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Monetary Policy Report to the Congress

Report submitted to the Congress on February 20, 1990, pursuant to the Full Employment and Balanced Growth Act of 1978.[1]

MONETARY POLICY AND THE ECONOMIC OUTLOOK FOR 1990

The U.S. economy recorded its seventh consecutive year of expansion in 1989. Although growth was slower than in the preceding two years, it was sufficient to support the creation of 2½ million jobs and to hold the unemployment rate steady at 5¼ percent, the lowest reading since the early 1970s. On the external front, the trade and current account deficits shrank further in 1989. And while inflation remained undesirably high, the pace was lower than many analysts—and, indeed, most members of the Federal Open Market Committee (FOMC)—had predicted, in part because of the continuing diminution in longer-range inflation expectations.

In 1989, monetary policy was tailored to the changing contours of the economic expansion and to the potential for inflation. Early in the year, as for most of 1988, the Federal Reserve tightened money market conditions to prevent pressures on wages and prices from building. Market rates of interest rose relative to those on deposit accounts, and unexpectedly large tax payments in April and May drained liquid balances, restraining the growth of the monetary aggregates in the first half of the year. By May, M2 and M3 lay below the lower bounds of the annual target ranges established by the FOMC.

Around midyear, risks of an acceleration in inflation were perceived to have diminished as pressures on industrial capacity had moderated, commodity prices had leveled out, and the dollar had strengthened on exchange markets, reinforcing the signals conveyed bythe weakness in the monetary aggregates. In June, the FOMC began a series of steps, undertaken with care to avoid excessive inflationary stimulus, that trimmed 1½ percentage points from short-term interest rates by year-end. Longer-term interest rates moved down by a like amount, influenced by both the System's easing and a reduction in inflation expectations.

Growth of M2 rebounded to end the year at about the midpoint of the 1989 target range. Growth of M3, however, remained around the lower end of its range, as a contraction of the thrift industry, encouraged by the Financial Institutions Reform, Recovery, and Enforcement Act of 1989 (FIRREA), reduced needs to tap M3 sources of funds. The primary effect of the shrinkage of the thrift industry's assets was a rechanneling of funds in mortgage markets, rather than a reduction in overall credit availability; growth of the aggregate for nonfinancial sector debt that is monitored by the FOMC was just a bit slower in the second half than in the first, and this measure ended the year only a little below the midpoint of its range.

Thus far this year, the overnight rate on federal funds has held at 8¼ percent, but other market rates have risen. Increases of as much as ½ percentage point have been recorded at the longer end of the maturity spectrum. The bond markets responded to indicators suggesting a somewhat greater-than-anticipated buoyancy in economic activity—which may have both raised expected real returns on investment and renewed some apprehensions about the outlook for inflation. The rise in yields occurred in the context of a general runup in international capital market yields, which appears to have been in part a response to emerging opportunities associated with the opening of Eastern Europe; this development had particularly notable effects on the exchange value of the West German mark, which rose considerably relative to the dollar, the yen, and other non-European Monetary System currencies.

1. The charts for the report are available on request from Publications Services, Board of Governors of the Federal Reserve System, Washington, D.C. 20551.

Monetary Policy for 1990

The Federal Open Market Committee is committed to the achievement, over time, of price stability. The importance of this objective derives from the fact that the prospects for long-run growth in the economy are brightest when inflation need no longer be a material consideration in the decisions of households and firms. The members recognize that certain short-term factors—notably a sharp increase in food and energy prices—are likely to boost inflation early this year, but they anticipate that these factors will not persist. Under these circumstances, policy can support further economic expansion without abandoning the goal of price stability.

To foster the achievement of those objectives, the Committee has selected a target range of 3 to 7 percent for M2 growth in 1990. Growth in M2 may be more rapid in 1990 than in recent years and yet be consistent with some moderation in the rate of increase in nominal income and restraint on prices; in particular, M2 may grow more rapidly than nominal GNP in the first part of this year in lagged response to last year's interest rate movements. Eventually, however, slower M2 growth will be required to achieve and maintain price stability (table 1).

The Committee reduced the M3 range to 2½ to 6½ percent to take account of the effects of the restructuring of the thrift industry, which is expected to continue in 1990. A smaller proportion of mortgages is likely to be held at depository institutions and financed by elements in M3; thrift institution assets should continue to decline, as some solvent thrift institutions will be under pressure to meet capital standards and insolvent thrift institutions will continue to be shrunk and closed, with a portion of their assets carried, temporarily, by the government. While some of the assets shed by thrift institutions are expected to be acquired by commercial banks, overall growth in the asset portfolios of banks is expected to be moderate, as these institutions exercise caution in extending credit. An increase in lender—and borrower—caution more generally points to some slowing in the pace at which nonfinancial sectors take on debt relative to their income in 1990. In particular, recent developments suggest that leveraged buyouts and other transactions that substitute debt for equity in corporate capital structures will be noticeably less important in 1990 than in recent years. Moreover, a further decline in the federal sector's deficit is expected to reduce credit growth this year. In light of these considerations, the Committee reduced the monitoring range for debt of the nonfinancial sectors to 5 to 9 percent.

The setting of targets for money growth in 1990 is made more difficult by uncertainty about developments affecting thrift institutions. The behavior of M3 and, to a more limited extent, M2 is likely to be affected by such developments, but there is only limited basis in experience to gauge the likely effect. In addition, in interpreting the growth of nonfinancial debt, the Committee will have to take into account the amount of Treasury borrowing (recorded as part of the debt aggregate) used to carry the assets of failed thrift institutions, pending their disposal. With these questions adding to the usual uncertainties about the relationship among movements in the aggregates and output and prices, the Committee agreed that, in implementing policy, they would need to continue to consider, in addition to the behavior of money, indicators of inflationary pressures and economic growth as well as developments in financial and foreign exchange markets.

1. Ranges of growth for monetary and credit aggregates
Percent change, fourth quarter to fourth quarter

Aggregate	1988	1989	1990
M2	4 to 8	3 to 7	3 to 7
M3	4 to 8	3½ to 7½	2½ to 6½
Debt	7 to 11	6½ to 10½	5 to 9

Economic Projections for 1990

The Committee members, and other Reserve Bank presidents, expect that growth in the real economy will be moderate during 1990. Most project real GNP growth over the four quarters of the year to be between 1¾ and 2 percent—essentially the same increase as in 1989, excluding the bounceback in farm output after the 1988 drought. It is expected that this pace of expansion will be reflected in some easing of pressures on domestic resources; the central tendency of forecasts is for an unemployment rate of 5½ to 5¾ percent in the fourth quarter (table 2).

2. Economic projections for 1990

Item	1989 Actual	FOMC members and other FRB Presidents		Administration
		Range	Central tendency	
Percent change, fourth quarter to fourth quarter				
Nominal GNP	6.4	4 to 7	5½ to 6½	7.0
Real GNP	2.4	1 to 2¼	1¾ to 2	2.6
Consumer price index	4.5	3½ to 5	4 to 4½	4.1[1]
Average level in the fourth quarter, percent				
Unemployment rate	5.3	5½ to 6½	5½ to 5¾	5.4[2]

1. CPI for Urban Wage Earners and Clerical Workers. FOMC forecasts are for CPI for All Urban Consumers.

2. Percent of total labor force, including armed forces residing in the United States.

Certain factors have caused an uptick in inflation early this year. Most notably, prices for food and energy increased sharply as the year began, reflecting the effect of the unusually cold weather in December. However, these run-ups should be largely reversed in coming months, and inflation in food and energy prices for the year as a whole may not differ much from increases in other prices.

Given the importance of labor inputs in determining the trend of overall costs, a deceleration in the cost of labor inputs is an integral part of any solid progress toward price stability. Nominal wages and total compensation have grown relatively rapidly during the past two years, while increases in labor productivity have diminished. With prices being constrained by domestic and international competition, especially in goods markets, profit margins have been squeezed to low levels. A restoration of more normal margins ultimately will be necessary if businesses are to have the wherewithal and the incentive to maintain and improve the stock of plant and equipment.

Unfortunately, the near-term prospects for a moderation in labor cost pressures are not favorable. Compensation growth is being boosted in the first half of 1990 by an increase in social security taxes and a hike in the minimum wage. The anticipated easing of pressures in the labor market should help produce some moderation in the pace of wage increases in the second half of 1990, but the Committee will continue to monitor closely the growth of labor costs for signs of progress in this area.

Finally, the recent depreciation of the dollar likely will constitute another impetus to near-term price increases, reversing the restraining influence exerted by a strong dollar through most of last year. Prices of imported goods, excluding oil, increased in the fourth quarter after declining through the first three quarters of 1989. The full effect of this upturn likely will not be felt on the domestic price level until some additional time has passed.

Despite these adverse elements in the near-term picture, the Committee believes that progress toward price stability can be achieved over time, given the apparently moderate pace of activity. In terms of the consumer price index, most members expect an increase of between 4 and 4½ percent, compared with the 4.5 percent advance recorded in 1989.

Relative to the Committee, the Administration currently is forecasting more rapid growth in real and nominal GNP. At the same time, the Administration's projection for consumer price inflation is at the low end of the Committee's central-tendency range. In its *Annual Report*, the Council of Economic Advisers argues that, if nominal GNP were to grow at a 7 percent annual rate this year—as the Council is projecting—then M2 could exceed its target range, particularly if interest rates fall as projected in the Administration forecast. As suggested above, monetary relationships cannot be predicted with absolute precision, but the Council's assessment is reasonable. And, although most Committee members believe that growth in nominal GNP more likely will be between 5½ and 6½ percent, a more rapid expansion in nominal income would be welcome if it promised to be accompanied by a declining path for inflation in 1990 and beyond.

The Performance of the Economy in 1989

Real GNP grew 2½ percent over the four quarters of 1989, 2 percent after adjustment for the recovery in farm output from the drought losses of the prior year. This rate of growth of GNP constituted a significant downshifting in the pace of expansion from the unsustainably rapid rates of 1987 and 1988, which had carried activity to the point that inflationary strains were beginning to become visible in the economy. As the year progressed, clear signs emerged that pressures on resource utilization were easing, particularly in the industrial sector. Nonetheless, the overall unemployment rate remained at 5.3 percent, the lowest reading since 1973, and inflation remained at 4½ percent despite the restraining influence of a dollar that was strong for most of the year.

The deceleration in business activity last year reflected, to some degree, the monetary tightening from early 1988 through early 1989 that was undertaken with a view toward damping the inflation forces. Partly as a consequence of that tightening, the U.S. dollar appreciated in the foreign exchange markets from early 1988 through mid-1989, contributing to a slackening of foreign demand for U.S. products. At the same time, domestic demand also slowed, more for goods than for services. Reflecting these developments, the slowdown in activity was concentrated in the manufacturing sector: Factory employment, which increased a total of 90,000 over the first three months of 1989, declined 195,000 over the remainder of the year, and growth in manufacturing production slowed from 5½ percent in 1988 to only 1¾ percent last year. Employment in manufacturing fell further in January of this year, but that decline was largely attributable to temporary layoffs in the automobile industry, and most of the affected workers have since been recalled.

As noted above, the rate of inflation was about the same in 1989 as it had been in the preceding two years. While the appreciation of the U.S. dollar through the first half of the year helped to hold down the prices of imported goods, the high level of resource utilization continued to exert pressure on wages and prices. In that regard, the moderation in the expansion of real activity during 1989 was a necessary development in establishing an economic environment that is more conducive to progress over time toward price stability.

The Household Sector

Household spending softened significantly in 1989, with a marked weakening in the demand for motor vehicles and housing. Real consumer spending on goods and services increased 2¼ percent over the four quarters of 1989, 1½ percentage points less than in 1988. Growth in real disposable income slowed last year, but continued to outstrip growth in spending, and, as a result, the personal saving rate increased to 5¾ percent in the fourth quarter of 1989.

The slackening in consumer demand was concentrated in spending on goods. Real spending on durable goods was about unchanged from the fourth quarter of 1988 to the fourth quarter of 1989—after jumping 8 percent in the prior year—chiefly reflecting a slump in purchases of motor vehicles. Spending on nondurable goods also decelerated, increasing only ½ percent in 1989 after an advance of 2 percent in 1988. The principal support to consumer spending came from continued large gains in outlays for services. Spending on medical care moved up 7½ percent in real terms last year, and now constitutes 11 percent of total consumption expenditures—up from 8 percent in 1970. Outlays for other services rose 3¼ percent, with sizable increases in a number of categories.

Sales of cars and light trucks fell ¾ million units in 1989, to 14½ million. Most of the decline reflected reduced sales of cars produced by U.S.-owned automakers; a decline in sales of imported automobiles was about offset by an increase in sales of foreign nameplates produced in U.S. plants. The slowing in sales of motor vehicles was most pronounced during the fourth quarter of 1989, reflecting a "payback" for sales that had been advanced into the third quarter and a relatively large increase in sticker prices on 1990-model cars. Although part of this increase reflected the inclusion of additional equipment—notably the addition of passive restraint systems to many models—consumers nevertheless reacted adversely to the overall increase in prices. Beyond these influences, longer-run factors appear to have been damping demand for autos and light trucks during 1989; in particular, the robust pace of sales earlier in the expansion seems to have satisfied demand pent up during the recessionary period of the early 1980s. The rebuilding of the motor vehicle stock suggests that future sales are likely to depend more heavily on replacement needs.

Residential investment fell in real terms through the first three quarters of 1989, and with only a slight upturn in the fourth quarter, expenditures decreased 6 percent on net over the year. Construction was weighed down throughout 1989 by the overbuilding that occurred in some locales earlier in the decade. Vacancy rates were especially high for multifamily rental and condominium units. In the single-family sector, affordability problems constrained demand, dramatically so in those areas in which home prices had soared relative to household income.

Mortgage interest rates declined more than a percentage point, on net, between the spring of 1989 and the end of the year, helping to arrest the contraction in housing activity; however, the response to the easing in rates appears to have been muted somewhat by a reduction in the availability of construction credit, likely reflecting, in part, the tightening of regulatory standards in the thrift industry and the closing of several insolvent institutions. Exceptionally cold weather also hampered building late in the year, but a sharp December drop in housing starts was followed by a record jump in activity last month.

The Business Sector

Business fixed investment, adjusted for inflation, increased only 1 percent at an annual rate during the second half of 1989 after surging 7¾ percent during the first half. Although competitive pressures forced many firms to continue seeking efficiency gains through capital investment, the deceleration in overall economic growth made the need for capacity expansion less urgent, and shrinking profits reduced the availability of internal finance.

Spending on equipment moved up briskly during the first half of 1989, with particularly notable gains in outlays for information-processing equipment—computers, photocopiers, telecommunications devices, and the like. However, equipment outlays were flat in the second half of the year; growth in the information processing category slowed sharply, and spending in most other categories was either flat or down. Purchases of motor vehicles dropped sharply in the fourth quarter from the elevated levels of the second and third quarters. There were a few exceptions to the general pattern of weakness during the second half. Spending on aircraft was greater in the second half of 1989 than in the first half, and would have increased still more had it not been for the strike at Boeing. Outlays for tractors and agricultural machinery moved up smartly; spending on farm equipment has been buoyed by the substantial improvements over the past several years in the financial health of the agricultural sector. Over the four quarters of 1989, total spending on equipment increased 6 percent in real terms—about 1 percentage point below the robust pace of 1988.

Business spending for new construction edged down ½ percent in real terms during 1989—the second consecutive yearly decline. Commercial construction, which includes office buildings, was especially weak; vacancy rates for office space remain at high levels in many areas, lowering prospective returns on new investment. Outlays for drilling and mining, which had dropped 20 percent over the four quarters of 1988, moved down further in the first quarter of 1989; later in the year, drilling activity revived as crude oil prices firmed. The industrial sector was the most notable exception to the overall pattern of weakness: Real outlays increased 11 percent in 1989, largely because of construction that had been planned in 1987 and 1988 when capacity in many basic industries tightened substantially and profitability was improving sharply.

As noted above, the slowdown in investment spending during the second half of last year likely was exacerbated by the deterioration in corporate cash flow. Before-tax operating profits of nonfinancial corporations dropped 12 percent from the fourth quarter of 1988 to the third quarter of 1989 (latest data available); after-tax profits were off in about the same proportion. Reflecting the increased pressures from labor and materials costs—and a highly competitive domestic and international environment—before-tax domestic profits of nonfinancial corporations as a share of gross domestic product declined to an average level of 8 percent during the first three quarters of 1989, the lowest reading since 1982. At the same time, taxes as a share of before-tax operating profits increased to an estimated 44 percent in the first three quarters of 1989; since 1985, this figure has retraced a bit more than half of its decline from 54 percent in 1980.

Nonfarm business inventory investment averaged $21 billion in 1989. Although the average pace of accumulation last year was slower than in 1988, the pattern across sectors was somewhat uneven. Some of the buildup in stocks took place in industries—such as aircraft—where orders and shipments have been strong for some time now. But inventories in some other sectors became uncomfortably heavy at times and precipitated adjustments in orders and production. The clearest area of inventory imbalance at the end of the year was at auto dealers, where stocks of domestically produced automobiles were at 1.7 million units in December—almost three months' supply at the sluggish fourth-quarter sales pace. In response, the domestic automakers implemented a new round of sales incentives and cut sharply the planned assembly rate for the first quarter of 1990. Elsewhere in the retail sector, inventories moved up substantially relative to sales at general merchandise outlets. Overall, however, most sectors of the economy have adjusted fairly promptly to the deceleration in sales and appear to have succeeded in preventing serious overhangs from developing.

The Government Sector

Budgetary pressures continued to restrain the growth of purchases at all levels of government. At the federal level, purchases fell 3 percent in real terms over the four quarters of 1989, with lower defense purchases accounting for the bulk of the decline. Nondefense purchases also declined in real terms from the fourth quarter of 1988 to the fourth quarter of 1989; increases in such areas as the space program and drug interdiction were more than offset by general budgetary restraint that imposed real reductions on most other discretionary programs.

In terms of the unified budget, the federal deficit in fiscal year 1989 was $152 billion, slightly smaller than in 1988. Growth in total federal outlays, which include transfer payments and interest costs as well as purchases of goods and services, picked up a bit in fiscal year 1989. Outlays were boosted at the end of the fiscal year by the initial $9 billion of spending by the Resolution Trust Corporation. On the revenue side of the ledger, growth in federal receipts also increased in fiscal 1989. The acceleration occurred in the individual income tax category, but strong increases also were recorded in corporate and social security tax payments.

Purchases of goods and services at the state and local level increased 2½ percent in real terms over the four quarters of 1989, down more than a percentage point from the average pace of the preceding five years. Nonetheless, there were some areas of growth. Spending for educational buildings increased, and employment in the state and local sector rose 350,000 over the year, largely driven by a pickup in hiring by schools. Despite the overall slowdown in the growth of purchases, the budgetary position of the state and local sector deteriorated further over the year; the annualized deficit of operating and capital accounts, which excludes social insurance funds, increased $6 billion over the first three quarters of 1989 and appears to have worsened further in the fourth quarter.

The External Sector

The U.S. external deficits improved somewhat in 1989, but not by as much as in 1988. On a balance-of-payments basis, the deficit on merchandise trade fell from an annual rate of $128 billion in the fourth quarter of 1988 (and $127 billion for the year as a whole) to $114 billion in the first quarter of 1989. Thereafter, there was no further net improvement. The appreciation in the foreign exchange value of the dollar between early 1988 and mid-1989 appears to have played an important role in inhibiting further progress on the trade front. During the first three quarters of 1989, the current account, excluding the influence of capital gains and losses that are largely caused by currency fluctuations, showed a deficit of $106 billion at an annual rate—somewhat below the deficit of $124 billion in the comparable period of 1988.

Measured in terms of the other Group of Ten (G-10) currencies, the foreign exchange value of the U.S. dollar in December 1989 was about 3 percent above its level in December 1988, but the dollar has moved lower thus far in 1990. In real terms, the net appreciation of the dollar during 1989 in terms of the other G-10 currencies was about 5 percent as consumer prices rose somewhat faster here than they did abroad, on average. Over the year, the dollar moved lower on balance against the currencies of South Korea, Singapore, and especially Taiwan. From a longer perspective, the modest uptrend on balance in the dollar over the past two years marked a sharp departure from the substantial weakening seen during the 1985–87 period.

The behavior of the dollar differed greatly between the two halves of 1989. In the first half, the dollar appreciated 12 percent in terms of the other G-10 currencies, while depreciating against the currencies of South Korea and Taiwan. The dollar fluctuated during the summer, and later in the year unwound most of the prior appreciation, as U.S. interest rates eased relative to rates abroad and in response to concerted intervention in exchange markets in the weeks immediately after the September meeting of Group of Seven officials and to events in Eastern Europe. In the second half of the year, the dollar rose against the currencies of South Korea and Taiwan while depreciating in terms of the Singapore dollar. Over the course of 1989, the dollar appreciated nearly 16 percent against the Japanese yen and 14 percent against the British pound, but it depreciated slightly against the German mark, the Canadian dollar, and most other major currencies.

On a GNP basis, merchandise exports increased about 11 percent in real terms over the four quarters of 1989 – roughly 4 percentage points less than in 1988. This deceleration took place despite continued strong growth in economic activity in most foreign industrial countries (with the exception of Canada and the United Kingdom), and appears to have reflected, in large part, the effect on U.S. competitiveness of the dollar's appreciation and the more rapid U.S. inflation over 1988 and much of 1989. Exports were also depressed in the fourth quarter of 1989 by several special factors, including the Boeing strike. The volume of agricultural exports increased about 11 percent in 1989 – a bit faster even than the robust pace of 1988. The value of agricultural exports rose much less, however, as agricultural export prices reversed the drought-induced increases of the previous year.

Merchandise imports excluding oil expanded about 7 percent in real terms during 1989, with much of the rise accounted for by imports of computers. Imports of oil increased 6 percent from the fourth quarter of 1988 to the fourth quarter of 1989, to a rate of 8.3 million barrels per day. At the same time, the average price per barrel increased almost 40 percent, and the nation's bill for foreign oil jumped 45 percent.

The counterpart of the current account deficit of $106 billion at an annual rate over the first three quarters of 1989 was a recorded net capital inflow of about $60 billion at an annual rate and an unusually large statistical discrepancy, especially in the second quarter. More than half of the recorded net inflow of capital reflected transactions in securities, as foreign private holdings of U.S. securities rose nearly $50 billion (half of the increase being in holdings of U.S. Treasury securities), while U.S. holdings of foreign securities increased a bit less than $20 billion. Net direct investment accounted for another substantial portion of the inflow; foreign direct investment holdings in the United States rose more than $40 billion, and U.S. holdings abroad rose only half as much. Over the first three quarters of 1989, foreign official assets in the United States increased almost $15 billion, but this increase was more than offset by the increase in U.S. official holdings of assets abroad, largely associated with U.S. intervention operations to resist the dollar's strength.

Labor Markets

Employment growth slowed in the second half of 1989; nonetheless, nonfarm payrolls increased nearly 2½ million during the year. The bulk of this expansion occurred in the service-producing sector. By contrast, the manufacturing sector shed 100,000 jobs. These job losses were more than accounted for by declines in the durable goods industries and appeared to reflect the slump in auto sales, the weakening in capital spending, and the effects of a stronger dollar on exports and imports.

Despite the slowdown in new job creation, the overall balance of supply and demand in the labor market remained steady over the year. The civilian unemployment rate, which had declined about ½ percentage point over the twelve months of 1988, finished 1989 at 5.3 percent – unchanged from twelve months earlier. Moreover, there was no increase in the number of "discouraged" workers – those who say they would re-enter the labor force if they thought they could find a job. Nor was there any net increase in workers who accepted part-time employment when they would have preferred full-time. The proportion of the civilian population with jobs reached a historic high.

Reflecting the tightness of labor markets and the persistence of inflation expectations in the range of 4 to 5 percent, according to surveys, the employment cost index for wages and salaries in nonfarm private industry increased 4¼ percent over the twelve months of 1989 – about the same as in 1988. Benefit costs continued to rise more rapidly than wages and salaries last year, with health insurance costs remaining a major factor; nonetheless, the rate of growth in overall benefit costs slowed in 1989, in part because of a smaller increase in social security taxes than in 1988. Total compensation – including both wages and salaries and benefits – rose 4¾ percent during 1989. Compensation growth in the service-producing sector—at 5 percent—continued to outpace the gain in the goods-producing sector by about ¾ percentage point.

A slowdown in the growth of productivity often accompanies a softening in the general economy, and productivity gains were lackluster in 1989. Output per hour in the private nonfarm business sector increased only ½ percent over the four quarters of the year—1 percentage point below the rate of increase in 1988. In the manufacturing sector, productivity gains during the first half of 1989 kept pace with the 1988 average of 3 percent; in the second half, however, productivity growth slowed to an annual rate of 2¼ percent. Reflecting both the persistent growth in hourly compensation and the disappointing developments in productivity, unit labor costs in private nonfarm industry rose 5 percent over the four quarters of 1989—the largest increase since 1982.

Price Developments

Inflation in consumer prices remained in the neighborhood of 4½ percent for the third year in a row, as the level of economic activity was strong and continued to exert pressures on available resources. During the first half of the year, overall inflation was boosted by a sharp run-up in energy prices and a carry-over from 1988 of drought-related increases in food prices. However, inflation in food prices slowed during the second half, and energy prices retraced about a third of the earlier run-up. Prices for imported goods excluding oil were little changed over 1989, on net, and acted as a moderating influence on consumer price inflation.

Food prices increased 5½ percent at the retail level, slightly more than in 1988 when several crops were severely damaged by drought. Continued supply problems in some agricultural markets in 1989—notably a poor wheat crop and a shortfall in dairy production—likely prevented a deceleration from the drought-induced rate of increase in 1988. At the same time, increases in demand, including sharp increases in exports of some commodities, also appear to have played a role. Still another impetus to inflation in the food area last year evidently came from the continuing rise in processing and marketing costs.

Consumer energy prices surged 17 percent at an annual rate during the first six months of 1989, before dropping back 6 percent in the second half. During the first half of the year, retail energy prices were driven up by increases in the cost of crude oil. The increase in gasoline prices at midyear was exaggerated by the introduction of tighter standards governing the composition of gasoline during summer months. Gasoline prices eased considerably in the second half, reflecting a dip in crude oil prices and the expiration of the summertime standards. Taking the twelve months of 1989 as a whole, the increase in retail energy prices came to a bit more than 5 percent. Heating oil prices jumped sharply at the turn of the year, reflecting a surge in demand caused by December's unusually cold weather. The spike in heating fuel prices largely reversed itself in spot markets during January of this year, but crude oil prices remained at high levels.

Consumer price increases for items other than food and energy remained at about 4½ percent in 1989. Developments in this category likely would have been less favorable had the dollar not been appreciating in foreign exchange markets through the first half of 1989. The prices of consumer commodities excluding food and energy decelerated sharply, and this slowdown was particularly marked for some categories in which import penetration is high, including apparel and recreational equipment. Given the dollar's more recent depreciation, however, the moderating effect of import prices on overall inflation may be diminishing. Indeed, prices for imported goods excluding oil turned up in the fourth quarter of 1989, after declining earlier in the year. In contrast to goods prices, the prices of nonenergy services—which make up half of the overall consumer price index—increased 5¼ percent in 1989, ¼ percentage point more than in 1988. The pickup in this category was led by rents, medical services, and entertainment services.

At the producer level, prices of finished goods increased 7½ percent at an annual rate during the first half—almost twice the pace of 1988— before slowing to an annual rate of increase of 2½ percent over the second half. In large part, developments in this sector reflected the same sharp swings in energy prices that affected consumer prices. At earlier stages of processing, the index for intermediate materials excluding food and energy decelerated sharply during the first half of the year and then edged down in the second half. For the year as a whole, this index registered a net increase of only 1 percent, compared with more than 7 percent in 1988. The sharp deceleration in this category appears to have reflected a relaxation of earlier pressures on capacity in the primary processing industries, and the influence of the rising dollar through the first half of last year. Also consistent with the weakening in the manufacturing sector and the strength of the dollar, the index for crude nonfood materials excluding energy declined 3¾ percent over the year, and spot prices for industrial metals moved sharply lower during the year, in part because of large declines for steel scrap, copper, and aluminum.

MONETARY AND FINANCIAL DEVELOPMENTS DURING 1989

In 1989, the Federal Reserve continued to pursue a policy aimed at containing and ultimately eliminating inflation while providing support for continued economic expansion. In implementing that policy, the Federal Open Market Committee maintained a flexible approach to monetary targeting, with policy responding to emerging conditions in the economy and financial markets as well as to the growth of the monetary aggregates relative to their established target ranges. This flexibility has been necessitated by the substantial variability in the short-run relationship between the monetary aggregates and economic performance; however, when viewed over a longer perspective, those aggregates are still useful in conveying information about price developments.

As the year began, monetary policy was following through on a set of measured steps begun a year earlier to check inflationary pressures. By then, however, evidence of a slackening in aggregate demand, along with sluggish growth of the monetary aggregates, suggested that the year-long rise in short-term interest rates was noticeably restraining the potential for more inflation. But, after an increase of ½ percentage point in the discount rate at the end of February, the Federal Reserve took no further policy action until June. Over the balance of 1989, the Federal Reserve moved toward an easing of money market conditions, as indications mounted of slack in demand and lessened inflation pressures. The easing in reserve availability induced declines in short-term interest rates of 1½ percentage points; money growth strengthened appreciably, and M2 was near the middle of its target range by the end of 1989. The level of M3, on the other hand, remained around the lower bound of its range, with its weakness mostly reflecting the shifting pattern of financial intermediation as the thrift industry retrenched. The growth of nonfinancial debt was trimmed to 8 percent in 1989, about in line with the slowing in the growth of nominal GNP, and ended the year at the midpoint of its monitoring range.

Implementation of Monetary Policy

In the opening months of the year, the Federal Open Market Committee, seeking to counter a disquieting intensification of inflationary pressures, extended the move toward restraint that had begun almost a year earlier. Policy actions in January and February, restraining reserve availability and raising the discount rate, prompted a further increase of ¾ percentage point in short-term market interest rates. Longer-term rates, however, moved up only moderately; the tightening apparently had been widely anticipated and was viewed as helping to avoid an escalation in underlying inflation. Real short-term interest rates—nominal rates adjusted for expected price inflation—likely moved higher, though remaining below peak levels earlier in the expansion; these gains contributed to a strengthening of the foreign exchange value of the dollar over this period, while the growth of the monetary aggregates slowed as the additional policy restraint reinforced the effects of actions in 1988.

As evidence on prospective trends in inflation and spending became more mixed in the second quarter, the Committee refrained from further tightening and in June began to ease pressures on reserve markets. As the information on the real economy, along with the continued rise in the dollar, suggested that the outlook for inflation was improving, most long-term nominal interest rates fell as much as a percentage point from their March peaks; the yield on the bellwether thirty-year Treasury bond moved down to about 8 percent by the end of June. The decline in interest rates outstripped the reduction in most measures of investors' inflation expectations, so that estimated real interest rates fell from their levels earlier in the year. These declines in nominal and real interest rates, however, were not accompanied by declines in the foreign exchange value of the dollar. Rather, because of better-than-expected trade reports and political turmoil abroad, the dollar strengthened further.

In July, when the FOMC met for its semiannual review of the growth ranges for money and credit, M2 and M3 lay at, or a bit below, the lower bounds of their target cones. This weakness, reinforcing the signals from prices and activity, contributed to the Committee's decision to take additional easing action in reserve markets. The Committee reaffirmed the existing annual target ranges for the monetary and debt aggregates and tentatively retained those ranges for the next year, since they were likely to encompass money growth that would foster further economic expansion and moderation of price pressures in 1990.

Late in the summer, longer-term interest rates turned higher, as several releases of economic data suggested reinvigorated inflationary pressures. With growth in the monetary aggregates rebounding, the Committee kept reserve conditions about unchanged until the direction of the economy and prices clarified.

Beginning in October, amid indications of added risks of a weakening in the economic expansion, the FOMC reduced pressures on reserve markets in three separate steps, which nudged the federal funds rate down to around 8¼ percent by year-end, about 1½ percentage points below its level when incremental tightening ceased in February. Over those ten months, other short- and long-term nominal interest rates fell about 1 to 1¼ percentage points; and most major stock price indexes reached record highs at the turn of the year, more than recovering the losses that occurred on October 13. Reflecting some reduction in inflation anticipations over the same period, estimated short- and long-term real interest rates fell somewhat less than nominal rates, dropping probably about ½ to ¾ percentage point. Still, most measures of short- and long-term real interest rates remained well above their trough levels of 1986 and 1987 – levels that had preceded rapid growth in the economy and a buildup of inflationary pressures.

Over the last three months of the year and into January 1990, the foreign exchange value of the dollar declined substantially from its high, which was reached around midyear and largely sustained through September. The dollar fell amid concerted intervention undertaken by the G-7 countries in the weeks immediately after a meeting of the finance ministers and central bank governors of these countries in September. The dollar continued to decline in response to the easing of short-term interest rates on dollar assets and increases in rates in Japan and Germany. The German currency rate rose particularly sharply as developments in Eastern Europe were viewed as favorable for the West German economy, attracting global capital flows. Rising interest rates in Germany likely contributed to an increase in bond yields in the United States early in 1990, even as U.S. short-term rates remained essentially unchanged. More important, however, for the rise in nominal, and likely real, long-term rates in the United States were incoming data pointing away from recession in the economy and from any abatement in price pressures, especially as oil prices moved sharply higher.

Behavior of Money and Credit

Growth in M2 was uneven over 1989, with marked weakness in the first part of the year giving way to robust growth thereafter. On balance over the year, M2 expanded 4½ percent, down from 5¼ percent growth in 1988, placing it about at the midpoint of its 1989 target range of 3 to 7 percent. The slower rate of increase in M2 reflected some moderation in nominal income growth as well as the pattern of interest rates and associated opportunity costs of holding money, with the effects of increases in 1988 and 1989 outweighing the later, smaller drop in rates (table 3).

M2 has grown relatively slowly over the past three years, as the Federal Reserve has sought to ensure progress over time toward price stability. There appears to be a fairly reliable long-term link between M2 and future changes in inflation. One method of specifying that link is to estimate the equilibrium level of prices implied by the current level of M2, assuming that real GNP is at its potential and velocity is at its long-run average, and compare that to actual prices. The historical record suggests that inflation tends to rise when actual prices are below the equilibrium level and to moderate when equilibrium prices are below actual. At the end of 1986, the equilibrium level of prices was well above the actual level, reinforcing the view that the risks weighed on the side of an increase in inflation; at the end of 1989, that equilibrium price had moved into approximate equality with the actual price level, indicating that basic inflation pressures had steadied.

In 1989, compositional shifts within M2 reflected the pattern of interest rates, the unexpected volume of tax payments in the spring, and the flow of funds out of thrift deposits and into other instruments. Early in the year, rising market interest rates buoyed the growth of small-denomination time deposits at the expense of more liquid deposits, as rates on the latter accounts adjusted only sluggishly to the upward market movements. The unexpectedly large tax payments in April and May contributed to the weakness in liquid instruments as those balances also were drawn down to meet tax obligations. As market interest rates fell, the relative rate advantage reversed in favor of liquid instruments and the growth in liquid deposits rebounded, boosted as well by the replenishment of accounts drained by tax payments.

The M1 component of M2 was especially affected by the swings in interest rates and opportunity costs last year, and in addition was buffeted by the effects of outsized tax payments in April. After its rise of 4¼ percent in 1988, M1 grew only ½ percent in 1989, with much of the weakness in this transactions aggregate occurring early in the year. By May, M1 had declined at an annual rate of about 2½ percent from its fourth-quarter 1988 level, reflecting a lagged response to earlier increases in short-term interest rates and an extraordinary bulge in net individual tax remittances to the Treasury. From May to December, M1 rebounded at a 4 percent rate as the cumulating effects of falling interest rates and post-tax-payment rebuilding boosted demands for this aggregate. M1 velocity continued the upward trend that resumed in 1987, increasing in the first three quarters before turning down in the fourth quarter of 1989.

The shift of deposits from thrift institutions to commercial banks and money fund shares owed, in part, to regulatory pressures that brought down rates paid by some excessively aggressive thrift institutions. Beginning in August, the newly created Resolution Trust Corporation (RTC) targeted some of its funds to pay down high-cost deposits at intervened thrift institutions and began a program of closing insolvent thrift institutions and selling their deposits to other institutions—for the most part, banks. On balance, the weak growth of retail deposits at thrift institutions appears to have been about offset by the shift into commercial banks and money market mutual funds, leaving M2 little affected overall by the realignment of the thrift industry.

M3 was largely driven, as usual, by the funding needs of banks and thrift institutions; under the special circumstances of the restructuring of the thrift industry, it was a less reliable barometer of monetary policy pressures than is normally the case. After expanding 6¼ percent in 1988, M3 hugged the lower bound of its 3½ to 7½ percent target cone in

3. Growth of money and debt

Percent change

Period	M1	M2	M3	Debt of domestic nonfinancial sectors
Fourth quarter to fourth quarter				
1980	7.4	8.9	9.5	9.5
1981	5.4 (2.5)[1]	9.3	12.3	10.2
1982	8.8	9.1	9.9	9.1
1983	10.4	12.2	9.8	11.1
1984	5.4	7.9	10.6	14.2
1985	12.0	8.9	7.8	13.1
1986	15.5	9.3	9.1	13.2
1987	6.3	4.3	5.8	9.9
1988	4.3	5.2	6.3	9.2
1989	.6	4.6	3.3	8.1
Quarterly growth rates (annual rates)				
1989: 1	−.1	2.3	3.9	8.4
2	−4.4	1.6	3.3	7.9
3	1.8	6.9	3.9	7.2
4	5.1	7.1	2.0	8.0

1. Figure in parentheses is adjusted for shifts to NOW accounts in 1981.

1989, closing the year about 3¼ percent above its fourth quarter of 1988 base. In 1989, bank credit growth about matched the previous year's 7½ percent increase, but credit at thrift institutions is estimated to have contracted a bit on balance over the year, in contrast to its 6¼ percent growth in 1988. This weakness in thrift credit directly owed to asset shrinkage at savings and loan institutions insured by the Savings Association Insurance Fund; credit unions and mutual savings banks expanded their balance sheets in 1989. In addition, funds paid out by the RTC to thrift institutions and to banks acquiring thrift deposits directly substituted for other sources of funds. As a result, thrift institutions lessened their reliance on managed liabilities, as evidenced by the decline of 14¾ percent over the year in the sum of large time deposits and repurchase agreements at thrift institutions. Institution-only money market mutual funds were bolstered by a relative yield advantage, as fund returns lagged behind declining market interest rates in the second half of the year; these funds provided the major source of growth for the non-M2 component of M3. On balance, the effects of the thrift restructuring dominated the movements in M3, and the rebound in M2 in the second half of the year did not show through to this broader aggregate. As a consequence, the velocity of M3 increased 3 percent in 1989, 1¼ percentage points faster than the growth in M2 velocity, and its largest annual increase in twenty years.

Many of the assets shed by thrift institutions were mortgages and mortgage-backed securities, but this appears to have had little sustained effect on home mortgage cost and availability. The spread between the rate on primary fixed-rate mortgages and the rate on ten-year Treasury notes rose somewhat early in the year, but thereafter remained relatively stable. The share of mortgages held in securitized form again climbed in 1989, facilitating the tapping of a base of investors. Diversified lenders, acting in part through other intermediaries, such as federally sponsored agencies, mostly filled the gap left by the thrift institutions. However, some shrinkage of credit available for acquisition, development, and construction appeared to follow from limits imposed by the FIRREA on loans by thrift institutions to single borrowers, though the reduction in funds available for these purposes probably also reflected problems in some residential real estate markets.

Aggregate debt of the domestic nonfinancial sectors grew at a fairly steady pace over 1989, averaging 8 percent, which placed it near the midpoint of its monitoring range of 6½ to 10½ percent. Although the annual growth of debt slowed in 1989, as it had during the preceding two years, it still exceeded the 6½ percent growth of nominal GNP. Federal sector debt grew 7½ percent, about ½ percentage point below the 1988 increase—and the lowest rate of expansion in a decade—as the deficit leveled off. Debt growth outside the federal sector eased by more to average 8¼ percent, mostly because of a decline in the growth of household debt. Mortgage credit slowed in line with the reduced pace of housing activity, and consumer credit growth, though volatile from month to month, trended down through much of the year. The growth of nonfinancial business debt slipped further below the extremely rapid rates of the mid-1980s. Corporate restructuring continued to be a major factor buoying business borrowing, although such activity showed distinct signs of slowing late in the year as lenders became more cautious and the use of debt to require equity ebbed.

The second half of 1989 was marked by the troubling deterioration in indicators of financial stress among certain classes of borrowers, with implications for the profitability of lenders, including commercial banks. In the third quarter, several measures of loan delinquency rates either rose sharply or continued on an uptrend. Delinquency rates on closed-end consumer loans at commercial banks and auto loans at "captive" auto finance companies were close to historically high levels. At commercial banks as a whole in 1989, both delinquency and charge-off rates for real estate loans were little changed from the previous year. Still, problem real estate loans continued to be a drag on the profitability of banks in Texas, Oklahoma, and Louisiana; in the second half, such loans emerged as a serious problem for banks in New England. On the other hand, smaller, agriculturally oriented banks continued to recover from the distressed conditions of the mid-1980s. Since 1987, agricultural banks have charged off loans at well below the national rate, and their nonperforming assets represented a smaller portion of their loans than that for the country as a whole.

The upswing in the profitability of insured commercial banks that began in 1988 only extended through the first half of 1989. A slowing in the buildup of loan loss provisions, along with improvements in interest rate margins, contributed to these gains, with the money center banks showing the sharpest turnaround. Information for the second half of 1989, although still incomplete, clearly points to an erosion of these profit gains, in part, because of problems in the quality of loans. Several money center banks sharply boosted their loss provisions on loans to developing countries, while evidence of rising delinquency rates on real estate and consumer loans suggested more widespread weakening. Despite these developments, the spread of rates on bank liabilities, certificates of deposit, and Eurodollar deposits, over comparable Treasury bill rates narrowed early in 1990.

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STUDY SUMMARY

NEW DATA ON THE PERFORMANCE OF NONBANK SUBSIDIARIES OF BANK HOLDING COMPANIES

Nellie Liang and Donald Savage—Staff, Board of Governors

Prepared as a staff study in the winter of 1989

The Federal Reserve Board is empowered to permit bank holding companies to engage in those nonbank activities that are closely related to banking and that provide net public benefits. There are few studies of the performance of nonbank subsidiaries and those bank holding companies that own them because, until 1986, little financial information had been collected from nonbank subsidiaries. Using 1986 and 1987 data from a new reporting system, this study examines the extent of the involvement of bank holding companies in nonbank activities and the profitability and riskiness of the nonbank subsidiaries.

In 1987, net nonbank assets owned by the 298 firms reporting under the new system totaled \$146.8 billion, representing 6.3 percent of the consolidated bank and nonbank assets of these firms. The ownership of these nonbank assets is highly concentrated. Among the reporting firms, the top five in terms of net nonbank assets held 59.2 percent of the net nonbank assets, and the top ten held 74.6 percent. The nation's largest banking organizations are also among the largest owners of nonbank assets. The fifty largest bank holding companies (in terms of consolidated bank and nonbank assets) held 90.6 percent of total net nonbank assets; twelve of these organizations held more than 10 percent of their total assets in nonbank subsidiaries.

For the most part, nonbank subsidiaries engage in the same lines of business as do banks. About 50 percent of aggregate nonbank assets are accounted for by the assets held in subsidiaries engaged principally in commercial finance, mortgage banking, consumer finance, and leasing. Securities brokerage subsidiaries, which engage in discount brokerage and some government securities underwriting, are also significant in terms of assets.

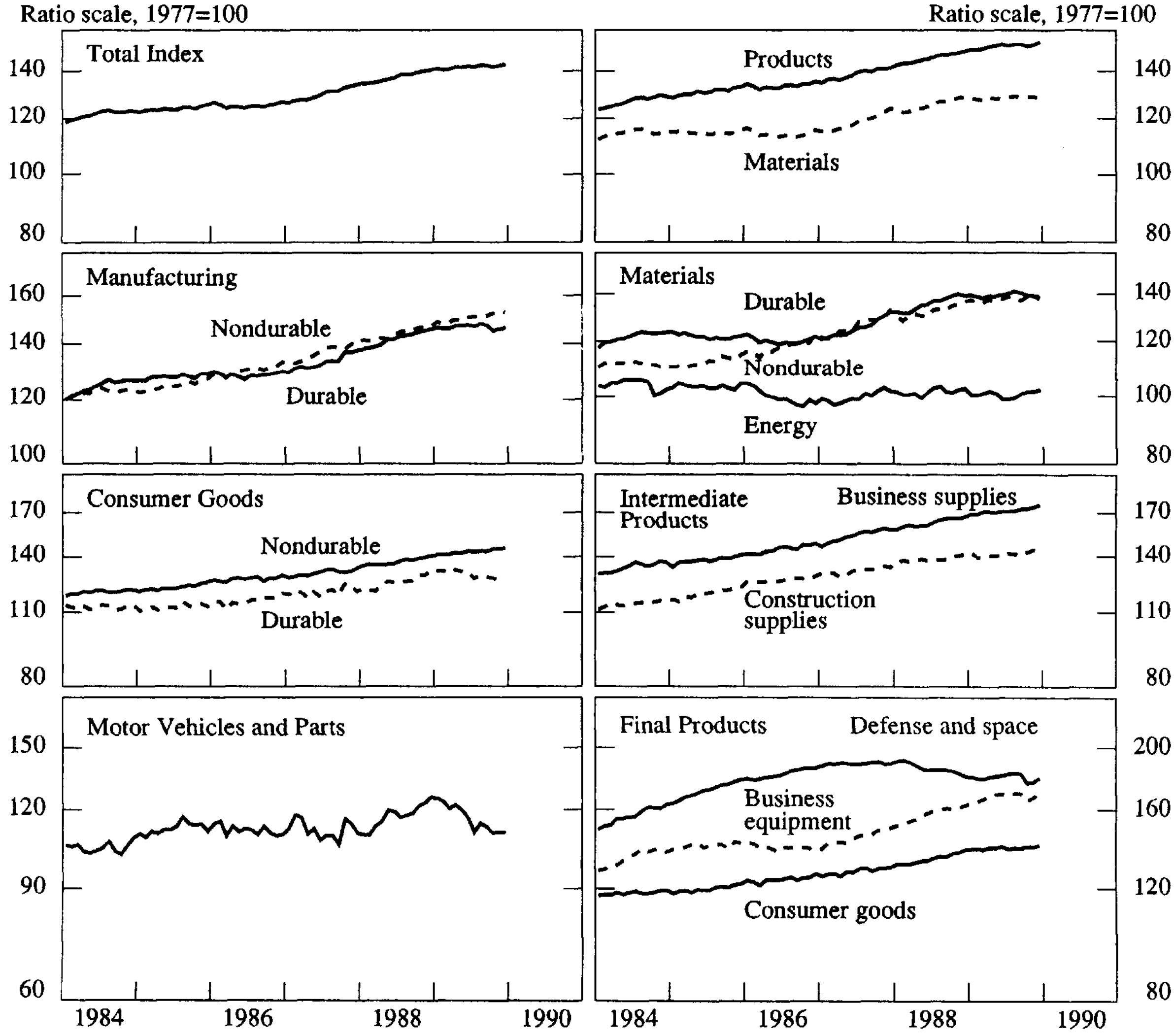
In both 1986 and 1987, profit rates of the nonbank subsidiaries were higher than the profit rates of affiliated banks and the consolidated bank holding companies. Across the different types of nonbank activities, profit rates vary widely. In general, subsidiaries engaged in insurance underwriting and the insurance agency business have relatively high returns on assets, whereas subsidiaries engaged in leasing and mortgage banking have relatively low returns.

Finally, nonbank subsidiaries are better capitalized than affiliated bank subsidiaries of bank holding companies. Some other commonly used risk measures suggest, however, that some of the nonbank subsidiaries are riskier than affiliated bank subsidiaries.

Industrial Production

Released for publication January 17

Industrial production rose 0.4 percent in December following an upward revised increase in November of 0.3 percent and slightly smaller declines in October and September than were reported last month. The extremely cold weather in December caused a sharp rise in utility output, but also resulted in some disruptions in production, particularly in petroleum refining and construction supplies. Aircraft production returned to normal in December following the settlement of a strike at a major producer in late November. At 142.8 percent of the 1977 annual average, the total index in December was 1.7 percent higher than that of a year earlier; for the fourth quarter on average, total industrial output was little changed from the third quarter. Manufacturing



All series are seasonally adjusted. Latest figures: December.

Group	1977 = 100		Percentage change from preceding month					Percentage change, Dec. 1988 to Dec. 1989
	1989		1989					
	Nov.	Dec.	Aug.	Sept.	Oct.	Nov.	Dec.	
	Major market groups							
Total industrial production	**142.3**	**142.8**	**.4**	**−.1**	**−.4**	**.3**	**.4**	**1.7**
Products, total	152.3	153.6	.5	−.1	−.6	.6	.8	2.8
Final products	150.1	151.6	.6	−.2	−1.0	.5	1.0	2.6
Consumer goods	139.8	140.6	.4	−.2	.6	−.1	.6	1.8
Durable	126.8	127.7	1.1	−.6	−.2	−.6	.7	−3.2
Nondurable	144.6	145.4	.2	−.1	.9	.1	.6	3.5
Business equipment	167.2	169.9	.8	−.2	−2.6	1.2	1.6	4.5
Defense and space	176.9	179.6	.4	−.3	−3.4	.5	1.6	−.5
Intermediate products	160.1	160.5	.0	.2	.6	.8	.3	3.5
Construction supplies	143.9	142.9	−.5	−.4	1.1	1.0	−.7	1.1
Materials	128.6	128.2	.4	−.2	.0	.0	−.3	−.1
	Major industry groups							
Manufacturing	148.6	148.8	.5	−.2	−.5	.4	.2	1.7
Durable	145.7	146.2	.7	−.4	−1.5	.4	.3	.3
Nondurable	152.7	152.6	.2	.0	.7	.3	−.1	3.7
Mining	104.4	103.2	.3	1.1	.6	.3	−1.2	−1.7
Utilities	115.5	122.7	−.5	1.0	1.2	−.3	6.3	6.3

NOTE. Indexes are seasonally adjusted.

output rose 0.2 percent in December, and factory utilization edged down to 83.1 percent. Detailed data for capacity utilization are shown separately in "Capacity Utilization," Federal Reserve monthly statistical release G.3.

In market groups, production of consumer goods rose 0.6 percent in December, mainly reflecting a surge in electricity and gas output for residential use and an increase in light truck production. Auto assemblies, at an annual rate of 6.2 million units, were unchanged from November. Output of home goods, particularly appliances, remained weak. Production of business equipment rose sharply last month as aircraft output rebounded; production of manufacturing equipment has changed little recently, but most other major sectors have posted gains.

Output of construction supplies fell 0.7 percent following sizable increases in the previous two months; the December decline reflected, at least in part, the effects of the severe weather. Materials production decreased 0.3 percent as output of basic metals, coal mining, and parts for consumer durables, mainly motor vehicles, fell significantly. These losses more than offset the weather-related jump in utility output.

In industry groups, excluding the comeback in the aircraft industry, manufacturing production would have been nearly unchanged in December. Output of motor vehicles and parts remained relatively weak in December; other related industries, such as steel, fabricated metal products, and textiles, also have declined, on balance, in recent months. The production of paper, printing, and publishing, and nonelectrical machinery posted further gains in December. Outside of manufacturing, mining output fell because coal production was curtailed by an unusually long holiday shutdown; utility output rose sharply because of the extremely cold weather.

Total industrial production—Revisions

Estimates as shown last month and current estimates

Month	Index (1977=100)		Percentage change from previous months	
	Previous	Current	Previous	Current
Sept.	142.1	142.3	−.3	−.1
Oct.	141.3	141.8	−.6	−.4
Nov.	141.5	142.3	.1	.3
Dec.	...	142.8	...	.4

Statements to Congress

Statement by Alan Greenspan, Chairman, Board of Governors of the Federal Reserve System, before the Committee on Ways and Means, U.S. House of Representatives, January 25, 1990.

I am pleased to appear before this committee today to discuss foreign investment in the United States. Over the past decade, foreign investment in the United States has increased dramatically, reflecting both the increased integration of world financial markets and the financial flows that are the necessary counterpart to large U.S. current account deficits. In my testimony today, I would like to put these developments in perspective and analyze their longer-run implications.

Both direct and portfolio investment by foreigners in the United States have soared in the past decade. Since 1980 the position of foreign direct investors in the United States has increased 300 percent. Private foreign holdings of U.S. Treasury securities have increased 500 percent, and holdings of equities have increased 200 percent. Holdings of corporate and U.S. government agency bonds also have grown rapidly, as have liabilities of banks in the United States to foreigners; growth of the latter was spurred by regulatory changes in late 1981 that permitted the creation of international banking facilities.

These statistics on foreign investments in the United States tell only part of the story of increased foreign participation in U.S. financial markets. Foreign-based financial intermediaries play an increasingly prominent role in U.S. banking and securities markets. The volume of transactions by foreigners in U.S. securities markets has increased even more dramatically than foreign holdings. For example, foreign purchases and sales of U.S. Treasury securities surpassed $3 trillion on a gross basis in 1988, up from $100 billion to $200 billion earlier in the decade. Similarly, foreign purchases and sales of U.S. corporate stocks and bonds also have been running dramatically above levels earlier in the decade, although they are off from their peak levels of a couple of years ago.

U.S. investment abroad also has grown in the 1980s, but not as rapidly as foreign investment in the United States. Although the position of U.S. direct investors abroad as measured by book value increased about 50 percent between the end of 1980 and the end of 1988, the book value of foreign direct investment in the United States rose from much lower levels to about the same total—$325 billion as of the end of 1988. However, the market value of U.S. direct investments abroad, which have accumulated over many years, undoubtedly still exceeds the market value of foreign direct investments in the United States by a substantial margin. U.S. holdings of foreign stocks and bonds also have grown in the 1980s, as have the activities abroad of U.S. financial intermediaries.

This surge in cross-border financial transactions has paralleled a large advance in the magnitude of cross-border trade of goods and services. A key factor behind these trends in international trade and securities transactions is a process that I have described elsewhere as the "downsizing of economic output." The creation of economic value has shifted increasingly toward conceptual values with decidedly less reliance on physical volumes. Today, for example, major new insights have led to thin fiber optics, replacing vast tonnages of copper in communications. Financial transactions historically buttressed with reams of paper are being progressively reduced to electronic charges. Such advances not only reduce the amount of human physical effort required in making and completing financial transactions across national borders but facilitate more accuracy, speed, and ease in execution.

Underlying this process have been quantum advances in technology, spurred by economic forces. In recent years, the explosive growth in information-gathering and processing techniques has greatly extended our analytic capabilities of substituting ideas for physical volume. The purpose of production of economic value will not change. It will continue to serve human needs and values. But the form of output increasingly will be less tangible and hence more easily traded across international borders. It should not come as a surprise therefore that in recent decades the growth in world trade has far outstripped the growth in domestic demand. As a necessary consequence, imports as a share of output, on average, have risen significantly. Since irreversible conceptual gains are propelling the downsizing process, these trends almost surely will continue into the twenty-first century and beyond.

New technology—especially computer and telecommunications technology—is boosting gross financial transactions across national borders at an even faster pace than the net transactions supporting the increase in trade in goods and services. Rapidly expanding data processing capabilities and virtually instantaneous information transmission are facilitating the development of a broad spectrum of complex financial instruments that can be tailored to the hedging, funding, and investment needs of a growing array of market participants. These types of instruments were simply not feasible a decade or two ago. Some of this activity has involved an unbundling of financial risk to meet the increasingly specialized risk management requirements of market participants. Exchange rate and interest rate swaps, together with financial futures and options, have become important means by which currency and interest rate risks are shifted to those more willing to take them on. The proliferation of financial instruments, in turn, implies an increasing number of arbitrage opportunities, which tend to boost further the volume of gross financial transactions in relation to output. Moreover, these technological advances and innovations have reduced the costs of managing operations around the globe, and have facilitated direct, as well as portfolio, investment.

Portfolio considerations also are playing an important role in the globalization of securities markets. As the welfare of people in the United States and abroad becomes increasingly dependent on the performance of foreign economies, it is natural for both individual investors and institutions to raise the share of foreign securities in investment portfolios. Such diversification provides investors a means of protecting against both the depreciation of the local currency on foreign exchange markets and the domestic economic disturbances affecting asset values on local markets. As international trade continues to expand more rapidly than global output and domestic economies become even more closely linked to those abroad, the objective of diversifying portfolios of international securities will become increasingly important. Moreover, since the U.S. dollar is still the key international currency, such diversification has been, and may continue to be, disproportionately into assets denominated in the dollar.

Another factor facilitating the globalization of capital markets and the growth of foreign investments in the United States has been deregulation. Technological change and innovations that have tied international economies more closely together have increased opportunities for arbitrage around domestic regulations, controls, and taxes, undermining the effectiveness of these policies. Many governments have responded by dismantling domestic regulations designed to allocate credit and by removing controls on international capital flows, relying more heavily instead on market forces to allocate capital. An additional factor contributing to an increase in Japanese gross investment abroad may have been the rise in stock and land prices in Japan that has been leveraged to finance these increased investments.

The 1980s were marked not just by the expansion of gross capital flows into and out of the United States but also by very large net capital inflows. As I noted earlier, foreign investment in the United States has grown faster than U.S. investment abroad. During the decade of the 1980s, the U.S. net international investment position, as published by the Department of Commerce, fell sharply from a positive $141 billion at the end of 1981 to a negative $533 billion by the end of 1988. However, these numbers should not be viewed as precise measures of U.S. net international indebtedness. Because of valuation problems in the U.S. international transactions accounts, the measurement of U.S. indebtedness could be overstated by several hundred billion dollars. Much of this overstatement is the result of the inclusion of direct investment assets in the data at book rather than market value. Nonetheless, while the precise level of our net investment position is uncertain, the direction and magnitude of recent changes are clear. They are the consequence of our large current account deficits.

The growing U.S. net international indebtedness and our large current account deficits are two sides of the same coin. Over the past decade the United States bought more goods and services from the rest of the world than it sold, and it has paid for the difference, in essence, by borrowing from, and selling assets to, foreigners. The U.S. current account moved from approximate balance in the early 1980s to a deficit of more than $140 billion in 1987. More recently, the deficit has declined, but it remains substantial.

The most important underlying cause of the surge in our net borrowing from foreigners and the deterioration in our external balance has been the substantial decline in our national savings rate against the background of a relatively stable domestic investment rate. As you are well aware, the decline in our savings rate reflected both the expansion of the fiscal deficit and some downtrend in the U.S. private savings rate. The fundamental accounting identity between savings and investment, of course, requires that any shortfall of domestic savings below domestic investment be made up in the form of a net inflow of savings from abroad.

It is important to understand just how this link between lower domestic savings and increased inflows from abroad worked in practice. The increased demand for funds to finance both the gaping budget deficit and growing private investment in the face of a declining private savings rate put substantial upward pressure on U.S. interest rates. Higher interest rates made investment in the United States more attractive to foreigners, increased demand for dollars to implement such investments, and, thereby, pushed up the foreign exchange value of the dollar. The higher dollar, in turn, reduced U.S. international price competitiveness and contributed to the widening of the external deficit. The fiscal stimulus and downtrend in private savings also led to strong growth in U.S. domestic demand, which raised demand for imports and contributed further to the external deficit.

The behavior of the U.S. national savings rate during most of the 1980s contrasted with events abroad. Over much of the past decade, other major industrial countries generally were moving fiscal policies toward restraint. In Germany and Japan, especially, government deficits were being reduced, which contributed to their external surpluses and to the outflow of financial resources from those countries.

The widening of the U.S. external deficit also was facilitated by the enhanced mobility of capital; the tremendous growth in gross capital flows undoubtedly permitted the emergence of very large net flows. On balance, though, the global integration of financial markets was probably only a facilitating factor, not a motivating force, behind the growth and persistence of U.S. net capital inflows.

The progress that has been made in reducing the budget deficit from its earlier peak levels, along with declines in U.S. interest rates and the dollar since the mid-1980s, can explain much of the more recent improvement in the external deficit. Nonetheless, we still have a long way to go to establish equilibrium in our international accounts.

The persistence of inadequate domestic savings, large current account deficits, and continued deterioration of the U.S. net international investment position remain matters of serious concern. Current U.S. savings levels are inadequate to finance the domestic investment necessary to provide rising living standards for future generations on the scale enjoyed by previous generations.

The most important contribution the Congress can make to remedying this problem is to continue the progress made in recent years in reducing the federal budget deficit. As I have stated here before, the ultimate target should be a budget surplus.

Efforts to limit directly or to discourage the inflow of capital from abroad would aggravate the problem by raising real interest rates in the United States and lowering domestic investment toward levels consistent with already low domestic savings. Even limited measures affecting only certain capital flows, such as direct investment, would necessitate larger inflows through other channels that could only be attracted at higher rates of return or with a weaker dollar.

Measures to restrict or discourage foreign investment in the United States would be undesirable for other reasons as well. The United States has benefited, and will continue to benefit, from the inevitably closer integration of world markets for goods, services, and capital. As unfolding events in Eastern Europe indicate, countries that attempt to isolate their economies from the rest of the world and do not heed market signals in allocating scarce resources pay a high price in terms of low levels of economic welfare.

The globalization of capital markets offers many benefits in terms of increased competition, reduced costs of financial intermediation that benefit both savers and borrowers, more efficient allocation of capital, and the more rapid spread of innovations. However, this internationalization does pose certain risks as well: The United States has become more vulnerable to disturbances originating outside its borders. The Federal Reserve has been actively interested in efforts to limit risks in international payments and settlement systems. In cooperation with authorities in other countries, the Federal Reserve has pressed for improved capital adequacy for banks and other financial intermediaries.

These measures to protect the soundness and integrity of our financial system are necessary regardless of whether the United States is a net debtor or a creditor. It should be noted that in the 1970s, when the United States was still a substantial net creditor, unfavorable developments led to repeated episodes of downward pressure on the foreign exchange value of the dollar. Given the vast array of financial products currently available, and the wealth of U.S. residents themselves, the size of net holdings of U.S. assets by foreigners bears little relationship to the magnitude of pressures that can arise in foreign exchange markets.

Concern about foreign investment in the United States tends to focus on direct investment; highly visible purchases, such as Rockfeller Center, Columbia Pictures, and Bloomingdales, have given rise to fears about the selling of America at bargain basement prices. However, little attention is paid to the benefits of direct investment. The operations of multinational companies play an important role in facilitating the growth of world trade in goods, services, and information. Trade and direct investment are intimately related; transactions between direct investment affiliates and their U.S. or foreign parents accounted for 35 percent of U.S. merchandise exports and 40 percent of U.S. imports in 1987—the latest year for which data are available. It is essentially impossible to separate trade from investment and vice versa. Foreign investment in the United States spurs competition, provides infusions of new capital and technology into industries like steel, and speeds the spread of technological advances.

Concerns about direct investment in the United States are understandable because these investments sometimes disrupt established patterns of doing business. But, on the whole, such concerns are overblown. It is ironic that if a Japanese real estate company buys a building in the United States, we record it as a direct investment and a possible source of concern. If, however, the real estate company dismantles the building brick by brick and ships it to Japan, it is recorded as a U.S. export, a positive event.

Acquisitions of U.S. companies by foreigners present somewhat different issues. The analysis of mergers and acquisitions in general is controversial, but one conclusion with which nearly all investigators would concur is that the American stockholders of takeover targets are big gainers. The former owners of acquired U.S. companies can reinvest these funds in other enterprises that they judge to have the highest returns. As for foreigners who outbid U.S. competitors for U.S. companies, recent news indicates that overly optimistic estimates of future earnings may have been an important factor in several important cases.

Although foreign direct investment in the United States has grown very rapidly, it is still relatively small. For manufacturing as a whole, direct investment affiliates accounted for 13 percent of assets and 11 percent of sales in 1987, the latest data available. Comparison of the role of direct investment affiliates in U.S. sales, manufacturing employment, and assets with ratios for other countries indicates that direct investment plays a much smaller role in the U.S. economy than in Canada, the United Kingdom, Germany, or France.

Most direct investment in the United States originates from the United Kingdom, Japan, Canada, the Netherlands, and Germany—countries with which the United States has close economic and political ties. Direct investment in the United States gives these countries an even larger interest in ensuring continued U.S. prosperity. Moreover, the U.S. government has ample authority to block direct investments that have a negative impact on national security or that involve undesirable concentrations of market power.

Comparison of the operations of affiliates of foreign companies with U.S. firms in the same industry indicates that research and development expenditures, wage rates, and value added do not differ systematically. Only a tendency to import more clearly distinguishes affiliates from U.S.-owned companies; however, since some foreign companies have built plants in the United States to replace imports, the net effect of direct investment on the U.S. trade balance is probably small.

One area of foreign direct investment of particular interest to the Federal Reserve Board is the banking industry. Foreign banks account for about one-fifth of all banking assets in the United States. However, in many cases foreign banks conduct largely international transactions at their U.S. offices. Foreign-chartered banks typically have not been very successful at competing for retail U.S. business, but they have been more successful in the area of commercial and industrial lending to large companies. Foreign bank participation in that market has increased competitive pressures to price loans off money market rates. U.S. consumers of banking services have benefited from a more competitive banking environment. Departure from a policy of national treatment in the banking industry could produce retaliation and could seriously complicate negotiations to ensure access of U.S. banks to markets abroad, particularly to Europe after 1992.

In conclusion, the globalization of markets for goods, services, and finance benefits both the United States and the rest of the world. Efforts to insulate the United States from the inexorable forces of increasing globalization could be very costly to our standard of living. However, continued efforts should be made to limit risks in international payments and securities settlement systems and to protect investors by increasing international cooperation and coordination of supervision and regulation.

The United States could help to ensure the orderly progress of global integration by reducing its current account imbalance. The necessary policies are not those that attack the symptoms—large accumulations of foreign assets in the United States—but rather policies that address the underlying cause, which is our inadequate national savings, particularly our large federal budget deficit. □

Statement by Alan Greenspan, Chairman, Board of Governors of the Federal Reserve System, before the Joint Economic Committee, U.S. Congress, January 30, 1990.

I am pleased, as always, to appear before this distinguished committee. As you know, the Federal Reserve will be submitting its semiannual Humphrey–Hawkins Report to the Congress in just a few weeks. At that time, I will be in a position to address more meaningfully the tactics and strategy of monetary policy. Under the circumstances, I thought it might be most useful for me to focus my initial remarks this morning on the current state of the economy.

Concerns that our long economic expansion may be nearing an end may have been intensified last week by the release of initial estimates showing that real GNP rose only ½ percent at an annual rate in the fourth quarter of 1989. To be sure, activity in that period was affected by several special transitory influences—the California earthquake, Hurricane Hugo, extraordinarily cold weather, and the long strike at Boeing. But even allowing for those factors, business activity in recent months clearly has been less vigorous than it was earlier.

The locus of the recent softness is in what we can broadly characterize as "durable" goods. Most notably, weakness has emerged in the auto industry, and this has spread to related supplier industries, including metals, textiles, and machine tools. In addition, several categories of capital goods and consumer hard goods, as well as construction of both residential and nonresidential buildings, have softened in recent months.

In evaluating trends in such long-lived physical assets, one must remember that household and business users' ownership of them does not appear anywhere in the gross national income and product accounts; nevertheless, by providing flows of services, these balance sheet items are an important determinant of the level of production. A fundamental characteristic of such durable items is that demand for them is shaped in part by the size of outstanding stocks relative to current household and producer needs. Viewed in this light, the current economic slowdown represents, at least to an extent, a pause in the accumulation of physical assets, a form of "inventory correction," so that levels of ownership do not get too far ahead of the long-term desired levels.

