6	48.5	77.2	40.7	24.1
23	Money market mutual funds	30.0	86.5	88.8	87.5	244.0	159.3	208.1	255.5	353.1	227.6	−92.6	232.1
24	Mutual funds	−7.1	52.5	48.9	80.9	124.8	156.4	146.4	92.9	103.5	103.0	121.0	−32.8
25	Closed-end funds	−3.7	10.5	4.7	−2.9	4.5	4.5	4.5	4.5	4.5	4.4	4.4	4.3
26	Government-sponsored enterprises	117.8	86.7	84.2	94.3	260.8	198.3	150.6	264.7	429.5	157.2	259.2	287.5
27	Federally related mortgage pools	115.4	98.2	141.1	114.5	192.6	106.7	239.0	261.7	162.8	399.2	274.4	246.2
28	Asset-backed securities issuers (ABSs)	69.4	120.6	123.6	162.3	276.7	223.9	321.4	248.7	312.7	282.9	319.0	181.9
29	Finance companies	48.3	49.9	18.4	21.9	51.9	28.7	24.0	79.5	75.3	92.2	79.6	94.5
30	Mortgage companies	−24.0	−3.4	8.2	−9.1	3.2	58.8	−56.4	4.5	6.0	−9.1	10.2	−2.1
31	Real estate investment trusts (REITs)	−.7	1.4	4.4	20.2	−5.1	25.6	6.1	−11.3	−40.8	1.7	−2.2	−2.7
32	Brokers and dealers	−44.2	90.1	−15.7	14.9	−17.4	245.8	−183.1	77.0	−209.1	184.5	−191.0	15.7
33	Funding corporations	−17.8	−21.2	14.0	55.6	4.7	86.0	−14.3	−60.1	7.2	27.9	111.0	30.4
	RELATION OF LIABILITIES TO FINANCIAL ASSETS												
34	**Net flows through credit markets**	**1,030.3**	**1,246.0**	**1,371.5**	**1,496.9**	**2,126.5**	**2,103.6**	**2,131.0**	**1,937.3**	**2,334.0**	**2,519.6**	**1,893.0**	**2,240.0**
	Other financial sources												
35	Official foreign exchange	−5.8	8.8	−6.3	.7	6.6	1.0	8.1	8.9	8.6	−14.0	−5.4	−8.5
36	Special drawing rights certificates	.0	2.2	−.5	−.5	.0	.0	.0	.0	.0	−4.0	.0	−4.0
37	Treasury currency	.7	.6	.1	.0	.0	.3	.2	1.7	−2.3	.0	2.1	2.0
38	Foreign deposits	52.9	35.3	85.9	106.8	−.2	−46.5	92.9	84.9	−131.9	127.7	99.3	63.6
39	Net interbank transactions	89.8	10.0	−51.6	−19.7	−33.5	−95.2	40.1	43.9	−122.8	48.5	90.2	−52.0
40	Checkable deposits and currency	−9.7	−12.7	15.8	41.5	47.6	52.6	90.1	−24.9	72.8	61.1	10.1	141.4
41	Small time and savings deposits	−39.9	96.6	97.2	97.1	152.4	99.0	84.9	144.7	281.2	−68.0	100.0	145.5
42	Large time deposits	19.6	65.6	114.0	122.5	92.1	187.8	−5.6	81.8	104.4	−5.9	42.6	102.4
43	Money market fund shares	43.3	142.3	145.8	157.6	285.5	213.6	247.2	367.9	313.1	204.9	100.5	180.3
44	Security repurchase agreements	78.2	110.5	41.4	120.9	52.6	250.3	−100.8	231.1	−170.3	408.2	−14.5	128.5
45	Corporate equities	12.8	−16.0	−28.5	−99.6	−199.4	−107.1	−115.8	−340.1	−234.6	−132.0	−94.9	−69.6
46	Mutual fund shares	100.6	147.4	237.6	265.1	274.6	322.3	377.8	173.4	224.8	253.3	208.2	126.7
47	Trade payables	120.0	128.9	114.8	125.9	31.5	138.6	−27.9	63.8	−48.3	175.1	235.6	88.4
48	Security credit	−.1	26.7	52.4	111.0	108.3	159.3	134.3	167.0	−27.2	−86.9	134.1	−8.3
49	Life insurance reserves	35.5	45.8	44.5	59.3	53.3	49.3	53.3	51.7	59.0	40.8	59.6	43.4
50	Pension fund reserves	254.7	235.1	246.9	304.0	290.2	294.7	272.9	279.5	313.8	285.7	324.4	327.8
51	Taxes payable	2.6	6.2	16.0	16.8	12.6	12.2	1.8	27.5	8.8	−8.2	39.5	28.5
52	Investment in bank personal trusts	17.8	4.0	−8.6	−56.3	−48.0	−45.7	−46.5	−51.2	−48.8	−32.0	−25.9	−23.5
53	Noncorporate proprietors' equity	58.2	65.2	3.4	11.1	−16.0	−8.6	−13.9	−60.9	19.4	14.1	22.1	−32.6
54	Miscellaneous	245.6	444.6	498.3	516.2	669.2	1,069.4	295.6	731.2	580.7	216.5	1,114.3	317.8
55	**Total financial sources**	**2,107.1**	**2,793.1**	**2,990.3**	**3,377.4**	**3,906.0**	**4,650.8**	**3,519.8**	**3,919.2**	**3,534.2**	**4,004.6**	**4,334.9**	**3,737.7**
	Liabilities not identified as assets (−)												
56	Treasury currency	−.2	−.5	−.9	−.6	−.7	−.2	−.3	1.1	−3.4	−1.5	.6	.5
57	Foreign deposits	43.0	25.1	59.6	106.8	−8.1	−95.7	149.9	69.9	−156.5	62.7	84.4	33.6
58	Net interbank liabilities	−2.7	−3.1	−3.3	−19.9	3.4	35.1	8.9	22.3	−52.8	58.7	−1.7	−.7
59	Security repurchase agreements	67.7	20.2	4.5	62.3	15.2	120.8	−170.0	110.2	.0	364.1	80.0	43.5
60	Taxes payable	16.6	21.1	22.8	26.8	17.8	14.2	9.1	28.2	19.6	−15.6	2.5	33.0
61	Miscellaneous	−128.0	−188.5	−37.6	−225.9	−30.7	125.1	−245.6	−81.1	78.6	−489.5	−550.9	−599.5
	Floats not included in assets (−)												
62	Federal government checkable deposits	−4.8	−6.0	.5	−2.7	2.6	8.3	−44.4	32.4	14.0	−1.8	−41.4	27.9
63	Other checkable deposits	−2.8	−3.8	−4.0	−3.9	−3.1	−4.0	−2.9	−3.6	−1.8	−1.9	−1.0	−.5
64	Trade credit	27.4	15.6	−21.2	33.2	−31.0	72.2	−110.5	−64.4	−21.1	67.1	−20.7	−19.9
65	**Total identified to sectors as assets**	**2,090.9**	**2,913.1**	**2,970.0**	**3,401.3**	**3,940.6**	**4,375.1**	**3,925.7**	**3,804.2**	**3,657.5**	**3,962.4**	**4,783.1**	**4,219.7**

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	1995	1996	1997	1998	1998 Q1	1998 Q2	1998 Q3	1998 Q4	1999 Q1	1999 Q2r	1999 Q3
					Nonfinancial sectors						
1 **Total credit market debt owed by domestic nonfinancial sectors**	**13,734.9r**	**14,480.3r**	**15,265.8r**	**16,289.9**	**15,527.4r**	**15,747.8r**	**15,962.2r**	**16,289.9r**	**16,604.3r**	**16,780.3**	**17,055.3**
By sector and instrument											
2 Federal government	3,636.7	3,781.8	3,804.9	3,752.2	3,830.8	3,749.0	3,720.2	3,752.2	3,759.7	3,651.7	3,632.7
3 Treasury securities	3,608.5	3,755.1	3,778.3	3,723.7	3,804.8	3,723.4	3,694.7	3,723.7	3,731.6	3,623.4	3,604.5
4 Budget agency securities and mortgages	28.2	26.6	26.5	28.5	25.9	25.6	25.5	28.5	28.1	28.3	28.3
5 Nonfederal	10,098.2r	10,698.5r	11,461.0r	12,537.7	11,696.6r	11,998.8r	12,242.0r	12,537.7r	12,844.6r	13,128.6	13,422.6
By instrument											
6 Commercial paper	157.4	156.4	168.6	193.0	193.1	202.5	216.9	193.0	223.9	232.4	239.3
7 Municipal securities and loans	1,293.5	1,296.0	1,367.5	1,464.3	1,397.1	1,429.3	1,439.9	1,464.3	1,491.0	1,510.0	1,518.1
8 Corporate bonds	1,344.1	1,460.4	1,610.9	1,829.6	1,680.6	1,754.3	1,781.3	1,829.6	1,898.1	1,970.0	2,020.7
9 Bank loans n.e.c.	863.6	934.1	1,040.5	1,148.8	1,047.9	1,097.6	1,120.6	1,148.8	1,165.2	1,178.5	1,201.6
10 Other loans and advances	736.9	770.4	839.5	913.8	863.5	873.1	886.8	913.8	956.7r	952.1	967.5
11 Mortgages	4,580.0r	4,869.7r	5,169.9r	5,656.6	5,278.5r	5,385.3r	5,510.0r	5,656.6r	5,790.5r	5,945.2	6,105.3
12 Home	3,510.4r	3,721.9r	3,959.5r	4,327.5	4,043.1r	4,122.0r	4,222.4r	4,327.5r	4,420.3r	4,532.1	4,648.2
13 Multifamily residential	269.1	284.3	295.0	317.4	300.4	305.7	309.7	317.4	326.6	335.3	347.7
14 Commercial	716.0	776.4	825.1	915.3	843.6	864.6	883.6	915.3	946.3	978.2	1,007.6
15 Farm	84.6	87.1	90.3	96.5	91.3	93.0	94.4	96.5	97.4	99.7	101.8
16 Consumer credit	1,122.8	1,211.6	1,264.1	1,331.7	1,236.0	1,256.8	1,286.6	1,331.7	1,319.3r	1,340.4	1,370.2
By borrowing sector											
17 Household	4,782.8r	5,108.0r	5,438.0r	5,909.9	5,499.7r	5,618.8r	5,752.1r	5,909.9r	5,993.0r	6,136.7	6,294.5
18 Nonfinancial business	4,245.2	4,527.1	4,903.5	5,428.0	5,052.6	5,209.2	5,311.1	5,428.0	5,628.4r	5,753.6	5,886.7
19 Corporate	2,947.7	3,141.0	3,433.8	3,852.2	3,559.4	3,686.4	3,762.5	3,852.2	4,028.6r	4,121.5	4,223.6
20 Nonfarm noncorporate	1,152.4	1,236.1	1,313.6	1,411.9	1,337.9	1,361.8	1,385.5	1,411.9	1,437.4r	1,466.0	1,494.2
21 Farm	145.1	149.9	156.1	163.8	155.3	161.0	163.1	163.8	162.4	166.1	168.9
22 State and local government	1,070.2	1,063.4	1,119.5	1,199.8	1,144.3	1,170.8	1,178.8	1,199.8	1,223.2	1,238.2	1,241.4
23 **Foreign credit market debt held in United States**	**441.4**	**518.7**	**570.1**	**603.7**	**591.6**	**617.1**	**612.8**	**603.7**	**607.8**	**598.2**	**614.7**
24 Commercial paper	56.2	67.5	65.1	72.9	76.7	71.4	74.0	72.9	77.2	70.1	81.8
25 Bonds	291.9	347.7	394.9	420.0	405.6	435.4	428.6	420.0	420.2	417.1	424.4
26 Bank loans n.e.c.	34.6	43.7	52.1	58.9	53.4	55.5	56.4	58.9	59.1	60.5	58.8
27 Other loans and advances	58.8	59.8	58.0	52.0	55.9	54.8	53.8	52.0	51.3	50.5	49.7
28 **Total credit market debt owed by nonfinancial sectors, domestic and foreign**	**14,176.4r**	**14,998.9r**	**15,836.0r**	**16,893.6**	**16,119.0r**	**16,364.8r**	**16,574.9r**	**16,893.6r**	**17,212.1r**	**17,378.4**	**17,670.0**
					Financial sectors						
29 **Total credit market debt owed by financial sectors**	**4,278.8**	**4,827.7**	**5,446.8**	**6,515.6**	**5,670.1**	**5,926.8**	**6,195.5**	**6,515.6**	**6,809.2r**	**7,080.3**	**7,346.7**
By instrument											
30 Federal government-related	2,376.8	2,608.3	2,821.1	3,292.0	2,878.0	2,981.4	3,121.7	3,292.0	3,434.1	3,580.8	3,746.0
31 Government-sponsored enterprise securities	806.5	896.9	995.3	1,273.6	1,030.9	1,072.5	1,146.0	1,273.6	1,321.8	1,398.0	1,499.8
32 Mortgage pool securities	1,570.3	1,711.4	1,825.8	2,018.4	1,847.1	1,908.9	1,975.7	2,018.4	2,112.3	2,182.8	2,246.2
33 Loans from U.S. government	.0	.0	.0	.0	0	.0	.0	.0	.0	.0	0
34 Private	1,901.9	2,219.4	2,625.7	3,223.6	2,792.1	2,945.4	3,073.8	3,223.6	3,375.1r	3,499.6	3,600.7
35 Open market paper	486.9	579.1	745.7	906.7	804.9	838.9	874.2	906.7	926.4	940.9	963.4
36 Corporate bonds	1,204.7	1,381.5	1,557.5	1,849.4	1,640.8	1,738.7	1,786.2	1,849.4	1,968.9r	2,049.8	2,089.6
37 Bank loans n.e.c.	51.4	64.0	77.2	107.2	90.6	88.2	103.2	107.2	104.1	106.8	106.4
38 Other loans and advances	135.0	162.9	198.5	288.7	206.6	225.6	246.2	288.7	299.1	328.6	365.4
39 Mortgages	24.1	31.9	46.8	71.6	49.1	54.1	64.0	71.6	76.6	73.6	75.9
By borrowing sector											
40 Commercial banks	102.6	113.6	140.6	188.6	148.7	159.6	169.6	188.6	187.5	202.7	224.2
41 Bank holding companies	148.0	150.0	168.6	193.5	181.2	190.5	196.1	193.5	202.6	205.5	211.9
42 Savings institutions	115.0	140.5	160.3	212.4	162.9	170.7	186.6	212.4	226.9	241.6	255.4
43 Credit unions	.4	.4	.6	1.1	.7	.8	1.0	1.1	1.5	1.8	2.5
44 Life insurance companies	.5	1.6	1.8	2.5	1.8	1.6	2.0	2.5	3.3	4.0	4.3
45 Government-sponsored enterprises	806.5	896.9	995.3	1,273.6	1,030.9	1,072.5	1,146.0	1,273.6	1,321.8	1,398.0	1,499.8
46 Federally related mortgage pools	1,570.3	1,711.4	1,825.8	2,018.4	1,847.1	1,908.9	1,975.7	2,018.4	2,112.3	2,182.8	2,246.2
47 Issuers of asset-backed securities (ABSs)	712.5	866.4	1,078.2	1,394.6	1,142.9	1,230.4	1,307.0	1,394.6	1,463.3r	1,546.8	1,597.5
48 Brokers and dealers	29.3	27.3	35.3	42.5	35.1	40.1	39.4	42.5	34.8	30.4	34.6
49 Finance companies	483.9	529.8	554.5	597.5	571.9	596.9	589.4	597.5	614.4	639.2	628.5
50 Mortgage companies	16.5	20.6	16.0	17.7	23.4	16.3	16.9	17.7	16.5	17.8	17.5
51 Real estate investment trusts (REITs)	44.6	56.5	96.1	158.8	111.9	128.0	147.8	158.8	165.2	160.3	162.2
52 Funding corporations	248.6	312.7	373.7	414.4	411.6	410.5	417.9	414.4	459.1	449.5	462.0
					All sectors						
53 **Total credit market debt, domestic and foreign**	**18,455.1r**	**19,826.6r**	**21,282.8r**	**23,409.3**	**21,789.0r**	**22,291.6r**	**22,770.5r**	**23,409.3r**	**24,021.3r**	**24,458.8**	**25,016.7**
54 Open market paper	700.4	803.0	979.4	1,172.6	1,074.8	1,112.7	1,165.1	1,172.6	1,227.6	1,243.3	1,284.5
55 U.S. government securities	6,013.6	6,390.0	6,626.0	7,044.3	6,708.7	6,730.3	6,841.9	7,044.3	7,193.8	7,232.5	7,378.7
56 Municipal securities	1,293.5	1,296.0	1,367.5	1,464.3	1,397.1	1,429.3	1,439.9	1,464.3	1,491.0	1,510.0	1,518.1
57 Corporate and foreign bonds	2,840.7	3,189.6	3,563.3	4,098.9	3,727.0	3,928.3	3,996.0	4,098.9	4,287.2r	4,436.8	4,534.6
58 Bank loans n.e.c.	949.6	1,041.7	1,169.8	1,314.9	1,191.9	1,241.3	1,280.3	1,314.9	1,328.3	1,345.7	1,366.8
59 Other loans and advances	930.6	993.1	1,095.9	1,254.4	1,126.1	1,153.6	1,186.8	1,254.4	1,307.0r	1,331.2	1,382.6
60 Mortgages	4,604.0r	4,901.6r	5,216.7r	5,728.2	5,327.5r	5,439.4r	5,574.0r	5,728.2r	5,867.2r	6,018.8	6,181.2
61 Consumer credit	1,122.8	1,211.6	1,264.1	1,331.7	1,236.0	1,256.8	1,286.6	1,331.7	1,319.3r	1,340.4	1,370.2