Because of their importance in understanding the current economic situation, it is worth examining some of these stock adjustment relationships in detail. Let me start with motor vehicles, for which manufacturers have made sizable production cutbacks recently. It appears that auto assemblies in January may fall short of an annual rate of 4½ million units, well below the rate of 7 million units over 1989 as a whole. The proximate cause of the recent production cutback was soft demand and rising dealer inventories last fall. The soft demand reflects a payback from the elevated sales pace of the third quarter during which the use of price incentives was especially heavy for the 1989 model-year cars. Moreover, demand for 1990 model-year cars has been restrained by increases in sticker prices, which in many cases exceeded 5 percent. However, with the introduction of new incentive programs, sales picked up in late December and early January. This has reduced dealer inventories to more acceptable levels, and automakers reportedly plan to step up production somewhat in the coming weeks.

Looking beneath these short-run variations in sales, production, and dealer inventories, however, current and prospective developments in the auto market reflect in part longer-range demand factors. Among the underlying forces are the existing number of motor vehicles owned per household and the average age of the auto and truck stocks. To see the role of these factors more clearly, it is useful to go back to the beginning of the last decade. Between 1979 and 1983, the number of vehicles per household—which had been on a strong uptrend throughout the postwar period—fell nearly 3 percent. A decline of 3 percent may not sound very large until you consider that it represented a shortfall of about 10 million cars and trucks between the actual stock of motor vehicles and the underlying trend stock. This decline in the ownership per household of motor vehicles was likely a result of consumer reaction to the relative increase in gasoline prices and the downturn in economic activity that occurred during the period. Also, during the late 1970s and early 1980s consumers slowed the pace at which they scrapped their existing cars and light trucks; the combination of lower scrappage and the lower sales of new vehicles pushed the average age of both the auto and truck stocks up approximately one year to more than seven years.

The combination of an enormous pent-up demand—reflecting the gap between actual and presumptive desired levels of ownership—as well as increased replacement needs associated with an aging auto stock, provided the stimulus for the extraordinarily strong pace of auto sales posted from 1983 through much of the remainder of the decade. The number of vehicles per household has risen substantially, rising well above the earlier peak, and, as scrappage rates have returned to prior levels, the average ages of the auto and truck stocks have leveled out. This rebuilding of the motor vehicle stock and stabilization in its average age suggest that the number of autos sitting in America's driveways is adequate to meet much of the desired demand for transportation equipment, and lowered sales are at this point likely to reflect primarily replacement needs and growth in the driving-age population.

In contrast to motor vehicles, the current slowdown in construction of new homes and commercial buildings seems to reflect a situation in which earlier activity was so robust that the actual stocks of residential and nonresidential structures exceed desired levels—at least in some locales. Moreover, in the housing market longer-run demographic factors also are having an effect on the underlying stock demand—especially the rate of household formation. This rate has been slowing and will slow further as more and more of the low birth cohort of the 1960s and 1970s matures into adulthood. What this means, of course, is that we need to lower our sights about what constitutes "normal" levels of homebuilding activity during the 1990s compared with the 1980s.

How the broad decade averages of demand get distributed from year to year depends in large part on financial conditions. Interest rates on home mortgages have been around 10 percent since mid-1989, and so, from the homebuyer's perspective, financial considerations have not varied to a great extent. In recent months, however, segments of the construction industry have reported difficulty in obtaining credit in the wake of newly imposed restrictions on lending by thrift institutions. Some added caution in acquisition, development, and construction lending was called for, given the riskiness of this activity, but the difficulties now being experienced by builders should diminish considerably over time as these businesses secure other financing sources for their creditworthy projects.

Despite the reduced pace of housing construction, there continues to be an overhang of new single-family homes and condominiums for sale in a few regions of the country, and rental vacancy rates in the multifamily market remain high. But, it is important to note that much of the market overhang is concentrated in the Northeast and shows few signs of leading to a national real estate market contraction. The reason is that the spread of local problems generally is limited by the geographical segmentation of real estate markets. Because neither residential property nor occupants are perfectly mobile, the market will not necessarily arbitrage away price differences observed in different local markets. Hence, softness in housing prices in some areas is unlikely to prove highly contagious in the short run. Indeed, in most areas, and on average nationally, real estate values have continued to increase.

In the case of nonresidential structures, there also is an indication of stock overhang, with vacancy rates for office space in metropolitan areas at near-record levels. Moreover, lending institutions—stung by a long series of questionable investments—are scrutinizing loan applications more carefully than in the past so that highly risky projects are not getting funded as readily. Reflecting these developments, building permits have turned down and new construction spending has been stagnant over the past year in all major sectors except industrial building.

Business demands for new equipment also reflect, to a large degree, stock-adjustment motives. Recently available data for the fourth quarter show that a sizable deceleration in business equipment spending is under way, reflecting the general slowdown in economic activity and expected sales. Real spending on producers' durable equipment fell more than 4 percent at an annual rate in the fourth quarter. Part of the decline resulted from the work stoppage at Boeing; but even allowing for that special factor, real equipment outlays still declined somewhat.

Looking forward, recent data are offering mixed signals about future capital spending. For example, orders for nondefense capital goods received in November and December show a bounceback from the decline that had occurred in the third quarter. Other indicators of capital spending, however, give the impression of softness ahead. For example, recent declines in real cash flow of nonfinancial corporations do not bode well for investment spending in the near term. In the 1980s, growth in cash flow—measured as the sum of undistributed after-tax profits and depreciation allowances—tended to move with growth in real gross business fixed investment. Thus the recent cash-flow experience—which has signaled a deterioration in the availability of internal funds—is one factor likely to be a restraining influence on capital spending in 1990. Moreover, this signal is being reinforced by surveys of plant and equipment expenditures taken this past fall that indicate real capital spending will grow less this year than last, the deceleration being most noticeable among nondurable manufacturing and nonmanufacturing firms.

Until now, I have been sketching the negative side of the economic landscape. Let me now suggest where we can look for more favorable signs. First, demand for long-lived assets is still growing in some areas, creating opportunities for strong production growth. This is most clearly evident in the case of civilian aircraft for which the level of the orders backlog has doubled over the past two years. Second, in contrast to some past cycles, we have not seen the type of speculative buildups of materials and finished goods by businesses that can exacerbate the effects of any weakening in sales trends. I believe one reason for this is that thus far we have avoided a cyclical upswing in inflation, so that the buy-in-advance motive has been less of an influence. Third, foreign demand for many of our manufactured products is strong. Real export growth of manufactured goods, although down somewhat from the torrid pace of 1988, remains sizable. Strength runs across a wide variety of consumer and capital goods as well as industrial supplies.

Fourth, there is evidence from labor markets that the spillover effects from durable manufacturing have been limited. Although manufacturing employment has fallen nearly 195,000 jobs since last March, total private nonfarm payrolls have continued to rise, with the increase totaling about 1½ million over that period. The contribution from the health services area to the overall increase has been especially noteworthy. Employment in medical care, which made up about 7 percent of total payroll employment early last year, has increased nearly 400,000 since then. Other sizable employment contributions have come from business services and state and local governments.

Favorable signs about the economy's economic health are also revealed by comparing recent movements in an index of leading economic indicators with its pattern of movements just before and during previous recessions. Recently, statistical procedures have been developed that allow such a comparison to be translated into the likelihood of a recession. These procedures have been applied by Board staff to the Commerce Department's index of leading economic indicators, which comprise several real and financial market variables. The resulting measure suggests that the probability of a recession developing in the next six months increased last spring to almost 30 percent, but according to the most recent estimates has declined to about 20 percent.

A second probability-of-recession measure is based on a leading index recently compiled by economists at the National Bureau of Economic Research, which relies less heavily on data from the manufacturing sector than does the Commerce Department index and does not include stock prices. The probability of a recession in the next six months based on the National Bureau of Economic Research (NBER) index also has declined since last spring and according to the December reading stands at about 10 percent. Both probabilities are much smaller than those occurring at the beginning of each of the four recessions since the late 1960s. For example, the probability exceeded 50 percent shortly before each of the previous recessions using the NBER index.

I wouldn't want to "bet the ranch" on such statistical measures. I think we must continue to monitor developments closely and stay alert to the possibility that, perhaps reinforced by some adverse shock not now visible, the weakness in the several sectors I have discussed might cumulate and lead to a more widespread downturn in activity. But such imbalances and dislocations as we see in the economy today probably do not suggest anything more than a temporary hesitation in the continuing expansion of the economy. □

Statement by E. Gerald Corrigan, President, Federal Reserve Bank of New York, before the Subcommittee on Domestic Monetary Policy of the Committee on Banking, Finance and Urban Affairs, U.S. House of Representatives, February 6, 1990.

I am pleased to appear before you this morning to lend my support to House Joint Resolution 409, which calls for Federal Reserve monetary policy to be conducted with a view toward achieving price stability in five years. I want to applaud your efforts for taking the initiative on this important matter. There is no doubt in my mind that our economy would perform better, our citizens would be better off, and our international competitiveness would improve in a setting in which the goals of this resolution were achieved. There is also no doubt in my mind that the primary (but not sole) mission of the central bank should be to promote a noninflationary economic environment. Finally, I believe that monetary policy in the United States is capable of achieving that result, but how quickly it is achieved, at what cost, and how sustainable that environment proves to be will depend importantly on other aspects of economic policy both here and, increasingly, in other countries as well.

In this context, it seems to me that the resolution raises two basic issues that warrant the careful consideration of the subcommittee and the Congress as a whole. The first relates to the definition of price stability and the second relates to the costs that may be incurred in moving toward price stability and, more importantly, what we, as a nation, can do to minimize such costs.

Let me turn first to the definitional question. The resolution incorporates a definition of price stability that is couched in terms of a pattern of behavior in which expectations of future price changes play no role in decisionmaking on the part of businesses, households, and governments. This definition is conceptually sound because inflation is at least as much a state of mind as it is a statistic. To be a bit more concrete, I would suggest that the spirit of the resolution would be essentially attained if we were able to return to the pattern of behavior that characterized the period from 1955 through 1965, when the average annual change in the consumer price index (CPI) was only 1.5 percent. Such an outcome would also closely approximate experience over the past few years in Japan, Germany, and the Netherlands, the industrial countries that have been among the leaders with regard to containing inflation over most of the 1980s. In short, the goal of seeking to replicate a pattern of price performance that approximates our own national experience between 1955 and 1965 and to realize that goal in the timeframe of the mid-1990s strikes me as appropriate.

The second major issue relates to the costs incurred in the transition to such an environment and the sustainability of that environment once it is achieved. There is absolutely no question that bringing the underlying inflation rate down from its current level of about 4.5 percent to about 1 or 1.5 percent will involve costs in terms of at least some shortfall of actual output relative to potential output over the transition period. Moreover, history here in the United States, as well as experience in all other countries, suggests that such costs *could* be large. Indeed, I am very hard pressed to recall a single case in which a significant reduction in inflation was accomplished in a major industrial country without relatively large costs. And, in cases in which the costs were more moderate and the success more lasting, the adjustment process typically has been assisted by complementary moves on the part of fiscal or other elements of economic policy. But, even under the best of circumstances, some costs will be incurred. For example, over the last decade, in both Germany and the Netherlands—the European superstars on the inflation front—the unemployment rate has been quite high by historic and international comparative standards.

Having said that there will be at least some costs associated with the transition, let me hasten to add that it is not easy to judge just how small or how great those costs might be. This is true, in part, because these costs can vary significantly, depending on the broad economic and expectational environment in which the transition is made. To illustrate some of the dimensions of this situation, I have attached to my statement a table containing a cross section of economic statistics covering the 1955–65 and the

1983–89 periods. Clearly a handful of statistics cannot begin to capture all the elements and all the dynamics of a multitrillion dollar economy, but I believe they convey many useful insights.

The first cluster of those statistics provides a quick comparison of five measures of overall economic performance over the two periods. These statistics suggest that the growth of real GNP was not, on average, wildly different in the two periods. In fact, the similarity in the average growth rates of real GNP in the two periods is very striking. However, the "core" inflation rate was much higher in the 1980s and unemployment materially lower in the earlier period even though the unemployment rate at the end of the 1980s had converged significantly toward its level in 1965.

To some extent, these differences in inflation and unemployment may reflect changed structural features in the economy. To illustrate this, the second set of statistics shows that over the interval spanned by the two time periods, we have experienced a significant increase in the following: (1) labor force participation rates; (2) the share of the population in the household formation age bracket of 25 to 44 years of age; and (3) the share of GNP that is accounted for by consumer spending on services, in which inflation rates tend to be relatively high.

However, even after allowing for these changed structural features of the economy, the "core" rate of inflation in the 1980s is both too high and is materially higher than it was in the 1955–65 interval. To shed further light on this, the third set of statistics presents data on compensation per hour, productivity, and unit labor costs for the private nonfarm economy. At least in a proximate sense, these data provide particularly good insights into the dynamics of the core inflationary process. In looking at these data, it is important to keep in mind that the aggregate compensation bill represents a sizable fraction of GNP. Therefore, as an approximation over time, it follows that the only way in which the core inflation rate can rise at a materially slower rate than the rise in unit labor costs would be when profitability is falling. That is particularly important in the current setting in which profits already are squeezed and the share of "economic" profits in GNP is near to an all-time postwar low.

With those qualifications in mind, the most striking feature of the third set of statistics is that by far the largest factor contributing to the more rapid rise in unit labor costs in the 1980s is *not* the rate of increase in compensation but the distinct slowing of productivity growth. The immediate situation is even worse than the average for 1983–89 since over the past four quarters productivity growth has slowed to only 1 percent and unit labor costs are rising at 4.3 percent. I might also add in this regard that recent patterns of productivity increases in the United States not only look poor relative to the 1955–65 period but

Selected macroeconomic statistics

Economic indicators	Average		
	1955–65	1983–89	
Economic performance			
Percent change in nominal GNP	6.0	7.5	
Percent change in real GNP	3.6	3.9	
Percent change in CPI	1.4	3.6	
Excluding food and energy	1.6[1]	4.3	
Average unemployment rate	5.3	6.9	
Unemployment rate at end of period	4.5	5.3	
Structural change in the economy			
Percent of civilian population aged 16 or more in labor force	59.2	65.2	
Percent of total population aged 25–44	26.2	31.3	
Consumer spending on services as percent of GNP	25.4	34.3	
Underlying inflation[2]			
Percent change in compensation per hour	4.3	4.4	5.4[3]
Percent change in productivity	2.6	1.8	1.0[3]
Percent change in unit labor cost (all data for private nonfarm economy)	1.6	2.6	4.3[3]
Financial performance			
Percent change in M2[4]	6.5[5]	7.4	
Inflation adjusted long-term bond yield[6]	2.4	6.0	3.7[7]
Inflation adjusted long-term bond yield using CPI, excluding food and energy	2.4[1]	5.3	4.0[7]
Underlying characteristics of the U.S. economy[2]			
Federal budget deficit as percent of GNP	.1	4.1	
Current account balance as percent of GNP	.6	−2.6	
Net private savings as percent of GNP	7.7	6.5	
Excluding state and local government balances[8]	7.8	5.2	
Net private investment as percent of GNP	6.9	4.8	
Net domestic savings gap as percent of GNP	.8	−2.4	
Net economic profits as percent of GNP	10.3	6.6	
Net foreign assets or liabilities (−) as percent of GNP at end of period	n.a.[9]	−11.7	

1. Based on 1958–65 average.
2. 1989 data are based on estimates.
3. Percent change, 1988:3 to 1989:3.
4. Annual data calculated on fourth-quarter-to-fourth-quarter basis.
5. 1955–59 data are based on estimates.
6. Ten-year bond yield less change in CPI.
7. 1989.
8. Includes state and local government surplus or deficit.
9. 5.7 percent at end of 1970.

n.a. Not available.

also look quite poor by international standards as well. For example, overall productivity increases not only in Japan and Germany, but also in France and the United Kingdom, have outpaced those in the United States during the 1980s. While I will return to this point later, it is quite clear to me that if we want to achieve and sustain major improvements in inflation at modest costs, we are going to have to do much better on the productivity front than has been our recent history. The reason for this is quite straightforward: Namely, the higher the rate of productivity growth, the lower the rise in unit labor costs associated with any given rate of compensation increase and the smaller the amount of slack needed in labor markets to achieve that lower rise in unit labor costs.

The next set of data in the table provides some insights on financial indicators during the two periods under study. These, too, might be surprising to some, especially since the growth of M2 over the two intervals was quite similar. However, there is a striking difference between the inflation-adjusted interest rates on long-term bonds over the two periods—a difference that, at first blush, seems difficult to explain. For the 1983–89 period as a whole, the very high, real long-term interest rates are somewhat exaggerated by extraordinarily high rates earlier in the period as the economy adjusted from the very high inflation rates of the early 1980s. However, even at the end of 1989 the inflation-adjusted long-bond rate of about 4 percent was still about 1.5 percentage points above its average during the 1955–65 period. The last set helps shed some light on this difference and, in my judgment, gets right to the heart of many of our current economic difficulties.

There are truly massive differences in the behavior of the federal budget and current account relative to GNP in the two periods, as well as associated sharp differences in the private savings and investment rates relative to GNP (bottom panel of the table). These differences can have profound implications both for how the economy works and for the costs associated with the transition to price stability. For example, with the investment rate as low as it is, should we be all that surprised that productivity behavior has been so poor? In fact, the investment situation may be even worse than indicated; some analytical work by my colleagues at the Federal Reserve Bank of New York suggests that the stock of net capital *per worker* has been essentially flat over the past three years.

As another example that can be drawn from the lower panel of the table, should we be surprised that real interest rates are so high when our domestic credit demands far exceed our domestic savings and, as a result, we must finance much, and at times virtually all, of our budget deficit by attracting savings flows from the balance of the world in a setting in which our net external liabilities are now so large. To be sure, other factors such as volatility in economic growth patterns and high and volatile inflation rates also play a role in explaining the relatively high level of U.S. real interest rates in recent years. But, the persistent domestic savings gap and the resulting need to attract so much savings from abroad in recent years have to be recognized as significant factors in this regard.

As I mentioned earlier, I am under no illusion that these few statistics can tell the whole story about a large and complex economy such as that of the United States. Despite these limitations, I think the message from these statistics is clear: We have some major imbalances in our economy, which, among other things, have a direct bearing on the relative ease—or lack thereof—with which the transition to price stability can be managed. For example, to the extent that the savings gap is eliminated by balancing the federal budget, we would at least have much more room to finance domestically a higher rate of private investment, which, in turn, would assist productivity performance over time. Similarly, in those same circumstances, the potential for some decline in real interest rates is clear, although we must recognize that our status as a large net debtor nation may limit the scope of these gains.

To put it differently, moving toward and sustaining a noninflationary environment will be even easier if we have genuine success in implementing policies that will deal with the closely interrelated problems of low savings, low investment, and low productivity growth. But, these gains will only come slowly.

There is one other crucial variable that could make an enormous difference with regard to containing the costs of the transition to price stability, and that is the role of expectations. Many models of the economy and most elements of casual observation suggest that expectations of future inflation are importantly, if not decisively, influenced by experience with inflation in the recent-to-intermediate-term past. Econometric analysis also suggests that the deeper those expectations are entrenched, the more difficult and more costly will be the task of winding down inflation. By the same token, the less entrenched, and even more important, the more forward looking such expectations are, the lower will be the cost of moving toward and achieving price stability.

For this reason, if the American public were convinced that the national commitment to price stability was real and lasting, the transition problem would be much easier and less costly. However, it is going to take much more than rhetoric to produce that change in expectations. Even if H.J. Res. 409 were to become law with broad-based bipartisan support, I am not at all sure that the public would immediately and fully adjust their expectations in a major way so long as perceptions about our national economic imbalances in areas such as the budget deficit remain unchanged. In other words, a change in expectations about future inflation would make a very major contribution to our success in achieving a noninflationary environment, but that change will not come easily or automatically.

In closing, I think that it is essential that any discussion of the costs of moving to price stability also includes a parallel discussion of the costs of coexisting with something like the current rate of inflation and the ever-present danger that the inflation rate could move still higher. Virtually every observable facet of economic and financial history—here in the United States and around the world—tells us that high or rising rates of inflation are simply incompatible with sustained economic prosperity. Inflation inevitably undermines economic and financial discipline; it can arbitrarily redistribute income; it surely undercuts international competitiveness; and it can induce wholly unnecessary and costly elements of volatility in interest rates and exchange rates. Moreover, so long as an inflationary environment persists, these costs are ongoing and cumulative. Looked at in this light, the costs of gradually winding down inflation—especially if we are able to maintain the discipline to keep the inflation down—look far less foreboding. Nevertheless, both minimizing the transition costs and maximizing the prospects of sustaining a noninflationary environment make it all the more clear to me that those complementary efforts aimed at the savings gap, the investment rate, and productivity growth are very important indeed. □

Statement by W. Lee Hoskins, President, Federal Reserve Bank of Cleveland, before the Subcommittee on Domestic Monetary Policy of the Committee on Banking, Finance and Urban Affairs, U.S. House of Representatives, February 6, 1990.

I am pleased to appear before this subcommittee to testify on House Joint Resolution 409. I strongly support your resolution directing the Federal Reserve System to make price stability the main goal of monetary policy. Ultimately, the price level is determined by monetary policy. While economic growth and the level of employment depend on our resources and the efficiency with which they are used, the aggregate price level is determined uniquely by the Federal Reserve. Efficient utilization of our nation's resources requires a sound and predictable monetary policy. H.J. Res. 409 wisely directs the Federal Reserve to place price stability above other economic goals because price stability is the most important contribution the Federal Reserve can make to achieve full employment and maximum sustainable growth.

The Benefits of Price Stability

Price Stability Leads to Economic Stability

An important benefit of price stability is that it would stabilize the economy. High and variable inflation has always been one of the prime causes of financial crises and economic recessions. Certainly U.S. experience since World War II reaffirms the notion that inflation is a leading cause of recessions. Every recession in our recent history has been preceded by an outburst of cost and price pressures and the associated imbalances and distortions. A monetary policy that strives for price stability, or zero inflation, as mandated by H.J. Res. 409, would help markets avoid distortions and imbalances, stabilize the business cycle, and promote the highest sustainable growth in our economy.

Price Stability Maximizes Economic Efficiency and Output

A market economy achieves maximum production and growth by allowing market prices to allocate resources. Money helps make markets work more efficiently by reducing information and transactions costs, thus allowing for better decisions and improved productivity in resource use. Stabilizing the price level would make the monetary system operate more efficiently and would result in a higher standard of living for all Americans. Money is a standard of value. Much of our wealth is held either in the form of money or in claims denominated in and payable in money. Money represents a claim on a share of society's output. Stabilizing the price level protects the value of that claim while inflation reduces it.

When we borrow, we promise to pay back the same amount with interest. When we allow unpredictable inflation, we arbitrarily take from the lender and give to the borrower. When this condition persists, we create an environment in which interest rates rise once to accommodate expected inflation and again to accommodate the increased risk involved in dealing with an uncertain inflation. When inflation rises and becomes uncertain, people are forced to develop elaborate, complicated, and expensive mechanisms to protect their wealth and income, such as new accounting systems, markets for trading financial futures and options, and cash managers who spend all their time trying to keep cash balances at zero. It would be inefficient to allow the length of a yardstick to vary over time, and it is inefficient to allow inflation to change the yardstick for economic value.

While the evidence that price stability maximizes production and employment is not as direct or as extensive as I would like, it is persuasive to me. One source of evidence can be found in the comparison of inflation and real growth across countries. Several studies find that higher inflation or higher uncertainty about inflation is associated with lower real growth.

Inflation adds risk to decisionmaking and retards long-term investments. Inflation causes people to invest scarce resources in activities that have the sole purpose of hedging against inflation. Inflation interacts with the tax structure to stifle incentives to invest.

More evidence comes from the extreme cases, the cases of hyperinflation. There we see that economic performance clearly deteriorates with high inflation. Both specialization and trade decline as small firms go bankrupt and people return to home production for a larger share of goods and services.

Even a relatively predictable and moderate rate of inflation can be quite harmful. During the seven years of our economic expansion since 1982, inflation has averaged between 3 and 4 percent. While that is low by the standards of the 1970s, the purchasing power of the dollar has been reduced about 25 percent. Interest rates continue to include a premium for expected inflation and a premium for uncertainty about inflation.

Research at the Federal Reserve Bank of Cleveland indicates that a fully anticipated inflation, with no uncertainty about future inflation, would reduce the capital stock through taxes on capital income. Using 1985 as a benchmark and using conservative assumptions, we have estimated that the interaction of an expected 4 percent inflation rate with the tax on capital income leads to a present value income loss in the American economy of $600 billion or more. This is an amount much greater than the output loss typically associated with recessions. This estimate is from a policy of a perfectly anticipated 4 percent inflation and includes only the welfare loss associated with the failure to fully index taxes on capital income. It ignores the greater damage done to market efficiency by making our monetary yardstick variable.[1]

Even beyond these costs, I believe that inflation diminishes productivity growth. Because the worldwide slowdown in productivity growth occurred simultaneously with the acceleration in inflation and the oil price shocks, the evidence is very difficult to sort out satisfactorily. But if I am correct in believing that inflation inhibits productivity growth, the present value of lost output from even a very small reduction in the trend of productivity growth would far exceed the adjustment costs associated with the transition to price stability.

The Limitations of Monetary Policy

A Fallacious Trade-Off: Inflation for Prosperity

Unfortunately, over the years we have come to believe that we can prolong expansion, or avoid recession, with more inflation. A look at recent history reminds us that there is no trade-off between inflation and recession. Although we do not understand recessions completely, we have seen that they can be caused by monetary policy actions as well as by nonmonetary factors.

In the early 1980s we had recessions caused by monetary policy mistakes. The policy mistake was the excessive monetary growth of the 1970s, which allowed accelerating inflation and rising interest rates and ultimately led to the need for disinflationary monetary policies. The disinflationary policies were necessary to get our economy back to an acceptable level of real activity. Yet even today, we are apt to blame the recessions on policies that reduced inflation instead of blaming the policies that created the inflation to begin with. While recessions will occur even under an ideal monetary policy, they will not be as frequent or as severe. With price stability, we would not have recessions induced by inflation and the subsequent need to eliminate it.

Even if we thought that eliminating the business cycle was a desirable and healthy long-term goal, I believe it is impossible to do so. There are several reasons that prevent us from using monetary policy to offset nonmonetary surprises. First, we cannot predict recessions. Second, monetary policy does not work immediately or predictably; it works with a lag, and the lag is variable and poorly understood.

The Crystal Ball Syndrome

The limitations of economic forecasting are well known. Analysis of forecast errors has shown that we often do not know that a recession has begun until it is well under way. At any point in time, the range of uncertainty around economic forecasts of business activity for one quarter in the future is wide enough that both expansion and recession are plausible outcomes.

The people who make forecasts and those who use them often get a false sense of confidence because forecast errors are not distributed evenly over the business cycle. When the economy is doing well, forecasts that prosperity will continue are usually correct. And when the economy is performing poorly, forecasts that the slump will continue are also usually correct. The problem lies in predicting the turning points. However, the turning points are the things we must forecast to prevent recessions.

Monetary Policy's Long and Variable Lags

We do not know exactly how a particular policy action will affect the economy. Macroeconomic ideas about monetary policy and its effect on real output have changed profoundly in the last decade, as we have recognized that the effect of monetary policy depends importantly on how economic agents form and alter expectations about policy.

Even if we could predict recessions and wanted to vary monetary policy to alleviate them, we still face an almost insurmountable problem—monetary policy operates with a lag. Moreover, the length of the lag varies over time, depending on conditions in the economy and on public perception of the policy process. The effect of today's monetary policy actions

1. David Altig and Charles T. Carlstrom, "Expected Inflation and the Welfare Losses from Taxes on Capital Income," Federal Reserve Bank of Cleveland, February 1990.

will probably not be felt for at least six to nine months, with the main influence perhaps two to three years in the future. The act of trying to prevent a recession may not only fail, but may also create a future recession—via an inflation—where otherwise there would not have been one.

Economic agents, businessmen, and consumers alike do not act in a vacuum. The political forces operating on a central bank make inflation always a possibility. Uncertainty about future inflation adds risk to future investments. Uncertainty about future inflation will raise real interest rates, drive investors away from long-term markets, and delay the very adjustments needed to end the recession. The more certain people are about the stability of future monetary policy, the more easily and quickly inflation can be reduced and the economy can recover.

Lessons We Should Have Learned

If we have learned anything about economic policymaking in the last twenty years, we ought to have learned to think about policy as a dynamic process. To claim that "in order to reduce inflation, we must have a recession," is a wrongheaded notion that completely ignores the ability of humans to adapt their expectations as the environment changes.

People do their best to forecast economic policies when they make decisions. If the central bank has a record of expanding the money supply in attempts to prevent recessions, people will come to anticipate the policy, setting off an acceleration of inflation and misallocation of resources that will lead to a recession.

An economy often goes into recession after an unexpected burst of inflation because people have made decisions that were based on an incorrect view of the future course of asset prices and economic activity. The central bank can help prevent the need for such adjustments by providing a stable price environment. Moreover, price stability will be the optimal setting for adjustments in business inventories and bad debts, should such adjustments be necessary.

The Importance of Adopting House Joint Resolution 409

Sound Policies Minimize Uncertainty

Economic policies must have clear objectives, verifiable outcomes, and rules that are consistently adhered to in order to minimize uncertainty. Predictable, verifiable policies ensure that long-term planning and resource allocation decisions will be efficient. Sound policy thus requires a resolute focus on the long term and resistance to policies that, while expedient in the short run, introduce more uncertainty into an already unpredictable world. If enacted, H.J. Res. 409 would make a valuable contribution to this important objective.

In the long run, inflation is the one economic variable for which monetary policy is unambiguously responsible. The zero inflation policy called for in H.J. Res. 409 satisfies the key requirements of sound policy: It is clear, it is verifiable, and it has consistent rules. Unlike other rates of inflation, zero inflation is a policy goal that will be understood by everyone.

Responding to Multiple Goals

The Federal Reserve Reform Act of 1977 amended the Federal Reserve Act so that it now requires the Federal Reserve ". . . to promote effectively the goals of maximum employment, stable prices, and moderate long-term interest rates." However, it is the Federal Reserve's responsibility to decide how best to pursue those goals.

Because of the multiplicity of goals established by the Congress for the Federal Reserve, the Federal Reserve can choose which goal it emphasizes at any moment. Such discretion increases the likelihood that political and special interest groups could try to influence the Federal Reserve to pursue the policy that is currently important to that group.

In this respect, the Federal Reserve's situation is different from that of West Germany's central bank, which is also independent. More than one goal is specified by law for that bank, but German law states that the goal of price stability is to be given highest priority whenever another goal might conflict with maintaining price stability. This stipulation is a major reason why West Germany's price level only doubled between 1950 and 1988, while the U.S. price level quadrupled.

Since current law requires the Federal Reserve to promote maximum employment, stable prices, and moderate long-term interest rates, the Federal Reserve must choose a viable strategy to accomplish this mission. Two approaches seem plausible.

One approach would be for the central bank to try to achieve a balance among its three congressionally mandated objectives. The Federal Reserve could use its own judgment about what balance among the objectives to pursue, and could change that balance from time to time, depending on its view of how the economy works and what course is broadly acceptable to the public. In essence, this is the practice that the Federal Reserve has followed. It has strived to balance desirable economic conditions such as full employment, economic growth, and low long-term interest rates with low rates of inflation. But the major drawback to this approach is its feasibility. To strike a balance among the mandated goals requires that they be reliably linked to one another. Furthermore, monetary policy would need to be capable of influencing simultaneously all these economic dimensions in the desired directions and quantities.

While monetary policy is capable of influencing the economy in the short to intermediate run, over long periods of time monetary policy can only affect the rate of inflation. The rate of inflation, in turn, affects all dimensions of economic performance, including output, employment, and interest rates. Maximum production and employment and low interest rates can be achieved only with price stability.

By its very nature, a balancing act among complex economic goals causes substantial confusion about the Federal Reserve's intentions. Such confusion could be avoided to a large degree if the Congress or the Federal Reserve assigned priorities to the goals.

A more promising approach is to select one objective—the only one that the Federal Reserve can influence directly. Under the provisions of H.J. Res. 409, the Federal Reserve would seek to maintain a stable price level over time. Price stability is defined as an inflation rate so small that it does not systematically affect economic decisions. The definition may appear less specific than some would like, but I believe that the decisions of economic agents will be very important in monitoring success in achieving price stability. In practice, the size of the inflation premium estimated to be found in long-term interest rates, surveys of the public's inflation expectations, and other market-generated measures of inflation expectations can be very useful. If policy is credible, both the inflation component and the inflation uncertainty risk premium would be eliminated from interest rates. Temporary and unforeseen factors will cause the price level to deviate from the desired course. It would be a mistake to try to keep some inflation index on target each and every quarter, or even each and every year.

Price stability can be achieved by holding the money supply (as measured by M2) on or close to a path that is consistent with price stability over long periods. The relationship between money and the price level over long periods of time is stable and strong. However, the link between money and the economy over periods perhaps as short as a year is loose enough to afford the Federal Reserve considerable leeway in responding to problems and crises—as long as economic agents believe that the future value of money will be stable. Clearly, this resolution would not prevent the Federal Reserve from providing liquidity in times of financial crises, such as the stock market crash in 1987.

Announcing a Commitment to Price Stability

Announcement of a commitment to price stability, as embodied in H.J. Res. 409, would enhance the ability of the Congress to hold the Federal Reserve accountable for achieving the goal. Central bank accountability is appropriate in a democracy and, in fact, the Congress has the ultimate authority to change the Federal Reserve's goal.

A legislative commitment to price stability would also enhance the Federal Reserve's independence from political pressures as it pursued that goal. A commitment by the Congress to price stability would reduce the effectiveness of political pressure to deviate from that goal. Thus, a distinction can be made between a central bank that is accountable for long-run performance and a central bank that can be influenced to pursue short-run goals that might be incompatible with desirable long-term economic performance.

The commitment to price stability supported by a legislative mandate would foster the credibility of the Federal Reserve. Improving the Federal Reserve's credibility would strengthen the expectation that prices will be stable and would contribute to price and wage decisions that would make price stability easier to achieve and maintain.

Arguments Against Adopting House Joint Resolution 409 Are Weak

What About the Transition Costs?

A commitment by the Congress and the Federal Reserve to achieve price stability would entail adjustment costs. Adjustment costs would arise from two sources: contractual obligations and the credibility problem, or uncertainty about whether price stability would be achieved and maintained. The contractual costs can be alleviated with an appropriate adjustment period. H.J. Res. 409 recognizes that abrupt policy changes can be disruptive and provides a phase-in period to help reduce adjustment costs.

Much of our day-to-day economic activity is conducted under contracts and commitments that extend over longer periods of time and that embody the expectations of a continuing moderate inflation rate. Most of these contracts will expire in the next few years. The disruption to business and the arbitrary wealth redistribution of an abrupt adjustment to price stability would be greatly reduced by an appropriate phase-in period. H.J. Res. 409 gives us five years to get to price stability—a period long enough to reduce substantially the transition costs.

The second set of adjustment costs emanates from the expectations of economic agents. As the Congressional Budget Office (CBO) points out in its recent *Economic and Budget Outlook,* if everyone believed that inflation would be reduced to zero, and planned accordingly, these costs would be very low. The Federal Reserve has stated that it intends to reduce inflation to zero or to low levels, but it has not committed to a specific timetable for eliminating inflation, or to a plan for doing so. The result is that the public in general and the markets in particular wonder just how serious we are in those intentions, or whether we will switch our priorities to some other goal, as we have in the past.

Large-Scale Econometric Model Estimates of the Transition Cost

Economists have not made much progress in estimating the transition costs of eliminating inflation. Frequently, econometric models that embody a large number of complex relationships and variables are used to estimate the adjustment costs. For manageability, econometric models are built with many simplifying assumptions, one of which is the presumption that economic agents are backward looking in the way they form and change expectations. In these models, expectations, which in effect determine adjustment costs, are formed from past experience, and are changed only slowly as the future unfolds. The presumption that expectations change only slowly inevitably generates estimates of high transition costs. The real question about a change in policy as specified by H.J. Res. 409 is how forward-looking economic agents would behave under a fully credible and fully understood policy change. Backward-looking models are relatively useless in answering this question.

In almost every case, such models are constructed to display the effects that are consistent with the model builder's theories and biases. Almost all of the large models are based on the dual notion that the only way to eliminate inflation is to raise the unemployment rate. Naturally, these models will find that eliminating inflation is very costly. These exercises have been conducted many times in the past, and they have consistently overestimated the costs of eliminating inflation and ignored the benefits of doing so. I might also observe that those who really believe the analytical structures contained in these models logically should advocate an acceleration of inflation because the models would predict great benefits from doing so.

One member of the Council of Economic Advisors, an expert on such matters, has developed large econometric models with sluggish resource adjustment induced by labor contracts. Even in these models, there is almost no short-run cost to eliminating inflation with a credible policy change. The reason is simply that, in these models, people are assumed to change their behavior in response to the policy change.

As the CBO study states, "inflation could be reduced relatively painlessly by lowering inflationary expectations." A commitment by the Congress and the Federal Reserve would enhance credibility and convince economic agents to begin to base decisions on gradual elimination of inflation over a five-year period. The transitional costs presented elsewhere in the CBO study then would be grossly overestimated.

A consistent commitment to a long-run policy goal of price stability is important. One of the worst things we could do is to eliminate inflation for a while and then return to high inflation later. H.J. Res. 409 would contribute to an important change in the policy process, focusing it toward consistent long-run goals and away from reactions to each new report of economic activity. Each policy action would become part of a policy process that is consistent with long-run price stability.

Fiscal Policy Is No Obstacle to Price Stability

Federal budget deficits should not compromise either the Federal Reserve's goal of price stability or the adoption of a specific timetable to achieve it. I do not mean to suggest or imply that current fiscal policy is ideal, appropriate, or the result of bad monetary policy. Savings are too low, at least partly because of budget deficits, and measures to address our savings shortfall must include measures to reduce the deficit. However, while we strive for better fiscal policy, we should recognize that monetary policy cannot offset whatever harm may result from fiscal policy; indeed, it can only add to those costs.

We are all familiar with the argument that large federal budget deficits cause high interest rates, forcing the Fed to ease monetary policy to keep interest rates at levels consistent with full employment. This argument ignores the fact that both the federal budget deficit and, more important, government spending, at least measured relative to the economy, have been falling for the past several years and should continue to do so.

There is, of course, legitimate concern that the progress in deficit and expenditure reduction might cease or even be reversed, for any number of reasons. How should such a reversal influence monetary policy? Even if fiscal policy choices were to put upward pressure on interest rates, and there is little consensus among economists that this is the case, it is far from clear that the Federal Reserve can do anything to alleviate the economic consequences of that problem. Ultimately, it is real interest rates that affect the consumption and production decisions of individuals and businesses and the allocation of resources over time. Real rates of return are based on the productivity of labor, capital, and other real assets in a society, and have very little, if any, connection with monetary policy.

In an inflationary environment, nominal rates of return include an inflation premium to compensate lenders for being repaid in money of reduced purchasing power. The correlation between monetary policy and nominal interest rates that dominates discussion in the financial press tells us next to nothing about the relationship between monetary policy and the real interest rates that govern the allocation of resources over time. Every movement in the federal funds rate does not produce equivalent changes in real interest rates, in the productivity of our capital stock, or in any of the other important real variables that affect economic activity. The fact that monetary policy exerts relatively direct control over the federal funds rate does not imply that real interest rates can, similarly, be controlled by monetary policy.

It is unnecessary and undesirable for sound monetary policy choices to await sound fiscal policy choices. Sound fiscal policy decisions, like sound private economic decisions, require the stable inflation environment that H.J. Res. 409 would direct the Federal Reserve to provide. The tax-related distortions and economic complexities associated even with stable, positive rates of inflation argue strongly for price stability.

Conclusion

If H.J. Res. 409 is enacted and the Federal Reserve commits to an explicit plan for price stability, the transition period will soon be over, and any costs that arise because of this policy change will be outweighed by the benefits. These benefits will be large and permanent, and will far outweigh the costs of getting there. H.J. Res. 409, if enacted, would be a milestone in economic policy legislation because it would shift the focus of monetary policy away from short-term fine tuning to the long term, where it belongs. It would enforce accountability for the one vital objective that the Federal Reserve can achieve. It would officially sanction those sometimes unpopular short-run policy actions that most certainly are in our nation's long-term interest. It would make clear that the Federal Reserve cannot achieve maximum output and employment without achieving price stability. I fully support House Joint Resolution 409. □

Statement by Robert P. Black, President, Federal Reserve Bank of Richmond, before the Subcommittee on Domestic Monetary Policy of the Committee on Banking, Finance and Urban Affairs, U.S. House of Representatives, February 6, 1990.

I am delighted to be here today to testify in favor of House Joint Resolution 409, which would instruct the Federal Reserve to achieve price stability within five years. I believe that passage of the resolution by the Congress would significantly improve the overall framework in which monetary policy is conducted and increase our chances of achieving price stability and steady economic growth in the years ahead.

I have been associated with the Federal Reserve Bank of Richmond for more than thirty-five years and have attended at least some of the meetings of the Federal Open Market Committee for about thirty of those years. For seventeen years, I have been the Richmond Bank's official representative at those meetings. My work with the Committee has convinced me that price stability should be the primary long-run objective for monetary policy and that the Federal Reserve can make its greatest contribution to the economic health of our country through pursuit of that objective.

The Case for Making Price Stability the Overriding Objective of Monetary Policy

The case for making price stability the primary objective of monetary policy is a compelling one. First, inflation imposes pervasive costs on our society, especially if it is not anticipated. Inflation distorts the signals that prices send in our market economy, which leads to serious inefficiencies in the allocation of resources. These distortions and inefficiencies reduce the long-run rate of growth of the economy below its full potential. In a similar way, inflation disrupts the functioning of our financial markets and on balance discourages saving and investment. Moreover, its volatility increases the risk associated with particular business decisions. Finally, inflation redistributes income and wealth in arbitrary ways, which creates dissatisfaction within the social and economic groups whose incomes and wealth are adversely affected.

Although many of these costs are hard to measure, there is good reason to believe that they are significant in the aggregate. First, there is a negative correlation between inflation and long-term economic growth across different countries. Second, our citizens have repeatedly made it clear that they strongly dislike inflation. Finally, persistently high rates of inflation in peacetime in the United States have frequently been associated with relatively low rates of real economic growth.

Inflation is still a major problem today, despite the belief in some quarters that it has been conquered. It disturbs me to hear people talk as if inflation were dead when we have been experiencing an underlying inflation rate of about 4 to 4½ percent. The current rate is clearly an improvement over the very high rates prevailing in the late 1970s and early 1980s, but it is not a particularly low rate when judged by longer-run historical standards. As you may know, the consumer price index rose at an average annual rate of 1.5 percent between the end of the Korean War and 1965. What is now considered by some to be moderate inflation was regarded as an intolerable condition only a few years ago. President Nixon imposed a comprehensive price and wage control program on the economy in August 1971 when the rate of inflation was even lower than the rates of recent years.

Moreover—and I believe that this is one of the critical issues addressed by the resolution—inflation may well reaccelerate in the absence of a clear signal to the public that the Congress fully supports the Federal Reserve's commitment to reduce it further. As we all know, the System is under constant pressure to "do something" with monetary policy in the short run to improve the economy's performance or deal with some other current problem. In the past such pressures have, at times, led the System to take actions that have eventually contributed to an acceleration of inflation. There is obviously a risk that history will repeat itself unless an effort is made to reduce these pressures.

I say this even though I believe that the present members of the Federal Open Market Committee as a group are especially strongly committed to fighting inflation and that the public still has vivid memories of the rampant inflation of the late 1970s and early 1980s. The composition of the Federal Open Market Committee will change, and the memories of double-digit inflation will gradually fade, but the pressures on the Federal Reserve to make its monetary policy decisions on the basis of short-run considerations without adequate regard for the long-run inflationary consequences of these decisions will surely persist in the years ahead.

One problem that the Federal Reserve faces in conducting monetary policy currently, in my view, is that our mandate is too broad. A clear and attainable objective is a necessary condition for the success of any policy strategy. Unfortunately, current law does not provide the Federal Reserve with such an objective. Instead, our current mandate instructs us to consider a wide range of economic conditions in carrying out monetary policy. Specifically, Section 2A of the Federal Reserve Act requires the System to take account of ". . . past and prospective developments in employment, unemployment, production, investment, real income, productivity, international trade and payments, and prices. . . . " in setting its annual objectives for the growth of the monetary and credit aggregates.

A mandate that instructs the Federal Reserve to consider such a broad range of economic conditions may not be the strongest foundation for an effective strategy for monetary policy. Faced with the requirement to take account of all these conditions, policy choices necessarily are made in a discretionary manner that gives substantial weight to current economic and financial conditions and prospects for the near-term future. This approach to policy fosters the notion that the Fed can fine-tune the economy even though both actual experience and much of the most important recent research in macroeconomics argue persuasively to the contrary. It also encourages special interest groups to try to pressure the System to pursue the particular goals they consider important. These circumstances tend to impart an inflationary bias to monetary policy.

The resolution would help us overcome these problems by specifying clearly a single, feasible objective for monetary policy and instructing the Federal Reserve to achieve that objective. Price stability is obviously an appropriate objective for any central bank. Further, it is a feasible objective since there is no question that the System can achieve price stability over the long run by controlling the rate of growth of the monetary aggregates.

Moreover, I believe price stability is really the *only* feasible objective for monetary policy. Some might argue that increasing long-run economic growth or fine-tuning economic activity in the short run are alternative objectives. Most economists now agree, however, that the long-run rate of real economic growth is determined by nonmonetary factors such as population growth, increases in productivity, and the rate of saving and investment. Accordingly, most conclude that expansionary monetary policies can raise the growth rate only temporarily, if at all. There is also a growing consensus that the System could make its greatest contribution to long-run economic growth by fostering price stability so that economic decisions could be made on the basis of reliable information on both current and future prices.

There also is very little evidence that the Federal Reserve can use monetary policy to fine-tune the economy in the short run. Monetary policy affects the economy with both long and variable lags. These lags, in conjunction with the inability of economists to forecast future economic conditions with much confidence, make it very difficult for the System to determine what policy actions it should take today to produce a particular result at some point in the near-term future. Moreover, as I indicated earlier, focusing too narrowly on relatively short-run economic conditions tends to give monetary policy an inflationary bias. This is not to say that the Federal Reserve should ignore extraordinary events such as the stock market crash in October 1987. But, as I believe we demonstrated in late 1987, the System can react to such shocks to the economy without weakening its long-run commitment to price stability.

One might argue, of course, that price stability has always been one of the System's primary objectives and therefore that the resolution is not needed since it simply instructs the Federal Reserve to seek an objective it is already pursuing. I strongly disagree with this view. Despite our best intentions, prices have not yet stabilized, as evidenced by the fourfold increase in the price level since 1964. Moreover, surveys of expected inflation consistently indicate that the public does not expect the Federal Reserve to make much further progress in reducing inflation in the future, let alone achieve price stability. Confidence in the System's commitment to price stability suffers because its policy decisions are necessarily influenced by numerous other considerations. Passage of the resolution would send an unambiguous signal to the public and the financial markets that price stability is the overriding goal of the Federal Reserve. The credibility of the System's efforts to reduce inflation would therefore rise. This increased credibility would, in turn, lower the public's expectations of future inflation because these expectations would be less influenced by the relatively high inflation rates in the recent past. Further, lower expected inflation would tend to reduce the costs of achieving price stability in terms of any temporary loss of output and employment. This reduction would occur, in part, because producers, when faced with monetary restraint, would be more inclined to reduce prices, or raise them at a slower pace, and less likely to reduce output and employment. Similarly, workers would be more inclined to restrain their wage demands. It is worth emphasizing that a truly clear and unambiguous congressional mandate to eliminate inflation would play a vital role in this process.

Responses to Some Likely Arguments against the Resolution

The major arguments that will be made against the resolution are fairly predictable, and I would like to say a few words about them. One argument obviously concerns the potential transitional cost of implementing the resolution. Specifically, some will argue that trying to eliminate inflation altogether would risk a recession. It is impossible to predict the future, so we cannot dismiss this argument out of hand. In evaluating the argument, however, we should not simply extrapolate from our experience in dealing with past inflationary episodes such as the ones in 1973–74 and 1979–81. In those periods, the System acted forcefully in a crisis atmosphere to reduce the rate of inflation over a short period of time and economic activity contracted sharply. In contrast, H.J. Res. 409 would require a *gradual* reduction in inflation over a relatively long period of time following an extended period in which substantial progress has already been made. As I indicated earlier, there is good reason to believe that passage of the resolution would enable us to achieve such a reduction in inflation with relatively small costs to the economy. Moreover, it is very important to weigh any short-run costs of achieving price stability as provided by the resolution against the longer-run costs of *not* achieving it. These latter costs could be particularly great if, at some future time, the Federal Reserve were forced to follow policies resulting in a recession in order to rein in an accelerating rate of inflation.

A second possible argument against H.J. Res. 409 is that it would prevent the Federal Reserve from reacting appropriately to unanticipated "shocks" to the economy, such as the stock market crash in October 1987. As I suggested a moment ago, however, there is simply no reason why shocks that may affect the System's actions in the short run should prevent us from achieving price stability over a period as long as five years. This would be especially true if the policy had credibility in the eyes of the general public and financial market participants, as I believe it would if the resolution were enacted. In evaluating this argument, it is also important to distinguish between temporary adjustments in our policy instruments or intermediate targets and changes in our ultimate policy objectives. Adjustments in our policy instruments or intermediate targets do not require us to alter our long-run objectives. Following the stock market crash in 1987, for example, the System temporarily supplied additional reserves to meet the greater demand for liquidity induced by the crash, but this action did not change our longer-run policy goals.

Implementation of the Resolution

A final question regarding H.J. Res. 409 concerns how it would be implemented. I realize that the resolution leaves this matter to the Federal Reserve. Nevertheless, in evaluating the resolution I think it is important to appreciate that from a technical standpoint the System is quite capable of achieving price stability over a five-year period and that pursuing this objective would require at most minor changes in our current procedures.

Recent research both at the Board of Governors and at the Federal Reserve Bank of Richmond has provided strong evidence that the public's total demand for balances included in the monetary aggregate, M2, has remained stable since the early 1950s, despite the substantial amount of financial innovation in recent years. This innovation has affected the behavior of the *components* of M2, but it has had little effect on the behavior of *total* M2. Consequently, the velocity of M2, which is simply current-dollar GNP divided by M2, has not exhibited any trend either upward or downward in this period. This constancy in the velocity of M2 over time implies that the System could bring the trend rate of inflation to zero within a five-year period by gradually lowering the trend rate of growth of M2 to the longer-run potential rate of growth of real GNP.

It is worth noting that implementing the resolution would not require any major change in the Federal Reserve's operating procedures, since we already set annual targets for M2 and announce them to the Congress. Under the resolution we would simply have to reduce these targets gradually and persistently until they declined to the trend rate of growth of real GNP, which is probably somewhere in the neighborhood of 2½ to 3 percent a year.

One fairly straightforward change in our procedures that I would favor would be to establish multiyear targets for M2 rather than the one-year targets we currently set. Under the current procedure, growth in M2 above or below the target for a given year is effectively forgiven at the end of the year. Thus, the base for the next year's target is the *actual* level of M2 at the end of the current year rather than the targeted level. As a result of this "base drift" in M2, the price level can drift up or down over time even though the individual annual M2 targets may be consistent with a zero rate of inflation. Consequently, I believe that the likelihood of achieving true long-run price stability would be increased if we eliminated base drift by setting a multiyear path for M2.

This last point raises a corresponding point regarding how, in practice, the System would pursue the price stability objective mandated by the resolution. One approach would be to seek to hold the price level at a particular permanent level on average over the long run. A second approach would be to try to maintain the price level at its current level at any point in time irrespective of any past movements in the level. Under the first approach, the System would act to bring prices back to their permanent target level if they moved away from that level in response, for example, to an unanticipated change in M2 velocity. Under the second approach, the System would not attempt to offset the one-time effects of such shocks on the price level, but would simply try to hold the price level at its then current level. We prefer the first approach, although we recognize that it might take considerable time to reattain the permanent objective in some instances in order to avoid significant transitory disruptions to real economic activity. Under the second approach, the price level would almost certainly change permanently from time to time, and it is not unreasonable to expect that political and other pressures would tend to bias these movements upward.

CONCLUSION

In conclusion, I strongly support H.J. Res. 409 and its objective of achieving price stability in five years. The costs of the persistent inflation in this country are substantial. Without a significant change in the framework in which monetary policy decisions are made, inflation is likely to continue to be a serious problem in the years ahead, and it is entirely possible that the rate of inflation could reaccelerate. H.J. Res. 409 goes to the heart of the policy problem, which stems to a large extent from the Federal Reserve's overly broad current mandate. Price stability can, and should, be the overriding objective of monetary policy. Achieving and maintaining price stability is the best contribution monetary policy can make to the successful performance of the economy over the long run. □

Statement by Robert T. Parry, President, Federal Reserve Bank of San Francisco, before the Subcommittee on Domestic Monetary Policy of the Committee on Banking, Finance and Urban Affairs, U.S. House of Representatives, February 6, 1990.

I am Robert Parry, President of the Federal Reserve Bank of San Francisco, a position I have held since early 1986. I am pleased to speak on House Joint Resolution 409. Over all, I strongly endorse the resolution—the Federal Reserve should gear monetary policy toward gradually eliminating inflation and maintaining price stability thereafter.

Since inflation is a monetary phenomenon, the central bank is uniquely suited to control inflation in the long run. Monetary policy also can have significant transitory effects on the production of goods and services. As a result, I believe that there is a role for countercyclical monetary policies, although the difficulty of forecasting future economic developments limits the extent to which the Federal Reserve can effectively engage in such policies. More important, monetary policy cannot have any direct control over real variables in the long run. Thus, although the Federal Reserve must consider the transitory effects of its actions on the business cycle, it should orient its efforts mainly around the single variable it can control in the long run—the rate of inflation.

Federal Reserve officials have made it clear that achieving price stability is the long-term goal of the System. H.J. Res. 409 would assist us in pursuing a credible and consistent anti-inflation policy by providing a statement from the legislature that we should focus primarily on achieving that one attainable goal within a specified period of time. Without this support, there is the danger that the pursuit of the long-term inflation goal could be unduly delayed because of pressure to respond to short-run, business-cycle considerations.[1]

Eliminating inflation would help to promote the highest possible standards of living for U.S. residents and greater prosperity around the world. The magnitude of the costs of inflation, in terms of lost output and employment, are noto-

1. For a discussion of the role of a monetary policy rule in combating inflation, see Robert J. Barro, "Recent Developments in the Theory of Rules Versus Discretion," Supplement to *Economic Journal* (1986), pp. 23–37.

riously difficult to estimate.[2] However, these costs almost surely are large.

The most worrisome of these costs stem from *uncertainty* about future prices, which undermines the ability of our market system to function efficiently. Price stability would reduce the risk and uncertainty that have hampered long-term planning and contracting by business and labor and that have reduced capital formation by raising the risk premia in long-term interest rates. Moreover, price stability would lead to the avoidance of the many arbitrary transfers of wealth and income that occur when the general price level changes unexpectedly and thus would reduce wasteful hedging activity designed to protect against these transfers. Eliminating inflation also would avoid confusion between absolute price changes and movements in relative prices, which can lead to inefficient economic decisions by businesses and households.[3]

The foregoing comments make it clear that I strongly support the message of H.J. Res. 409. I also have the following comments on its more specific features.

Length of the Transition Period

Few would disagree that the elimination of inflation is a desirable goal for the Federal Reserve. The issues center on the costs of achieving the goal and on how large these costs are relative to the benefits. As I mentioned earlier, it is difficult to produce reliable estimates of the gains in output and employment that would accrue from price stability, although my judgment is that they most likely would be large. Unfortunately, calculations of the costs of eliminating inflation also are problematic.

An *upper limit* to these costs can be obtained from the so-called Phillips curve, which relates inflation to the actual unemployment rate, an estimate of the unemployment rate consistent with the economy operating at full capacity, and an estimate of expected inflation. The latter estimate generally is based on an assumption that the public's expectations adjust gradually to past observations of inflation.

The Phillips curve suggests that the short-run costs of reducing inflation are relatively high, largely because it assumes that inflation expectations are slow to adjust to the introduction of an anti-inflation regime. For example, work at the Federal Reserve Bank of San Francisco on this relationship suggests that a recession is not necessary to reduce inflation from approximately 4½ percent now to zero percent in 1994. The unemployment rate would need to rise a maximum of about 1¾ percentage points above an estimated 5 to 6 percent "full-employment" rate.[4] At the same time, real GNP growth would need to slow from 1 to 2 percent per year below what it would otherwise have been during the five-year transition period.

Two points about these estimates are worth emphasizing. First, the costs would be transitory only. In the long run, there is no trade-off between inflation and unemployment. Thus, once inflation were eliminated, real GNP could go back to its long-run potential path, and the unemployment rate to its "full-employment" level. The benefits of price stability, however, would continue indefinitely. Second, the figures represent average historical relationships over the past twenty-five years and should be taken only as very rough guidelines for the costs of implementing the resolution *if* inflation expectations were to adjust only gradually.

It seems highly likely, however, that the costs would be smaller than this. Rather than adapting

2. For more formal discussions of the costs of inflation, see Stanley Fischer, "Towards an Understanding of the Costs of Inflation: II," in Karl Brunner and Allan H. Meltzer, eds., *The Costs and Consequences of Inflation*, Carnegie-Rochester Conference Series on Public Policy, vol. 15 (Amsterdam: North-Holland, 1981), pp. 5–41; and Michelle R. Garfinkel, "What Is an 'Acceptable' Rate of Inflation?—A Review of the Issues," Federal Reserve Bank of St. Louis, *Review*, vol. 71 (July/August 1989), pp. 3–15.

3. For example, an individual firm may speed up its production schedule because it finds that it can command a higher price for its product, only to subsequently find out that the prices of its materials and other inputs also have risen (along with the aggregate price level). By mistaking inflation for a rise in the demand for its product, the firm makes an inefficient production decision.

4. For a discussion of how estimates of this type are made, see Laurence H. Meyer and Robert H. Rasche, "On the Costs and Benefits of Anti-Inflation Policies," Federal Reserve Bank of St. Louis, *Review*, vol. 62 (February 1980), pp. 3–14.

solely to declines in observed inflation, as assumed in the Phillips curve analysis, the public's expectations of inflation probably would adjust directly in response to the implementation of the new anti-inflation regime itself. This direct response might become quite strong over perhaps two to three years, as it became apparent that the Federal Reserve, with legislative support, indeed was acting to eliminate inflation.

Unfortunately, there appears to be little historical evidence available that would provide a reliable estimate of how strong the direct response might be. There is evidence that sweeping institutional changes put in place to limit hyperinflations have had dramatically beneficial effects, but the relevance of these experiences to moderate inflation is remote.[5] In fact, there is evidence that expectations did *not* respond directly to the October 1979 change in Federal Reserve monetary policy procedures.[6] However, I seriously doubt that this experience is particularly relevant to the question at hand. The announcement of a policy change by the central bank itself will not carry as much credibility as the same announcement initiated and supported by a resolution of the legislative body. Moreover, the Federal Reserve has much more credibility as an inflation fighter today than it did in the period of double-digit inflation at the beginning of this decade.[7] Finally, as noted by others, I also believe that the attainment of price stability would be expedited if such a monetary policy were supported by other policy actions, such as a credible elimination of the federal deficit.

There is general agreement within the economics profession that the costs of reducing inflation are closely tied to the degree to which the public believes the central bank's anti-inflation policy to be credible.[8] I believe that the resolution as proposed would help in this regard, but I also recognize the possibility that achieving zero inflation in five years might involve high transitional costs. We will only know for sure as such a policy is being carried out. However, I do not favor lengthening the transition period because the resolution's credibility, and thus its impact, would be diluted if the time limit were too far in the future.

Price Stability or Inflation Stability

There appears to be some ambiguity in the wording of the resolution concerning what the Federal Reserve would be required to do once zero inflation is achieved: Should it aim at a constant price *level* over time (price level stability) or at zero inflation over time (inflation stability)? This distinction would become important after an unanticipated price level change. A stable price level objective would require that a period of deflation (inflation) follow a positive (negative) price level shock. As a consequence, this approach might imply a high level of volatility in short- to intermediate-run inflation.

Alternatively, a zero-inflation objective would allow the price level to be permanently affected by a price level shock, while monetary policy would be geared toward permitting no further change in prices: that is, zero future inflation. This approach, by accommodating past price level movements, would involve less short-term volatility in inflation, but would permit more long-run inflation or deflation if shocks or policy errors tended to be one-sided.

I personally prefer a policy of price level stability. First, in my view, the costs of inflation that I discussed earlier relate more closely to uncertainty about the long-run price level than to short-

5. See Thomas J. Sargent, "The Ends of Four Big Inflations," in Robert E. Hall, ed., *Inflation: Causes and Effects* (University of Chicago Press for the National Bureau of Economic Research, 1982), pp. 41–97.

6. See Benjamin M. Friedman, "Lessons on Monetary Policy from the 1980s," *Journal of Economic Perspectives*, vol. 2 (Summer 1988), pp. 51–72.

7. In recent years, long-term interest rates have not risen very much when tighter monetary policies have led to higher short-term interest rates. This development suggests that financial market participants believed that recent periods of tighter monetary policy would be successful in controlling inflation. See Frederick T. Furlong, "The Yield Curve and Recessions," Federal Reserve Bank of San Francisco, *Weekly Letter*, March 10, 1989.

8. For a discussion of the conceptual basis for this view, see Keith Blackburn and Michael Christensen, "Monetary Policy and Policy Credibility: Theories and Evidence," *Journal of Economic Literature*, vol. 27 (March 1989), pp. 1–45; and Alex Cukierman, "Central Bank Behavior and Credibility: Some Recent Theoretical Developments," Federal Reserve Bank of St. Louis, *Review*, vol. 68 (May 1986), pp. 5–17.

run inflation volatility.[9] Moreover, the credibility of a zero-inflation goal probably would be less than that of a price-level goal. Permitting the price level to drift (upward) under a zero-inflation goal inevitably would raise questions in the minds of the public as to whether the Federal Reserve was serious about controlling inflation or instead was losing control of long-run inflation through a series of "one-time" price-level adjustments.

Finally, there is nothing to be gained, and a lot to be lost, by permitting the price level to drift over the long run. Permitting this drift in response to the influences of fiscal and monetary policies obviously would defeat the purpose of the resolution. In my view the appropriate response to a supply shock, such as the oil embargo of the mid-1970s, also is to maintain price stability in the long run. Following such a shock, real GNP inevitably must fall to reflect the decline in long-run potential output. This decline in output will occur no matter where the price level eventually ends up, and thus there is nothing to gain by allowing prices to rise in the long run.

There are, however, short-run problems to consider. For example, a recession could result from attempts by the Federal Reserve to hold the price level constant immediately after a large oil price shock. This example shows why it is important for the Federal Reserve to have some flexibility in implementing the requirements of the resolution. "Draconian" effects on economic activity could be avoided by permitting some inflation for a time in the wake of the oil shock. The potential damage done by price-level uncertainty simultaneously could be avoided by monetary policies designed to produce a subsequent period of gradual deflation until the price level returned to its original level. Such an approach, once it became credible with the public, would remove the long-run uncertainty about the price level that damages the performance of the economy.

Definition of Price Stability

For the reasons just given, there may be some flexibility needed in the implementation of policies designed to achieve price stability. Thus, I support the concept of a functional definition instead of a specific numerical target. It might be argued that a numerical target would enhance the credibility of the objective, since the public then could measure Federal Reserve performance against a published standard. However, it would be difficult to define, *in advance*, a specific numerical target that reasonably could be adhered to over a long period of time into the future.

First, there would be a great deal of debate over which particular price index to target, and all indexes most likely will not exhibit zero rates of change when "price stability" is achieved. Second, there may be upward biases in the price indexes because they may not adequately adjust for improvements in the quality of goods and services. This difficult-to-estimate bias should be reflected in a change in the price index that is greater than zero, but it would be difficult to estimate the appropriate size of the adjustment.[10] Third, a specific numerical target would reduce Federal Reserve flexibility in responding to relative price shocks. I already have discussed how an inflexible approach in such circumstances could lead to undesirable effects on economic activity.

Of course, relying on a functional definition of price stability inevitably will lead to some debate over how the Federal Reserve's performance stacks up against its objective. This judgment will depend on the evaluation of a large number of different price indexes. Other considerations also could play a role. Does a recent supply shock justify the inflation observed in a given year? Have there been significant biases in price

9. The one exception may be the problem of confusing price level and relative price movements in making economic decisions. This cost of inflation may be exacerbated more by a price level target than by an inflation target because the former would involve greater volatility in short-run inflation. However, this cost of inflation may be among the least onerous on my list, since information is readily available to businesses and individuals on the general price level each month.

10. See Paul A. Armknecht, "Quality Adjustment in the CPI and Methods to Improve It," in Proceedings of the Business and Economic Statistics Section (American Statistical Association, August 13–16, 1984), pp. 57–63; Martin Neil Baily and Robert J. Gordon, "The Productivity Slowdown, Measurement Issues, and the Explosion of Computer Power," *Brookings Papers on Economic Activity, 1988:2*, pp. 347–431; and Robert J. Gordon, *The Measurement of Durable Goods Prices* (University of Chicago Press for the National Bureau of Economic Research, forthcoming).

indexes because of mismeasurement of quality change? These issues can be discussed and evaluated in the context of the Federal Reserve's semiannual policy report to the Congress, as specified in H.J. Res. 409.

Although this process may not alleviate everyone's concerns, I would like to point out that specifying a numerical target that later had to be modified in view of unforeseen events might damage credibility more than acknowledging the need to retain some flexibility and judgment. Moreover, I am confident that credibility will develop as the evidence emerges that Federal Reserve policy actions actually are being guided by the resolution, and as the economy moves toward price stability.

CONCLUSION

To sum up, I enthusiastically support H.J. Res. 409. Eliminating inflation would be the most significant contribution that the Federal Reserve could make to the attainment of the highest possible standards of living in the United States and around the world. H.J. Res. 409 can assist the Federal Reserve in attaining this goal by stating that we should design policies to eliminate inflation within a prescribed deadline. Once this goal is achieved, I believe that monetary policy should be geared toward maintaining a stable price *level*, so that businesses and individuals do not need to be concerned about long-run inflation in making their economic decisions. □

Announcements

NEW MEMBERS NAMED TO CONSUMER ADVISORY COUNCIL

The Federal Reserve Board named on January 25, 1990, eight new members to its Consumer Advisory Council to replace those members whose terms have expired and designated a new chairman and vice chairman of the council for 1990.

The Consumer Advisory Council was established by the Congress in 1976, at the suggestion of the Board, to advise the Board on the exercise of its duties under the Consumer Credit Protection Act and on other consumer-related matters. The thirty-member council meets three times a year.

William E. Odom, Chairman of the Board of the Ford Motor Credit Company in Dearborn, Michigan, was designated chairman of the council, and James W. Head, Executive Director of the National Economic Development and Law Center in Berkeley, California, was designated vice chairman.

The eight new members, named for staggered, three-year terms, are the following:

George C. Galster
Professor of Economics
The College of Wooster
Wooster, Ohio

E. Thomas Garman
Professor of Consumer Studies
College of Human Resources
Virginia Polytechnic Institute
and State University
Blacksburg, Virginia

Michael M. Greenfield
Professor of Law
Washington University
St. Louis, Missouri

Deborah B. Goldberg
Reinvestment Specialist on the Neighborhood
Revitalization Project
Center for Community Change
Washington, D.C.