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	1995	1996	1997	1998	1998				1999		
					Q1	Q2	Q3	Q4	Q1	Q2	Q3
CREDIT MARKET DEBT OUTSTANDING[2]											
1 **Total credit market assets**	**18,455.1**	**19,826.6**	**21,282.8**	**23,409.3**	**21,789.0**	**22,291.6**	**22,770.5**	**23,409.3**	**24,021.3**	**24,458.8**	**25,016.7**
2 Domestic nonfederal nonfinancial sectors	2,857.4	2,927.5	2,815.9	2,860.8	2,798.2	2,886.3	2,919.9	2,860.8	2,926.3	2,966.3	3,003.0
3 Household	1,896.1	2,014.5	1,905.6	1,849.2	1,905.2	1,958.8	1,957.1	1,849.2	1,924.7	1,947.1	1,990.2
4 Nonfinancial corporate business	280.4	270.2	268.0	269.8	249.6	238.5	244.4	269.8	247.0	249.2	248.0
5 Nonfarm noncorporate business	42.3	38.0	37.4	37.4	37.4	37.4	37.4	37.4	37.5	37.7	38.0
6 State and local governments	638.6	604.8	605.0	704.4	606.0	651.6	681.1	704.4	717.1	732.3	726.9
7 Federal government	202.7	195.3	200.4	213.9	204.3	207.5	210.9	213.9	218.2	219.8	224.0
8 Rest of the world	1,531.1	1,926.6	2,256.8	2,534.3	2,317.1	2,396.0	2,412.2	2,534.3	2,601.0	2,608.4	2,702.3
9 Financial sectors	13,863.9	14,777.2	16,009.8	17,800.2	16,469.4	16,801.8	17,227.5	17,800.2	18,275.9	18,664.2	19,087.5
10 Monetary authority	380.8	393.1	431.4	452.5	433.8	440.3	446.5	452.5	466.0	485.1	489.3
11 Commercial banking	3,520.1	3,707.7	4,031.9	4,335.7	4,093.4	4,136.4	4,195.7	4,335.7	4,338.4	4,383.4	4,488.2
12 U.S.-chartered banks	3,056.1	3,175.8	3,450.7	3,761.2	3,505.1	3,543.6	3,616.2	3,761.2	3,782.9	3,847.6	3,944.1
13 Foreign banking offices in United States	412.6	475.8	516.1	504.2	517.9	525.6	510.1	504.2	487.8	465.7	475.4
14 Bank holding companies	18.0	22.0	27.4	26.5	31.2	26.8	28.3	26.5	25.0	25.1	22.0
15 Banks in U.S.-affiliated areas	33.4	34.1	37.8	43.8	39.2	40.4	41.1	43.8	42.7	45.0	46.7
16 Savings institutions	913.3	933.2	928.5	964.8	931.3	930.8	939.3	964.8	990.8	1,011.4	1,030.8
17 Credit unions	263.0	288.5	305.3	324.2	306.7	315.1	320.5	324.2	330.2	341.0	350.8
18 Bank personal trusts and estates	239.7	232.0	207.0	194.1	204.3	201.5	197.5	194.1	192.2	190.1	188.0
19 Life insurance companies	1,587.5	1,657.0	1,751.1	1,828.0	1,777.3	1,793.2	1,810.6	1,828.0	1,853.7	1,874.7	1,893.1
20 Other insurance companies	468.7	491.2	515.3	535.7	521.1	520.8	518.8	535.7	530.8	537.5	535.4
21 Private pension funds	716.9	769.2	834.7	953.4	853.4	885.9	909.8	953.4	968.5	1,006.0	1,017.4
22 State and local government retirement funds	531.0	568.2	632.0	697.0	648.9	668.5	684.9	697.0	716.3	726.5	732.5
23 Money market mutual funds	545.5	634.3	721.9	965.9	775.0	815.9	869.9	965.9	1,036.2	1,001.8	1,049.7
24 Mutual funds	771.3	820.2	901.1	1,025.9	940.0	979.1	1,005.9	1,025.9	1,050.8	1,084.0	1,079.8
25 Closed-end funds	96.4	101.1	98.3	102.8	99.4	100.5	101.7	102.8	103.9	105.0	106.1
26 Government-sponsored enterprises	750.0	807.9	902.2	1,163.0	951.4	989.4	1,055.4	1,163.0	1,201.9	1,267.0	1,338.6
27 Federally related mortgage pools	1,570.3	1,711.4	1,825.8	2,018.4	1,847.1	1,908.9	1,975.7	2,018.4	2,112.3	2,182.8	2,246.2
28 Asset-backed securities issuers (ABSs)	653.4	777.0	939.3	1,216.0	989.2	1,068.9	1,134.2	1,216.0	1,280.4	1,359.7	1,408.2
29 Finance companies	526.2	544.5	566.4	618.4	572.0	579.0	592.7	618.4	639.9	660.9	678.1
30 Mortgage companies	33.0	41.2	32.1	35.3	46.8	32.7	33.8	35.3	33.0	35.6	35.0
31 Real estate investment trusts (REITs)	26.0	30.4	50.6	45.5	57.0	58.5	55.7	45.5	45.9	45.3	44.7
32 Brokers and dealers	183.4	167.7	182.6	165.2	244.0	198.3	217.5	165.2	211.4	163.6	167.5
33 Funding corporations	87.4	101.4	152.3	158.5	177.5	178.3	161.6	158.5	173.3	202.7	208.0
RELATION OF LIABILITIES TO FINANCIAL ASSETS											
34 **Total credit market debt**	**18,455.1**	**19,826.6**	**21,282.8**	**23,409.3**	**21,789.0**	**22,291.6**	**22,770.5**	**23,409.3**	**24,021.3**	**24,458.8**	**25,016.7**
Other liabilities											
35 Official foreign exchange	63.7	53.7	48.9	60.1	48.2	50.1	54.5	60.1	53.6	50.9	52.1
36 Special drawing rights certificates	10.2	9.7	9.2	9.2	9.2	9.2	9.2	9.2	8.2	8.2	7.2
37 Treasury currency	18.2	18.3	18.3	18.3	18.4	18.4	18.8	18.3	18.3	18.8	19.3
38 Foreign deposits	418.8	516.1	618.8	639.9	607.2	630.4	651.7	639.9	671.8	696.6	712.5
39 Net interbank liabilities	290.7	240.8	219.4	187.7	179.6	189.2	198.7	187.7	180.4	201.7	190.3
40 Checkable deposits and currency	1,229.3	1,245.1	1,286.6	1,334.2	1,259.2	1,320.7	1,282.3	1,334.2	1,311.4	1,354.1	1,354.9
41 Small time and savings deposits	2,279.7	2,377.0	2,474.1	2,626.5	2,525.4	2,531.0	2,553.8	2.626.5	2,637.6	2.644.6	2,666.8
42 Large time deposits	476.9	590.9	713.4	805.5	760.9	754.0	776.5	805.5	804.3	809.0	836.8
43 Money market fund shares	745.3	891.1	1,048.7	1,334.2	1,130.7	1,153.7	1,249.7	1,334.2	1,416.0	1,398.1	1,449.6
44 Security repurchase agreements	660.0	701.5	822.4	875.0	889.3	861.5	918.9	875.0	980.3	974.2	1,006.1
45 Mutual fund shares	1.852.8	2.342.4	2,989.4	3,610.5	3,339.3	3,438.4	3,137.3	3,610.5	3,758.4	4,049.4	3,863.0
46 Security credit	305.7	358.1	469.1	577.4	505.3	540.6	579.0	577.4	552.7	587.9	582.3
47 Life insurance reserves	566.2	610.6	665.0	718.3	677.3	690.6	703.5	718.3	730.9	745.8	756.7
48 Pension fund reserves	5,767.8	6,642.5	7,894.4	9,160.7	8,583.1	8,730.8	8,194.6	9,160.7	9,258.8	9,711.7	9,464.8
49 Trade payables	1,698.0	1,812.8	1,938.6	1,970.2	1,940.8	1,933.9	1,954.5	1,970.2	1,981.2	2,039.6	2,067.3
50 Taxes payable	107.6	123.6	140.4	152.9	151.7	144.6	155.0	152.9	159.7	161.5	172.5
51 Investment in bank personal trusts	803.0	871.7	942.5	1,001.0	1,002.7	999.8	908.6	1,001.0	1,012.5	1,059.8	1,000.9
52 Miscellaneous	5.634.7	6,098.8	6.666.5	7.053.7	6.741.0	6,791.2	7,013.1	7,053.7	7,074.2	7,158.2	7,157.4
53 **Total liabilities**	**41,383.6**	**45,331.1**	**50,248.3**	**55,544.5**	**52,158.3**	**53,079.8**	**53,130.2**	**55,544.5**	**56,631.7**	**58,128.9**	**58,377.3**
Financial assets not included in liabilities (+)											
54 Gold and special drawing rights	22.1	21.4	21.1	21.6	21.2	21.0	21.2	21.6	20.7	20.8	21.3
55 Corporate equities	8,495.7	10,255.8	13,181.4	15,413.4	14,842.1	14,987.0	13,121.2	15,413.4	15,893.6	17,018.0	16,008.3
56 Household equity in noncorporate business	3,640.4	3,833.3	4,171.8	4,395.3	4,213.6	4,284.7	4,331.3	4,395.3	4,405.1	4,489.9	4,568.0
Liabilities not identified as assets (−)											
57 Treasury currency	−5.8	−6.7	−7.3	−8.0	−7.4	−7.4	−7.2	−8.0	−8.4	−8.2	−8.1
58 Foreign deposits	360.2	431.4	534.0	547.2	510.1	547.6	565.1	547.2	562.8	583.9	592.3
59 Net interbank transactions	−9.0	−10.6	−32.2	−27.0	−21.2	−17.1	−15.4	−27.0	−11.3	−10.6	−12.9
60 Security repurchase agreements	86.4	90.9	153.1	168.4	187.4	140.9	175.2	168.4	263.5	279.8	297.1
61 Taxes payable	62.4	76.7	93.5	103.5	89.6	95.8	102.2	103.5	90.7	111.3	101.4
62 Miscellaneous	−1,011.4	−1,339.6	−1,668.9	−2,319.9	−1,868.2	−1,929.2	−2,015.4	−2,319.9	−2,436.0	−2,588.2	−2,996.5
Floats not included in assets (−)											
63 Federal government checkable deposits	3.1	−1.6	−8.1	−3.9	−10.4	−16.1	−12.0	−3.9	−7.2	−12.4	−9.0
64 Other checkable deposits	34.2	30.1	26.2	23.1	21.4	24.2	15.7	23.1	18.9	22.1	14.5
65 Trade credit	198.2	176.7	199.5	168.0	163.5	119.4	99.1	168.0	129.2	108.7	101.1
66 **Total identified to sectors as assets**	**53,823.6**	**59,994.4**	**68,332.7**	**76,723.3**	**72,170.3**	**73,414.4**	**71,696.7**	**76,723.3**	**78,348.9**	**81,171.0**	**80,894.9**

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	1997	1998	1999	1999								
				Apr.	May	June	July	Aug.	Sept.	Oct.[r]	Nov.[r]	Dec.[p]
1 **Industrial production**[1]	**127.1**	**132.4**	**137.2**	**135.5**	**136.2**	**136.6**	**137.4**	**137.7**	**138.1[r]**	**139.4**	**139.9**	**140.5**
Market groupings												
2 Products, total	119.6	123.7	126.7	126.2	126.8	126.8	126.9	127.6	127.6[r]	129.0	129.2	129.4
3 Final, total	121.1	125.4	128.2	127.6	128.2	128.3	128.6	129.5	129.1[r]	130.7	131.0	130.9
4 Consumer goods	115.1	116.2	117.2	116.5	116.8	117.0	116.8	117.6	117.1[r]	118.9	118.9	119.1
5 Equipment	132.1	142.7	149.1	147.0	148.4	148.3	149.3	150.5	150.2[r]	151.4	152.3	151.8
6 Intermediate	115.3	118.8	122.3	121.7	122.3	121.7	121.5	121.7	122.6	123.6	123.6	124.4
7 Materials	139.0	146.5	154.7	150.8	151.7	153.1	155.0	154.6	155.7[r]	156.8	158.0	159.2
Industry groupings												
8 Manufacturing	130.1	136.4	142.3	140.2	141.0	141.4	142.0	142.5	142.9	144.3	145.2	145.5
9 Capacity utilization, manufacturing (percent)[2]	82.4	80.9	79.8	79.5	79.7	79.6	79.7	79.7	79.7	80.2	80.4	80.3
10 Construction contracts[3]	143.2	157.4	170.9	174.0[r]	176.0	180.0[r]	176.0[r]	160.0[r]	168.0[r]	170.0	166.0	165.0
11 Nonagricultural employment, total[4]	120.3	123.4	126.1	125.7	125.7	126.0	126.3	126.5	126.6	126.9	127.1	127.4
12 Goods-producing, total	101.2	102.7	102.3	102.5	102.1	102.1	102.3	101.9	102.1	102.1	102.4	102.4
13 Manufacturing, total	98.3	98.8	97.0	97.2	97.0	96.8	97.1	96.7	96.7	96.6	96.7	96.7
14 Manufacturing, production workers	99.6	99.8	97.8	98.0	97.8	97.5	98.0	97.4	97.4	97.3	97.4	97.4
15 Service-producing	126.5	130.0	133.8	133.1	133.2	133.6	134.0	134.3	134.4	134.7	135.0	135.3
16 Personal income, total	175.4	185.7	196.6	194.1	194.9	196.4	197.0	197.9	198.1	200.4	201.2	201.8
17 Wages and salary disbursements	171.3	184.4	197.0	194.3	195.2	196.3	197.8	198.6	199.5	200.7	201.3	202.8
18 Manufacturing	144.6	152.4	156.9	155.1	155.9	156.8	158.2	158.0	158.6	159.7	158.9	159.1
19 Disposable personal income[5]	172.9	181.7	191.9	189.7	190.3	191.8	192.1	193.4	193.0	195.6	196.3	196.7
20 Retail sales[5]	170.1	178.5	194.3	190.9	192.8	192.6	194.5	197.1	197.1	197.7	200.0	202.5
Prices[6]												
21 Consumer (1982–84=100)	160.5	163.0	166.6	166.2	166.2	166.2	166.7	167.1	167.9	168.2	168.3	168.3
22 Producer finished goods (1982=100)	131.8	130.7	133.1	131.9	132.4	132.7	132.9	133.7	134.8	135.0	135.0	135.0

1. Data in this table appear in the Board's G.17 (419) monthly statistical release. The data are also available on the Board's web site, http://www.federalreserve.gov/releases/g17. The latest historical revision of the industrial production index and the capacity utilization rates was released in November 1999. The recent annual revision is described in an article in the March 2000 issue of the *Bulletin*. For a description of the methods of estimating industrial production and capacity utilization, see "Industrial Production and Capacity Utilization: Historical Revision and Recent Developments," *Federal Reserve Bulletin*, vol. 83 (February 1997), pp. 67–92, and the references cited therein. For details about the construction of individual industrial production series, see "Industrial Production: 1989 Developments and Historical Revision," *Federal Reserve Bulletin*, vol. 76 (April 1990), pp. 187–204.

2. Ratio of index of production to index of capacity. Based on data from the Federal Reserve, 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 the U.S. Department of Labor, *Employment and Earnings*. Series covers employees only, excluding personnel in the armed forces.

5. Based on data from U.S. Department of Commerce, *Survey of Current Business*.

6. Based on data not seasonally adjusted. Seasonally adjusted data for changes in the price indexes can be obtained from the U.S. Department of Labor, Bureau of Labor Statistics, *Monthly Labor Review*.

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

2.11 LABOR FORCE, EMPLOYMENT, AND UNEMPLOYMENT

Thousands of persons; monthly data seasonally adjusted

Category	1997[r]	1998[r]	1999	1999							
				May	June	July	Aug.	Sept.	Oct.[r]	Nov.[r]	Dec.
HOUSEHOLD SURVEY DATA[1]											
1 Civilian labor force[2]	136,297	137,673	139,368	139,013[r]	139,332[r]	139,336[r]	139,372[r]	139,475[r]	139,697	139,834	140,108
Employment											
2 Nonagricultural industries[3]	126,159	128,085	130,207	129,900[r]	130,068[r]	130,121[r]	130,296[r]	130,471[r]	130,702	130,788	131,141
3 Agriculture	3,399	3,378	3,281	3,290[r]	3,330[r]	3,278[r]	3,234[r]	3,179[r]	3,238	3,310	3,279
Unemployment											
4 Number	6,739	6,210	5,880	5,823[r]	5,934[r]	5,937[r]	5,842[r]	5,825[r]	5,757	5,736	5,688
5 Rate (percent of civilian labor force)	4.9	4.5	4.2	4.2	4.3	4.3	4.2	4.2	4.1	4.1	4.1
ESTABLISHMENT SURVEY DATA											
6 **Nonagricultural payroll employment**[4]	**122,690**	**125,826**	**128,610**	**128,162**	**128,443**	**128,816**	**128,945**	**129,048**	**129,332**	**129,554**	**129,869**
7 Manufacturing	18,675	18,772	18,432	18,429	18,396	18,449	18,378	18,366	18,356	18,364	18,363
8 Mining	596	590	535	531	526	528	524	527	528	527	529
9 Contract construction	5,691	5,985	6,273	6,239	6,258	6,270	6,246	6,293	6,314	6,369	6,385
10 Transportation and public utilities	6,408	6,600	6,791	6,758	6,781	6,799	6,813	6,831	6,841	6,860	6,892
11 Trade	28,614	29,127	29,787	29,725	29,789	29,915	29,919	29,903	29,955	29,953	30,034
12 Finance	7,109	7,407	7,633	7,621	7,636	7,647	7,650	7,653	7,668	7,678	7,690
13 Service	36,040	37,526	38,999	38,782	38,952	39,055	39,205	39,257	39,433	39,545	39,654
14 Government	19,557	19,819	20,160	20,077	20,105	20,153	20,210	20,218	20,237	20,258	20,322

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	1999				1999				1999			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
	Output (1992=100)				Capacity (percent of 1992 output)				Capacity utilization rate (percent)[2]			
1 **Total industry**	**134.6**	**136.1**	**137.7**	**139.9**	**167.3**	**169.2**	**170.7**	**172.3**	**80.4**	**80.5**	**80.7**	**81.2**
2 Manufacturing	139.2	140.9	142.5	145.0	174.8	176.9	178.7	180.6	79.6	79.6	79.7	80.3
3 Primary processing[3]	122.2	122.5	123.4	125.2	147.4	148.2	149.0	149.8	82.9	82.7	82.8	83.6
4 Advanced processing[4]	148.1	150.5	152.5	155.4	188.6	191.4	193.7	196.1	78.5	78.6	78.7	79.2
5 Durable goods	167.1	170.8	174.4	177.3	210.3	214.2	217.6	221.0	79.5	79.8	80.2	80.2
6 Lumber and products	122.2	122.5	120.5	121.0	145.3	146.3	147.4	148.4	84.1	83.7	81.7	81.5
7 Primary metals	122.3	125.1	128.7	130.3	147.6	148.5	149.3	150.1	82.9	84.2	86.2	86.8
8 Iron and steel	116.9	121.4	126.6	128.0	148.5	150.0	151.3	152.5	78.7	80.9	83.7	83.9
9 Nonferrous	129.1	129.6	131.2	133.2	146.5	146.8	147.0	147.2	88.1	88.3	89.3	90.5
10 Industrial machinery and equipment	221.3	227.9	232.3	240.3	265.7	275.5	285.3	295.8	83.3	82.7	81.4	81.3
11 Electrical machinery	349.4	374.6	400.9	418.0	461.8	482.0	498.5	514.6	75.7	77.7	80.4	81.2
12 Motor vehicles and parts	147.5	150.6	153.3	154.7	184.8	184.8	184.9	185.0	79.8	81.5	82.9	83.6
13 Aerospace and miscellaneous transportation equipment	98.9	95.9	93.8	88.8	126.8	126.6	126.2	125.8	78.0	75.7	74.3	70.6
14 Nondurable goods	111.8	111.6	111.5	113.6	139.1	139.5	139.9	140.3	80.4	80.0	79.7	81.0
15 Textile mill products	109.6	111.1	111.6	112.7	131.4	131.5	131.6	131.8	83.4	84.5	84.8	85.5
16 Paper and products	115.8	115.1	116.0	118.3	133.8	134.5	135.3	136.1	86.6	85.6	85.7	86.9
17 Chemicals and products	115.9	116.3	117.0	120.3	150.0	150.4	150.7	151.0	77.3	77.3	77.6	79.7
18 Plastics materials	122.9	123.5	124.2	129.4	135.9	137.2	138.4	139.6	90.4	90.0	89.7	92.7
19 Petroleum products	116.3	114.1	114.6	113.5	121.8	122.2	122.7	123.1	95.6	93.3	93.4	92.2
20 Mining	97.6	97.1	98.2	99.8	120.4	120.3	120.2	120.2	81.1	80.7	81.7	83.0
21 Utilities	114.6	116.6	118.4	117.9	126.9	127.3	127.8	128.2	90.3	91.6	92.7	91.9
22 Electric	116.6	118.9	120.8	120.9	124.7	125.2	125.6	126.1	93.5	95.0	96.2	95.8

Series	1973	1975	Previous cycle[5]		Latest cycle[6]		1998	1999					
	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**	**80.6**	**80.7**	**80.7**	**80.6**	**81.2**	**81.2**	**81.3**
2 Manufacturing	88.5	70.5	86.9	69.0	85.7	76.6	79.9	79.7	79.7	79.7	80.2	80.4	80.3
3 Primary processing[3]	91.2	68.2	88.1	66.2	88.9	77.7	83.1	82.9	82.8	82.8	83.3	83.7	83.7
4 Advanced processing[4]	87.2	71.8	86.7	70.4	84.2	76.1	78.8	78.6	78.8	78.7	79.2	79.4	79.1
5 Durable goods	89.2	68.9	87.7	63.9	84.6	73.1	80.1	80.3	80.2	80.0	80.3	80.4	80.0
6 Lumber and products	88.7	61.2	87.9	60.8	93.6	75.5	84.8	82.7	81.6	81.0	81.4	81.4	81.7
7 Primary metals	100.2	65.9	94.2	45.1	92.7	73.7	83.4	85.9	86.8	85.8	85.7	87.4	87.4
8 Iron and steel	105.8	66.6	95.8	37.0	95.2	71.8	79.0	83.7	84.4	83.0	81.8	85.1	84.8
9 Nonferrous	90.8	59.8	91.1	60.1	89.3	74.2	88.9	88.6	89.9	89.3	90.6	90.3	90.6
10 Industrial machinery and equipment	96.0	74.3	93.2	64.0	85.4	72.3	83.5	81.5	81.1	81.6	81.8	81.3	80.7
11 Electrical machinery	89.2	64.7	89.4	71.6	84.0	75.0	77.2	80.9	80.5	79.8	80.7	81.2	81.8
12 Motor vehicles and parts	93.4	51.3	95.0	45.5	89.1	55.9	79.6	82.3	82.3	84.1	84.1	84.6	82.1
13 Aerospace and miscellaneous transportation equipment	78.4	67.6	81.9	66.6	87.3	79.2	79.9	74.9	75.0	73.1	71.6	70.6	69.6
14 Nondurable goods	87.8	71.7	87.5	76.4	87.3	80.7	80.1	79.4	79.7	79.9	80.7	81.0	81.2
15 Textile mill products	91.4	60.0	91.2	72.3	90.4	77.7	81.0	85.3	84.8	84.1	86.5	85.2	84.8
16 Paper and products	97.1	69.2	96.1	80.6	93.5	85.0	86.3	85.2	85.6	86.4	86.9	87.1	86.8
17 Chemicals and products	87.6	69.7	84.6	69.9	86.2	79.3	76.6	76.9	78.1	77.8	78.9	79.9	80.2
18 Plastics materials	102.0	50.6	90.9	63.4	97.0	74.8	91.8	90.9	87.8	90.5	94.0	91.3	92.7
19 Petroleum products	96.7	81.1	90.0	66.8	88.5	85.1	94.6	93.9	93.0	93.3	93.2	91.5	92.1
20 Mining	94.3	88.2	96.0	80.3	88.0	87.0	81.4	81.3	81.9	81.8	82.6	83.1	83.4
21 Utilities	96.2	82.9	89.1	75.9	92.6	83.4	88.9	93.9	92.2	92.0	92.6	90.1	93.1
22 Electric	99.0	82.7	88.2	78.9	95.0	87.1	93.1	97.7	95.5	95.2	96.1	94.2	97.2

1. Data in this table appear in the Board's G.17 (419) monthly statistical release. The data are also available on the Board's web site, http://www.federalreserve.gov/releases/g17. The latest historical revision of the industrial production index and the capacity utilization rates was released in November 1999. The recent annual revision is described in an article in the March 2000 issue of the *Bulletin*. For a description of the methods of estimating industrial production and capacity utilization, see "Industrial Production and Capacity Utilization: Historical Revision and Recent Developments," *Federal Reserve Bulletin*, vol. 83 (February 1997), pp. 67–92, and the references cited therein. For details about the construction of individual industrial production series, see "Industrial Production: 1989 Developments and Historical Revision," *Federal Reserve Bulletin*, vol. 76 (April 1990), pp. 187–204.

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

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

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

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

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

2.13 INDUSTRIAL PRODUCTION Indexes and Gross Value[1]

Monthly data seasonally adjusted

Group	1992 proportion	1999 avg.	1998 Dec.	1999 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**	**137.2**	**133.8**	**134.1**	**134.5**	**135.1**	**135.5**	**136.2**	**136.6**	**137.4**	**137.7**	**138.1**	**139.4**	**139.9**	**140.5**
2 Products	60.5	126.7	124.9	125.4	125.8	126.0	126.2	126.8	126.8	126.9	127.6	127.6	129.0	129.2	129.4
3 Final products	46.3	128.2	126.0	126.6	127.3	127.3	127.6	128.2	128.3	128.6	129.5	129.1	130.7	131.0	130.9
4 Consumer goods, total	29.1	117.2	115.1	116.3	117.2	116.7	116.5	116.8	117.0	116.8	117.6	117.1	118.9	118.9	119.1
5 Durable consumer goods	6.1	152.8	146.0	149.1	150.9	149.9	152.0	152.8	154.0	153.4	155.5	153.5	157.5	156.2	155.4
6 Automotive products	2.6	144.7	141.7	143.7	142.0	140.0	142.0	145.4	147.4	143.7	150.6	145.5	147.9	146.9	144.6
7 Autos and trucks	1.7	151.8	148.2	149.4	148.7	147.0	149.0	153.2	157.5	148.9	162.9	152.8	155.1	154.3	148.8
8 Autos, consumer	.9	102.6	108.4	104.7	100.2	101.6	102.3	99.9	101.8	102.4	105.0	105.5	103.9	107.2	100.0
9 Trucks, consumer	.7	202.4	190.2	195.9	198.5	194.1	197.3	207.4	214.2	197.2	221.6	201.9	207.8	203.6	199.2
10 Auto parts and allied goods	.9	134.0	131.8	134.8	131.8	129.3	131.4	133.6	132.5	135.3	132.8	134.4	136.7	135.4	137.3
11 Other	3.5	159.1	148.8	152.8	158.0	157.8	160.0	158.3	158.8	161.1	158.7	159.7	165.1	163.5	164.2
12 Appliances, televisions, and air conditioners	1.0	324.9	283.5	299.7	320.0	317.6	325.8	311.1	319.0	329.9	319.0	326.3	360.1	351.1	349.8
13 Carpeting and furniture	.8	122.8	115.9	121.1	122.8	119.6	120.2	121.0	121.0	124.1	122.1	124.1	126.8	125.2	124.9
14 Miscellaneous home goods	1.6	114.6	111.0	111.0	113.6	115.7	116.9	117.2	116.2	115.9	115.4	114.4	114.5	114.8	116.2
15 Nondurable consumer goods	23.0	108.9	107.9	108.7	109.3	108.9	108.3	108.4	108.4	108.3	108.9	108.7	110.0	110.3	110.7
16 Foods and tobacco	10.3	107.6	107.2	108.4	109.4	108.4	107.8	107.7	107.3	106.7	106.5	106.2	107.6	108.7	109.1
17 Clothing	2.4	90.7	91.3	91.7	92.0	91.3	91.8	90.2	90.2	89.2	90.1	89.9	90.3	90.7	89.8
18 Chemical products	4.5	121.5	120.2	119.7	122.8	121.6	118.7	120.5	120.2	119.4	122.7	120.9	122.6	124.5	125.0
19 Paper products	2.9	102.3	102.8	101.5	100.4	98.8	99.9	100.3	101.5	102.0	103.2	104.7	106.3	104.9	103.9
20 Energy	2.9	115.4	108.6	113.1	109.9	115.4	115.1	114.7	115.3	118.6	116.6	117.6	118.4	114.1	117.1
21 Fuels	.8	110.9	110.1	112.2	113.4	110.7	111.5	110.9	109.9	111.1	110.0	112.0	112.4	108.2	108.6
22 Residential utilities	2.1	117.3	107.6	113.3	108.2	117.2	116.4	116.1	117.4	121.7	119.3	119.7	120.8	116.4	120.7
23 Equipment	17.2	149.1	145.2	144.6	144.9	145.9	147.0	148.4	148.3	149.3	150.5	150.2	151.4	152.3	151.8
24 Business equipment	13.2	171.8	166.3	165.9	166.3	167.5	169.4	171.2	171.2	172.6	173.9	173.7	175.1	176.1	175.6
25 Information processing and related	5.4	249.5	220.9	223.0	224.5	229.2	236.9	244.3	248.2	253.8	259.9	261.3	266.5	269.6	273.2
26 Computer and office equipment	1.1	845.6	657.8	677.5	703.1	736.1	773.0	805.8	830.2	851.9	892.8	926.9	957.0	977.1	992.8
27 Industrial	4.0	135.4	138.6	137.0	135.8	135.2	136.0	135.3	133.7	135.4	133.6	133.9	135.4	135.2	135.1
28 Transit	2.5	126.5	134.8	132.8	131.2	129.5	129.4	128.9	128.2	127.5	128.1	124.0	121.6	120.8	115.4
29 Autos and trucks	1.2	131.5	131.0	130.9	128.9	129.0	130.7	131.2	132.2	131.2	135.3	132.0	133.2	136.0	128.1
30 Other	1.3	131.4	133.0	132.6	139.9	143.0	135.7	134.0	130.2	123.8	123.2	126.4	125.4	128.8	127.4
31 Defense and space equipment	3.3	74.3	75.2	75.0	75.4	75.6	75.1	75.2	74.6	74.5	74.7	73.6	73.7	73.0	72.0
32 Oil and gas well drilling	.6	106.7	105.2	99.8	97.4	100.8	97.2	99.8	100.1	102.0	107.1	111.3	115.7	121.3	123.6
33 Manufactured homes	.2	155.7	172.5	173.3	169.2	168.8	164.7	161.3	158.9	151.5	151.3	144.4	142.6	143.5	141.5
34 Intermediate products, total	14.2	122.3	121.1	121.4	121.3	121.6	121.7	122.3	121.7	121.5	121.7	122.6	123.6	123.6	124.4
35 Construction supplies	5.3	133.5	132.2	133.3	132.5	131.7	131.3	132.9	132.6	133.2	132.9	134.1	135.3	135.7	136.2
36 Business supplies	8.9	115.6	114.5	114.3	114.7	115.6	116.1	116.1	115.3	114.6	115.1	115.8	116.7	116.4	117.4
37 Materials	39.5	154.7	148.5	148.2	148.7	150.3	150.8	151.7	153.1	155.0	154.6	155.7	156.8	158.0	159.2
38 Durable goods materials	20.8	198.6	189.2	188.8	189.2	191.9	193.1	194.3	197.2	200.3	199.9	202.3	203.1	205.9	207.3
39 Durable consumer parts	4.0	150.9	147.2	145.4	148.4	149.9	147.7	148.4	150.5	153.9	147.2	156.0	154.3	156.5	155.3
40 Equipment parts	7.6	360.0	322.1	323.1	324.4	331.5	340.5	345.0	355.2	364.6	369.0	371.4	377.0	382.9	390.3
41 Other	9.2	131.1	131.2	130.8	129.8	130.9	130.4	130.4	130.6	131.1	131.6	131.2	131.3	132.7	133.1
42 Basic metal materials	3.1	121.7	119.3	119.1	116.8	119.8	120.1	119.9	122.6	122.8	123.3	122.1	122.8	125.6	126.0
43 Nondurable goods materials	8.9	114.2	111.7	111.3	112.4	112.7	112.8	113.8	114.2	114.5	114.4	114.7	116.5	117.2	117.4
44 Textile materials	1.1	100.9	101.8	96.5	100.2	101.2	101.8	101.8	101.2	101.2	101.1	100.3	102.2	100.9	101.2
45 Paper materials	1.8	117.2	114.4	116.1	115.6	116.3	116.5	115.3	117.7	116.3	116.3	118.6	118.5	120.1	119.8
46 Chemical materials	3.9	116.6	111.3	111.6	112.8	113.6	114.2	116.0	116.9	117.7	117.4	117.7	119.9	121.1	121.4
47 Other	2.1	113.5	114.6	113.4	114.4	113.3	111.9	114.2	112.0	113.0	113.2	112.5	115.2	115.0	115.4
48 Energy materials	9.7	102.0	101.6	101.8	101.7	102.4	102.2	102.2	101.6	102.9	102.3	101.8	102.6	101.6	103.4
49 Primary energy	6.3	99.3	98.8	99.1	99.1	99.1	97.3	98.3	98.9	100.2	100.3	99.6	100.0	99.3	100.3
50 Converted fuel materials	3.3	107.7	107.0	106.8	106.7	108.9	111.7	109.9	106.8	108.0	106.1	106.1	107.7	106.1	109.4
SPECIAL AGGREGATES															
51 Total excluding autos and trucks	97.1	137.1	133.7	133.9	134.4	135.1	135.4	136.1	136.4	137.3	137.4	138.0	139.3	139.8	140.6
52 Total excluding motor vehicles and parts	95.1	136.5	133.2	133.5	133.9	134.6	134.9	135.6	135.9	136.7	137.1	137.2	138.6	139.2	140.0
53 Total excluding computer and office equipment	98.2	131.2	128.7	128.8	129.1	129.5	129.7	130.2	130.6	131.2	131.4	131.5	132.7	133.1	133.6
54 Consumer goods excluding autos and trucks	27.4	115.3	113.4	114.6	115.5	115.1	114.8	114.8	114.8	115.0	115.2	115.2	117.0	117.0	117.5
55 Consumer goods excluding energy	26.2	117.4	115.9	116.7	118.0	116.9	116.7	117.0	117.2	116.6	117.7	117.1	119.0	119.4	119.4
56 Business equipment excluding autos and trucks	12.0	176.4	170.3	169.9	170.6	171.9	173.8	175.7	175.7	177.4	178.3	178.5	179.9	180.7	181.1
57 Business equipment excluding computer and office equipment	12.1	143.9	143.7	142.7	142.4	142.6	143.4	144.2	143.6	144.4	144.6	143.6	144.1	144.6	143.8
58 Materials excluding energy	29.8	171.7	163.3	162.9	163.6	165.5	166.3	167.4	169.5	171.6	171.3	173.0	174.2	176.2	177.2

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

Group	SIC code[2]	1992 proportion	1999 avg.	1998 Dec.	1999 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**	**137.2**	**133.8**	**134.1**	**134.5**	**135.1**	**135.5**	**136.2**	**136.6**	**137.4**	**137.7**	**138.1**	**139.4**	**139.9**	**140.5**
60 Manufacturing	...	85.4	142.3	138.4	138.6	139.3	139.7	140.2	141.0	141.4	142.0	142.5	142.9	144.3	145.2	145.5
61 Primary processing	..	26.5	123.2	121.9	122.2	122.1	122.4	122.2	122.5	122.7	123.3	123.4	123.6	124.6	125.3	125.7
62 Advanced processing	.	58.8	151.8	147.2	147.2	148.4	148.8	149.6	150.7	151.2	151.8	152.6	153.1	154.7	155.6	155.9
63 Durable goods	.	45.0	172.8	166.2	166.3	166.8	168.1	169.4	170.8	172.2	173.8	174.4	175.0	176.4	177.7	177.9
64 Lumber and products	24	2.0	121.7	122.5	122.6	122.3	121.7	121.5	123.9	122.2	121.5	120.2	119.7	120.4	120.9	121.6
65 Furniture and fixtures	25	1.4	125.8	123.3	122.7	124.6	125.8	123.8	124.4	124.4	125.7	126.4	127.9	127.6	127.9	128.6
66 Stone, clay, and glass products	32	2.1	130.4	131.8	133.1	132.2	130.8	128.8	128.5	127.8	129.3	130.2	129.6	131.6	132.2	132.1
67 Primary metals	33	3.1	126.5	122.5	122.9	120.1	124.0	123.9	123.9	127.4	128.0	129.6	128.3	128.3	131.2	131.3
68 Iron and steel	331,2	1.7	122.9	116.5	118.1	114.6	118.1	119.4	120.1	124.5	126.2	127.6	125.9	124.4	129.9	129.7
69 Raw steel	331PT	.1	113.3	102.7	106.8	106.8	108.3	109.3	111.4	110.7	111.1	115.9	112.4	121.8	124.0	123.6
70 Nonferrous	333–6,9	1.4	130.8	130.0	128.9	127.0	131.4	129.4	128.6	130.8	130.2	132.1	131.4	133.2	132.9	133.4
71 Fabricated metal products	34	5.0	128.8	129.8	129.0	128.4	128.5	128.0	127.2	128.3	128.6	128.5	128.4	129.0	130.1	130.3
72 Industrial machinery and equipment	35	8.0	230.5	216.6	217.5	221.7	224.6	227.0	228.4	228.2	230.0	231.4	235.5	239.0	240.5	241.6
73 Computer and office equipment	357	1.8	1,069.6	832.2	868.1	907.1	947.6	987.5	1,021.6	1,048.2	1,075.1	1,123.7	1,167.5	1,206.7	1,233.0	1,254.9
74 Electrical machinery	36	7.3	389.6	344.8	346.7	347.5	354.0	366.4	373.3	384.2	399.2	401.3	402.1	410.9	417.7	425.4
75 Transportation equipment	37	9.5	122.3	123.9	122.7	123.2	122.6	122.1	122.8	123.5	122.9	122.9	123.1	122.1	121.8	118.9
76 Motor vehicles and parts	371	4.9	151.0	147.1	146.5	147.8	148.1	148.4	150.6	152.9	152.2	152.2	155.6	155.6	156.4	152.0
77 Autos and light trucks	371PT	2.6	137.8	136.4	136.5	135.0	134.0	135.7	138.3	142.0	135.8	146.8	139.4	140.7	141.0	135.1
78 Aerospace and miscellaneous transportation equipment	372–6,9	4.6	94.6	101.2	99.4	99.3	97.9	96.5	96.0	95.2	94.7	94.7	92.2	90.2	88.8	87.5
79 Instruments	38	5.4	116.5	112.8	113.3	112.9	113.7	115.1	116.7	117.0	117.2	117.7	117.2	118.6	119.0	119.2
80 Miscellaneous	39	1.3	124.6	120.8	120.6	121.8	122.9	124.2	125.5	124.5	125.2	125.2	125.1	125.0	124.7	125.6
81 Nondurable goods	..	40.4	111.8	111.1	111.3	112.3	111.8	111.5	111.9	111.3	111.0	111.5	111.8	113.1	113.6	114.0
82 Foods	20	9.4	110.3	110.3	111.0	111.4	110.9	110.6	110.6	110.0	108.9	108.9	109.6	110.6	111.3	111.4
83 Tobacco products	21	1.6	94.8	91.1	94.8	99.2	95.4	94.1	95.4	94.5	96.0	94.8	90.9	93.6	96.1	97.9
84 Textile mill products	22	1.8	111.2	106.4	108.0	110.5	110.1	111.4	110.9	110.8	112.3	111.7	110.8	114.0	112.3	111.8
85 Apparel products	23	2.2	90.8	93.2	92.3	92.2	91.8	92.4	91.2	90.7	89.8	89.2	89.0	89.6	89.5	89.5
86 Paper and products	26	3.6	116.3	114.9	115.7	115.9	115.9	115.0	114.6	115.7	115.0	115.8	117.2	118.0	118.5	118.3
87 Printing and publishing	27	6.7	104.5	105.3	104.3	104.3	103.7	104.2	104.1	103.5	102.8	103.6	104.6	106.4	106.0	106.0
88 Chemicals and products	28	9.9	117.1	114.7	114.5	116.6	116.8	115.6	117.0	116.3	115.8	117.7	117.4	119.1	120.7	121.2
89 Petroleum products	29	1.4	114.5	114.8	117.2	117.0	114.9	114.6	114.2	113.4	115.1	114.1	114.6	114.6	112.5	113.4
90 Rubber and plastic products	30	3.5	137.6	135.6	135.4	135.6	135.8	136.2	137.4	136.4	138.0	137.6	139.3	138.8	139.3	140.6
91 Leather and products	31	.3	70.1	73.2	71.9	71.5	71.3	70.6	70.9	71.3	69.1	70.2	69.5	68.7	68.3	67.3
92 Mining	..	6.9	98.1	98.1	98.0	97.4	97.5	96.7	97.4	97.1	97.8	98.5	98.3	99.3	99.8	100.2
93 Metal	10	.5	97.2	106.6	102.9	101.3	98.5	100.5	100.2	98.9	96.2	93.0	91.4	92.5	95.4	96.7
94 Coal	12	1.0	108.1	109.2	107.7	108.9	103.9	107.3	106.1	107.0	110.0	110.7	109.4	108.8	110.0	108.5
95 Oil and gas extraction	13	4.8	92.5	91.5	91.2	90.7	92.1	90.8	91.8	91.4	92.3	93.2	93.0	94.0	94.2	95.3
96 Stone and earth minerals	14	.6	125.1	124.1	129.4	127.1	126.6	121.8	123.9	123.3	120.5	123.0	125.5	128.2	128.5	125.5
97 Utilities	..	7.7	116.8	112.5	114.5	112.6	116.8	116.3	116.1	117.4	119.8	117.8	117.7	118.6	115.5	119.5
98 Electric	491,493PT	6.2	119.2	115.9	115.8	114.9	119.1	118.6	118.4	119.6	122.6	120.0	119.8	121.0	118.8	122.7
99 Gas	492,493PT	1.6	106.9	97.5	108.8	102.5	106.4	105.7	105.8	107.5	107.4	108.2	108.5	107.9	100.5	104.9
SPECIAL AGGREGATES																
100 Manufacturing excluding motor vehicles and parts	...	80.5	141.7	138.0	138.2	138.9	139.3	139.8	140.5	140.8	141.4	142.0	142.3	143.7	144.6	145.2
101 Manufacturing excluding computer and office equipment	.	83.6	135.3	132.5	132.4	133.0	133.1	133.4	134.1	134.3	134.8	135.1	135.3	136.5	137.2	137.4
102 Computers, communications equipment, and semiconductors	.	5.9	794.7	656.4	665.0	676.0	700.3	731.6	753.3	780.5	812.1	830.4	843.0	864.0	885.9	908.1
103 Manufacturing excluding computers and semiconductors	...	81.1	121.6	120.7	120.6	121.1	121.0	120.9	121.3	121.2	121.3	121.6	121.7	122.7	123.1	123.1
104 Manufacturing excluding computers, communications equipment, and semiconductors	.	79.5	119.3	118.7	118.6	119.1	118.9	118.7	119.1	118.9	118.9	119.1	119.3	120.2	120.6	120.5
				Gross value (billions of 1992 dollars, annual rates)												
Major Markets																
105 **Products, total**	...	**2,001.9**	**2,730.7**	**2,674.9**	**2,693.7**	**2,699.9**	**2,701.8**	**2,710.2**	**2,721.9**	**2,723.6**	**2,726.1**	**2,742.0**	**2,740.2**	**2,772.2**	**2,768.1**	**2,768.1**
106 Final	...	1,552.1	2,104.7	2,056.0	2,072.5	2,079.5	2,080.1	2,087.2	2,095.3	2,100.3	2,102.8	2,118.5	2,112.5	2,139.8	2,136.3	2,131.3
107 Consumer goods	...	1,049.6	1,297.4	1,267.6	1,286.4	1,292.3	1,287.9	1,288.4	1,290.1	1,295.1	1,292.4	1,301.3	1,297.0	1,318.0	1,309.6	1,310.4
108 Equipment	...	502.5	808.8	789.6	787.0	788.1	793.3	800.1	806.7	806.7	812.3	819.0	817.5	823.5	828.8	822.7
109 Intermediate	...	449.9	624.7	617.5	619.9	619.1	620.4	621.7	625.2	622.1	622.0	622.4	626.4	631.2	630.6	635.4

1. Data in this table appear in the Board's G.17 (419) monthly statistical release. The data are also available on the Board's web site, http://www.federalreserve.gov/releases/g17. The latest historical revision of the industrial production index and the capacity utilization rates was released in November 1999. The recent annual revision is described in an article in the March 2000 issue of the *Bulletin*. For a description of the methods of estimating industrial production and capacity utilization, see "Industrial Production and Capacity Utilization: Historical Revision and Recent Developments," *Federal Reserve Bulletin*, vol. 83 (February 1997), pp. 67–92, and the references cited therein. For details about the construction of individual industrial production series, see "Industrial Production: 1989 Developments and Historical Revision," *Federal Reserve Bulletin*, vol. 76 (April 1990), pp. 187–204.