Kathleen E. Keest
Staff Attorney
National Consumer Law Center, Inc.
Boston, Massachusetts

Colleen D. McCarthy
Executive Director
Kansas City Neighborhood Alliance
Kansas City, Missouri

Bernard F. Parker, Jr.
Executive Director
Community Resource Projects
Detroit, Michigan

Nancy Harvey Steorts
President
Nancy Harvey Steorts & Associates
Dallas, Texas

The other members of the Council are the following:

George H. Braasch
Corporate General Counsel
Spiegel, Inc.
Oakbrook, Illinois

Betty Tom Chu
Chairman
Trust Savings Bank
Arcadia, California

Cliff E. Cook
Vice President and Compliance Officer
Puget Sound National Bank
Tacoma, Washington

Jerry D. Craft
Senior Vice President
First National Bank of Atlanta
Atlanta, Georgia

Donald C. Day
President
New England Securities Corp.
Boston, Massachusetts

R.B. Dean, Jr.
Administrator of Community and Consumer
Affairs
South Carolina National Bank
Columbia, South Carolina

William C. Dunkelberg
Dean of the School of Business & Management
Temple University
Philadelphia, Pennsylvania

James Fletcher
President and Director
South Shore Bank of Chicago
Chicago, Illinois

Robert A. Hess
President and General Manager
Wright Patman Congressional
Federal Credit Union
Washington, D.C.

Barbara Kaufman
Co-Director of KCBS Call for Action
San Francisco, California

A.J. King
Chairman and Vice President
Valley Bank of Kalispell
Kalispell, Montana

Michelle S. Meier
Counsel for Government Affairs
Consumers Union
Washington, D.C.

Linda K. Page
Director
Ohio Department of Commerce
Columbus, Ohio

Sandra Phillips
Executive Director
Pittsburgh Partnership for
Neighborhood Development
Pittsburgh, Pennsylvania

Vincent P. Quayle
Director
St. Ambrose Housing Aid Center
Baltimore, Maryland

Clifford N. Rosenthal
Executive Director
National Federation of Community
Development Credit Unions
New York, New York

Alan M. Silberstein
Senior Vice President
Chemical Bank
New York, New York

Ralph E. Spurgin
President and Chief Executive Officer
Limited Credit Services, Inc.
Columbus, Ohio

David B. Ward
Consultant
Beneficial Management Corp.
Chester, New Jersey

Lawrence Winthrop
President
Consumer Credit Counseling Services
of Oregon, Inc.
Portland, Oregon

New Members Appointed to Thrift Institutions Advisory Council

The Federal Reserve Board announced on January 19, 1990, the names of the five new members appointed to its Thrift Institutions Advisory Council (TIAC) to replace those members whose terms have expired and designated a new President and Vice President of the council for 1990.

The council is an advisory group made up of twelve representatives from thrift institutions. The panel was established by the Board in 1980 and includes savings and loan, savings bank, and credit union representatives. The council meets at least four times each year with the Board of Governors to discuss developments relating to thrift institutions, the housing industry, mortgage finance, and certain regulatory issues.

Donald B. Shackelford, Chairman of the Board of State Savings Bank, Columbus, Ohio, will serve as president of the council and Marion O. Sandler, President/Chief Executive Officer of World Savings and Loan Association, Oakland, California, will serve as vice president.

The five new members, named for two-year terms that began January 1, are the following:

David L. Hatfield
President
Fidelity Federal Savings and Loan Association
Kalamazoo, Michigan

Lynn W. Hodge
President and Chief Executive Officer
United Savings Bank Inc.
Greenwood, South Carolina

Elliott K. Knutson
Chairman and Chief Executive Officer
Washington Federal Savings and Loan Association
Seattle, Washington

John Wm. Laisle
President
MidFirst Bank SSB
Oklahoma City, Oklahoma

John A. Pancetti
Chairman and Chief Executive Officer
The Manhattan Savings Bank
New York, New York

The other members of the Council are the following:

Charlotte Chamberlain
Vice Chairman
NewAmerica Saving
Los Angeles, California

Adam A. Jahns
Chairman and President
Cragin Federal Bank for Savings
Chicago, Illinois

H.C. Klein
President and General Manager
Little Rock AFB Federal Credit Union
Jacksonville, Arkansas

Philip E. Lamb
Chairman and Chief Executive Officer
Springfield Institution for Savings
Springfield, Massachusetts

Charles B. Stuzin
Chairman, President, and
Chief Executive Officer
Citizens Federal Savings and Loan Association
Miami, Florida

Income and Expenses of the Federal Reserve Banks

Preliminary figures released on January 9, 1990, indicate that operating income of the Federal Reserve Banks amounted to $22.230 billion during 1989. Net income before dividends, additions to surplus, and payments to the Treasury totaled $21.888 billion. About $21.6 billion was paid to the U.S. Treasury during 1989.

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 $702 million.

Operating expenses of the twelve Reserve Banks and their Branches totaled $1.331 billion, including $147 million for the earnings credits granted to depository institutions under the Monetary Control Act of 1980. Assessments by the Board of Governors for Board expenditures totaled $90 million, and the cost of currency amounted to $175 million.

Net additions to income amounted to $1.296 billion, primarily resulting from gains on assets denominated in foreign currencies. Statutory dividends to member banks were $130 million; and payments to the Treasury amounted to $21.627 billion.

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 as interest on Federal Reserve notes.

Revised List of OTC Stocks Subject to Margin Regulations Now Available

The Federal Reserve Board published on January 26, 1990, a revised list of over-the-counter (OTC) stocks that are subject to its margin regulations, effective February 12, 1990.

This revised List of Marginable OTC Stocks supersedes the list that was effective on November 13, 1989. The changes that have been made to the list, which now includes 2,859 OTC stocks, are as follows:

- Seventy stocks have been included for the first time, sixty-three under National Market System (NMS) designation.
- Forty-six stocks previously on the list have been removed for substantially failing to meet the requirements for continued listing.
- Fifty-eight stocks have been removed for reasons such as listing on a national securities exchange or involvement in an acquisition.

This list is published by the Board for the information of lenders and the general public. It includes all OTC securities designated by the Board pursuant to its established criteria as well as all stocks designated as NMS securities for which transaction reports are required to be made pursuant to an effective transaction reporting plan. Additional OTC securities may be designated as NMS securities in the interim between the Board's quarterly publications and will be immediately marginable. The next publication of the Board's list is scheduled for April 1990.

Besides NMS-designated securities, the Board will continue to monitor the market activity of other OTC stocks to determine which stocks meet the requirements for inclusion and continued inclusion on the list.

Change in Board Staff

William C. Schneider, Jr., has been appointed to the Office of Staff Director for Management as Project Director of the National Information Center (NIC), effective January 12, 1990. Before this appointment, Mr. Schneider served as Vice President at the Federal Reserve Bank of Cleveland. He holds an M.B.A. in Computer Science from George Mason University.

Legal Developments

Final Rule—Amendment to Regulations G, T, U and X

The Board of Governors is amending 12 C.F.R. Parts 207, 220, 221 and 224, its Securities Credit Transactions; List of Marginable OTC Stocks. The List of Marginable OTC Stocks is comprised of stocks traded over-the-counter (OTC) that have been determined by the Board of Governors of the Federal Reserve System to be subject to the margin requirements under certain Federal Reserve regulations. The List is published four times a year by the Board as a guide for lenders subject to the regulations and the general public. This document sets forth additions to or deletions from the previously published List which was effective November 13, 1989, and will serve to give notice to the public about the changed status of certain stocks.

Effective February 12, 1990, accordingly, pursuant to the authority of sections 7 and 23 of the Securities Exchange Act of 1934, as amended (15 U.S.C. §§ 78g and 78w), and in accordance with 12 C.F.R. 207.2(k) and 207.6(c) (Regulation G), 12 C.F.R. 220.2(s) and 220.17(c) (Regulation T), and 12 C.F.R. 221.2(j) and 221.7(c) (Regulation U), there is set forth below a listing of deletions from and additions to the Board's List of Marginable OTC Stocks:

Deletions From the List of Marginable OTC Stocks

Stocks Removed For Failing Continued Listing Requirements

3CI Incorporated: $.01 par common

ABQ Corporation: $.01 par common
AFP Imaging Corporation: $.01 par common
American Savings & Loan Association of Florida: $.01 par preferred

Braniff, Inc.: $.01 par common
Brown, Robert C. & Co., Inc.: $.01 par common

Central Bancorporation: $1.67 par common
Chemex Pharmaceuticals, Inc.: $.01 par common, 1989-1 Warrants (expire 03-31-94)
City Investing Company Liquidating Trust: Units of beneficial interest
Columbia Pictures Entertainment, Inc.: Warrants (expire 06-01-92)
Commercial Decal, Inc.: $.20 par common
Commodore Environmental Services, Inc.: $.10 par common
Connaught Biosciences Inc.: No par common
Constar International, Inc.: Warrants (expire 11-13-89)

Entree Corporation: $.01 par common

First American Bank and Trust of Palm Beach County: Class A, $1.00 par common
Flight International Group, Inc.: $.01 par common
Fonar Corporation: $.0001 par common
Frances Denney Companies, Inc.: $.01 par common
Frontier Savings Association: $.80 par capital

Harvard Knitwear, Inc.: $.001 par common
Hauserman, Inc.: $1.00 par common
High Plains Corporation: $.10 par common

Kimmons Environmental Service Corp.: 9% convertible subordinated debentures
Kurzweil Music Systems, Inc.: $.001 par common

Lyphomed, Inc.: $.01 par common, 5-½% convertible subordinated debentures

Macrochem Corporation: $.005 par common
Management Assistance Inc. Liquidating Trust: Units of beneficial interest
McM Corporation: $1.00 par common
Medical Sterilization, Inc.: $.01 par common
Monoclonal Antibodies, Inc.: No par common

Northern Trust Corporation: Series B, no par preferred stock

Pantera's Corporation: $.01 par common
Plains Resources Inc.: $1.00 par cumulative convertible preferred
Ports of Call, Inc.: $.20 par common
Priam Corporation: $.001 par common
Properties of America, Inc.: $.01 par common

Rentrak Corp.: $.001 par common
Rudy's Restaurant Group, Inc.: $.01 par common

Scanforms, Inc.: $.01 par common
Silvar-Lisco: No par common
Skipper's Inc.: $.10 par common

Unifast Industries, Inc.: $.01 par common

Yorkridge-Calvert Savings and Loan Association (Maryland): $1.00 par common

Stocks Removed for Listing on a National Securities Exchange or Being Involved in an Acquisition

Alco Health Services Corporation: $.01 par common
Alliance Financial Corporation: $10.00 par common
American Home Shield Corporation: $.04 par common
American Savings Financial Corporation (Washington): $1.00 par common
Associated Natural Gas Corp.: $.10 par common

Beaman Corporation: $1.00 par common

Clinical Sciences, Inc.: $.01 par common
CMS Enhancements, Inc.: $.01 par common
Coast Federal Savings and Loan Association (Florida): $.01 par common
Convex Computer Corporation: $.01 par common
Crawford & Company: $1.00 par common
CVB Financial Corp.: No par common
CVN Companies, Inc.: No par common

Digilog, Inc.: $.01 par common
Dumagami Mines Limited: $1.00 par common
Dunkin' Donuts Inc.: $1.00 par common
Dyatron Corporation: $.66-⅔ par common

E.I.L. Instruments, Inc.: $.10 par common
Elan Corporation PLC: American Depositary Receipts

First Banc Securities, Inc.: $5.00 par common
First Ohio Bancshares, Inc.: $6.25 par common

Gen-Probe Incorporated: $.01 par common
Guber-Peters Entertainment Company, The: $.01 par common

H.M.S.S., Inc.: $.01 par common
HCC Industries Inc.: $.10 par common
Hibernia Corporation: Class A, no par common
Howard Bancorp: $5.00 par common

Inca Resources, Inc.: No par common
International Genetic Engineering, Inc.: No par common

Jefferson Smurfit Corporation: $1.00 par common

Leo's Industries, Inc.: $.001 par common

Management Science America, Inc.: $.0025 par common
Marine Transport Lines, Inc.: $.10 par common
Mayfair Super Markets, Inc.: Class A, $.01 par common
Microbilt Corporation: No par common
Midwest Financial Group, Inc.: $5.00 par common

Noxell Corporation: Class B, non-voting, $1.00 par common
Numerex Corporation: $.01 par common

Pace Membership Warehouse, Inc.: $.01 par common
Pacific First Financial Corp.: $1.00 par common
Pacific Silver Corporation: $.25 par common
Peoples Savings Bank F.S.B.: $1.00 par common
Praxis Biologics, Inc.: $.01 par common
Precision Castparts Corp.: No par common

Ravenswood Financial Corp.: $1.00 par common
Reisterstown Federal Savings Bank (Maryland): $1.00 par common
Resurgens Communications Group, Inc.: $.01 par common
Rhone-Poulenc S.A.: American Depositary Receipts
Richton International Corp.: $.10 par common
RSI Corporation: $.05 par common

Safecard Services, Inc.: $.01 par common
SAG Harbor Savings Bank (New York): $1.00 par common
Security American Financial Enterprises, Inc.: $.10 par common
Starpointe Savings Bank: $2.00 par common
Stratus Computer, Inc.: $.01 par common

Trustcorp, Inc.: $1.00 par common

Weisfield's, Inc.: $2.00 par capital
Westmarc Communications, Inc.: Class A, $.01 par common

Additions to the List of Marginable OTC Stocks

Allied Capital Corporation II: $1.00 par common
American Capital and Research Corporation: Class A, $.01 par common

Amtech Corporation: $.01 par common
Aztar Corporation: $.01 par common

BKLA Bancorp: No par common
Borland International, Inc.: $.01 par common
Boston Technology, Inc.: $.001 par common
BT Shipping Limited: American Depositary Receipts

Caere Corporation: $.001 par common
Candela Laser Corporation: $.01 par common
Cellular Information Systems, Inc.: Class A, $.01 par common
Century South Banks, Inc.: No par common
Continental Gold Corporation: No par common
Cray Computer Corporation: $.01 par common
Cupertino National Bancorp: No par common
Cytogen Corporation: $.01 par convertible exchangeable preferred

Economy Savings Bank, PASA: $1.00 par common
Energy Ventures, Inc.: $1.00 par common
Exabyte Corporation: $.001 par common
Exide Electronics Group, Inc.: $.01 par common

Financial Center Bancorp: No par common
First American Financial Corporation, The: Class B, $1.00 par common
First Bank of Philadelphia: $2.00 par common
First Federal Capital Corp.: $.01 par common

G-III Apparel Group, Ltd.: $.01 par common
Gehl Company: $.10 par common
Great Southern Bancorp, Inc.: $.01 par common

Harmonia Bancorp, Inc.: $.01 par common
Healthsource, Inc.: $.10 par common
Henley Group, Inc., The (Delaware): $.01 par common
Home Nutritional Services, Inc.: No par common
Hycor Biomedical Inc.: $.01 par common

Ilio, Inc.: $.01 par common, Warrants (expire 10–25–92)
Immunogen, Inc.: $.01 par common
Industrial Funding Corporation: Class A, no par common

Keegan Management Company: $.001 par common
Knowledgeware, Inc.: No par common

Landmark Bancorp: No par common
Laserscope: No par common
Lattice Semiconductor Corporation: $.01 par common

MAF Bancorp, Inc.: $1.00 par common
MIPS Computer Systems, Inc.: No par common

New Horizons Savings & Loan Association: No par common
Nucorp, Inc.: Class C, Warrants (expire 06–30–91)

Pacific Bank, N.A., The: $5.00 par common
Pamrapo Bancorp, Inc.: $.01 par common
Parametric Technology Corporation: $.01 par common
People's Telephone Company, Inc.: $.01 par common
Pinnacle Financial Services, Inc.: $10.00 par common
Players International, Inc.: $.005 par common
Procyte Corporation: $.01 par common

Ramtron Australia Limited: American Depositary Receipts
Receptech Corporation: Paired common stock & a Warrant
Ren Corporation - USA: No par common
Robec, Inc.: $.01 par common

Sierra Tucson Companies, Inc.: $.01 par common
Smith International, Inc.: Class A, Warrants (expire 02–28–95)
Solectron Corporation: No par common
Summit Technology, Inc.: $.01 par common
Sun Sportswear, Inc.: No par common

T2 Medical, Inc.: $.01 par common
TW Holdings, Inc.: No par common

United Artists Entertainment Company: 12.875%, no par cumulative convertible preferred
Urcarco, Inc.: $.01 par common

Ventura County National Bancorp: No par common
Village Financial Services, Inc.: $.01 par common

Westcott Communications, Inc.: $.01 par common
Workmen's Bancorp, Inc.: $1.00 par common

Yes Clothing Company: No par common

Final Rule—Amendment to Rules Regarding Foreign Gifts and Decorations

The Board of Governors is amending 12 C.F.R. Part 264b, its Rules Regarding Foreign Gifts and Decorations. Congress has permitted federal government employees to accept gifts from foreign governments in amounts up to a "minimal value" that is to be established by the Government Services Administration ("GSA") in consultation with the Secretary of State.

The GSA's regulations currently establish "minimal value" to be $180, while the Board's Rules Regarding Foreign Gifts and Regulations set "minimal value" at $100. Accordingly, this amendment will change the Board's definition of "minimal value" by increasing it to $180 or such higher amount as might be established by the GSA.

Effective January 29, 1990, and pursuant to the Board's authority under section 11(i) of the Federal Reserve Act (12 U.S.C. § 248(i)), 12 C.F.R. Part 264b is amended as follows:

Part 264b—Rules Regarding Foreign Gifts and Decorations

1. The authority citation for Part 264b continues to read as follows:

Authority: 5 U.S.C. § 7342, as amended; and section 11(i) of the Federal Reserve Act (12 U.S.C. § 248(i)); 5 U.S.C. § 552.

2. In section 264b.3 paragraph (a) is revised to read as follows:

Section 264b.3—Foreign gifts.

* * * * *

(a) *Gifts of minimal value*. If not otherwise prohibited by Board regulations, Board members and employees may accept and retain a tangible or intangible gift of minimal value, intended as a souvenir or mark of courtesy, from a foreign government. A gift of minimal value is one having a retail value in the United States at the time of acceptance not in excess of $180 (or such higher amount established in 41 C.F.R. Part 101–49).

Orders Issued Under Bank Holding Company Act

Orders Issued Under Section 4 of the Bank Holding Company Act

Canadian Imperial Bank of Commerce
Toronto, Ontario, Canada

The Royal Bank of Canada
Montreal, Quebec, Canada

Barclays PLC
London, England

Barclays Bank PLC
London, England

Order Approving Applications to Engage, to a Limited Extent, in Underwriting and Dealing in Debt and Equity Securities

Canadian Imperial Bank of Commerce, Toronto, Ontario, Canada ("Canadian Imperial"), The Royal Bank of Canada, Montreal, Quebec, Canada ("Royal Bank"), and Barclays PLC and Barclays Bank PLC, London, England ("Barclays") (together referred to as "Applicants"), bank holding companies within the meaning of the Bank Holding Company Act ("BHC Act"), have each applied for the Board's approval under section 4(c)(8) of the BHC Act, 12 U.S.C. § 1843(c)(8), and section 225.23(a)(3) of the Board's Regulation Y, 12 C.F.R. 225.23(a)(3), for their indirect subsidiaries, Wood Gundy Corp., RBC Dominion Securities Corporation, and Barclays de Zoete Wedd Government Securities, Inc., respectively, each located in New York, New York ("Companies"), to underwrite and deal in, on a limited basis, all types of debt securities, including without limitation, sovereign debt securities, corporate debt, debt securities convertible into equity securities, and securities issued by a trust or other vehicle secured by or representing interests in debt obligations.

In addition, Canadian Imperial and Royal Bank have each applied for approval to underwrite and deal in equity securities, including, without limitation, common stock, preferred stock, American Depositary Receipts, and other direct and indirect equity ownership interests in corporations and other entities.[1]

Notice of the applications, affording interested persons an opportunity to submit comments on the proposals, has been duly published (54 *Federal Register* 25,173; 54 *Federal Register* 29,388; 54 *Federal Register* 26,252 (1989)). The Board received comments in opposition to approval of all the applications from the Securities Industry Association ("SIA"), a trade association of the investment banking industry, and in opposition to approval of the application of Royal Bank from the Investment Company Institute ("ICI"), a trade association of the mutual fund industry. The Board also received comments in support of the proposals from the Institute of International Bankers, the Bankers' Association for Foreign Trade, and the Bank Capital Markets Association.

1. Applicants have not proposed to underwrite or deal in securities issued by open-end investment companies and, accordingly, may not do so without further application under section 4(c)(8) of the BHC Act. Canadian Imperial and Royal Bank have proposed to underwrite and deal in securities issued by closed-end investment companies.

Canadian Imperial has total consolidated assets equivalent to approximately $82.6 billion.[2] Canadian Imperial owns bank subsidiaries in Los Angeles, California, and New York, New York, and operates agencies in Atlanta, New York City, Los Angeles, and San Francisco.

Royal Bank has total consolidated assets equivalent to approximately $96.0 billion. Royal Bank owns bank subsidiaries in New York, New York, and San Juan, Puerto Rico, and operates branches in Portland, Oregon, New York City, and Puerto Rico and agencies in Miami and San Francisco.

Barclays has total consolidated assets equivalent to approximately $196.1 billion.[3] Barclays owns bank subsidiaries in New York City, Wilmington, Delaware, and Charlotte, North Carolina, and operates branches in New York, Boston, Seattle, and Chicago and agencies in San Francisco and Miami.

I. Glass–Steagall Act

Applicants have previously received Board approval under section 4(c)(8) of the BHC Act for Companies to underwrite and deal in securities that member banks are authorized to underwrite and deal in under the Glass–Steagall Act[4] (hereinafter "eligible securities") and to engage in various other activities permissible for bank holding companies. In order to ensure that Companies would not be engaged principally in underwriting or dealing in securities in violation of section 20 of the Glass–Steagall Act[5] upon commencing the proposed debt and equity securities activities, each Company will limit the gross revenues derived from these activities to no more than 10 percent of its total gross revenues over any two-year period.[6] The Board has previously determined that a company would not be in violation of section 20 of the Glass–Steagall Act if the gross revenue the company derived from underwriting and dealing in ineligible securities does not exceed between 5 and 10 percent of the company's total gross revenues on average over any two-year period. *Citicorp/J.P. Morgan & Co. Incorporated/ Bankers Trust New York Corporation*, 73 *Federal Reserve Bulletin* 473, 485 (1987).[7] Accordingly, the Board concludes that Applicants' proposals would be consistent with section 20 of the Glass–Steagall Act.

II. Bank Holding Company Act

In order to approve an application under section 4(c)(8) of the BHC Act, the Board must find that the activities to be conducted are "so closely related to banking . . . as to be a proper incident thereto." 12 U.S.C. § 1843(c)(8). In January 1989, the Board determined that bank holding companies, through separately incorporated and capitalized subsidiaries ("section 20 subsidiaries" or "underwriting subsidiaries"), may underwrite and deal in ineligible debt and equity securities, subject to the 5 to 10 percent revenue limit established under the Glass–Steagall Act. *J.P. Morgan & Co. Incorporated, et al.*, 75 *Federal Reserve Bulletin* 192 (1989) (the "section 20 Order"). The Board concluded that these activities are closely related to banking and a proper incident thereto, provided that the activities are conducted within a framework of prudential limitations that avoid the potential for conflicts of interest, unsound banking practices, unfair competition and other adverse effects.[8] In reaching this decision, the Board found that the proposals could be expected to result in public benefits such as increased competition, gains in efficiency, greater convenience to users of these services and a strengthened and more competitive banking and financial system.

Applicants have proposed for Companies to conduct the new activities within the prudential framework of limitations established by the Board in the section 20 Order. They have requested, however, certain modifications to that framework, which are discussed below, to account for the fact that each Applicant is a foreign bank that operates predominately outside the United States.

Applicants' requests for modification raise issues under the BHC Act and the framework established in the section 20 Order because, unlike U.S. bank holding companies, Applicants are both banks and bank holding companies. The framework established in the section 20 Order required a separation of federally-insured bank or thrift institutions from an affiliated

2. Unless otherwise noted, asset data are as of April 30, 1989.

3. Asset data are as of June 30, 1989.

4. Other types of securities, which member banks may not underwrite deal in under the Glass–Steagall Act, are referred to herein as "ineligible securities".

5. 12 U.S.C. § 377. Section 20 provides that ". . . no member bank shall be affiliated . . . with any . . . organization engaged principally in the issue, flotation, underwriting, public sale, or distribution at wholesale or retail or through syndication of stocks, bonds, debentures, notes, or other securities . . . ."

6. Compliance with the revenue limits shall be calculated in the manner set forth in *J. P. Morgan & Co. Incorporated, et al.*, 75 *Federal Reserve Bulletin* 192, 196–197 (1989).

7. That decision has been affirmed by the United States Court of Appeals for the Second Circuit. *Securities Industry Ass'n v. Board of Governors*, 839 F.2d 47, 67, *cert. denied*, 108 S.Ct. 2830 (1988). *See also* Press Release, dated September 21, 1989, 75 *Federal Reserve Bulletin* 751 (1989), raising the revenue limitation for section 20 subsidiaries from 5 to 10 percent.

8. The Board hereby adopts and incorporates herein by reference the reasoning and analysis from that Order for these findings, except as that reasoning and analysis is specifically modified by this Order to account for the particular circumstances of these cases.

section 20 subsidiary in order both to insulate U.S.-insured institutions and the federal safety net from the risk of the section 20 subsidiary's activities and for reasons of competitive equity in the United States. Although as banks, Applicants are not supported to any significant extent by the U.S. federal safety net, they have access to any benefits that are associated with their respective home country safety nets, from which they may derive some competitive advantage over U.S. bank holding companies operating under the section 20 framework or other U.S. securities firms. Rigid application of the section 20 framework to Applicants as banks, however, would prevent them generally from being able to establish section 20 subsidiaries in the United States unless they adopted a holding company structure.

The International Banking Act of 1978 ("IBA"), 12 U.S.C. § 3101 *et seq.*, established that foreign banks were to operate in the United States under the principle of national treatment. National treatment in this context calls for parity of treatment between domestic and foreign banking organizations to the extent possible such that one group does not have competitive advantages relative to the other in the United States.

In order to assist in achieving this objective, the IBA provided that any foreign bank that operates a bank, branch or agency in the United States "shall be subject to the provisions of the Bank Holding Company Act . . . in the same manner and to the same extent that bank holding companies are subject thereto . . ." 12 U.S.C. § 3106(a). The legislative history of the IBA states that this was "to insure competitive equality by allowing foreign financial institutions to expand their U.S. banking-related activities in accordance with the same standards applicable to domestic bank holding companies. . . . [T]he bill does not affect the type or scope of a foreign bank's nondomestic business." S. Rep. No. 1073, 95th Cong., 2d Sess. 15 (1978).

Applicants have asserted that some of the conditions established in the section 20 Order were imposed on domestic bank holding companies for supervisory reasons and that such conditions should not be applicable to the operations of Applicants. Consequently, they have requested modification of certain conditions, principally those that apply to their non-U.S. operations. Without appropriate modifications, Applicants assert, the conditions of the section 20 Order would be an extraterritorial extension of U.S. regulation and supervision, which would be inconsistent with U.S. policy and international agreements on bank supervision.

The Board has carefully considered Applicants' requests and has determined that, consistent with the IBA and its policy of national treatment, foreign banks must conduct the proposed activities in the United States within the framework of prudential limitations established in the section 20 Order. Giving due regard to the principles of national treatment and the Board's policy not to extend U.S. bank supervisory standards extraterritorially, the Board has determined, as discussed further below, to adjust the funding and certain operational requirements of the section 20 Order where these adjustments would not change the balance of public interest factors that the Board considered in the section 20 Order or cause adverse effects to outweigh public benefits. Consistent with the terms and objectives of the BHC Act and the IBA, the conditions to which the Board believes Applicants should be subject are designed to ensure that the prudential, competitive equity, safety net and prevention of moral hazard objectives of the conditions continue to be met; that U.S. regulation does not interfere with the operations of foreign banks outside the United States; and that foreign bank applicants will not have any significant competitive advantage in the United States over section 20 subsidiaries and non-bank-owned securities firms.

To achieve these ends, the Board has determined that:

(1) the prudential framework of the section 20 Order will apply without modification to the U.S. bank and thrift affiliates of Applicants' underwriting subsidiaries;

(2) the framework will also generally cover U.S. branches and agencies of Applicants;

(3) the Applicants, insofar as their foreign offices and operations are concerned, will be treated as bank holding companies for purposes of the framework consistent with the IBA; and

(4) the responsibility for compliance with the framework will be placed on the section 20 subsidiaries in order to avoid U.S. regulation having an extraterritorial impact.

The Board recognizes that this modified framework raises certain issues of compatibility with that established for U.S.-owned section 20 subsidiaries, principally in the area of bank funding and investment. For example, under the modified framework, a foreign bank may establish and fund a section 20 subsidiary, while a U.S. bank may not.

While there could be potential advantages accruing to Applicants through this differing structure, the Board believes that any advantage would not be significant in light of the effect on them of the overall section 20 framework and the circumstances of these cases, and should not preclude foreign bank ownership of section 20 subsidiaries. The Board notes that the absolute size of the ineligible securities activities of section 20 companies owned by foreign banks will generally be small, as they will necessarily be constrained by the 10 percent revenue limitation established by the Board. The base of eligible securities activities against which to measure ineligible securities activities is derived mainly from U.S. government securities, which do not form as relatively large or as natural an asset base for foreign banks as they do for U.S. banking organizations. In addition, foreign banks in their capacity as bank holding companies will be subject to the provisions of the section 20 Order requiring a bank holding company to deduct from its capital investments in and unsecured lending to a section 20 subsidiary. Finally, the U.S. operations of the foreign bank will be subject to the provisions of the section 20 Order to the same extent as U.S.-owned and section 20 subsidiaries, and, significantly, a foreign-owned section 20 subsidiary may not utilize the credit facilities of its foreign bank parent to gain an advantage over U.S. firms in its securities underwriting and dealing activities. The Board notes that this assessment could change with a significant change in the factors considered by the Board, such as if the size of section 20 companies becomes significant, due to an increase in the revenue limitations, a change in the law governing bank securities activities, or sizeable growth in the base of eligible securities. In such circumstances, the Board may reevaluate its position on these matters from the standpoint of the principles of national treatment.

The modifications adopted by the Board to the section 20 framework as it applies to Applicant foreign banks are discussed below.

Capital Adequacy Considerations

In the section 20 Order, the Board stated that it would not permit any impairment in an applicant's financial strength as a result of the provision of capital or liquidity support for the proposed activities. The Board required that each bank holding company deduct from its consolidated primary capital any investments in, or unsecured extensions of credit to, the section 20 subsidiary[9] and exclude from its total consolidated assets the assets of the section 20 subsidiary. This requirement was designed to ensure that the holding company maintains a strong capital position to support its subsidiary banks and that the resources needed for that support would not be put at risk to fund the expanded securities activities.[10]

Applicants have proposed that, in the case of a foreign bank seeking to establish a section 20 company, the proper authority to assess capital adequacy is the home country supervisor, using its own capital guidelines consistent with the standards established by the Basle Committee on Banking Regulations and Supervisory Practices. The Board has adopted guidelines consistent with these standards and considers the Basle Accord an important step toward a more consistent and equitable international standard for assessing capital adequacy.[11]

In 1979, the Board adopted a Policy Statement on Foreign-Based Bank Holding Companies[12] that states a foreign bank with U.S. banking operations is expected to meet the same general standards of financial strength as U.S. bank holding companies. The Board recognized, however, that foreign banks operate outside the United States in accordance with different banking practices and in different legal environments, and that the Board's supervisory responsibilities extend only to the safety and soundness of U.S. banking operations. The Board stated that, consistent with the principles of the BHC Act and the IBA, its policy is not to extend U.S. bank supervisory standards extraterritorially to foreign banks. Rather, the Board would seek to assure itself of the foreign bank's ability to be a source of strength to its U.S. operations.

In light of the Board's policy with respect to foreign bank holding companies and the endorsement and implementation of the Basle Accord by the Applicants' home country regulators, the Board has considered the following in assessing Applicants' capital positions: both before and after deduction of investments in and unsecured loans to the section 20 subsidiary, each Applicant meets the risk-based capital standards established by its home country supervisor under the Basle Accord; each is in good standing with the home country supervisor; the U.S. offices, subsidiary banks, and any subsidiary U.S. holding company of Applicants are in generally satisfactory condition; and all other financial and managerial factors are consistent with the capability of each Applicant to remain a source of strength to its U.S. banking operations.

One of the conditions of the section 20 Order is that the section 20 subsidiary maintain at all times capital adequate to support its activity and cover reasonably

9. The applicants were required to deduct any loans extended directly or indirectly to the section 20 subsidiary that were not fully secured by U.S. government or other marketable securities in the same manner and to the same extent as would be applicable in the case of member bank loans or extensions of credit to an affiliate under section 23A(c) of the Federal Reserve Act. 12 U.S.C. § 371c(c).

10. In accordance with the new Risk-Based Capital Guidelines, the applicants were required to take 50 percent of the deductions from Tier 1 capital and 50 percent from Tier 2 capital.

11. *See* 54 *Federal Register* 4186 (1989).

12. Federal Reserve Regulatory Service ¶ 4–835.

expected expenses and losses in accordance with industry norms. The Board has reviewed the capitalization of each of the section 20 subsidiaries and believes that each is adequate in light of its business plan which, at the outside, projects a modest increase in outstanding ineligible securities positions. Barclays notes that additional capitalization of its section 20 subsidiary may be necessary, and has committed to increase capital in the securities subsidiary in early 1991 if, at year end 1990, the subsidiary's assets have grown to the size projected. The section 20 subsidiaries of Canadian Imperial and Royal Bank may also have a need for increased capital if their businesses grow beyond current projections. Accordingly, and subject to any commitments related to capital, approval of these activities is limited to a level consistent with the projections of position size and types of securities contained in each of the applications unless the section 20 subsidiaries receive an appropriate infusion of additional capital.

The Board notes that Applicants have an ongoing responsibility under the Board's regulations to continue to act as a source of financial strength to their U.S. subsidiary banks. 12 C.F.R. 225.4(a). Under this rule, Applicants are expected to manage their operations, including their section 20 subsidiaries, in such a way as not to compromise or prejudice their ability to continue to act as a source of strength to their U.S. subsidiary banks and thrifts.

Funding of Section 20 Subsidiaries

In addition to these capital adequacy considerations, the Board determined in the section 20 Order that the broadening in the scope of permissible securities activities required a prohibition on lending by a bank or thrift affiliate to the section 20 subsidiary, as well as a prohibition on the purchase and sale of financial assets between these institutions for their own account, subject to limited exceptions for clearing U.S. government and agency securities and the purchase and sale of U.S. Treasury securities. The purpose of the prohibitions is to limit the transfer of risk from the securities activities to the federal safety net, both to protect the resources of the federal safety net and to prevent a securities company affiliated with a bank from gaining an unfair competitive advantage over securities companies that are not bank-affiliated. The section 20 Order permitted a bank holding company to provide secured and unsecured credit to an underwriting subsidiary.

In these cases, Applicants are not only bank holding companies within the meaning of the BHC Act but are also banks that have access to deposits in the United States and abroad and have the benefits of the safeguards that most countries afford to their banking systems. Unlike the typical U.S. banking organization structure, foreign banking institutions are not generally organized in a holding company structure. The foreign bank itself is generally the parent organization.[13] Applicants argue that, in light of this organizational structure, the foreign bank parent is the only ultimate source of support for the operations of the section 20 subsidiary. Accordingly, Applicants contend, a determination by the Board that the foreign bank parent could not fund its section 20 subsidiary through loans or investments because it is a bank would have the effect of preventing foreign banks from establishing section 20 subsidiaries in the United States unless they adopted the U.S. holding company structure.

As previously noted, the Board has considered the implications of modifying the section 20 conditions to permit extensions of credit and other support by a foreign bank to its section 20 subsidiary in light of the purposes of the prohibition against such support by a bank affiliate. Because funds of a foreign bank that are generated from abroad are not federally insured, and the foreign bank itself does not have access to the discount window, the provision of support by a foreign bank to its underwriting subsidiary from outside the United States would not directly implicate the federal safety net. In addition, for the reasons discussed above, it does not appear that the ability to provide such support would give securities companies owned by foreign banks a significant competitive advantage over domestically-owned companies.

Moreover, whether or not a funding advantage exists by virtue of Applicants' status as banks, U.S. securities companies, whether or not affiliated with a U.S. bank, may borrow from foreign bank affiliates. The Board notes that certain of the largest U.S. investment banking companies are affiliated with foreign banks from which they may obtain credit. In the case of a U.S. bank holding company that directly owns a foreign bank, the section 20 conditions would not prohibit loans by that foreign bank affiliate to an underwriting subsidiary in the United States, subject to the lending and capital deduction requirements established in the section 20 Order, which are applicable also to the foreign bank Applicants.

Accordingly, in light of these considerations and consistent with the IBA, the Board has determined that Applicant foreign banks should be able to lend to their section 20 subsidiaries in accordance with their status as bank holding companies. The restrictions

13. In some cases, this organizational structure is required by the home country's laws governing ownership of banks.

against lending and purchasing or selling assets will apply, however, to all of Applicants' U.S. banking offices, including their U.S. bank and thrift subsidiaries, branches, and agencies.

Barclays has requested modification of the section 20 conditions in order to lend to its section 20 subsidiary through its U.S. branches. In support of the request, Barclays notes that the deposits in its U.S. branches are not insured by the Federal Deposit Insurance Corporation and Barclays is expected by the Federal Reserve to call on home country resources before seeking credit at the discount window. Therefore, according to Barclays, the U.S. federal safety net would not be exposed even if Barclays' U.S. branches were to lend to its section 20 subsidiary.

The Board has considered this request and has determined that an exception to the section 20 Order to permit U.S. branches of foreign banks to lend to the section 20 subsidiaries would not be appropriate. Although their deposits are not FDIC-insured, these offices are part of the U.S. financial structure and have statutory access to the discount window and payments system. Moreover, in the Board's view, lending to a section 20 subsidiary from a U.S. branch is inconsistent with, and could potentially undermine, the framework that the Board has adopted for the operation of the section 20 companies in the United States.

Compliance with Capital and Funding Conditions

In the section 20 Order, the Board required that any funds supplied to a section 20 subsidiary by the holding company or its nonbank subsidiaries, whether in the form of capital, secured or unsecured loans or transfer of assets, be subject to prior notice to and approval by the Board. The Board imposed this requirement as a method to ensure compliance with the condition that requires a bank holding company to deduct from capital any investments in and unsecured lending to its section 20 subsidiary. In this manner, the Board could assure itself that any funds necessary to support a bank holding company's bank or thrift subsidiaries would not be diverted to fund the activities of the section 20 subsidiary. The Board stated that it would consider requests for prior approval of specific quantitative levels of funding by a holding company for a section 20 subsidiary in accordance with the particular holding company's capitalization and resources and the requirements outlined in the section 20 Order.

Applicants have requested modification to this condition to permit them to fund their section 20 subsidiaries without prior notice. Applicants argue that this requirement was designed to protect the safety and soundness of the U.S. banking system; accordingly, it should not be necessary to extend its application to the foreign offices and subsidiaries of Applicants, which are supervised by home country authorities.

The Board has considered Applicants' arguments and believes that, while the home country supervisors have primary responsibility for the financial soundness of Applicants, it is an appropriate concern of the Board to ensure that Applicants' investments in and liquidity support for section 20 companies do not adversely affect their ability to support their U.S. insured subsidiary banks and other U.S. banking operations in accordance with the Board's source of strength policy. Accordingly and consistent with the general approach to these applications outlined above, the Board has determined not to grant Applicants an exception from the requirement for prior approval for additional investments in or loans or transfers of assets to the section 20 subsidiary. This requirement is not expected to impose a significant burden as each Applicant has requested approval for investments and funding in amounts that should be adequate for its section 20 company's operations for the next several years.

The Board recognizes that the capital deduction for unsecured lending and prior approval requirements for bank holding companies raise a number of difficult and complex issues for foreign bank applicants that, as noted, need not be definitively or finally resolved by the specific factual setting of the present applications. The Board believes that these requirements are issues of concern to both domestic and foreign applicants that implicate significant banking structure policies. In light of the concerns raised by this issue, the Board intends to review this requirement generally to determine whether it need be retained for domestic and foreign applicants.

Credit Enhancement and Loans to Customers

In the section 20 Order, the Board established several limitations on extensions of credit by the applicants or their subsidiaries to customers of the section 20 subsidiaries. The Board provided that bank holding companies and their subsidiaries may not extend credit or issue or enter into any facility that might be viewed as enhancing the creditworthiness or marketability of ineligible securities underwritten or distributed by the section 20 subsidiary, or make loans to issuers of ineligible securities underwritten by the section 20 subsidiaries for the purpose of payment of principal, interest, or dividends on such securities. Affiliates of section 20 subsidiaries also could not knowingly extend credit to a customer secured by, or for the purpose of purchasing, any ineligible security that the section 20 subsidiary underwrites during the period of the underwriting and for 30 days thereafter, or to purchase from the section 20 subsidiary any ineligible security in which the subsidiary makes a market.

These limitations were imposed in order to protect the soundness of U.S. banking institutions by removing improper incentives from the credit granting process. In addition, the limitations protect the federal safety net from the potential for abusive credit practices and prevent bank-affiliated securities companies from obtaining an unfair advantage over companies that are not affiliated with banks.

Applicants argue that because the limitations were imposed primarily to protect the soundness of U.S. banking institutions and the federal safety net, they should not be applied to Applicants' non-U.S. operations in a manner that interferes with those operations or requires them to create costly new compliance systems. Applicants view such requirements not only as entailing substantial costs, but also as amounting to an unwarranted extraterritorial regulation of their non-U.S. operations. Applicants have suggested a number of alternatives to ensure compliance by their non-U.S. operations with the goals of the section 20 conditions.

Credit Enhancements

Although Applicants argue generally against the need for limitations on credit enhancements, each has agreed to comply fully with the conditions with respect to their U.S. operations. Barclays also committed to comply with the condition worldwide, while Canadian Imperial and Royal Bank proposed to comply worldwide with the restrictions when the section 20 subsidiary is the sole underwriter or lead or co-lead manager of an underwriting of ineligible securities. Canadian Imperial and Royal Bank contend that a section 20 subsidiary should not be prohibited from handling a small part of an underwriting that is managed by other securities companies simply because a foreign affiliate has provided credit enhancements for that issue.

The Board is of the view that it is appropriate to adopt one general framework for foreign banks and section 20 subsidiaries, rather than to rely on individual and differing commitments from each foreign bank applicant. In considering the merits of Applicants' various arguments, the Board has determined not to grant an exception from the condition prohibiting an affiliate from providing credit enhancements for ineligible securities underwritten by a section 20 subsidiary. The Board, however, recognizes that a compliance requirement imposed on the foreign operations of Applicants could be viewed as having an inappropriate extraterritorial effect on their non-U.S. business. Consequently, the Board has determined that the objectives of the credit enhancement condition may be achieved by placing the restriction on the operations of the section 20 subsidiary, rather than on its non-U.S. affiliates. Accordingly, the section 20 company would be prohibited from underwriting any ineligible securities where it became aware, in the ordinary course of conducting a due diligence review, that an affiliate was providing a credit enhancement. Because virtually every credit facility that would enhance an issue of securities would be listed in the required disclosure documents for the issue, the section 20 subsidiary would be in a position to know if an affiliate is providing credit.

Credit to Customers and Issuers

Applicants offered various commitments with respect to the conditions prohibiting credit to customers to purchase ineligible securities underwritten or dealt in by the section 20 subsidiary or to issuers of ineligible securities underwritten by the section 20 subsidiary to pay the principal, interest, or dividends on those securities. Each Applicant committed to comply fully with these conditions in the United States. Canadian Imperial and Royal Bank committed to comply with the conditions worldwide in any instance in which the section 20 subsidiary is sole underwriter or lead or co-lead manager of an underwriting syndicate in respect of ineligible securities. Canadian Imperial also suggested that the prohibitions not apply to pre-existing or new lines of credit unless such lines were purposely marketed to an issuer in connection with the offering of services by the section 20 subsidiary.

As with the condition prohibiting credit enhancements, the Board believes it is important to maintain these conditions relating to credit granted to customers and issuers. As in the previous condition, the Board also believes that it is appropriate to place the responsibility for compliance with these prohibitions on Applicants' section 20 subsidiaries rather than on their non-U.S. affiliates. Therefore, the section 20 subsidiary may not participate in any underwriting where it arranges for an affiliate to provide credit, or knowingly participates in any arrangement whereby an affiliate provides credit, to a customer or issuer for a prohibited purpose. This modification would limit the extraterritorial impact of establishing compliance procedures in the non-U.S. offices of the foreign banks, while also achieving the purposes of the conditions in the section 20 Order and preserving competitive equality.

Purchase by Affiliate of Securities Underwritten by the Section 20 Subsidiary

The section 20 Order did not permit bank holding companies or their subsidiaries to purchase, as principal, ineligible securities underwritten by the section 20 subsidiaries during the period of the underwriting and for 60 days thereafter. The Order also prohibited the purchase from the section 20 subsidiary of any ineligible security in which it makes a market. The Board imposed these prohibitions in order to prevent a bank holding company from using its resources, to the detriment of its banking subsidiaries, to support a failing underwriting or ineligible securities in which the section 20 subsidiary makes a market.

Royal Bank has proposed that this prohibition extend only to its U.S. subsidiaries, branches, and agencies. Canadian Imperial has put forward a more limited proposal, requesting only that Wood Gundy Inc., the Canadian parent company of its section 20 subsidiary, be exempt from the prohibition in order to permit the joint participation by Wood Gundy Inc. and the section 20 subsidiary in cross-border transactions. Barclays has requested that its foreign securities affiliates be permitted to purchase securities from the section 20 subsidiary at any time.

The Board has considered these requests and has determined that it is not appropriate to modify this condition generally. The Board believes, however, that this limitation should be modified for all section 20 companies, both domestic and foreign-owned, in one limited respect. Canadian Imperial has argued that this restriction would potentially interfere with the effective distribution of securities that are issued in a simultaneous, cross-border offering. In such situations, where the securities are issued in two or more markets at the same time, a syndicate in each market commits to a portion of the issue. During the underwriting period, fluctuations in market conditions may enhance demand for the issue in one market and dampen demand in another. Intersyndicate agreements in such circumstances permit the sale of securities between syndicate members to ensure smooth and broad distribution of the securities.

The Board believes that modifying this prohibition to permit purchases and sales of ineligible securities between affiliates that are participating in simultaneous underwritings in more than one market could promote efficiency and better service to customers. If the transactions are entered into to satisfy *bona fide* customer demand, the risk of adverse effects appears to be slight. Accordingly, in this limited circumstance, the Board believes that the purposes of the condition prohibiting purchases or sales during the underwriting period and for 60 days thereafter would not be undermined where such purchases or sales result from *bona fide* indications of interest from customers in the various markets. This exception will extend to all section 20 companies whether owned by U.S. bank holding companies or foreign banks. The Board requires all section 20 companies to establish appropriate documentation procedures to assure that such purchases or sales are related to customer demand in the market and are not entered into to evade the requirements established in this Order or the section 20 Order.

Personnel Interlocks and Other Restrictions

The section 20 Order prohibited officer, director, or employee interlocks between a section 20 subsidiary and any affiliated bank or thrift institution. It also prohibited an affiliated bank or thrift institution from engaging in certain marketing activities on behalf of the section 20 subsidiary. These limitations were among the measures established to ensure that the section 20 company was insulated, both structurally and operationally, from the holding company's subsidiary banks and thrifts.

Canadian Imperial and Royal Bank have each committed to comply with these restrictions and to extend them to their U.S. branches and agencies. Barclays has agreed to the prohibition against personnel interlocks and marketing with respect to its U.S. bank and thrift affiliates, but has requested that it be permitted to have management interlocks and engage in joint marketing between its U.S. branches and agencies and the section 20 subsidiary. Barclays argues that these prohibitions were adopted in order to assure the protection of federally-insured depositors. This rationale would be inapplicable, however, to U.S. branches and agencies of a foreign bank that are not insured by the FDIC and, consequently, are not covered by the federal safety net.

Barclays also states that qualified personnel available to foreign banks for employment in the United States are scarce and that it would impose a particular hardship on foreign banks to require them to build up duplicate marketing staffs in New York for their branches and their section 20 subsidiaries. Barclays argues further that applying these prohibitions to its New York branch would also place the section 20 subsidiary at a competitive disadvantage. Because there are a number of officers and employees in the New York office of Barclays whose responsibilities are not specifically confined to the New York branch, Barclays states that it would be administratively difficult to exclude those officers and employees from involvement with any permitted transactions between Barclays as a bank holding company and the section 20 subsidiary.

With respect to interlocks, the Board notes that various proposals considered by the Congress to amend the Glass–Steagall Act would not have required a complete prohibition on interlocks between a section

20 subsidiary and an insured bank, and would have authorized the Board to permit officer or director interlocks, taking into consideration the size of the organizations, safety and soundness considerations, and other appropriate factors, including unfair competition in securities activities. In these applications, the Board, as a regulator of foreign bank offices in the United States, has an interest in assuring that these foreign banks have in place a mechanism for proper control of all of their U.S. operations. Accordingly, while the Board has determined at this time to retain the general prohibition against interlocks, the Board believes that, giving due regard to all relevant factors, it is appropriate to permit an interlock between a U.S. branch and agency of a foreign bank and a section 20 subsidiary as a means of providing the foreign bank with a mechanism to monitor effectively the operations of the underwriting subsidiary for supervisory purposes. In these applications, such an interlock would not appear to result in any adverse effects in light of the general framework of conditions to which Applicants' section 20 subsidiaries will be subject.

The Board has determined not to modify at this time the condition relating to marketing activities as it would apply to U.S. branches and agencies in light of the general approach to these applications as outlined above and considerations of competitive equity. However, with respect to this condition as well as the general prohibition on interlocks between U.S. banks or banking offices and a section 20 subsidiary, the Board will consider, based on experience with the operations of section 20 subsidiaries, whether modification of these general restrictions would be appropriate consistent with the purposes of the section 20 prudential framework.

In accordance with the policy of not extending U.S. regulation extraterritorially, the Board has also modified the condition relating to purchases by an affiliate of a section 20 company, acting in a trustee or other fiduciary capacity, of ineligible securities from the section 20 affiliate. This condition, which reflects applicable U.S. fiduciary principles, was intended to apply only to U.S. organizations or entities operating in the United States. This condition would apply fully to the U.S. affiliates, branches and agencies of Applicants, but would not apply to the non-U.S. operations of Applicants, which are governed by their home country law.

Supervision of Section 20 Subsidiaries and Reservation of Authority to Modify Operating Limitations

In the section 20 Order, the Board stated that, because the proposals represented the first major entry of banking organizations into debt and equity securities underwriting and dealing activities, it was appropriate to proceed cautiously and to establish an extensive framework of prudential limitations to guard against potential conflicts of interest, unsound banking practices, and other adverse effects.[14] The Board continues to be of this view. The Board also continues to believe that careful supervisory review is needed to ensure that the structural and operating conditions established in the section 20 Order are observed in order to achieve the objectives of the conditions of minimizing adverse effects and insulating affiliated banks and thrifts and the federal safety net from the risks of the new activity.[15] Thus, the Board expects careful adherence by section 20 subsidiaries, including Companies, and their affiliates to the conditions established in this and the section 20 Order and directs the appropriate Federal Reserve Banks to undertake at least annual inspections for compliance. The Board will review the results of these inspections annually.

In addition, the Board continues to believe that, before the new activities may be commenced, the appropriate Reserve Bank should determine by inspection that the section 20 subsidiaries and their affiliates have put in place the operational and managerial infrastructure necessary to ensure compliance with the conditions in this and the section 20 Order, including computer, audit and accounting systems, internal risk management controls and other policies and procedures consistent with sound operating practices.

As indicated in the section 20 Order, the Board may review the continued appropriateness of particular operating limitations as section 20 subsidiaries establish a record of experience in the proposed activities. The Board also reserves the right to establish, from time to time, based upon the supervisory process and experience with the activities, additional limitations on the conduct of the proposed activities to ensure that they are consistent with safety and soundness, and conflict of interest and other considerations relevant under the BHC Act.

Canadian Government Securities

Canadian Imperial and Royal Bank have proposed that Canadian government securities be treated in the same manner as U.S. government securities for purposes of exemptions granted U.S. government securities from two of the section 20 conditions. First, the prohibition

14. *J.P. Morgan & Co. Incorporated*, at 210.
15. *Id.* at 209.

against purchase and sale of financial assets between a bank or thrift affiliate and a section 20 subsidiary contains an exemption for U.S. Treasury securities. Second, the section 20 prohibition against a bank or thrift affiliate extending credit to a section 20 subsidiary contains an exemption for an extension of credit that is incidental to the provision of clearing services by the bank or thrift to the section 20 subsidiary with respect to U.S. government securities if the extension of credit is fully secured by such securities, is on market terms, and is repaid on the same calendar day.

In light of the United States-Canada Free-Trade Agreement, under which member banks were authorized to underwrite and deal in Canadian governmental securities, and in light of the nature of the Canadian government securities market, the Board has determined that a section 20 subsidiary may engage in transactions involving Canadian government securities with a U.S. bank or thrift affiliate to the same extent it is permitted to do so with respect to U.S. and other government securities.[16] This authority is extended to all section 20 subsidiaries, whether owned by foreign or U.S. bank holding companies.

Immediate Authority to Underwrite and Deal in Equity Securities

The section 20 Order imposed a one-year waiting period on the applicants in those cases before they were permitted to commence underwriting and dealing in equity securities.[17] The Board indicated that it would review in one year whether the applicants had established the managerial and operational infrastructure and other policies and procedures necessary to comply with the requirements of the section 20 Order and thus to be able to implement the equity securities underwriting and dealing activities.

Canadian Imperial and Royal Bank have requested immediate authority to commence underwriting and dealing in equity securities. They assert that, unlike U.S. bank holding companies, their section 20 subsidiaries were engaged in a full range of securities activities in the United States for over 70 years prior to their acquisition by the Applicants. At that time, the companies terminated their ineligible securities activities to conform to U.S. banking law. Applicants assert that the companies already have the necessary managerial and operational infrastructure in place for underwriting equity securities. Applicants state that the purpose of their applications is merely to obtain approval for their section 20 subsidiaries to resume, on a very limited basis, underwriting activities that had been an essential part of their operations for many years prior to their acquisition by the Canadian banks in 1988.

In imposing the one-year waiting period in the section 20 Order, the Board explained that it wanted to allow the applicants time to establish the managerial and operational infrastructure and other policies and procedures necessary "to comply with the requirements of this Order." 75 *Federal Reserve Bulletin* 209. Accordingly, in addition to being concerned with the bank holding companies' lack of experience in underwriting equity securities, the Board recognized that the applicants would require time to develop and put into place the policies and procedures required by the operating conditions of the section 20 Order, especially when applied in the context of underwriting equity securities.

In light of these concerns and the principle established by the IBA of equality of treatment in the United States, the Board does not believe it would be appropriate to authorize Canadian Imperial and Royal Bank to begin underwriting equity securities immediately. Although Applicants' section 20 subsidiaries may have had substantial experience in underwriting equity securities prior to their acquisition by Applicants, the subsidiaries and their U.S. bank affiliates and the U.S. offices of their parent foreign banks have never had to comply with the framework of conditions established in the section 20 Order. Thus, the Board finds no basis to differentiate between the Canadian and U.S. applicants with respect to the need for an infrastructure review.

In the alternative, Canadian Imperial and Royal Bank have requested an exemption pursuant to section 4(c)(9) of the BHC Act (12 U.S.C. § 1843(c)(9)) to underwrite and deal in the equity securities of Canadian issuers immediately. Section 4(c)(9) permits the Board to grant an exemption from the BHC Act's nonbanking activity prohibitions to a foreign bank if the Board determines that the exemption would not be substantially at variance with the purposes of the BHC Act and would be in the public interest.

Applicants assert that granting the exemption would not be substantially at variance with the purposes of the BHC Act because the Board has determined that underwriting and dealing in equity securities are closely related to banking under the BHC Act. Moreover, Applicants argue, there is no basis for finding a substantial competitive disadvantage to U.S. competitors because U.S. companies may commence the activity as well as soon as they are found to have the necessary procedures and expertise. Applicants fur-

16. Where exceptions to the requirements apply only to U.S. Treasury Securities, rather than the broader category of government securities, the exception is extended only to direct obligations of the Canadian federal government.

17. *J.P. Morgan & Co. Incorporated*, at 209.

ther contend that the proposed exemption would be in the public interest in that it would provide the public with additional sources of equity underwriting and dealing services. Finally, Applicants contend that their underwriting subsidiaries will suffer substantial competitive harm if they are not permitted to resume underwriting and dealing in equity securities immediately in that they will lose valuable, experienced staff to companies who are able to engage in such activities.

The Board believes, however, that granting Applicants' request for an exemption pursuant to section 4(c)(9) would give them a competitive advantage over U.S. bank holding companies as well as other securities companies owned by foreign banks. By virtue of the exemption, Applicants would be able to offer equity underwriting services while their U.S. bank-owned competitors could not without having been examined with respect to their managerial and operational infrastructure and other policies and procedures. Moreover, it has long been the policy of the Board not to grant exemptions under section 4(c)(9) to foreign organizations if the exemption would give the foreign organization a material competitive advantage over U.S. bank holding companies.[18] Accordingly, the Board does not believe Applicants' request for an exemption to be consistent with the policies governing the implementation of section 4(c)(9) of the BHC Act and the request is denied.

Public Benefits

Consummation of Applicants' proposals would provide increased convenience to the section 20 subsidiaries' customers and gains in efficiency. In addition, the Board expects that the *de novo* entry of Applicants into the market for these services would increase the level of competition among providers of these services. Accordingly, for these reasons and the reasons set forth in the section 20 Order, the Board finds that the performance of the proposed activities by the section 20 subsidiaries can reasonably be expected to produce benefits to the public.

Contentions of SIA and ICI

The SIA and ICI, in their comments on these applications, incorporated by reference the arguments each had made relating to the Board's January 1989 section 20 Order. The SIA contends that the proposed activities would result in a violation of section 20 of the Glass–Steagall Act and that they do not meet the "closely related" and "proper incident to banking" standards of section 4(c)(8) of the BHC Act. The ICI makes similar contentions to the extent that the application by Royal Bank requests authority to underwrite and deal in investment company securities.[19]

With respect to the comments previously made by the SIA and ICI in connection with the January 1989 Order regarding the Glass–Steagall Act and the BHC Act, the Board has considered and rejected such comments in that Order, the reasons for which have been incorporated and made part of the Board's decision herein.[20]

The SIA also contends that consistent application of the Board's statutory interpretation and related regulatory framework is appropriate, given that the applicable statutory language applies equally to all conduct covered by it regardless of the status or locale of the particular banking entity involved. The SIA argues that such a consistent rationale counsels against granting additional authority to or reducing limitations proposed by a given applicant, such as Canadian

18. *See Midland Bank Limited*, 67 *Federal Reserve Bulletin* 729 (1981).

19. The ICI also argues that, to the extent Royal Bank seeks authority for the Section 20 subsidiary to engage in underwriting or dealing in bank-ineligible affiliate securities, the application is contrary to law and should be denied. By Order dated September 21, 1989, however, the Board made a determination to permit a section 20 subsidiary to underwrite and deal in securities of affiliates, where the securities are rated by an unaffiliated, nationally recognized rating organization or are issued or guaranteed by the Federal National Mortgage Association, the Federal Home Loan Mortgage Corporation, or the Government National Mortgage Association, or represent interests in such obligations. 75 *Federal Reserve Bulletin* 751 (1989). The Board hereby incorporates the reasoning of that decision.

20. The SIA has also indicated that a determination to increase from 5 to 10 percent the revenue limit on the amount of total revenues a Section 20 subsidiary may derive from ineligible securities underwriting and dealing activities should be addressed in the context of a response to the Board's general request for comments on that issue, rather than in the context of this particular application. The Board acted on this issue by Order dated September 21, 1989, determining that it would be appropriate to raise the revenue limit from 5 to 10 percent.

The SIA also contends that Royal Bank and Barclays appear to be requesting permission to engage in "riskless principal" transactions in which their section 20 subsidiaries would act in effect as dealers for securities underwritten or distributed by foreign affiliates. While it is unclear which of the proposed activities the SIA is referring to as "riskless principal" transactions, Royal Bank and Barclays have committed that any of the activities of the section 20 subsidiaries that constitute underwriting or dealing in securities within the meaning of section 20 of the Glass–Steagall Act would be subject to the 10 percent revenue limitation.

The Board also notes that Royal Bank and Barclays have not applied to engage in riskless principal transactions as an eligible securities activity in accordance with the conditions established by the Board for the conduct of that activity. *Bankers Trust New York Corporation*, 75 *Federal Reserve Bulletin* 829 (1989). One of the conditions established in the *Bankers Trust* Order is that, for a riskless principal transaction to be considered an eligible activity for a section 20 subsidiary, it may not be entered into on behalf of a foreign affiliate that deals in securities abroad. The Board had previously stated that, where a U.S. company acts as a riskless principal on behalf of foreign securities affiliates, such activity could constitute dealing in securities. Letter from William W. Wiles to Security Pacific Corporation (April 18, 1988).

Imperial, Royal Bank or Barclays, relative to those previously enunciated by the Board.

The Board has considered the SIA's comments and has found, for the reasons discussed in this Order, that modifications to the conditions previously imposed by the Board on the conduct of the proposed activities are appropriate in these cases, particularly in light of the policy of national treatment mandated by the IBA and Applicants' status as bank holding companies. Moreover, the Board has not modified the commitments for particular foreign bank applicants; rather, the Board has adopted a general framework that adjusts certain of the section 20 conditions to address the issues raised by Applicants' foreign status without creating the potential for adverse effects that outweigh expected public benefits.

Finally, SIA appears to contend that Applicants' branches and agencies are subject to all the same laws and regulations as national banks by virtue of 12 U.S.C. § 3106a, and therefore the Board may not modify any conditions of the section 20 Order for Applicants that are applicable to national banks. The Board does not agree with this reading of the statute. The provision in question provides that foreign banks operating in the United States are subject to all the same laws and regulations affecting U.S. banks that relate to discrimination based on race, sex, creed or national origin.

For these reasons, and subject to the framework and conditions established in this Order, the Board believes that the proposals are not likely to result in decreased or unfair competition, conflicts of interest, unsound banking practices, concentration of resources, or other adverse effects that outweigh the reasonably expected public benefits from the proposals.

Conclusion

Based on the foregoing and other facts of record, and subject to the conditions set forth in this Order, the Board concludes that Applicants' proposals are consistent with section 20 of the Glass–Steagall Act and are so closely related to banking as to be a proper incident thereto within the meaning of section 4(c)(8) of the BHC Act. Accordingly, the applications are hereby approved. The Board's approval of these proposals extends only to activities conducted within the conditions of this Order and subject to the gross revenue limitation discussed above. Underwriting and dealing in the approved securities in any manner other than as approved in this Order is not within the scope of the Board's approval and is not authorized for the section 20 subsidiaries. As more fully set forth in the section 20 Order, as modified by this Order, the Board's approval is subject to the following conditions:

A. Capital Adequacy Conditions

1. Applicant meets internationally-accepted risk-based capital requirements before and after deduction from Applicant's consolidated capital of:
   (a) any investment it makes in the underwriting subsidiary that is treated as capital in that subsidiary, and
   (b) any credit Applicant or a subsidiary extends directly or indirectly to the underwriting subsidiary unless the extension of credit is fully secured by U.S. Treasury securities, securities that are direct obligations of the Canadian federal government, or other marketable securities and is collateralized in the same manner and to the same extent as would be required under section 23A(c) of the Federal Reserve Act if the extension of credit were made by a member bank.[21]

2. In calculating risk-based capital ratios, Applicant should deduct 50 percent of the amount of any investment in, and 50 percent of any unsecured or not fully secured or inadequately collateralized loans to, the underwriting subsidiary from Tier 1 capital and 50 percent from Tier 2 capital. Applicant should also exclude the underwriting subsidiary's assets from its consolidated assets. Notwithstanding these adjustments, Applicant should continue to maintain adequate capital on a fully consolidated basis.
3. No Applicant nor any of its subsidiaries shall, directly or indirectly, provide any funds to, or for the benefit of, an underwriting subsidiary, whether in the form of capital, secured or unsecured extensions of credit, or transfer of assets, without prior notice to and approval by the Board.
4. The underwriting subsidiary shall maintain at all times capital adequate to support its activity and cover reasonably expected expenses and losses in accordance with industry norms.

B. Credit Extensions to Customers of the Underwriting Subsidiary[22]

5(a) No U.S. affiliate or branch or agency of Applicant shall directly or indirectly extend credit or issue or enter into a stand-by letter of credit, asset purchase

21. An extension of credit means any loan, guarantee, or other form of credit exposure, including those described in Condition 5.

22. Unless otherwise stated, these conditions shall apply to a subsidiary of a bank or thrift institution to the same extent as they apply to the bank or thrift institution.

agreement, indemnity, guarantee, insurance or other facility that might be viewed as enhancing the creditworthiness or marketability of an ineligible securities issue underwritten or distributed by the underwriting subsidiary.

(b) The underwriting subsidiary shall not underwrite or distribute ineligible securities if the underwriting subsidiary is aware in the ordinary course of conducting a due diligence review that an affiliate is extending credit or issuing or entering into a standby letter of credit, asset purchase agreement, indemnity, guarantee, insurance or other facility that might be viewed as enhancing the creditworthiness or marketability of such ineligible securities.

6(a) No U.S. affiliate or branch or agency of Applicant (other than the underwriting subsidiary) shall knowingly extend credit to a customer directly or indirectly secured by, or for the purpose of purchasing, any ineligible security that the underwriting subsidiary underwrites during the period of the underwriting or for 30 days thereafter, or to purchase from the underwriting subsidiary any ineligible security in which the underwriting subsidiary makes a market.

(b) The underwriting subsidiary shall not arrange for an Applicant or any of its subsidiaries to extend, or knowingly participate in any arrangement whereby an Applicant or any of its subsidiaries extends, credit to a customer directly or indirectly secured by, or for the purpose of purchasing, any ineligible security that the underwriting subsidiary underwrites during the period of the underwriting or for 30 days thereafter, or to purchase from the underwriting subsidiary any ineligible security in which the underwriting subsidiary makes a market.

(c) These limitations extend to all customers of Applicant and its subsidiaries, including broker-dealers and unaffiliated banks, but do not include lending to a broker-dealer for the purchase of securities where an affiliated bank is the clearing bank for such broker-dealer.

7(a) No U.S. affiliate or branch or agency of Applicant may, directly or indirectly, extend credit to issuers of ineligible securities underwritten by the underwriting subsidiary for the purpose of the payment of principal, interest or dividends on such securities.

(b) The underwriting subsidiary shall not arrange for an Applicant or any of its subsidiaries to extend, or knowingly participate in any arrangement whereby an Applicant or any of its subsidiaries extends, credit to an issuer of ineligible securities underwritten by the underwriting subsidiary for the purpose of the payment of principal, interest, or dividends on such securities and shall not underwrite any ineligible securities of an issuer if it becomes aware that an affiliate is providing credit to an issuer for such purposes.

(c) These limitations are inapplicable to any credit lines extended to an issuer by any Applicant or any subsidiary of an Applicant that provide for substantially different timing, terms, conditions and maturities from the ineligible securities being underwritten. It would be clear, for example, that a credit has substantially different terms and timing if it is for a documented special purpose (other than the payment of principal, interest or dividends) or there is substantial participation by other lenders.

8. Each Applicant shall adopt appropriate procedures, including maintenance of necessary documentary records, to assure that any extension of credit by any of its U.S. affiliates, branches, or agencies to issuers of ineligible securities underwritten or dealt in by an underwriting subsidiary are on an arm's length basis for purposes other than payment of principal, interest, or dividends on the issuer's ineligible securities being underwritten or dealt in by the underwriting subsidiary. An extension of credit is considered to be on an arm's length basis if the terms and conditions are substantially the same as those prevailing at the time for comparable transactions with issuers whose securities are not underwritten or dealt in by the underwriting subsidiary.

9. In any transaction involving an underwriting subsidiary, Applicant's thrift subsidiaries shall observe the limitations of sections 23A and 23B of the Federal Reserve Act as if the thrifts were banks.[23]

10. The requirements relating to credit extensions to issuers noted in paragraphs 5 - 9 above shall also apply to extensions of credit to parties that are major users of projects that are financed by industrial revenue bonds.