2. Standard industrial classification.

2.14 HOUSING AND CONSTRUCTION

Monthly figures at seasonally adjusted annual rates except as noted

Item	1996	1997	1998	1999 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	1,426	1,441	1,612[r]	1,738	1,654	1,572	1,591	1,641	1,641	1,619	1,506	1,594	1,612
2 One-family	1,070	1,062	1,188[r]	1,306	1,242	1,214	1,243	1,241	1,247	1,210	1,171	1,178	1,200
3 Two-family or more	356	379	425[r]	432	412	358	348	400	394	409	335	416	412
4 Started	1,477	1,474	1,617	1,752	1,746	1,577	1,668	1,607	1,680	1,655	1,637	1,642	1,598
5 One-family	1,161	1,134	1,271	1,380	1,394	1,260	1,389	1,305	1,332	1,289	1,295	1,339	1,299
6 Two-family or more	316	340	346	372	352	317	279	302	348	366	342	303	299
7 Under construction at end of period[1]	819	834	935	1,032	1,036	1,031	1,029	1,017	1,021	1,026	1,021	1,017	1,020
8 One-family	584	570	638	712	714	708	708	702	704	704	701	703	707
9 Two-family or more	235	264	297	320	322	323	321	315	317	322	320	314	313
10 Completed	1,406	1,406	1,473	1,528	1,700	1,633	1,650	1,674	1,609	1,594	1,668	1,624	1,617
11 One-family	1,123	1,120	1,158	1,246	1,357	1,324	1,334	1,346	1,263	1,267	1,321	1,288	1,306
12 Two-family or more	283	285	315	282	343	309	316	328	346	327	347	336	311
13 Mobile homes shipped	362[r]	354	374[r]	381	383	368	365	355	336	340	320	321	316
Merchant builder activity in one-family units													
14 Number sold	757	804	886	909	885	952	914	932	929	912[r]	854	931	865
15 Number for sale at end of period[1]	326	287	300	297	300	300	304	306	305	307	309	312	316
Price of units sold (thousands of dollars)[2]													
16 Median	140.0	146.0	152.5	159.9	155.0	160.0	154.8	158.3	157.9	154.9[r]	160.1	159.0	167.4
17 Average	166.4	176.2	181.9	191.4	189.4	191.4	188.2	193.4	188.8	193.3[r]	193.9	201.3	209.7
EXISTING UNITS (one-family)													
18 Number sold	4,196	4,381	4,970	5,140	5,420	5,250	5,000	5,630	5,400	5,240	5,130	4,800	5,130
Price of units sold (thousands of dollars)[2]													
19 Median	115.8	121.8	128.4	128.1	129.6	130.7	132.8	136.9	136.0	137.4	134.4	132.5	133.2
20 Average	141.8	150.5	159.1	159.6	162.3	163.8	167.4	174.2	171.9	174.3	170.2	167.2	168.9
	Value of new construction (millions of dollars)[3]												
CONSTRUCTION													
21 **Total put in place**	**581,920**	**617,877**	**664,451**	**710,657**	**715,396**	**704,582**	**698,461**	**698,852**	**701,961[r]**	**698,439[r]**	**698,168**	**701,933**	**716,042**
22 Private	447,593	474,842	518,987	548,682	555,362	547,885	546,880	546,931	545,992[r]	541,793[r]	540,939	543,796	550,546
23 Residential	255,577	265,908	293,569	318,483	323,133	322,213	321,803	320,913	320,350[r]	319,656[r]	320,048	322,658	325,737
24 Nonresidential	192,017	208,933	225,418	230,199	232,229	225,672	225,077	226,018	225,642[r]	222,137[r]	220,891	221,138	224,809
25 Industrial buildings	32,644	31,355	32,308	28,967	29,052	26,217	24,975	25,465	26,246	25,703[r]	25,566	25,268	25,887
26 Commercial buildings	75,829	86,190	95,252	102,802	103,983	102,180	104,134	104,457	103,355[r]	102,407[r]	102,728	102,454	105,023
27 Other buildings	30,648	37,198	39,438	40,449	39,840	39,737	38,876	38,592	38,412[r]	37,791[r]	37,727	38,436	38,173
28 Public utilities and other	52,896	54,190	58,421	57,981	59,354	57,538	57,092	57,504	57,629[r]	56,236[r]	54,870	54,980	55,726
29 Public	134,326	143,035	145,464	161,975	160,033	156,697	151,581	151,921	155,969[r]	156,646[r]	157,229	158,137	165,496
30 Military	2,604	2,559	2,588	2,636	2,223	2,268	2,128	2,137	2,275[r]	1,682[r]	1,947	2,092	1,961
31 Highway	39,883	44,295	45,067	54,880	53,099	50,897	48,542	45,518	47,822[r]	48,182[r]	49,031	46,988	53,051
32 Conservation and development	5,827	5,576	5,487	6,271	6,194	6,016	5,101	5,845	5,820[r]	6,598[r]	6,268	6,305	6,867
33 Other	86,012	90,605	92,322	98,188	98,517	97,516	95,810	98,421	100,052[r]	100,184[r]	99,983	102,752	103,617

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. 1999
	1998 Dec.	1999 Dec.	1999 Mar.	1999 June	1999 Sept.	1999 Dec.	1999 Aug.	1999 Sept.	1999 Oct.	1999 Nov.	1999 Dec.	
CONSUMER PRICES[2] (1982–84=100)												
1 **All items**	**1.6**	**2.7**	**1.5**	**2.9**	**4.2**	**2.2**	**.3**	**.4**	**.2**	**.1**	**.2**	**168.3**
2 Food	2.3	1.9	1.7	1.7	2.5	2.0	.2	.2	.2	1	1	165.4
3 Energy items	−8.8	13.4	5.8	14.2	29.4	5.2	2.7	1.7	−.1	.0	1 4	112.2
4 All items less food and energy	2.4	1.9	.9	2.3	2.5	2.0	.1	3	.2	.2	1	178.2
5 Commodities	1.3	2	−3.0	2.0	2.5	−.8	−.1	.7	.1	−.2	−.1	144.2
6 Services	3.0	2.7	2.7	2.5	2.3	3.3	.2	.2	.3	.4	.2	197.7
PRODUCER PRICES (1982=100)												
7 Finished goods	.0	3.0	.6	2.8	7.1	1.5	.5	1.0[r]	−.1	.2	.3	135.0
8 Consumer foods	.1	.9	2.1	.0	2.4	−.9	.2[r]	1.0	−.7	.1	.4	135.7
9 Consumer energy	−11.7	18.4	5.7	23.2	42.4	6.8	3.7[r]	2.3[r]	−1.0	1.4	1.2	83.8
10 Other consumer goods	4.2	1.2	−1.3	.8	3.8	1.6	.0[r]	.9[r]	.3	.1	.1	153.4
11 Capital equipment	.0	.3	−.6	−.3	.6	1.5	−.1[r]	.3[r]	.3	−.1	.1	138.3
Intermediate materials												
12 Excluding foods and feeds	−3.0	4.3	.3	6.1	6.6	4.2	.5	.3	.3	.3	4	126.5
13 Excluding energy	−1.6	1.9	−.9	3.1	2.7	2.7	.2	.1	.4	.1	.2	134.6
Crude materials												
14 Foods	−11.0	−.2	4.1	−.8	1.2	−2.8	3.5	1.3	−.1	1.0	−1.6	96.8
15 Energy	−23.8	38.6	−21.1	163.8	121.9	−20.0	8.6[r]	7.8[r]	−4.8	8.8	−8.7	89.0
16 Other	−16.0	13.6	.9	8.6	26.6	19.6	1.9	2.2	2.4	.3	1.8	145.5

1. Not seasonally adjusted.

2. Figures for consumer prices are for all urban consumers and reflect a rental-equivalence measure of homeownership.

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

2.16 GROSS DOMESTIC PRODUCT AND INCOME

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

Account	1996	1997	1998	1998		1999		
				Q3	Q4	Q1	Q2	Q3
GROSS DOMESTIC PRODUCT								
1 **Total**	**7,813.2**	**8,300.8**	**8,759.9**	**8,797.9**	**8,947.6**	**9,072.7**	**9,146.2**	**9,297.8**
By source								
2 Personal consumption expenditures	5,237.5	5,524.4	5,848.6	5,889.6	5,973.7	6,090.8	6,200.8	6,303.7
3 Durable goods	616.5	642.9	698.2	696.9	722.8	739.0	751.6	761.8
4 Nondurable goods	1,574.1	1,641.7	1,708.9	1,716.6	1,742.9	1,787.8	1,824.8	1,853.9
5 Services	3,047.0	3,239.8	3,441.5	3,476.1	3,508.0	3,564.0	3,624.3	3,688.0
6 Gross private domestic investment	1,242.7	1,383.7	1,531.2	1,535.3	1,580.3	1,594.3	1,585.4	1,635.0
7 Fixed investment	1,212.7	1,315.4	1,460.0	1,461.7	1,508.9	1,543.3	1,567.8	1,594.2
8 Nonresidential	899.4	986.1	1,091.3	1,087.2	1,121.4	1,139.9	1,155.4	1,181.6
9 Structures	225.0	254.1	272.8	271.7	278.0	274.7	272.5	272.1
10 Producers' durable equipment	674.4	732.1	818.5	815.4	843.4	865.2	882.9	909.5
11 Residential structures	313.3	329.2	368.7	374.5	387.5	403.4	412.4	412.7
12 Change in business inventories	30.0	68.3	71.2	73.7	71.4	51.0	17.6	40.8
13 Nonfarm	22.2	65.6	70.9	74.7	56.2	40.9	12.8	40.1
14 Net exports of goods and services	−89.0	−88.3	−149.6	−165.7	−161.2	−201.6	−245.8	−278.2
15 Exports	874.2	968.0	966.3	949.1	981.8	966.9	978.2	1,008.5
16 Imports	963.1	1,056.3	1,115.9	1,114.8	1,143.1	1,168.5	1,224.0	1,286.6
17 Government consumption expenditures and gross investment	1,421.9	1,481.0	1,529.7	1,538.7	1,554.8	1,589.1	1,605.9	1,637.2
18 Federal	531.6	537.8	538.7	539.7	546.7	557.4	561.6	569.8
19 State and local	890.4	943.2	991.0	999.0	1,008.1	1,031.8	1,044.3	1,067.4
By major type of product								
20 Final sales, total	7,783.2	8,232.4	8,688.7	8,724.2	8,876.2	9,021.6	9,128.6	9,257.0
21 Goods	2,921.3	3,074.1	3,239.1	3,231.9	3,318.4	3,365.6	3,406.6	3,453.2
22 Durable	1,331.9	1,424.8	1,528.9	1,519.9	1,571.4	1,584.3	1,601.7	1,631.1
23 Nondurable	1,589.4	1,649.3	1,710.3	1,712.1	1,747.0	1,781.3	1,804.9	1,822.2
24 Services	4,191.0	4,434.7	4,664.6	4,700.4	4,747.9	4,820.7	4,885.5	4,963.7
25 Structures	670.9	723.7	785.1	791.9	809.9	835.3	836.5	840.1
26 Change in business inventories	30.0	68.3	71.2	73.7	71.4	51.0	17.6	40.8
27 Durable goods	19.1	35.6	39.0	39.8	38.6	24.1	6.3	23.0
28 Nondurable goods	10.9	32.8	32.3	33.9	32.8	27.0	11.4	17.8
MEMO								
29 **Total GDP in chained 1992 dollars**	**7,813.2**	**8,165.1**	**8,516.3**	**8,536.0**	**8,659.2**	**8,737.9**	**8,778.6**	**8,900.6**
NATIONAL INCOME								
30 **Total**	**6,210.2**	**6,634.9**	**7,036.4**	**7,087.1**	**7,193.8**	**7,334.5**	**7,423.1**	**7,522.1**
31 Compensation of employees	4,395.6	4,675.7	5,011.2	5,053.6	5,134.7	5,217.7	5,287.1	5,373.6
32 Wages and salaries	3,630.1	3,884.7	4,189.5	4,227.9	4,300.8	4,371.5	4,432.6	4,509.4
33 Government and government enterprises	641.0	664.4	692.8	696.7	702.8	715.8	721.3	730.3
34 Other	2,989.1	3,220.3	3,496.7	3,531.2	3,598.0	3,655.7	3,711.3	3,779.1
35 Supplement to wages and salaries	765.4	791.0	821.7	825.7	833.9	846.2	854.5	864.2
36 Employer contributions for social insurance	275.4	290.1	306.0	308.1	311.8	318.3	321.5	325.7
37 Other labor income	490.0	500.9	515.7	517.7	522.1	528.0	533.0	538.5
38 Proprietors' income[1]	544.7	578.6	606.1	606.4	637.1	639.9	655.3	654.0
39 Business and professional[1]	510.5	549.1	581.0	583.6	596.0	607.5	621.2	633.0
40 Farm[1]	34.3	29.5	25.1	22.9	41.1	32.5	34.1	21.0
41 Rental income of persons[2]	129.7	130.2	137.4	139.3	147.0	148.6	148.8	139.0
42 Corporate profits[1]	753.9	837.9	846.1	843.8	834.3	882.0	875.5	879.2
43 Profits before tax[3]	726.3	795.9	781.9	780.1	766.7	818.1	835.8	853.8
44 Inventory valuation adjustment	3.1	7.4	20.9	19.8	20.8	13.3	−13.6	−26.7
45 Capital consumption adjustment	24.4	34.6	43.3	43.9	46.9	50.6	53.2	52.1
46 Net interest	386.3	412.5	435.7	444.0	440.8	446.3	456.4	476.3

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

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

2.17 PERSONAL INCOME AND SAVING

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

Account	1996	1997	1998	1998 Q3	1998 Q4	1999 Q1	1999 Q2	1999 Q3
PERSONAL INCOME AND SAVING								
1 **Total personal income**	**6,547.4**	**6,951.1**	**7,358.9**	**7,413.6**	**7,530.8**	**7,630.2**	**7,732.6**	**7,831.4**
2 Wage and salary disbursements	3,626.5	3,888.9	4,186.0	4,224.4	4,297.3	4,371.5	4,432.6	4,509.4
3 Commodity-producing industries	908.2	975.5	1,038.7	1,045.6	1,056.6	1,062.9	1,075.1	1,090.2
4 Manufacturing	673.7	718.8	757.5	762.3	765.6	767.0	774.8	786.4
5 Distributive industries	822.4	879.1	944.6	953.5	969.9	986.3	997.6	1,013.4
6 Service industries	1,254.9	1,369.8	1,509.9	1,528.6	1,568.0	1,606.6	1,638.5	1,675.5
7 Government and government enterprises	641.0	664.4	692.8	696.7	702.8	715.8	721.3	730.3
8 Other labor income	490.0	500.9	515.7	517.7	522.1	528.0	533.0	538.5
9 Proprietors' income[1]	544.7	578.6	606.1	606.4	637.1	639.9	655.3	654.0
10 Business and professional[1]	510.5	549.1	581.0	583.6	596.0	607.5	621.2	633.0
11 Farm[1]	34.3	29.5	25.1	22.9	41.1	32.5	34.1	21.0
12 Rental income of persons[2]	129.7	130.2	137.4	139.3	147.0	148.6	148.8	139.0
13 Dividends	297.4	333.4	348.3	348.0	351.9	356.1	361.2	367.0
14 Personal interest income	810.6	854.9	897.8	909.3	906.4	907.4	920.5	938.8
15 Transfer payments	928.8	962.4	983.6	986.5	991.0	1,007.8	1,013.6	1,021.3
16 Old-age survivors, disability, and health insurance benefits	537.6	565.8	578.1	579.6	581.1	588.9	593.0	599.0
17 LESS: Personal contributions for social insurance	280.4	298.1	315.9	318.0	322.0	328.9	332.3	336.7
18 EQUALS: Personal income	6,547.4	6,951.1	7,358.9	7,413.6	7,530.8	7,630.2	7,732.6	7,831.4
19 LESS: Personal tax and nontax payments	869.7	968.3	1,072.6	1,088.3	1,113.0	1,124.8	1,139.4	1,160.4
20 EQUALS. Disposable personal income	5,677.7	5,982.8	6,286.2	6,325.3	6,417.8	6,505.4	6,593.2	6,671.0
21 LESS· Personal outlays	5,405.6	5,711.7	6,056.6	6,100.5	6,190.3	6,310.3	6,425.2	6,531.5
22 EQUALS: Personal saving	272.1	271.1	229.7	224.8	227.5	195.1	168.0	139.5
MEMO								
Per capita (chained 1992 dollars)								
23 Gross domestic product	29,428.1r	30,466.7r	31,471.8r	31,509.7r	31,882.1r	32,112.7r	32,179.8r	32,543.4r
24 Personal consumption expenditures	19,726.9	20,275.2r	21,059.2r	21,154.4r	21,339.3r	21,640.6	21,854.1	22,059.5r
25 Disposable personal income	21,385.0	21,954.0	22,636.0	22,715.0	22,924.0	23,110.0	23,239.0	23,343.0
26 Saving rate (percent)	4.8	4.5	3.7	3.6	3.5	3.0	2.5	2.1
GROSS SAVING								
27 **Gross saving**	**1,349.3**	**1,521.3**	**1,646.0**	**1,664.1**	**1,685.4**	**1,727.8**	**1,709.5**	**1,735.6**
28 Gross private saving	1,290.4	1,362.0	1,371.2	1,367.7	1,382.3	1,389.4	1,359.3	1,355.7
29 Personal saving	272.1	271.1	229.7	224.8	227.5	195.1	168.0	139.5
30 Undistributed corporate profits[1]	232.5	265.9	257.2	251.1	246.5	277.6	259.5	252.4
31 Corporate inventory valuation adjustment	3.1	7.4	20.9	19.8	20.8	13.3	−13.6	−26.7
Capital consumption allowances								
32 Corporate	543.6	579.4	619.2	625.0	637.1	645.8	657.2	676.5
33 Noncorporate	238.5	249.8	261.5	263.3	267.7	271.0	274.6	287.2
34 Gross government saving	58.9	159.3	274.8	296.4	303.0	338.3	350.2	379.9
35 Federal	−51.5	37.7	134.3	147.1	147.8	187.2	208.3	225.1
36 Consumption of fixed capital	85.3	86.6	87.4	87.5	88.1	89.6	90.2	91.2
37 Current surplus or deficit (−), national accounts	−136.8	−48.8	46.9	59.6	59.7	97.6	118.1	133.8
38 State and local	110.4	121.5	140.5	149.3	155.2	151.1	141.9	154.8
39 Consumption of fixed capital	88.9	94.0	98.8	99.4	101.1	102.4	104.3	106.0
40 Current surplus or deficit (−), national accounts	21.4	27.5	41.7	49.9	54.2	48.7	37.6	48.9
41 **Gross investment**	**1,382.1**	**1,518.1**	**1,598.4**	**1,576.2**	**1,623.0**	**1,628.4**	**1,574.0**	**1,594.4**
42 Gross private domestic investment	1,242.7	1,383.7	1,531.2	1,535.3	1,580.3	1,594.3	1,585.4	1,635.0
43 Gross government investment	250.2	258.1	268.7	273.5	272.6	289.8	292.2	295.7
44 Net foreign investment	−110.7	−123.7	−201.5	−232.6	−229.9	−255.7	−303.7	−336.3
45 **Statistical discrepancy**	**32.8**	**−3.2**	**−47.6**	**−87.9**	**−62.4**	**−99.4**	**−135.5**	**−141.2**