11. Applicants shall cause their U.S. bank and thrift subsidiaries, branches, and agencies to adopt policies and procedures, including appropriate limits on exposure, to govern their participation in financing transactions underwritten or arranged by an underwriting subsidiary as set forth in this Order. The Reserve Banks shall ensure that these policies and procedures are in place at Applicants' U.S. bank and thrift subsidiaries, branches, and agencies and shall assure that loan documentation is available for review by Reserve Banks to ensure that an independent and thorough credit evaluation has been under-

23. The Board notes that the Applicants in these cases do not currently own thrift subsidiaries in the United States. The Board is including this limitation as part of a general framework for foreign banks operating in the United States.

taken in connection with the participation by the bank, thrift, branch, or agency in such financing packages and that such lending complies with the requirements of this Order and section 23B of the Federal Reserve Act.

12. Applicants' U.S. bank and thrift subsidiaries and branches and agencies should also establish appropriate policies, procedures, and limitations regarding exposure of Applicants' U.S. subsidiaries and offices on a consolidated basis to any single customer whose securities are underwritten or dealt in by the underwriting subsidiary.

C. Limitations to Maintain Separateness of an Underwriting Affiliate's Activity

13. There will be no officer, director, or employee interlocks between an underwriting subsidiary and any of Applicant's U.S. bank or thrift subsidiaries, branches, or agencies, except that one officer of a branch or agency may act as a director of the underwriting subsidiary. The underwriting subsidiary will have separate offices from any bank or thrift subsidiary or branch or agency of Applicant.[24]

D. Disclosure by the Underwriting Subsidiary

14. An underwriting subsidiary will provide each of its customers with a special disclosure statement describing the difference between the underwriting subsidiary and its bank and thrift affiliates and its U.S. branches and agencies and pointing out that an affiliated bank or thrift or U.S. branch or agency could be a lender to an issuer and referring the customer to the disclosure documents for details. In addition, the statement shall state that securities sold, offered, or recommended by the underwriting subsidiary are not deposits, are not insured by the Federal Deposit Insurance Corporation, are not guaranteed by an affiliated bank or thrift or branch or agency, and are not otherwise an obligation or responsibility of such a bank or thrift or branch or agency (unless such is the case). The underwriting subsidiary should also disclose any material lending relationship between the issuer and a bank or lending affiliate of the underwriting subsidiary as required under the securities laws and in every case, to the extent known, whether the proceeds of the issue will be used to repay outstanding indebtedness to affiliates.

24. An underwriting subsidiary may have offices in the same building as a bank or thrift subsidiary or branch or agency of Applicant if the underwriting subsidiary's offices are clearly distinguished from those of the bank, thrift, branch, or agency.

E. Marketing Activities on Behalf of an Underwriting Subsidiary

15. No underwriting subsidiary nor any affiliated U.S. bank or thrift institution, branch, or agency will engage in advertising or enter into an agreement stating or suggesting that an affiliated U.S. bank, thrift, branch, or agency is responsible in any way for the underwriting subsidiary's obligations as required for affiliates of member banks under section 23B of the Federal Reserve Act.

16. No U.S. bank or thrift subsidiary or U.S. branch or agency of Applicant will act as agent for, or engage in marketing activities on behalf of, the underwriting subsidiary.[25] In this regard, prospectuses and sales literature relating to securities being underwritten or dealt in by an underwriting subsidiary may not be distributed by a U.S. bank or thrift subsidiary or U.S. branch or agency of Applicant; nor should any such literature be made available to the public at any offices of any such bank, thrift, branch, or agency, unless specifically requested by a customer.

F. Investment Advice by Bank/Thrift Affiliates, Branches, and Agencies

17. An affiliated U.S. bank or thrift institution or a U.S. branch or agency may not express an opinion on the value or the advisability of the purchase or the sale of ineligible securities underwritten or dealt in by an affiliated underwriting subsidiary unless the affiliated institution, branch, or agency notifies the customer that the underwriting subsidiary is underwriting, making a market, distributing or dealing in the security.

18. No U.S. bank, thrift, or trust or investment advisory subsidiaries, or U.S. branches or agencies, of an Applicant shall purchase, as a trustee or in any other fiduciary capacity, for accounts over which they have investment discretion ineligible securities:

(a) underwritten by the underwriting subsidiary as lead underwriter or syndicate member during the period of any underwriting or selling syndicate, and for a period of 60 days after the termination thereof, and

(b) from the underwriting subsidiary if it makes a market in that security, unless, in either case, such purchase is specifically authorized under the instrument creating the fiduciary relationship, by court order, or by the law of the jurisdiction under which the trust is administered.

25. This condition does not prevent a bank, thrift, branch, or agency from informing its customers of the available services of the underwriting subsidiary.

G. Extensions of Credit and Purchases and Sales of Assets

19. An underwriting subsidiary may not sell to any affiliate that is acting as principal in the transaction, ineligible securities that are underwritten by the underwriting subsidiary during the period of the underwriting and for 60 days after the close of the underwriting period, or any ineligible security in which the underwriting subsidiary makes a market, except that, in the case of ineligible securities that are being issued in a simultaneous cross-border underwriting in which the underwriting subsidiary and a foreign affiliate or affiliates are participating, such securities may be purchased or sold pursuant to an intersyndicate agreement for the period of the underwriting where the purchase or sale results from *bona fide* indications of interest from customers. Such purchases or sales shall not be made for purposes of providing liquidity or capital support to the underwriting subsidiary or otherwise to evade the requirements of this Order. An underwriting subsidiary shall maintain documentation on such transactions.

20. An underwriting subsidiary may not underwrite or deal in any ineligible securities issued by its affiliates or representing interests in, or secured by, obligations originated or sponsored by its affiliates (except for grantor trusts or special purpose corporations created to facilitate underwriting of securities backed by assets originated by a non-affiliated lender) unless such securities are rated by an unaffiliated, nationally recognized rating organization or are issued or guaranteed by the Federal National Mortgage Association, the Federal Home Loan Mortgage Corporation, or the Government National Mortgage Association or represent interests in securities issued or guaranteed by such agencies.

21(a) Applicants shall assure that no U.S. bank or thrift subsidiary, branch, or agency shall, directly or indirectly, extend credit in any manner to an affiliated underwriting subsidiary or a subsidiary thereof; or issue a guarantee, acceptance, or letter of credit, including an endorsement or standby letter of credit, for the benefit of the underwriting subsidiary or a subsidiary thereof.

(b) This prohibition shall not apply to an extension of credit by an affiliated bank or thrift subsidiary, branch, or agency to an underwriting subsidiary that is incidental to the provision of clearing services by such affiliate, branch or agency to the underwriting subsidiary with respect to securities of the United States or Canada or their agencies, or securities on which the principal and interest are fully guaranteed by the United States or Canada or their agencies, if the extension of credit is fully secured by such securities, is on market terms, and is repaid on the same calendar day. If the intra-day clearing of such securities cannot be completed because of a *bona fide* fail or operational problem incidental to the clearing process that is beyond the control of the affiliate, branch or agency and the underwriting subsidiary, the affiliate, branch or agency may continue the intra-day extension of credit overnight provided the extension of credit is fully secured as to principal and interest as described above, is on market terms, and is repaid as early as possible on the next business day.

22. No U.S. bank or thrift subsidiary, branch, or agency shall, directly or indirectly, for its own account, purchase financial assets of an affiliated underwriting subsidiary or a subsidiary thereof or sell such assets to the underwriting subsidiary or subsidiary thereof. This limitation shall not apply to the purchase and sale of U.S. Treasury securities or direct obligations of the Canadian federal government that are not subject to repurchase or reverse repurchase agreements between the underwriting subsidiary and its affiliated bank or thrift subsidiary, branch, or agency.

H. Limitations on Transfers of Information

23. No U.S. bank, thrift, branch, or agency shall disclose to an affiliated underwriting subsidiary, nor shall an underwriting subsidiary disclose to an affiliated bank, thrift, branch, or agency, any nonpublic customer information (including an evaluation of the creditworthiness of an issuer or other customer of that bank, thrift, branch, agency, or underwriting subsidiary) without the consent of that customer.

I. Reports

24. Applicants shall submit quarterly to the appropriate Federal Reserve Bank FOCUS reports filed with the NASD or other self-regulatory organizations, and detailed information breaking down the underwriting subsidiaries' business with respect to eligible and ineligible securities, in order to permit monitoring of the underwriting subsidiaries' compliance with the provisions of this Order.

J. Transfer of Activities and Formation of Subsidiaries of an Underwriting Subsidiary to Engage in Underwriting and Dealing

25. The Board's approval of the proposed underwriting and dealing activities extends only to the subsidiaries described above for which approval has been sought in the instant applications. The activities in the United States may not be conducted by Applicants in

any other subsidiary without prior Board review. Pursuant to Regulation Y, no corporate reorganization of an underwriting subsidiary, such as the establishment of subsidiaries of the underwriting subsidiary to conduct the activities, may be consummated without prior Board approval.

K. Limitations on Reciprocal Arrangements and Discriminatory Treatment

26. No Applicant nor any of its subsidiaries may, directly or indirectly, enter into any reciprocal arrangement. A reciprocal arrangement means any agreement, understanding, or other arrangement under which one bank holding company (or subsidiary thereof) agrees to engage in a transaction with, or on behalf of, another bank holding company (or subsidiary thereof), in exchange for the agreement of the second bank holding company (or any subsidiary thereof) to engage in a transaction with, or on behalf of, the first bank holding company (or any subsidiary thereof) for the purpose of evading any requirement of this Order or any prohibition on transactions between, or for the benefit of, affiliates of banks established pursuant to federal banking law or regulation.

27. No U.S. bank or thrift subsidiary or branch or agency of Applicant shall, directly or indirectly:

(a) acting alone or with others, extend or deny credit or services (including clearing services), or vary the terms or conditions thereof, if the effect of such action would be to treat an unaffiliated securities firm less favorably than its affiliated underwriting subsidiary, unless the bank, thrift, branch, or agency demonstrates that the extension or denial is based on objective criteria and is consistent with sound business practices; or

(b) extend or deny credit or services or vary the terms or conditions thereof with the intent of creating a competitive advantage for an underwriting subsidiary of an affiliated bank holding company.

L. Requirement for Supervisory Review Before Commencement of Activities

28. An Applicant may not commence the proposed debt or equity securities underwriting and dealing activities until the Board has determined that the Applicant has established policies and procedures to ensure compliance with the requirements of this Order, including computer, audit and accounting systems, internal risk management controls and the necessary operational and managerial infrastructure. In this regard, the Board will review whether an Applicant may commence underwriting and dealing in equity securities based on a determination by the Board that it has established the managerial and operational infrastructure and other policies and procedures necessary to comply with the requirements of this Order.

The Board's approval determination is subject to the conditions set forth in the Board's Regulation Y, including those in sections 225.4(d) and 225.23(b), and to the Board's authority to require modification or termination of the activities of a bank holding company or any of its subsidiaries as the Board finds necessary to assure compliance with, and to prevent evasion of, the provisions and purposes of the BHC Act and the Board's regulations and orders issued thereunder.

By order of the Board of Governors, effective January 4, 1990.

Voting for this action: Chairman Greenspan and Governors Johnson, Seger, Angell, Kelley, and LaWare.

JENNIFER J. JOHNSON
Associate Secretary of the Board

Concurring Statement of Governor Seger

I concur in the decision of the Board to approve these applications. I believe, however, that the Board should reevaluate the need for continued imposition on any section 20 company, whether U.S. or foreign-owned, of any firewalls that are not related to safety and soundness of affiliated banks.

In these cases, I would not require that Applicants obtain the Board's prior approval for future investment and lending. Moreover, I do not see the need to continue to require U.S.-owned section 20 companies to obtain such approval. I would also permit Applicants to establish interlocks without restriction between the section 20 companies and their U.S. branches and agencies, and would urge the Board to reconsider the section 20 Order's total prohibition on interlocks with bank and thrift affiliates.

January 4, 1990

Concurring Statement of Governor LaWare

These applications present a number of complex issues that require difficult choices on the part of the Board. The Board's decision to approve the applications within the framework of its previous section 20 Orders reflects a careful balancing of competing interests and, in my view, the decision strikes the appropriate balance under the circumstances.

As the Board's Order recognizes, there is a basic incongruity presented by Applicants' status as both banks and bank holding companies. In my view, the Board correctly determined, consistent with the provisions of the International Banking Act, that the Applicant foreign banks should be treated as bank holding companies and that the conditions or firewalls should be appropriately adjusted to reflect that policy. My disagreement with the Board lies in its decision to leave open the possibility that other circumstances could arise that would warrant a different treatment for an applicant foreign bank than the one reached today. I recognize that the Board is proceeding cautiously in this difficult area and that it is not willing to establish a general principle applicable to situations not before it. Nevertheless, it is my opinion that the Board's basic decision to treat the Applicant foreign banks as bank holding companies is the correct principle to apply generally under current law.

In applying the principles of national treatment and competitive equity in the context of the International Banking Act's instruction that Applicants be treated as bank holding companies, the Board felt compelled not to exempt Applicants from the requirement of the section 20 Order that bank holding companies deduct from their capital any investments in and unsecured lending to the section 20 company, and seek prior approval for such actions in the future. The Board established the condition in its original decision in order to ensure that the parent bank holding company met its capital requirements after the applicable deductions and thus could continue to serve as a source of strength to its subsidiary banks. While I recognize that it is the Board's objective through the condition to strengthen and preserve the capital position of domestic bank holding companies, I disagree with the need for that requirement in the context of foreign banks whose financial condition is subject to comparable home country supervision. Any advantage that might be conferred on Applicants by an exemption would not, in my opinion, be so substantial as to warrant the condition in order to maintain competitive equity. I note, however, that the Board has stated it will review the requirement for prior approval of bank holding company funding of section 20 subsidiaries, whether domestically or foreign owned, outside the context of these applications. I welcome that review.

January 4, 1990

First Union Corporation
Charlotte, North Carolina

Order Approving Application to Act in the Private Placement of All Types of Securities

First Union Corporation, Charlotte, North Carolina ("First Union"), a bank holding company within the meaning of the Bank Holding Company Act ("BHC Act"), has applied for 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) for its subsidiary, First Union Securities, Incorporated, Charlotte, North Carolina ("Company"), to act as agent in the private placement of all types of securities.

First Union, with approximately $19.9 billion in deposits, is the third largest commercial banking organization in North Carolina.[1] It operates five subsidiary banks and engages directly and through subsidiaries in a broad range of permissible nonbanking activities in the United States, including engaging through Company to a limited extent in underwriting and dealing in certain securities.[2] Company is and will continue to be a broker-dealer registered with the Securities and Exchange Commission and subject to the recordkeeping, reporting, fiduciary standards, and other requirements of the Securities Exchange Act of 1934, and the National Association of Securities Dealers.

Notice of the application, affording interested persons an opportunity to submit comments on the proposal, has been published (54 *Federal Register* 24,038 (1989)). The time for filing comments has expired, and the Board has considered the application and all comments received in light of the public interest factors set forth in section 4(c)(8) of the BHC Act. The Board received written comments opposing the application from the Investment Company Institute ("ICI"), a trade association of the mutual fund industry.[3]

Because Company would be affiliated through common ownership with a member bank, Company may not be "engaged principally" in underwriting or dealing in securities within the meaning of section 20 of the Banking Act of 1933 (the "Glass–Steagall Act").[4] In earlier decisions, the Board has determined that Company is not "engaged principally" in section 20 activities if revenues from underwriting and dealing in

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1. All data are as of June 30, 1989.
2. *See First Union Corporation*, 75 *Federal Reserve Bulletin* 645 (1989).
3. The comments of the ICI were received substantially after the close of the comment period prescribed in the notice of this application. Under the Board's Rules of Procedure, the Board may, but is not required to consider comments received after the close of the public comment period. 12 C.F.R. 262.3. In any event, the ICI has objected to First Union's proposal to the extent that it could be construed to seek approval for Company to privately place securities of investment companies that are sponsored or advised by Company or First Union. This application does not involve a request by First Union to place such securities.
4. Section 20 of the Glass–Steagall Act (12 U.S.C. § 377) provides that

> ". . . no member bank shall be affiliated . . . with any . . . organization engaged principally in the issue, flotation, underwriting, public sale, or distribution at wholesale or retail or through syndicate participation of stocks, bonds, debentures, notes, or other securities. . . ."

securities that banks are not authorized to underwrite and deal in directly ("ineligible securities") do not exceed 10 percent of Company's gross revenues.

In its recent *Bankers Trust* decision, the Board determined that acting as agent in the private placement of securities does not constitute underwriting and dealing in securities for purposes of section 20 of the Glass–Steagall Act, and therefore revenue derived from these activities is not subject to the 10 percent revenue limitation on ineligible securities underwriting and dealing.[5] In addition, in its *Bankers Trust* and *J.P. Morgan* decisions the Board found that, subject to a number of prudential limitations that address the potential for conflicts of interests, unsound banking practices or other adverse effects, private placement was so closely related to banking as to be a proper incident thereto within the meaning of section 4(c)(8) of the BHC Act. First Union has committed that Company will conduct its private placement activities in a manner consistent with, and subject to, all of the prudential limitations approved by the Board in *J.P. Morgan*.[6]

First Union has proposed to have its affiliated banks extend credit to an issuer whose debt securities have been placed by the section 20 subsidiary where the proceeds would be used to pay the principal amount of the securities at maturity. Such transactions may be appropriate if at the time the securities mature it were more advantageous to the issuer to obtain financing from the bank rather than to reissue the securities.

In situations where the decision to extend credit to an issuer of securities placed by the section 20 subsidiary to repay the principal amount of the securities at maturity is made at a different time than when the securities are actually being placed, the likelihood that the decision to extend credit would be influenced by any promotional incentive associated with the placement activity would be minimized, especially in the case of longer-term securities. Since the decision whether to extend credit in this situation would not be made while the securities are being marketed, the likelihood that the bank would not exercise independent judgment in assessing the creditworthiness of the issuer in light of all relevant circumstances at the time would be lessened. The bank's credit decisions, moreover, can be closely scrutinized through the examination process. In addition, many of these credit transactions could be subject to the requirements of section 23B of the Federal Reserve Act, which provides that certain types of transactions between a bank and a nonbank affiliate must be on an arm's length basis.[7] While it is not entirely clear that section 23B will apply to all of these credit transactions, the Board expects that the standards set out in that section will nevertheless be complied with.

Accordingly, the Board believes that it is appropriate to allow banks affiliated with section 20 subsidiaries or other nonbank affiliates to extend credit to an issuer to repay the principal amount of the securities, provided there is some reasonable time difference between the placement of the securities and the decision to extend credit,[8] and provided the extensions of credit meet prudent and objective standards. The Board conditions its decision with regard to these extensions of credit on the requirement that First Union's subsidiary banks or other affiliates maintain detailed and clearly identified credit and collateral documentation so that examiners may determine that a thorough, objective and independent analysis of the credit has been undertaken. In addition, documentation must be maintained to show that the participation by a bank or thrift affiliate in the transaction has been undertaken under circumstances and on terms and conditions (including pricing, minimum borrower cash flow-to-debt service or collateral requirements, or repayment terms) that are not preferential and that fully reflect the risks associated with the loan, as required under section 23B of the Federal Reserve Act. The Federal Reserve Bank of Richmond will closely review loan documentation of bank affiliates to ensure that an independent and thorough credit evaluation has been undertaken with respect to the participation of the bank in these credit extensions to issuers of securities privately placed by an agent affiliated with the bank.

With respect to the affiliate purchase restriction, First Union also has proposed to have Company place securities with its parent holding company or with a nonbank subsidiary of the parent company consistent with the Board's ruling in *J.P. Morgan*.[9] The Board notes that since purchases of securities will not be made by an affiliated bank, the possibility that losses as a result of these investments will adversely affect the federal safety net protecting the bank is minimized.

5. *Bankers Trust New York Corporation*, 75 *Federal Reserve Bulletin* 829 ("*Bankers Trust*"). *See also J.P. Morgan & Company Incorporated*, 76 *Federal Reserve Bulletin* 26 ("*J.P. Morgan*").

6. First Union has agreed to consult with Federal Reserve staff before transferring its private placement activities from Company to any other nonbank subsidiary of First Union to assure that none of the provisions of the *J.P. Morgan* Order are evaded by the transfer.

7. 12 U.S.C. § 371c-1.

8. In the Board's view, this requirement will be satisfied if at the time the extension of credit is made, a period of at least three years has elapsed from the time of the placement of the securities.

9. Under current legal restrictions, member banks cannot generally purchase securities privately placed by an affiliate. This is because member banks are prohibited from acquiring any equity securities or unmarketable debt securities, *i.e.*, those that cannot be resold because of SEC private placement restrictions. *See* 12 U.S.C. §§ 24 (Seventh) and 335.

Accordingly, the Board believes that it is appropriate to allow Company to place securities with its parent holding company or a nonbank affiliate. The Board recognizes that the potential for certain conflicts of interest may be increased if affiliates were to purchase the entire issue of securities placed by the section 20 subsidiary or a substantial portion of such an issue. The Board therefore believes that it is appropriate to require that affiliates of the section 20 subsidiary limit their investment, both individually and in the aggregate, in any particular issue of securities that are placed by the section 20 subsidiary. The Board expects that First Union will establish appropriate internal policies, procedures, and limitations regarding the amount of securities of any particular issue placed by Company that may be purchased by First Union and each of its nonbanking subsidiaries, individually and in the aggregate.[10] These policies and procedures, as well as the purchases themselves, will be reviewed by the Federal Reserve Bank of Richmond.

In sum, the record shows that under the framework established in this and prior decisions, consummation of this proposal is not likely to result in any significant undue concentration of resources, decreased or unfair competition, conflicts of interest, unsound banking practices, or other adverse effects.

Consummation of this proposal would provide greater efficiencies and added convenience to First Union's customers by allowing consolidation of a wider range of services in a single entity. Accordingly, the Board has determined that the performance of the proposed activities by First Union can reasonably be expected to produce public benefits which would outweigh adverse effects under the proper incident to banking standard of section 4(c)(8) of the BHC Act.

Based on the above, the Board has determined to approve First Union's application subject to all of the terms and conditions set forth above. The Board's determination is subject to all of the conditions set forth in the Board's Regulation Y, including those in sections 225.4(d) and 225.23(b), and to the Board's authority to require modification or termination of the activities of a bank holding company or any of its subsidiaries as the Board finds necessary to assure compliance with, and to prevent evasion of, the provisions of the BHC Act and the Board's regulations and Orders issued thereunder.

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 by the Federal Reserve Bank of Richmond, pursuant to delegated authority.

By order of the Board of Governors, effective January 4, 1990.

Voting for this action: Chairman Greenspan and Governors Johnson, Seger, Angell, Kelley, and LaWare.

JENNIFER J. JOHNSON
Associate Secretary of the Board

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

CoreStates Financial Corp.
Philadelphia, Pennsylvania

Order Approving Merger of Bank Holding Companies

CoreStates Financial Corp., Philadelphia, Pennsylvania ("CoreStates"), a bank holding company within the meaning of the Bank Holding Company Act ("BHC Act"), has applied for the Board's approval under section 3 of the BHC Act (12 U.S.C. § 1842) to merge with First Pennsylvania Corp., Philadelphia, Pennsylvania ("First Penn"), and thereby indirectly acquire First Pennsylvania Bank, N.A., Philadelphia, Pennsylvania, First Pennsylvania Bank (NJ), N.A., Evesham Twp., New Jersey, and First Pennsylvania Bank (Del), Wilmington, Delaware. CoreStates also has applied for the Board's approval under section 4(c)(8) of the BHC Act to acquire the nonbanking subsidiaries of First Penn.[1]

Notice of the applications, affording interested persons an opportunity to submit comments, has been published (54 *Federal Register* 51,235 (1989)). The time for filing comments has expired, and the Board has considered the applications and all comments

10. The limit established shall not exceed 50 percent of the issue being placed. Additionally, in the development of these policies and procedures, First Union should incorporate, with respect to placements of securities, the limitations established by the Board in condition 12 of its Order regarding aggregate exposure of the holding company on a consolidated basis to any single customer whose securities are underwritten or dealt in by Company. *J.P. Morgan & Co. Incorporated, The Chase Manhattan Corporation, Bankers Trust New York Corporation, Citicorp and Security Pacific Corporation*, 75 *Federal Reserve Bulletin* 192 (1989).

1. CoreStates proposes to acquire Centre Square Investment Group, Inc., Philadelphia, Pennsylvania, and thereby engage in investment advisory services; Pennco Life Insurance Company, Phoenix, Arizona, and thereby engage in underwriting as a reinsurer of credit life and accident and health insurance in connection with extensions of credit by its subsidiary banks; and First Pennsylvania Financial Services, Inc., Philadelphia, Pennsylvania, and thereby engage in second-mortgage lending.

These activities are authorized for bank holding companies pursuant to the Board's Regulation Y, 12 C.F.R. 225.25(b)(4), (b)(8), and (b)(1).

received in light of the factors set forth in sections 3(c) and 4 of the BHC Act.

Section 3(d) of the BHC Act, the Douglas Amendment, prohibits the Board from approving an application by a bank holding company to acquire control of any bank located outside of the holding company's home state,[2] unless such acquisition is "specifically authorized by the statute laws of the State in which [the] bank is located, by language to that effect and not merely by implication." 12 U.S.C. § 1842(d). The Board has previously determined that the acquisition of a Delaware bank by a Pennsylvania bank holding company is specifically authorized by the statute laws of Delaware, subject to CoreStates's obtaining the approval required pursuant to Delaware law.[3] The Board has also previously determined that the acquisition of a New Jersey bank by a Pennsylvania bank holding company is specifically authorized by the statute laws of New Jersey.[4] Based on the foregoing, the Board has determined that the proposed merger is specifically authorized by the statute laws of Delaware and New Jersey, and that Board approval of the proposal is not barred by the Douglas Amendment, subject to CoreStates's obtaining the required approval of state banking authorities.

CoreStates controls commercial banking institutions in Pennsylvania, New Jersey and Delaware. CoreStates is the fourth largest commercial banking organization in Pennsylvania, controlling deposits of $11 billion, representing approximately 6.7 percent of the total deposits in commercial banks in the state.[5] First Penn operates commercial bank subsidiaries in Pennsylvania, New Jersey and Delaware. First Penn is the eighth largest commercial banking organization in Pennsylvania, with total deposits of $4.8 billion, representing 3.3 percent of the total deposits in commercial banks in the state. Upon consummation of the proposal, CoreStates would become the third largest commercial banking organization in Pennsylvania, controlling deposits of approximately $15.8 billion, representing approximately 10 percent of the total deposits in commercial banking organizations in Pennsylvania. Consummation of this proposal would not have a significantly adverse effect upon the concentration of commercial banking resources in Pennsylvania.

CoreStates and First Penn compete directly in the Philadelphia, Pennsylvania/Trenton, New Jersey banking market.[6] In that market, CoreStates is the third largest of 184 commercial banking and thrift organizations, controlling $6.6 billion in deposits, representing approximately 10 percent of total deposits in commercial banking organizations in the market ("market deposits").[7] First Penn is the sixth largest commercial banking organization in the Philadelphia/Trenton market, controlling $3.6 billion in deposits, representing approximately 5.4 percent of market deposits. Upon consummation of this proposal, CoreStates would become the second largest commercial banking organization in the market, controlling $10.2 billion in deposits, representing approximately 15.4 percent of market deposits.[8] The Philadelphia/Trenton market is considered unconcentrated, with a Herfindahl–Hirschman Index ("HHI") of 660, which would increase by 108 points to 768 upon consummation of the proposal.

Based on the facts of record in this case, the Board has determined that consummation of the proposal would not have a significantly adverse effect on existing competition in the Philadelphia/Trenton banking market, or in any other relevant banking market. The increase in concentration resulting from the proposal is small, and a significant number of competitors would remain after consummation. The Board also has considered the effects of the proposal on probable future competition in relevant markets. In light of the market concentration and the number of probable future entrants into those markets, the Board concludes that consummation of this proposal would not have a significantly adverse effect on probable future competition in any relevant market.

In evaluating these applications, the Board has considered the financial and managerial resources of CoreStates, First Penn and their bank subsidiaries, and the effect of the proposed merger on the resources and future prospects of these companies. The Board has stated and continues to believe that capital adequacy is an important factor in the analysis of bank holding company expansion proposals.[9] In this regard, the Board expects banking organizations contemplating expansion proposals to maintain strong capital levels substantially above the minimum levels speci-

2. A bank holding company's home state is that state in which the operations of the bank holding company's banking subsidiaries were principally conducted on July 1, 1966, or the date on which the company became a bank holding company, whichever is later.

3. *Meridian Bancorp, Inc.*, 74 *Federal Reserve Bulletin* 51 (1988).

4. *CoreStates Financial Corporation*, 72 *Federal Reserve Bulletin* 796 (1986).

5. Banking data are as of September 30, 1989.

6. The Philadelphia/Trenton banking market is comprised of Philadelphia, the counties of Bucks, Chester, Delaware and Montgomery in Pennsylvania, and Trenton and the counties of Burlington, Camden, Gloucester and Mercer in New Jersey.

7. Market data are as of June 30, 1988.

8. This includes 50 percent of thrift deposits.

9. *The Bank of New York Company, Inc.*, 74 *Federal Reserve Bulletin* 257 (1988); *Chemical New York Corporation*, 73 *Federal Reserve Bulletin* 378 (1987); *Citicorp*, 72 *Federal Reserve Bulletin* 497 (1986); *National City Corporation*, 70 *Federal Reserve Bulletin* 743 (1984).

fied in the Board's Capital Adequacy Guidelines[10] without significant reliance on intangibles, in particular goodwill. The Board carefully analyzes the effect of expansionary proposals on the preservation or achievement of strong capital levels, and has adopted a policy that there should be no significant diminution of financial strength below these levels for the purpose of effecting major expansion proposals.

CoreStates proposes to accomplish the merger through an exchange of shares. CoreStates would remain well capitalized following consummation of the proposal, with capital ratios above the minimum levels specified in the Board's Capital Adequacy Guidelines. Based on these and all of the other facts of record, the Board concludes that financial and managerial considerations are consistent with approval of this application.

In considering the convenience and needs of the communities to be served, the Board has taken into account the record of CoreStates's subsidiary banks under the Community Reinvestment Act ("CRA"). The CRA requires the federal financial supervisory agencies to encourage financial institutions to help meet the credit needs of the local communities in which they operate, consistent with the safe and sound operation of such institutions. To accomplish this end, the CRA requires the appropriate federal supervisory authority to "assess an institution's record of meeting the credit needs of its entire community, including low- and moderate-income neighborhoods, consistent with the safe and sound operation of the institution," and to "take this record into account in its evaluation of bank holding company applications."[11]

In this regard, the Board has received comments filed by the Black Clergy of Philadelphia and Vicinity ("Protestant") critical of the CRA performance of CoreStates's subsidiary bank, Philadelphia National Bank, Philadelphia, Pennsylvania ("PNB"). Protestant alleges that PNB has shown a lack of commitment to low- and moderate-income minority neighborhoods in the Philadelphia area. In particular, Protestant asserts that PNB engaged in a significantly smaller percentage of its mortgage business in low- to moderate-income and minority areas than in other parts of the Philadelphia area. CoreStates has submitted a detailed response to the comments made by Protestant.[12]

The Board also received letters from 12 community organizations[13] in support of this application. The letters describe the initiatives these organizations have undertaken in collaboration with PNB and the positive relationship PNB has developed with their organizations, generally over a period of years.

The Board has carefully reviewed the CRA performance record of PNB, as well as Protestant's comments and CoreStates's response to those comments, in light of the CRA, the Board's regulations, and the jointly issued Statement of the Federal Financial Supervisory Agencies Regarding the Community Reinvestment Act ("CRA Policy Statement").[14] The CRA Policy Statement provides guidance regarding the types of policies and procedures that the supervisory agencies believe financial institutions should have in place in order to fulfill their responsibilities under the CRA on an ongoing basis, and the procedures that the supervisory agencies will use during the application process to review an institution's CRA compliance and performance.

Initially, the Board notes that PNB has received a satisfactory rating from the Office of the Comptroller of the Currency in a January 1990 examination of its CRA performance. The record also shows that CoreStates's other subsidiary banks have each received satisfactory ratings from their primary regulators in the most recent examinations of their CRA performance. In addition, CoreStates has in place the types of programs outlined in the CRA Policy Statement as essential to any effective CRA program. Specifically, PNB has a Public Responsibility Department that reports to the Board of Directors of CoreStates and concentrates on CRA matters, monitors the CRA activities and initiatives taken by the bank, and maintains contacts within the community to develop and monitor all of its CRA activities. CoreStates also has a Compliance Committee to evaluate CRA activity in a similar manner throughout the entire organization.

PNB routinely codes and analyzes the geographic distribution of its loans in order to monitor the effectiveness of its lending and outreach programs and advertises the availability of its products and services in community newspapers, including foreign-language newspapers, directed at low- and moderate-income areas. PNB sponsors community informational events to publicize products which could be of interest to

10. Capital Adequacy Guidelines, 50 *Federal Register* 16,057 (April 24, 1985).

11. 12 U.S.C. § 2903.

12. CoreStates has met with Protestant in an effort to clarify the issues presented under the CRA, although the parties failed to resolve all of their differences.

13. These are the Glenwood Development Corporation, Women's Community Revitalization Project, Venture Theatre, the Resource Center for Human Services, Indochinese-American Council, Hispanic Association of Contractors and Enterprises, Inc., People's Emergency Center, Better Housing for Chester, Inc., Neighborhoods Action Bureau, Inc., Community Ventures, Inc., Housing Consortium for Disabled Individuals, and Centro Pedro Claver.

14. 54 *Federal Register* 13,742 (1989).

members of the community, including low- and moderate-income neighborhoods.

PNB has been extensively involved in the Philadelphia Mortgage Plan, which is a city-wide plan with participation by local banks to grant mortgages in the inner-city; the Philadelphia Rehabilitation Plan, which makes inner-city rehabilitation loans; the Action Loan Program, which consists of subsidized home improvement loans in low- to moderate-income neighborhoods; and other loans to multi-family rental housing made in cooperation with community groups. It has also participated in subsidized public mortgage lending programs, as well as lending to local governments, underwriting debt issues, investing in municipal bonds, lending to small businesses, farms and nonprofit organizations, and the creation of no-frills and basic checking accounts.

CoreStates engages in a variety of other CRA activities, including support for public debt issues for local units of government; industrial development lending in cooperation with local and regional development authorities; a wide range of credit and banking services to health care facilities; and secured loans to individuals and businesses through consumer finance and commercial finance subsidiaries as well as the banks.

The Board has carefully reviewed Protestant's allegation that 83 percent of mortgage dollars extended by PNB went to census tracts with less than 10 percent minority population, while only 5.3 percent of mortgage dollars were extended in census tracts with minority populations of 40 percent or more. An analysis of the Home Mortgage Disclosure Act ("HMDA") data for PNB in the Philadelphia Metropolitan Statistical Area ("PMSA") indicates, however, that there is no evidence of discriminatory or other illegal credit practices by PNB. When compared with other HMDA-reporting lenders in the PMSA, PNB devoted a much higher percentage of its portfolio to those areas with a substantial minority population, and a lesser percentage of its mortgage loan portfolio to mostly white neighborhoods than aggregate lenders. In 1987 and 1988, PNB made 25 and 24 percent of the total number of mortgage loans in census tracts with minority populations of greater than 40 percent. These census tracts constitute approximately 16 percent of the owner-occupied housing units in the PMSA. In mostly white census tracts, which constitute 68 percent of owner-occupied units, PNB made 62 and 55 percent of its mortgage loans in 1987 and 1988.[15] For home improvement lending, PNB's lending was roughly the same as the aggregate in those neighborhoods during 1987 and 1988.

Protestant bases its comments on an analysis of the level of loans by dollar amount, rather than on the number of loans made as reported under HMDA. Because differences in housing values will affect the size of mortgage and home improvement loans, analysis of the number of loans made is a more reliable indicator of lending practices than percentages based on loan amounts.

For the foregoing reasons, and based upon the overall CRA record of CoreStates and PNB, and other facts of record, the Board concludes that convenience and needs considerations, including the record of performance under the CRA of CoreStates, PNB and CoreStates's other subsidiaries, are consistent with approval of this application.

CoreStates has also applied, pursuant to section 4(c)(8) of the BHC Act, to acquire certain nonbanking subsidiaries of First Penn. CoreStates and First Penn operate subsidiaries that engage in investment advisory activities, credit related health, accident and life insurance, and mortgage lending. These activities are permissible for bank holding companies under the Board's Regulation Y.[16] The market share controlled by each of these subsidiaries is small, and there are numerous competitors for their services. Accordingly, consummation of this proposal would have a *de minimis* effect on competition in each of these markets, and the Board concludes that the proposal would not have any significantly adverse effect on competition in the provision of these services in any relevant market. Furthermore, there is no evidence in the record to indicate that approval of this proposal would result in undue concentration of resources, decreased or unfair competition, conflicts of interests, unsound banking practices, or other adverse effects on the public interest. Accordingly, the Board has determined that the balance of public interest factors it must consider under section 4(c)(8) of the BHC Act is favorable and consistent with approval of CoreStates's application to acquire the nonbanking subsidiaries of First Penn.

Based on the foregoing and other facts of record, the Board has determined that the consummation of the transaction would be in the public interest, and that the applications under sections 3 and 4 should be, and hereby are, approved. The acquisition of First Penn shall not be consummated before the thirtieth calendar day following the effective day of this Order, or later than three months following the effective date of this Order, unless such period is extended for good cause by the Board or by the Federal Reserve Bank of

15. Eighteen percent, or 217 out of 1,187, of the PMSA's census tracts have a minority population of 40 percent or more. These 217 tracts account for only 16 percent of the owner-occupied housing units in the PMSA. At the same time, 756, or 64 percent, of the tracts have lower than 10 percent minority population, and account for 68 percent of the owner-occupied units.

16. 12 C.F.R. 225.25(b)(4), (b)(8) and (b)(1), respectively.

Philadelphia, acting pursuant to delegated authority. The determinations as to Applicant's nonbanking activities are subject to all of the conditions contained in the Board's Regulation Y, including sections 225.4(d) and 225.23(b)(3) (12 C.F.R. 225.4(d) and 225.23(b)(3)), 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 assure compliance with, or to prevent evasion of, the provisions and purposes of the BHC Act and the Board's regulations and orders issued thereunder.

By order of the Board of Governors, effective January 29, 1990.

Voting for this action: Chairman Greenspan and Governors Johnson, Seger, Angell, Kelley, and LaWare.

JENNIFER J. JOHNSON
Associate Secretary of the Board

ORDERS ISSUED UNDER BANK MERGER ACT

Manufacturers and Traders Trust Company Buffalo, New York

Order Approving the Acquisition of Assets and Assumption of Liabilities of a Savings Bank

Manufacturers and Traders Trust Company, Buffalo, New York, has applied for the Board's approval under the Bank Merger Act (12 U.S.C. § 1828(c)) to acquire certain assets and assume certain liabilities of Monroe Savings Bank, FSB, Rochester, New York, ("Bank"), an FDIC-insured savings bank.

Public notice of the application before the Board is not required by the Act, and, in view of the emergency situation, the Board has not followed its normal practice of affording interested parties the opportunity to submit comments and views. In view of the emergency situation involving Bank, the Office of Thrift Supervision has recommended immediate action by the Board to prevent the probable failure of Bank.

In connection with the application, the Secretary of the Board has taken into consideration the competitive effects of the proposed transaction, the financial and managerial resources of the banks concerned, and the convenience and needs of the communities to be served. On the basis of the information before the Board, the Secretary of the Board finds that an emergency situation exists so as to require that the Secretary of the Board act immediately pursuant to the provisions of section 18(c)(3) of the Federal Deposit Insurance Act (12 U.S.C. § 1828 (c)(3)) in order to safeguard the depositors of Bank. Having considered the record of this application in light of the factors contained in the Bank Merger Act, the Secretary of the Board has determined that consummation of the transaction would be in the public interest and that the application should be approved on a basis that would not preclude immediate consummation of the proposal. On the basis of these considerations, the application is approved.

The transaction may be consummated immediately, but in no event later than three months after the effective date of this Order, unless such period is extended for good cause by the Board or by the Federal Reserve Bank of New York, acting pursuant to delegated authority.

By order of the Secretary of the Board acting pursuant to delegated authority for the Board of Governors, effective January 26, 1990.

WILLIAM W. WILES
Secretary of the Board

APPLICATIONS APPROVED UNDER BANK HOLDING COMPANY ACT

By the Secretary of the Board

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

Section 3

Applicant(s)	Bank(s)	Effective date
First Commercial Corporation, Little Rock, Arkansas	ABT Bancshares Corporation, Hot Springs, Arkansas	January 16, 1990

Section 3—Continued

Applicant(s)	Bank(s)	Effective date
First Security Corporation, Salt Lake City, Utah	United Savings Bank, Salem, Oregon	January 31, 1990
West One Bancorp, Boise, Idaho West One Bancorp, Washington Bellevue, Washington	Bank of Tacoma, Tacoma, Washington	January 29, 1990

Section 4

Applicant(s)	Bank(s)	Effective date
Mid-South Bancorp, Inc., Franklin, Kentucky	General Trust Company, Nashville, Tennessee	January 19, 1990

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	Bank(s)	Reserve Bank	Effective date
Bradford Bankshares, Inc., Starke, Florida	First National Bank of Bradford County, Starke, Florida	Atlanta	December 22, 1989
Brotherhood Bancshares, Inc., Kansas City, Kansas	The Brotherhood Bank and Trust Company, Kansas City, Kansas	Kansas City	January 12, 1990
Chrisman-Sawyer Bancshares, Inc., Independence, Missouri	First City Bank, Independence, Missouri	Kansas City	January 19, 1990
The Citizens and Southern Corporation, Atlanta, Georgia The Citizens and Southern Florida Corporation, Fort Lauderdale, Florida	M.B. Group, Inc., Marathon, Florida	Atlanta	January 4, 1990
Durand Bancorp, Inc., Durand, Illinois	Durand State Bank, Durand, Illinois	Chicago	January 8, 1990
Financial Bancshares, Inc., St. Louis, Missouri	First Bank of East Prairie, East Prairie, Missouri	St. Louis	December 29, 1989
First Banks, Inc., St. Louis, Missouri	West Frankfort Community Bancshares, Inc., West Frankfort, Illinois	St. Louis	January 9, 1990

Section 3—Continued

Applicant	Bank(s)	Reserve Bank	Effective date
First City, Inc., Memphis, Tennessee	First City, A Federal Savings Bank, Memphis, Tennessee	St. Louis	December 29, 1989
First Eldorado Bancshares, Inc., Eldorado, Illinois	First State Bank of Eldorado, Eldorado, Illinois	St. Louis	December 27, 1989
First Malden Bancshares, Inc., Malden, Missouri	First National Bank of Malden, Malden, Missouri	St. Louis	December 19, 1989
First Mid-America Bancorp, Inc., Davenport, Iowa	The State Bank of Annawan, Annawan, Illinois	Chicago	January 10, 1990
First Mutual Bancorp of Illinois, Inc., Chicago, Illinois	First State Bancorp of Harvey, Harvey, Illinois	Chicago	January 11, 1990
First Patriot Bankshares Corporation, Fairfax, Virginia	Patriot National Bank of Reston, Reston, Virginia	Richmond	December 27, 1989
First State Bancorp of Monticello, Inc., Monticello, Illinois	Busey Bank of McLean County, Heyworth, Illinois	Chicago	January 3, 1990
First State Bancorp of Princeton, Illinois, Inc., Princeton, Illinois	First Bank and Trust Co. of Gridley, Gridley, llinois	Chicago	January 5, 1990
FMS Bancorp, Inc., Poplar Bluff, Missouri	First Missouri State Bank, Poplar Bluff, Missouri	St. Louis	December 19, 1989
Goodenow Bancorporation, Spirit Lake, Iowa	First Trust & Savings Bank, Armstrong, Iowa	Chicago	January 10, 1990
Gore-Bronson Bancorp, Inc., Prospect Heights, Illinois	IRVING BANCORP, INC., Chicago, Illinois	Chicago	December 22, 1989
International Brotherhood of Boilermakers, Iron Ship Builders, Blacksmiths, Forgers and Helpers, Kansas City, Kansas	Brotherhood Bancshares, Inc., Kansas City, Kansas	Kansas City	January 12, 1990
Las Cruces B.R.G., Inc., Las Cruces, New Mexico	Rio Grande, N.A., Las Cruces, New Mexico	Dallas	January 12, 1990
Lincoln Financial Corporation, Fort Wayne, Indiana	PTC Financial Corporation, Peru, Indiana	Chicago	December 29, 1989
Mercantile Bankshares Corporation, Baltimore, Maryland	Baltimore Trust Company, Selbyville, Delaware	Richmond	December 28, 1989
Merchant Bankshares Group, Inc., Fort Myers, Florida	Merchant National Bank, Fort Myers, Florida	Atlanta	December 22, 1989
National Penn Bancshares, Inc., Boyertown, Pennsylvania	Valley Community Bank, Kingston, Pennsylvania	Philadelphia	January 10, 1990
Overton Bank Shares, Inc., Mondamin, Iowa	Mondamin Savings Bank, Mondamin, Iowa	Chicago	December 27, 1989
The Owego National Financial Corporation, Owego, New York	The Owego National Bank, Owego, New York	New York	December 29, 1989

Section 3—Continued

Applicant	Bank(s)	Reserve Bank	Effective date
Piedmont Bancshares Corporation, Winston-Salem, North Carolina	Enterprise National Bank of the Piedmont, Winston-Salem, North Carolina	Richmond	January 3, 1990
Royal Bancshares, Inc., Elroy, Wisconsin	Bank of Elroy, Elroy, Wisconsin	Chicago	January 8, 1990
Security Chicago, Corp., Chicago, Illinois	First Bank and Trust Company of Gridley, Gridley, Illinois	Chicago	January 5, 1990
Star Banc Corporation, Cincinnati, Ohio	Fir-Ban Inc., Verona, Kentucky	Cleveland	January 5, 1990
Thompson Financial, Ltd., Fort Worth, Texas	Texas Security Bancshares, Inc., Fort Worth, Texas Central Bank and Trust, Fort Worth, Texas North Fort Worth Bank, Fort Worth, Texas	Dallas	January 10, 1990
Union Planters Corporation, Memphis, Tennessee	First Financial Services, Inc., Brownsville, Tennessee	St. Louis	January 4, 1990
Union Planters Corporation, Memphis, Tennessee	Security Bancshares, Inc., Paris, Tennessee	St. Louis	January 4, 1990
Valley Bancorporation, Appleton, Wisconsin	Peoples State Bank, Three Lakes, Wisconsin	Chicago	December 21, 1989
Valley Bancorporation, Appleton, Wisconsin	First National Bank of Chippewa Falls, Chippewa Falls, Wisconsin	Chicago	December 21, 1989
WallCo, Inc., Nehawka, Nebraska	The Nehawka Bank, Nehawka, Nebraska	Kansas City	December 21, 1989

Section 4

Applicant	Nonbanking Activity/Company	Reserve Bank	Effective date
Compagnie Financiere de Suez, Paris, France Banque Indosuez, Paris, France	brokerage of foreign currency options and in the provision of incidental investment advice with respect to such options	New York	December 22, 1989
Dunlap Iowa Holding Co., Dunlap, Iowa	to increase the dollar volume of its lending authority	Chicago	December 27, 1989
Northern Missouri Bancshares, Inc., Unionville, Missouri	Harrison County Bancshares, Inc., Bethany, Missouri	Kansas City	January 18, 1990
Norwest Corporation, Minneapolis, Minnesota	First Interstate Corporation of Wisconsin, Kohler, Wisconsin	Minneapolis	December 29, 1989
Union Planters Corporation, Memphis, Tennessee	Union Planters Investment Bankers Corporation, Memphis, Tennessee	St. Louis	December 28, 1989

Section 4—Continued

Applicant	Nonbanking Activity/Company	Reserve Bank	Effective date
The Yasuda Trust & Banking Co., Ltd., Tokyo, Japan	MASI, Ltd., Deerfield, Illinois	New York	January 22, 1990

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	Bank(s)	Reserve Bank	Effective date
Central State Bank, Elkader, Iowa	First State Savings Bank, McGregor, Iowa	Chicago	December 21, 1989
First Illini Bank, Galesburg, Illinois	Abingdon Bank and Trust Company, Abingdon, Illinois Community Bank & Trust Company, Canton, Illinois Madison Park Bank, Peoria, Illinois	Chicago	January 12, 1990
Ohio Citizens Bank, Toledo, Ohio	Fremont Office of Diamond Savings and Loan Company, Findlay, Ohio	Cleveland	January 19, 1990

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.

Woodward v. Board of Governors, No. 90–3031 (11th Cir., filed January 16, 1990); *Kaimowitz v. Board of Governors*, undocketed (11th Cir., filed January 23, 1990). Petitions for review of Board order dated December 22, 1989, approving application by First Union Corporation to acquire Florida National Banks. Petitioners object to approval on Community Reinvestment Act grounds, and have moved for a stay of the Board's order.

Securities Industry Association v. Board of Governors, No. 89–1730 (D.C. Cir., filed November 29, 1989). Petition for review of Board order approving application under section 4(c)(8) to engage in private placement and riskless principal activities. The case has been held in abeyance pending the outcome of *Securities Industry Association v. Board of Governors*, No. 89–1127 (D.C. Circuit).

Babcock and Brown Holdings, Inc., et al. v. Board of Governors, No. 89–70518 (9th Cir., filed November 22, 1989). Petition for review of Board determination that a company would control a proposed insured bank for purposes of the Bank Holding Company Act.

Consumers Union of U.S., Inc. v. Board of Governors, No. 89–3008 (D.D.C., filed November 1, 1989). Challenge to various aspects of amendments to Regulation Z implementing the Home Equity Loan Consumer Protection Act.

Synovus Financial Corp. v. Board of Governors, No. 89–1394 (D.C. Cir., filed June 21, 1989). Petition for review of Board order permitting relocation of a bank holding company's national bank subsidiary from Alabama to Georgia.

MCorp v. Board of Governors, No. 89–2816 (5th Cir., filed May 2, 1989). Appeal of preliminary injunction against the Board enjoining pending and future enforcement actions against bank holding company now in bankruptcy. Awaiting decision.

Independent Insurance Agents of America v. Board of Governors, No. 89-4030 (2d Cir., filed March 9, 1989). Petition for review of Board order ruling that the non-banking restrictions of section 4 of the Bank Holding Company Act apply only to non-bank subsidiaries of bank holding companies. Board's order upheld on November 29, 1989. Petition for rehearing denied; petitioners have moved for a stay pending Supreme Court review.

Securities Industry Association v. Board of Governors, No. 89–1127 (D.C. Cir., filed February 16, 1989). Petition for review of Board order permitting five bank holding companies to engage to a limited extent in additional securities underwriting and dealing activities.

American Land Title Assoc. v. Board of Governors, No. 88–1872 (D.C. Cir., filed December 16, 1988). Petition for review of Board order ruling that exemption G from the section 4(c)(8) prohibition on insurance activities, which grandfathers insurance agency activities by bank holding companies that conducted insurance agency activities before January 1, 1971, does not limit those grandfathered activities to the specific ones undertaken at that time. Board's order upheld on December 29, 1989.

MCorp v. Board of Governors, No. CA3–88–2693 (N.D. Tex., filed October 10, 1988). Application for injunction to set aside temporary cease and desist orders. Stayed pending outcome of *MCorp v. Board of Governors* in Fifth Circuit.

White v. Board of Governors, No. CU-S-88–623-RDF (D. Nev., filed July 29, 1988). Age discrimination complaint.

Cohen v. Board of Governors, No. 88–1061 (D.N.J., filed March 7, 1988). Action seeking disclosure of documents under the Freedom of Information Act.

Chase Manhattan Corp. v. Board of Governors, No. 87–1333 (D.C. Cir., filed July 20, 1987). Petition to review order conditionally approving application for bank holding company to underwrite and deal in mortgage-related securities to a limited extent. Dismissed by stipulation on December 28, 1989.

Lewis v. Board of Governors, Nos. 87–3455, 87–3545 (11th Cir., filed June 25, August 3, 1987). Petition for review of Board orders approving applications of non-Florida bank holding companies to expand activities of Florida trust company subsidiaries. Matter stayed pending Supreme Court review of *Continental Illinois Corp. v. Lewis*, 827 F.2d 1517 (11th Cir. 1987).

Final Enforcement Orders Issued by The Board of Governors

Bruce F. Dailey
Director of First Security Bank of Missoula
Missoula, Montana

The Federal Reserve Board announced on October 31, 1989, the issuance, on October 30, 1989, of an Order of Prohibition against Bruce F. Dailey, the former chairman of the board of directors of the First Security Bank of Missoula, Missoula, Montana, in settlement of an enforcement action instituted against him.

In an enforcement proceeding, the Board contended that Mr. Dailey misappropriated at least $100,000 from the bank, while he was the chairman of its board, through the use of false loan documents. Without admitting any allegations made by the Board, Mr. Dailey consented to the issuance of the Order of Prohibition. Mr. Dailey is henceforth prohibited from participating, including serving as an officer, director, or employee, in any manner in the conduct of the affairs of any financial institution supervised by a federal financial institutions supervisory agency without the approval of the appropriate federal banking agencies.

EVCO, Inc.
Evanston, Wyoming

Stockgrowers State Bank Company, Inc.
Worland, Wyoming

The Federal Reserve Board announced on January 30, 1990, the issuance of a Final Decision and Final Order assessing civil money penalties in an aggregate amount of $3,015,000 against seven former officials of EVCO, Inc., Evanston, Wyoming, and Stockgrowers State Bank Company, Inc., Worland, Wyoming.

They are Daniel M. Burke, John P. Burke, M. Joseph Burke, John A. Edmiston, Don C. Davis, Lyle R. Lake, and James R. Sperry. The Board also issued Orders of Prohibition against four of those officials, Daniel M. Burke, M. Joseph Burke, Edmiston, and Davis.

National Bank of Greece
Athens, Greece

The Federal Reserve Board announced on September 25, 1989, the issuance of a Consent Cease and Desist Order and Consent Assessment of Civil Money Penalty as to the National Bank of Greece and the National Mortgage Bank of Greece.

The Consent Order is in settlement of enforcement proceedings instituted by the Board because of alleged unsafe and unsound practices and alleged violations of law and regulation that generally arose out of the receipt of deposits by representative offices of the National Mortgage Bank in New York and in three other states.

The National Mortgage Bank of Greece, without admitting any of the allegations in the proceeding, agreed to pay a fine of $2,000,000. The National Bank of Greece, without admitting any of the allegations in the proceeding, agreed to pay a fine of $125,000.

Financial and Business Statistics

NOTE. *The following tables may have some discontinuities in historical data for some series beginning with the December 1989 issue: 1.12, 1.33, 1.44, 1.52, 1.57–1.60, 2.10, 2.12, 2.13, 3.10, 3.11, 3.15–3.20, 3.22–3.25, 3.27, 3.28, and 4.30. For a more detailed explanation of the changes, see the announcement on page 16 of the January 1990 Bulletin.*

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

Annual rates of change, seasonally adjusted in percent[1]

Monetary and credit aggregates	1989				1989				
	Q1	Q2	Q3	Q4	Aug.	Sept.	Oct.r	Nov.r	Dec.
Reserves of depository institutions[2]									
1 Total	−4.2	−8.7	.3	5.7	1.1	9.6	8.1	−1.1	8.5
2 Required	−4.4	−7.6	.1	5.5	2.8	8.6	6.5	.4	9.1
3 Nonborrowed	.0	−10.2	8.3	7.8	1.5	9.3	11.0	3.1	10.3
4 Monetary base[3]	4.6	1.5	2.9	4.1	1.2	7.5	2.8	1.3	9.4
Concepts of money, liquid assets, and debt[4]									
5 M1	−.4	−5.6	1.5	6.7	.3	5.8	10.1	2.8	12.2
6 M2	1.9	1.2	7.1r	7.7	7.3	6.8r	7.6	8.6	7.8
7 M3	3.7	2.5r	4.0r	2.8	1.9	.4r	2.9	5.0	3.7
8 L	5.0	4.7	4.4r	n.a.	3.9r	1.6r	3.1	3.1	n.a.
9 Debt	8.4	7.9	7.2	7.5	8.1	7.1	7.8	8.2	n.a.
Nontransaction components									
10 In M2[5]	2.6	3.6r	9.0r	8.0	9.6r	7.2r	6.8	10.4	6.4
11 In M3 only[6]	10.5r	7.3r	−7.0r	−15.0	−17.5r	−22.8r	−14.8	−8.4	−12.3
Time and savings deposits									
Commercial banks									
12 Savings[7]	−3.7	−14.2	−.2	8.9	7.3	7.9	5.9	13.6	11.4
13 Small-denomination time[8]	22.5	29.0	10.3r	8.3	7.5	3.9	13.0	6.0	8.3
14 Large-denomination time[9,10]	18.1	17.7	2.1r	1.5	−2.0r	−3.3r	5.0	6.6	−5.9
Thrift institutions									
15 Savings[7]	−7.7	−19.0	−6.7	4.1	−1.7r	4.2r	3.6	7.7	3.7
16 Small-denomination time	4.3	14.0	9.9r	−4.5	5.3r	−2.9	−10.0	−4.0	−2.0
17 Large-denomination time[9]	1.2	5.9	−9.6	−28.4	−22.6r	−29.2r	−34.3	−27.1	−23.3
Debt components[4]									
18 Federal	7.7	6.9	4.6	9.6	8.8	11.0	9.8	11.1	n.a.
19 Nonfederal	8.6	8.2	8.0	6.9	8.0	5.9	7.2	7.4	n.a.

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

2. Figures incorporate adjustments for discontinuities associated with the implementation of the Monetary Control Act and other regulatory changes to reserve requirements. To adjust for discontinuities due to changes in reserve requirements on reservable nondeposit liabilities, the sum of such required reserves is subtracted from the actual series. Similarly, in adjusting for discontinuities in the monetary base, required clearing balances and adjustments to compensate for float also are subtracted from the actual series.

3. The monetary base not adjusted for discontinuities consists of total reserves plus required clearing balances and adjustments to compensate for float at Federal Reserve Banks plus the currency component of the money stock less the amount of vault cash holdings of thrift institutions that is included in the currency component of the money stock plus, for institutions not having required reserve balances, the excess of current vault cash over the amount applied to satisfy current reserve requirements. After the introduction of contemporaneous reserve requirements (CRR), currency and vault cash figures are measured over the weekly computation period ending Monday.

Before CRR, all components of the monetary base other than excess reserves are seasonally adjusted as a whole, rather than by component, and excess reserves are added on a not seasonally adjusted basis. After CRR, the seasonally adjusted series consists of seasonally adjusted total reserves, which include excess reserves on a not seasonally adjusted basis, plus the seasonally adjusted currency component of the money stock plus the remaining items seasonally adjusted as a whole.

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

M1: (1) currency outside the 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 due 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 (OCD) 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.

M2: M1 plus overnight (and continuing contract) repurchase agreements (RPs) issued by all commercial banks and overnight Eurodollars issued to U.S. residents by foreign branches of U.S. banks worldwide, Money Market Deposit Accounts (MMDAs), savings and small-denomination time deposits (time deposits—including retail RPs—in amounts of less than $100,000), and balances in both taxable and tax-exempt general purpose and broker-dealer money market mutual funds. Excludes individual retirement accounts (IRA) and Keogh balances at depository institutions and money market funds. Also excludes all balances held by U.S. commercial banks, money market funds (general purpose and broker-dealer), foreign governments and commercial banks, and the U.S. government.

M3: M2 plus large-denomination time deposits and term RP liabilities (in amounts of $100,000 or more) issued by commercial banks and thrift institutions, term Eurodollars held by U.S. residents at foreign branches of U.S. banks worldwide and at all banking offices in the United Kingdom and Canada, and balances in both taxable and tax-exempt, institution-only money market mutual funds. Excludes amounts held by depository institutions, the U.S. government, money market funds, and foreign banks and official institutions. Also subtracted is the estimated amount of overnight RPs and Eurodollars held by institution-only money market mutual funds.

L: M3 plus the nonbank public holdings of U.S. savings bonds, short-term Treasury securities, commercial paper and bankers acceptances, net of money market mutual fund holdings of these assets.

Debt: Debt of domestic nonfinancial sectors consists of outstanding credit market debt of the U.S. government, state and local governments, and private nonfinancial sectors. Private debt consists of corporate bonds, mortgages, consumer credit (including bank loans), other bank loans, commercial paper, bankers acceptances, and other debt instruments. The source of data on domestic nonfinancial debt is the Federal Reserve Board's flow of funds accounts. Debt data are based on monthly averages. Growth rates for debt reflect adjustments for discontinuities over time in the levels of debt presented in other tables.

5. Sum of overnight RPs and Eurodollars, money market fund balances (general purpose and broker-dealer), MMDAs, and savings and small time deposits less the estimated amount of demand deposits and vault cash held by thrift institutions to service their time and savings deposit liabilities.

6. Sum of large time deposits, term RPs, and Eurodollars of U.S. residents, money market fund balances (institution-only), less a consolidation adjustment that represents the estimated amount of overnight RPs and Eurodollars held by institution-only money market mutual funds.

7. Excludes MMDAs.

8. Small-denomination time deposits—including retail RPs—are those issued in amounts of less than $100,000. All IRA and Keogh accounts at commercial banks and thrifts are subtracted from small time deposits.

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

10. Large-denomination time deposits at commercial banks less those held by money market mutual funds, depository institutions, and foreign banks and official institutions.

1.11 RESERVES OF DEPOSITORY INSTITUTIONS AND RESERVE BANK CREDIT

Millions of dollars

Factors	Monthly averages of daily figures			Weekly averages of daily figures for week ending						
	1989			1989						
	Oct.	Nov.	Dec.	Nov. 15	Nov. 22	Nov. 29	Dec. 6	Dec. 13	Dec. 20	Dec. 27
SUPPLYING RESERVE FUNDS										
1 **Reserve Bank credit**	**260,634**	**265,521**	**269,244**	**261,218**	**261,012**	**264,506**	**266,554**	**267,710**	**267,551**	**270,879**
2 U.S. government securities[1]	215,920	217,455	224,142	214,890	217,268	220,059	223,003	223,498	222,841	224,613
3 Bought outright	215,920	216,475	223,031	214,890	216,872	216,254	223,003	223,040	222,609	221,943
4 Held under repurchase agreements	0	980	1,111	0	396	3,805	0	458	232	2,670
5 Federal agency obligations	6,546	6,602	6,683	6,525	6,536	6,845	6,525	6,549	6,544	6,786
6 Bought outright	6,546	6,525	6,525	6,525	6,525	6,525	6,525	6,525	6,525	6,525
7 Held under repurchase agreements	0	77	158	0	11	320	0	24	19	261
8 Acceptances	0	0	0	0	0	0	0	0	0	0
9 Loans	608	346	289	341	202	680	171	132	189	513
10 Float	734	1,024	1,128	1,197	858	981	672	832	1,314	1,692
11 Other Federal Reserve assets	36,825	37,093	37,003	38,265	36,148	35,941	36,184	36,699	36,665	37,275
12 Gold stock[2]	11,064	11,062	11,059	11,062	11,061	11,060	11,060	11,059	11,059	11,059
13 Special drawing rights certificate account	8,518	8,518	8,518	8,518	8,518	8,518	8,518	8,518	8,518	8,518
14 Treasury currency outstanding	19,462	19,529	19,585	19,522	19,536	19,550	19,564	19,578	19,592	19,606
ABSORBING RESERVE FUNDS										
15 Currency in circulation	249,190	251,807	256,870	251,338	252,158	253,641	253,842	255,349	256,683	259,112
16 Treasury cash holdings[2]	439	448	448	449	451	448	445	448	447	447
Deposits, other than reserve balances, with Federal Reserve Banks										
17 Treasury	6,111	5,008	4,787	4,757	4,449	5,093	5,162	4,475	4,402	4,571
18 Foreign	245	234	286	213	239	253	327	223	252	215
19 Service-related balances and adjustments	1,866	1,944	1,817	1,880	1,984	1,966	1,904	2,165	1,881	1,822
20 Other	327	333	397	248	293	457	283	231	337	337
21 Other Federal Reserve liabilities and capital	8,091	7,862	8,242	7,716	7,651	7,912	8,464	8,458	7,839	8,140
22 Reserve balances with Federal Reserve Banks[3]	33,410	33,993	35,559	33,717	32,903	33,866	35,268	35,515	34,878	35,417

Factors	End-of-month figures			Wednesday figures						
	1989			1989						
	Oct.	Nov.	Dec.	Nov. 15	Nov. 22	Nov. 29	Dec. 6	Dec. 13	Dec. 20	Dec. 27
SUPPLYING RESERVE FUNDS										
23 **Reserve Bank credit**	**264,717**	**267,060**	**276,622**	**261,062**	**263,150**	**275,731**	**266,028**	**272,155**	**270,208**	**283,575**
24 U.S. government securities[1]	218,176	223,142	228,367	216,088	219,406	228,898	221,821	226,601	224,245	233,951
25 Bought outright	218,176	223,142	226,775	216,088	216,633	216,672	221,821	223,395	222,623	222,195
26 Held under repurchase agreements	0	0	1,592	0	2,773	12,226	0	3,206	1,622	11,756
27 Federal agency obligations	6,525	6,525	7,050	6,525	6,599	7,689	6,525	6,691	6,655	8,026
28 Bought outright	6,525	6,525	6,525	6,525	6,525	6,525	6,525	6,525	6,525	6,525
29 Held under repurchase agreements	0	0	525	0	74	1,164	0	166	130	1,501
30 Acceptances	0	0	0	0	0	0	0	0	0	0
31 Loans	270	181	481	1,329	170	1,225	136	147	182	2,159
32 Float	1,471	668	1,093	563	890	1,022	1,003	1,649	2,100	1,514
33 Other Federal Reserve assets	38,275	36,544	39,631	36,556	36,086	36,898	36,543	37,068	37,028	37,926
34 Gold stock[2]	11,062	11,060	11,059	11,062	11,061	11,060	11,059	11,059	11,059	11,059
35 Special drawing rights certificate account	8,518	8,518	8,518	8,518	8,518	8,518	8,518	8,518	8,518	8,518
36 Treasury currency outstanding	19,494	19,564	19,615	19,522	19,536	19,550	19,564	19,578	19,592	19,606
ABSORBING RESERVE FUNDS										
37 Currency in circulation	249,025	253,960	260,443	251,555	253,389	253,928	254,561	256,013	257,700	260,291
38 Treasury cash holdings[2]	444	445	455	452	447	448	448	447	447	447
Deposits, other than reserve balances, with Federal Reserve Banks										
39 Treasury	13,124	5,500	6,217	6,637	4,504	6,470	4,020	5,692	5,356	5,029
40 Foreign	252	307	589	277	244	185	241	206	228	269
41 Service-related balances and adjustments	1,623	1,638	1,618	1,636	1,639	1,639	1,638	1,636	1,637	1,626
42 Other	292	311	1,298	301	232	949	230	217	228	523
43 Other Federal Reserve liabilities and capital	8,303	8,402	8,486	7,405	7,572	7,855	8,292	7,878	7,641	8,062
44 Reserve balances with Federal Reserve Banks[3]	30,728	35,639	36,709	31,901	34,238	43,385	35,739	39,221	36,141	46,511

1. *Includes* securities loaned—fully guaranteed by U.S. government securities pledged with Federal Reserve Banks—and *excludes* any securities sold and scheduled to be bought back under matched sale-purchase transactions.

2. Revised for periods between October 1986 and April 1987. At times during this interval, outstanding gold certificates were inadvertently in excess of the gold stock. Revised data not included in this table are available from the Division of Monetary Affairs, Banking Section.

3. Excludes required clearing balances and adjustments to compensate for float.

NOTE. For amounts of currency and coin held as reserves, see table 1.12. Components may not add to totals because of rounding.

1.12 RESERVES AND BORROWINGS Depository Institutions[1]

Millions of dollars

Reserve classification	Monthly averages[9]									
	1987	1988	1989	1989						
	Dec.	Dec.	Dec.	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1 Reserve balances with Reserve Banks[2]	37,673	37,830	35,437	33,852	33,902	32,823	33,556	33,123	33,941[r]	35,437
2 Total vault cash[3]	26,185	27,197	28,782	27,151	27,851	28,358	28,085	28,900	28,519	28,782
3 Vault[4]	24,449	25,909	27,374	25,735	26,351	26,735	26,570	27,275	27,048	27,374
4 Surplus[5]	1,736	1,288	1,409	1,416	1,500	1,622	1,515	1,625	1,471	1,409
5 Total reserves[6]	62,123	63,739	62,810	59,587	60,254	59,559	60,126	60,397	60,989	62,810
6 Required reserves	61,094	62,699	61,887	58,681	59,288	58,674	59,188	59,378	60,044	61,887
7 Excess reserve balances at Reserve Banks[7]	1,029	1,040	923	905	966	885	938	1,020	945	923
8 Total borrowings at Reserve Banks	777	1,716	265	1,490	694	675	693	555	349	265
9 Seasonal borrowings at Reserve Banks	93	130	84	431	497	490	452	330	134	84
10 Extended credit at Reserve Banks[8]	483	1,244	20	917	106	41	22	21	21	20
	Biweekly averages of daily figures for weeks ending									
	1989									1990
	Sept. 6	Sept. 20	Oct. 4	Oct. 18	Nov. 1	Nov. 15	Nov. 29	Dec. 13[r]	Dec. 27[r]	Jan. 10
11 Reserve balances with Reserve Banks[2]	33,053	34,424	32,643	33,581	32,778	34,468	33,394	35,399	35,131	36,630
12 Total vault cash[3]	27,710	28,095	28,298	29,096	28,875	27,907	29,156	27,821	29,415	29,695
13 Vault[4]	26,153	26,660	26,695	27,531	27,177	26,552	27,574	26,509	27,903	28,334
14 Surplus[5]	1,557	1,436	1,603	1,565	1,698	1,355	1,582	1,312	1,513	1,361
15 Total reserves[6]	59,206	61,083	59,338	61,112	59,955	61,020	60,968	61,908	63,033	64,963
16 Required reserves	58,247	60,195	58,343	60,186	58,827	60,139	59,958	61,149	62,015	63,841
17 Excess reserve balances at Reserve Banks[7]	959	888	995	926	1,128	881	1,009	759	1,018	1,122
18 Total borrowings at Reserve Banks	538	614	898	653	345	272	441	151	351	339
19 Seasonal borrowings at Reserve Banks	485	438	453	342	280	147	115	87	89	58
20 Extended credit at Reserve Banks[8]	22	21	25	19	23	20	23	22	19	19

1. These data also appear in the Board's H.3 (502) release. For address, see inside front cover.
2. Excludes required clearing balances and adjustments to compensate for float.
3. Dates refer to the maintenance periods in which the vault cash can be used to satisfy reserve requirements. Under contemporaneous reserve requirements, maintenance periods end 30 days after the lagged computation periods in which the balances are held.
4. Equal to all vault cash held during the lagged computation period by institutions having required reserve balances at Federal Reserve Banks plus the amount of vault cash equal to required reserves during the maintenance period at institutions having no required reserve balances.
5. Total vault cash at institutions having no required reserve balances less the amount of vault cash equal to their required reserves during the maintenance period.
6. Total reserves not adjusted for discontinuities consist of reserve balances with Federal Reserve Banks, which exclude required clearing balances and adjustments to compensate for float, plus vault cash used to satisfy reserve requirements. Such vault cash consists of all vault cash held during the lagged computation period by institutions having required reserve balances at Federal Reserve Banks plus the amount of vault cash equal to required reserves during the maintenance period at institutions having no required reserve balances.
7. Reserve balances with Federal Reserve Banks plus vault cash used to satisfy reserve requirements less required reserves.
8. 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 there is with traditional short-term adjustment credit, the money market impact of extended credit is similar to that of nonborrowed reserves.
9. Data are prorated monthly averages of biweekly averages.

1.13 SELECTED BORROWINGS IN IMMEDIATELY AVAILABLE FUNDS Large Member Banks[1]

Averages of daily figures, in millions of dollars

Maturity and source	1988 and 1989 week ending Monday								
	Dec. 5	Dec. 12	Dec. 19	Dec. 26	Jan. 2	Jan. 9	Jan. 16	Jan. 23	Jan. 30
Federal funds purchased, repurchase agreements, and other selected borrowing in immediately available funds									
From commercial banks in the United States									
1 For one day or under continuing contract	74,471	70,886	69,448	70,964	67,427	75,520	70,344	69,604	66,372
2 For all other maturities	9,940	9,829	10,114	9,810	9,356	9,753	10,870	10,424	9,947
From other depository institutions, foreign banks and foreign official institutions, and U.S. government agencies									
3 For one day or under continuing contract	28,709	30,368	26,454	24,933	22,855	28,713	26,331	24,937	27,974
4 For all other maturities	6,545	7,418	7,778	8,730	7,709	6,801	7,431	6,694	6,345
Repurchase agreements on U.S. government and federal agency securities in immediately available funds									
Brokers and nonbank dealers in securities									
5 For one day or under continuing contract	14,929	15,392	14,634	13,043	12,610	15,134	14,513	15,955	16,041
6 For all other maturities	10,352	10,890	10,659	11,003	8,252	9,458	11,235	11,280	12,425
All other customers									
7 For one day or under continuing contract	30,312	30,307	29,321	27,986	27,418	28,613	29,334	28,826	28,775
8 For all other maturities	9,790	9,651	9,790	10,860	9,248	9,154	9,547	9,389	9,750
MEMO: Federal funds loans and resale agreements in immediately available funds in maturities of one day or under continuing contract									
9 To commercial banks in the United States	39,202	35,912	39,237	40,080	38,015	42,159	40,105	40,596	40,075
10 To all other specified customers[2]	13,277	13,936	14,108	14,987	12,747	15,135	14,111	14,784	13,584

1. Banks with assets of $1 billion or more as of Dec. 31, 1977.
These data also appear in the Board's H.5 (507) release. For address, see inside front cover.

2. Brokers and nonbank dealers in securities; other depository institutions; foreign banks and official institutions; and United States government agencies.

1.14 FEDERAL RESERVE BANK INTEREST RATES

Percent per year

Current and previous levels

Federal Reserve Bank	Adjustment credit and Seasonal credit[1]			Extended credit[2]						
				First 30 days of borrowing			After 30 days of borrowing[3]			
	On 1/29/90	Effective date	Previous rate	On 1/29/90	Effective date	Previous rate	On 1/29/90	Effective date	Previous rate	Effective date
Boston	7	2/24/89	6½	7	2/24/89	6½	8.70	1/25/90	8.75	1/11/90
New York		2/24/89			2/24/89			1/25/90		1/11/90
Philadelphia		2/24/89			2/24/89			1/25/90		1/11/90
Cleveland		2/24/89			2/24/89			1/25/90		1/11/90
Richmond		2/24/89			2/24/89			1/25/90		1/11/90
Atlanta		2/24/89			2/24/89			1/25/90		1/11/90
Chicago		2/24/89			2/24/89			1/25/90		1/11/90
St. Louis		2/24/89			2/24/89			1/25/90		1/11/90
Minneapolis		2/24/89			2/24/89			1/25/90		1/11/90
Kansas City		2/24/89			2/24/89			1/25/90		1/11/90
Dallas		2/27/89			2/27/89			1/25/90		1/11/90
San Francisco	7	2/24/89	6½	7	2/24/89	6½	8.70	1/25/90	8.75	1/11/90

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

Effective date	Range (or level)— All F.R. Banks	F.R. Bank of N.Y.	Effective date	Range (or level)— All F.R. Banks	F.R. Bank of N.Y.	Effective date	Range (or level)— All F.R. Banks	F.R. Bank of N.Y.
In effect Dec. 31, 1977	6	6	1980—July 28	10–11	10	1984—Apr. 9	8½–9	9
1978—Jan. 9	6–6½	6½	29	10	10	13	9	9
20	6½	6½	Sept. 26	11	11	Nov. 21	8½–9	8½
May 11	6½–7	7	Nov. 17	12	12	26	8½	8½
12	7	7	Dec. 5	12–13	13	Dec. 24	8	8
July 3	7–7¼	7¼						
10	7¼	7¼	1981—May 5	13–14	14	1985—May 20	7½–8	7½
Aug. 21	7¾	7¾	8	14	14	24	7½	7½
Sept. 22	8	8	Nov. 2	13–14	13			
Oct. 16	8–8½	8½	6	13	13	1986—Mar. 7	7–7½	7
20	8½	8½	Dec. 4	12	12	10	7	7
Nov. 1	8½–9½	9½				Apr. 21	6½–7	6½
3	9½	9½	1982—July 20	11½–12	11½	July 11	6	6
			23	11½	11½	Aug. 21	5½–6	5½
1979—July 20	10	10	Aug. 2	11–11½	11	22	5½	5½
Aug. 17	10–10½	10½	3	11	11			
20	10½	10½	16	10½	10½	1987—Sept. 4	5½–6	6
Sept. 19	10½–11	11	27	10–10½	10	11	6	6
21	11	11	30	10	10			
Oct. 8	11–12	12	Oct. 12	9½–10	9½	1988—Aug. 9	6–6½	6½
10	12	12	13	9½	9½	11	6½	6½
			Nov. 22	9–9½	9			
1980—Feb. 15	12–13	13	26	9	9	1989—Feb. 24	6½–7	7
19	13	13	Dec. 14	8½–9	9	27	7	7
May 29	12–13	13	15	8½–9	8½			
30	12	12	17	8½	8½	In effect Jan. 29, 1990	7	7
June 13	11–12	11						
16	11	11						

1. Adjustment credit is available on a short-term basis to help depository institutions meet temporary needs for funds that cannot be met through reasonable alternative sources. After May 19, 1986, 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.

Seasonal credit is available to help smaller depository institutions meet regular, seasonal needs for funds that cannot be met through special industry lenders and that arise from a combination of expected patterns of movement in their deposits and loans. A temporary simplified seasonal program was established on Mar. 8, 1985, and the interest rate was a fixed rate ½ percent above the rate on adjustment credit. The program was reestablished for 1986 and 1987 but was not renewed for 1988.

2. Extended credit is available to depository institutions, when similar assistance is not reasonably available from other sources, when exceptional circumstances or practices involve only a particular institution or when an institution is experiencing difficulties adjusting to changing market conditions over a longer period of time.

3. For extended-credit loans outstanding more than 30 days, a flexible rate somewhat above rates on market sources of funds ordinarily will be charged, but in no case will the rate charged be less than the basic discount rate plus 50 basis points. The flexible rate is reestablished on the first business day of each two-week reserve maintenance period. At the discretion of the Federal Reserve Bank, the time period for which the basic discount rate is applied may be shortened.

4. For earlier data, see the following publications of the Board of Governors: *Banking and Monetary Statistics, 1914–1941*, and *1941–1970*; *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. There was no surcharge until Nov. 17, 1980, when a 2 percent surcharge was adopted; 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 13-week period. The surcharge was eliminated on Nov. 17, 1981.

1.15 RESERVE REQUIREMENTS OF DEPOSITORY INSTITUTIONS[1]

Percent of deposits

Type of deposit, and deposit interval[2]	Depository institution requirements after implementation of the Monetary Control Act	
	Percent of deposits	Effective date
Net transaction accounts[3,4]		
$0 million–$40.4 million	3	12/19/89
More than $40.4 million	12	12/19/89
Nonpersonal time deposits[5]		
By original maturity		
Less than 1½ years	3	10/6/83
1½ years or more	0	10/6/83
Eurocurrency liabilities		
All types	3	11/13/80

1. Reserve requirements in effect on Dec. 31, 1989. 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 provisions of the Monetary Control Act, depository institutions include commercial banks, mutual savings banks, savings and loan associations, credit unions, agencies and branches of foreign banks, and Edge corporations.

2. The Garn–St Germain Depository Institutions Act of 1982 (Public Law 97–320) requires that $2 million of reservable liabilities (transaction accounts, nonpersonal time deposits, and Eurocurrency liabilities) of each depository institution be subject to a zero percent reserve requirement. The Board is to adjust the amount of reservable liabilities subject to this 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 to be made in the event of a decrease. On Dec. 20, 1988, the exemption was raised from $3.2 million to $3.4 million. In determining the reserve requirements of depository institutions, the exemption shall apply in the following order: (1) net NOW accounts (NOW accounts less allowable deductions); (2) net other transaction accounts; and (3) nonpersonal time deposits or Eurocurrency liabilities starting with those with the highest reserve ratio. With respect to NOW accounts and other transaction accounts, the exemption applies only to such accounts that would be subject to a 3 percent reserve requirement.

3. Transaction accounts include all deposits on which the account holder is permitted to make withdrawals by negotiable or transferable instruments, payment orders of withdrawal, and telephone and preauthorized transfers in excess of three per month for the purpose of making payments to third persons or others. However, MMDAs and similar accounts subject to the rules that permit no more than six preauthorized, automatic, or other transfers per month, of which no more than three can be checks, are not transaction accounts (such accounts are savings deposits subject to time deposit reserve requirements).

4. The Monetary Control Act of 1980 requires that the amount of transaction accounts against which the 3 percent reserve requirement applies be modified annually by 80 percent of the percentage change in transaction accounts held by all depository institutions, determined as of June 30 each year. Effective Dec. 19, 1989 for institutions reporting quarterly and Dec. 26, 1989 for institutions reporting weekly, the amount was decreased from $41.5 million to $40.4 million.

5. In general, nonpersonal time deposits are time deposits, including savings deposits, that are not transaction accounts and in which a beneficial interest is held by a depositor that is not a natural person. Also included are certain transferable time deposits held by natural persons and certain obligations issued to depository institution offices located outside the United States. For details, see section 204.2 of Regulation D.

1.17 FEDERAL RESERVE OPEN MARKET TRANSACTIONS[1]

Millions of dollars

Type of transaction	1986	1987	1988	1989						
				May	June	July	Aug.	Sept.	Oct.	Nov.
U.S. TREASURY SECURITIES										
Outright transactions (*excluding matched transactions*)										
Treasury bills										
1 Gross purchases	22,604	18,983	8,223	311	0	0	0	0	219	8,794
2 Gross sales	2,502	6,051	587	321	571	5,517	934	0	1,633	0
3 Exchange	0	0	0	0	0	0	0	0	0	0
4 Redemptions	1,000	9,029	2,200	1,200	1,200	2,400	800	0	1,400	3,530
Others within 1 year										
5 Gross purchases	190	3,659	2,176	0	0	0	0	0	0	155
6 Gross sales	0	300	0	0	0	0	0	0	0	0
7 Maturity shift	18,674	21,504	23,854	2,863	1,828	1,749	4,200	1,832	852	3,915
8 Exchange	−20,180	−20,388	−24,588	−3,628	−1,434	−1,073	−4,025	0	−2,678	−5,502
9 Redemptions	0	70	0	0	0	0	0	0	500	0
1 to 5 years										
10 Gross purchases	893	10,231	5,485	0	0	0	0	0	0	0
11 Gross sales	0	452	800	75	0	13	150	0	24	0
12 Maturity shift	−17,058	−17,975	−17,720	−2,036	−1,828	−1,584	−3,321	−1,832	−758	−2,869
13 Exchange	16,985	18,938	22,515	3,328	1,434	787	3,425	0	2,552	4,902
5 to 10 years										
14 Gross purchases	236	2,441	1,579	0	0	0	0	0	0	0
15 Gross sales	0	0	175	0	0	9	0	0	0	0
16 Maturity shift	−1,620	−3,529	−5,946	258	0	−165	−879	0	−95	−1,046
17 Exchange	2,050	950	1,797	200	0	286	400	0	126	400
Over 10 years										
18 Gross purchases	158	1,858	1,398	0	0	0	0	0	0	0
19 Gross sales	0	0	0	0	0	0	0	0	0	0
20 Maturity shift	0	0	−188	−1,086	0	0	0	0	0	0
21 Exchange	1,150	500	275	100	0	0	200	0	0	200
All maturities										
22 Gross purchases	24,081	37,170	18,863	311	0	0	0	0	219	8,949
23 Gross sales	2,502	6,803	1,562	396	571	5,539	1,084	0	1,657	0
24 Redemptions	1,000	9,099	2,200	1,200	1,200	2,400	800	0	1,900	3,530
Matched transactions										
25 Gross sales	927,999	950,923	1,168,484	123,029	128,139	123,373	146,611	116,502	111,430	105,696
26 Gross purchases	927,247	950,935	1,168,142	113,041	138,141	118,221	147,228	120,144	111,893	105,243
Repurchase agreements[2]										
27 Gross purchases	170,431	314,621	152,613	31,419	6,203	4,961	0	9,396	0	15,350
28 Gross sales	160,268	324,666	151,497	41,117	6,203	4,961	0	9,396	0	15,350
29 Net change in U.S. government securities	29,988	11,234	15,872	−20,971	8,232	−13,091	−1,267	3,642	−2,875	4,966
FEDERAL AGENCY OBLIGATIONS										
Outright transactions										
30 Gross purchases	0	0	0	0	0	0	0	0	0	0
31 Gross sales	0	0	0	0	0	0	0	0	0	0
32 Redemptions	398	276	587	0	0	45	0	54	30	0
Repurchase agreements[2]										
33 Gross purchases	31,142	80,353	57,259	12,732	1,666	1,137	0	4,011	0	1,247
34 Gross sales	30,521	81,350	56,471	16,573	1,666	1,137	0	4,011	0	1,247
35 Net change in federal agency obligations	222	−1,274	198	−3,841	0	−45	0	−54	−30	0
36 Total net change in System Open Market Account	**30,212**	**9,961**	**16,070**	**−24,812**	**8,232**	**−13,136**	**−1,267**	**3,588**	**−2,905**	**4,966**

1. Sales, redemptions, and negative figures reduce holdings of the System Open Market Account; all other figures increase such holdings. Details may not add to totals because of rounding.

2. In July 1984 the Open Market Trading Desk discontinued accepting bankers acceptances in repurchase agreements.

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

Millions of dollars

Account	Wednesday					End of month		
	1989					1989		
	Nov. 29	Dec. 6	Dec. 13	Dec. 20	Dec. 27	Oct.	Nov.	Dec.
	Consolidated condition statement							
ASSETS								
1 Gold certificate account	11,060	11,059	11,059	11,059	11,059	11,062	11,060	11,059
2 Special drawing rights certificate account	8,518	8,518	8,518	8,518	8,518	8,518	8,518	8,518
3 Coin	473	477	495	489	467	492	465	456
Loans								
4 To depository institutions	1,225	136	146	182	2,159	270	182	481
5 Other	0	0	0	0	0	0	0	0
6 Acceptances held under repurchase agreements	0	0	0	0	0	0	0	0
Federal agency obligations								
7 Bought outright	6,525	6,525	6,525	6,525	6,525	6,525	6,525	6,525
8 Held under repurchase agreements	1,164	0	166	130	1,501	0	0	525
U.S. Treasury securities								
Bought outright								
9 Bills	94,477	99,626	101,201	100,428	100,000	96,136	100,947	104,581
10 Notes	91,381	91,381	91,381	91,381	91,381	91,426	91,381	91,381
11 Bonds	30,814	30,814	30,814	30,814	30,814	30,614	30,814	30,814
12 Total bought outright[2]	216,672	221,821	223,395	222,623	222,195	218,176	223,142	226,775
13 Held under repurchase agreements	12,226	0	3,206	1,622	11,756	0	0	1,592
14 Total U.S. Treasury securities	228,897	221,821	226,602	224,245	233,951	218,176	223,142	228,367
15 Total loans and securities	**237,812**	**228,482**	**233,439**	**231,081**	**244,136**	**224,971**	**229,848**	**235,898**
16 Items in process of collection	6,275	7,547	7,594	8,516	8,150	10,120	6,103	8,903
17 Bank premises	776	787	789	790	789	775	776	790
Other assets								
18 Denominated in foreign currencies[3]	29,075	29,593	29,679	29,722	29,784	28,953	29,593	31,333
19 All other[4]	7,047	6,163	6,600	6,516	7,353	8,548	6,175	7,465
20 Total assets	**301,036**	**292,626**	**298,173**	**296,691**	**310,256**	**293,439**	**292,539**	**304,424**
LIABILITIES								
21 Federal Reserve notes	235,299	235,923	237,377	239,045	241,599	230,467	235,306	241,739
Deposits								
22 To depository institutions	45,024	37,377	40,858	37,777	48,136	32,351	37,277	38,327
23 U.S. Treasury—General account	6,470	4,020	5,692	5,356	5,029	13,124	5,500	6,217
24 Foreign—Official accounts	185	241	206	228	269	252	307	590
25 Other	949	230	217	228	523	292	311	1,298
26 Total deposits	**52,628**	**41,868**	**46,973**	**43,589**	**53,958**	**46,018**	**43,395**	**46,430**
27 Deferred credit items	5,253	6,543	5,945	6,417	6,637	8,649	5,436	7,773
28 Other liabilities and accrued dividends[5]	3,041	2,952	3,003	2,808	3,198	2,819	3,081	3,994
29 Total liabilities	**296,221**	**287,286**	**293,299**	**291,858**	**305,392**	**287,954**	**287,217**	**299,935**
CAPITAL ACCOUNTS								
30 Capital paid in	2,230	2,229	2,232	2,244	2,247	2,223	2,229	2,243
31 Surplus	2,112	2,112	2,112	2,112	2,112	2,112	2,112	2,243
32 Other capital accounts	472	999	530	477	505	1,150	980	0
33 Total liabilities and capital accounts	**301,036**	**292,626**	**298,173**	**296,691**	**310,256**	**293,439**	**292,539**	**304,423**
34 MEMO: Marketable U.S. Treasury securities held in custody for foreign and international accounts	233,024	235,957	233,712	232,269	230,616	235,318	235,096	233,048
	Federal Reserve note statement							
35 Federal Reserve notes outstanding issued to bank	279,559	280,873	281,361	280,943	280,128	278,866	279,629	279,665
36 LESS: Held by bank	44,260	44,950	43,984	41,899	38,529	48,398	44,321	37,926
37 Federal Reserve notes, net	235,299	235,923	237,377	239,045	241,599	230,467	235,306	241,739
Collateral held against notes net:								
38 Gold certificate account	11,060	11,059	11,059	11,059	11,059	11,062	11,060	11,059
39 Special drawing rights certificate account	8,518	8,518	8,518	8,518	8,518	8,518	8,518	8,518
40 Other eligible assets	0	0	0	0	0	0	0	0
41 U.S. Treasury and agency securities	215,721	216,345	217,800	219,468	222,022	210,887	215,728	222,162
42 Total collateral	**235,299**	**235,923**	**237,377**	**239,045**	**241,599**	**230,467**	**235,306**	**241,739**

1. Some of these data also appear in the Board's H.4.1 (503) release. For address, see inside front cover. Components may not add to totals because of rounding.
2. Includes securities loaned—fully guaranteed by U.S. Treasury securities pledged with Federal Reserve Banks—and excludes securities sold and scheduled to be bought back under matched sale-purchase transactions.
3. Valued monthly at market exchange rates.
4. Includes special investment account at the Federal Reserve Bank of Chicago in Treasury bills maturing within 90 days.
5. Includes exchange-translation account reflecting the monthly revaluation at market exchange rates of foreign-exchange commitments.

1.19 FEDERAL RESERVE BANKS Maturity Distribution of Loan and Security Holdings[1]

Millions of dollars

Type and maturity groupings	Wednesday 1989					End of month 1989		
	Nov. 29	Dec. 6	Dec. 13	Dec. 20	Dec. 27	Oct. 31	Nov. 30	Dec. 29
1 Loans—Total	1,225	136	146	182	2,159	270	182	481
2 Within 15 days	1,214	72	89	177	2,157	193	134	469
3 16 days to 90 days	11	64	57	5	2	77	48	11
4 91 days to 1 year	0	0	0	0	0	0	0	0
5 Acceptances—Total	0	0	0	0	0	0	0	0
6 Within 15 days	0	0	0	0	0	0	0	0
7 16 days to 90 days	0	0	0	0	0	0	0	0
8 91 days to 1 year	0	0	0	0	0	0	0	0
9 U.S. Treasury securities—Total	228,897	221,821	226,602	224,245	233,951	218,176	223,142	228,367
10 Within 15 days[2]	19,836	9,418	12,291	11,241	18,134	8,144	4,468	9,413
11 16 days to 90 days	48,452	48,932	50,825	52,183	52,297	48,677	51,283	55,523
12 91 days to 1 year	68,641	70,726	70,741	68,076	70,776	70,197	74,646	70,687
13 Over 1 year to 5 years	52,732	53,509	53,509	53,509	53,509	51,476	53,509	53,509
14 Over 5 years to 10 years	12,529	12,529	12,529	12,529	12,529	13,175	12,529	12,529
15 Over 10 years	26,706	26,706	26,706	26,706	26,706	26,506	26,706	26,706
16 Federal agency obligations—Total	7,689	6,525	6,691	6,655	8,026	6,525	6,525	7,050
17 Within 15 days[2]	1,480	70	203	307	1,654	89	316	678
18 16 days to 90 days	418	673	636	496	568	672	418	568
19 91 days to 1 year	1,395	1,386	1,386	1,386	1,346	1,357	1,395	1,346
20 Over 1 year to 5 years	3,159	3,166	3,206	3,206	3,198	3,180	3,159	3,198
21 Over 5 years to 10 years	1,048	1,041	1,071	1,071	1,071	1,038	1,048	1,071
22 Over 10 years	189	189	189	188	188	189	189	188

1. Holdings under repurchase agreements are classified as maturing within 15 days in accordance with maximum maturity of the agreements.

NOTE: Components may not add to totals due to rounding.

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

Billions of dollars, averages of daily figures

Item	1986 Dec.	1987 Dec.	1988 Dec.	1989 Dec.	1989 May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
	Seasonally adjusted											
ADJUSTED FOR CHANGES IN RESERVE REQUIREMENTS[2]												
1 **Total reserves[3]**	**58.14**	**58.69**	**60.71**	**59.99**	**58.74**	**58.35**	**58.70**	**58.75**	**59.22**	**59.62**	**59.57**	**59.99**
2 Nonborrowed reserves	57.31	57.92	58.99	59.73	57.02	56.86	58.00	58.08	58.53	59.07	59.22	59.73
3 Nonborrowed reserves plus extended credit[4]	57.62	58.40	60.23	59.75	58.22	57.78	58.11	58.12	58.55	59.09	59.24	59.75
4 Required reserves	56.77	57.66	59.67	59.07	57.71	57.44	57.73	57.87	58.29	58.60	58.62	59.07
5 Monetary base[5]	241.45	257.99	275.50	285.22	278.43	279.06	280.01	280.29	282.04	282.70	283.00[r]	285.22
	Not seasonally adjusted											
6 **Total reserves[3]**	**59.46**	**60.06**	**62.21**	**61.50**	**57.72**	**58.41**	**58.95**	**58.30**	**58.91**	**59.14**	**59.72**	**61.50**
7 Nonborrowed reserves	58.64	59.28	60.50	61.24	56.00	56.92	58.26	57.62	58.21	58.58	59.37	61.24
8 Nonborrowed reserves plus extended credit[4]	58.94	59.76	61.74	61.26	57.20	57.84	58.37	57.66	58.24	58.61	59.39	61.26
9 Required reserves	58.09	59.03	61.17	60.58	56.69	57.51	57.99	57.41	57.97	58.12	58.77[r]	60.58
10 Monetary base[5]	245.25	262.08	279.71	289.44	277.59	280.19	282.10	281.09	280.70	281.37	284.13	289.44
NOT ADJUSTED FOR CHANGES IN RESERVE REQUIREMENTS[6]												
11 **Total reserves[3]**	**59.56**	**62.12**	**63.74**	**62.81**	**58.91**	**59.59**	**60.25**	**59.56**	**60.13**	**60.40**	**60.99**	**62.81**
12 Nonborrowed reserves	58.73	61.35	62.02	62.54	57.19	58.10	59.56	58.88	59.43	59.84	60.64	62.54
13 Nonborrowed reserves plus extended credit[4]	59.04	61.83	63.27	62.56	58.39	59.01	59.67	58.93	59.46	59.86	60.66	62.56
14 Required reserves	58.19	61.09	62.70	61.89	57.88	58.68	59.29	58.67	59.19	59.38	60.04	61.89
15 Monetary base[5]	247.71	266.16	283.18	292.71	280.64	283.28	285.39	284.23	283.78	284.49	287.35	292.71

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

2. Figures incorporate adjustments for discontinuities associated with the implementation of the Monetary Control Act and other regulatory changes to reserve requirements. To adjust for discontinuities due to changes in reserve requirements on reservable nondeposit liabilities, the sum of such required reserves is subtracted from the actual series. Similarly, in adjusting for discontinuities in the monetary base, required clearing balances and adjustments to compensate for float also are subtracted from the actual series.

3. Total reserves not adjusted for discontinuities consist of reserve balances with Federal Reserve Banks, which exclude required clearing balances and adjustments to compensate for float, plus vault cash held during the lagged computation period by institutions having required reserve balances at Federal Reserve Banks plus the amount of vault cash equal to required reserves during the maintenance period at institutions having no required reserve balances.

4. Extended credit consists of borrowing at the discount window under the terms and conditions established for the extended credit program to helpdepository institutions deal with sustained liquidity pressures. Because there isnot the same need to repay such borrowing promptly as there is with traditional short-term adjustment credit, the money market impact of extended credit is similar to that of nonborrowed reserves.

5. The monetary base not adjusted for discontinuities consists of total reserves plus required clearing balances and adjustments to compensate for float at Federal Reserve Banks and the currency component of the money stock plus, for institutions not having required reserve balances, the excess of current vault cash over the amount applied to satisfy current reserve requirements. Currency and vault cash figures are measured over the weekly computation period ending Monday.

The seasonally adjusted monetary base consists of seasonally adjusted total reserves, which include excess reserves on a not seasonally adjusted basis, plus the seasonally adjusted currency component of the money stock and the remaining items seasonally adjusted as a whole.

6. Reflects actual reserve requirements, including those on nondeposit liabilities, with no adjustments to eliminate the effects of discontinuities associated with implementation of the Monetary Control Act or other regulatory changes to reserve requirements.

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

Billions of dollars, averages of daily figures

Item[2]	1986 Dec.	1987 Dec.	1988 Dec.	1989 Dec.	1989 Sept.	1989 Oct.	1989 Nov.[r]	1989 Dec.
	Seasonally adjusted							
1 M1	725.9	752.3	790.3	797.6	781.1	787.7	789.6	797.6
2 M2	2,811.2	2,909.9	3,069.6	3,217.0	3,153.5[r]	3,173.6[r]	3,196.2	3,217.0
3 M3	3,494.9	3,677.8[r]	3,915.6[r]	4,039.6	4,001.0[r]	4,010.6[r]	4,027.3	4,039.6
4 L	4,135.1	4,336.8[r]	4,672.3[r]	n.a.	4,813.9[r]	4,826.2[r]	4,838.7	n.a.
5 Debt	7,597.0	8,316.1	9,082.2	n.a.	9,615.3	9,677.9[r]	9,744.2	n.a.
M1 components								
6 Currency[3]	180.5	196.4	211.8	222.1	219.3	219.7	220.2	222.1
7 Travelers checks[4]	6.5	7.1	7.6	7.5	7.2	7.3	7.5	7.5
8 Demand deposits[5]	303.2	288.3	288.6	281.2	277.3	280.4	278.9	281.2
9 Other checkable deposits[6]	235.8	260.4	282.3	286.8	277.3	280.3	283.0	286.8
Nontransactions components								
10 In M2[7]	2,085.3	2,157.6	2,279.3	2,419.4	2,372.4[r]	2,385.9[r]	2,406.6	2,419.4
11 In M3 only[8]	683.7	767.9[r]	846.0[r]	822.6	847.4[r]	837.0[r]	831.1	822.6
Savings deposits[9]								
12 Commercial Banks	155.8	178.5	192.5	189.0	184.2	185.1	187.2	189.0
13 Thrift institutions	215.2	237.8	238.8	222.8	220.0	220.7	222.1	222.8
Small-denomination time deposits[10]								
14 Commercial Banks	364.6	385.3	443.1	521.4	509.7[r]	515.2[r]	517.8	521.4
15 Thrift institutions	489.3	528.8	582.2	614.3	622.5	617.3[r]	615.3	614.3
Money market mutual funds								
16 General purpose and broker-dealer	208.0	221.1	239.4	309.1	292.4[r]	298.4[r]	306.5	309.1
17 Institution-only	84.4	89.6	87.6	102.8	99.1	98.7	102.0	102.8
Large-denomination time deposits[11]								
18 Commercial Banks[12]	288.8	325.4	364.9	397.8	395.9[r]	397.6[r]	399.8	397.8
19 Thrift institutions	150.1	162.0	172.9	156.4	167.9	163.1	159.5	156.4
Debt components								
20 Federal debt	1,805.8	1,957.4	2,113.5	n.a.	2,220.1	2,238.3	2,259.0	n.a.
21 Nonfederal debt	5,791.2	6,358.6	6,968.7	n.a.	7,395.2	7,439.5[r]	7,485.2	n.a.
	Not seasonally adjusted							
22 M1	740.4	766.4	804.4	811.5	778.5	784.4	791.1	811.5
23 M2	2,821.1	2,918.7	3,077.3	3,223.6	3,146.9[r]	3,169.5[r]	3,194.2	3,223.6
24 M3	3,507.4	3,688.7[r]	3,925.4[r]	4,048.2	3,999.0[r]	4,008.0[r]	4,032.6	4,048.2
25 L	4,150.1	4,351.1[r]	4,685.8[r]	n.a.	4,808.6[r]	4,821.5[r]	4,847.4	n.a.
26 Debt	7,580.7	8,297.6	9,067.5	n.a.	9,577.0	9,643.7[r]	9,711.1	n.a.
M1 components								
27 Currency[3]	183.0	199.3	214.9	225.3	218.7	219.0	221.1	225.3
28 Travelers checks[4]	6.0	6.5	6.9	6.9	7.7	7.3	7.0	6.9
29 Demand deposits[5]	314.0	298.6	298.8	291.2	275.9	280.3	281.1	291.2
30 Other checkable deposits[6]	257.4	262.0	283.7	288.1	276.2	277.8	281.8	288.1
Nontransactions components								
31 M2[7]	2,080.7	2,152.3	2,272.9	2,412.1	2,368.5[r]	2,385.1[r]	2,403.1	2,412.1
32 M3 only[8]	686.3	770.1[r]	848.1[r]	824.6	852.1[r]	838.5[r]	838.3	824.6
Money market deposit accounts								
33 Commercial Banks	379.6	358.8	352.5	354.4	338.9	342.0	349.7	354.4
34 Thrift institutions	192.9	167.5	150.3	132.0	130.2	131.0	132.0	132.0
Savings deposits[9]								
35 Commercial Banks	154.2	176.6	190.3	186.8	184.0[r]	185.5	186.7	186.8
36 Thrift institutions	212.7	234.8	235.6	219.7	220.9[r]	221.9	221.2	219.7
Small-denomination time deposits[10]								
37 Commercial Banks	365.3	386.1	444.1	522.8	510.1[r]	515.6	519.5	522.8
38 Thrift institutions	489.8	529.1	582.4	614.4	619.7	617.8[r]	615.8	614.4
Money market mutual funds								
39 General purpose and broker-dealer	208.0	221.1	239.4	309.1	292.4[r]	298.4[r]	306.5	309.1
40 Institution-only	84.4	89.6	87.6	102.8	99.1	98.7	102.0	102.8
Large-denomination time deposits[11]								
41 Commercial Banks[12]	289.1	325.8	365.6	398.8	398.1[r]	399.3[r]	401.2	398.8
42 Thrift institutions	150.7	163.0	174.1	157.5	168.3	164.9	161.2	157.5
Debt components								
43 Federal debt	1,803.9	1,955.6	2,111.8	n.a.	2,200.9	2,222.6	2,250.8	n.a.
44 Nonfederal debt	5,776.8	6,342.0	6,955.7	n.a.	7,376.1	7,421.1[r]	7,460.2	n.a.

For notes see following page.

NOTES TO TABLE 1.21

1. Latest monthly and weekly figures are available from the Board's H.6 (508) release. Historical data are available from the Monetary and Reserves Projection section, Division of Monetary Affairs, Board of Governors of the Federal Reserve System, Washington, D.C. 20551.

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

M1: (1) currency outside the 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 due 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 (OCD) 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.

M2: M1 plus overnight (and continuing contract) repurchase agreements (RPs) issued by all commercial banks and overnight Eurodollars issued to U.S. residents by foreign branches of U.S. banks worldwide, MMDAs, savings and small-denomination time deposits (time deposits—including retail RPs—in amounts of less than $100,000), and balances in both taxable and tax-exempt general purpose and broker–dealer money market mutual funds. Excludes individual retirement accounts (IRA) and Keogh balances at depository institutions and money market funds. Also excludes all balances held by U.S. commercial banks, money market funds (general purpose and broker–dealer), foreign governments and commercial banks, and the U.S. government.

M3: M2 plus large-denomination time deposits and term RP liabilities (in amounts of $100,000 or more) issued by commercial banks and thrift institutions, term Eurodollars held by U.S. residents at foreign branches of U.S. banks worldwide and at all banking offices in the United Kingdom and Canada, and balances in both taxable and tax-exempt, institution-only money market mutual funds. Excludes amounts held by depository institutions, the U.S. government, money market funds, and foreign banks and official institutions. Also subtracted is the estimated amount of overnight RPs and Eurodollars held by institution-only money market mutual funds.

L: M3 plus the nonbank public holdings of U.S. savings bonds, short-term Treasury securities, commercial paper and bankers acceptances, net of money market mutual fund holdings of these assets.

Debt: Debt of domestic nonfinancial sectors consists of outstanding credit market debt of the U.S. government, state and local governments, and private nonfinancial sectors. Private debt consists of corporate bonds, mortgages, consumer credit (including bank loans), other bank loans, commercial paper, bankers acceptances, and other debt instruments. The source of data on domestic nonfinancial debt is the Federal Reserve Board's flow of funds accounts. Debt data are based on monthly averages.

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 due 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 balances at all depository institutions, credit union share draft balances, and demand deposits at thrift institutions.

7. Sum of overnight RPs and overnight Eurodollars, money market fund balances (general purpose and broker-dealer), MMDAs, and savings and small time deposits.

8. Sum of large time deposits, term RPs, and term Eurodollars of U.S. residents, money market fund balances (institution-only), less the estimated amount of overnight RPs and Eurodollars held by institution-only money market funds.

9. Savings deposits exclude MMDAs.

10. Small-denomination time deposits—including retail RPs—are those issued in amounts of less than $100,000. All individual retirement accounts (IRA) and Keogh accounts at commercial banks and thrifts are subtracted from small time deposits.

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

12. Large-denomination time deposits at commercial banks less those held by money market mutual funds, depository institutions, and foreign banks and official institutions.

1.22 BANK DEBITS AND DEPOSIT TURNOVER[1]

Debits are shown in billions of dollars, turnover as ratio of debits to deposits. Monthly data are at annual rates.

Bank group, or type of customer	1986	1987	1988	1989 May	1989 June	1989 July	1989 Aug.	1989 Sept.	1989 Oct.
DEBITS TO	Seasonally adjusted								
Demand deposits[3]									
1 All insured banks	188,346.0	217,116.2	226,888.4	266,468.1	284,129.2	276,453.7	292,446.5	281,432.2	293,424.9
2 Major New York City banks	91,397.3	104,496.3	107,547.3	120,984.1	129,166.6	114,991.8	121,378.1	125,206.9	136,039.0
3 Other banks	96,948.8	112,619.8	119,341.2	145,483.9	154,962.7	161,461.9	171,068.3	156,225.3	155,385.9
4 ATS-NOW accounts[4]	2,182.5	2,402.7	2,757.7	3,406.5	3,696.5	3,596.3	3,943.1	3,601.9	3,911.9
5 Savings deposits[5]	403.5	526.5	583.0	647.2	640.0	580.4	650.0	672.3	665.4
DEPOSIT TURNOVER									
Demand deposits[3]									
6 All insured banks	556.5	612.1	641.2	767.1	824.0	788.4	841.8	802.2	826.4
7 Major New York City banks	2,498.2	2,670.6	2,903.5	3,342.1	3,588.5	3,222.3	3,402.4	3,482.2	3,486.5
8 Other banks	321.2	357.0	376.8	467.5	501.8	512.6	548.8	496.2	492.5
9 ATS-NOW accounts[4]	15.6	13.8	14.7	18.2	19.8	19.1	20.6	18.8	20.1
10 Savings deposits[5]	3.0	3.1	3.1	3.6	3.6	3.2	3.6	3.7	3.6
DEBITS TO	Not seasonally adjusted								
Demand deposits[3]									
11 All insured banks	188,506.7	217,125.1	227,010.7	274,861.8	295,522.8	268,243.0	304,407.5	266,882.2	292,750.0
12 Major New York City banks	91,500.1	104,518.8	107,565.0	121,507.2	134,020.7	117,276.1	132,158.8	115,187.4	138,964.6
13 Other banks	97,006.7	112,606.2	119,445.7	153,354.6	161,502.1	150,966.9	172,248.7	151,694.7	153,785.5
14 ATS-NOW accounts[4]	2,184.6	2,404.8	2,754.7	3,325.2	3,770.8	3,549.0	3,762.6	3,702.7	3,891.4
15 MMDA[6]	1,609.4	1,954.2	2,430.1	2,910.5	3,136.0	2,686.7	3,068.7	2,554.3	2,651.5
16 Savings deposits[5]	404.1	526.8	578.0	637.9	641.4	610.4	656.7	665.2	690.4
DEPOSIT TURNOVER									
Demand deposits[3]									
17 All insured banks	556.7	612.3	641.7	805.9	855.6	761.3	891.5	763.1	829.6
18 Major New York City banks	2,499.1	2,674.9	2,901.4	3,482.5	3,795.0	3,247.5	3,911.6	3,279.7	3,594.8
19 Other banks	321.2	356.9	377.1	500.9	520.9	477.4	559.9	482.2	489.4
20 ATS-NOW accounts[4]	15.6	13.8	14.7	18.0	20.3	18.9	20.0	19.5	20.3
21 MMDA[6]	4.5	5.3	6.9	9.0	9.7	8.2	9.2	7.6	7.8
22 Savings deposits[5]	3.0	3.1	3.1	3.5	3.6	3.4	3.6	3.7	3.8

1. Historical tables containing revised data for earlier periods may be obtained from the Monetary and Reserves Projections Section, Division of Monetary Affairs, Board of Governors of the Federal Reserve System, Washington, D.C. 20551.

These data also appear on the Board's G.6 (406) release. For address, see inside front cover.

2. Annual averages of monthly figures.

3. Represents accounts of individuals, partnerships, and corporations and of states and political subdivisions.

4. Accounts authorized for negotiable orders of withdrawal (NOW) and accounts authorized for automatic transfer to demand deposits (ATS). ATS data are available beginning December 1978.

5. Excludes ATS and NOW accounts, MMDA and special club accounts, such as Christmas and vacation clubs.

6. Money market deposit accounts.

1.23 LOANS AND SECURITIES All Commercial Banks[1]

Billions of dollars; averages of Wednesday figures

Category	1989 Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
	Seasonally adjusted											
1 **Total loans and securities[2]**	**2,422.8**	**2,451.9**	**2,464.9**	**2,470.9**	**2,486.3**	**2,496.8**	**2,518.1**	**2,534.4**	**2,544.1**	**2,575.5**	**2,583.9**	**2,577.4**
2 U.S. government securities	360.4	361.8	368.8	370.7	373.5	373.8	374.4	376.6	378.8	391.7	397.5	396.9
3 Other securities	189.6	190.4	189.7	187.2	186.4	185.7	184.6	182.8	182.9	182.7	180.3	181.3
4 Total loans and leases[2]	1,872.9	1,899.7	1,906.5	1,913.1	1,926.5	1,937.3	1,959.1	1,974.9	1,982.4	2,001.1	2,006.1	1,999.2
5 Commercial and industrial	606.6	619.0	617.8	620.6	626.3	624.9	632.1	637.3	636.9	641.1	641.5r	634.2
6 Bankers acceptances held[3]	4.4	4.2	4.0	4.1	4.2	4.2	4.1	4.5	4.8	5.4	4.9	4.3
7 Other commercial and industrial	602.2	614.8	613.7	616.6	622.1	620.7	628.1	632.8	632.1	635.7	636.7	629.9
8 U.S. addressees[4]	596.6	609.9	608.3	611.7	616.6	615.2	622.2	627.1	626.6	629.3r	631.2r	624.6
9 Non-U.S. addressees[4]	5.7	4.9	5.4	4.9	5.4	5.5	5.9	5.7	5.5	6.3r	5.5r	5.2
10 Real estate	678.9	685.6	691.8	699.5	705.5	712.0	719.9	729.0	734.4	741.1	747.7	754.8
11 Individual	357.9	358.9	360.6	362.9	365.4	366.0	367.0	369.3	372.1	374.4	376.9	378.1
12 Security	37.6	44.7	43.5	39.9	38.0	41.2	40.0r	39.3r	39.9r	41.4r	40.6r	37.8
13 Nonbank financial institutions	30.1	30.5	29.6	29.1	28.6	30.2	31.2r	31.1r	31.3r	32.4r	33.1	32.2
14 Agricultural	30.7	30.7	30.7	30.4	30.3	30.3	30.4	30.3	30.2	30.1	30.3r	30.5
15 State and political subdivisions	44.2	44.3	44.3	44.4	44.4	44.2	43.9	43.6	43.5	42.9	42.3	41.0
16 Foreign banks	7.8	8.5	8.2	8.4	9.4	9.3	8.9	9.3	8.5	9.7r	9.0r	9.1
17 Foreign official institutions	4.8	4.8	4.8	4.9	4.9	4.7	4.5	4.3	4.3	4.0	3.8	3.8
18 Lease financing receivables	29.4	29.6	29.6	29.8	30.0	29.9	30.3	30.3	31.0	31.6	31.6	31.1
19 All other loans	44.8	43.1	45.6	43.2	43.7	44.5	50.8r	51.1r	50.2r	52.3r	49.2r	46.5
	Not seasonally adjusted											
20 **Total loans and securities[2]**	**2,430.7**	**2,453.6**	**2,462.8**	**2,473.9**	**2,487.4**	**2,500.9**	**2,511.8**	**2,526.9**	**2,541.2**	**2,565.6**	**2,582.6r**	**2,591.7**
21 U.S. government securities	362.2	366.3	370.2	370.9	372.6	372.6	373.1	376.8	378.5	388.3	396.1	397.2
22 Other securities	191.7	190.1	188.9	187.2	186.8	186.0	184.1	183.1	182.8	181.6	180.5	181.2
23 Total loans and leases[2]	1,876.9	1,897.2	1,903.7	1,915.9	1,928.0	1,942.3	1,954.6	1,966.9	1,980.0	1,995.6	2,006.1	2,013.3
24 Commercial and industrial	605.8	618.3	621.1	625.2	630.0	629.0	631.0	632.7	632.2	636.0	638.7	637.9
25 Bankers acceptances held[3]	4.1	4.1	4.0	4.0	4.3	4.4	4.2	4.6	4.9	5.5	4.8	4.3
26 Other commercial and industrial	601.7	614.2	617.1	621.3	625.8	624.6	626.8	628.0	627.3	630.5	634.0	633.6
27 U.S. addressees[4]	596.4	608.9	611.8	616.0	620.2	619.0	621.1	622.6	621.7r	624.9r	628.5r	628.3
28 Non-U.S. addressees[4]	5.3	5.3	5.3	5.3	5.5	5.6	5.6	5.5	5.5	5.6r	5.4	5.3
29 Real estate	678.9	683.6	689.2	697.4	704.1	712.1	720.6	730.4	736.5	741.9	749.8	756.4
30 Individual	360.7	358.2	357.7	360.3	363.2	364.5	365.9	369.3	374.0	375.6	378.1	382.4
31 Security	38.1	43.7	44.1	42.0	38.9	42.8r	39.7r	38.0r	38.4r	39.7r	39.9r	38.2
32 Nonbank financial institutions	30.6	29.9	29.0	28.9	28.8	30.3r	31.2r	31.0r	31.2r	32.1r	33.3	33.4
33 Agricultural	30.1	29.7	29.6	29.5	30.1	30.6	31.1	31.2	31.1	31.0	30.5r	30.3
34 State and political subdivisions	45.6	45.3	44.9	44.6	44.3	43.9	43.4	43.2	42.9	42.5	41.8	40.9
35 Foreign banks	8.1	8.5	8.0	8.1	9.0	9.1	9.0	9.1	8.7	9.8	9.1r	9.5
36 Foreign official institutions	4.8	4.8	4.8	4.9	4.9	4.7	4.5	4.3	4.3	4.0	3.8	3.8
37 Lease financing receivables	29.7	29.7	29.7	29.8	30.0	30.0	30.2	30.2	30.9	31.4	31.5	31.4
38 All other loans	44.4	45.4	45.8	45.0	44.8	45.2	48.1r	47.6r	49.8r	51.7r	49.6r	49.3

1. Data have been revised because of benchmarking beginning January 1984. These data also appear in the Board's G.7 (407) release. For address, see inside front cover.
2. Excludes loans to commercial banks in the United States.
3. Includes nonfinancial commercial paper held.
4. United States includes the 50 states and the District of Columbia.

1.24 MAJOR NONDEPOSIT FUNDS OF COMMERCIAL BANKS[1]

Monthly averages, billions of dollars

Source	1989											
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.[r]	Dec.
Seasonally adjusted												
1 Total nondeposit funds[2]	208.2	211.3	212.1	205.9	209.9	226.9	228.3	229.8[r]	238.0[r]	248.4[r]	251.9	245.2
2 Net balances due to related foreign offices[3]	8.2	10.7	8.2	3.0	−.1	7.7	11.1	9.3[r]	9.7[r]	10.0[r]	8.8	3.0
3 Borrowings from other than commercial banks in United States[4]	200.0	200.6	203.9	203.0[r]	210.0	219.3[r]	217.2	220.5	228.3	238.4	243.1	242.2
4 Domestically chartered banks	163.0	161.3	165.8	164.2	169.2	179.1	175.4	178.2	184.9	192.0	194.4	194.9
5 Foreign-related banks	37.0	39.3	38.1	38.8[r]	40.8[r]	40.1	41.8	42.3	43.4	46.4	48.7	47.3
Not seasonally adjusted												
6 Total nondeposit funds[2]	207.4	216.1	217.7	208.6	217.6[r]	230.1[r]	224.0	228.6[r]	234.0[r]	241.5[r]	247.6	238.2
7 Net balances due to related foreign offices[3]	7.9	10.5	7.2	.9	2.5	7.9	8.1	8.9[r]	10.7[r]	9.7[r]	9.8	5.5
8 Domestically chartered banks	−20.2	−17.6	−19.5	−22.8	−21.9	−18.3	−16.4	−15.5	−14.2	−14.8	−15.2	−19.0
9 Foreign-related banks	28.1	28.1	26.7	23.7	24.4	26.2	24.5	24.4[r]	24.9[r]	24.5[r]	25.0	24.6
10 Borrowings from other than commercial banks in United States[4]	199.5	205.7	210.6	207.7	215.0	222.2	215.9	219.7	223.3	231.8	237.8	232.7
11 Domestically chartered banks	161.3	165.1	170.9	168.1	173.8	180.5	173.5	177.7	180.7	187.2	192.7	187.8
12 Federal funds and security RP borrowings[5]	157.9	161.9	167.5	163.8	170.1	177.0	170.8	175.1	178.1	184.8	190.7	185.3
13 Other[6]	3.4	3.2	3.5	4.3	3.7	3.4	2.7	2.6	2.6	2.4	2.0	2.5
14 Foreign-related banks[6]	38.1	40.6	39.6	39.6	41.2	41.7	42.4	42.0	42.6	44.7	45.0	44.9
MEMO												
Gross large time deposits[7]												
15 Seasonally adjusted	434.9	440.3	446.7	452.7	456.8	458.8	461.6	460.4	458.0	459.4[r]	461.4	460.1
16 Not seasonally adjusted	434.5	440.2	448.2	450.6	455.5	457.3	458.8	461.2	460.1	461.1[r]	462.9	461.1
U.S. Treasury demand balances at commercial banks[8]												
17 Seasonally adjusted	20.3	20.3	20.3	20.9	27.1	27.4	22.7	22.9	23.8	19.9	20.4	21.3
18 Not seasonally adjusted	25.0	25.9	18.1	20.2	34.3	26.2	23.0	15.8	24.8[r]	20.6	14.7	19.6

1. Commercial banks are those in the 50 states and the District of Columbia with national or state charters plus agencies and branches of foreign banks, New York investment companies majority owned by foreign banks, and Edge Act corporations owned by domestically chartered and foreign banks.

These data also appear in the Board's G.10 (411) release. For address, see inside front cover.

2. Includes federal funds, RPs, and other borrowing from nonbanks and net balances due to related foreign offices.

3. Reflects net positions of U.S. chartered banks, Edge Act corporations, and U.S. branches and agencies of foreign banks with related foreign offices plus net positions with own IBFs.

4. Other borrowings are borrowings through any instrument, such as a promissory note or due bill, given for the purpose of borrowing money for the banking business. This includes borrowings from Federal Reserve Banks and from foreign banks, term federal funds, loan RPs, and sales of participations in pooled loans.

5. Based on daily average data reported weekly by approximately 120 large banks and quarterly or annual data reported by other banks.

6. Figures are partly daily averages and partly averages of Wednesday data.

7. Time deposits in denominations of $100,000 or more. Estimated averages of daily data.

8. U.S. Treasury demand deposits and Treasury tax-and-loan notes at commercial banks. Averages of daily data.

1.25 ASSETS AND LIABILITIES OF COMMERCIAL BANKING INSTITUTIONS Last-Wednesday-of-Month Series[1]

Billions of dollars

Account	1989										
	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
ALL COMMERCIAL BANKING INSTITUTIONS[2]											
1 Loans and securities	2,624.0	2,627.1	2,623.0	2,659.8	2,660.7	2,677.1	2,692.5	2,695.7	2,728.1	2,764.7	2,771.0
2 Investment securities	535.8	539.1	538.3	541.1	541.6	538.3	542.8	542.4	545.4	549.5	550.4
3 U.S. government securities	351.3	355.5	356.6	359.1	362.2	360.3	365.3	366.4	370.8	375.8	375.7
4 Other	184.5	183.6	181.7	182.0	179.4	178.1	177.5	176.1	174.6	173.7	174.7
5 Trading account assets	20.1	21.8	17.8	19.2	18.2	19.8	18.7	18.3	26.6	27.6	23.4
6 Total loans	2,068.0	2,066.2	2,066.8	2,099.5	2,100.9	2,119.0	2,131.0	2,135.0	2,156.1	2,187.6	2,197.2
7 Interbank loans	173.2	154.9	150.7	160.5	155.0	162.4	162.9	158.0	164.2	179.9	181.9
8 Loans excluding interbank	1,894.9	1,911.3	1,916.2	1,939.0	1,945.9	1,956.6	1,968.1	1,977.1	1,992.0	2,007.8	2,015.3
9 Commercial and industrial	617.6	622.9	627.3	631.1	628.3	635.3	631.9	630.3	634.9	638.7	639.4
10 Real estate	684.1	692.6	699.4	706.7	715.1	722.8	733.9	737.5	743.2	752.0	757.7
11 Individual	358.3	358.1	361.8	363.8	366.0	366.2	371.4	375.5	376.1	378.8	384.5
12 All other	234.8	237.7	227.7	237.4	236.6	232.3	231.0	233.7	237.8	238.2	233.8
13 Total cash assets	227.4	211.5	215.8	248.3	214.2	211.7	212.0	219.6	213.0	234.8	259.3
14 Reserves with Federal Reserve Banks	27.7	30.9	33.4	27.8	27.9	30.6	28.7	31.7	28.0	38.7	42.8
15 Cash in vault	26.6	26.8	26.9	27.9	27.6	27.4	28.5	28.0	27.9	30.7	31.6
16 Cash items in process of collection	89.1	75.9	78.8	107.6	78.7	75.2	77.4	82.6	77.5	84.1	98.8
17 Demand balances at U.S. depository institutions	33.3	28.8	28.5	34.9	29.6	28.8	29.7	29.0	28.8	28.9	32.5
18 Other cash assets	50.7	49.0	48.3	50.2	50.5	49.7	47.7	48.3	50.7	52.3	53.7
19 Other assets	191.4	194.1	200.7	206.8	198.7	201.1	199.6	203.9	203.8	201.9	208.2
20 **Total assets/total liabilities and capital**	**3,042.8**	**3,032.7**	**3,039.5**	**3,114.9**	**3,073.6**	**3,090.0**	**3,104.0**	**3,119.3**	**3,144.9**	**3,201.3**	**3,238.6**
21 Deposits	2,125.2	2,123.7	2,134.2	2,182.6	2,138.2	2,152.0	2,166.6	2,175.3	2,194.2	2,221.1	2,265.1
22 Transaction deposits	602.6	583.2	594.5	628.5	580.5	579.4	583.4	588.5	588.0	602.5	643.3
23 Savings deposits	527.3	523.2	512.0	509.7	507.4	514.0	518.9	520.7	527.6	537.6	540.3
24 Time deposits	995.3	1,017.3	1,027.6	1,044.3	1,050.2	1,058.6	1,064.4	1,066.1	1,078.6	1,081.0	1,081.5
25 Borrowings	502.9	483.6	486.7	510.6	512.7	510.2	504.6	516.5	526.5	542.2	530.6
26 Other liabilities	216.5	223.9	217.4	218.6	218.4	223.1	226.3	221.4	222.4	235.2	239.1
27 Residual (assets less liabilities)	198.2	201.4	201.2	203.2	204.4	204.7	206.5	206.1	201.9	202.9	203.8
MEMO											
28 U.S. government securities (including trading account)	366.2	372.1	369.5	372.3	374.4	373.5	377.5	378.5	390.4	396.2	392.2
29 Other securities (including trading account)	189.7	188.8	186.6	188.0	185.4	184.6	184.0	182.3	181.6	180.9	181.6
DOMESTICALLY CHARTERED COMMERCIAL BANKS[3]											
30 Loans and securities	2,405.9	2,407.8	2,407.8	2,446.0	2,439.9	2,452.1	2,467.6	2,473.6	2,506.5	2,526.4	2,535.9
31 Investment securities	509.0	513.1	513.8	516.1	517.3	514.2	519.4	519.0	521.6	523.0	524.3
32 U.S. government securities	338.1	342.7	344.1	345.9	349.5	347.8	353.5	354.5	358.7	362.1	363.3
33 Other	171.0	170.4	169.7	170.2	167.8	166.5	165.9	164.5	162.9	160.9	161.0
34 Trading account assets	20.1	21.8	17.8	19.2	18.2	19.8	18.7	18.3	26.6	27.6	23.4
35 Total loans	1,876.8	1,872.8	1,876.2	1,910.6	1,904.5	1,918.1	1,929.4	1,936.3	1,958.3	1,975.8	1,988.3
36 Interbank loans	138.9	122.3	120.2	131.5	119.3	126.4	127.0	125.1	134.9	142.1	145.8
37 Loans excluding interbank	1,737.8	1,750.5	1,756.0	1,779.2	1,785.1	1,791.7	1,802.5	1,811.2	1,823.5	1,833.7	1,842.5
38 Commercial and industrial	503.4	506.1	511.3	515.5	511.6	515.6	512.8	510.4	514.2	515.3	515.9
39 Real estate	661.7	669.8	676.0	683.2	691.6	698.2	708.7	712.2	717.1	724.4	729.7
40 Individual	358.0	357.7	361.4	363.5	365.6	365.8	371.1	375.2	375.8	378.5	384.2
41 All other	214.7	216.9	207.3	217.0	216.3	212.0	209.9	213.5	216.4	215.5	212.7
42 Total cash assets	206.4	191.4	195.3	227.0	192.3	190.1	191.7	197.6	191.5	209.5	235.0
43 Reserves with Federal Reserve Banks	26.6	29.5	30.7	26.7	26.6	29.6	27.0	29.5	26.3	37.9	41.7
44 Cash in vault	26.6	26.8	26.8	27.9	27.6	27.4	28.5	28.0	27.9	30.7	31.5
45 Cash items in process of collection	88.1	75.1	77.9	106.6	77.7	74.4	76.5	81.3	76.3	82.2	97.4
46 Demand balances at U.S. depository institutions	31.2	26.6	26.8	32.9	27.5	27.0	28.0	27.3	26.9	27.0	30.7
47 Other cash assets	33.9	33.4	33.1	33.0	32.9	31.7	31.7	31.6	34.2	31.7	33.6
48 Other assets	129.6	130.6	134.6	133.6	131.6	128.4	127.5	131.5	126.3	132.2	136.0
49 **Total assets/liabilities and capital**	**2,741.8**	**2,729.9**	**2,737.7**	**2,806.6**	**2,763.9**	**2,770.6**	**2,786.7**	**2,802.8**	**2,824.3**	**2,868.2**	**2,906.9**
50 Deposits	2,052.7	2,047.4	2,056.2	2,103.0	2,058.8	2,071.3	2,086.9	2,094.5	2,112.4	2,139.2	2,182.3
51 Transaction deposits	593.5	574.1	584.8	618.7	571.2	570.2	574.7	578.8	578.4	592.7	633.2
52 Savings deposits	524.8	520.7	509.4	507.1	504.8	511.3	516.2	517.9	525.0	534.8	537.5
53 Time deposits	934.4	952.6	961.9	977.2	982.9	989.9	995.9	997.7	1,009.0	1,011.6	1,011.7
54 Borrowings	378.7	362.8	368.2	383.0	387.3	380.2	375.5	390.8	393.2	404.4	398.3
55 Other liabilities	115.8	121.7	115.6	120.9	116.9	117.8	121.3	114.9	120.4	125.2	125.9
56 Residual (assets less liabilities)	194.6	197.9	197.7	199.7	200.8	201.2	203.0	202.6	198.4	199.4	200.3
MEMO											
57 Real estate loans, revolving	41.7	42.5	43.4	44.3	45.3	45.7	46.4	47.1	47.9	48.5	49.1
58 Real estate loans, other	620.0	627.3	632.6	638.9	646.2	652.5	662.3	665.0	669.2	676.0	680.6

1. Back data are available from the Banking and Monetary Statistics section, Board of Governors of the Federal Reserve System, Washington, D.C., 20551. These data also appear in the Board's weekly H.8 (510) release.

Figures are partly estimated. They include all bank-premises subsidiaries and other significant majority-owned domestic subsidiaries. Loan and securities data for domestically chartered commercial banks are estimates for the last Wednesday of the month based on a sample of weekly reporting banks and quarter-end condition report data. Data for other banking institutions are estimates made for the last Wednesday of the month based on a weekly reporting sample of foreign-related institutions and quarter-end condition reports.

2. Commercial banking institutions include insured domestically chartered commercial banks, branches and agencies of foreign banks, Edge Act and Agreement corporations, and New York State foreign investment corporations.