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

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

3.10 U.S. INTERNATIONAL TRANSACTIONS Summary

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

Item credits or debits	1996	1997	1998	1998 Q3	1998 Q4	1999 Q1	1999 Q2	1999 Q3
1 Balance on current account	−129,295	−143,465	−220,562	−63,476	−61,669	−68,654	−80,909	−89,949
2 Balance on goods and services	−104,318	−104,730	−164,282	−45,724	−43,262	−53,974	−65,085	−73,825
3 Exports	849,806	938,543	933,907	229,284	236,904	231,904	234,512	242,626
4 Imports	−954,124	−1,043,273	−1,098,189	−275,008	−280,166	−285,878	−299,597	−316,451
5 Income, net	17,210	3,231	−12,205	−6,965	−4,933	−4,340	−4,612	−4,920
6 Investment, net	21,754	8,185	−6,956	−5,637	−3,571	−2,946	−3,225	−3,520
7 Direct	67,746	69,220	59,405	11,834	14,558	14,834	13,990	15,657
8 Portfolio	−45,992	−61,035	−66,361	−17,471	−18,129	−17,780	−17,215	−19,177
9 Compensation of employees	−4,544	−4,954	−5,249	−1,328	−1,362	−1,394	−1,387	−1,400
10 Unilateral current transfers, net	−42,187	−41,966	−44,075	−10,787	−13,474	−10,340	−11,212	−11,204
11 Change in U.S. government assets other than official reserve assets, net (increase, −)	−989	68	−429	185	−50	119	−392	−673
12 Change in U.S. official reserve assets (increase, −)	6,668	−1,010	−6,784	−2,026	−2,369	4,068	1,159	1,950
13 Gold	0	0	0	0	0	0	0	0
14 Special drawing rights (SDRs)	370	−350	−149	188	−227	563	−190	−185
15 Reserve position in International Monetary Fund	−1,280	−3,575	−5,118	−2,078	−1,924	3	1,413	2,268
16 Foreign currencies	7,578	2,915	−1,517	−136	−218	3,502	−64	−133
17 Change in U.S. private assets abroad (increase, −)	−386,441	−464,354	−285,605	−60,256	−48,188	−19,335	−155,480	−102,760
18 Bank-reported claims[3]	−91,555	−144,822	−24,918	−33,344	37,192	27,771	−42,519	384
19 Nonbank-reported claims	−86,333	−120,403	−25,041	−20,320	16,202	−13,853	−16,816	−32,098
20 U.S. purchases of foreign securities, net	−115,859	−89,174	−102,817	14,994	−70,809	8,132	−64,579	−26,511
21 U.S. direct investments abroad, net	−92,694	−109,955	−132,829	−21,586	−30,773	−41,385	−31,566	−44,535
22 Change in foreign official assets in United States (increase, +)	127,390	18,119	−21,684	−46,489	24,352	4,708	−628	12,106
23 U.S. Treasury securities	115,671	−6,690	−9,957	−32,811	31,836	800	−6,708	12,880
24 Other U.S. government obligations	5,008	4,529	6,332	1,906	1,562	5,993	5,792	1,932
25 Other U.S. government liabilities[3]	−316	−1,798	−3,113	−224	−1,054	−1,594	−647	−1,163
26 Other U.S. liabilities reported by U.S. banks[3]	5,704	22,286	−11,469	−12,866	−7,133	−589	1,437	−1,832
27 Other foreign official assets[4]	1,323	−208	−3,477	−2,494	−859	98	−502	289
28 Change in foreign private assets in United States (increase, +)	447,457	733,542	524,321	140,036	125,453	84,152	274,899	195,047
29 U.S. bank-reported liabilities[2]	16,478	149,026	40,731	77,313	−21,811	−14,184	34,938	30,965
30 U.S. nonbank-reported liabilities	39,404	107,779	9,412	11,875	−53,210	20,188	8,871	12,136
31 Foreign private purchases of U.S. Treasury securities, net	154,996	146,433	46,155	−1,438	24,391	−8,781	−5,407	9,713
32 U.S. currency flows	17,362	24,782	16,622	7,277	6,250	2,440	3,057	4,697
33 Foreign purchases of other U.S. securities, net	130,240	196,258	218,026	20,103	49,328	61,540	79,067	93,062
34 Foreign direct investments in United States, net	88,977	109,264	193,375	24,906	120,505	22,949	154,373	44,474
35 Capital account transactions, net[5]	672	292	617	148	166	166	178	166
36 Discrepancy	−65,462	−143,192	10,126	31,878	−37,695	−5,224	−38,827	−15,887
37 Due to seasonal adjustment	...	...	...	−10,582	4,144	5,264	276	−10,209
38 Before seasonal adjustment	−65,462	−143,192	10,126	42,460	−41,839	−10,488	−39,103	−5,678
MEMO								
Changes in official assets								
39 U.S. official reserve assets (increase, −)	6,668	−1,010	−6,784	−2,026	−2,369	4,068	1,159	1,950
40 Foreign official assets in United States, excluding line 25 (increase, +)	127,706	19,917	−18,571	−46,265	25,406	6,302	19	13,269
41 Change in Organization of Petroleum Exporting Countries official assets in United States (part of line 22)	14,911	12,124	−11,499	−11,642	2,057	2,058	1,966	−1,047

1. Seasonal factors are not calculated for lines 11–16, 18–20, 22–35, and 38–41.
2. Reporting banks included all types of depository institutions as well as some brokers and dealers.
3. Associated primarily with military sales contracts and other transactions arranged with or through foreign official agencies.
4. Consists of investments in U.S. corporate stocks and in debt securities of private corporations and state and local governments.
5. Consists of capital transfers (such as those of accompanying migrants entering or leaving the country and debt forgiveness) and the acquisition and disposal of nonproduced nonfinancial assets.

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

3.11 U.S. FOREIGN TRADE[1]

Millions of dollars; monthly data seasonally adjusted

Item	1996	1997	1998	1999						
				May	June	July	Aug.	Sept.	Oct.	Nov.[p]
1 Goods and services, balance	−104,318	−104,731	−164,282	−21,390	−24,604	−24,886	−23,953	−24,152	−25,563	−26,503
2 Merchandise	−191,270	−196,652	−246,932	−27,899	−31,179	−31,422	−30,132	−30,211	−31,816	−32,445
3 Services	86,952	91,921	82,650	6,509	6,575	6,536	6,179	6,059	6,253	5,942
4 Goods and services, exports	849,806	938,543	933,907	77,978	78,623	79,122	82,171	82,025	82,334	82,891
5 Merchandise	612,057	679,715	670,246	55,121	55,472	55,890	59,139	58,934	58,927	59,543
6 Services	237,749	258,828	263,661	22,857	23,151	23,232	23,032	23,091	23,407	23,348
7 Goods and services, imports	−954,124	−1,043,273	−1,098,189	−99,368	−103,227	−104,008	−106,124	−106,177	−107,897	−109,394
8 Merchandise	−803,327	−876,366	−917,178	−83,020	−86,651	−87,312	−89,271	−89,145	−90,743	−91,988
9 Services	−150,797	−166,907	−181,011	−16,348	−16,576	−16,696	−16,853	−17,032	−17,154	−17,406

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

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

3.12 U.S. RESERVE ASSETS

Millions of dollars, end of period

Asset	1996	1997	1998	1999							2000
				June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.[p]
1 **Total**	**75,090**	**69,954**	**81,755**	**71,689**	**73,305**	**72,649**	**73,414**	**73,230**	**72,318**	**71,516**	**69,898**
2 Gold stock, including Exchange Stabilization Fund[1]	11,049	11,050	11,041	11,046	11,048	11,046	11,047	11,049	11,049	11,089	11,048
3 Special drawing rights[2,3]	10,312	10,027	10,603	9,719	9,925	10,152	10,284	10,232	10,326	10,336	10,199
4 Reserve position in International Monetary Fund[2]	15,435	18,071	24,111	21,462	21,462	19,885	19,978	19,571	18,707	17,950	17,710
5 Foreign currencies[4]	38,294	30,809	36,001	29,462	30,870	31,566	32,105	32,378	32,236	32,182	30,941

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	1996	1997	1998	1999							2000
				June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.[p]
1 **Deposits**	**167**	**457**	**167**	**409**	**257**	**166**	**243**	**189**	**501**	**71**	**82**
Held in custody											
2 U.S. Treasury securities[2]	638,049	620,885	607,574	611,372	619,004	626,669	634,086	621,351	629,430	632,482	627,326
3 Earmarked gold[3]	11,197	10,763	10,343	10,329	10,329	10,271	10,155	10,114	10,015	9,933	9,866

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

3.15 SELECTED U.S. LIABILITIES TO FOREIGN OFFICIAL INSTITUTIONS

Millions of dollars, end of period

Item	1997	1998	1999						
			May	June	July	Aug.	Sept.	Oct.	Nov.^{p}
1 **Total**[1]	**776,505**	**759,933**	**760,410**	**765,708**	**773,494**	**782,505**	**778,681**	**782,881**	**780,767**
By type									
2 Liabilities reported by banks in the United States[2]	135,384	125,878	124,270	126,180	125,873	126,220	124,148	124,509	124,197
3 U.S. Treasury bills and certificates[3]	148,301	134,177	136,199	138,518	147,492	153,499	152,457	154,582	153,465
U.S. Treasury bonds and notes									
4 Marketable	428,004	432,127	421,573	421,970	420,197	422,591	420,877	419,629	417,141
5 Nonmarketable[4]	5,994	6,074	6,143	5,982	6,022	6,060	6,098	6,139	6,177
6 U.S. securities other than U.S. Treasury securities[5]	58.822	61,677	72,225	73,058	73,910	74,135	75,101	78,022	79,787
By area									
7 Europe[1]	252,289	256,026	242,386	241,989	240,546	243,334	241,233	243,412	242,587
8 Canada	36,177	36,715	38,181	39,001	39,147	39,342	39,337	39,682	39,081
9 Latin America and Caribbean	96,942	79,498	81,075	76,828	77,832	75,339	74,279	73,613	72,324
10 Asia	400,144	400,641	411,739	421,282	430,050	438,300	437,957	439,862	441,042
11 Africa	9,981	10,059	9,326	8,378	8,376	8,119	8,215	7,847	7,153
12 Other countries	7,058	3,080	3,789	4,316	3,629	4,157	3,746	4,551	4,666

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

SOURCE. Based on U.S. Department of the Treasury data and on data reported to the department by banks (including Federal Reserve Banks) and securities dealers in the United States, and on the 1994 benchmark survey of foreign portfolio investment in the United States.

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

Millions of dollars, end of period

Item	1995	1996	1997	1998	1999		
				Dec.	Mar.	June	Sept.
1 Banks' liabilities	109,713	103,383	117,524	101,125	101,359	97,751	110,322
2 Banks' claims	74,016	66,018	83,038	78,152	80,642	67,864	77,946
3 Deposits	22,696	22,467	28,661	45,985	42,147	41,895	48,719
4 Other claims	51,320	43,551	54,377	32,167	38,495	25,969	29,227
5 Claims of banks' domestic customers[2]	6,145	10,978	8,191	20,718	11,039	23,474	11,534

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

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

Millions of dollars, end of period

Item	1996	1997	1998	1999						
				May	June	July	Aug.	Sept.	Oct.	Nov.[p]
BY HOLDER AND TYPE OF LIABILITY										
1 **Total, all foreigners**	**1,162,148**	**1,283,027**	**1,347,771**	**1,352,678**	**1,382,649**	**1,339,888**	**1,385,468**	**1,378,674[r]**	**1,373,962**	**1,420,839**
2 Banks' own liabilities	758,998	882,980	884,873	900,891	920,125	889,661	907,916	927,078[r]	931,629	977,736
3 Demand deposits	27,034	31,344	29,556	32,184	36,322	43,183	44,940	44,594	39,451	42,888
4 Time deposits[2]	186,910	198,546	152,226	156,515	156,677	156,891	154,299	156,338[r]	162,159	168,222
5 Other[3]	143,510	168,011	140,245	160,800	152,683	151,819	152,863	160,863[r]	155,812	162,718
6 Own foreign offices[4]	401,544	485,079	562,846	551,392	574,443	537,768	555,814	565,283[r]	574,207	603,908
7 Banks' custodial liabilities[5]	403,150	400,047	462,898	451,787	462,524	450,227	477,552	451,596[r]	442,333	443,103
8 U.S. Treasury bills and certificates[6]	236,874	193,239	183,494	177,768	179,351	187,872	192,096	189,030	188,486	184,675
9 Other negotiable and readily transferable instruments[7]	72,011	93,641	141,699	124,100	123,246	121,567	132,405	131,726[r]	131,464	130,970
10 Other	94,265	113,167	137,705	149,919	159,927	140,788	153,051	130,840[r]	122,383	127,458
11 Nonmonetary international and regional organizations[8]	13,972	11,690	11,883	14,067	17,987	18,463	18,268	18,646	17,883	14,033
12 Banks' own liabilities	13,355	11,486	10,850	13,320	16,002	16,964	16,856	17,726	17,042	13,146
13 Demand deposits	29	16	172	25	49	66	31	21	187	70
14 Time deposits[2]	5,784	5,466	5,793	5,840	7,231	7,380	6,419	7,370	8,772	7,675
15 Other[3]	7,542	6,004	4,885	7,455	8,722	9,518	10,406	10,335	8,083	5,401
16 Banks' custodial liabilities[5]	617	204	1,033	747	1,985	1,499	1,412	920	841	887
17 U.S. Treasury bills and certificates[6]	352	69	636	616	956	953	896	661	628	658
18 Other negotiable and readily transferable instruments[7]	265	133	397	131	1,029	533	516	259	213	229
19 Other	0	2	0	0	0	13	0	0	0	0
20 Official institutions[9]	312,019	283,685	260,055	260,469	264,698	273,365	279,719	276,605	279,091	277,662
21 Banks' own liabilities	79,406	102,028	80,251	79,452	78,445	80,400	77,801	76,780	79,362	81,721
22 Demand deposits	1,511	2,314	3,003	2,789	2,952	2,652	2,537	2,932	2,314	2,829
23 Time deposits[2]	33,336	41,396	29,602	27,372	26,643	26,845	24,407	25,301	29,141	28,701
24 Other[3]	44,559	58,318	47,646	49,291	48,850	50,903	50,857	48,547	47,907	50,191
25 Banks' custodial liabilities[5]	232,613	181,657	179,804	181,017	186,253	192,965	201,918	199,825	199,729	195,941
26 U.S. Treasury bills and certificates[6]	198,921	148,301	134,177	136,199	138,518	147,492	153,499	152,457	154,582	153,465
27 Other negotiable and readily transferable instruments[7]	33,266	33,151	44,953	44,586	47,582	45,094	48,297	46,633	44,804	42,331
28 Other	426	205	674	232	153	379	122	735	343	145
29 Banks[10]	694,835	815,247	885,047	881,368	910,025	853,184	888,328	877,909[r]	874,000	921,380
30 Banks' own liabilities	562,898	641,447	675,998	676,341	695,251	656,403	676,931	692,279[r]	698,135	739,616
31 Unaffiliated foreign banks	161,354	156,368	113,152	124,949	120,808	118,635	121,117	126,996	123,928	135,708
32 Demand deposits	13,692	16,767	14,071	15,957	15,812	14,086	15,436	14,084	17,111	14,402
33 Time deposits[2]	89,765	83,433	46,219	49,217	47,998	49,540	49,444	49,593[r]	48,541	54,388
34 Other[3]	57,897	56,168	52,862	59,775	56,998	55,009	56,237	63,319[r]	58,276	66,918
35 Own foreign offices[4]	401,544	485,079	562,846	551,392	574,443	537,768	555,814	565,283[r]	574,207	603,908
36 Banks' custodial liabilities[5]	131,937	173,800	209,049	205,027	214,774	196,781	211,397	185,630	175,865	181,764
37 U.S. Treasury bills and certificates[6]	23,106	31,915	35,359	28,323	27,757	28,284	26,314	24,749	22,203	19,512
38 Other negotiable and readily transferable instruments[7]	17,027	35,393	45,102	35,580	36,983	37,459	41,541	40,370	41,529	44,889
39 Other	91,804	106,492	128,588	141,124	150,034	131,038	143,542	120,511	112,133	117,363
40 Other foreigners	141,322	172,405	190,786	196,774	189,939	194,876	199,153	205,514[r]	202,988	207,764
41 Banks' own liabilities	103,339	128,019	117,774	131,778	130,427	135,894	136,328	140,293	137,090	143,253
42 Demand deposits	11,802	12,247	12,310	13,413	17,509	26,379	26,936	27,557	19,839	25,587
43 Time deposits[2]	58,025	68,251	70,612	74,086	74,805	73,126	74,029	74,074	75,705	77,458
44 Other[3]	33,512	47,521	34,852	44,279	38,113	36,389	35,363	38,662	41,546	40,208
45 Banks' custodial liabilities[5]	37,983	44,386	73,012	64,996	59,512	58,982	62,825	65,221[r]	65,898	64,511
46 U.S. Treasury bills and certificates[6]	14,495	12,954	13,322	12,630	12,120	11,143	11,387	11,163	11,073	11,040
47 Other negotiable and readily transferable instruments[7]	21,453	24,964	51,247	43,803	37,652	38,481	42,051	44,464[r]	44,918	43,521
48 Other	2,035	6,468	8,443	8,563	9,740	9,358	9,387	9,594[r]	9,907	9,950
MEMO										
49 Negotiable time certificates of deposit in custody for foreigners	14,573	16,083	27,026	24,141	22,569	21,811	22,565	24,367	26,550	28,320

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

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

Item	1996	1997	1998	1999 May	1999 June	1999 July	1999 Aug.	1999 Sept.	1999 Oct.	1999 Nov.[p]
AREA										
50 **Total, all foreigners**	**1,162,148**	**1,283,027**	**1,347,771**	**1,352,678**	**1,382,649**	**1,339,888**	**1,385,468**	**1,378,674[r]**	**1,373,962**	**1,420,839**
51 **Foreign countries**	**1,148,176**	**1,271,337**	**1,335,888**	**1,338,611**	**1,364,662**	**1,321,425**	**1,367,200**	**1,360,028[r]**	**1,356,079**	**1,406,806**
52 Europe	376,590	419,672	427,367	434,124	430,580	438,232	450,827	456,949[r]	442,509	469,910
53 Austria	5,128	2,717	3,178	2,224	2,678	2,770	3,210	3,205	3,299	2,842
54 Belgium and Luxembourg	24,084	41,007	42,818	39,227	31,298	31,242	34,834	36,890[r]	38,590	41,171
55 Denmark	2,565	1,514	1,437	1,267	961	1,143	1,811	1,903	2,658	3,197
56 Finland	1,958	2,246	1,862	1,645	1,384	1,358	1,335	1,222	1,269	1,894
57 France	35,078	46,607	44,616	48,328	45,235	42,622	42,424	45,809	45,764	50,262
58 Germany	24,660	23,737	21,357	24,689	21,999	23,950	23,719	24,478	25,471	26,537
59 Greece	1,835	1,552	2,066	2,691	2,737	3,168	3,121	3,358	3,322	3,365
60 Italy	10,946	11,378	7,103	5,943	6,192	6,426	5,840	6,231	6,306	5,264
61 Netherlands	11,110	7,385	10,793	11,752	12,152	12,206	11,292	11,634	13,882	12,775
62 Norway	1,288	317	710	1,210	1,049	1,184	1,333	1,225	951	1,364
63 Portugal	3,562	2,262	3,235	2,461	2,439	2,237	1,912	1,976	1,875	2,148
64 Russia	7,623	7,968	2,439	2,794	2,871	2,756	2,665	2,816	3,713	3,655
65 Spain	17,707	18,989	15,775	8,083	8,678	7,700	8,194	9,479	9,281	11,222
66 Sweden	1,623	1,628	3,027	3,429	2,966	3,851	3,779	4,571	5,381	5,518
67 Switzerland	44,538	39,023	50,654	66,214	65,967	60,758	76,176	69,338	65,967	67,277
68 Turkey	6,738	4,054	4,286	5,810	5,914	7,786	7,883	8,368	8,252	8,820
69 United Kingdom	153,420	181,904	181,554	178,015	187,310	200,038	192,431	196,490	178,022	195,215
70 Yugoslavia[11]	206	239	233	242	254	289	270	266	267	267
71 Other Europe and other former U.S.S.R.[12]	22,521	25,145	30,224	28,100	28,496	26,748	28,598	27,690	28,239	27,117
72 Canada	38,920	28,341	30,212	28,543	30,416	29,862	30,409	29,728	34,995	33,746
73 Latin America and Caribbean	467,529	536,393	554,808	591,047	610,201	554,346	581,338	570,233[r]	573,126	593,790
74 Argentina	13,877	20,199	19,013	16,428	17,804	17,202	17,061	15,544	17,544	16,734
75 Bahamas	88,895	112,217	118,085	118,122	123,549	122,465	132,442	139,101	134,111	139,192
76 Bermuda	5,527	6,911	6,846	7,951	9,168	9,410	9,319	8,747	10,902	8,859
77 Brazil	27,701	31,037	15,800	17,295	14,696	15,389	15,399	16,208	13,223	14,184
78 British West Indies	251,465	276,418	302,472	334,386	347,368	294,208	315,799	299,634[r]	308,539	325,738
79 Chile	2,915	4,072	5,010	7,236	5,918	6,744	5,805	6,601	6,559	6,521
80 Colombia	3,256	3,652	4,616	4,861	4,615	4,634	4,452	4,708	5,008	4,783
81 Cuba	21	66	62	64	70	70	72	76	72	73
82 Ecuador	1,767	2,078	1,572	1,800	1,930	1,975	1,724	1,792	1,833	1,930
83 Guatemala	1,282	1,494	1,333	1,449	1,468	1,425	1,521	1,471	1,484	1,577
84 Jamaica	628	450	577	547	527	471	533	550	549	546
85 Mexico	31,240	33,972	37,148	37,588	37,920	39,024	36,301	35,028	32,208	31,188
86 Netherlands Antilles	6,099	5,085	5,010	3,853	5,662	3,012	3,408	2,927	2,688	3,389
87 Panama	4,099	4,241	3,864	3,984	4,130	3,844	3,816	4,029	4,007	3,835
88 Peru	834	893	840	854	816	836	994	1,041	959	998
89 Uruguay	1,890	2,382	2,486	2,331	2,552	2,319	2,147	2,175	2,217	2,584
90 Venezuela	17,363	21,601	19,894	21,204	20,393	20,437	19,796	19,451	19,914	20,311
91 Other	8,670	9,625	10,180	11,094	11,615	10,881	10,749	11,150	11,309	11,348
92 Asia	249,083	269,379	307,960	269,026	276,917	283,218	288,974	287,227	287,963	292,142
China										
93 Mainland	30,438	18,252	13,441	14,753	13,366	10,872	12,359	11,914	10,460	13,981
94 Taiwan	15,995	11,840	12,708	10,795	11,408	12,482	12,678	12,514	12,023	14,856
95 Hong Kong	18,789	17,722	20,900	25,728	24,575	24,200	24,149	23,368	24,299	22,275
96 India	3,930	4,567	5,250	5,520	5,421	5,864	5,408	5,625	5,659	5,610
97 Indonesia	2,298	3,554	8,282	6,211	6,530	7,309	6,633	6,468	6,037	6,486
98 Israel	6,051	6,281	7,749	7,004	6,144	5,076	5,059	5,688	5,175	5,071
99 Japan	117,316	143,401	168,563	132,605	143,635	145,652	145,403	149,578	151,632	152,095
100 Korea (South)	5,949	13,060	12,524	11,387	12,901	12,792	12,723	11,903	9,935	8,474
101 Philippines	3,378	3,250	3,324	2,492	2,273	2,177	2,189	2,414	2,134	2,639
102 Thailand	10,912	6,501	7,359	5,739	5,296	6,054	5,809	5,281	4,983	5,164
103 Middle Eastern oil-exporting countries[13]	16,285	14,959	15,609	15,453	15,168	15,581	15,942	14,367	16,825	17,944
104 Other	17,742	25,992	32,251	31,339	30,200	35,159	40,622	38,107	38,801	37,547
105 Africa	8,116	10,347	8,905	7,713	7,485	7,508	7,660	8,064	8,037	7,799
106 Egypt	2,012	1,663	1,339	1,339	1,576	1,566	1,851	1,852	1,364	1,846
107 Morocco	112	138	97	72	101	116	108	118	174	166
108 South Africa	458	2,158	1,522	1,132	1,091	1,049	885	753	828	957
109 Zaire	10	10	5	12	16	13	13	13	14	13
110 Oil-exporting countries[14]	2,626	3,060	3,088	2,508	2,247	2,281	2,510	2,807	2,912	2,244
111 Other	2,898	3,318	2,854	2,650	2,454	2,483	2,293	2,521	2,745	2,573
112 Other	7,938	7,205	6,636	8,158	9,063	8,259	7,992	7,827	9,449	9,419
113 Australia	6,479	6,304	5,495	6,820	7,624	7,252	6,963	6,788	8,199	8,394
114 Other	1,459	901	1,141	1,338	1,439	1,007	1,029	1,039	1,250	1,025
115 Nonmonetary international and regional organizations	13,972	11,690	11,883	14,067	17,987	18,463	18,268	18,646	17,883	14,033
116 International[15]	12,099	10,517	10,221	11,759	14,987	15,822	16,112	16,570	15,999	12,700
117 Latin American regional[16]	1,339	424	594	653	898	819	725	662	960	345
118 Other regional[17]	534	749	1,068	1,655	2,102	1,822	1,431	1,414	924	988

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

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

Millions of dollars, end of period

Area or country	1996	1997	1998	1999						
				May	June	July	Aug.	Sept.	Oct.	Nov.[p]
1 **Total, all foreigners**	**599,925**	**708,225**	**735,058**	**750,581**	**750,859**	**720,597**	**731,139**	**758,600**	**751,856**	**779,041**
2 **Foreign countries**	**597,321**	**705,762**	**731,441**	**746,094**	**746,786**	**716,190**	**727,983**	**755,010**	**746,932**	**774,040**
3 Europe	165,769	199,880	233,320	265,789	299,977	292,697	305,153	316,097	293,559	313,269
4 Austria	1,662	1,354	1,043	2,902	2,514	3,855	3,080	2,335	2,746	2,407
5 Belgium and Luxembourg	6,727	6,641	7,187	9,811	10,028	9,214	7,463	7,229	9,624	9,332
6 Denmark	492	980	2,383	2,141	1,901	1,763	1,442	1,756	2,352	1,756
7 Finland	971	1,233	1,070	1,480	1,730	2,197	1,915	1,855	1,669	2,034
8 France	15,246	16,239	15,251	15,800	18,253	19,944	19,040	19,253	21,527	24,591
9 Germany	8,472	12,676	15,923	18,367	20,793	23,965	23,558	22,995	23,616	22,365
10 Greece	568	402	575	585	551	628	659	663	743	754
11 Italy	6,457	6,230	7,283	6,434	6,783	7,451	7,747	7,957	6,670	7,297
12 Netherlands	7,117	6,141	5,697	8,588	8,724	9,334	10,132	9,425	8,940	8,099
13 Norway	808	555	827	753	717	821	583	1,252	949	920
14 Portugal	418	777	669	1,134	1,122	1,056	1,222	1,342	1,691	1,430
15 Russia	1,669	1,248	789	1,016	768	831	782	814	871	711
16 Spain	3,211	2,942	5,735	4,516	6,178	4,606	3,700	5,104	4,073	4,659
17 Sweden	1,739	1,854	4,223	2,950	3,005	3,199	4,082	4,184	4,325	3,853
18 Switzerland	19,798	28,846	46,874	65,488	75,544	66,927	71,866	90,187	78,448	91,491
19 Turkey	1,109	1,558	1,982	1,918	2,288	2,219	2,268	2,383	2,392	2,463
20 United Kingdom	85,234	103,143	106,349	112,946	130,859	125,262	137,646	129,305	114,185	120,831
21 Yugoslavia[2]	115	52	53	54	54	50	49	50	51	50
22 Other Europe and other former U.S.S.R.[3]	3,956	7,009	9,407	8,906	8,165	9,375	7,919	8,008	8,687	8,226
23 Canada	26,436	27,189	47,036	41,116	37,454	31,957	32,109	37,197	35,903	37,060
24 Latin America and Caribbean	274,153	343,730	342,720	352,496	326,063	311,721	310,159	320,987	335,152	335,342
25 Argentina	7,400	8,924	9,553	10,318	10,776	10,482	10,257	10,296	10,153	10,038
26 Bahamas	71,871	89,379	96,455	78,480	71,996	77,049	77,674	85,386	87,085	87,179
27 Bermuda	4,129	8,782	5,011	6,276	6,111	7,813	9,747	8,481	9,887	9,449
28 Brazil	17,259	21,696	16,213	14,893	14,870	14,629	13,844	14,010	14,216	14,971
29 British West Indies	105,510	145,471	153,749	184,978	166,508	146,859	137,214	142,500	159,145	158,910
30 Chile	5,136	7,913	8,255	7,545	7,531	7,153	6,900	6,810	6,846	6,591
31 Colombia	6,247	6,945	6,523	5,877	5,570	5,590	5,046	4,821	4,800	4,745
32 Cuba	0	0	0	0	0	0	0	0	0	0
33 Ecuador	1,031	1,311	1,400	1,104	1,069	993	889	844	793	762
34 Guatemala	620	886	1,127	1,157	1,033	1,075	1,053	1,064	1,084	1,090
35 Jamaica	345	424	239	327	303	311	322	330	318	308
36 Mexico	18,425	19,428	21,227	19,316	18,638	18,978	17,819	18,255	17,800	17,932
37 Netherlands Antilles	25,209	17,838	6,779	5,867	5,484	5,101	14,032	13,298	7,497	8,078
38 Panama	2,786	4,364	3,584	3,298	3,353	3,064	2,898	2,941	2,917	3,050
39 Peru	2,720	3,491	3,275	3,053	2,975	2,710	2,516	2,534	2,442	2,507
40 Uruguay	589	629	1,126	724	1,050	1,105	1,049	946	778	775
41 Venezuela	1,702	2,129	3,089	3,245	3,479	3,501	3,460	3,325	4,103	3,587
42 Other	3,174	4,120	5,115	6,038	5,317	5,308	5,439	5,146	5,288	5,370
43 Asia	122,478	125,092	98,606	77,699	74,693	72,240	73,247	72,449	73,072	78,427
China										
44 Mainland	1,401	1,579	1,261	3,006	3,745	3,144	2,758	2,032	1,998	2,082
45 Taiwan	1,894	922	1,041	763	870	904	937	790	816	1,495
46 Hong Kong	12,802	13,991	9,080	4,977	7,102	5,333	4,969	5,224	4,740	6,010
47 India	1,946	2,200	1,440	1,458	1,569	1,708	1,728	1,736	1,856	1,972
48 Indonesia	1,762	2,651	1,942	2,061	1,760	1,791	1,711	1,689	1,636	1,681
49 Israel	633	768	1,166	1,236	1,955	1,433	1,669	951	857	1,059
50 Japan	59,967	59,549	46,712	30,664	27,093	25,900	26,226	27,978	28,339	30,280
51 Korea (South)	18,901	18,162	8,289	12,326	11,317	12,753	12,194	11,093	12,432	13,254
52 Philippines	1,697	1,689	1,465	1,808	1,669	1,380	1,279	1,491	1,562	990
53 Thailand	2,679	2,259	1,807	1,623	1,850	1,683	1,549	1,432	1,411	1,433
54 Middle Eastern oil-exporting countries[4]	10,424	10,790	16,130	10,569	10,127	9,396	11,211	11,379	10,667	11,631
55 Other	8,372	10,532	8,273	7,208	5,636	6,815	7,016	6,654	6,758	6,540
56 Africa	2,776	3,530	3,122	2,448	2,629	2,499	2,178	2,293	2,299	2,473
57 Egypt	247	247	257	221	241	252	209	225	251	226
58 Morocco	524	511	372	444	454	431	444	437	439	354
59 South Africa	584	805	643	640	724	598	449	506	589	873
60 Zaire	0	0	0	0	0	0	0	0	0	9
61 Oil-exporting countries[5]	420	1,212	936	288	340	297	280	323	253	282
62 Other	1,001	755	914	855	870	921	796	802	767	729
63 Other	5,709	6,341	6,637	6,546	5,970	5,076	5,137	5,987	6,947	7,469
64 Australia	4,577	5,300	6,173	6,093	5,636	4,811	4,907	5,770	6,696	7,272
65 Other	1,132	1,041	464	453	334	265	230	217	251	197
66 Nonmonetary international and regional organizations[6]	2,604	2,463	3,617	4,487	4,073	4,407	3,156	3,590	4,924	5,001

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

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

Millions of dollars, end of period

Type of claim	1996	1997	1998	1999						
				May	June	July	Aug.	Sept.	Oct.	Nov.[p]
1 **Total**	**743,919**	**852,852**	**875,954**	...	**898,460**	...	...	**900,562**	...	...
2 Banks' claims	599,925	708,225	735,058	750,581	750,859	720,597	731,139	758,600	751,856	779,041
3 Foreign public borrowers	22,216	20,581	23,540	36,616	37,344	38,465	35,689	34,995	40,570	39,246
4 Own foreign offices[2]	341,574	431,685	484,525	492,192	488,803	460,268	457,930	488,320	487,537	511,625
5 Unaffiliated foreign banks	113,682	109,230	106,281	99,864	104,102	99,715	108,961	102,051	97,298	99,389
6 Deposits	33,826	30,995	27,196	25,234	24,164	24,859	23,716	24,407	24,858	27,825
7 Other	79,856	78,235	79,085	74,630	79,938	74,856	85,245	77,644	72,440	71,564
8 All other foreigners	122,453	146,729	120,712	121,909	120,610	122,149	128,559	133,234	126,451	128,781
9 Claims of banks' domestic customers[3]	143,994	144,627	140,896	...	147,601	...	...	141,962	...	...
10 Deposits	77,657	73,110	79,363	...	94,575	...	...	87,222	...	...
11 Negotiable and readily transferable instruments[4]	51,207	53,967	47,914	...	42,670	...	...	40,604	...	...
12 Outstanding collections and other claims	15,130	17,550	13,619	...	10,356	...	...	14,136	...	...
MEMO										
13 Customer liability on acceptances	10,388	9,624	4,519	...	4,450	...	...	4,614	...	...
14 Dollar deposits in banks abroad, reported by nonbanking business enterprises in the United States[5]	39,661	33,816	39,978	31,210	29,165	32,857	32,336	27,750	33,827	37,163

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

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

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

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

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

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

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

Millions of dollars, end of period

Maturity, by borrower and area[2]	1995	1996	1997	1998	1999		
				Dec.	Mar.	June	Sept.
1 **Total**	**224,932**	**258,106**	**276,550**	**250,479**	**242,360**	**259,215**	**270,119**
By borrower							
2 Maturity of one year or less	178,857	211,859	205,781	186,585	175,402	186,861	198,303
3 Foreign public borrowers	14,995	15,411	12,081	13,669	20,902	24,656	22,809
4 All other foreigners	163,862	196,448	193,700	172,916	154,500	162,205	175,494
5 Maturity of more than one year	46,075	46,247	70,769	63,894	66,958	72,354	71,816
6 Foreign public borrowers	7,522	6,790	8,499	9,840	13,290	11,667	11,980
7 All other foreigners	38,553	39,457	62,270	54,054	53,668	60,687	59,836
By area							
Maturity of one year or less							
8 Europe	55,622	55,690	58,294	68,679	66,875	84,721	82,744
9 Canada	6,751	8,339	9,917	10,948	7,832	6,705	8,598
10 Latin America and Caribbean	72,504	103,254	97,207	81,846	71,122	65,821	79,202
11 Asia	40,296	38,078	33,964	18,006	21,347	21,977	20,844
12 Africa	1,295	1,316	2,211	1,835	1,571	1,543	1,119
13 All other[3]	2,389	5,182	4,188	5,271	6,655	6,094	5,796
Maturity of more than one year							
14 Europe	4,995	6,965	13,240	14,923	16,949	18,764	18,440
15 Canada	2,751	2,645	2,525	3,140	2,766	3,261	3,139
16 Latin America and Caribbean	27,681	24,943	42,049	33,443	33,539	36,910	37,046
17 Asia	7,941	9,392	10,235	10,018	10,972	10,471	10,644
18 Africa	1,421	1,361	1,236	1,233	1,160	1,105	1,087
19 All other[3]	1,286	941	1,484	1,137	1,572	1,843	1,460