3. Insured domestically chartered commercial banks include all member banks and insured nonmember banks.

1.26 ASSETS AND LIABILITIES OF LARGE WEEKLY REPORTING COMMERCIAL BANKS[1]

Millions of dollars, Wednesday figures

Account	1989								
	Nov. 1[r]	Nov. 8[r]	Nov. 15[r]	Nov. 22	Nov. 29	Dec. 6	Dec. 13	Dec. 20	Dec. 27
1 Cash and balances due from depository institutions	130,647	109,220	117,955	111,966[r]	120,195[r]	113,198	115,176	123,602	139,112
2 **Total loans, leases, and securities, net**	**1,274,536**	**1,245,950**	**1,265,997**	**1,250,175**	**1,250,240**	**1,257,325**	**1,258,300**	**1,258,888**	**1,251,465**
3 U.S. Treasury and government agency	159,975	160,544	163,222	162,577[r]	161,329[r]	164,458	164,785	160,736	156,540
4 Trading account	21,235	21,716	23,416	22,109	20,406	22,782	22,685	19,700	16,554
5 Investment account	138,740	138,828	139,806	140,468[r]	140,923[r]	141,677	142,101	141,036	139,986
6 Mortgage-backed securities[3]	69,066	69,219	70,775	71,209[r]	71,483[r]	71,836	72,131	72,163	71,822
All other maturing in									
7 One year or less	19,880	19,744	19,342	19,307	19,189	19,929	20,406	19,949	19,846
8 Over one through five years	35,237	35,431	35,401	35,649[r]	35,644[r]	34,763	34,526	34,238	33,868
9 Over five years	14,556	14,433	14,288	14,303[r]	14,606[r]	15,148	15,038	14,686	14,450
10 Other securities	67,141	66,817	66,971	66,658[r]	66,556[r]	66,693	66,737	66,591	66,646
11 Trading account	913	900	1,064	1,032	1,182	1,087	1,078	1,253	1,276
12 Investment account	66,229	65,918	65,907	65,626[r]	65,374[r]	65,605	65,658	65,338	65,370
13 States and political subdivisions, by maturity	39,125	38,800	38,628	38,525	38,395	38,036	37,790	37,406	37,332
14 One year or less	4,850	4,943	4,932	4,947	4,948	5,017	4,963	4,919	4,876
15 Over one year	34,275	33,857	33,696	33,578	33,447	33,018	32,827	32,487	32,456
16 Other bonds, corporate stocks, and securities	27,104	27,118	27,278	27,101[r]	26,979[r]	27,570	27,868	27,932	28,038
17 Other trading account assets	6,148	6,118	6,066	6,046	5,982	6,265	6,001	5,866	5,570
18 Federal funds sold[4]	88,666	70,289	81,758	66,208	67,784	71,574	70,838	72,093	69,681
19 To commercial banks	62,061	46,908	57,063	43,944[r]	46,306[r]	48,399	49,069	51,964	50,681
20 To nonbank brokers and dealers in securities	16,978	16,444	16,603	15,875[r]	15,090[r]	15,341	14,731	13,552	13,577
21 To others	9,628	6,937	8,092	6,389	6,389[r]	7,834	7,037	6,576	5,422
22 Other loans and leases, gross	995,523	985,228	991,078	991,820[r]	991,549	991,529	993,296	996,866	995,794
23 Other loans, gross	969,371	959,125	964,936	965,614[r]	965,323	965,642	967,382	970,873	969,625
24 Commercial and industrial	320,642	318,275	320,301	320,156[r]	319,046[r]	317,973	318,337	320,047	318,783
25 Bankers acceptances and commercial paper	1,816	1,798	1,721	1,721	1,520	1,495	1,410	1,404	1,404
26 All other	318,827	316,477	318,579	318,435[r]	317,526[r]	316,477	316,926	318,643	317,379
27 U.S. addressees	317,000	314,720	316,681	316,685[r]	315,771[r]	314,724	315,152	316,916	315,573
28 Non-U.S. addressees	1,827	1,757	1,898	1,750[r]	1,754[r]	1,753	1,774	1,727	1,806
29 Real estate loans	347,332	348,200	348,900	349,330[r]	350,282	352,077	353,080	353,327	352,524
30 Revolving, home equity	26,491	26,542	26,653	26,734	26,816	26,908	27,035	27,222	27,271
31 All other	320,841	321,658	322,247	322,596[r]	323,466	325,169	326,046	326,105	325,253
32 To individuals for personal expenditures	174,030	174,049	174,713	174,802	175,401	175,594	176,721	177,262	177,825
33 To depository and financial institutions	51,068	48,618	49,315	49,542[r]	48,921[r]	49,119	48,480	47,948	47,572
34 Commercial banks in the United States	23,049	21,194	22,137	22,798	21,591[r]	21,490	21,140	20,633	20,813
35 Banks in foreign countries	5,168	4,660	4,691	4,549[r]	4,458[r]	4,615	4,368	4,876	4,430
36 Nonbank depository and other financial institutions	22,851	22,764	22,487	22,195	22,872	23,014	22,972	22,439	22,329
37 For purchasing and carrying securities	17,319	15,137	16,006	16,356	15,760	15,286	16,852	17,110	16,261
38 To finance agricultural production	5,559	5,511	5,521	5,449	5,402	5,355	5,398	5,379	5,452
39 To states and political subdivisions	25,935	25,836	25,548	25,429	25,389	25,210	24,996	24,919	24,856
40 To foreign governments and official institutions	1,459	1,481	1,483	1,388	1,414	1,340	1,364	1,452	1,415
41 All other	26,026	22,017	23,148	23,163[r]	23,708[r]	23,688	22,153	23,428	24,936
42 Lease financing receivables	26,152	26,103	26,142	26,206	26,226	25,887	25,913	25,993	26,169
43 LESS: Unearned income	4,863	4,886	4,890	4,941	4,912	4,813	4,817	4,784	4,762
44 Loan and lease reserve[5]	38,054	38,161	38,208	38,194	38,050	38,381	38,539	38,480	38,004
45 Other loans and leases, net	952,606	942,181	947,980	948,685[r]	948,588	948,336	949,940	953,602	953,027
46 All other assets	134,716	135,227	138,016	132,920[r]	133,365[r]	135,449	136,581	136,322	135,528
47 **Total assets**	**1,539,899**	**1,490,398**	**1,521,968**	**1,495,062[r]**	**1,503,799**	**1,505,973**	**1,510,058**	**1,518,812**	**1,526,105**
48 Demand deposits	247,426	222,095	243,064	227,363	223,373	227,177	228,103	247,131	247,985
49 Individuals, partnerships, and corporations	193,984	177,368	193,079	181,649	178,974	182,551	185,306	191,286	197,147
50 States and political subdivisions	7,122	5,244	6,632	6,925	5,623	5,998	5,944	7,450	7,245
51 U.S. government	1,582	3,227	4,266	3,212	1,793	2,675	1,446	5,099	1,853
52 Depository institutions in the United States	26,572	20,374	23,788	20,081	21,049	20,475	20,199	22,542	23,729
53 Banks in foreign countries	7,138	6,068	6,050	6,583	6,250	6,304	5,982	8,196	6,844
54 Foreign governments and official institutions	738	621	592	781	618	606	878	628	681
55 Certified and officers' checks	10,290	9,192	8,655	8,131	9,066	8,567	8,349	11,929	10,485
56 Transaction balances other than demand deposits	77,424	77,648	77,533	76,872	76,012	79,918	78,322	79,232	79,264
57 Nontransaction balances	702,216	702,174	705,266	703,451	703,876	706,637	706,401	702,865	704,033
58 Individuals, partnerships, and corporations	664,376	664,443	667,394	665,702	665,914[r]	668,841	668,522	665,733	666,359
59 States and political subdivisions	29,252	29,202	29,462	29,332[r]	29,409[r]	29,273	29,298	28,424	28,968
60 U.S. government	945	948	945	952[r]	948[r]	898	900	886	886
61 Depository institutions in the United States	7,039	6,963	6,886	6,890	7,037	7,061	7,128	7,289	7,241
62 Foreign governments, official institutions, and banks	604	617	579	574	569	563	554	533	579
63 Liabilities for borrowed money	323,954	302,262	309,420	298,644[r]	310,423[r]	306,167	306,043	299,242	302,906
64 Borrowings from Federal Reserve Banks	0	0	1,150	0	899	0	25	0	1,943
65 Treasury tax-and-loan notes	24,403	2,520	3,244	7,613	9,610[r]	7,786	7,360	17,626	15,064
66 All other liabilities for borrowed money[6]	299,552	299,742	305,026	291,030[r]	299,914[r]	298,381	298,658	281,616	285,899
67 Other liabilities and subordinated notes and debentures	90,466	87,779	88,427	89,939[r]	91,243[r]	87,003	92,012	91,000	92,732
68 **Total liabilities**	**1,441,486**	**1,391,958**	**1,423,710**	**1,396,268**	**1,404,928**	**1,406,901**	**1,410,881**	**1,419,470**	**1,426,920**
69 Residual (total assets minus total liabilities)[7]	98,413	98,439	98,258	98,794[r]	98,871	99,072	99,176	99,342	99,185
MEMO									
70 Total loans and leases (gross) and investments adjusted[8]	1,232,344	1,220,896	1,229,895	1,226,568[r]	1,225,304[r]	1,230,630	1,231,448	1,229,554	1,222,737
71 Total loans and leases (gross) adjusted[8]	999,080	987,416	993,636	991,286[r]	991,437[r]	993,214	993,925	996,361	993,980
72 Time deposits in amounts of $100,000 or more	218,072	218,747	218,339	218,219	217,748	217,753	217,113	215,307	214,664
73 U.S. Treasury securities maturing in one year or less	18,413	18,288	17,957	17,594	17,100	18,496	19,039	17,882	17,257
74 Loans sold outright to affiliates—total[9]	1,526	1,523	1,126	829	536	536	536	524	532
75 Commercial and industrial	1,226	1,221	825	525	231	233	232	229	235
76 Other	300	302	301	304	305	304	304	295	297
77 Nontransaction savings deposits (including MMDAs)	264,644	264,325	266,525	265,355	265,832	268,157	268,617	266,828	268,435

1. Beginning Jan. 6, 1988, the "Large bank" reporting group was revised somewhat, eliminating some former reporters with less than $2 billion of assets and adding some new reporters with assets greater than $3 billion.
2. For adjustment bank data see this table in the March 1989 Bulletin. The adjustment data for 1988 should be added to the reported data for 1988 to establish comparability with data reported for 1989.
3. Includes U.S. government-issued or guaranteed certificates of participation in pools of residential mortgages.
4. Includes securities purchased under agreements to resell.
5. Includes allocated transfer risk reserve.
6. Includes federal funds purchased and securities sold under agreements to repurchase; for information on these liabilities at banks with assets of $1 billion or more on Dec. 31, 1977, see table 1.13.
7. This is not a measure of equity capital for use in capital-adequacy analysis or for other analytic uses.
8. Exclusive of loans and federal funds transactions with domestic commercial banks.
9. Loans sold are those sold outright to a bank's own foreign branches, nonconsolidated nonbank affiliates of the bank, the bank's holding company (if not a bank), and nonconsolidated nonbank subsidiaries of the holding company.

1.28 ASSETS AND LIABILITIES OF LARGE WEEKLY REPORTING COMMERCIAL BANKS IN NEW YORK CITY[1]

Millions of dollars, Wednesday figures

Account	1989 Nov. 1	Nov. 8	Nov. 15	Nov. 22	Nov. 29	Dec. 6	Dec. 13	Dec. 20	Dec. 27
1 Cash balances due from depository institutions	34,938	25,318	24,768	21,833	28,750	22,921	21,572	28,238	36,663
2 **Total loans, leases, and securities, net**[2]	**222,339**	**207,756**	**220,795**	**209,742**	**212,537**	**209,462**	**214,997**	**210,684**	**207,786**
Securities									
3 U.S. Treasury and government agency[3]	0	0	0	0	0	0	0	0	0
4 Trading account[3]	0	0	0	0	0	0	0	0	0
5 Investment account	15,927	15,890	15,718	16,173	16,100	16,141	16,043	15,969	15,848
6 Mortgage-backed securities[4]	8,442	8,447	8,376	8,627	8,534	8,588	8,464	8,402	8,242
All other maturing in									
7 One year or less	2,836	2,844	2,849	2,858	2,831	2,792	2,813	2,816	2,774
8 Over one through five years	3,180r	3,209r	3,111r	3,342r	3,242r	3,236	3,240	3,289	3,330
9 Over five years	1,469r	1,389r	1,381r	1,346r	1,494r	1,525	1,525	1,462	1,500
10 Other securities[3]	0	0	0	0	0	0	0	0	0
11 Trading account[3]	0	0	0	0	0	0	0	0	0
12 Investment account	15,312	15,032	15,092	15,056	14,846	14,873	14,900	14,805	14,830
13 States and political subdivisions, by maturity	8,403	8,120	8,057	8,020	7,988	7,893	7,867	7,837	7,833
14 One year or less	1,061	1,046	1,051	1,052	1,049	1,052	1,055	1,053	1,047
15 Over one year	7,343	7,074	7,006	6,969	6,940	6,841	6,812	6,783	6,786
16 Other bonds, corporate stocks, and securities	6,908	6,912	7,035	7,036	6,858	6,980	7,033	6,968	6,997
17 Other trading account assets[3]	0	0	0	0	0	0	0	0	0
Loans and leases									
18 Federal funds sold[5]	25,543	17,730	27,450	16,640	19,788	17,344	20,548	17,304	16,289
19 To commercial banks	13,429	9,001	16,294	8,473	12,046	8,310	12,041	10,169	10,381
20 To nonbank brokers and dealers in securities	6,296	4,919	6,104	5,077	4,600	4,922	5,098	4,154	3,339
21 To others	5,818	3,811	5,052	3,089	3,143	4,113	3,409	2,981	2,569
22 Other loans and leases, gross	185,571	179,133	182,583	181,982	181,873	181,205	183,655	182,749	180,812
23 Other loans, gross	179,860	173,458	176,911	176,269	176,168	175,510	177,917	177,023	175,068
24 Commercial and industrial	61,631	60,418	61,406	60,506	60,040	59,781	60,455	60,379	58,571
25 Bankers acceptances and commercial paper	165	160	151	136	131	122	116	134	125
26 All other	61,466	60,259	61,255	60,371	59,909	59,659	60,339	60,245	58,445
27 U.S. addressees	60,764	59,620	60,473	59,795	59,332	59,056	59,724	59,635	57,838
28 Non-U.S. addressees	702	639	782	576	578	603	616	609	607
29 Real estate loans	59,768	59,939	59,925	60,099	60,309	61,332	61,563	61,303	60,850
30 Revolving, home equity	3,798	3,809	3,810	3,828	3,835	3,840	3,852	3,864	3,841
31 All other	55,970	56,130	56,115	56,270	56,474	57,492	57,711	57,439	57,009
32 To individuals for personal expenditures	20,055	20,139	20,150	20,168	20,148	19,975	19,969	19,967	20,046
33 To depository and financial institutions	19,624	16,926	18,481	18,256	18,188	18,596	18,479	18,066	18,098
34 Commercial banks in the United States	8,082	5,901	7,380	7,391	6,954	7,166	7,259	6,797	7,446
35 Banks in foreign countries	3,777	3,357	3,382	3,239	3,127	3,200	3,006	3,536	3,026
36 Nonbank depository and other financial institutions	7,765	7,668	7,720	7,626	8,108	8,230	8,214	7,733	7,625
37 For purchasing and carrying securities	7,069	5,516	6,366	6,857	6,404	5,425	6,841	6,298	6,150
38 To finance agricultural production	122	114	113	102	103	103	111	113	113
39 To states and political subdivisions	5,969	5,961	5,695	5,565	5,555	5,515	5,350	5,340	5,349
40 To foreign governments and official institutions	384	412	425	339	382	316	346	405	384
41 All other	5,238	4,032	4,350	4,377	5,037	4,465	4,803	5,154	5,509
42 Lease financing receivables	5,711	5,676	5,672	5,714	5,705	5,695	5,739	5,726	5,744
43 LESS: Unearned income	1,738	1,759	1,757	1,820	1,791	1,801	1,807	1,808	1,801
44 Loan and lease reserve	18,275	18,271	18,290	18,290	18,280	18,301	18,343	18,336	18,192
45 Other loans and leases, net[6]	165,558	159,103	162,536	161,873	161,802	161,103	163,506	162,606	160,819
46 All other assets[7]	60,546	61,507	62,540	59,368	59,680	61,547	61,204	59,750	61,849
47 **Total assets**	**317,824**	**294,581**	**308,103**	**290,943**	**300,966**	**293,930**	**297,773**	**298,672**	**306,298**
Deposits									
48 Demand deposits	61,956	51,659	56,515	50,289	50,743	48,644	50,476	59,194	55,232
49 Individuals, partnerships, and corporations	41,668	35,810	40,130	35,858	34,999	34,518	36,648	39,192	38,291
50 States and political subdivisions	956	582	965	635	493	584	547	953	810
51 U.S. government	170	626	715	604	326	448	168	1,004	270
52 Depository institutions in the United States	8,798	5,028	6,800	4,114	5,920	4,451	4,458	5,424	5,432
53 Banks in foreign countries	5,849	4,941	4,675	5,413	4,944	5,037	4,799	6,708	5,547
54 Foreign governments and official institutions	554	458	453	646	468	479	740	392	541
55 Certified and officers' checks	3,962	4,213	2,777	3,018	3,593	3,127	3,114	5,521	4,340
56 Transaction balances other than demand deposits (ATS, NOW, Super NOW, telephone transfers)	8,255	8,305	8,361	8,252	8,205	8,560	8,505	8,675	8,701
57 Nontransaction balances	115,441	113,697	116,677	115,318	115,313	116,075	115,658	116,117	115,660
58 Individuals, partnerships, and corporations	105,718	104,048	106,976	105,704	105,701	106,650	106,374	107,067	106,870
59 States and political subdivisions	7,388	7,274	7,353	7,281	7,292	7,117	7,040	6,819	6,691
60 U.S. government	29	29	30	29	29	30	29	27	26
61 Depository institutions in the United States	2,034	2,074	2,062	2,051	2,041	2,041	1,980	1,976	1,833
62 Foreign governments, official institutions, and banks	271	273	256	252	249	238	234	228	240
63 Liabilities for borrowed money	75,784	67,473	72,910	62,029	69,940	68,108	67,054	61,462	71,691
64 Borrowings from Federal Reserve Banks	0	0	1,150	0	883	0	0	0	1,680
65 Treasury tax-and-loan notes	5,684	422	604	1,465	1,878	1,594	1,541	4,664	3,831
66 All other liabilities for borrowed money[8]	70,100	67,050	71,157	60,564	67,179	66,515	65,514	56,798	66,180
67 Other liabilities and subordinated notes and debentures	32,327	29,333	29,622	30,619	32,460	28,037	31,589	28,929	30,930
68 **Total liabilities**	**293,763**	**270,467**	**284,085**	**266,507**	**276,662**	**269,425**	**273,282**	**274,377**	**282,214**
69 Residual (total assets minus total liabilities)[9]	24,060	24,114	24,018	24,436	24,305	24,505	24,491	24,295	24,084
MEMO									
70 Total loans and leases (gross) and investments adjusted[2,10]	220,842	212,884	217,169	213,987	213,608	214,087	215,846	213,862	209,952
71 Total loans and leases (gross) adjusted[10]	189,604	181,962	186,359	182,758	182,662	183,073	184,904	183,087	179,274
72 Time deposits in amounts of $100,000 or more	42,444	41,933	42,576	41,804	41,576	41,740	41,535	41,798	41,103
73 U.S. Treasury securities maturing in one year or less	3,353	3,005	2,904	2,990	2,970	3,066	3,084	3,118	3,240

1. These data also appear in the Board's H.4.2 (504) release. For address, see inside front cover.
2. Excludes trading account securities.
3. Not available due to confidentiality.
4. Includes U.S. government-issued or guaranteed certificates of participation in pools of residential mortgages.
5. Includes securities purchased under agreements to resell.
6. Includes allocated transfer risk reserve.
7. Includes trading account securities.
8. Includes federal funds purchased and securities sold under agreements to repurchase.
9. Not a measure of equity capital for use in capital adequacy analysis or for other analytic uses.
10 Exclusive of loans and federal funds transactions with domestic commercial banks.

1.30 LARGE WEEKLY REPORTING U.S. BRANCHES AND AGENCIES OF FOREIGN BANKS[1] Assets and Liabilities

Millions of dollars, Wednesday figures

Account	1989								
	Nov. 1	Nov. 8	Nov. 15	Nov. 22	Nov. 29[r]	Dec. 6	Dec. 13	Dec. 20	Dec. 27
1 Cash and due from depository institutions	12,734	12,083[r]	12,983	12,064	13,482	12,161	12,958	13,008	13,410
2 Total loans and securities	137,835[r]	139,655	140,684	141,024	146,884	142,824	143,456	143,263	144,880
3 U.S. Treasury and government agency securities	8,167	8,237	8,268	8,367	8,997	8,922	9,054	8,380	8,266
4 Other securities	6,159	6,204	6,347	6,423	6,577	6,637	6,672	6,810	6,925
5 Federal funds sold[2]	4,441	5,321	4,996	4,865	8,219	4,984	6,182	4,857	6,956
6 To commercial banks in the United States	3,049	3,985	3,338	3,349	6,567	3,233	4,293	3,532	5,745
7 To others	1,392	1,336	1,658	1,516	1,652	1,751	1,889	1,325	1,211
8 Other loans, gross	119,068[r]	119,893	121,073	121,369	123,091	122,281	121,548	123,216	122,733
9 Commercial and industrial	74,366	75,074	74,987	75,917	75,345	74,487	73,952	75,238	75,075
10 Bankers acceptances and commercial paper	2,329	2,129	2,032	2,328	2,399	2,050	2,062	2,065	2,054
11 All other	72,037	72,945	72,955	73,589	72,946	72,437	71,890	73,173	73,021
12 U.S. addressees	70,117	71,196	71,224	71,838	71,263	70,762	70,244	71,492	71,318
13 Non-U.S. addressees	1,920	1,749	1,731	1,751	1,683	1,675	1,646	1,681	1,703
14 Loans secured by real estate[3]	17,426	17,379	17,753	17,643	18,077	18,226	18,206	18,244	18,553
15 To financial institutions	22,631[r]	23,280	23,168	23,366	24,399	24,869	24,441	24,826	24,542
16 Commercial banks in the United States	16,981[r]	16,881[r]	17,326[r]	17,507[r]	18,262	18,487	18,082	18,348	18,388
17 Banks in foreign countries	1,398[r]	1,508[r]	1,311[r]	1,330[r]	1,552	1,803	1,779	1,636	1,415
18 Nonbank financial institutions	4,252	4,891	4,531	4,529	4,585	4,579	4,580	4,842	4,739
19 To foreign governments and official institutions	489	374	373	384	382	431	434	402	388
20 For purchasing and carrying securities	1,627	1,472	2,306	1,722	2,317	2,026	2,206	2,141	1,956
21 All other[3]	2,529	2,314	2,486	2,337	2,571	2,242	2,309	2,365	2,219
22 Other assets (claims on nonrelated parties)	36,183	36,499[r]	36,571	36,570[r]	36,761	37,903	38,117	38,122	37,250
23 Net due from related institutions	20,307	15,348	16,029	16,429[r]	11,454	13,961	12,517	13,350	12,124
24 Total assets	207,059	203,584	206,268	206,087[r]	208,580	206,852	207,047	207,742	207,665
25 Deposits or credit balances due to other than directly related institutions	51,313	50,944	52,887	50,359	49,927	49,684	50,906	50,992	50,180
26 Transaction accounts and credit balances[4]	4,483	3,772	4,918	3,757	4,204	3,735	4,292	4,241	4,047
27 Individuals, partnerships, and corporations	2,531	2,250	2,635	2,661	2,439	2,509	2,514	2,612	2,632
28 Other	1,952	1,522	2,283	1,096	1,765	1,226	1,778	1,629	1,415
29 Nontransaction accounts[5]	46,830	47,172	47,969	46,602	45,723	45,949	46,614	46,751	46,133
30 Individuals, partnerships, and corporations	38,998[r]	39,006[r]	39,184	38,828	38,584	38,311	38,334	38,961	38,816
31 Other	7,832[r]	8,166[r]	8,785	7,774	7,139	7,638	8,280	7,790	7,317
32 Borrowings from other than directly related institutions	96,525	90,730	92,556	92,251	90,291	92,244	88,366	92,845	86,771
33 Federal funds purchased[6]	46,988	40,454	42,500	37,192	38,907	39,896	35,839	41,464	34,624
34 From commercial banks in the United States	25,390	21,168	25,151	18,392	19,041	21,010	18,551	23,606	16,521
35 From others	21,598	19,286	17,349	18,800	19,866	18,886	17,288	17,858	18,103
36 Other liabilities for borrowed money	49,537	50,276	50,056	55,059	51,384	52,348	52,527	51,381	52,147
37 To commercial banks in the United States	32,411	32,698	32,588	35,040	33,158	33,718	33,508	32,250	33,674
38 To others	17,126	17,578	17,468	20,019	18,226	18,630	19,019	19,131	18,473
39 Other liabilities to nonrelated parties	36,260	36,141	37,070	37,114	36,552	37,386	38,052	37,582	37,169
40 Net due to related institutions	22,962	25,769	23,754	26,361[r]	31,808	27,537	29,722	26,323	33,545
41 Total liabilities	207,059	203,584	206,268	206,087[r]	208,580	206,852	207,047	207,742	207,665
MEMO									
42 Total loans (gross) and securities adjusted[7]	117,805[r]	118,789[r]	120,020[r]	120,168[r]	122,055	121,104	121,081	121,383	120,747
43 Total loans (gross) adjusted[7]	103,479[r]	104,348[r]	105,405[r]	105,378[r]	106,481	105,545	105,355	106,193	105,556

1. Effective Jan. 4, 1989, the reporting panel includes a new group of large U.S. branches and agencies of foreign banks. Earlier data included 65 U.S. branches and agencies of foreign banks that included those branches and agencies with assets of $750 million or more on June 30, 1980, plus those branches and agencies that had reached the $750 million asset level on Dec. 31, 1984. These data also appear in the Board's H.4.2 (504) release. For address, see inside front cover.

2. Includes securities purchased under agreements to resell.

3. Effective Jan. 4, 1989, loans secured by real estate are being reported as a separate component of Other loans, gross. Formerly, these loans were included in "All other", line 21.

4. Includes credit balances, demand deposits, and other checkable deposits.

5. Includes savings deposits, money market deposit accounts, and time deposits.

6. Includes securities sold under agreements to repurchase.

7. Exclusive of loans to and federal funds sold to commercial banks in the United States.

1.31 GROSS DEMAND DEPOSITS Individuals, Partnerships, and Corporations[1]

Billions of dollars, estimated daily-average balances, not seasonally adjusted

Type of holder	Commercial banks									
	1985 Dec.	1986 Dec.	1987 Dec.	1988 Dec.	1988 Sept.	1988 Dec.	1989 Mar.	1989 June	1989 Sept.	1989 Dec.
1 **All holders—Individuals, partnerships, and corporations**	**321.0**	**363.6**	**343.5**	**354.7**	**337.8**	**354.7**	**330.4**	**329.3**	**337.3**	n.a.
2 Financial business	32.3	41.4	36.3	38.6	34.8	38.6	36.3	33.0	33.7	n.a.
3 Nonfinancial business	178.5	202.0	191.9	201.2	190.3	201.2	182.2	185.9	190.4	n.a.
4 Consumer	85.5	91.1	90.0	88.3	87.8	88.3	87.4	86.6	87.9	n.a.
5 Foreign	3.5	3.3	3.4	3.7	3.2	3.7	3.7	2.9	2.9	n.a.
6 Other	21.2	25.8	21.9	22.8	21.7	22.8	20.7	21.0	22.4	n.a.
	Weekly reporting banks									
	1985 Dec.	1986 Dec.	1987 Dec.	1988 Dec.	1988 Sept.	1988 Dec.	1989 Mar.	1989 June	1989 Sept.	1989 Dec.
7 **All holders—Individuals, partnerships, and corporations**	**168.6**	**195.1**	**183.8**	**198.3**	**185.3**	**198.3**	**181.9**	**182.2**	**186.6**	**196.7**
8 Financial business	25.9	32.5	28.6	30.5	27.2	30.5	27.2	25.4	26.3	27.6
9 Nonfinancial business	94.5	106.4	100.0	108.7	101.5	108.7	98.6	99.8	101.6	108.8
10 Consumer	33.2	37.5	39.1	42.6	41.8	42.6	41.1	42.4	43.0	44.1
11 Foreign	3.1	3.3	3.3	3.6	3.1	3.6	3.3	2.9	2.8	3.0
12 Other	12.0	15.4	12.7	12.9	11.7	12.9	11.7	11.7	12.9	13.2

1. Figures include cash items in process of collection. Estimates of gross deposits are based on reports supplied by a sample of commercial banks. Types of depositors in each category are described in the June 1971 *Bulletin*, p. 466. Figures may not add to totals because of rounding.
2. Beginning in March 1984, these data reflect a change in the panel of weekly reporting banks, and are not comparable to earlier data. Estimates in billions of dollars for December 1983 based on the new weekly reporting panel are: financial business, 24.4; nonfinancial business, 80.9; consumer, 30.1; foreign, 3.1; other 9.5.
3. Beginning March 1985, financial business deposits and, by implication, total gross demand deposits have been redefined to exclude demand deposits due to thrift institutions. Historical data have not been revised. The estimated volume of such deposits for December 1984 is \$5.0 billion at all insured commercial banks and \$3.0 billion at weekly reporting banks.
4. Historical data back to March 1985 have been revised to account for corrections of bank reporting errors. Historical data before March 1985 have not been revised, and may contain reporting errors. Data for all commercial banks for March 1985 were revised as follows (in billions of dollars): all holders, −.3; financial business, −.8; nonfinancial business, −.4; consumer, .9; foreign, .1; other, −.1. Data for weekly reporting banks for March 1985 were revised as follows (in billions of dollars): all holders, −.1; financial business, −.7; nonfinancial business, −.5; consumer, 1.1; foreign, .1; other, −.2.
5. Beginning March 1988, these data reflect a change in the panel of weekly reporting banks, and are not comparable to earlier data. Estimates in billions of dollars for December 1987 based on the new weekly reporting panel are: financial business, 29.4; nonfinancial business, 105.1; consumer, 41.1; foreign, 3.4; other, 13.1.

1.32 COMMERCIAL PAPER AND BANKERS DOLLAR ACCEPTANCES OUTSTANDING

Millions of dollars, end of period

Instrument	1984 Dec.	1985 Dec.	1986 Dec.	1987 Dec.	1988 Dec.	1989 June	1989 July	1989 Aug.	1989 Sept.	1989 Oct.[r]	1989 Nov.
	Commercial paper (seasonally adjusted unless noted otherwise)										
1 **All issuers**	**237,586**	**298,779**	**329,991**	**357,129**	**455,017**	**503,445**	**506,095**	**516,476**	**507,090**	**507,902**	n.a.
Financial companies[1]											
Dealer-placed paper[2]											
2 Total	56,485	78,443	101,072	101,958	159,947	167,681	179,354	183,992	179,050	177,713	n.a.
3 Bank-related (not seasonally adjusted)[3]	2,035	1,602	2,265	1,428	1,248	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Directly placed paper[4]											
4 Total	110,543	135,320	151,820	173,939	192,442	211,020	205,847	208,915	206,521	210,855	n.a.
5 Bank-related (not seasonally adjusted)[3]	42,105	44,778	40,860	43,173	43,155	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
6 Nonfinancial companies[5]	70,558	85,016	77,099	81,232	102,628	124,744	121,217	125,478	123,489	121,466	n.a.
	Bankers dollar acceptances (not seasonally adjusted)[6]										
7 **Total**	**78,364**	**68,413**	**64,974**	**70,565**	**66,631**	**64,141**[r]	**65,588**	**65,764**	**63,814**[r]	**63,660**	**63,704**
Holder											
8 Accepting banks	9,811	11,197	13,423	10,943	9,086	9,442[r]	9,410[r]	9,935[r]	9,526[r]	10,811	10,025
9 Own bills	8,621	9,471	11,707	9,464	8,022	8,397[r]	8,334[r]	8,874[r]	8,779[r]	9,108	8,518
10 Bills bought	1,191	1,726	1,716	1,479	1,064	1,046	1,076	1,061	747[r]	1,703	1,507
Federal Reserve Banks											
11 Own account	0	0	0	0	0	0	0	0	0	0	0
12 Foreign correspondents	671	937	1,317	965	1,493	1,177	1,026	1,014	1,016	1,016	1,034
13 Others	67,881	56,279	50,234	58,658	56,052	53,521	55,152[r]	54,615[r]	53,370	51,833	52,645
Basis											
14 Imports into United States	17,845	15,147	14,670	16,483	14,984	15,093	15,338	16,140	16,101[r]	16,157	15,664
15 Exports from United States	16,305	13,204	12,960	15,227	14,410	15,063	15,270	14,895	14,304[r]	14,275	14,397
16 All other	44,214	40,062	37,344	38,855	37,237	33,985[r]	34,980	34,729	33,409[r]	33,228	33,643

1. Institutions engaged primarily in activities such as, but not limited to, 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. Beginning January 1989, bank-related series have been discontinued.
4. As reported by financial companies that place their paper directly with investors.
5. Includes public utilities and firms engaged primarily in such activities as communications, construction, manufacturing, mining, wholesale and retail trade, transportation, and services.
6. Beginning January 1988, the number of respondents in the bankers acceptance survey were reduced from 155 to 111 institutions—those with $100 million or more in total acceptances. The new reporting group accounts for over 90 percent of total acceptances activity.

1.33 PRIME RATE CHARGED BY BANKS on Short-Term Business Loans

Percent per year

Date of change	Rate	Period	Average rate	Period	Average rate	Period	Average rate
		1987	8.21	1988— Jan.	8.75	1989— Jan.	10.50
		1988	9.32	Feb.	8.51	Feb.	10.93
1987— Apr. 1	7.75	1989	10.87	Mar.	8.50	Mar.	11.50
May 1	8.00			Apr.	8.50	Apr.	11.50
15	8.25	1987— Jan.	7.50	May	8.84	May	11.50
Sept. 4	8.75	Feb.	7.50	June	9.00	June	11.07
Oct. 7	9.25	Mar.	7.50	July	9.29	July	10.98
22	9.00	Apr.	7.75	Aug.	9.84	Aug.	10.50
Nov. 5	8.75	May	8.14	Sept.	10.00	Sept.	10.50
1988— Feb. 2	8.50	June	8.25	Oct.	10.00	Oct.	10.50
May 11	9.00	July	8.25	Nov.	10.05	Nov.	10.50
July 14	9.50	Aug.	8.25	Dec.	10.50	Dec.	10.50
Aug. 11	10.00	Sept.	8.70				
Nov. 28	10.50	Oct.	9.07			1990— Jan.	10.11
1989— Feb. 10	11.00	Nov.	8.78				
24	11.50	Dec.	8.75				
June 5	11.00						
July 31	10.50						
1990— Jan. 8	10.00						

NOTE. These data also appear in the Board's H.15 (519) and G.13 (415) releases. For address, see inside front cover.

1.35 INTEREST RATES Money and Capital Markets

Averages, percent per year; weekly, monthly and annual figures are averages of business day data unless otherwise noted.

	Instrument	1987	1988	1989	1989				1989, week ending				
					Sept.	Oct.	Nov.	Dec.	Dec. 1	Dec. 8	Dec. 15	Dec. 22	Dec. 29
	MONEY MARKET RATES												
1	Federal funds[1,2]	6.66	7.57	9.21	9.02	8.84	8.55	8.45	8.51	8.52	8.47	8.52	8.38
2	Discount window borrowing[1,2,3]	5.66	6.20	6.93	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00
	Commercial paper[4,5]												
3	1-month	6.74	7.58	9.11	8.87	8.66	8.47	8.61	8.42	8.53	8.61	8.67	8.66
4	3-month	6.82	7.66	8.99	8.70	8.53	8.35	8.29	8.25	8.24	8.31	8.33	8.31
5	6-month	6.85	7.68	8.80	8.50	8.24	8.00	7.93	7.90	7.86	7.94	7.94	7.99
	Finance paper, directly placed[4,5]												
6	1-month	6.61	7.44	8.99	8.76	8.54	8.33	8.40	8.21	8.40	8.45	8.43	8.28
7	3-month	6.54	7.38	8.72	8.35	8.29	8.07	8.01	7.97	8.00	8.01	8.01	8.00
8	6-month	6.37	7.14	8.16	7.56	7.50	7.45	7.33	7.34	7.33	7.31	7.34	7.36
	Bankers acceptances[5,6]												
9	3-month	6.75	7.56	8.87	8.59	8.42	8.21	8.15	8.12	8.10	8.19	8.15	8.16
10	6-month	6.78	7.60	8.67	8.37	8.08	7.86	7.78	7.77	7.73	7.81	7.77	7.84
	Certificates of deposit, secondary market[7]												
11	1-month	6.75	7.59	9.11	8.83	8.62	8.44	8.65	8.43	8.55	8.67	8.72	8.72
12	3-month	6.87	7.73	9.09	8.78	8.60	8.39	8.32	8.27	8.26	8.35	8.37	8.33
13	6-month	7.01	7.91	9.08	8.75	8.45	8.21	8.12	8.09	8.04	8.16	8.15	8.16
14	Eurodollar deposits, 3-month[8]	7.07	7.85	9.16	8.85	8.67	8.42	8.39	8.25	8.34	8.40	8.48	8.39
	U.S. Treasury bills[5]												
	Secondary market[9]												
15	3-month	5.78	6.67	8.11	7.75	7.64	7.69	7.63	7.63	7.61	7.65	7.60	7.68
16	6-month	6.03	6.91	8.03	7.74	7.62	7.49	7.42	7.43	7.35	7.40	7.42	7.56
17	1-year	6.33	7.13	7.92	7.65	7.45	7.25	7.21	7.21	7.22	7.22	7.15	7.27
	Auction average[10]												
18	3-month	5.82	6.68	8.12	7.72	7.63	7.65	7.64	7.63	7.55	7.60	7.62	7.77
19	6-month	6.05	6.92	8.04	7.74	7.61	7.46	7.45	7.45	7.30	7.41	7.43	7.64
20	1-year	6.33	7.17	7.91	7.61	7.35	7.17	7.14	n.a.	n.a.	n.a.	7.14	n.a.
	CAPITAL MARKET RATES												
	U.S. Treasury notes and bonds[11]												
	Constant maturities[12]												
21	1-year	6.77	7.65	8.53	8.22	7.99	7.77	7.72	7.73	7.73	7.73	7.66	7.80
22	2-year	7.42	8.10	8.57	8.28	7.98	7.80	7.78	7.76	7.77	7.78	7.71	7.89
23	3-year	7.68	8.26	8.55	8.26	8.02	7.80	7.77	7.76	7.77	7.74	7.72	7.90
24	5-year	7.94	8.47	8.50	8.17	7.97	7.81	7.75	7.77	7.74	7.72	7.69	7.88
25	7-year	8.23	8.71	8.52	8.23	8.03	7.86	7.85	7.83	7.83	7.83	7.81	7.99
26	10-year	8.39	8.85	8.49	8.19	8.01	7.87	7.84	7.85	7.84	7.82	7.78	7.93
27	20-year	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
28	30-year	8.59	8.96	8.45	8.15	8.00	7.90	7.90	7.91	7.90	7.88	7.85	7.98
	Composite[13]												
29	Over 10 years (long-term)	8.64	8.98	8.58	8.31	8.15	8.03	8.02	8.03	8.02	8.00	7.97	8.12
	State and local notes and bonds												
	Moody's series[14]												
30	Aaa	7.14	7.36	7.00	6.97	6.93	6.77	6.72	6.67	6.61	6.73	6.76	6.76
31	Baa	8.17	7.83	7.40	7.26	7.33	7.16	7.03	7.00	6.83	7.10	7.10	7.10
32	*Bond Buyer* series[15]	7.63	7.68	7.23	7.26	7.22	7.14	6.98	7.04	7.00	6.99	6.96	6.97
	Corporate bonds												
	Seasoned issues[16]												
33	All industries	9.91	10.18	9.66	9.41	9.34	9.32	9.30	9.31	9.30	9.29	9.28	9.32
34	Aaa	9.38	9.71	9.26	9.01	8.92	8.89	8.86	8.88	8.86	8.85	8.85	8.88
35	Aa	9.68	9.94	9.46	9.23	9.19	9.14	9.11	9.14	9.11	9.12	9.08	9.14
36	A	9.99	10.24	9.74	9.51	9.44	9.42	9.39	9.40	9.40	9.38	9.36	9.41
37	Baa	10.58	10.83	10.18	9.91	9.81	9.81	9.82	9.83	9.81	9.81	9.82	9.85
38	A-rated, recently offered utility bonds[17]	9.96	10.20	9.79	9.55	9.39	9.28	9.36	9.26	9.29	9.33	9.40	9.54
	MEMO: Dividend/price ratio[18]												
39	Preferred stocks	8.37	9.23	n.a.	8.82	8.85	8.73	8.75	8.67	8.69	8.68	8.75	8.75
40	Common stocks	3.08	3.64	n.a.	3.29	3.29	3.39	3.33	3.37	3.33	3.29	3.39	3.31

1. Weekly, monthly and annual figures are averages of all calendar days, where the rate for a weekend or holiday is taken to be the rate prevailing on the preceding business day. The daily rate is the average of the rates on a given day weighted by the volume of transactions at these rates.
2. Weekly figures are averages for statement week ending Wednesday.
3. Rate for the Federal Reserve Bank of New York.
4. Unweighted average of offering rates quoted by at least five dealers (in the case of commercial paper), or finance companies (in the case of finance paper). Before November 1979, maturities for data shown are 30–59 days, 90–119 days, and 120–179 days for commercial paper; and 30–59 days, 90–119 days, and 150–179 days for finance paper.
5. Yields are quoted on a bank-discount basis, rather than in an investment yield basis (which would give a higher figure).
6. Dealer closing offered rates for top-rated banks. Most representative rate (which may be, but need not be, the average of the rates quoted by the dealers).
7. Unweighted average of offered rates quoted by at least five dealers early in the day.
8. Calendar week average. For indication purposes only.
9. Unweighted average of closing bid rates quoted by at least five dealers.
10. Rates are recorded in the week in which bills are issued. Beginning with the Treasury bill auction held on Apr. 18, 1983, bidders were required to state the percentage yield (on a bank discount basis) that they would accept to two decimal places. Thus, average issuing rates in bill auctions will be reported using two rather than three decimal places.
11. Yields are based on closing bid prices quoted by at least five dealers.
12. Yields adjusted to constant maturities by the U.S. Treasury. That is, yields are read from a yield curve at fixed maturities. Based on only recently issued, actively traded securities.
13. Averages (to maturity or call) for all outstanding bonds neither due nor callable in less than 10 years, including one very low yielding "flower" bond.
14. General obligations based on Thursday figures; Moody's Investors Service.
15. General obligations only, with 20 years to maturity, issued by 20 state and local governmental units of mixed quality. Based on figures for Thursday.
16. Daily figures from Moody's Investors Service. Based on yields to maturity on selected long-term bonds.
17. Compilation of the Federal Reserve. This series is an estimate of the yield on recently-offered, A-rated utility bonds with a 30-year maturity and 5 years of call protection. Weekly data are based on Friday quotations.
18. Standard and Poor's corporate series. Preferred stock ratio based on a sample of ten issues: four public utilities, four industrials, one financial, and one transportation. Common stock ratios on the 500 stocks in the price index.

NOTE. These data also appear in the Board's H.15 (519) and G.13 (415) releases. For address, see inside front cover.

1.36 STOCK MARKET Selected Statistics

Indicator	1987	1988	1989	1989 Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
	Prices and trading (averages of daily figures)											
Common stock prices												
1 New York Stock Exchange (Dec. 31, 1965 = 50)	161.78	149.97	180.13	169.38	175.30	180.76	185.15	192.93	193.02	192.49	188.50	192.67
2 Industrial	195.31	180.83	228.04	204.81	211.81	216.75	221.74	231.32	230.86	229.40	224.38	230.12
3 Transportation	140.52	134.09	174.90	164.32	169.05	173.47	179.32	197.53	202.02	190.36	174.26	177.25
4 Utility	74.29	72.22	94.33	79.69	84.21	87.95	90.40	92.90	93.44	94.67	94.95	99.73
5 Finance	146.48	127.41	162.01	143.26	146.82	154.08	157.78	164.86	165.51	166.55	160.89	155.63
6 Standard & Poor's Corporation (1941–43 = 10)[1]	287.00	265.88	323.05	302.25	313.93	323.73	331.92	346.61	347.33	347.40	340.22	348.57
7 American Stock Exchange (Aug. 31, 1973 = 50)[2]	316.78	295.08	356.67	336.82	349.50	362.73	368.52	379.28	382.75	383.63	371.92	373.87
Volume of trading (thousands of shares)												
8 New York Stock Exchange	188,922	161,386	165,568	161,863	171,495	180,680	162,501	171,683	151,752	182,394	144,389	160,671
9 American Stock Exchange	13,832	9,955	13,124	11,529	11,699	13,519	11,702	14,538	12,631	13,853	12,001	13,298
	Customer financing (end-of-period balances, in millions of dollars)											
10 Margin credit at broker-dealers[3]	**31,990**	**32,740**	**34,320**	**32,610**	**33,140**	**34,730**	**34,360**	**33,940**	**35,020**	**35,110**	**34,630**	**34,320**
Free credit balances at brokers[4]												
11 Margin-account[5]	4,750	5,660	7,040	5,450	5,250	6,900	5,420	5,580	5,680	6,000	5,815	7,040
12 Cash-account	15,640	16,595	18,505	16,125	15,965	19,080	16,345	16,015	15,310	16,340	16,345	18,505

Margin requirements (percent of market value and effective date)[6]

Indicator	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. Effective July 1976, includes a new financial group, banks and insurance companies. With this change the index includes 400 industrial stocks (formerly 425), 20 transportation (formerly 15 rail), 40 public utility (formerly 60), and 40 financial.
2. Beginning July 5, 1983, the American Stock Exchange rebased its index effectively cutting previous readings in half.
3. Beginning July 1983, under the revised Regulation T, margin credit at broker-dealers includes credit extended against stocks, convertible bonds, stocks acquired through exercise of subscription rights, corporate bonds, and government securities. Separate reporting of data for margin stocks, convertible bonds, and subscription issues was discontinued in April 1984.
4. Free credit balances are in accounts with no unfulfilled commitments to the brokers and are subject to withdrawal by customers on demand.
5. New series beginning June 1984.
6. These regulations, adopted by the Board of Governors pursuant to the Securities Exchange Act of 1934, limit the amount of credit to purchase and carry "margin securities" (as defined in the regulations) when such credit is collateralized by securities. Margin requirements on securities other than options 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. Effective Jan. 31, 1986, the SEC approved new maintenance margin rules, permitting margins to be the price of the option plus 15 percent of the market value of the stock underlying the option.

1.37 SELECTED FINANCIAL INSTITUTIONS Selected Assets and Liabilities

Millions of dollars, end of period

Account	1987	1988	1989 Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.
	SAIF-insured institutions											
1 **Assets**	**1,250,855**	**1,350,500**	**1,337,382**	**1,339,115**	**1,340,502**	**1,345,347r**	**1,346,564r**	**1,338,576r**	**1,331,965r**	**1,318,148r**	**1,301,825r**	**1,289,468**
2 Mortgages	721,593	764,513	767,260	767,603	769,398	773,386r	774,358r	772,720r	771,654r	770,072r	764,703r	757,730
3 Mortgage-backed securities	201,828	214,587	211,308	213,090	215,203	216,129r	216,256r	211,325r	204,321r	195,262r	188,397r	181,589
4 Contra-assets to mortgage assets[1]	42,344	37,950	37,157	37,013	37,842	37,791r	37,504r	37,540r	37,204r	36,781r	36,235r	34,835
5 Commercial loans	23,163	33,889	32,974	32,955	32,866	32,812r	33,009r	33,073r	33,213	32,004r	32,939r	32,579
6 Consumer loans	57,902	61,922	61,998	61,981	61,402	61,710r	61,869r	60,769r	61,100r	60,981r	60,425r	59,795
7 Contra-assets to non-mortgage loans[2]	3,467	3,056	2,840	2,923	3,074	2,899r	2,918r	3,192r	3,192r	3,157r	3,001r	3,111
8 Cash and investment securities	169,717	186,986	178,813	177,178	177,094	175,841r	174,333r	175,222r	175,244r	171,674r	169,643r	172,721
9 Other[3]	122,462	129,610	125,026	126,243	125,455	126,065r	127,161r	126,200r	126,829r	127,092r	125,054r	123,000
10 **Liabilities and net worth**	**1,250,855**	**1,350,500**	**1,337,382**	**1,339,115**	**1,340,502**	**1,345,347r**	**1,346,564r**	**1,338,576r**	**1,331,965r**	**1,318,148r**	**1,301,825r**	**1,289,468**
11 Savings capital	932,616	971,700	963,820	957,358	956,663	954,495	955,566	960,073r	963,158	960,344r	958,949r	948,531
12 Borrowed money	249,917	299,400	299,415	305,675	312,988	318,671r	318,367r	312,093r	301,581	289,631	281,474	275,979
13 FHLBB	116,363	134,168	135,712	140,089	146,007	148,000	146,520	144,217	141,875	138,331	133,633	130,514
14 Other	133,554	165,232	163,703	165,586	166,981	170,671r	171,847r	167,876r	159,706	151,300	147,841	145,465
15 Other	21,941	24,216	29,751	31,749	29,593	31,629r	33,585r	29,892r	31,884r	33,807r	29,831r	30,875
16 Net worth	46,382	55,185	58,882	58,962	57,113	56,068r	54,596r	52,741r	50,916r	49,959r	47,802r	49,157
	SAIF-insured federal savings banks											
17 **Assets**	**284,270**	**425,983**	**423,846**	**432,675**	**443,167**	**455,143**	**469,939**	**495,739**	**507,020r**	**504,187r**	**501,128r**	**502,589**
18 Mortgages	161,926	227,869	234,591	238,415	241,076	249,940r	257,187r	276,613r	285,072r	285,503r	283,188r	283,674
19 Mortgage-backed securities	45,826	64,957	62,773	65,896	68,086	69,964	73,963	73,943	74,341	72,082	72,438r	72,318
20 Contra-assets to mortgage assets[1]	9,100	13,140	12,258	12,685	12,896	13,049	13,227	13,662	13,972	13,859	13,821r	13,492
21 Commercial loans	6,504	16,731	16,172	16,320	16,313	16,497r	16,934r	18,014	18,279r	18,169	18,195	18,301
22 Consumer loans	17,696	24,222	25,033	25,977	26,096	26,768r	27,957r	28,157	28,996r	28,985	28,766	28,326
23 Contra-assets to non-mortgage loans[2]	678	889	814	857	977	863	888	976	980	987	1,029	1,051
24 Finance leases plus interest	591	880	907	946	1,011	1,047	1,072	1,083	1,088	1,075	1,092	1,087
25 Cash and investment	35,347	61,029	57,434	57,986	60,272	61,278	62,002	65,778	66,068	65,109	64,232	65,277
26 Other	24,069	35,428	33,954	34,664	34,964	37,333	38,021	39,644	40,340r	40,534r	40,680	40,756
27 **Liabilities and net worth**	**284,270**	**425,983**	**423,846**	**432,675**	**443,167**	**455,143**	**469,939**	**495,739**	**507,020r**	**504,187r**	**501,128r**	**502,589**
28 Savings capital	203,196	298,197	298,515	301,770	307,580	315,725	324,369	342,145	352,547	352,099	353,461r	355,903
29 Borrowed money	60,716	99,286	98,304	102,902	107,179	110,004	114,854	121,895	121,195	117,970	115,628	114,232
30 FHLBB	29,617	46,265	46,470	48,951	51,532	53,519	55,463	58,505	59,781	59,189	57,941	57,793
31 Other	31,099	53,021	51,834	53,951	55,647	56,485	59,391	63,390	61,414	58,781	57,687	56,439
32 Other	5,324	8,075	8,270	8,884	8,649	9,306	10,174	9,825	10,697	11,443	9,904r	10,298
33 Net worth	15,034	20,235	21,625	22,700	23,090	23,404	23,926	25,677	26,266r	26,369r	26,134r	26,126

1.37—Continued

Account	1987	1988	1989 Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.
	Credit unions[5]											
34 **Total assets/liabilities and capital**		**174,593**	**175,027**	**176,270**	**178,175**	**177,417**	**178,812**	**180,664**	**179,029**	**180,035**	**181,812**	**181,527**
35 Federal		114,566	114,909	115,543	117,555	115,416	116,705	117,632	117,475	117,463	118,746	118,887
36 State		60,027	60,118	60,727	60,620	62,001	62,107	63,032	61,554	62,572	63,066	62,640
37 Loans outstanding	n.a.	113,191	114,012	113,880	114,572	115,249	116,947	119,101	119,720	120,577	122,522	122,997
38 Federal		73,766	74,083	73,917	74,395	75,003	76,052	77,729	78,472	78,946	80,548	80,570
39 State		39,425	39,927	39,963	40,177	40,246	40,895	41,372	41,248	41,631	41,874	42,427
40 Savings		159,010	159,106	161,073	164,322	161,388	162,134	164,415	162,405	162,754	164,050	164,695
41 Federal		104,431	104,629	105,262	107,368	105,208	105,787	106,984	106,266	106,038	106,633	107,588
42 State		54,579	54,477	55,811	56,954	56,180	56,347	57,431	56,139	56,716	57,417	57,107
	Life insurance companies											
43 **Assets**	**1,044,459**	**1,157,140**	**1,176,042**	**1,186,208**	**1,199,125**	**1,209,242**	**1,221,332**	**1,232,195**	**1,247,341**	**1,257,045**	**1,266,773**	
Securities												
44 Government	84,426	84,051	84,042	84,190	84,485	82,873	83,847	84,564	84,438	83,225	82,867	
45 United States[6]	57,078	58,564	58,473	58,509	58,417	57,127	57,790	57,817	57,698	56,978	56,684	
46 State and local	10,681	9,136	8,918	8,817	8,860	8,911	8,953	9,036	9,061	9,002	9,037	
47 Foreign[7]	16,667	16,351	16,651	16,864	17,208	16,835	17,104	17,711	17,679	17,245	17,146	
48 Business	n.a.	660,416	667,026	678,541	687,777	697,703	706,960	714,398	726,599	735,441	742,537	n.a.
49 Bonds	472,684	556,043	560,385	571,365	579,232	587,889	595,500	601,786	606,686	614,585	621,856	
50 Stocks	n.a.	104,373	106,641	107,176	108,545	109,814	111,460	112,612	119,913	120,856	120,681	
51 Mortgages	203,545	232,863	232,941	233,556	234,632	235,312	236,651	237,444	237,865	238,944	240,189	
52 Real estate	34,172	37,371	37,453	37,603	37,842	37,976	38,598	38,190	38,622	38,822	38,942	
53 Policy loans	53,626	54,236	54,517	54,738	54,921	55,201	55,525	55,746	55,812	56,077	56,403	
54 Other assets	89,586	93,358	98,063	97,580	99,468	100,173	99,751	101,853	104,005	104,536	105,835	

1. Contra-assets are credit-balance accounts that must be subtracted from the corresponding gross asset categories to yield net asset levels. Contra-assets to mortgage loans, contracts, and pass-through securities include loans in process, unearned discounts and deferred loan fees, valuation allowances for mortgages "held for sale," and specific reserves and other valuation allowances.
2. Contra-assets are credit-balance accounts that must be subtracted from the corresponding gross asset categories to yield net asset levels. Contra-assets to nonmortgage loans include loans in process, unearned discounts and deferred loan fees, and specific reserves and valuation allowances.
3. Holding of stock in Federal Home Loan Bank and Finance leases plus interest are included in "Other" (line 9).
4. Excludes checking, club, and school accounts.
5. Data include all federally insured credit unions, both federal and state chartered, serving natural persons.
6. Direct and guaranteed obligations. Excludes federal agency issues not guaranteed, which are shown in the table under "Business" securities.
7. Issues of foreign governments and their subdivisions and bonds of the International Bank for Reconstruction and Development.

NOTE. *FSLIC-insured institutions:* Estimates by the FHLBB for all institutions insured by the FSLIC and based on the FHLBB thrift Financial Report.

FSLIC-insured federal savings banks: Estimates by the FHLBB for federal savings banks insured by the FSLIC and based on the FHLBB thrift Financial Report.

Savings banks: Estimates by the National Council of Savings Institutions for all savings banks in the United States and for FDIC-insured savings banks that have converted to federal savings banks.

Credit unions: Estimates by the National Credit Union Administration for federally chartered and federally insured state-chartered credit unions serving natural persons.

Life insurance companies: Estimates of the American Council of Life Insurance for all life insurance companies in the United States. Annual figures are annual-statement asset values, with bonds carried on an amortized basis and stocks at year-end market value. Adjustments for interest due and accrued and for differences between market and book values are not made on each item separately but are included, in total, in "other assets."

As of June 1989 Savings bank data are no longer available.

1.38 FEDERAL FISCAL AND FINANCING OPERATIONS

Millions of dollars

Type of account or operation	Fiscal year 1987	Fiscal year 1988[r]	Fiscal year 1989	Calendar year 1989 July	Aug.	Sept.	Oct.	Nov.	Dec.
U.S. budget[1]									
1 Receipts, total	854,143	908,166	990,789	66,191	76,161	99,233	68,426	71,213	89,130
2 On-budget	640,741	666,675	727,123	45,673	57,156	75,711	50,122	51,989	69,052
3 Off-budget	213,402	241,491	263,666	20,518	19,004	23,522	18,304	19,223	20,077
4 Outlays, total	1,003,804	1,063,318	1,142,777	84,430	98,310	105,299	94,515	100,172	103,770
5 On-budget	809,972	860,626	931,556	66,624	79,218	86,548	75,096	80,794	91,249
6 Off-budget	193,832	202,691	211,221	17,806	19,092	18,750	19,419	19,378	12,522
7 Surplus, or deficit (−), total	−149,661	−155,151	−151,988	−18,239	−22,150	−6,066	−26,089	−28,959	−14,641
8 On-budget	−169,231	−193,951	−204,433	−20,951	−22,062	−10,837	−24,974	−28,804	−22,196
9 Off-budget	19,570	38,800	52,445	2,712	−88	4,771	−1,115	−155	7,556
Source of financing (total)									
10 Borrowing from the public	151,717	166,139	140,156	−3,962	35,854	6,618	36,690	19,790	6,821
11 Operating cash (decrease, or increase (−))	−5,052	−7,963	3,425	21,564	−3,235	−15,589	−2,513	21,772	−5,221
12 Other[2]	2,996	−3,025	8,407	636	−10,469	14,977	−8,088	−12,603	13,040
MEMO									
13 Treasury operating balance (level, end of period)	36,436	44,398	40,973	22,149	25,384	40,973	43,486	21,715	26,935
14 Federal Reserve Banks	9,120	13,024	13,452	5,312	6,652	13,452	13,124	5,501	6,217
15 Tax and loan accounts	27,316	31,375	27,521	16,837	18,732	27,521	30,362	16,214	20,718

1. In accordance with the Balanced Budget and Emergency Deficit Control Act of 1985, all former off-budget entries are now presented on-budget. The Federal Financing Bank (FFB) activities are now shown as separate accounts under the agencies that use the FFB to finance their programs. The act has also moved two social security trust funds (Federal old-age survivors insurance and Federal disability insurance trust funds) off-budget.

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

SOURCE. *Monthly Treasury Statement of Receipts and Outlays of the U.S. Government* and the *Budget of the U.S. Government*.

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

Millions of dollars

Source or type	Fiscal year 1988	Fiscal year 1989	Calendar year 1988 H1	1988 H2	1989 H1	1989 H2	1989 Oct.	1989 Nov.	1989 Dec.
RECEIPTS									
1 **All sources**	**908,166**	**990,789**	**475,724**	**449,394**	**527,574**	**470,354**	**68,426**	**71,213**	**89,130**
2 Individual income taxes, net	401,181	445,690	207,659	200,300	233,572	218,661	35,493	34,448	37,385
3 Withheld	341,435	361,386	169,300	179,600	174,230	193,296	32,751	34,439	35,443
4 Presidential Election Campaign Fund	33	32	28	4	28	3	0	0	0
5 Nonwithheld	132,199	154,839	101,614	29,880	121,563	33,303	3,684	1,459	2,717
6 Refunds	72,487	70,567	63,283	9,186	62,251	7,943	943	1,450	775
Corporation income taxes									
7 Gross receipts	109,683	117,015	58,002	56,409	61,585	52,269	3,279	3,381	19,731
8 Refunds	15,487	13,723	8,706	7,250	7,259	6,842	2,549	996	853
9 Social insurance taxes and contributions, net	334,335	359,416	181,058	157,603	200,127	162,574	24,308	26,791	25,805
10 Employment taxes and contributions[2]	305,093	332,859	164,412	144,983	184,569	152,407	23,100	24,303	25,266
11 Self-employment taxes and contributions[3]	17,691	18,405	14,839	3,032	16,371	1,947	0	140	0
12 Unemployment insurance	24,584	22,011	14,363	10,359	13,279	7,909	859	2,088	161
13 Other net receipts[4]	4,659	4,547	2,284	2,262	2,277	2,260	350	401	377
14 Excise taxes	35,540	34,386	16,440	19,299	16,814	16,844	2,970	2,939	2,763
15 Customs deposits	15,411	16,334	7,522	8,107	7,918	8,667	1,493	1,421	1,293
16 Estate and gift taxes	7,594	8,745	3,863	4,054	4,583	4,451	835	693	850
17 Miscellaneous receipts[5]	19,909	22,927	9,950	10,873	10,235	13,728	2,598	2,535	2,156
OUTLAYS									
18 **All types**	**1,063,318**	**1,142,777**	**512,856**	**552,801**	**565,524**	**586,496**	**94,515**	**100,172**	**103,770**
19 National defense	290,361	303,551	143,080	150,496	148,098	149,613	19,930	25,234	28,570
20 International affairs	10,471	9,596	7,150	2,636	6,605	5,981	2,117	495	1,306
21 General science, space, and technology	10,841	12,891	5,361	5,852	6,238	7,091	1,342	1,155	1,202
22 Energy	2,297	3,745	555	1,966	2,221	564	363	−170	160
23 Natural resources and environment	14,625	16,084	6,776	9,144	7,022	9,209	1,975	2,064	1,319
24 Agriculture	17,210	16,948	7,872	6,911	9,619	4,132	904	1,967	1,097
25 Commerce and housing credit	18,828	27,716	5,951	19,836	4,129	22,200	5,496	2,030	1,107
26 Transportation	27,272	27,623	12,700	14,922	13,035	14,982	2,618	2,584	2,515
27 Community and regional development	5,294	5,755	2,765	2,690	1,833	4,879	790	1,100	841
28 Education, training, employment, and social services	31,938	35,697	15,451	16,152	18,083	18,663	3,251	3,194	3,151
29 Health	44,490	48,391	22,643	23,360	24,078	25,339	4,511	4,136	4,435
30 Social security and medicare	297,828	317,506	135,322	149,017	162,195	162,322	27,143	27,337	27,166
31 Income security	129,332	136,765	65,555	64,978	70,937	67,950	9,711	11,456	13,217
32 Veterans benefits and services	29,406	30,066	13,241	15,797	14,891	14,864	1,503	2,627	3,664
33 Administration of justice	8,436	9,396	4,379	4,351	4,801	4,963	842	771	968
34 General government	9,518	8,940	4,337	5,137	3,858	4,753	842	1,437	745
35 General-purpose fiscal assistance	1,816	n.a.	448	0	0	n.a.	n.a.	n.a.	n.a.
36 Net interest[6]	151,748	169,314	76,098	78,317	86,009	87,927	14,124	15,526	14,579
37 Undistributed offsetting receipts[7]	−36,967	−37,212	−17,766	−18,771	−18,131	−18,935	−2,945	−2,771	−2,271

1. Functional details do not add to total outlays for calendar year data because revisions to monthly totals have not been distributed among functions. Fiscal year total for outlays does 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. Old-age, disability, and hospital insurance.
4. Federal employee retirement contributions and civil service retirement and disability fund.
5. Deposits of earnings by Federal Reserve Banks and other miscellaneous receipts.
6. Net interest function includes interest received by trust funds.
7. Consists of rents and royalties on the outer continental shelf and U.S. government contributions for employee retirement.

SOURCES. U.S. Department of the Treasury, *Monthly Treasury Statement of Receipts and Outlays of the U.S. Government*, and the U.S. Office of Management and Budget, *Budget of the U.S. Government, Fiscal Year 1990*.

1.40 FEDERAL DEBT SUBJECT TO STATUTORY LIMITATION

Billions of dollars

Item	1987		1988				1989		
	Sept. 30	Dec. 31	Mar. 31	June 30	Sept. 30	Dec. 31	Mar. 31	June 30	Sept. 30
1 **Federal debt outstanding**	**2,354.3**	**2,435.2**	**2,493.2**	**2,555.1**	**2,614.6**	**2,707.3**	**2,763.6**	**2,824.0**	**2,881.1**
2 Public debt securities	2,350.3	2,431.7	2,487.6	2,547.7	2,602.2	2,684.4	2,740.9	2,799.9	2,857.4
3 Held by public	1,893.1	1,954.1	1,996.7	2,013.4	2,051.7	2,095.2	2,133.4	2,142.1	2,180.7
4 Held by agencies	457.2	477.6	490.8	534.2	550.4	589.2	607.5	657.8	676.7
5 Agency securities	4.0	3.5	5.6	7.4	12.4	22.9	22.7	24.0	23.7
6 Held by public	3.0	2.7	5.1	7.0	12.2	22.6	22.3	23.6	23.5
7 Held by agencies	1.0	.8	.6	.5	.2	.3	.4	.5	.1
8 **Debt subject to statutory limit**	**2,336.0**	**2,417.4**	**2,472.6**	**2,532.2**	**2,586.9**	**2,669.1**	**2,725.6**	**2,784.6**	**2,829.8**
9 Public debt securities	2,334.7	2,416.3	2,472.1	2,532.1	2,586.7	2,668.9	2,725.5	2,784.3	2,829.5
10 Other debt[1]	1.3	1.1	.5	.1	.1	.2	.2	.2	.3
11 MEMO: Statutory debt limit	2,800.0	2,800.0	2,800.0	2,800.0	2,800.0	2,800.0	2,800.0	2,800.0	2,870.0

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

SOURCES. *Treasury Bulletin* and *Monthly Statement of the Public Debt of the United States.*

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

Billions of dollars, end of period

Type and holder	1985	1986	1987	1988	1988	1989		
					Q4	Q1	Q2	Q3
1 **Total gross public debt**	**1,945.9**	**2,214.8**	**2,431.7**	**2,684.4**	**2,684.4**	**2,740.9**	**2,799.9**	**2,857.4**
By type								
2 Interest-bearing debt	1,943.4	2,212.0	2,428.9	2,663.1	2,663.1	2,738.3	2,797.4	2,836.3
3 Marketable	1,437.7	1,619.0	1,724.7	1,821.3	1,821.3	1,871.7	1,877.3	1,892.8
4 Bills	399.9	426.7	389.5	414.0	414.0	417.0	397.1	406.6
5 Notes	812.5	927.5	1,037.9	1,083.6	1,083.6	1,121.4	1,137.2	1,133.2
6 Bonds	211.1	249.8	282.5	308.9	308.9	318.4	328.0	338.0
7 Nonmarketable[1]	505.7	593.1	704.2	841.8	841.8	866.6	920.1	943.5
8 State and local government series	87.5	110.5	139.3	151.5	151.5	154.4	156.0	158.6
9 Foreign issues[2]	7.5	4.7	4.0	6.6	6.6	6.7	6.2	6.8
10 Government	7.5	4.7	4.0	6.6	6.6	6.7	6.2	6.8
11 Public	.0	.0	.0	.0	.0	.0	.0	.0
12 Savings bonds and notes	78.1	90.6	99.2	107.6	107.6	110.4	112.3	114.0
13 Government account series[3]	332.2	386.9	461.3	575.6	575.6	594.7	645.2	663.7
14 Non-interest-bearing debt	2.5	2.8	2.8	21.3	21.3	2.6	2.5	21.1
By holder[4]								
15 U.S. government agencies and trust funds	348.9	403.1	477.6	589.2	589.2	607.5	657.8	676.7
16 Federal Reserve Banks	181.3	211.3	222.6	238.4	238.4	228.6	231.8	220.6
17 Private investors	1,417.2	1,602.0	1,745.2	1,852.8	1,852.8	1,900.2	1,905.4	1,954.6
18 Commercial banks	198.2	203.5	201.5	193.8	193.8	200.9	206.7	n.a.
19 Money market funds	25.1	28.0	14.6	18.8	18.8	13.0	11.6	12.4
20 Insurance companies	78.5	105.6	104.9	111.2	111.2	112.5	n.a.	n.a.
21 Other companies	59.0	68.8	84.6	86.5	86.5	89.2	90.7	n.a.
22 State and local Treasurys	226.7	262.8	284.6	313.6	313.6	320.4	322.1	n.a.
Individuals								
23 Savings bonds	79.8	92.3	101.1	109.6	109.6	112.2	114.0	115.7
24 Other securities	75.0	70.4	70.2	77.0	77.0	82.9	89.1	n.a.
25 Foreign and international[5]	224.8	263.4	299.7	362.1	362.1	375.6	367.9	393.5
26 Other miscellaneous investors[6]	450.1	506.6	584.0	587.2	587.2	593.5	n.a.	n.a.

1. Includes (not shown separately): Securities issued to the Rural Electrification Administration; depository bonds, retirement plan bonds, and individual retirement bonds.
2. Nonmarketable dollar-denominated and foreign currency-denominated series held by foreigners.
3. Held almost entirely by U.S. Treasury agencies and trust funds.
4. Data for Federal Reserve Banks and U.S. Treasury agencies and trust funds are actual holdings; data for other groups are Treasury estimates.
5. Consists of investments of foreign and international accounts. Excludes non-interest-bearing notes issued to the International Monetary Fund.
6. Includes savings and loan associations, nonprofit institutions, credit unions, mutual savings banks, corporate pension trust funds, dealers and brokers, certain U.S. Treasury deposit accounts, and federally-sponsored agencies.

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

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

Par value; averages of daily figures, in millions of dollars

	Item	1987	1988	1989	1989			1989					
					Oct.[r]	Nov.[r]	Dec.	Nov. 22[r]	Nov. 29[r]	Dec. 6	Dec. 13	Dec. 20	Dec. 27
	Immediate delivery[2]												
1	**U.S. Treasury securities**	**110,050**	**101,623**	**112,730**	**130,820**	**115,717**	**84,256**	**102,465**	**103,002**	**84,048**	**86,756**	**105,779**	**72,754**
	By maturity												
2	Bills	37,924	29,387	30,741	35,905	32,619	26,846	30,234	31,041	24,334	26,890	34,298	24,327
3	Other within 1 year	3,271	3,426	3,182	3,312	2,809	2,559	2,892	2,660	2,593	2,393	2,745	2,193
4	1–5 years	27,918	27,777	33,665	39,950	38,445	25,879	38,594	38,543	24,995	25,871	34,564	22,201
5	5–10 years	24,014	24,939	28,682	34,368	26,207	18,250	17,045	20,540	22,193	20,356	20,487	14,356
6	Over 10 years	16,923	16,093	16,460	17,285	15,638	10,723	13,701	10,219	9,933	11,247	13,685	9,677
	By type of customer												
7	U.S. government securities dealers	2,936	2,761	3,287	4,298	3,496	2,552	2,753	2,582	2,081	2,410	3,364	2,920
8	U.S. government securities brokers	61,539	59,844	66,419	77,566	66,555	45,734	59,514	59,607	46,781	48,224	57,553	38,286
9	All others[3]	45,575	39,019	43,024	48,956	45,666	35,970	40,198	40,813	35,186	36,123	44,862	31,549
10	Federal agency securities	18,084	15,903	18,622	20,989	20,026	17,908	19,816	15,963	19,857	23,434	17,557	13,325
11	Certificates of deposit	4,112	3,369	2,798	2,422	2,184	1,596	2,281	2,150	1,783	2,016	1,807	1,046
12	Bankers acceptances	2,965	2,316	2,222	2,169	1,995	1,635	1,903	2,110	1,828	1,878	1,567	1,226
13	Commercial paper	17,135	22,927	31,807	34,167	31,188	32,291	32,277	27,286	32,864	31,288	33,421	31,857
	Futures contracts[4]												
14	Treasury bills	3,233	2,627	2,525	2,797	1,900	2,523	1,606	2,254	2,578	2,713	3,567	1,788
15	Treasury coupons	8,963	9,695	9,603	10,334	9,308	5,838	10,303	6,532	5,334	5,769	6,733	6,773
16	Federal agency securities	5	1	8	20	7	3	10	0	0	6	5	2
	Forward transactions[5]												
17	U.S. Treasury securities	2,029	2,095	2,130	2,163	2,009	1,859	1,440	2,373	1,305	1,221	3,372	1,789
18	Federal agency securities	9,290	8,008	9,486	10,561	10,894	9,536	10,750	6,150	9,884	13,212	10,135	5,709

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.

Averages for transactions are based on the number of trading days in the period. The figures exclude allotments of, and exchanges for, new U.S. Treasury securities, redemptions of called or matured securities, purchases or sales of securities under repurchase agreement, reverse repurchase (resale), or similar contracts.

2. Data for immediate transactions do not include forward transactions.

3. Includes, among others, all other dealers and brokers in commodities and securities, nondealer departments of commercial banks, foreign banking agencies, and the Federal Reserve System.

4. Futures contracts are standardized agreements arranged on an organized exchange in which parties commit to purchase or sell securities for delivery at a future date.

5. Forward transactions are agreements arranged in the over-the-counter market in which securities are purchased (sold) for delivery after 5 business days from the date of the transaction for Treasury securities (Treasury bills, notes, and bonds) or after 30 days for mortgage-backed agency issues.

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

Averages of daily figures, in millions of dollars

Item	1987	1988	1989	1989 Oct.	1989 Nov.r	1989 Dec.	1989 Nov. 29r	1989 Dec. 6	1989 Dec. 13	1989 Dec. 20	1989 Dec. 27
						Positions					
Net immediate[2]											
1 **U.S. Treasury securities**	−6,216	**−22,765**	**−5,938**	**10,654r**	**17,160**	**25,256**	**16,790**	**23,866**	**23,329**	**27,240**	**26,448**
2 Bills	4,317	2,238	7,835	19,152r	22,529	26,829	24,419	26,211	26,749	29,911	24,106
3 Other within 1 year	1,557	−2,236	−1,528	−1,646	−1,276	−1,171	−1,091	−887	−852	−1,106	−1,702
4 1–5 years	649	−3,020	2,340	9,664r	10,545	12,424	8,656	11,050	9,942	10,561	17,619
5 5–10 years	−6,564	−9,663	−8,133	−10,499	−8,995	−7,230	−9,351	−6,640	−7,155	−6,623	−7,877
6 Over 10 years	−6,174	−10,084	−6,452	−6,017r	−5,642	−5,595	−5,843	−5,868	−5,355	−5,504	−5,698
7 Federal agency securities	31,911	28,230	31,912	36,265r	35,449	35,922	31,403	32,700	37,615	37,788	35,231
8 Certificates of deposit	8,188	7,300	6,674	7,123r	7,003	6,884	6,580	7,121	7,197	6,848	6,849
9 Bankers acceptances	3,660	2,486	2,089	2,105	1,925	1,728	1,830	2,259	2,109	1,258	1,364
10 Commercial paper	7,496	6,152	8,242	9,055	7,650	8,151	7,583	8,875	8,069	8,114	8,191
Futures positions											
11 Treasury bills	−3,373	−2,210	−4,599	−7,459	−9,455	−10,140	−10,425	−11,781	−11,624	−9,907	−8,278
12 Treasury coupons	5,988	6,224	−2,919	−9,302	−11,364	−11,022	−10,772	−10,264	−10,907	−13,006	−10,748
13 Federal agency securities	−95	0	14	68	25	30	1	1	31	36	43
Forward positions											
14 U.S. Treasury securities	−1,211	346	−545	1,380	−109	−144	1,310	649	114	−22	52
15 Federal agency securities	−18,817	−16,348	−16,878	−15,367	−17,372	−16,523	−14,703	−15,993	−19,513	−16,799	−14,438
						Financing[3]					
Reverse repurchase agreements[4]											
16 Overnight and continuing	126,709	136,327	156,848	164,478	153,281	129,595	160,730	149,612	150,482	142,593	131,535
17 Term	148,288	177,477	223,566	233,888	242,133	200,542	231,768	212,603	221,256	220,594	230,344
Repurchase agreements[5]											
18 Overnight and continuing	170,763	172,695	217,235	242,486	227,507	211,236	245,546	229,821	241,158	240,487	221,690
19 Term	121,270	137,056	178,362	193,445	218,527	165,061	201,010	180,957	184,035	181,824	182,633

1. Data for dealer positions and sources of financing are obtained from reports submitted to the Federal Reserve Bank of New York by the U.S. Treasury securities dealers on its published list of primary dealers.

Data for positions are averages of daily figures, in terms of par value, based on the number of trading days in the period. Positions are net amounts and are shown on a commitment basis. Data for financing are in terms of actual amounts borrowed or lent and are based on Wednesday figures.

2. Immediate positions are net amounts (in terms of par values) of securities owned by nonbank dealer firms and dealer departments of commercial banks on a commitment, that is, trade-date basis, including any such securities that have been sold under agreements to repurchase (RPs). The maturities of some repurchase agreements are sufficiently long, however, to suggest that the securities involved are not available for trading purposes. Immediate positions include reverses to maturity, which are securities that were sold after having been obtained under reverse repurchase agreements that mature on the same day as the securities. Data for immediate positions do not include forward positions.

3. Figures cover financing involving U.S. Treasury and federal agency securities, negotiable CDs, bankers acceptances, and commercial paper.

4. Includes all reverse repurchase agreements, including those that have been arranged to make delivery on short sales and those for which the securities obtained have been used as collateral on borrowings, that is, matched agreements.

5. Includes both repurchase agreements undertaken to finance positions and "matched book" repurchase agreements.

NOTE. Data on positions for the period May 1 to Sept. 30, 1986, are partially estimated.

1.44 FEDERAL AND FEDERALLY SPONSORED CREDIT AGENCIES Debt Outstanding

Millions of dollars, end of period

Agency	1985	1986	1987	1988	1989				
					July	Aug.	Sept.	Oct.	Nov.
1 **Federal and federally sponsored agencies**	**293,905**	**307,361**	**341,386**	**381,498**	**411,874**	**411,979**	**408,591**	**409,113**	**412,234**
2 Federal agencies	36,390	36,958	37,981	35,668	36,453	36,453	36,584	36,378	35,855
3 Defense Department[1]	71	33	13	8	7	7	7	7	7
4 Export-Import Bank[2,3]	15,678	14,211	11,978	11,033	11,014	11,014	10,990	10,990	10,990
5 Federal Housing Administration[4]	115	138	183	150	245	255	295	301	308
6 Government National Mortgage Association participation certificates[5]	2,165	2,165	1,615	0	0	0	0	0	0
7 Postal Service[6]	1,940	3,104	6,103	6,142	6,445	6,445	6,445	6,445	6,445
8 Tennessee Valley Authority	16,347	17,222	18,089	18,335	18,742	18,732	18,847	18,635	18,105
9 United States Railway Association[6]	74	85	0	0	0	0	0	0	0
10 Federally sponsored agencies[7]	257,515	270,553	303,405	345,830	375,421	375,526	372,007	372,735	376,379
11 Federal Home Loan Banks	74,447	88,752	115,725	135,834	151,487	149,269	143,578	140,854	138,229
12 Federal Home Loan Mortgage Corporation	11,926	13,589	17,645	22,797	25,690	27,165	26,738	25,097	27,018
13 Federal National Mortgage Association	93,896	93,563	97,057	105,459	109,926	110,155	111,507	111,776	115,774
14 Farm Credit Banks[8]	68,851	62,478	55,275	53,127	53,158	53,511	54,015	54,029	54,131
15 Student Loan Marketing Association[9]	8,395	12,171	16,503	22,073	26,813	27,079	27,126	27,440	27,688
16 Financing Corporation[10]	0	0	1,200	5,850	7,500	7,500	8,170	8,170	8,170
17 Farm Credit Financial Assistance Corporation[11]	0	0	0	690	847	847	847	847	847
18 Resolution Funding Corporation[12]	0	0	0	0	0	0	0	4,522	4,522
MEMO									
19 **Federal Financing Bank debt**[13]	**153,373**	**157,510**	**152,417**	**142,850**	**138,814**	**137,690**	**136,092**	**135,841**	**135,213**
Lending to federal and federally sponsored agencies									
20 Export-Import Bank[3]	15,670	14,205	11,972	11,027	11,008	11,008	10,984	10,984	10,984
21 Postal Service[6]	1,690	2,854	5,853	5,892	6,195	6,195	6,195	6,195	6,195
22 Student Loan Marketing Association	5,000	4,970	4,940	4,910	4,910	4,910	4,910	4,880	4,880
23 Tennessee Valley Authority	14,622	15,797	16,709	16,955	17,362	17,352	17,467	17,255	16,725
24 United States Railway Association[6]	74	85	0	0	0	0	0	0	0
Other Lending[14]									
25 Farmers Home Administration	64,234	65,374	59,674	58,496	54,911	54,611	53,311	53,311	53,311
26 Rural Electrification Administration	20,654	21,680	21,191	19,246	19,257	19,270	19,275	19,233	19,249
27 Other	31,429	32,545	32,078	26,324	25,171	24,344	23,950	23,983	23,869

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. Off-budget Aug. 17, 1974, through Sept. 30, 1976; on-budget thereafter.
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 1969 by the Government National Mortgage Association acting as trustee for the Farmers Home Administration; Department of Health, Education, and Welfare; Department of Housing and Urban Development; Small Business Administration; and the Veterans Administration.
6. Off-budget.
7. Includes outstanding noncontingent liabilities: notes, bonds, and debentures. Some data are estimated.
8. Excludes borrowing by the Farm Credit Financial Assistance Corporation, shown in line 17.
9. Before late 1981, the Association obtained financing through the Federal Financing Bank (FFB). Borrowing excludes that obtained from the FFB, which is shown on line 21.
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. Includes FFB purchases of agency assets and guaranteed loans; the latter contain loans guaranteed by numerous agencies with the guarantees of any particular agency being generally small. The Farmers Home Administration item consists exclusively of agency assets, while the Rural Electrification Administration entry contains both agency assets and guaranteed loans.
14. The FFB, which began operations in 1974, is authorized to purchase or sell obligations issued, sold, or guaranteed by other federal agencies. Since FFB incurs debt solely for the purpose of lending to other agencies, its debt is not included in the main portion of the table in order to avoid double counting.

1.45 NEW SECURITY ISSUES Tax-Exempt State and Local Governments

Millions of dollars

Type of issue or issuer, or use	1986	1987	1988	1989 May	June	July	Aug.	Sept.	Oct.	Nov.r	Dec.
1 **All issues, new and refunding**[1]	**147,011**	**102,407**	**114,522**	**7,435**	**13,775**	**8,735**	**9,824**	**10,818**	**9,075**	**9,564**	**12,456**
Type of issue											
2 General obligation	46,346	30,589	30,312	2,342	4,960	3,789	2,199	3,500	3,273	3,328	1,930
3 Revenue	100,664	71,818	84,210	5,093	8,815	4,946	7,625	7,318	5,802	6,237	10,526
Type of issuer											
4 State	14,474	10,102	8,830	392	1,989	970	694	764	1,330	930	885
5 Special district and statutory authority[2]	89,997	65,460	74,409	4,979	8,033	4,868	7,027	7,567	4,770	5,473	8,657
6 Municipalities, counties, and townships	42,541	26,845	31,193	2,064	3,753	2,897	2,103	2,487	2,975	3,161	2,914
7 **Issues for new capital, total**	**83,492**	**56,789**	**79,665**	**5,938**	**10,078**	**6,816**	**6,612**	**7,470**	**7,266**	**7,777**	**9,412**
Use of proceeds											
8 Education	12,307	9,524	15,021	1,024	2,678	998	1,302	1,639	1,006	1,058	1,292
9 Transportation	7,246	3,677	6,825	748	576	500	556	976	280	675	622
10 Utilities and conservation	14,594	7,912	8,496	467	1,058	551	813	622	718	1,137	2,173
11 Social welfare	11,353	11,106	19,027	1,376	1,509	1,632	1,553	1,242	1,803	1,441	2,292
12 Industrial aid	6,190	7,474	5,624	361	329	440	447	381	345	444	966
13 Other purposes	31,802	18,020	24,672	1,962	3,928	2,695	1,941	2,610	3,114	3,022	2,067

1. Par amounts of long-term issues based on date of sale.
2. Includes school districts beginning 1986.

SOURCES. Securities Data/Bond Buyer Municipal Data Base beginning 1986. Public Securities Association for earlier data.

1.46 NEW SECURITY ISSUES U.S. Corporations

Millions of dollars

Type of issue or issuer, or use	1986	1987	1988	1989 Apr.	May	June	July	Aug.	Sept.	Oct.r	Nov.
1 **All issues**[1]	**424,737**	**392,171r**	**408,803r**	**14,405**	**21,471**	**24,450**	**17,734r**	**14,895r**	**14,409r**	**24,267r**	**20,240**
2 **Bonds**[2]	**356,304**	**325,663r**	**351,002r**	**13,396**	**19,662**	**21,622**	**12,680r**	**12,860r**	**12,136r**	**20,587r**	**16,000**
Type of offering											
3 Public, domestic	232,742	209,279	200,124r	11,471	17,756	18,714	11,260r	12,044r	10,936r	19,479r	14,000
4 Private placement, domestic[3]	80,760	92,070	127,700	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5. Sold abroad	42,801	24,308	23,178	1,925	1,906	2,908	1,420	816	1,200	1,108r	2,000
Industry group											
6 Manufacturing	90,788	61,666	70,348r	1,457	7,715	3,252r	2,776r	2,665r	2,177r	3,438r	3,214
7 Commercial and miscellaneous	41,909	49,327	61,620r	843	2,162	1,649r	1,331	1,090	1,393	1,830r	1,112
8 Transportation	10,322r	11,974	9,976	100	150	480	0	423	0	831	272
9 Public utility	31,074r	23,004	19,318	1,695	385	2,936	1,173	705r	1,058r	1,738r	927
10 Communication	16,441	7,340	5,951r	453	122	4	300	358	308	632	812
11 Real estate and financial	165,770	172,351	183,787r	8,848	9,128	13,302	7,099	7,619	7,201r	12,118r	9,663
12 **Stocks**[2]	**68,433**	**66,508**	**57,802**	**1,009**	**1,809**	**2,828**	**5,054**	**2,035**	**2,273**	**3,680**	**4,240**
Type											
13 Preferred	11,514	10,123	6,544	495	306	335	920	1,013	519	570	160
14 Common	50,316	43,225	35,911	514	1,503	2,493	4,134	1,023	1,754	3,110	4,080
15 Private placement[3]	6,603	13,157	15,346	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Industry group											
16 Manufacturing	15,027	13,880	7,608	155	299	630	593	393	193	190	378
17 Commercial and miscellaneous	10,617	12,888	8,449	282	115	512	438	343	155	728	498
18 Transportation	2,427	2,439	1,535	169	39	0	0	0	0	50	0
19 Public utility	4,020	4,322	1,898	0	192	125	25	137	709	465	211
20 Communication	1,825	1,458	515	93	280	25	29	20	0	0	0
21 Real estate and financial	34,517	31,521	37,798	310	884	1,536	3,969	1,020	1,195	2,214	3,153

1. Figures which represent gross proceeds of issues maturing in more than one year, are principal amount or number of units multiplied by offering price. Excludes secondary offerings, employee stock plans, investment companies other than closed-end, intracorporate transactions, equities sold abroad, and Yankee bonds. Stock data include ownership securities issued by limited partnerships.
2. Monthly data include only public offerings.
3. Data are not available on a monthly basis. Before 1987, annual totals include underwritten issues only.

SOURCES. IDD Information Services, Inc., the Board of Governors of the Federal Reserve System, and before 1989, the U.S. Securities and Exchange Commission.

1.47 OPEN-END INVESTMENT COMPANIES Net Sales and Asset Position

Millions of dollars

Item	1987	1988	1989							
			Apr.	May	June	July	Aug.	Sept.	Oct.[r]	Nov.
INVESTMENT COMPANIES[1]										
1 **Sales of own shares[2]**	**381,260**	**271,237**	**25,496**	**24,661**	**25,817**	**25,330**	**26,800**	**23,911**	**23,872**	**23,618**
2 Redemptions of own shares[3]	314,252	267,451	26,183	22,483	22,562	20,053	22,262	21,499	21,702	19,719
3 Net sales	67,008	3,786	−687	2,178	3,255	5,277	4,538	2,412	2,170	3,899
4 **Assets[4]**	**453,842**	**472,297**	**497,329**	**509,781**	**515,814**	**535,910**	**539,553**	**539,814**	**534,922**	**550,130**
5 Cash position[5]	38,006	45,090	48,788	49,177	48,428	47,888	47,209	47,163	46,146	48,428
6 Other	415,836	427,207	448,541	460,604	467,386	488,022	492,344	492,651	488,776	501,702

1. Data on sales and redemptions exclude money market mutual funds but include limited maturity municipal bond funds. Data on asset positions exclude both money market mutual funds and limited maturity municipal bond funds.
2. Includes reinvestment of investment income dividends. Excludes reinvestment of capital gains distributions and share issue of conversions from one fund to another in the same group.
3. Excludes share redemption resulting from conversions from one fund to another in the same group.
4. Market value at end of period, less current liabilities.
5. Also includes all U.S. government securities and other short-term debt securities.

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

SOURCE. *Survey of Current Business* (Department of Commerce).

1.48 CORPORATE PROFITS AND THEIR DISTRIBUTION ▲

Billions of dollars; quarterly data are at seasonally adjusted annual rates.

Account	1986	1987	1988	1987	1988				1989		
				Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
1 Corporate profits with inventory valuation and capital consumption adjustment	282.1	298.7	328.6	308.2	318.1	325.3	330.9	340.2	316.3	307.8	295.2
2 Profits before tax	221.6	266.7	306.8	276.2	288.8	305.3	314.4	318.8	318.0	296.0	275.0
3 Profits tax liability	106.3	124.7	137.9	127.3	129.0	138.4	141.2	143.2	144.4	134.9	122.6
4 Profits after tax	115.3	142.0	168.9	148.9	159.9	166.9	173.2	175.6	173.6	161.1	152.4
5 Dividends	91.3	98.7	110.4	102.8	105.7	108.6	112.2	115.2	118.5	120.9	123.3
6 Undistributed profits	24.0	43.3	58.5	46.1	54.2	58.3	61.1	60.4	55.1	40.2	29.1
7 Inventory valuation	6.7	−18.9	−25.0	−20.4	−20.7	−28.8	−30.4	−20.1	−38.3	−21.0[r]	n.a.[r]
8 Capital consumption adjustment	53.8	50.9	46.8	52.4	49.9	48.9	46.9	41.5	36.6	32.3	26.5

▲Trade and services are no longer being reported separately. They are included in Commercial and other, line 10.

1.50 TOTAL NONFARM BUSINESS EXPENDITURES on New Plant and Equipment ▲

Billions of dollars; quarterly data are at seasonally adjusted annual rates.

Industry	1988[r]	1989	1990[1]	1988			1989				1990
				Q2	Q3	Q4	Q1	Q2	Q3	Q4[1]	Q1[1]
1 **Total nonfarm business**	**430.17**	**475.18**	**505.49[r]**	**427.54**	**435.61**	**442.11**	**459.47**	**470.86**	**484.93**	**485.45**	**503.46**
Manufacturing											
2 Durable goods industries	77.75	83.05	83.22[r]	77.38	79.15	80.56	81.26	82.97	85.66	82.30	86.84
3 Nondurable goods industries	86.79	100.11	106.94[r]	85.24	89.62	92.76	93.96	98.57	102.00	105.90	106.92
Nonmanufacturing											
4 Mining	12.57	12.50	12.01[r]	13.15	12.53	12.38	12.15	12.70	12.59	12.58	12.23
Transportation											
5 Railroad	7.21	8.12	7.78[r]	6.99	6.84	7.45	8.02	7.37	8.16	8.93	7.91
6 Air	7.00	9.50	10.60[r]	6.91	8.09	7.69	7.04	9.49	12.48	8.99	10.12
7 Other	7.15	7.62	8.03[r]	7.05	7.08	6.89	8.07	7.40	7.89	7.13	8.58
Public utilities											
8 Electric	31.75	33.96	34.32[r]	31.31	32.07	33.69	33.69	35.34	33.73	33.07	35.47
9 Gas and other	14.63	16.10	15.82[r]	14.49	14.61	15.04	17.12	16.67	15.84	14.79	16.42
10 Commercial and other[2]	185.32	204.22	226.78[r]	185.21	185.61	185.65	198.15	200.36	206.59	211.76	218.97

1. Anticipated by business.
2. "Other" consists of construction; wholesale and retail trade; finance and insurance; personal and business services; and communication.

SOURCE. *Survey of Current Business* (Department of Commerce).

1.51 DOMESTIC FINANCE COMPANIES Assets and Liabilities[1]

Billions of dollars, end of period

Account	1985	1986	1987	1988 Q1	1988 Q2	1988 Q3	1988 Q4	1989 Q1	1989 Q2	1989 Q3
ASSETS										
Accounts receivable, gross[2]										
1 Consumer	111.9	134.7	141.1	141.5	144.4	146.3	146.2	140.2	144.9	147.2
2 Business	157.5	173.4	207.4	219.7	224.0	223.3	236.5	243.1	250.5	248.8
3 Real estate	28.0	32.6	39.5	41.4	42.5	43.1	43.5	45.4	47.4	48.9
4 Total	297.4	340.6	388.1	402.6	410.9	412.7	426.2	428.7	442.8	444.9
Less:										
5 Reserves for unearned income	39.2	41.5	45.3	46.8	46.3	48.4	50.0	50.9	52.1	53.7
6 Reserves for losses	4.9	5.8	6.8	6.8	6.8	7.1	7.3	7.4	7.5	7.8
7 Accounts receivable, net	253.3	293.3	336.0	348.9	357.8	357.3	368.9	370.4	383.2	383.5
8 All other	45.3	58.6	58.3	60.1	70.5	68.7	72.4	75.1	81.5	83.1
9 Total assets	**298.6**	**351.9**	**394.2**	**409.1**	**428.3**	**426.0**	**441.3**	**445.5**	**464.6**	**466.6**
LIABILITIES										
10 Bank loans	18.0	18.6	16.4	14.9	13.3	11.9	15.4	11.6	12.2	12.3
11 Commercial paper	99.2	117.8	128.4	125.2	131.6	129.4	142.0	147.9	149.2	147.4
Debt										
12 Other short-term	12.7	17.5	28.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
13 Long-term	94.4	117.5	137.1	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
14 Due to parent	n.a.	n.a.	n.a.	49.0	51.4	51.5	50.6	56.8	59.7	60.4
15 Not elsewhere classified	n.a.	n.a.	n.a.	132.4	139.8	139.3	137.9	134.5	141.3	146.1
16 All other liabilities	41.5	44.1	52.8	56.1	58.7	58.9	59.8	58.1	63.5	60.4
17 Capital, surplus, and undivided profits	32.8	36.4	31.5	31.5	33.5	34.9	35.6	36.6	38.7	40.0
18 Total liabilities and capital	**298.6**	**351.9**	**394.2**	**409.1**	**428.3**	**426.0**	**441.3**	**445.5**	**464.6**	**466.6**

1. Components may not add to totals because of rounding.
2. Excludes pools of securitized assets.

1.52 DOMESTIC FINANCE COMPANIES Business Credit Outstanding and Net Change[1]

Millions of dollars, seasonally adjusted

Type	1986	1987	1988	1989 June	1989 July	1989 Aug.	1989 Sept.	1989 Oct.	1989 Nov.
1 Total	**172,060**	**205,810**	**234,529**	**249,322**	**251,126**	**253,822**	**258,851**	**259,083**	**257,930**
Retail financing of installment sales									
2 Automotive	26,015	35,782	36,548	39,042	39,183	39,355	39,258	38,952	38,187
3 Equipment	23,112	25,170	28,298	27,773	28,128	29,039	29,639	29,594	29,568
4 Pools of securitized assets[2]	n.a.	n.a.	n.a.	807	769	793	755	715	739
Wholesale									
5 Automotive	23,010	30,507	33,300	34,021	33,233	33,566	37,243	35,210	33,537
6 Equipment	5,348	5,600	5,983	6,165	6,244	6,497	6,602	6,843	6,933
7 All other	7,033	8,342	9,341	9,862	10,001	9,990	9,957	9,927	9,895
8 Pools of securitized assets[2]	n.a.	n.a.	n.a.	0	0	0	0	0	0
Leasing									
9 Automotive	19,827	21,952	24,673	26,515	26,701	26,739	26,865	27,442	27,547
10 Equipment	38,179	43,335	57,455	63,370	64,086	64,186	65,170	66,787	67,677
11 Pools of securitized assets[2]	n.a.	n.a.	n.a.	796	887	990	948	1,199	1,093
12 Loans on commercial accounts receivable and factored commercial accounts receivable	15,978	18,078	17,796	19,302	19,989	20,098	19,611	19,487	18,892
13 All other business credit	13,557	17,043	21,134	21,669	21,904	22,571	22,804	22,926	23,861
	Net change (during period)								
14 Total	**15,763**	**33,750**	**22,662**	**3,462**	**1,803**	**2,697**	**5,029**	**232**	**−1,153**
Retail financing of installment sales									
15 Automotive	5,355	9,767	766	226	141	172	−97	−305	−765
16 Equipment	629	2,058	1,384	135	354	911	600	−45	−25
17 Pools of securitized assets[2]	n.a.	n.a.	n.a.	−39	−38	24	−38	−40	24
Wholesale									
18 Automotive	−978	7,497	2,793	−513	−788	332	3,677	−2,033	−1,673
19 Equipment	780	252	226	69	79	253	104	242	90
20 All other	224	1,309	999	−68	139	−11	−32	−30	−32
21 Pools of securitized assets[2]	n.a.	n.a.	n.a.	0	0	0	0	0	0
Leasing									
22 Automotive	3,552	2,125	2,721	504	187	38	126	577	105
23 Equipment	3,411	5,156	9,962	2,348	716	99	984	1,618	890
24 Pools of securitized assets[2]	n.a.	n.a.	n.a.	−28	91	103	−42	251	−106
25 Loans on commercial accounts receivable and factored commercial accounts receivable	213	2,100	−282	530	687	109	−487	−124	−595
26 All other business credit	2,576	3,486	4,091	298	235	667	234	122	934

1. These data also appear in the Board's G.20 (422) release. For address, see inside front cover.
2. Data on pools of securitized assets are not seasonally adjusted.

1.53 MORTGAGE MARKETS

Millions of dollars; exceptions noted.

Item	1987	1988	1989	1989 June	July	Aug.	Sept.	Oct.	Nov.	Dec.
	Terms and yields in primary and secondary markets									
PRIMARY MARKETS										
Conventional mortgages on new homes										
Terms[1]										
1 Purchase price (thousands of dollars)	137.0	150.0	159.6	150.5	174.5	160.8	160.6	153.1	152.8	162.7
2 Amount of loan (thousands of dollars)	100.5	110.5	117.0	111.0	125.3	119.4	118.6	111.3	110.4	119.9
3 Loan/price ratio (percent)	75.2	75.5	74.5	75.2	73.8	75.6	75.3	73.2	73.0	74.4
4 Maturity (years)	27.8	28.0	28.1	27.8	28.6	28.3	28.4	27.3	27.1	27.9
5 Fees and charges (percent of loan amount)[2]	2.26	2.19	2.06	1.91	2.42	2.31	2.14	1.95	1.81	2.18
6 Contract rate (percent per year)	8.94	8.81	9.76	10.09	10.06	9.83	9.87	9.77	9.78	9.70
Yield (percent per year)										
7 OTS series[3]	9.31	9.18	10.11	10.42	10.48	10.22	10.24	10.11	10.09	10.07
8 HUD series[4]	10.17	10.30	10.22	10.04	9.70	10.05	10.04	9.79	9.72	9.75
SECONDARY MARKETS										
Yield (percent per year)										
9 FHA mortgages (HUD series)[5]	10.16	10.49	n.a.	10.08	9.61	9.95	9.94	9.73	9.69	9.71
10 GNMA securities[6]	9.43	9.83	n.a.	9.75	9.55	9.48	9.47	9.21	9.07	n.a.
	Activity in secondary markets									
FEDERAL NATIONAL MORTGAGE ASSOCIATION										
Mortgage holdings (end of period)										
11 Total	95,030	101,329	104,974	103,309	104,421	105,896	107,052	108,180	109,076	110,721
12 FHA/VA-insured	21,660	19,762	19,640	19,586	19,630	19,589	19,608	19,843	19,953	20,283
13 Conventional	73,370	81,567	85,335	83,723	84,791	86,307	87,444	88,337	89,123	90,438
Mortgage transactions (during period)										
14 Purchases	20,531	23,110	22,518	1,862	2,091	2,724	2,223	2,267	2,376	2,982
Mortgage commitments[7]										
15 Contracted (during period)	25,415	23,435	27,409	2,573	2,513	2,842	2,328	2,963	2,536	2,495
16 Outstanding (end of period)	4,886	2,148	n.a.	5,236	5,648	5,755	5,865	6,548	6,645	n.a.
FEDERAL HOME LOAN MORTGAGE CORPORATION										
Mortgage holdings (end of period)[8]										
17 Total	12,802	15,105	n.a.	20,121	20,533	21,024	20,650	21,342	n.a.	n.a.
18 FHA/VA	686	620	n.a.	585	585	589	540	588	n.a.	n.a.
19 Conventional	12,116	14,485	n.a.	19,535	19,948	20,435	20,110	20,755	n.a.	n.a.
Mortgage transactions (during period)										
20 Purchases	76,845	44,077	n.a.	7,392	5,720	7,283	7,889	7,884	n.a.	n.a.
21 Sales	75,082	39,780	72,932	6,551	5,180	6,650	8,050	7,058	7,059	8,526
Mortgage commitments[9]										
22 Contracted (during period)	71,467	66,026	n.a.	7,948	6,608	5,705	7,708	7,555	n.a.	n.a.

1. Weighted averages based on sample surveys of mortgages originated by major institutional lender groups; compiled by the Federal Home Loan Bank 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 rates on loans closed, assuming prepayment at the end of 10 years.
4. Average contract rates on new commitments for conventional first mortgages; from Department of Housing and Urban Development.
5. Average gross yields on 30-year, minimum-downpayment, Federal Housing Administration-insured first mortgages for immediate delivery in the private secondary market. Based on transactions on first day of subsequent month. Large monthly movements in average yields may reflect market adjustments to changes in maximum permissable contract rates.
6. Average net yields to investors on Government National Mortgage Association guaranteed, mortgage-backed, fully modified pass-through securities, assuming prepayment in 12 years on pools of 30-year FHA/VA mortgages carrying the prevailing ceiling rate. Monthly figures are averages of Friday figures from the *Wall Street Journal*.
7. Includes some multifamily and nonprofit hospital loan commitments in addition to 1- to 4-family loan commitments accepted in FNMA's free market auction system, and through the FNMA-GNMA tandem plans.
8. Includes participation as well as whole loans.
9. Includes conventional and government-underwritten loans. FHLMC's mortgage commitments and mortgage transactions include activity under mortgage/securities swap programs, while the corresponding data for FNMA exclude swap activity.

1.54 MORTGAGE DEBT OUTSTANDING[1]

Millions of dollars, end of period

Type of holder, and type of property	1986	1987	1988	1988		1989		
				Q3	Q4	Q1	Q2	Q3[p]
1 **All holders**	**2,618,324**	**2,977,293**	**3,268,285**	**3,189,132**	**3,268,285**	**3,328,824**	**3,391,259**	**3,453,883**
2 1- to 4-family	1,719,673	1,959,607	2,189,475	2,134,225	2,189,475	2,230,006	2,281,317	2,331,196
3 Multifamily	247,831	273,954	290,355	284,675	290,355	296,139	297,860	302,121
4 Commercial	555,039	654,863	701,652	683,207	701,652	716,695	725,341	733,988
5 Farm	95,781	88,869	86,803	87,025	86,803	85,984	86,741	86,578
6 Selected financial institutions	1,507,944	1,704,560	1,874,967	1,833,800	1,874,967	1,905,052	1,932,154	1,950,634
7 Commercial banks[2]	502,534	591,369	669,160	650,799	669,160	688,662	715,049	737,979
8 1- to 4-family	235,814	276,270	314,283	307,041	314,283	324,681	338,872	349,739
9 Multifamily	31,173	33,330	34,131	33,960	34,131	34,172	34,954	36,075
10 Commercial	222,799	267,340	305,242	294,398	305,242	313,941	324,878	335,296
11 Farm	12,748	14,429	15,504	15,400	15,504	15,868	16,345	16,869
12 Savings institutions[3]	777,967	860,467	929,647	914,280	929,647	936,091	933,694	927,982
13 1- to 4-family	559,067	602,408	678,263	665,294	678,263	682,658	684,828	680,572
14 Multifamily	97,059	106,359	111,302	109,287	111,302	112,507	110,009	109,353
15 Commercial	121,236	150,943	139,416	139,029	139,416	140,255	138,201	137,406
16 Farm	605	757	666	670	666	671	656	651
17 Life insurance companies	193,842	212,375	232,639	225,627	232,639	234,910	236,160	235,767
18 1- to 4-family	12,827	13,226	15,284	14,917	15,284	12,690	12,745	13,045
19 Multifamily	20,952	22,524	23,562	23,139	23,562	24,636	25,103	25,913
20 Commercial	149,111	166,722	184,124	178,166	184,124	188,073	188,756	187,208
21 Farm	10,952	9,903	9,669	9,405	9,669	9,511	9,556	9,601
22 Finance companies[4]	33,601	40,349	43,521	43,094	43,521	45,389	47,251	48,906
23 Federal and related agencies	203,800	192,721	200,570	198,027	200,570	199,847	201,909	206,503
24 Government National Mortgage Association	889	444	26	64	26	26	24	23
25 1- to 4-family	47	25	26	51	26	26	24	23
26 Multifamily	842	419	0	13	0	0	0	0
27 Farmers Home Administration[5]	48,421	43,051	42,018	41,836	42,018	41,780	40,711	41,117
28 1- to 4-family	21,625	18,169	18,347	18,268	18,347	18,347	18,391	18,405
29 Multifamily	7,608	8,044	8,513	8,349	8,513	8,615	8,778	8,916
30 Commercial	8,446	6,603	5,343	5,300	5,343	5,101	3,885	4,366
31 Farm	10,742	10,235	9,815	9,919	9,815	9,717	9,657	9,430
32 Federal Housing and Veterans Administration	5,047	5,574	5,973	5,666	5,973	6,075	6,424	5,853
33 1- to 4-family	2,386	2,557	2,672	2,432	2,672	2,550	2,827	2,730
34 Multifamily	2,661	3,017	3,301	3,234	3,301	3,525	3,597	3,123
35 Federal National Mortgage Association	97,895	96,649	103,013	102,453	103,013	101,991	103,309	107,052
36 1- to 4-family	90,718	89,666	95,833	95,417	95,833	94,727	95,714	99,168
37 Multifamily	7,177	6,983	7,180	7,036	7,180	7,264	7,595	7,884
38 Federal Land Banks	39,984	34,131	32,115	32,566	32,115	31,261	31,467	30,943
39 1- to 4-family	2,353	2,008	1,890	1,917	1,890	1,839	1,851	1,821
40 Farm	37,631	32,123	30,225	30,649	30,225	29,422	29,616	29,122
41 Federal Home Loan Mortgage Corporation	11,564	12,872	17,425	15,442	17,425	18,714	19,974	21,515
42 1- to 4-family	10,010	11,430	15,077	13,322	15,077	16,192	17,305	18,493
43 Multifamily	1,554	1,442	2,348	2,120	2,348	2,522	2,669	3,022
44 Mortgage pools or trusts[6]	565,428	718,297	810,887	782,802	810,887	839,684	861,827	898,388
45 Government National Mortgage Association	262,697	317,555	340,527	333,177	340,527	348,622	353,154	361,291
46 1- to 4-family	256,920	309,806	331,257	324,573	331,257	337,563	341,951	349,830
47 Multifamily	5,777	7,749	9,270	8,604	9,270	11,059	11,203	11,461
48 Federal Home Loan Mortgage Corporation	171,372	212,634	226,406	220,684	226,406	234,695	242,789	256,896
49 1- to 4-family	166,667	205,977	219,988	214,195	219,988	228,389	236,404	250,123
50 Multifamily	4,705	6,657	6,418	6,489	6,418	6,306	6,385	6,773
51 Federal National Mortgage Association	97,174	139,960	178,250	167,170	178,250	188,071	196,501	208,894
52 1- to 4-family	95,791	137,988	172,331	162,228	172,331	181,352	188,774	200,302
53 Multifamily	1,383	1,972	5,919	4,942	5,919	6,719	7,727	8,592
54 Farmers Home Administration[5]	348	245	104	106	104	96	85	78
55 1- to 4-family	142	121	26	27	26	24	23	22
56 Multifamily	0	0	0	0	0	0	0	0
57 Commercial	132	63	38	38	38	34	26	22
58 Farm	74	61	40	41	40	38	36	34
59 Individuals and others[7]	341,152	361,715	381,861	374,503	381,861	384,241	395,369	398,358
60 1- to 4-family	197,868	201,704	215,077	209,784	215,077	215,379	225,059	226,788
61 Multifamily	66,940	75,458	78,411	77,502	78,411	78,814	79,840	81,009
62 Commercial	53,315	63,192	67,489	66,276	67,489	69,291	69,595	69,690
63 Farm	23,029	21,361	20,884	20,941	20,884	20,757	20,875	20,871

1. Based on data from various institutional and governmental sources, with some quarters estimated in part by the Federal Reserve. Multifamily debt refers to loans on structures of five or more units.
2. Includes loans held by nondeposit trust companies but not bank trust departments.
3. Includes savings banks and savings and loan associations. Beginning 1987:1, data reported by FSLIC-insured institutions include loans in process and other contra assets (credit balance accounts that must be subtracted from the corresponding gross asset categories to yield net asset levels).
4. Assumed to be entirely 1- to 4-family loans.
5. FmHA-guaranteed securities sold to the Federal Financing Bank were reallocated from FmHA mortgage pools to FmHA mortgage holdings in 1986:4, because of accounting changes by the Farmers Home Administration.
6. Outstanding principal balances of mortgage pools backing securities insured or guaranteed by the agency indicated. Includes private pools which are not shown as a separate line item.
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 other U.S. agencies.

1.55 CONSUMER INSTALLMENT CREDIT[1] Total Outstanding, and Net Change, seasonally adjusted

Millions of dollars

Holder, and type of credit	1987	1988	1989 Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.r	Nov.
			Amounts outstanding (end of period)								
1 **Total**	**607,721**	**659,507**	**691,162**	**693,911**	**698,132**	**700,849**	**700,344**	**703,001**	**704,371**	**707,562**	**711,799**
By major holder											
2 Commercial banks	282,910	318,925	318,242	320,458	323,363	324,438	323,621	326,135	327,327	330,746	332,300
3 Finance companies[2]	140,281	145,180	143,070	144,378	145,523	146,055	145,488	144,386	144,188	141,273	141,440
4 Credit unions	80,087	86,118	88,514	89,330	89,890	90,073	89,852	90,016	89,892	89,856	90,035
5 Retailers[3]	40,975	43,498	41,300	41,301	41,323	41,649	41,798	41,989	42,221	42,319	42,554
6 Savings institutions	59,851	62,099	62,735	61,919	61,311	59,920	60,092	59,229	59,883	58,890	57,967
7 Gasoline companies	3,618	3,687	3,682	3,787	3,897	4,017	3,936	3,976	3,886	3,804	3,772
8 Pools of securitized assets[4]	n.a.	n.a.	33,619	32,737	32,826	34,696	35,557	37,270	36,974	40,675	43,731
By major type of credit											
9 Automobile	265,976	281,174	288,850	289,654	290,741	290,192	288,526	288,533	287,754	288,747	289,266
10 Commercial banks	109,201	123,259	123,062	123,878	125,118	125,592	124,881	126,597	126,759	128,238	128,635
11 Credit unions	40,351	41,326	42,211	42,510	42,687	42,684	42,624	42,747	42,733	42,761	42,891
12 Finance companies	98,195	97,204	89,567	90,268	90,976	91,184	90,213	89,439	88,317	84,814	84,707
13 Savings institutions	18,228	19,385	19,231	18,866	18,566	18,032	17,972	17,603	17,990	17,692	17,415
14 Pools of securitized assets[4]	n.a.	n.a.	14,779	14,132	13,395	12,700	12,835	12,147	11,955	15,243	15,619
15 Revolving	153,884	174,792	182,831	184,500	186,502	189,622	191,028	194,398	195,302	196,379	199,191
16 Commercial banks	99,119	117,572	112,553	114,130	115,407	115,561	115,967	117,012	117,868	118,801	119,335
17 Retailers	36,389	38,692	36,489	36,497	36,504	36,814	36,963	37,134	37,355	37,435	37,639
18 Gasoline companies	3,618	3,687	3,682	3,787	3,897	4,017	3,936	3,976	3,886	3,804	3,772
19 Savings institutions	10,367	10,151	10,860	10,918	11,008	10,951	11,176	11,206	11,183	10,998	10,826
20 Credit unions	4,391	4,691	4,947	5,035	5,109	5,162r	5,192	5,244	5,279	5,319	5,372
21 Pools of securitized assets[4]	n.a.	n.a.	14,299	14,134	14,578	17,117	17,795	19,827	19,731	20,021	22,247
22 Mobile home	26,387	25,744	24,168	23,993	23,952	23,685	23,630	22,938	22,991	22,947	22,523
23 Commercial banks	9,220	8,974	8,844	8,836	8,878	8,847	8,830	8,808	8,788	8,724	8,942
24 Finance companies	7,762	7,186	5,687	5,659	5,684	5,674	5,624	5,100	5,087	5,272	4,783
25 Savings institutions	9,406	9,583	9,637	9,498	9,390	9,163	9,176	9,030	9,116	8,951	8,797
26 Other	161,475	177,798	195,314	195,763	196,936	197,349	197,161	197,132	198,324	199,490	200,818
27 Commercial banks	65,370	69,120	73,783	73,614	73,960	74,438	73,944	73,718	73,912	74,983	75,389
28 Finance companies	34,324	40,790	47,816	48,451	48,863	49,197	49,650	49,847	50,784	51,187	51,950
29 Credit unions	35,344	40,102	41,357	41,785	42,094	42,228	42,036	42,025	41,880	41,776	41,772
30 Retailers	4,586	4,807	4,811	4,804	4,819	4,834	4,835	4,855	4,866	4,884	4,914
31 Savings institutions	21,850	22,981	23,006	22,638	22,347	21,773	21,769	21,390	21,593	21,249	20,929
32 Pools of securitized assets[4]	n.a.	n.a.	4,541	4,471	4,853	4,879	4,927	5,296	5,288	5,411	5,865
			Net change (during period)								
33 **Total**	**35,674**	**51,786**	**3,765**	**2,749**	**4,221**	**2,717**	**−505**	**2,657**	**1,371**	**3,191**	**4,236**
By major holder											
34 Commercial banks	19,884	36,015	−181	2,216	2,904	1,076	−817	2,514	1,192	3,418	1,555
35 Finance companies[2]	6,349	4,899	−349	1,309	1,145	532	−567	−1,102	−198	−2,915	167
36 Credit unions	3,853	6,031	701	815	560	184	−222	164	−124	−36	179
37 Retailers[3]	1,568	2,523	247	2	21	326	149	192	231	98	235
38 Savings institutions	3,689	2,248	−375	−815	−609	−1,390	172	−863	654	−993	−923
39 Gasoline companies	332	69	6	104	110	120	−81	39	−89	−82	−33
40 Pools of securitized assets[4]	n.a.	n.a.	3,716	−882	89	1,870	861	1,713	−296	3,701	3,056
By major type of credit											
41 Automobile	18,663	15,198	82	804	1,087	−549	−1,667	7	−779	993	519
42 Commercial banks	7,919	14,058	79	816	1,239	474	−711	1,716	162	1,479	397
43 Credit unions	1,916	975	247	300	177	−3	−60	123	−14	28	130
44 Finance companies	5,639	−991	778	701	708	208	−970	−775	−1,122	−3,503	−107
45 Savings institutions	3,188	1,157	−233	−366	−300	−533	−61	−369	387	−298	−277
46 Pools of securitized assets[4]	n.a.	n.a.	−789	−647	−737	−695	135	−688	−192	3,288	376
47 Revolving	16,871	20,908	4,261	1,670	2,002	3,120	1,406	3,370	904	1,076	2,813
48 Commercial banks	12,188	18,453	848	1,576	1,277	154	405	1,045	856	933	534
49 Retailers	1,866	2,303	232	8	7	310	149	171	221	80	205
50 Gasoline companies	332	69	6	104	110	120	−81	39	−89	−82	−33
51 Savings institutions	1,771	−216	138	58	90	−57	225	30	−22	−185	−172
52 Credit unions	715	300	81	88	74	53r	30	52	35	40	53
53 Pools of securitized assets[4]	n.a.	n.a.	2,957	−165	444	2,539	678	2,032	−96	290	2,226
54 Mobile home	−968	−643	−1,824	−174	−41	−267	−56	−692	53	−44	−424
55 Commercial banks	192	−246	−131	−7	42	−31	−18	−22	−20	−64	219
56 Finance companies	−1,052	−576	−1,621	−28	25	−10	−50	−524	−13	185	−489
57 Savings institutions	−107	177	−72	−140	−108	−227	12	−146	86	−165	−154
58 Other	1,108	16,323	1,246	449	1,173	413	−189	−29	1,192	1,166	1,329
59 Commercial banks	−415	3,750	−977	−169	346	478	−494	−226	194	1,071	405
60 Finance companies	1,761	6,466	494	635	412	334	453	197	937	403	763
61 Credit unions	1,221	4,758	374	428	309	133	−191	−11	−145	−104	−4
62 Retailers	−297	221	16	−7	15	16	0	21	11	18	30
63 Savings institutions	−1,162	1,131	−208	−368	−291	−574	−5	−379	203	−344	−320
64 Pools of securitized assets[4]	n.a.	n.a.	1,548	−70	382	26	48	369	−8	123	454

1. The Board's series cover most short– and intermediate–term credit extended to individuals that is scheduled to be repaid (or has the option of repayment) in two or more installments.

These data also appear in the Board's G.19 (421) release. For address, see inside front cover.

2. More detail for finance companies is available in the G. 20 statistical release.

3. Excludes 30–day charge credit held by travel and entertainment companies.

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

1.56 TERMS OF CONSUMER INSTALLMENT CREDIT[1]

Percent unless noted otherwise

	Item	1986	1987	1988	1989 May	June	July	Aug.	Sept.	Oct.	Nov.
	Interest Rates										
	Commercial banks[2]										
1	48-month new car[3]	11.33	10.45	10.85	12.44	n.a.	n.a.	12.13	n.a.	n.a.	11.94
2	24-month personal	14.82	14.22	14.68	15.65	n.a.	n.a.	15.45	n.a.	n.a.	15.42
3	120-month mobile home[3]	13.99	13.38	13.54	14.35	n.a.	n.a.	14.13	n.a.	n.a.	13.97
4	Credit card	18.26	17.92	17.78	18.11	n.a.	n.a.	18.07	n.a.	n.a.	18.07
	Auto finance companies										
5	New car	9.44	10.73	12.60	11.80	11.96	11.94	12.22	12.42	13.04	13.27
6	Used car	15.95	14.60	15.11	16.45	16.45	16.37	16.31	16.22	16.17	16.09
	Other Terms[4]										
	Maturity (months)										
7	New car	50.0	53.5	56.2	52.7	53.0	52.9	52.9	53.1	54.4	55.1
8	Used car	42.6	45.2	46.7	46.6	46.5	46.4	46.2	46.2	45.8	45.6
	Loan-to-value ratio										
9	New car	91	93	94	91	91	91	90	88	88	89
10	Used car	97	98	98	97	97	97	96	96	96	96
	Amount financed (dollars)										
11	New car	10,665	11,203	11,663	11,973	12,065	12,108	11,949	11,841	11,965	12,279
12	Used car	6,555	7,420	7,824	7,908	7,921	7,988	7,874	7,856	7,904	8,063

1. These data also appear in the Board's G.19 (421) release. For address, see inside front cover.
2. Data for midmonth of quarter only.
3. Before 1983 the maturity for new car loans was 36 months, and for mobile home loans was 84 months.
4. At auto finance companies.

1.57 FUNDS RAISED IN U.S. CREDIT MARKETS

Billions of dollars; quarterly data are at seasonally adjusted annual rates.

Transaction category, sector	1984	1985	1986	1987	1988	1988 Q1	1988 Q2	1988 Q3	1988 Q4	1989 Q1	1989 Q2	1989 Q3
	Nonfinancial sectors											
1 **Total net borrowing by domestic nonfinancial sectors**	**750.7**	**846.3**	**831.1**	**693.2**	**767.0**	**728.2**	**827.2**	**754.4**	**758.3**	**792.2**	**658.9**	**688.1**
By sector and instrument												
2 U.S. government	198.8	223.6	215.0	144.9	157.5	211.6	113.7	162.5	142.1	199.9	70.9	149.0
3 Treasury securities	199.0	223.7	214.7	143.4	140.0	212.0	106.0	141.6	100.5	201.1	65.8	149.1
4 Agency issues and mortgages	−.2	−.1	.4	1.5	17.4	−.5	7.7	20.9	41.6	−1.2	5.1	−.2
5 Private domestic nonfinancial sectors	551.9	622.7	616.1	548.3	609.6	516.6	713.4	592.0	616.3	592.3	588.0	539.1
6 Debt capital instruments	320.0	451.4	460.3	458.5	462.6	386.5	561.0	463.9	438.9	427.8	394.1	412.6
7 Tax-exempt obligations	51.0	135.4	22.7	34.1	34.0	29.1	37.9	34.8	34.3	29.3	20.6	32.6
8 Corporate bonds	46.1	73.8	121.3	99.9	120.9	118.8	143.9	115.9	104.9	111.6	138.5	113.6
9 Mortgages	222.8	242.2	316.3	324.5	307.7	238.7	379.2	313.2	299.7	286.9	234.9	266.4
10 Home mortgages	136.7	156.8	218.7	234.9	229.1	170.7	300.7	231.0	214.0	205.2	186.1	191.9
11 Multifamily residential	25.2	29.8	33.5	24.4	18.9	24.2	14.7	19.5	17.3	27.2	8.1	21.3
12 Commercial	62.2	62.2	73.6	71.6	61.7	48.5	65.4	65.4	67.7	58.8	38.7	53.2
13 Farm	−1.2	−6.6	−9.5	−6.4	−2.1	−4.7	−1.6	−2.6	.7	−4.4	2.1	.0
14 Other debt instruments	231.9	171.3	155.8	89.7	147.0	130.1	152.4	128.1	177.3	164.5	193.9	126.5
15 Consumer credit	81.6	82.5	58.0	32.9	51.1	43.7	51.9	35.5	73.1	34.8	46.0	30.9
16 Bank loans n.e.c.	66.3	38.6	66.7	10.8	38.4	20.8	58.8	7.3	66.6	23.1	29.9	21.6
17 Open market paper	21.7	14.6	−9.3	2.3	11.6	2.4	6.8	17.1	20.0	44.1	44.9	20.4
18 Other	62.2	35.6	40.5	43.8	45.9	63.2	34.8	68.1	17.6	62.5	73.1	53.6
19 By borrowing sector	551.9	622.7	616.1	548.3	609.6	516.6	713.4	592.0	616.3	592.3	588.0	539.1
20 State and local governments	28.1	90.9	36.2	33.6	29.8	23.4	37.0	28.1	30.6	29.7	27.7	29.5
21 Households	231.5	284.6	289.2	271.9	287.9	230.2	346.7	291.6	283.3	263.1	227.1	254.8
22 Nonfinancial business	292.3	247.2	290.7	242.8	291.8	263.0	329.7	272.3	302.4	299.4	333.3	254.9
23 Farm	−.4	−14.5	−16.3	−10.6	−7.5	−12.7	−3.3	−2.2	−11.8	−2.2	.3	2.8
24 Nonfarm noncorporate	123.2	129.3	103.2	107.9	91.9	85.2	83.6	100.5	98.2	91.1	70.0	81.7
25 Corporate	169.6	132.4	203.7	145.5	207.5	190.5	249.4	174.0	216.0	210.6	263.0	170.4
26 Foreign net borrowing in United States	8.4	1.2	9.7	4.9	6.9	4.8	5.4	4.1	13.3	−1.1	−3.9	28.7
27 Bonds	3.8	3.8	3.1	7.4	6.9	14.2	2.6	5.9	5.1	3.2	11.1	9.1
28 Bank loans n.e.c.	−6.6	−2.8	−1.0	−3.6	−1.8	1.7	−3.3	.0	−5.7	4.9	1.7	.0
29 Open market paper	6.2	6.2	11.5	2.1	9.6	.7	6.5	10.3	21.0	12.1	−8.1	20.4
30 U.S. government loans	5.0	−6.0	−3.9	−1.0	−7.8	−11.8	−.4	−12.1	−7.1	−21.4	−8.6	−.9
31 **Total domestic plus foreign**	**759.1**	**847.5**	**840.9**	**698.1**	**773.9**	**733.0**	**832.6**	**758.5**	**771.7**	**791.1**	**655.0**	**716.8**
	Financial sectors											
32 **Total net borrowing by financial sectors**	**150.7**	**201.3**	**318.9**	**315.0**	**264.2**	**242.5**	**263.9**	**232.1**	**318.3**	**394.4**	**123.4**	**152.5**
By instrument												
33 U.S. government related	74.9	101.5	187.9	185.8	137.5	128.8	104.3	144.4	172.5	216.1	105.8	137.4
34 Sponsored credit agency securities	30.4	20.6	15.2	30.2	44.9	59.5	11.1	46.5	62.3	84.9	12.5	10.0
35 Mortgage pool securities	44.4	79.9	173.1	156.4	92.6	69.3	93.1	97.8	110.1	131.2	93.3	127.4
36 Loans from U.S. government	.0	1.1	−.4	−.8	.0	.0	.0	.0	.0	.0	.0	.0
37 Private financial sectors	75.9	99.7	131.0	129.2	126.7	113.7	159.6	87.7	145.8	178.3	17.6	15.1
38 Corporate bonds	34.3	50.9	82.9	78.9	51.7	60.0	71.1	32.5	43.0	52.7	31.4	26.4
39 Mortgages	.4	.1	.1	.4	.3	−.1	.1	−.1	1.2	.3	.0	.0
40 Bank loans n.e.c.	1.4	2.6	4.0	−3.3	1.4	5.9	5.7	−5.6	−.3	3.0	.3	4.1
41 Open market paper	24.0	32.0	24.2	28.8	53.6	38.5	70.5	35.1	70.4	53.2	2.8	28.2
42 Loans from Federal Home Loan Banks	15.7	14.2	19.8	24.4	19.7	9.4	12.3	25.8	31.4	69.1	−16.9	−43.7
By sector												
43 **Total**	**150.7**	**201.3**	**318.9**	**315.0**	**264.2**	**242.5**	**263.9**	**232.1**	**318.3**	**394.4**	**123.4**	**152.5**
44 Sponsored credit agencies	30.4	21.7	14.9	29.5	44.9	59.5	11.1	46.5	62.3	84.9	12.5	10.0
45 Mortgage pools	44.4	79.9	173.1	156.4	92.6	69.3	93.1	97.8	110.1	131.2	93.3	127.4
46 Private financial sectors	75.9	99.7	131.0	129.2	126.7	113.7	159.6	87.7	145.8	178.3	17.6	15.1
47 Commercial banks	7.3	−4.9	−3.6	7.1	−3.9	−16.7	−1.6	−.9	3.7	−13.4	−.9	7.5
48 Bank affiliates	16.1	16.6	15.2	14.3	5.2	−8.8	22.4	6.1	.8	6.4	6.5	6.7
49 Savings and loan associations	17.2	17.3	20.9	19.6	19.9	10.0	19.1	24.1	26.3	71.3	−16.2	−43.9
50 Mutual savings banks	1.2	1.5	4.2	8.1	1.9	2.3	1.1	.5	3.8	−2.8	−1.1	−2.9
51 Finance companies	24.0	57.2	54.5	40.3	67.0	78.4	85.4	40.7	63.6	78.4	32.8	43.2
52 REITs	.8	.5	1.0	.8	4.1	5.4	1.7	−5.9	15.0	−.9	−2.2	−1.4
53 SCO Issuers	9.3	11.5	39.0	39.1	32.5	43.0	31.5	23.1	32.5	39.3	−1.4	5.9

1.57—Continued

Transaction category, sector	1984	1985	1986	1987	1988	1988				1989		
						Q1	Q2	Q3	Q4	Q1	Q2	Q3
	All sectors											
54 **Total net borrowing**	**909.8**	**1,048.8**	**1,159.8**	**1,013.2**	**1,038.1**	**975.5**	**1,096.5**	**990.6**	**1,089.9**	**1,185.4**	**778.4**	**869.3**
55 U.S. government securities	273.8	324.2	403.4	331.5	294.9	340.4	218.0	306.8	314.6	416.0	176.7	286.4
56 State and local obligations	51.0	135.4	22.7	34.1	34.0	29.1	37.9	34.8	34.3	29.3	20.6	32.6
57 Corporate and foreign bonds	84.3	128.4	207.3	186.3	179.5	193.0	217.6	154.3	153.0	167.5	181.1	149.2
58 Mortgages	223.1	242.2	316.4	324.9	308.0	238.6	379.3	313.1	300.8	287.2	234.9	266.4
59 Consumer credit	81.6	82.5	58.0	32.9	51.1	43.7	51.9	35.5	73.1	34.8	46.0	30.9
60 Bank loans n.e.c.	61.1	38.3	69.7	3.8	38.0	28.3	61.2	1.7	60.7	31.1	31.9	25.8
61 Open market paper	51.9	52.8	26.4	33.2	74.9	41.6	83.9	62.5	111.5	109.4	39.6	69.0
62 Other loans	82.9	45.0	56.1	66.5	57.8	60.8	46.8	81.8	42.0	110.2	47.5	9.1
63 MEMO: U.S. government, cash balance	6.3	14.4	.0	−7.9	10.4	47.6	1.2	10.6	−17.9	−22.5	43.7	−7.5
Totals net of changes in U.S. government cash balances												
64 Net borrowing by domestic nonfinancial	744.4	831.9	831.2	701.1	756.6	680.6	825.9	743.8	776.3	814.7	615.2	695.6
65 Net borrowing by U.S. government	192.5	209.3	215.0	152.8	147.1	164.0	112.5	151.8	160.0	222.4	27.2	156.4
	External corporate equity funds raised in United States											
66 **Total net share issues**	**−36.0**	**20.1**	**90.5**	**14.3**	**−117.9**	**−101.0**	**−133.7**	**−73.5**	**−163.5**	**−163.5**	**−48.7**	**−64.7**
67 Mutual funds	29.3	84.4	159.0	71.6	−.7	−9.5	−6.6	1.5	11.9	3.6	24.0	50.0
68 All other	−65.3	−64.3	−68.5	−57.3	−117.2	−91.5	−127.0	−75.0	−175.4	−167.1	−72.7	−114.6
69 Nonfinancial corporations	−74.5	−81.5	−80.8	−76.5	−130.5	−95.0	−140.0	−92.0	−195.0	−180.0	−105.0	−145.0
70 Financial corporations	8.2	13.5	11.1	21.4	12.4	2.4	19.0	14.6	13.5	9.4	17.1	17.1
71 Foreign shares purchased in United States	.9	3.7	1.2	−2.1	.9	1.1	−6.0	2.4	6.1	3.6	15.2	13.3

1.58 DIRECT AND INDIRECT SOURCES OF FUNDS TO CREDIT MARKETS

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

	Transaction category, or sector	1984	1985	1986	1987	1988	1988				1989		
							Q1	Q2	Q3	Q4	Q1	Q2	Q3
1	**Total funds advanced in credit markets to domestic nonfinancial sectors**	**750.7**	**846.3**	**831.1**	**693.2**	**767.0**	**728.2**	**827.2**	**754.4**	**758.3**	**792.2**	**658.9**	**688.1**
	By public agencies and foreign												
2	Total net advances	157.6	202.0	314.0	262.8	237.6	278.6	185.5	196.9	289.3	348.7	26.7	267.4
3	U.S. government securities	38.9	45.9	69.4	70.1	85.0	153.2	43.3	24.1	119.6	97.6	−102.4	117.1
4	Residential mortgages	56.5	94.6	170.1	153.2	104.0	88.9	107.9	98.1	121.2	133.3	106.6	149.0
5	FHLB advances to thrifts	15.7	14.2	19.8	24.4	19.7	9.4	12.3	25.8	31.4	69.1	−16.9	−43.7
6	Other loans and securities	46.6	47.3	54.7	15.1	28.8	27.1	22.1	49.0	17.1	48.7	39.4	45.0
	Total advanced, by sector												
7	U.S. government	17.1	17.8	9.7	−7.9	−4.9	−7.0	−7.6	4.3	−9.3	2.8	3.1	5.2
8	Sponsored credit agencies	74.3	103.5	187.2	183.4	129.6	114.3	105.7	130.1	168.5	221.4	15.6	165.6
9	Monetary authorities	8.4	18.4	19.4	24.7	10.5	2.7	5.0	15.5	18.9	5.2	−3.9	−30.7
10	Foreign	57.9	62.3	97.8	62.7	102.3	168.6	82.5	47.0	111.2	119.3	11.9	127.2
	Agency and foreign borrowing not in line 1												
11	Sponsored credit agencies and mortgage pools	74.9	101.5	187.9	185.8	137.5	128.8	104.3	144.4	172.5	216.1	105.8	137.4
12	Foreign	8.4	1.2	9.7	4.9	6.9	4.8	5.4	4.1	13.3	−1.1	−3.9	28.7
	Private domestic funds advanced												
13	Total net advances	676.3	747.0	714.8	621.1	673.8	583.2	751.3	705.9	654.8	658.4	734.1	586.8
14	U.S. government securities	234.9	278.2	333.9	261.4	209.9	187.2	174.7	282.8	195.0	318.4	279.1	169.3
15	State and local obligations	51.0	135.4	22.7	34.1	34.0	29.1	37.9	34.8	34.3	29.3	20.6	32.6
16	Corporate and foreign bonds	35.1	40.8	84.2	87.5	104.4	126.5	126.2	91.7	73.0	89.4	132.3	103.4
17	Residential mortgages	105.3	91.8	82.0	106.1	144.0	106.0	207.5	152.3	110.1	99.2	87.5	64.2
18	Other mortgages and loans	265.6	214.8	211.8	156.5	201.2	143.8	217.2	170.1	273.7	191.3	197.7	173.6
19	LESS: Federal Home Loan Bank advances	15.7	14.2	19.8	24.4	19.7	9.4	12.3	25.8	31.4	69.1	−16.9	−43.7
	Private financial intermediation												
20	Credit market funds advanced by private financial institutions	585.8	579.9	744.0	560.8	558.2	617.4	553.7	427.5	634.1	568.6	544.3	342.2
21	Commercial banking	169.2	186.0	197.5	136.8	155.3	87.9	194.5	118.4	220.5	120.6	158.6	132.9
22	Savings institutions	154.7	87.9	107.6	136.8	120.5	96.0	134.9	157.0	94.2	62.2	−73.1	−154.2
23	Insurance and pension funds	121.8	154.4	174.6	210.9	194.9	257.4	182.7	150.5	189.1	228.3	182.5	156.0
24	Other finance	140.1	151.6	264.2	76.3	87.4	176.1	41.6	1.7	130.3	157.6	276.2	207.4
25	Sources of funds	585.8	579.9	744.0	560.8	558.2	617.4	553.7	427.5	634.1	568.6	544.3	342.2
26	Private domestic deposits and RPs	322.6	214.3	262.6	144.1	219.2	305.5	102.0	191.9	277.4	166.5	213.4	282.7
27	Credit market borrowing	75.9	99.7	131.0	129.2	126.7	113.7	159.6	87.7	145.8	178.3	17.6	15.1
28	Other sources	187.3	265.9	350.4	287.5	212.3	198.2	292.1	147.9	210.9	223.8	313.3	44.3
29	Foreign funds	8.8	19.7	12.9	43.7	9.3	−60.6	94.5	−42.1	45.5	−28.4	−16.0	10.6
30	Treasury balances	4.0	10.3	1.7	−5.8	7.3	44.2	−16.3	5.6	−4.1	−21.6	26.6	−6.4
31	Insurance and pension reserves	124.0	131.9	149.3	176.1	186.8	190.1	184.0	109.8	263.3	133.0	151.5	88.7
32	Other, net	50.5	104.1	186.5	73.6	8.8	24.4	29.9	74.5	−93.8	140.8	151.2	−48.6
	Private domestic nonfinancial investors												
33	Direct lending in credit markets	166.4	266.8	101.8	189.6	242.3	79.5	357.2	366.2	166.5	268.1	207.5	259.7
34	U.S. government securities	111.4	157.8	60.9	100.0	149.3	119.6	103.2	225.7	148.7	211.1	123.2	137.4
35	State and local obligations	27.1	37.7	−21.7	45.6	33.9	19.7	37.2	56.4	22.3	35.7	−11.4	22.6
36	Corporate and foreign bonds	−4.1	4.2	39.3	24.1	2.6	−39.6	61.4	−5.8	−5.7	−15.4	32.8	21.2
37	Open market paper	7.8	47.5	5.4	6.6	37.2	−14.5	98.6	77.4	−12.6	67.1	19.5	43.4
38	Other	24.2	19.6	17.9	13.3	19.3	−5.8	56.8	12.5	13.9	−30.3	43.4	35.1
39	Deposits and currency	326.1	224.6	283.0	160.2	221.8	313.5	110.0	215.7	248.2	211.2	231.1	273.2
40	Currency	8.6	12.4	14.4	19.0	14.7	10.7	13.8	29.3	5.1	19.3	12.6	11.4
41	Checkable deposits	30.2	41.9	95.0	−3.0	12.3	3.6	−30.5	−21.4	97.3	−54.5	−83.0	35.4
42	Small time and savings accounts	150.7	138.5	120.6	76.0	122.2	199.5	130.5	72.7	86.0	26.4	117.4	119.1
43	Money market fund shares	49.0	8.9	38.3	27.2	22.8	57.6	−21.0	−3.5	58.1	51.1	111.8	124.3
44	Large time deposits	82.9	7.4	−11.4	26.7	40.8	16.9	−3.5	137.0	12.7	111.9	39.8	−15.4
45	Security RPs	9.8	17.7	20.2	17.2	21.2	27.9	26.5	7.0	23.3	31.6	27.5	19.4
46	Deposits in foreign countries	−5.1	−2.1	5.9	−2.8	−12.1	−2.7	−5.9	−5.5	−34.4	25.5	5.1	−20.9
47	**Total of credit market instruments, deposits, and currency**	**492.5**	**491.4**	**384.8**	**349.8**	**464.2**	**393.0**	**467.2**	**581.9**	**414.7**	**479.4**	**438.6**	**532.9**
48	Public holdings as percent of total	20.8	23.8	37.3	37.6	30.7	38.0	22.3	26.0	37.5	44.1	4.1	37.3
49	Private financial intermediation (in percent)	86.6	77.6	104.1	90.3	82.8	105.9	73.7	60.6	96.8	86.4	74.1	58.3
50	Total foreign funds	66.7	82.0	110.7	106.4	111.7	108.1	177.0	4.9	156.7	90.9	−4.1	137.8
	MEMO: Corporate equities not included above												
51	**Total net issues**	**−36.0**	**20.1**	**90.5**	**14.3**	**−117.9**	**−101.0**	**−133.7**	**−73.5**	**−163.5**	**−163.5**	**−48.7**	**−64.7**
52	Mutual fund shares	29.3	84.4	159.0	71.6	−.7	−9.5	−6.6	1.5	11.9	3.6	24.0	50.0
53	Other equities	−65.3	−64.3	−68.5	−57.3	−117.2	−91.5	−127.0	−75.0	−175.4	−167.1	−72.7	−114.6
54	Acquisitions by financial institutions	15.8	45.6	53.7	21.4	5.4	−34.4	.2	25.5	30.1	−6.5	−6.5	3.8
55	Other net purchases	−51.8	−25.5	36.8	−7.1	−123.3	−66.5	−133.9	−99.1	−193.6	−157.0	−42.2	−68.4

NOTES BY LINE NUMBER.
1. Line 1 of table 1.57.
2. Sum of lines 3–6 or 7–10.
6. Includes farm and commercial mortgages.
11. Credit market funds raised by federally sponsored credit agencies, and net issues of federally related mortgage pool securities.
13. Line 1 less line 2 plus line 11 and 12. Also line 20 less line 27 plus line 33. Also sum of lines 28 and 47 less lines 40 and 46.
18. Includes farm and commercial mortgages.
26. Line 39 less lines 40 and 46.
27. Excludes equity issues and investment company shares. Includes line 19.
29. Foreign deposits at commercial banks, bank borrowings from foreign branches, and liabilities of foreign banking agencies to foreign affiliates, less claims on foreign affiliates and deposits by banking in foreign banks.
30. Demand deposits and note balances at commercial banks.
31. Excludes net investment of these reserves in corporate equities.
32. Mainly retained earnings and net miscellaneous liabilities.
33. Line 13 less line 20 plus line 27.
34–38. Lines 14–18 less amounts acquired by private finance plus amounts borrowed by private finance. Line 38 includes mortgages.
40. Mainly an offset to line 9.
47. Lines 33 plus 39, or line 13 less line 28 plus 40 and 46.
48. Line 2/line 1.
49. Line 20/line 13.
50. Sum of lines 10 and 29.
51, 53. Includes issues by financial institutions.