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	1995	1996	1997			1998				1999	
			June	Sept.	Dec.	Mar.	June	Sept.	Dec.	Mar.	June
1 **Total**	**551.9**	**645.3**	**678.8**	**711.0**	**719.3**	**739.1**	**749.7**	**738.9**	**714.1**	**678.3**	**667.3**
2 G-10 countries and Switzerland	206.0	228.3	250.0	247.8	242.8	249.0	278.3	268.3	255.8	246.4	255.7
3 Belgium and Luxembourg	13.6	11.7	9.4	11.4	11.0	11.2	16.2	15.1	13.4	14.1	14.8
4 France	19.4	16.6	17.9	20.2	15.4	15.5	20.5	19.9	18.4	19.5	18.4
5 Germany	27.3	29.8	34.1	34.7	28.6	25.5	28.8	28.9	31.1	32.0	29.2
6 Italy	11.5	16.0	20.2	19.3	15.5	19.7	19.5	18.0	11.5	13.2	11.6
7 Netherlands	3.7	4.0	6.4	7.2	6.2	7.3	8.3	8.1	7.9	8.9	10.9
8 Sweden	2.7	2.6	3.6	4.1	3.3	4.8	3.1	2.2	2.3	3.6	2.3
9 Switzerland	6.7	5.3	5.4	4.8	7.2	5.6	6.9	7.5	8.3	7.3	7.8
10 United Kingdom	82.4	104.7	110.6	108.3	113.4	120.1	134.9	130.4	121.5	110.6	122.7
11 Canada	10.3	14.0	15.7	15.1	13.7	13.5	16.5	15.6	16.7	15.7	16.5
12 Japan	28.5	23.7	26.8	22.6	28.6	25.8	23.7	22.8	24.7	21.3	21.6
13 Other industrialized countries	50.2	65.7	71.7	73.8	64.5	74.3	72.1	71.6	68.5	75.8	76.5
14 Austria	.9	1.1	1.5	1.7	1.5	1.7	1.9	2.1	1.4	2.5	2.7
15 Denmark	2.6	1.5	2.8	3.7	2.4	2.0	2.1	2.8	2.2	3.2	2.8
16 Finland	.8	.8	1.4	1.9	1.3	1.5	1.4	1.6	1.5	1.4	.8
17 Greece	5.7	6.7	6.1	6.2	5.1	6.1	5.8	5.8	6.0	6.2	5.7
18 Norway	3.2	8.0	4.7	4.6	3.6	4.0	3.4	3.3	3.2	2.9	2.9
19 Portugal	1.3	.9	1.1	1.4	.9	.7	1.3	1.1	1.3	1.3	1.2
20 Spain	11.6	13.2	15.4	13.9	11.7	16.5	15.2	17.5	13.6	14.3	15.8
21 Turkey	1.9	2.7	3.4	4.4	4.5	4.9	6.5	5.2	4.8	5.0	4.7
22 Other Western Europe	4.7	4.7	5.5	6.1	8.2	9.9	9.6	10.3	10.6	10.1	10.1
23 South Africa	1.2	2.0	1.9	1.9	2.2	3.7	5.0	3.7	3.5	3.4	3.4
24 Australia	16.4	24.0	27.8	28.0	23.1	23.2	20.0	18.2	20.3	25.3	26.5
25 OPEC[2]	22.1	19.7	22.3	22.9	26.0	25.7	25.3	25.9	27.1	26.0	25.9
26 Ecuador	.7	1.1	.9	1.2	1.3	1.3	1.2	1.2	1.2	1.1	1.0
27 Venezuela	2.7	2.4	2.1	2.2	2.5	3.3	3.2	3.1	3.2	3.4	3.1
28 Indonesia	4.8	5.2	5.6	6.5	6.7	5.5	5.1	4.7	4.8	4.5	4.9
29 Middle East countries	13.3	10.7	12.5	11.8	14.4	14.3	15.5	16.1	17.0	16.6	16.4
30 African countries	.6	.4	1.2	1.1	1.2	1.4	.3	.8	1.0	.4	.4
31 Non-OPEC developing countries	112.6	130.3	140.6	137.0	138.7	147.4	141.7	140.6	147.9	143.7	145.3
Latin America											
32 Argentina	12.9	14.3	16.4	17.1	18.4	19.3	20.2	22.3	22.3	23.5	22.0
33 Brazil	13.7	20.7	27.3	26.1	28.6	32.4	27.2	24.9	24.2	23.6	24.7
34 Chile	6.8	7.0	7.6	8.0	8.7	9.0	9.1	9.3	8.3	8.5	8.2
35 Colombia	2.9	4.1	3.3	3.4	3.4	3.3	3.6	3.4	3.2	3.2	3.1
36 Mexico	17.3	16.2	16.6	16.4	17.4	17.7	17.9	18.4	25.3	18.9	18.0
37 Peru	.8	1.6	1.4	1.8	2.0	2.1	2.2	2.2	2.2	2.2	2.1
38 Other	2.8	3.3	3.4	3.6	4.1	4.0	4.4	4.6	5.4	5.4	5.5
Asia											
China											
39 Mainland	1.8	2.5	3.6	4.3	3.2	4.2	3.9	2.8	3.0	5.1	5.3
40 Taiwan	9.4	10.3	10.6	9.7	9.0	11.7	11.3	12.2	12.8	11.7	11.9
41 India	4.4	4.3	5.3	4.9	4.9	5.0	4.9	5.3	5.3	5.5	6.5
42 Israel	.5	.5	.8	1.0	.7	.7	.9	.9	1.1	1.1	2.0
43 Korea (South)	19.1	21.5	16.3	16.2	15.6	16.2	14.5	12.9	13.7	13.3	14.9
44 Malaysia	4.4	6.0	6.4	5.6	5.1	4.5	4.7	5.1	5.7	5.9	5.9
45 Philippines	4.1	5.8	7.0	5.7	5.7	5.0	5.4	4.7	5.1	5.3	5.6
46 Thailand	4.9	5.7	7.3	6.2	5.4	5.5	4.9	5.3	4.6	4.5	4.1
47 Other Asia	4.5	4.1	4.7	4.5	4.3	4.2	3.7	3.1	2.9	3.0	2.8
Africa											
48 Egypt	.4	.7	1.1	.9	.9	1.0	1.5	1.7	1.3	1.4	1.4
49 Morocco	.7	.7	.7	.7	.6	.6	.6	.5	.5	.5	.5
50 Zaire	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
51 Other Africa[3]	.9	.9	.9	.9	.8	1.1	.8	1.1	1.0	1.2	.9
52 Eastern Europe	4.2	6.9	7.1	9.8	9.1	12.0	10.9	6.0	5.2	6.1	5.1
53 Russia[4]	1.0	3.7	4.2	5.1	5.1	7.5	6.8	2.8	2.2	2.2	1.9
54 Other	3.2	3.2	2.9	4.7	4.0	4.6	4.1	3.2	3.1	3.9	3.2
55 Offshore banking centers	99.2	134.7	129.6	138.9	139.0	129.3	125.8	121.9	94.1	83.0	70.6
56 Bahamas	11.0	20.3	16.1	19.8	23.3	29.2	24.7	29.0	33.0	30.2	16.1
57 Bermuda	6.3	4.5	7.9	9.8	9.8	9.0	9.3	10.4	4.6	3.8	5.6
58 Cayman Islands and other British West Indies	32.4	37.2	35.1	45.7	43.4	24.9	34.2	30.6	15.4	6.3	7.0
59 Netherlands Antilles	10.3	26.1	15.8	21.7	14.6	14.0	10.5	6.0	2.6	2.7	1.2
60 Panama[5]	1.4	2.0	2.6	2.1	3.1	3.2	3.3	4.0	3.9	3.9	3.9
61 Lebanon	.1	.1	.1	.1	.1	.1	.1	.2	.1	.1	.1
62 Hong Kong, China	25.0	27.9	35.2	27.2	32.2	33.8	30.0	30.6	23.4	22.8	21.9
63 Singapore	13.1	16.7	16.7	12.7	12.7	15.0	13.5	11.1	11.2	13.1	14.6
64 Other[6]	.1	1	.3	.1	.1	.1	.2	.2	.2	.2	.1
65 Miscellaneous and unallocated[7]	57.6	59.6	57.6	80.8	99.1	101.3	95.7	104.5	115.5	97.3	88.1

1. Data after June 1999 are not available.

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

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

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

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

Millions of dollars, end of period

Type of liability, and area or country	1995	1996	1997	1998			1999		
				June	Sept.	Dec.	Mar.	June	Sept.[p]
1 **Total**	**46,448**	**61,782**	**57,382**	**51,433**	**49,279**	**46,570**	**46,663**	**49,337**	**52,945**
2 Payable in dollars	33,903	39,542	41,543	40,026	38,410	36,668	34,030	36,032	36,321
3 Payable in foreign currencies	12,545	22,240	15,839	11,407	10,869	9,902	12,633	13,305	16,624
By type									
4 Financial liabilities	24,241	33,049	26,877	22,322	19,331	19,255	22,458	25,058	27,363
5 Payable in dollars	12,903	11,913	12,630	11,988	9,812	10,371	11,225	13,205	12,231
6 Payable in foreign currencies	11,338	21,136	14,247	10,334	9,519	8,884	11,233	11,853	15,132
7 Commercial liabilities	22,207	28,733	30,505	29,111	29,948	27,315	24,205	24,279	25,582
8 Trade payables	11,013	12,720	10,904	9,537	10,276	10,978	9,999	10,935	12,676
9 Advance receipts and other liabilities	11,194	16,013	19,601	19,574	19,672	16,337	14,206	13,344	12,906
10 Payable in dollars	21,000	27,629	28,913	28,038	28,598	26,297	22,805	22,827	24,090
11 Payable in foreign currencies	1,207	1,104	1,592	1,073	1,350	1,018	1,400	1,452	1,492
By area or country									
Financial liabilities									
12 Europe	15,622	23,179	18,027	15,468	12,905	12,589	16,098	19,578	21,695
13 Belgium and Luxembourg	369	632	186	75	150	79	50	70	50
14 France	999	1,091	1,425	1,699	1,457	1,097	1,178	1,287	1,675
15 Germany	1,974	1,834	1,958	2,441	2,167	2,063	1,906	1,959	1,712
16 Netherlands	466	556	494	484	417	1,406	1,337	2,104	2,066
17 Switzerland	895	699	561	189	179	155	141	143	133
18 United Kingdom	10,138	17,161	11,667	8,765	6,610	5,980	9,729	13,097	15,096
19 Canada	632	1,401	2,374	539	389	693	781	320	344
20 Latin America and Caribbean	1,783	1,668	1,386	1,320	1,351	1,495	1,528	1,369	1,180
21 Bahamas	59	236	141	6	1	7	1	1	1
22 Bermuda	147	50	229	49	73	101	78	52	26
23 Brazil	57	78	143	76	154	152	137	131	122
24 British West Indies	866	1,030	604	845	834	957	1,064	944	786
25 Mexico	12	17	26	51	23	59	22	19	28
26 Venezuela	2	1	1	1	1	2	2	1	0
27 Asia	5,988	6,423	4,387	4,315	4,005	3,785	3,475	3,217	3,563
28 Japan	5,436	5,869	4,102	3,869	3,754	3,612	3,337	3,035	3,325
29 Middle Eastern oil-exporting countries[1]	27	25	27	0	0	0	1	2	3
30 Africa	150	38	60	29	31	28	31	29	31
31 Oil-exporting countries[2]	122	0	0	0	0	0	2	0	0
32 All other[3]	66	340	643	651	650	665	545	545	550
Commercial liabilities									
33 Europe	7,700	9,767	10,228	9,987	11,010	10,030	8,580	8,718	9,277
34 Belgium and Luxembourg	331	479	666	557	623	278	229	189	128
35 France	481	680	764	612	740	920	654	656	622
36 Germany	767	1,002	1,274	1,219	1,408	1,392	1,088	1,143	1,201
37 Netherlands	500	766	439	485	440	429	361	432	535
38 Switzerland	413	624	375	349	507	499	535	497	593
39 United Kingdom	3,568	4,303	4,086	3,743	4,286	3,697	3,008	2,959	3,175
40 Canada	1,040	1,090	1,175	1,206	1,504	1,390	1,597	1,670	1,753
41 Latin America and Caribbean	1,740	2,574	2,176	2,285	1,840	1,618	1,612	1,674	1,961
42 Bahamas	1	63	16	14	48	14	11	19	24
43 Bermuda	205	297	203	209	168	198	225	180	178
44 Brazil	98	196	220	246	256	152	107	112	121
45 British West Indies	56	14	12	27	5	10	7	5	39
46 Mexico	416	665	565	557	511	347	437	490	704
47 Venezuela	221	328	261	196	230	202	155	149	182
48 Asia	10,421	13,422	14,966	13,611	13,539	12,342	10,428	10,039	10,436
49 Japan	3,315	4,614	4,500	3,995	3,779	3,827	2,715	2,753	2,689
50 Middle Eastern oil-exporting countries[1]	1,912	2,168	3,111	3,194	3,582	2,852	2,479	2,209	2,623
51 Africa	619	1,040	874	921	810	794	727	832	960
52 Oil-exporting countries[2]	254	532	408	354	372	393	377	392	584
53 Other[3]	687	840	1,086	1,101	1,245	1,141	1,261	1,346	1,195

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

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

3. Includes nonmonetary international and regional organizations.

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

Millions of dollars, end of period

	Type of claim, and area or country	1995	1996	1997	1998 June	1998 Sept.	1998 Dec.	1999 Mar.	1999 June	1999 Sept.[p]
1	**Total**	**52,509**	**65,897**	**68,128**	**63,188**	**67,976**	**77,462**	**68,973**	**63,804**	**65,602**
2	Payable in dollars	48,711	59,156	62,173	57,587	62,034	72,171	63,988	56,968	58,492
3	Payable in foreign currencies	3,798	6,741	5,955	5,601	5,942	5,291	4,985	6,836	7,110
	By type									
4	Financial claims	27,398	37,523	36,959	32,341	37,262	46,260	38,136	31,877	31,939
5	Deposits	15,133	21,624	22,909	14,762	15,406	30,199	18,686	13,350	13,967
6	Payable in dollars	14,654	20,852	21,060	13,084	13,374	28,549	17,101	11,636	12,015
7	Payable in foreign currencies	479	772	1,849	1,678	2,032	1,650	1,585	1,714	1,952
8	Other financial claims	12,265	15,899	14,050	17,579	21,856	16,061	19,450	18,527	17,972
9	Payable in dollars	10,976	12,374	11,806	14,904	19,867	14,049	17,419	14,762	15,005
10	Payable in foreign currencies	1,289	3,525	2,244	2,675	1,989	2,012	2,031	3,765	2,967
11	Commercial claims	25,111	28,374	31,169	30,847	30,714	31,202	30,837	31,927	33,663
12	Trade receivables	22,998	25,751	27,536	26,764	26,330	27,202	26,724	27,791	29,371
13	Advance payments and other claims	2,113	2,623	3,633	4,083	4,384	4,000	4,113	4,136	4,292
14	Payable in dollars	23,081	25,930	29,307	29,599	28,793	29,573	29,468	30,570	31,472
15	Payable in foreign currencies	2,030	2,444	1,862	1,248	1,921	1,629	1,369	1,357	2,191
	By area or country									
	Financial claims									
16	Europe	7,609	11,085	14,999	14,091	14,473	12,294	12,800	13,898	13,618
17	Belgium and Luxembourg	193	185	406	518	496	661	469	457	574
18	France	803	694	1,015	796	1,140	864	913	1,368	1,152
19	Germany	436	276	427	290	359	304	302	367	499
20	Netherlands	517	493	677	975	867	875	955	959	1,067
21	Switzerland	498	474	434	403	409	414	530	504	559
22	United Kingdom	4,303	7,922	10,337	9,639	9,849	7,766	8,357	8,589	8,007
23	Canada	2,851	3,442	3,313	3,020	4,090	2,503	3,111	2,828	3,022
24	Latin America and Caribbean	14,500	20,032	15,543	11,967	15,758	27,714	18,825	11,486	11,221
25	Bahamas	1,965	1,553	2,308	1,306	2,105	403	666	467	755
26	Bermuda	81	140	108	48	63	39	41	39	77
27	Brazil	830	1,468	1,313	1,394	710	835	1,112	1,102	1,265
28	British West Indies	10,393	15,536	10,462	7,349	10,960	24,388	14,621	7,393	6,182
29	Mexico	554	457	537	1,089	1,122	1,245	1,583	1,702	1,791
30	Venezuela	32	31	36	57	50	55	72	71	47
31	Asia	1,579	2,221	2,133	2,376	2,121	3,027	2,648	2,801	3,205
32	Japan	871	1,035	823	886	928	1,194	942	949	1,250
33	Middle Eastern oil-exporting countries[1]	3	22	11	12	13	9	8	5	5
34	Africa	276	174	319	155	157	159	174	228	251
35	Oil-exporting countries[2]	5	14	15	15	16	16	26	5	12
36	All other[3]	583	569	652	732	663	563	578	636	622
	Commercial claims									
37	Europe	9,824	10,443	12,120	12,882	13,029	13,246	12,782	12,961	14,356
38	Belgium and Luxembourg	231	226	328	216	219	238	281	286	289
39	France	1,830	1,644	1,796	1,955	2,098	2,171	2,173	2,094	2,373
40	Germany	1,070	1,337	1,614	1,757	1,502	1,822	1,599	1,660	1,945
41	Netherlands	452	562	597	492	463	467	415	389	617
42	Switzerland	520	642	554	418	546	483	367	385	714
43	United Kingdom	2,656	2,946	3,660	4,664	4,681	4,769	4,529	4,615	4,789
44	Canada	1,951	2,165	2,660	2,779	2,291	2,617	2,983	2,855	2,638
45	Latin America and Caribbean	4,364	5,276	5,750	6,082	5,773	6,296	5,930	6,278	5,874
46	Bahamas	30	35	27	12	39	24	10	21	29
47	Bermuda	272	275	244	359	173	536	500	583	549
48	Brazil	898	1,303	1,162	1,183	1,062	1,024	936	887	761
49	British West Indies	79	190	109	110	91	104	117	127	157
50	Mexico	993	1,128	1,392	1,462	1,356	1,545	1,431	1,478	1,613
51	Venezuela	285	357	576	585	566	401	361	384	365
52	Asia	7,312	8,376	8,713	7,367	7,190	7,192	7,080	7,690	8,570
53	Japan	1,870	2,003	1,976	1,757	1,789	1,681	1,486	1,511	1,823
54	Middle Eastern oil-exporting countries[1]	974	971	1,107	1,127	967	1,135	1,286	1,465	1,474
55	Africa	654	746	680	657	740	711	685	738	681
56	Oil-exporting countries[2]	87	166	119	116	128	165	116	202	221
57	Other[3]	1,006	1,368	1,246	1,080	1,691	1,140	1,377	1,405	1,544

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

3.24 FOREIGN TRANSACTIONS IN SECURITIES

Millions of dollars

Transaction, and area or country	1997	1998	1999 Jan.– Nov.	1999 May	June	July	Aug.	Sept.	Oct.	Nov.[p]
				U.S. corporate securities						
STOCKS										
1 Foreign purchases	1,097,958	1,574,185	2,086,996	185,646	179,785	188,099	178,428	175,565	219,307	241,634
2 Foreign sales	1,028,361	1,524,189	1,988,126	177,108	167,878	179,783	166,212	172,204[r]	211,547	223,044
3 **Net purchases, or sales (−)**	**69,597**	**49,996**	**98,870**	**8,538**	**11,907**	**8,316**	**12,216**	**3,361[r]**	**7,760**	**18,590**
4 **Foreign countries**	**69,754**	**50,376**	**98,889**	**8,549**	**11,893**	**8,361**	**12,225**	**3,358[r]**	**7,786**	**18,565**
5 Europe	62,688	68,124	85,063	5,260	7,663	6,171	9,568	7,236[r]	7,780	10,878
6 France	6,641	5,672	3,851	−206	919	−55	269	146	1,033	−350
7 Germany	9,059	9,195	11,839	971	1,376	−354	1,322	110[r]	1,728	2,485
8 Netherlands	3,831	8,249	6,452	738	1,181	404	566	−538	164	1,375
9 Switzerland	7,848	5,001	4,256	481	1,452	−2,822	827	1,185	−1,404	480
10 United Kingdom	22,478	23,952	39,680	1,822	1,300	8,498	4,578	4,775	3,791	3,857
11 Canada	−1,406	−4,689	489	−159	401	153	−50	−927	531	−1,030
12 Latin America and Caribbean	5,203	760	9,914	2,049	2,474	2,935	846	−4,688	−3,163	7,722
13 Middle East[1]	383	−1,449	−1,489	419	64	−273	174	−26	−15	−1,155
14 Other Asia	2,072	−12,347	3,781	574	1,271	−671	1,666	1,463	2,372	2,394
15 Japan	4,787	−1,171	5,513	464	681	−452	1,269	2,652	1,696	630
16 Africa	472	639	391	138	81	14	−39	61	−23	2
17 Other countries	342	−662	740	268	−61	32	60	239	304	−246
18 **Nonmonetary international and regional organizations**	**−157**	**−380**	**−19**	**−11**	**14**	**−45**	**−9**	**3[r]**	**−26**	**25**
BONDS[2]										
19 Foreign purchases	610,116	905,782	796,296	66,558	67,569	75,778	64,641	76,270	80,934	73,513
20 Foreign sales	475,958	727,044	560,778	49,145	52,197	47,984	46,667	48,902	55,131	50,810
21 **Net purchases, or sales (−)**	**134,158**	**178,738**	**235,518**	**17,413**	**15,372**	**27,794**	**17,974**	**27,368**	**25,803**	**22,703**
22 **Foreign countries**	**133,595**	**179,081**	**235,901**	**17,326**	**15,383**	**27,520**	**18,001**	**27,037**	**26,667**	**22,774**
23 Europe	71,631	130,057	130,514	10,911	9,553	18,196	10,736	13,724	14,379	10,489
24 France	3,300	3,386	1,603	352	258	447	160	24	53	54
25 Germany	2,742	4,369	7,948	797	321	1,707	31	752	1,202	1,325
26 Netherlands	3,576	3,443	2,263	168	187	336	144	279	103	133
27 Switzerland	187	4,826	4,093	128	−26	705	322	496	360	431
28 United Kingdom	54,134	99,637	97,662	8,310	7,651	13,582	8,273	9,766	10,672	8,109
29 Canada	6,264	6,121	4,705	413	184	−23	286	908	263	1,140
30 Latin America and Caribbean	34,733	23,938	56,789	3,382	4,603	5,088	5,558	5,490	6,398	6,661
31 Middle East[1]	2,155	4,997	1,670	−717	−114	−182	−219	257	178	−506
32 Other Asia	16,996	12,662	39,696	3,224	1,458	4,031	1,179	6,698	4,847	4,675
33 Japan	9,357	8,384	15,440	0	310	3,020	827	4,375	2,081	2,297
34 Africa	1,005	190	1,154	82	−307	122	59	−189	343	146
35 Other countries	811	1,116	1,373	31	6	288	402	149	259	169
36 **Nonmonetary international and regional organizations**	**563**	**−343**	**−383**	**87**	**−11**	**274**	**−27**	**331**	**−864**	**−71**
				Foreign securities						
37 Stocks, net purchases, or sales (−)	−40,942	6,227	17,776	2,455	6,220	−2,236	594	907[r]	−8,189	4,388
38 Foreign purchases	756,015	929,923	1,051,720	86,345	97,622	106,264	91,851	97,456	96,609	129,676
39 Foreign sales	796,957	923,696	1,033,944	83,890	91,402	108,500	91,257	96,549[r]	104,798	125,288
40 Bonds, net purchases, or sales (−)	−48,171	−17,350	−9,250	−499	8,969	−4,777	−6,421	1,132	−1,220	−438
41 Foreign purchases	1,451,704	1,328,281	746,074	72,372	79,013	63,975	70,061	66,661	62,533	59,684
42 Foreign sales	1,499,875	1,345,631	755,324	72,871	70,044	68,752	76,482	65,529	63,753	60,122
43 **Net purchases, or sales (−), of stocks and bonds**	**−89,113**	**−11,123**	**8,526**	**1,956**	**15,189**	**−7,013**	**−5,827**	**2,039[r]**	**−9,409**	**3,950**
44 **Foreign countries**	**−88,921**	**−10,778**	**8,399**	**2,056**	**15,219**	**−7,104**	**−6,010**	**2,109[r]**	**−9,415**	**4,142**
45 Europe	−29,874	12,632	54,216	5,845	16,749	−3,759	−1,829	2,216[r]	2,186	2,235
46 Canada	−3,085	−1,901	−2,276	−537	1,202	−1,055	525	303	321	−1,594
47 Latin America and Caribbean	−25,258	−13,798	−4,999	−2,351	−2,785	445	−299	602	−1,827	6,505
48 Asia	−25,123	−3,992	−37,475	−494	194	−3,330	−4,303	−362[r]	−9,599	−3,578
49 Japan	−10,001	−1,742	−40,041	−704	−1,241	−4,323	−4,805	−565	−10,006	−4,453
50 Africa	−3,293	−1,225	178	112	−25	−21	4	−116	63	160
51 Other countries	−2,288	−2,494	−1,245	−519	−116	616	−108	−534	−559	414
52 **Nonmonetary international and regional organizations**	**−192**	**−345**	**127**	**−100**	**−30**	**91**	**183**	**−70**	**6**	**−192**

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

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

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

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

Area or country	1997	1998	1999	1999						
			Jan.–Nov.	May	June	July	Aug.	Sept.	Oct.	Nov.[p]
1 **Total estimated**	**184,171**	**49,039**	**−14,603**	**5,638**	**−609**	**−6,242**	**19,118**	**87**	**−9,734**	**−3,613**
2 Foreign countries	183,688	46,570	−15,092	5,316	−815	−6,226	18,847	−4	−9,905	−3,800
3 Europe	144,921	23,797	−32,696	−3,997	−5,796	−5,740	1,771	−9,268	−405	8,646
4 Belgium and Luxembourg	3,427	3,805	717	121	753	37	105	12	−351	−357
5 Germany	22,471	144	1,678	−290	538	643	1,438	−963	78	510
6 Netherlands	1,746	−5,533	1,854	797	−77	−1,224	453	−423	130	360
7 Sweden	−465	1,486	1,382	−21	579	−229	876	−45	−6	369
8 Switzerland	6,028	5,240	−3,166	−121	971	−216	−714	234	365	146
9 United Kingdom	98,253	14,384	−16,750	−4,528	−7,215	1,385	1,934	−3,534	−1,854	5,838
10 Other Europe and former U.S.S.R.	13,461	4,271	−18,411	45	−1,345	−6,136	−2,321	−4,549	1,233	1,780
11 Canada	−811	615	7,128	2,580	460	1,382	1,339	1,459	−657	−551
12 Latin America and Caribbean	−2,554	−3,662	−8,334	1,364	−1,403	693	8,695	3,003	−9,911	−5,417
13 Venezuela	655	59	395	88	−31	131	15	10	25	154
14 Other Latin America and Caribbean	−549	9,523	1,080	−123	−52	−43	1,650	2,982	−1,777	1,362
15 Netherlands Antilles	−2,660	−13,244	−9,809	1,399	−1,320	605	7,030	11	−8,159	−6,933
16 Asia	39,567	27,433	19,641	5,631	6,489	−2,319	6,832	5,344	942	−6,630
17 Japan	20,360	13,048	11,839	1,284	4,905	−394	2,913	5,259	344	−4,378
18 Africa	1,524	751	−2,480	−198	−246	−178	−622	−302	−202	−680
19 Other	1,041	−2,364	1,649	−64	−319	−64	832	−240	328	832
20 Nonmonetary international and regional organizations	483	2,469	489	322	206	−16	271	91	171	187
21 International	621	1,502	115	223	−8	−101	233	98	184	125
22 Latin American regional	170	199	665	122	192	191	175	−9	−1	−4
MEMO										
23 Foreign countries	183,688	46,570	−15,092	5,316	−815	−6,226	18,847	−4	−9,905	−3,800
24 Official institutions	43,959	4,123	−14,986	3,223	397	−1,773	2,394	−1,714	−1,248	−2,488
25 Other foreign	139,729	42,447	−106	2,093	−1,212	−4,453	16,453	1,710	−8,657	−1,312
Oil-exporting countries										
26 Middle East[2]	7,636	−16,554	5,763	2,887	238	−38	130	401	201	−2,050
27 Africa[3]	−12	2	1	0	0	0	1	0	0	0

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

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

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

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

Currency units per dollar except as noted

Item	1997	1998	1999	1999 Aug.	1999 Sept.	1999 Oct.	1999 Nov.	1999 Dec.	2000 Jan.
	Exchange Rates								
COUNTRY/CURRENCY UNIT									
1 Australia/dollar[2]	74.37	62.91	64.54	64.46	64.95	65.09	63.88	64 10	65.60
2 Austria/schilling	12.206	12.379	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3 Belgium/franc	35.81	36.31	n.a.	n.a	n.a.	n.a.	n.a.	n.a.	n.a.
4 Brazil/real	1.0779	1.1605	1.8207	1.8859	1.8987	1.9688	1.9314	1.8442	1.8057
5 Canada/dollar	1.3849	1.4836	1.4858	1.4932	1.4771	1.4776	1.4674	1.4722	1.4486
6 China, P.R./yuan	8.3193	8.3008	8.2781	8.2772	8.2774	8.2775	8.2782	8.2794	8.2792
7 Denmark/krone	6.6092	6.7030	6.9900	7.0144	7.0828	6.9450	7.2019	7.3597	7.3492
8 European Monetary Union/euro[3]	n.a.	n.a.	1.0653	1.0605	1.0497	1.0706	1.0328	1.0110	1.0131
9 Finland/markka	5.1956	5.3473	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
10 France/franc	5.8393	5.8995	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
11 Germany/deutsche mark	1 7348	1.7597	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
12 Greece/drachma	273.28	295.70	306.30	307.84	311.68	307.71	318.24	326.19	326.86
13 Hong Kong/dollar	7.7431	7.7467	7.7594	7.7638	7.7665	7.7696	7.7718	7.7728	7.7791
14 India/rupee	36.36	41.36	43.13	43.50	43.60	43.55	43.46	43.52	43.59
15 Ireland/pound[2]	151.63	142.48	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
16 Italy/lira	1,703.81	1,736.85	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
17 Japan/yen	121.06	130.99	113.73	113.23	106.88	105.97	104.65	102.58	105.30
18 Malaysia/ringgit	2.8173	3.9254	3.8000	3.8000	3.8000	3.8000	3.8000	3.8000	3.8000
19 Mexico/peso	7.918	9.152	9.553	9.398	9.341	9.575	9.416	9.427	9.494
20 Netherlands/guilder	1.9525	1.9837	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
21 New Zealand/dollar[2]	66.25	53.61	52.94	52.59	52.30	51.42	51.22	50.87	51.27
22 Norway/krone	7.0857	7.5521	7.8071	7.8036	7.8361	7.7402	7.9367	8.0113	8.0241
23 Portugal/escudo	175.44	180.25	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
24 Singapore/dollar	1.4857	1.6722	1.6951	1.6787	1.6965	1.6757	1.6699	1.6745	1.6757
25 South Africa/rand	4.6072	5.5417	6.1191	6.1302	6.0563	6.1029	6.1424	6.1503	6.1309
26 South Korea/won	947.65	1,400.40	1,189.84	1,198.31	1,201.00	1,205.29	1,176.98	1,136.80	1,130.99
27 Spain/peseta	146.53	149.41	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
28 Sri Lanka/rupee	59.026	65.006	70.868	71.868	71.942	71.747	72.040	72.018	73.140
29 Sweden/krona	7.6446	7.9522	8.2740	8.2589	8.2264	8.1492	8.3586	8.4910	8.4918
30 Switzerland/franc	1.4514	1.4506	1.5045	1.5093	1.5262	1.4896	1.5543	1.5841	1.5903
31 Taiwan/dollar	28.775	33.547	32.322	32.076	31.848	31.828	31.794	31.625	30.890
32 Thailand/baht	31.072	41.262	37.887	38.060	40.060	39.416	38.749	38.227	37.380
33 United Kingdom/pound[2]	163.76	165.73	161.72	160.58	162.47	165.72	162.05	161.32	164.04
34 Venezuela/bolivar	488.39	548.39	606.82	615.95	625.41	630.75	634.80	644.28	652.81
	Indexes[4]								
NOMINAL									
35 Broad (January 1997=100)[5]	104.44	116.48	116.87	117.00	116.38	115.88	116.08	116.09	115.95
36 Major currencies (March 1973=100)[6]	91.24	95.79	94.07	94.31	92.92	91.94	92.87	93.23	93.14
37 Other important trading partners (January 1997=100)[7]	104.67	126.03	129.94	129.73	130.60	131.06	129.93	129.34	129.14
REAL									
38 Broad (March 1973=100)[5]	91.33	99.35	98.74[r]	99.08	98.53	98.00[r]	98.16	98.10[r]	97.92[r]
39 Major currencies (March 1973=100)[6]	92.25	97.25	96.74[r]	97.13	95.91	95.02	96.12	96.42[r]	96.38
40 Other important trading partners (March 1973=100)[7]	95.87	108.52[r]	107.72[r]	108.00	108.36	108.32	107.13	106.57	106.17[r]

1. Averages of certified noon buying rates in New York for cable transfers. Data in this table also appear in the Board's G.5 (405) monthly statistical release. For ordering address, see inside front cover.

2. Value in U.S. cents.

3. As of January 1999, the euro is reported in place of the individual euro area currencies. These currency rates can be derived from the euro rate by using the fixed conversion rates (in currencies per euro) as shown below:

Euro equals

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

4. The December 1999 Bulletin contains revised index values resulting from the annual revision to the trade weights. For more information on the indexes of the foreign exchange value of the dollar, see *Federal Reserve Bulletin*, vol. 84 (October 1998), pp. 811–18.

5. Weighted average of the foreign exchange value of the U.S. dollar against the currencies of a broad group of U.S. trading partners. The weight for each currency is computed as an average of U.S. bilateral import shares from and export shares to the issuing country and of a measure of the importance to U.S. exporters of that country's trade in third country markets.

6. Weighted average of the foreign exchange value of the U.S. dollar against a subset of broad index currencies that circulate widely outside the country of issue. The weight for each currency is its broad index weight scaled so that the weights of the subset of currencies in the index sum to one.

7. Weighted average of the foreign exchange value of the U.S. dollar against a subset of broad index currencies that do not circulate widely outside the country of issue. The weight for each currency is its broad index weight scaled so that the weights of the subset of currencies in the index sum to one.

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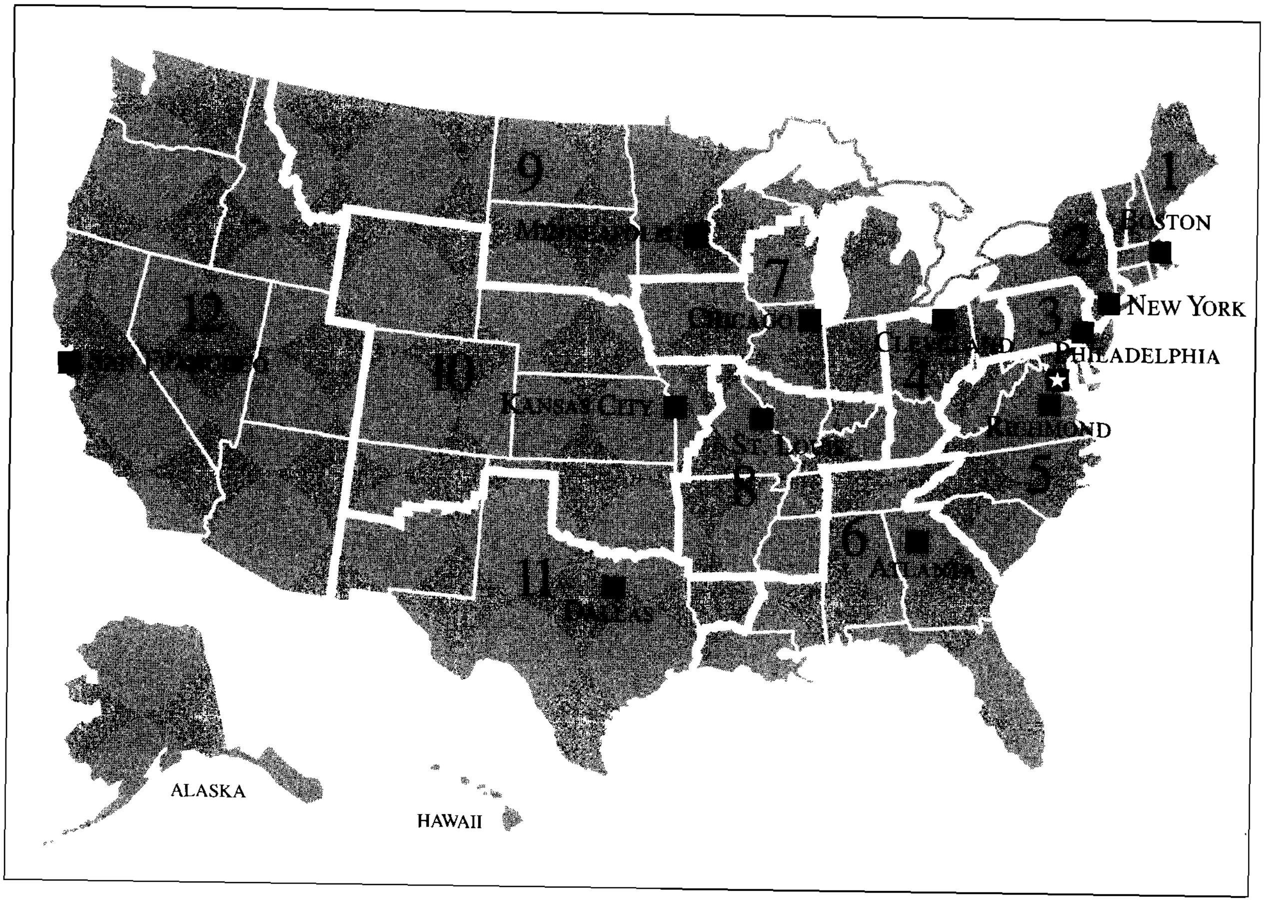

LEGEND

Both pages

- ■ Federal Reserve Bank city
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Facing page

- • Federal Reserve Branch city
- — Branch boundary

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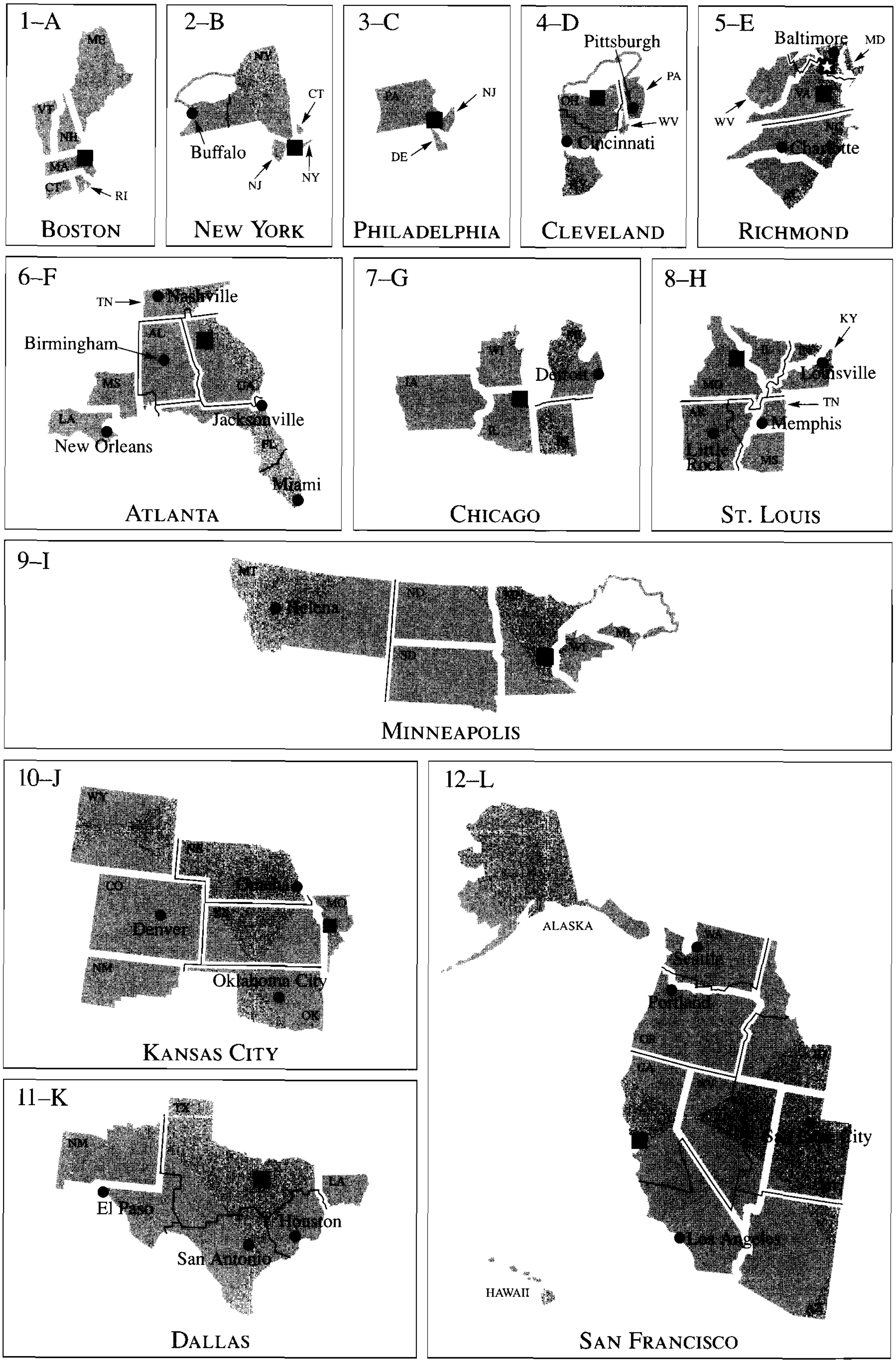
The Federal Reserve officially identifies Districts by number and Reserve Bank city (shown on both pages) and by letter (shown on the facing page).

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

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