NOTE. Full statements for sectors and transaction types in flows and in amounts outstanding may be obtained from Flow of Funds Section, Division of Research and Statistics, Board of Governors of the Federal Reserve System, Washington, D.C. 20551.

1.59 SUMMARY OF CREDIT MARKET DEBT OUTSTANDING

Billions of dollars; period-end levels.

	Transaction category, sector	1984	1985	1986	1987	1988 Q1	1988 Q2	1988 Q3	1988 Q4	1989 Q1	1989 Q2	1989 Q3
	Nonfinancial sectors											
1	**Total credit market debt owed by domestic nonfinancial sectors**	**5,951.8**	**6,795.1**	**7,631.2**	**8,335.0**	**8,477.0**	**8,686.9**	**8,875.4**	**9,105.6**	**9,258.7**	**9,428.4**	**9,604.5**
	By sector and instrument											
2	U.S. government	1,376.8	1,600.4	1,815.4	1,960.3	2,003.2	2,022.3	2,063.9	2,117.8	2,155.7	2,165.7	2,204.3
3	Treasury securities	1,373.4	1,597.1	1,811.7	1,955.2	1,998.1	2,015.3	2,051.7	2,095.2	2,133.4	2,142.1	2,180.7
4	Agency issues and mortgages	3.4	3.3	3.6	5.2	5.0	7.0	12.2	22.6	22.3	23.6	23.5
5	Private domestic nonfinancial sectors	4,575.1	5,194.7	5,815.8	6,374.7	6,473.8	6,664.7	6,811.5	6,987.8	7,103.0	7,262.7	7,400.2
6	Debt capital instruments	3,038.0	3,485.5	3,957.5	4,428.0	4,511.0	4,652.6	4,782.0	4,902.1	4,979.2	5,078.3	5,187.8
7	Tax-exempt obligations	520.0	655.5	679.1	713.2	718.1	727.2	746.1	759.8	764.7	769.3	780.3
8	Corporate bonds	469.2	542.9	664.2	764.1	793.8	829.8	858.8	885.0	912.9	947.5	975.9
9	Mortgages	2,048.8	2,287.1	2,614.2	2,950.7	2,999.1	3,095.7	3,177.2	3,257.3	3,301.6	3,361.6	3,431.6
10	Home mortgages	1,336.2	1,490.2	1,720.8	1,943.1	1,978.0	2,055.3	2,118.0	2,174.2	2,214.8	2,263.4	2,316.7
11	Multifamily residential	183.6	213.0	246.2	270.0	273.0	276.6	281.0	286.8	292.6	294.4	299.3
12	Commercial	416.5	478.1	551.4	648.7	660.2	676.0	691.1	709.6	708.2	717.0	728.9
13	Farm	112.4	105.9	95.8	88.9	88.0	87.8	87.0	86.8	86.0	86.7	86.6
14	Other debt instruments	1,537.1	1,709.3	1,858.4	1,946.7	1,962.8	2,012.0	2,029.4	2,085.7	2,123.8	2,184.3	2,212.4
15	Consumer credit	519.3	601.8	659.8	692.7	688.9	705.8	721.2	743.7	745.0	761.0	775.3
16	Bank loans n.e.c.	553.1	592.7	656.1	664.3	668.3	687.2	687.7	702.6	717.6	729.8	734.5
17	Open market paper	58.5	72.2	62.9	73.8	73.5	77.8	80.3	85.4	96.1	110.1	113.1
18	Other	406.2	442.6	479.6	516.0	532.1	541.2	540.2	554.0	565.1	583.5	589.5
19	By borrowing sector	4,575.1	5,194.7	5,815.8	6,374.7	6,473.8	6,664.7	6,811.5	6,987.8	7,103.0	7,262.7	7,400.2
20	State and local governments	383.0	473.9	510.1	543.7	547.1	556.0	565.7	573.5	578.5	584.8	595.1
21	Households	2,018.2	2,295.5	2,591.8	2,864.5	2,900.7	2,990.2	3,068.3	3,152.0	3,205.6	3,265.5	3,336.1
22	Nonfinancial business	2,173.9	2,425.4	2,714.0	2,966.5	3,026.0	3,118.5	3,177.5	3,262.4	3,319.0	3,412.3	3,469.0
23	Farm	187.9	173.4	156.6	145.5	141.3	143.9	143.6	137.6	135.9	139.5	140.7
24	Nonfarm noncorporate	769.0	898.3	1,001.6	1,109.4	1,131.7	1,151.9	1,172.6	1,205.3	1,229.1	1,245.9	1,261.6
25	Corporate	1,216.9	1,353.6	1,555.8	1,711.6	1,753.0	1,822.7	1,861.3	1,919.5	1,954.0	2,027.0	2,066.6
26	Foreign credit market debt held in United States	233.6	234.7	236.4	242.9	244.6	245.9	246.1	249.6	249.9	249.0	255.3
27	Bonds	68.0	71.8	74.9	82.3	86.1	86.0	87.4	89.2	90.5	92.2	94.5
28	Bank loans n.e.c.	30.8	27.9	26.9	23.3	22.8	22.4	22.7	21.5	21.6	22.7	22.9
29	Open market paper	27.7	33.9	37.4	41.2	42.5	44.0	46.3	50.9	54.9	52.7	57.5
30	U.S. government loans	107.1	101.1	97.1	96.1	93.1	93.5	89.8	88.1	83.0	81.4	80.4
31	**Total domestic plus foreign**	**6,185.4**	**7,029.9**	**7,867.6**	**8,578.0**	**8,721.6**	**8,932.8**	**9,121.5**	**9,355.3**	**9,508.7**	**9,677.4**	**9,859.7**
	Financial sectors											
32	**Total credit market debt owed by financial sectors**	**1,010.2**	**1,213.2**	**1,563.6**	**1,885.5**	**1,926.0**	**2,000.5**	**2,058.2**	**2,149.7**	**2,258.7**	**2,298.9**	**2,336.7**
	By instrument											
33	U.S. government related	531.2	632.7	844.2	1,026.5	1,050.6	1,076.9	1,116.3	1,164.0	1,209.0	1,235.8	1,273.8
34	Sponsored credit agency securities	237.2	257.8	273.0	303.2	313.5	317.9	328.5	348.1	364.3	369.0	370.4
35	Mortgage pool securities	289.0	368.9	565.4	718.3	732.1	754.0	782.8	810.9	839.7	861.8	898.4
36	Loans from U.S. government	5.0	6.1	5.7	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
37	Private financial sectors	479.0	580.5	719.5	859.0	875.4	923.6	941.9	985.7	1,049.7	1,063.1	1,062.9
38	Corporate bonds	153.0	204.5	287.4	366.3	380.5	397.9	406.4	418.0	458.2	465.8	472.8
39	Mortgages	2.5	2.7	2.7	3.1	3.1	3.1	3.1	3.4	3.5	3.5	3.5
40	Bank loans n.e.c.	29.5	32.1	36.1	32.8	31.7	34.3	32.9	34.2	32.2	33.8	34.7
41	Open market paper	219.5	252.4	284.6	323.8	330.6	353.4	358.0	377.4	392.0	398.3	400.9
42	Loans from Federal Home Loan Banks	74.6	88.8	108.6	133.1	129.5	134.8	141.6	152.8	163.8	161.9	151.1
43	**Total, by sector**	**1,010.2**	**1,213.2**	**1,563.6**	**1,885.5**	**1,926.0**	**2,000.5**	**2,058.2**	**2,149.7**	**2,258.7**	**2,298.9**	**2,336.7**
44	Sponsored credit agencies	242.2	263.9	278.7	308.2	318.5	322.9	333.5	353.1	369.3	374.0	375.4
45	Mortgage pools	289.0	368.9	565.4	718.3	732.1	754.0	782.8	810.9	839.7	861.8	898.4
46	Private financial sectors	479.0	580.5	719.5	859.0	875.4	923.6	941.9	985.7	1,049.7	1,063.1	1,062.9
47	Commercial banks	84.1	79.2	75.6	82.7	76.4	77.2	76.6	78.8	73.3	74.5	75.8
48	Bank affiliates	89.5	106.2	116.8	131.1	131.0	136.3	136.3	136.2	140.0	141.2	141.5
49	Savings and loan associations	81.6	98.9	119.8	139.4	135.3	141.9	148.1	159.3	170.1	167.9	156.8
50	Mutual savings banks	2.9	4.4	8.6	16.7	17.1	17.6	18.1	18.6	17.8	17.7	17.6
51	Finance companies	203.0	261.2	328.1	378.8	393.0	419.8	427.7	445.8	463.8	478.0	486.3
52	REITs	4.3	5.6	6.5	7.3	8.7	9.1	7.6	11.4	11.1	10.6	10.3
53	SCO issuers	13.5	25.0	64.0	103.1	113.9	121.8	127.5	135.7	173.5	173.1	174.6
	All sectors											
54	**Total credit market debt**	**7,195.7**	**8,243.1**	**9,431.2**	**10,463.4**	**10,647.5**	**10,933.4**	**11,179.7**	**11,504.9**	**11,767.4**	**11,976.3**	**12,196.4**
55	U.S. government securities	1,902.8	2,227.0	2,653.8	2,981.8	3,048.8	3,094.2	3,175.2	3,276.7	3,359.7	3,396.5	3,473.1
56	State and local obligations	520.0	655.5	679.1	713.2	718.1	727.2	746.1	759.8	764.7	769.3	780.3
57	Corporate and foreign bonds	690.1	819.2	1,026.4	1,212.7	1,260.4	1,313.7	1,352.5	1,392.2	1,461.6	1,505.5	1,543.2
58	Mortgages	2,051.4	2,289.8	2,617.0	2,953.8	3,002.2	3,098.8	3,180.3	3,260.7	3,305.1	3,365.0	3,435.1
59	Consumer credit	519.3	601.8	659.8	692.7	688.9	705.8	721.2	743.7	745.0	761.0	775.3
60	Bank loans n.e.c.	613.4	652.7	719.1	720.3	722.7	744.0	743.3	758.3	771.4	786.2	792.0
61	Open market paper	305.7	358.5	384.9	438.8	446.7	475.3	484.6	513.6	543.1	561.1	571.4
62	Other loans	592.9	638.6	691.1	750.2	759.7	774.5	776.6	799.8	816.8	831.7	826.0

1.60 SUMMARY OF CREDIT MARKET CLAIMS, BY HOLDER

Billions of dollars, except as noted; period-end levels.

	Transaction category, or sector	1984	1985	1986	1987	1988				1989		
						Q1	Q2	Q3	Q4	Q1	Q2	Q3
1	**Total funds advanced in credit markets to domestic nonfinancial sectors**	**5,951.8**	**6,795.1**	**7,631.2**	**8,335.0**	**8,477.0**	**8,686.9**	**8,875.4**	**9,105.6**	**9,258.7**	**9,428.4**	**9,604.5**
	By public agencies and foreign											
2	Total held	1,257.7	1,460.5	1,794.7	2,044.9	2,099.4	2,151.3	2,191.8	2,266.4	2,332.1	2,345.1	2,414.3
3	U.S. government securities	377.9	423.8	493.2	563.3	595.7	610.1	613.3	648.3	666.2	644.6	670.7
4	Residential mortgages	423.5	518.2	712.3	862.0	880.6	906.1	934.9	966.0	995.3	1,020.5	1,062.6
5	FHLB advances to thrifts	74.6	88.8	108.6	133.1	129.5	134.8	141.6	152.8	163.8	161.9	151.1
6	Other loans and securities	381.6	429.7	480.5	486.6	493.6	500.3	502.1	499.3	506.9	518.1	529.8
7	Total held, by type of lender	1,257.7	1,460.5	1,794.7	2,044.9	2,099.4	2,151.3	2,191.8	2,266.4	2,332.1	2,345.1	2,414.3
8	U.S. government	228.2	246.7	253.3	238.0	237.1	235.8	226.3	216.9	213.9	215.2	216.9
9	Sponsored credit agencies and mortgage pools	556.3	659.8	869.8	1,048.9	1,068.0	1,095.6	1,132.9	1,178.6	1,223.5	1,228.9	1,275.3
10	Monetary authority	167.6	186.0	205.5	230.1	224.9	229.7	230.8	240.6	235.4	238.4	227.6
11	Foreign	305.6	367.9	466.1	527.9	569.5	590.2	601.9	630.3	659.3	662.6	694.5
	Agency and foreign debt not in line 1											
12	Sponsored credit agencies and mortgage pools	531.2	632.7	844.2	1,026.5	1,050.6	1,076.9	1,116.3	1,164.0	1,209.0	1,235.8	1,273.8
13	Foreign	233.6	234.7	236.4	242.9	244.6	245.9	246.1	249.6	249.9	249.0	255.3
	Private domestic holdings											
14	Total private holdings	5,458.9	6,202.1	6,917.1	7,559.5	7,672.7	7,858.4	8,045.9	8,252.8	8,385.5	8,568.1	8,719.2
15	U.S. government securities	1,524.9	1,803.2	2,160.6	2,418.5	2,453.1	2,484.1	2,561.9	2,628.4	2,693.5	2,751.9	2,802.3
16	State and local obligations	520.0	655.5	679.1	713.2	718.1	727.2	746.1	759.8	764.7	769.3	780.3
17	Corporate and foreign bonds	476.8	517.6	601.3	689.6	722.2	752.9	775.7	794.0	817.6	849.3	875.1
18	Residential mortgages	1,096.5	1,185.1	1,254.7	1,351.1	1,370.4	1,425.9	1,464.1	1,494.9	1,512.2	1,537.3	1,553.5
19	Other mortgages and loans	1,915.3	2,129.7	2,330.0	2,520.1	2,538.5	2,603.3	2,639.6	2,728.4	2,761.3	2,822.2	2,859.1
20	LESS: Federal Home Loan Bank advances	74.6	88.8	108.6	133.1	129.5	134.8	141.6	152.8	163.8	161.9	151.1
	Private financial intermediation											
21	Credit market claims held by private financial institutions	4,699.6	5,283.1	6,025.7	6,604.6	6,732.0	6,891.0	7,003.5	7,168.1	7,298.7	7,458.7	7,543.1
22	Commercial banking	1,791.9	1,978.9	2,176.3	2,313.1	2,327.1	2,382.6	2,421.6	2,468.4	2,490.9	2,538.2	2,580.2
23	Savings institutions	1,100.7	1,191.2	1,297.9	1,445.5	1,453.6	1,495.9	1,538.8	1,571.3	1,566.7	1,557.3	1,522.8
24	Insurance and pension funds	1,215.3	1,369.7	1,544.3	1,755.2	1,810.6	1,859.0	1,899.1	1,950.2	1,996.7	2,046.5	2,083.7
25	Other finance	591.7	743.4	1,007.1	1,090.7	1,140.7	1,153.5	1,144.0	1,178.1	1,244.4	1,316.7	1,356.5
26	Sources of funds	4,699.6	5,283.1	6,025.7	6,604.6	6,732.0	6,891.0	7,003.5	7,168.1	7,298.7	7,458.7	7,543.1
27	Private domestic deposits and RPs	2,715.6	2,930.0	3,188.4	3,324.8	3,404.2	3,432.6	3,474.2	3,554.2	3,587.8	3,644.5	3,710.6
28	Credit market debt	479.0	580.5	719.5	859.0	875.4	923.6	941.9	985.7	1,049.7	1,063.1	1,062.9
29	Other sources	1,504.9	1,772.7	2,117.9	2,420.8	2,452.4	2,534.8	2,587.4	2,628.1	2,661.1	2,751.0	2,769.6
30	Foreign funds	−14.1	5.6	18.6	62.2	45.9	62.3	51.9	71.6	61.9	51.0	53.7
31	Treasury balances	15.5	25.8	27.5	21.6	23.5	32.6	34.2	29.0	13.5	34.4	32.4
32	Insurance and pension reserves	1,160.8	1,289.4	1,427.9	1,597.2	1,647.9	1,693.8	1,729.2	1,771.2	1,802.6	1,833.7	1,853.9
33	Other, net	342.6	451.8	643.9	739.6	735.2	746.1	772.1	756.4	783.0	831.9	829.6
	Private domestic nonfinancial investors											
34	Credit market claims	1,238.4	1,499.5	1,610.8	1,813.9	1,816.1	1,891.0	1,984.4	2,070.5	2,136.6	2,172.6	2,239.0
35	U.S. government securities	659.5	814.7	899.1	992.0	1,005.2	1,022.1	1,086.1	1,143.5	1,175.0	1,196.3	1,239.6
36	Tax-exempt obligations	194.2	231.9	211.2	256.8	257.6	270.1	289.0	303.7	307.2	308.2	312.4
37	Corporate and foreign bonds	33.1	38.0	77.8	102.2	97.7	105.7	107.1	100.8	137.0	136.4	150.0
38	Open market paper	83.5	131.0	136.4	160.7	151.9	179.9	188.7	201.0	213.0	221.7	221.4
39	Other	268.0	283.8	286.2	302.3	303.7	313.3	313.6	321.5	304.3	309.9	315.5
40	Deposits and currency	2,895.8	3,120.4	3,399.2	3,553.9	3,628.0	3,662.4	3,704.4	3,785.9	3,822.8	3,887.9	3,945.9
41	Currency	159.6	171.9	186.3	205.4	204.0	209.9	213.4	220.1	220.7	226.4	225.0
42	Checkable deposits	380.6	422.5	517.4	514.0	495.4	510.3	496.1	525.4	492.8	496.4	497.3
43	Small time and savings accounts	1,693.4	1,831.9	1,948.3	2,017.1	2,084.9	2,110.9	2,131.1	2,150.4	2,164.7	2,186.7	2,219.0
44	Money market fund shares	218.5	227.3	265.6	292.8	318.4	306.1	303.6	315.6	340.3	359.9	389.2
45	Large time deposits	332.5	339.9	328.5	355.2	353.7	349.1	384.7	396.0	415.9	423.1	421.2
46	Security RPs	90.6	108.3	128.5	145.7	151.9	156.2	158.6	166.9	174.1	178.4	183.9
47	Deposits in foreign countries	20.6	18.5	24.5	23.7	19.9	19.9	16.8	11.6	14.3	17.0	10.3
48	**Total of credit market instruments, deposits, and currency**	**4,134.2**	**4,619.9**	**5,010.0**	**5,367.8**	**5,444.2**	**5,553.5**	**5,688.8**	**5,856.4**	**5,959.4**	**6,060.4**	**6,184.9**
49	Public holdings as percent of total	20.3	20.8	22.8	23.8	24.1	24.1	24.0	24.2	24.5	24.2	24.5
50	Private financial intermediation (in percent)	86.1	85.2	87.1	87.4	87.7	87.7	87.0	86.9	87.0	87.1	86.5
51	Total foreign funds	291.5	373.5	484.7	590.2	615.3	652.5	653.8	701.9	721.2	713.6	748.1
	MEMO: Corporate equities not included above											
52	**Total market value**	**2,157.9**	**2,823.9**	**3,360.6**	**3,325.0**	**3,504.0**	**3,622.7**	**3,577.6**	**3,620.3**	**3,731.6**	**4,072.3**	**4,296.0**
53	Mutual fund shares	136.7	240.2	413.5	460.1	479.2	486.8	478.1	478.3	486.3	514.8	538.5
54	Other equities	2,021.2	2,583.7	2,947.1	2,864.9	3,024.8	3,136.0	3,099.5	3,142.0	3,245.3	3,557.5	3,757.5
55	Holdings by financial institutions	615.6	800.0	972.1	1,013.8	1,112.6	1,170.0	1,167.1	1,200.4	1,277.7	1,395.7	1,523.6
56	Other holdings	1,542.3	2,023.9	2,388.4	2,311.2	2,391.3	2,452.8	2,410.5	2,419.9	2,453.9	2,676.6	2,772.4

NOTES BY LINE NUMBER.
1. Line 1 of table 1.59.
2. Sum of lines 3–6 or 7–10.
6. Includes farm and commercial mortgages.
12. Credit market debt of federally sponsored agencies, and net issues of federally related mortgage pool securities.
14. Line 1 less line 2 plus line 12 and 13. Also line 21 less line 28 plus line 34. Also sum of lines 29 and 48 less lines 41 and 47.
19. Includes farm and commercial mortgages.
27. Line 40 less lines 41 and 47.
28. Excludes equity issues and investment company shares. Includes line 20.
30. Foreign deposits at commercial banks plus bank borrowings from foreign affiliates, less claims on foreign affiliates and deposits by banking in foreign banks.
31. Demand deposits and note balances at commercial banks.
32. Excludes net investment of these reserves in corporate equities.
33. Mainly retained earnings and net miscellaneous liabilities.
34. Line 14 less line 21 plus line 28.
35–39. Lines 15–19 less amounts acquired by private finance plus amounts borrowed by private finance. Line 39 includes mortgages.
41. Mainly an offset to line 10.
48. Lines 34 plus 40, or line 14 less line 29 plus 41 and 47.
49. Line 2/line 1 and 13.
50. Line 21/line 14.
51. Sum of lines 11 and 30.
52–54. Includes issues by financial institutions.

NOTE. Full statements for sectors and transaction types in flows and in amounts outstanding may be obtained from Flow of Funds Section, Stop 95, Division of Research and Statistics, Board of Governors of the Federal Reserve System, Washington, D.C. 20551.

2.10 NONFINANCIAL BUSINESS ACTIVITY Selected Measures[1]

1977 = 100; monthly and quarterly data are seasonally adjusted. Exceptions noted.

Measure	1987	1988	1989	1989 Apr.	May	June	July	Aug.	Sept.	Oct.r	Nov.r	Dec.
1 **Industrial production**	**129.8**	**137.2**	n.a.	**141.7**	**141.6**	**142.0**	**141.9**	**142.5**	**142.3r**	**141.8**	**142.3**	**142.8**
Market groupings												
2 Products, total	138.3	145.9	n.a.	151.6	151.7	152.5	151.8	152.5	152.4r	151.5	152.3	153.6
3 Final, total	136.8	144.3	n.a.	150.2	150.4	151.2	150.2	151.1	150.8r	149.4	150.1	151.6
4 Consumer goods	127.7	133.9	n.a.	139.5	139.2	139.9	138.7	139.3	139.0r	139.9	139.8	140.6
5 Equipment	148.8	158.2	n.a.	164.3	165.4	166.1	165.5	166.8	166.5r	162.0	163.7	166.1
6 Intermediate	143.3	151.5	n.a.	156.5	156.3	157.0	157.5	157.5	157.8r	158.9	160.1	160.5
7 Materials	118.3	125.3	n.a.	128.2	127.9	127.7	128.3	128.8	128.6r	128.6	128.6	128.2
Industry groupings												
8 Manufacturing	134.6	142.8	n.a.	148.0	148.1	148.7	148.5	149.2	148.8r	148.0	148.6	148.8
Capacity utilization (percent)[2]												
9 Manufacturing	81.1	83.5	84.0	84.5	84.3	84.4	84.0	84.2	83.7	83.1	83.2	83.1
10 Industrial materials industries	80.5	83.7	83.7	84.2	83.8	83.6	83.7	83.9	83.6r	83.5	83.3	82.8
11 Construction contracts (1982 = 100)[3]	163.8	160.8	159.4	163.0	159.0	157.0	163.0	160.0	175.0	165.0	158.0	160.0
12 Nonagricultural employment, total[4]	123.9	128.0	131.6	131.1	131.3	131.7	131.9	132.0	132.3	132.4	132.6	132.8
13 Goods-producing, total	101.5	103.7	105.3	105.5	105.5	105.4	105.4	105.5	105.2	105.2	105.2	104.9
14 Manufacturing, total	96.7	98.6	99.6	99.9	99.9	99.8	99.8	99.8	99.4	99.2	99.1	99.0
15 Manufacturing, production- worker	91.9	93.9	94.8	95.0	95.0	94.8	94.8	94.8	94.2	94.1	93.9	93.9
16 Service-producing	133.3	138.2	142.7	141.8	142.2	142.7	143.0	143.1	143.6	143.8	144.1	144.5
17 Personal income, total	235.0	252.8	275.5	272.9	273.5	274.8	276.4	277.3	277.9	280.3	282.9	284.2
18 Wages and salary disbursements	226.3	244.4	264.8	261.7	262.0	263.8	266.1	266.7	268.5	271.4	271.6	273.3
19 Manufacturing	183.8	196.5	207.3	205.7	205.8	207.0	207.5	208.8	208.8	211.1	208.9	209.8
20 Disposable personal income[5]	232.4	252.1	274.0	269.6	271.7	273.8	275.4	276.1	276.5	278.7	281.6	282.7
21 Retail sales[6]	210.8	225.1	237.5	235.5	237.4	237.3	239.1	241.3	242.0	238.9	240.1	240.6
Prices[7]												
22 Consumer (1982–84 = 100)	113.6	118.3	124.0	123.1	123.8	124.1	124.4	124.6	125.0	125.6	125.9	126.1
23 Producer finished goods (1982 = 100)	105.4	108.0	113.5	113.0	114.2	114.3	114.1	113.4r	113.5	114.8	114.8	115.3

1. A major revision of the industrial production index and the capacity utilization rates was released in July 1985. See "A Revision of the Index of Industrial Production" and accompanying tables that contain revised indexes (1977=100) through December 1984 in the *Federal Reserve Bulletin*, vol. 71 (July 1985), pp. 487–501. The revised indexes for January through June 1985 were shown in the September *Bulletin*.

2. Ratios of indexes of production to indexes of capacity. Based on data from Federal Reserve, McGraw-Hill Economics Department, 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 in *Employment and Earnings* (U.S. Department of Labor). Series covers employees only, excluding personnel in the Armed Forces.

5. Based on data in *Survey of Current Business* (U.S. Department of Commerce).

6. Based on Bureau of Census data published in *Survey of Current Business*.

7. Data without seasonal adjustment, as published in *Monthly Labor Review*. Seasonally adjusted data for changes in the price indexes may be obtained from the Bureau of Labor Statistics, U.S. Department of Labor.

NOTE. Basic data (not index numbers) for series mentioned in notes 4, 5,and 6, and indexes for series mentioned in notes 3 and 7 may also be found in the *Survey of Current Business*.

Figures for industrial production for the last two months are preliminary and estimated, respectively.

2.11 LABOR FORCE, EMPLOYMENT, AND UNEMPLOYMENT

Thousands of persons; monthly data are seasonally adjusted. Exceptions noted.

Category	1987^r	1988^r	1989	1989							
				May	June	July	Aug.	Sept.	Oct.^r	Nov.^r	Dec.
HOUSEHOLD SURVEY DATA											
1 **Noninstitutional population**[1]	**185,010**	**186,837**	**188,601**	**188,377**	**188,518**	**188,672**	**188,808**	**188,948**	**189,096**	**189,238**	**189,381**
2 Labor force (including Armed Forces)[1]	122,122	123,893	126,077	125,747^r	126,300^r	126,202^r	126,280^r	126,245^r	126,373	126,709	126,762
3 Civilian labor force	119,865	121,669	123,869	123,551^r	124,111^r	124,013^r	124,070^r	124,023^r	124,148	124,488	124,546
Employment											
4 Nonagricultural industries[2]	109,232	111,800	114,142	113,995^r	114,404^r	114,219^r	114,275^r	114,200^r	114,388	114,676	114,691
5 Agriculture	3,208	3,169	3,199	3,137^r	3,138^r	3,217^r	3,275^r	3,219^r	3,197	3,160	3,197
Unemployment											
6 Number	7,425	6,701	6,528	6,419^r	6,569^r	6,577^r	6,520^r	6,604^r	6,563	6,652	6,658
7 Rate (percent of civilian labor force)	6.2	5.5	5.3	5.2	5.3	5.3^r	5.3^r	5.3	5.3	5.3	5.3
8 Not in labor force	62,888	62,944	62,524	62,630^r	62,218^r	62,470^r	62,528^r	62,703^r	62,723	62,529	62,619
ESTABLISHMENT SURVEY DATA											
9 **Nonagricultural payroll employment**[3]	**102,200**	**105,584**	**108,573**	**108,310**	**108,607**	**108,767**	**108,887**	**109,096**	**109,171**	**109,393**	**109,535**
10 Manufacturing	19,024	19,403	19,611	19,667	19,650	19,649	19,644	19,559	19,537	19,510	19,485
11 Mining	717	721	722	722	715	706	729	730	731	737	736
12 Contract construction	4,967	5,125	5,302	5,283	5,283	5,314	5,321	5,325	5,335	5,360	5,322
13 Transportation and public utilities	5,372	5,548	5,703	5,700	5,716	5,736	5,618	5,709	5,729	5,745	5,818
14 Trade	24,327	25,139	25,807	25,750	25,781	25,823	25,877	25,896	25,957	26,022	26,024
15 Finance	6,547	6,676	6,814	6,790	6,808	6,815	6,836	6,852	6,851	6,872	6,885
16 Service	24,236	25,600	26,889	26,711	26,931	26,973	27,058	27,159	27,188	27,321	27,405
17 Government	17,010	17,372	17,726	17,687	17,723	17,751	17,804	17,866	17,843	17,826	17,860

1. Persons 16 years of age and over. Monthly figures, which are based on sample data, relate to the calendar week that contains the 12th day; annual data are averages of monthly figures. By definition, seasonality does not exist in population figures. Based on data from *Employment and Earnings* (U.S. Department of Labor).

2. Includes self-employed, unpaid family, and domestic service workers.

3. Data include all full- and part-time employees who worked during, or received pay for, the pay period that includes the 12th day of the month, and exclude proprietors, self-employed persons, domestic servants, unpaid family workers, and members of the Armed Forces. Data are adjusted to the March 1984 benchmark and only seasonally adjusted data are available at this time. Based on data from *Employment and Earnings* (U.S. Department of Labor).

2.12 OUTPUT, CAPACITY, AND CAPACITY UTILIZATION[1]

Seasonally adjusted

Series	1989 Q1r	1989 Q2r	1989 Q3r	1989 Q4	1989 Q1r	1989 Q2r	1989 Q3r	1989 Q4	1989 Q1r	1989 Q2r	1989 Q3r	1989 Q4
	Output (1977 = 100)				Capacity (percent of 1977 output)				Utilization rate (percent)			
1 **Total industry**	**140.7**	**141.8**	**142.2**	**142.3**	**167.5**	**168.7**	**169.9**	**171.1**	**84.0**	**84.1**	**83.7**	**83.2**
2 Mining	101.8	102.0	102.7	103.9	125.1	124.7	124.3	123.8	81.3	81.8	82.6	83.9
3 Utilities	116.0	115.7	113.9	118.0	141.0	141.4	141.7	142.0	82.3	81.8	80.4	83.1
4 **Manufacturing**	**147.0**	**148.3**	**148.8**	**148.5**	**174.3**	**175.7**	**177.2**	**178.7**	**84.4**	**84.4**	**84.0**	**83.1**
5 Primary processing	127.8	127.6	128.8	128.5	146.5	147.8	149.1	150.4	87.3	86.4	86.4	85.5
6 Advanced processing	158.6	160.8	160.9	160.4	191.0	192.6	194.2	195.8	83.0	83.5	82.9	81.9
7 **Materials**	**127.6**	**127.9**	**128.6**	**128.5**	**151.7**	**152.6**	**153.5**	**154.4**	**84.1**	**83.9**	**83.8**	**83.2**
8 Durable goods	138.6	139.0	140.4	138.6	170.1	171.3	172.5	173.7	81.5	81.1	81.4	79.8
9 Metal materials	98.4	96.0	97.8	92.9	110.2	110.6	111.0	111.4	83.8	81.4	82.3	78.0
10 Nondurable goods	136.3	137.1	137.9	138.6	152.7	154.2	155.8	157.4	89.3	88.9	88.5	88.1
11 Textile, paper, and chemical	139.2	139.8	141.1	141.5	153.5	155.3	157.0	158.8	90.7	90.0	89.8	89.1
12 Paper	148.4	146.1	149.8	......	154.0	155.8	157.6	......	96.4	93.8	95.1	......
13 Chemical	145.4	145.7	146.5	......	161.4	163.7	165.9	......	90.1	89.0	88.3	......
14 Energy materials	100.7	100.7	99.8	101.8	118.4	118.3	118.1	118.0	85.0	85.1	84.5	86.3

Series	Previous cycle[2] High	Previous cycle[2] Low	Latest cycle[3] High	Latest cycle[3] Low	1988 Dec.	1989 Apr.r	1989 Mayr	1989 Juner	1989 Julyr	1989 Aug.r	1989 Sept.r	1989 Oct.r	1989 Nov.r	1989 Dec.
	Capacity utilization rate (percent)													
15 **Total industry**	**88.6**	**72.1**	**86.9**	**69.5**	**84.3**	**84.2**	**84.0**	**84.0**	**83.7**	**83.9**	**83.6**	**83.1**	**83.1**	**83.3**
16 Mining	92.8	87.8	95.2	76.9	83.6	82.0	81.8	81.5	82.1	82.4	83.4	84.0	84.3	83.4
17 Utilities	95.6	82.9	88.5	78.0	82.0	82.9	81.8	80.8	80.5	80.0	80.8	81.7	81.3	86.3
18 **Manufacturing**	**87.7**	**69.9**	**86.5**	**68.0**	**84.4**	**84.5**	**84.3**	**84.4**	**84.0**	**84.2**	**83.7**	**83.1**	**83.2**	**83.1**
19 Primary processing	91.9	68.3	89.1	65.0	87.9	86.8	86.2	86.2	86.7	86.6	85.8	86.2	85.7	84.5
20 Advanced processing	86.0	71.1	85.1	69.5	82.8	83.5	83.4	83.5	82.9	83.2	82.6	81.7	81.9	82.2
21 **Materials**	**92.0**	**70.5**	**89.1**	**68.5**	**84.9**	**84.2**	**83.8**	**83.6**	**83.7**	**83.9**	**83.6**	**83.5**	**83.3**	**82.8**
22 Durable goods	91.8	64.4	89.8	60.9	82.1	81.3	81.0	81.1	81.3	81.7	81.2	80.3	80.0	79.1
23 Metal materials	99.2	67.1	93.6	45.7	84.6	83.6	79.8	80.6	82.3	82.7	81.9	81.7	77.2	75.0
24 Nondurable goods	91.1	66.7	88.1	70.7	89.8	89.2	88.7	88.7	89.2	88.8	87.5	88.3	88.1	87.8
25 Textile, paper, and chemical	92.8	64.8	89.4	68.8	91.3	90.7	89.6	89.8	90.6	90.1	88.8	89.4	89.1	88.8
26 Paper	98.4	70.6	97.3	79.9	98.4	94.5	93.2	93.7	95.0	95.1	95.1	96.3	95.8	......
27 Chemical	92.5	64.4	87.9	63.5	90.7	90.1	88.4	88.5	89.5	88.6	86.7	87.4	87.2	......
28 Energy materials	94.6	86.9	94.0	82.3	86.5	86.0	85.5	83.8	83.9	84.3	85.4	86.1	86.1	86.6

1. These data also appear in the Board's G.3 (402) release. For address, see inside front cover.

2. Monthly high 1973; monthly low 1975.

3. Monthly highs 1978 through 1980; monthly lows 1982.

2.13 INDUSTRIAL PRODUCTION Indexes and Gross Value[1]

Monthly data are seasonally adjusted

Groups	1977 proportion	1989 avg.	1988 Dec.	1989 Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.[r]	Oct.[r]	Nov.[p]	Dec.[e]
			Index (1977 = 100)												
MAJOR MARKET															
1 **Total index**	**100.00**	....	**140.4**	**140.8**	**140.5**	**140.7**	**141.7**	**141.6**	**142.0**	**141.9**	**142.5**	**142.3**	**141.8**	**142.3**	**142.8**
2 Products	57.72	....	149.4	150.1	150.0	150.5	151.6	151.7	152.5	151.8	152.5	152.4	151.5	152.3	153.6
3 Final products	44.77	....	147.7	148.2	148.6	148.9	150.2	150.4	151.2	150.2	151.1	150.8	149.4	150.1	151.6
4 Consumer goods	25.52	....	138.2	138.5	138.7	138.4	139.5	139.2	139.9	138.7	139.3	139.0	139.9	139.8	140.6
5 Equipment	19.25	....	160.4	161.1	161.6	162.8	164.3	165.4	166.1	165.5	166.8	166.5	162.0	163.7	166.1
6 Intermediate products	12.94	....	155.0	156.6	155.1	156.1	156.5	156.3	157.0	157.5	157.5	157.8	158.9	160.1	160.5
7 Materials	42.28	....	128.3	128.1	127.4	127.3	128.2	127.9	127.7	128.3	128.8	128.6	128.6	128.6	128.2
Consumer goods															
8 Durable consumer goods	6.89	....	131.9	131.5	131.6	130.1	132.2	131.2	130.8	127.3	128.7	127.9	127.6	126.8	127.7
9 Automotive products	2.98	....	134.5	132.5	131.6	128.9	131.7	128.6	125.6	120.2	122.3	120.6	118.9	119.3	121.9
10 Autos and trucks	1.79	....	138.0	135.6	133.1	128.3	131.7	127.4	123.3	114.6	119.3	117.1	113.1	114.8	118.3
11 Autos, consumer	1.16	....	105.1	99.6	96.0	95.0	98.8	96.0	91.4	81.2	86.4	92.7	91.5	84.3	84.2
12 Trucks, consumer	.63	....	199.1	202.3	201.9	190.0	192.8	185.5	182.5	176.7	180.5	162.4	153.3	171.2	181.7
13 Auto parts and allied goods	1.19	....	129.3	127.9	129.4	129.8	131.7	130.4	129.1	128.7	126.7	125.9	127.6	126.2	127.4
14 Home goods	3.91	....	130.0	130.7	131.6	131.1	132.6	133.3	134.8	132.7	133.5	133.4	134.2	132.5	132.1
15 Appliances, A/C and TV	1.24	....	151.0	151.0	153.9	151.6	151.7	151.3	155.6	148.1	152.1	151.9	151.7	145.0	142.5
16 Appliances and TV	1.19	....	150.0	149.5	153.0	152.3	152.5	151.4	155.0	147.0	149.4	148.3	147.3	142.3	....
17 Carpeting and furniture	.96	....	140.5	141.1	141.3	140.7	142.8	144.3	143.1	141.3	139.8	139.9	142.0	142.7	....
18 Miscellaneous home goods	1.71	....	108.9	110.1	110.1	110.9	113.0	114.1	115.0	116.8	116.6	116.5	117.2	117.8	....
19 Nondurable consumer goods	18.63	....	140.5	141.1	141.4	141.4	142.2	142.1	143.3	142.8	143.2	143.1	144.4	144.6	145.4
20 Consumer staples	15.29	....	148.9	149.4	149.7	149.9	150.7	150.7	151.9	151.4	152.0	151.8	153.4	153.8	155.0
21 Consumer foods and tobacco	7.80	....	144.5	144.8	144.3	143.3	144.7	144.7	145.7	144.2	145.6	145.9	147.2	148.1	....
22 Nonfood staples	7.49	....	153.6	154.2	155.4	156.9	156.9	156.9	158.4	158.9	158.7	157.9	160.0	159.7	162.8
23 Consumer chemical products	2.75	....	186.8	187.6	187.8	188.9	187.3	189.1	191.0	193.1	192.5	187.9	192.6	191.5	....
24 Consumer paper products	1.88	....	169.0	174.2	177.0	180.4	180.9	180.9	183.6	183.0	184.7	186.6	187.1	189.0	....
25 Consumer energy	2.86	....	111.6	109.1	110.1	110.7	112.0	110.1	110.7	110.4	109.2	110.3	110.8	110.1	115.2
26 Consumer fuel	1.44	....	96.3	96.7	95.0	95.6	97.3	93.6	95.6	97.0	96.0	95.7	96.1	94.9	....
27 Residential utilities	1.42	....	127.1	121.7	125.4	126.1	127.0	127.0	126.1	124.0	122.7	125.1	125.8	....	....
Equipment															
28 Business and defense equipment	18.01	....	166.2	167.1	167.9	168.9	170.3	171.5	172.0	171.3	172.5	172.1	167.4	169.2	171.9
29 Business equipment	14.34	....	162.6	163.8	165.0	166.3	167.8	169.1	169.6	168.5	169.9	169.6	165.2	167.2	169.9
30 Construction, mining, and farm	2.08	....	74.6	74.3	75.6	76.9	77.6	76.3	74.8	73.0	72.1	74.7	75.2	75.8	76.9
31 Manufacturing	3.27	....	137.0	136.3	137.8	138.6	139.7	140.9	142.8	143.8	143.5	143.1	142.9	142.7	142.9
32 Power	1.27	....	91.8	92.8	92.7	93.0	93.6	93.3	92.5	92.8	94.2	93.8	95.0	94.7	95.3
33 Commercial	5.22	....	248.9	252.4	254.3	257.6	260.1	263.2	264.5	263.8	265.6	265.1	259.6	264.0	264.8
34 Transit	2.49	....	124.9	125.7	125.2	123.9	124.8	125.3	124.8	120.1	124.4	122.2	107.7	110.2	122.6
35 Defense and space equipment	3.67	....	180.5	180.0	179.3	178.7	179.9	180.7	181.1	182.0	182.7	182.1	176.0	176.9	179.6
Intermediate products															
36 Construction supplies	5.95	....	141.4	142.3	139.5	139.3	140.2	140.2	141.2	142.2	141.5	140.9	142.5	143.9	142.9
37 Business supplies	6.99	....	166.7	168.8	168.4	170.4	170.4	170.0	170.4	170.6	171.2	172.3	172.8	173.9	....
38 General business supplies	5.67	....	173.8	175.9	175.4	177.4	177.9	177.3	177.9	177.8	178.8	180.1	180.4	181.7	....
39 Commercial energy products	1.31	....	135.8	138.2	138.3	140.3	138.0	138.2	138.4	139.6	138.1	138.5	140.0	140.3	....
Materials															
40 Durable goods materials	20.50	....	139.0	139.4	138.6	137.9	139.0	138.7	139.4	139.9	140.9	140.4	139.2	139.0	137.7
41 Durable consumer parts	4.92	....	112.5	111.7	112.1	110.7	110.8	111.8	111.6	109.9	111.9	110.7	108.3	108.0	105.0
42 Equipment parts	5.94	....	174.1	175.2	175.2	175.3	176.9	177.1	177.5	179.1	180.0	179.6	177.7	179.4	179.7
43 Durable materials n.e.c.	9.64	....	130.9	131.5	129.7	128.8	130.0	128.9	130.0	131.0	131.6	131.4	131.2	129.9	128.6
44 Basic metal materials	4.64	....	99.8	100.8	98.4	95.9	98.0	94.4	95.5	97.7	98.4	97.4	96.7	92.0	90.0
45 Nondurable goods materials	10.09	....	136.3	137.1	135.9	136.0	137.1	136.8	137.3	138.5	138.3	136.7	138.5	138.6	138.7
46 Textile, paper, and chemical materials	7.53	....	139.1	139.9	138.6	139.0	140.3	139.1	140.0	141.8	141.5	140.0	141.5	141.5	141.5
47 Textile materials	1.52	....	110.0	112.1	110.7	111.8	114.6	116.4	117.2	116.4	117.0	115.6	115.7	115.0	....
48 Pulp and paper materials	1.55	....	150.3	150.4	147.5	147.3	146.7	145.2	146.5	149.1	149.9	150.5	153.0	152.7	....
49 Chemical materials	4.46	....	145.1	145.7	145.0	145.4	146.8	144.7	145.5	147.9	147.0	144.6	146.3	146.6	....
50 Miscellaneous nondurable materials	2.57	....	128.0	129.1	128.0	127.2	127.8	129.9	129.4	129.0	128.9	127.3	129.8	....	....
51 Energy materials	11.69	....	102.6	100.5	100.5	101.0	101.7	101.1	99.1	99.1	99.5	100.9	101.6	101.7	102.2
52 Primary energy	7.57	....	107.6	105.2	104.4	103.7	104.1	104.6	103.0	103.2	104.2	105.6	106.7	106.6	....
53 Converted fuel materials	4.12	....	93.3	92.0	93.3	96.1	97.4	94.7	92.0	91.6	91.0	92.2	92.2	92.6	....

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

Groups	SIC code	1977 proportion	1989 avg.	1988 Dec.	1989 Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.[r]	Oct.[r]	Nov.[p]	Dec.[e]
				Index (1977 = 100)												
MAJOR INDUSTRY																
1 Mining and utilities	......	15.79	....	108.9	107.2	106.8	107.5	107.9	107.2	106.3	106.6	106.5	107.7	108.6	108.6	110.5
2 Mining	......	9.83	....	104.9	103.0	100.9	101.5	102.4	102.0	101.5	102.1	102.4	103.5	104.2	104.4	103.2
3 Utilities	......	5.96	....	115.4	114.0	116.5	117.5	117.1	115.6	114.3	114.0	113.3	114.5	115.9	115.5	122.7
4 Manufacturing	......	84.21	....	146.3	147.2	146.8	147.0	148.0	148.1	148.7	148.5	149.2	148.8	148.0	148.6	148.8
5 Nondurable	......	35.11	....	147.1	148.5	148.1	148.6	149.6	149.5	150.5	150.8	151.1	151.1	152.2	152.7	152.6
6 Durable	......	49.10	....	145.7	146.2	145.9	145.8	146.9	147.1	147.4	146.8	147.8	147.2	145.0	145.7	146.2
Mining																
7 Metal	10	.50	....	111.9	106.9	98.6	98.1	96.8	94.0	101.2	106.2	103.7	104.3	104.6	101.0	....
8 Coal	11.12	1.60	....	155.1	144.7	134.7	137.7	145.5	137.1	129.2	130.2	135.4	144.2	144.4	144.4	137.1
9 Oil and gas extraction	13	7.07	....	88.9	88.9	89.5	89.6	89.1	90.5	90.6	90.8	90.3	90.0	90.6	91.2	....
10 Stone and earth minerals	14	.66	....	149.4	150.8	142.5	143.5	144.5	146.6	150.2	152.1	151.5	148.8	151.3	151.5	....
Nondurable manufactures																
11 Foods	20	7.96	....	145.8	146.6	146.3	145.4	146.6	147.2	147.9	147.3	148.3	148.8	150.1	150.7	....
12 Tobacco products	21	.62	....	107.0	105.0	104.7	101.5	109.2	105.9	104.2	97.1	99.9	97.3	96.6	96.0	....
13 Textile mill products	22	2.29	....	117.9	120.2	119.4	119.7	122.5	123.6	123.8	123.5	123.2	123.2	123.0	121.7	....
14 Apparel products	23	2.79	....	108.8	110.2	110.2	109.9	111.3	111.5	111.9	111.4	111.1	111.2	110.8	110.1	....
15 Paper and products	26	3.15	....	151.7	153.8	151.7	151.7	150.7	150.1	150.2	152.4	152.8	153.4	155.2	155.0	....
16 Printing and publishing	27	4.54	....	188.0	193.0	194.6	198.5	200.1	199.0	200.5	199.9	200.6	203.1	203.8	205.6	206.6
17 Chemicals and products	28	8.05	....	158.1	159.0	158.5	159.2	159.3	158.2	159.9	162.2	161.5	159.3	161.5	162.8	....
18 Petroleum products	29	2.40	....	98.0	98.0	96.3	97.0	97.3	96.9	97.9	98.3	97.7	98.4	98.1	98.1	96.1
19 Rubber and plastic products	30	2.80	....	177.5	175.9	175.0	176.4	178.0	180.5	182.3	182.3	183.6	184.2	185.8	185.8	....
20 Leather and products	31	.53	....	60.2	62.9	62.9	61.2	61.4	60.3	60.5	60.8	60.2	60.4	60.1	57.3	....
Durable manufactures																
21 Lumber and products	24	2.30	....	143.0	139.9	132.8	133.4	135.1	135.5	137.2	136.9	136.5	135.7	137.6	138.9	....
22 Furniture and fixtures	25	1.27	....	165.4	166.3	164.8	165.8	168.0	170.2	170.8	169.0	168.0	167.6	167.9	167.5	....
23 Clay, glass, and stone products	32	2.72	....	125.1	126.6	125.4	125.5	124.7	123.9	123.9	122.9	123.9	123.4	123.7	124.2	....
24 Primary metals	33	5.33	....	90.0	93.2	91.1	88.4	90.1	87.2	87.3	89.2	90.3	89.2	88.9	85.1	82.8
25 Iron and steel	331.2	3.49	....	77.6	82.2	79.1	75.9	77.0	73.2	72.9	75.4	75.9	75.4	76.4	72.1	....
26 Fabricated metal products	34	6.46	....	125.1	124.5	124.5	123.8	123.1	124.8	125.2	125.4	125.5	124.4	124.2	125.2	124.6
27 Nonelectrical machinery	35	9.54	....	177.8	178.7	180.8	183.0	184.7	186.5	187.5	186.7	187.8	188.2	184.9	188.5	189.4
28 Electrical machinery	36	7.15	....	180.9	180.9	181.7	181.6	182.2	181.6	181.9	181.4	183.7	182.7	181.8	181.5	180.9
29 Transportation equipment	37	9.13	....	136.8	136.7	136.4	134.8	136.4	135.5	134.2	131.3	133.2	131.9	123.8	125.0	129.7
30 Motor vehicles and parts	371	5.25	....	125.5	124.9	123.4	120.4	122.0	119.7	116.4	110.4	114.2	112.7	110.1	110.5	110.4
31 Aerospace and miscellaneous transportation equipment	372–6.9	3.87	....	152.2	152.7	154.0	154.4	155.9	157.1	158.4	159.6	159.0	157.9	142.4	144.8	155.9
32 Instruments	38	2.66	....	159.1	161.0	161.3	161.8	163.0	164.3	165.7	166.0	164.1	163.1	163.4	162.9	162.4
33 Miscellaneous manufactures	39	1.46	117.3	111.0	111.8	107.6	110.0	114.5	114.7	117.1	119.6	118.5	119.2	121.7	124.0	....
Utilities																
34 Electric	......	4.17	....	132.9	131.0	135.3	137.0	137.1	135.8	134.6	134.9	134.2	135.5	137.3	136.8	145.2
	Gross value (billions of 1982 dollars, annual rates)															
MAJOR MARKET																
35 Products, total	......	**517.5**	....	**1,855.5**	**1,875.3**	**1,885.1**	**1,879.2**	**1,878.0**	**1,893.9**	**1,885.5**	**1,868.0**	**1,875.4**	**1,874.8**	**1,874.3**	**1,881.7**	**1,895.7**
36 Final	......	405.7	....	1,426.3	1,442.1	1,447.5	1,449.6	1,442.8	1,460.4	1,449.6	1,430.0	1,438.1	1,436.5	1,431.3	1,436.2	1,450.2
37 Consumer goods	......	272.7	....	918.4	934.4	935.6	934.3	928.0	939.4	928.5	915.5	919.9	917.7	924.0	925.9	934.7
38 Equipment	......	133.0	....	507.9	507.7	511.9	515.2	514.8	521.1	521.1	514.5	518.2	518.8	507.3	510.3	515.5
39 Intermediate	......	111.9	....	429.3	433.2	437.7	429.6	435.3	433.5	435.9	438.0	437.3	438.3	443.0	445.5	445.5

1. These data also appear in the Board's G.12.3 (414) release. For address, see inside front cover.

A major revision of the industrial production index and the capacity utilization rates was released in July 1985. See "A Revision of the Index of Industrial Production" and accompanying tables that contain revised indexes (1977=100) through December 1984 in the *Federal Reserve Bulletin*, vol. 71 (July 1985), pp. 487–501. The revised indexes for January through June 1985 were shown in the September *Bulletin*.

2.14 HOUSING AND CONSTRUCTION

Monthly figures are at seasonally adjusted annual rates except as noted.

Item	1986	1987	1988	1989 Feb.	Mar.	Apr.	May	June	July	Aug.[r]	Sept.[r]	Oct.[r]	Nov.
	Private residential real estate activity (thousands of units)												
NEW UNITS													
1 Permits authorized	1,750	1,535	1,456	1,403	1,230	1,334	1,347	1,308	1,281	1,328	1,319	1,356	1,342
2 1-family	1,071	1,024	994	989	870	954	905	874	906	927	946	961	979
3 2-or-more-family	679	511	462	414	360	380	442	434	375	401	373	395	363
4 Started	1,805	1,621	1,488	1,465	1,409	1,343	1,308	1,406	1,420	1,329	1,264	1,423	1,342
5 1-family	1,180	1,146	1,081	1,029	981	1,029	977	972	1,026	990	971	1,023	1,003
6 2-or-more-family	626	474	407	436	428	314	331	434	394	339	293	400	339
7 Under construction, end of period[1]	1,074	987	919	951	942	924	911	914	918	902	893	897	888
8 1-family	583	591	570	594	586	579	572	572	576	565	566	566	563
9 2-or-more-family	490	397	350	357	356	345	339	342	342	337	327	331	325
10 Completed	1,756	1,669	1,530	1,610	1,459	1,552	1,442	1,355	1,372	1,439	1,368	1,318	1,451
11 1-family	1,120	1,123	1,085	1,189	1,050	1,115	1,041	964	965	1,040	960	990	1,045
12 2-or-more-family	636	546	445	421	409	437	401	391	407	399	408	328	406
13 Mobile homes shipped	244	233	218	212	207	198	205	202	178	194	185	191	191
Merchant builder activity in 1-family units													
14 Number sold	748	672	675	621	555	607	653	647	738	723	642	648	710
15 Number for sale, end of period[1]	357	365	366	375	377	377	380	377	369	364	366	366	365
Price (thousands of dollars)[2]													
Median													
16 Units sold	92.2	104.7	113.3	118.0	123.0	116.7	119.0	122.8	116.0	122.9	119.0	123.0	127.0
Average													
17 Units sold	112.2	127.9	139.0	145.3	149.0	144.7	145.1	153.6	140.3	158.6	149.7	147.6	155.9
EXISTING UNITS (1-family)													
18 Number sold	3,566	3,530	3,594	3,480	3,400	3,400	3,210	3,360	3,330	3,480	3,520	3,480	3,590
Price of units sold (thousands of dollars)[2]													
19 Median	80.3	85.6	89.2	91.9	92.0	92.9	92.6	93.4	96.7	94.8	94.3	92.6	93.2
20 Average	98.3	106.2	112.5	117.8	116.1	118.0	118.0	118.8	122.1	120.8	118.4	117.2	118.3
	Value of new construction[3] (millions of dollars)												
CONSTRUCTION													
21 Total put in place	**387,043**	**397,721**	**409,663**	**416,597**	**416,779**	**411,891**	**416,540**	**412,523**	**410,269[r]**	**416,279**	**416,176**	**415,631**	**421,692**
22 Private	315,313	320,108	328,738	333,169	338,065	332,537	330,591	329,035	328,785[r]	331,884	329,564	330,183	330,281
23 Residential	187,147	194,656	198,101	200,454	202,083	200,735	196,984	194,229	195,165[r]	194,393	192,765	193,158	194,381
24 Nonresidential, total	128,166	125,452	130,637	132,715	135,982	131,802	133,607	134,806	133,620[r]	137,491	136,799	137,025	135,900
Buildings													
25 Industrial	13,747	13,707	14,931	15,098	15,698	16,245	15,945	16,302	16,424[r]	17,526	17,927	17,825	18,063
26 Commercial	56,762	55,448	58,104	58,749	60,653	55,581	56,796	57,434	56,640[r]	57,680	57,132	58,154	56,741
27 Other	13,216	15,464	17,278	17,484	17,634	16,645	17,343	17,179	16,768[r]	18,455	17,962	17,392	17,972
28 Public utilities and other	44,441	40,833	40,324	41,384	41,997	43,331	43,523	43,891	43,788[r]	43,830	43,778	43,654	43,124
29 Public	71,727	77,612	80,922	83,428	78,714	80,420	85,130	81,914	81,484[r]	84,395	86,612	85,448	91,411
30 Military	3,868	4,327	3,579	3,433	3,740	2,054	3,870	4,324	3,194[r]	3,779	4,916	3,342	3,988
31 Highway	22,971	25,343	28,524	27,936	26,091	27,772	27,432	27,321	26,128	27,367	27,581	26,406	29,288
32 Conservation and development	4,646	5,162	4,474	4,742	4,210	3,068	6,053	4,699	4,567[r]	4,708	4,906	5,343	4,878
33 Other	40,242	42,780	44,345	47,317	44,673	47,526	47,775	45,570	47,595[r]	48,541	49,209	50,357	53,257

1. Not at annual rates.
2. Not seasonally adjusted.
3. Value of new construction data in recent periods may not be strictly comparable with data in 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 Bureau in July 1976.

NOTE. Census Bureau 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 16,000 jurisdictions beginning with 1978.

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 (at annual rate)				Change from 1 month earlier					Index level Dec. 1989[1]
	1988 Dec.	1989 Dec.	1989 Mar.	1989 June	1989 Sept.	1989 Dec.	1989 Aug.	1989 Sept.	1989 Oct.	1989 Nov.	1989 Dec.	
CONSUMER PRICES[2] (1982–84=100)												
1 **All items**	**4.4**	**4.6**	**6.1**	**5.7**	**1.6**	**5.2**	**.0**	**.2**	**.5**	**.4**	**.4**	**126.1**
2 Food	5.2	5.6	8.2	5.6	2.9	5.8	.2	.2	.4	.6	.5	127.4
3 Energy items	.5	5.1	10.2	24.8	−13.4	2.2	−2.0	−.9	.6	−.1	.0	93.2
4 All items less food and energy	4.7	4.4	5.2	3.8	3.1	5.3	.2	.2	.5	.4	.4	131.5
5 Commodities	4.0	2.7	4.1	2.0	.7	4.1	−.3	.4	.6	.2	.2	121.2
6 Services	5.0	5.3	5.9	4.3	4.5	6.0	.3	.2	.4	.5	.5	137.5
PRODUCER PRICES (1982=100)												
7 Finished goods	4.0	4.8	10.2	5.8	−.3	4.3	−.4	.8r	.4	−.1	.7	115.3
8 Consumer foods	5.7	5.0	13.1	−1.3	−1.3	10.9	.3	−.5r	1.4	.8	.5	120.9
9 Consumer energy	−3.6	9.6	41.0	31.8	−16.8	−7.1	−7.3	6.5	.2	−3.3	1.4	64.9
10 Other consumer goods	4.8	4.5	5.4	5.7	2.6	4.5	.6r	.4r	.2	.0	.9	126.6
11 Capital equipment	3.6	3.7	4.6	4.5	4.8	1.0	.3r	.8r	−.3	.3	.2	120.7
12 Intermediate materials[3]	5.3	2.6	8.7	2.9	−1.1	−.4	−.4r	.4	.1	−.1	−.1	112.0
13 Excluding energy	7.2	.9	5.5	.3	−.7	−1.3	−.1r	.2r	.1	.0	−.4	119.7
Crude materials												
14 Foods	14.2	2.6	16.9	−17.8	−2.2	17.1	1.7r	−1.3r	−.6	1.7	3.0	112.3
15 Energy	−9.5	17.9	48.3	23.6	−6.5	12.6	−6.8r	3.7r	.5	.3	2.2	78.5
16 Other	7.5	−3.8	10.3	−9.3	−.6	−14.3	.8	.3	.3	−2.3	−1.8	131.7

1. Not seasonally adjusted.
2. Figures for consumer prices are those for all urban consumers and reflect a rental equivalence measure of homeownership after 1982.
3. Excludes intermediate materials for food manufacturing and manufactured animal feeds.

SOURCE. Bureau of Labor Statistics.

2.16 GROSS NATIONAL PRODUCT AND INCOME

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

Account	1987	1988	1989	1988	1989			
				Q4	Q1	Q2	Q3	Q4
GROSS NATIONAL PRODUCT								
1 **Total**	**4,524.3**	**4,880.6**	**5,233.2**	**5,017.3**	**5,113.1**	**5,201.7**	**5,281.0**	**5,337.0**
By source								
2 Personal consumption expenditures	3,010.8	3,235.1	3,470.3	3,324.0	3,381.4	3,444.1	3,508.1	3,547.5
3 Durable goods	421.0	455.2	473.6	467.4	466.4	471.0	486.1	471.0
4 Nondurable goods	998.1	1,052.3	1,122.6	1,078.4	1,098.3	1,121.5	1,131.4	1,139.1
5 Services	1,591.7	1,727.6	1,874.1	1,778.2	1,816.7	1,851.7	1,890.6	1,937.5
6 Gross private domestic investment	699.9	750.3	777.1	752.8	769.6	775.0	779.1	784.8
7 Fixed investment	670.6	719.6	747.7	734.1	742.0	747.6	751.7	749.6
8 Nonresidential	444.3	487.2	512.5	495.8	503.1	512.5	519.6	514.8
9 Structures	133.8	140.3	145.1	142.5	144.7	142.4	146.2	147.1
10 Producers' durable equipment	310.5	346.8	367.4	353.3	358.5	370.1	373.4	367.7
11 Residential structures	226.4	232.4	235.2	238.4	238.8	235.1	232.1	234.8
12 Change in business inventories	29.3	30.6	29.4	18.7	27.7	27.4	27.4	35.2
13 Nonfarm	30.5	34.2	25.2	40.8	19.1	23.6	19.8	38.3
14 Net exports of goods and services	−112.6	−73.7	−50.9	−70.8	−54.0	−50.6	−45.1	−53.8
15 Exports	448.6	547.7	624.4	579.7	605.6	626.1	628.5	637.3
16 Imports	561.2	621.3	675.2	650.5	659.6	676.6	673.6	691.1
17 Government purchases of goods and services	926.1	968.9	1,036.7	1,011.4	1,016.0	1,033.2	1,038.9	1,058.6
18 Federal	381.6	381.3	404.1	406.4	399.0	406.0	402.7	408.8
19 State and local	544.5	587.6	632.5	604.9	617.0	627.2	636.2	649.8
By major type of product								
20 Final sales, total	4,495.0	4,850.0	5,203.8	4,998.7	5,085.4	5,174.3	5,253.6	5,301.8
21 Goods	1,785.2	1,931.9	2,073.6	1,987.4	2,030.9	2,079.1	2,096.3	2,087.9
22 Durable	777.6	863.6	911.6	888.5	894.7	905.2	930.1	916.5
23 Nondurable	1,007.6	1,068.3	1,161.9	1,098.9	1,136.2	1,173.9	1,166.2	1,171.3
24 Services	2,304.5	2,499.2	2,700.7	2,570.0	2,620.8	2,667.5	2,728.1	2,786.2
25 Structures	434.6	449.5	459.0	459.9	461.3	455.1	456.6	462.9
26 Change in business inventories	29.3	30.6	29.4	18.7	27.7	27.4	27.4	35.2
27 Durable goods	22.0	25.0	14.6	32.0	22.0	6.0	5.2	25.0
28 Nondurable goods	7.2	5.6	14.9	−13.3	5.7	21.4	22.2	10.2
MEMO								
29 **Total GNP in 1982 dollars**	**3,853.7**	**4,024.4**	**4,142.6**	**4,069.4**	**4,106.8**	**4,132.5**	**4,162.9**	**4,168.1**
NATIONAL INCOME								
30 **Total**	**3,665.4**	**3,972.6**	**4,265.0**	**4,097.4**	**4,185.2**	**4,249.6**	**4,287.3**	n.a.
31 Compensation of employees	2,690.0	2,907.6	3,145.4	2,997.2	3,061.7	3,118.2	3,171.9	3,230.1
32 Wages and salaries	2,249.4	2,429.0	2,632.0	2,505.1	2,560.7	2,608.8	2,654.7	2,704.0
33 Government and government enterprises	419.2	446.5	476.9	456.3	466.9	473.5	480.2	487.1
34 Other	1,830.1	1,982.5	2,155.1	2,048.9	2,093.8	2,135.3	2,174.5	2,216.9
35 Supplement to wages and salaries	440.7	478.6	513.4	492.0	501.0	509.4	517.2	526.1
36 Employer contributions for social insurance	227.8	249.7	265.1	255.6	259.7	263.4	266.6	270.7
37 Other labor income	212.8	228.9	248.3	236.5	241.3	246.0	250.7	255.3
38 Proprietors' income[1]	311.6	327.8	352.2	328.3	359.3	355.5	343.3	350.9
39 Business and professional[1]	270.0	288.0	305.9	296.3	300.3	304.2	307.2	312.0
40 Farm[1]	41.6	39.8	46.3	32.0	59.0	51.3	36.1	38.8
41 Rental income of persons[2]	13.4	15.7	8.0	16.1	11.8	9.8	5.4	5.1
42 Corporate profits[1]	298.7	328.6	298.2	340.2	316.3	307.8	295.2	n.a.
43 Profits before tax[3]	266.7	306.8	287.3	318.8	318.0	296.0	275.0	n.a.
44 Inventory valuation adjustment	−18.9	−25.0	−18.5	−20.1	−38.3	−20.7	−6.3	−8.9
45 Capital consumption adjustment	50.9	46.8	29.4	41.5	36.6	32.3	26.5	22.4
46 Net interest	351.7	392.9	461.1	415.7	436.1	458.4	471.5	478.4

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. *Survey of Current Business* (Department of Commerce).

2.17 PERSONAL INCOME AND SAVING

Billions of current dollars; quarterly data are at seasonally adjusted annual rates. Exceptions noted.

Account	1987	1988	1989	1988 Q4	1989 Q1	1989 Q2	1989 Q3	1989 Q4
PERSONAL INCOME AND SAVING								
1 **Total personal income**	**3,777.6**	**4,064.5**	**4,428.7**	**4,185.2**	**4,317.8**	**4,400.3**	**4,455.9**	**4,540.9**
2 Wage and salary disbursements	2,249.4	2,429.0	2,632.0	2,505.1	2,560.7	2,608.8	2,654.7	2,704.0
3 Commodity-producing industries	649.9	696.3	738.3	714.7	726.6	733.7	742.6	750.4
4 Manufacturing	490.3	524.0	553.0	538.1	546.3	549.9	555.7	559.9
5 Distributive industries	531.9	571.9	615.1	587.5	598.8	610.8	619.4	631.2
6 Service industries	648.3	714.4	801.7	746.7	768.4	790.8	812.4	835.3
7 Government and government enterprises	419.2	446.5	476.9	456.3	466.9	473.5	480.2	487.1
8 Other labor income	212.8	228.9	248.3	236.5	241.3	246.0	250.7	255.3
9 Proprietors' income[1]	311.6	327.8	352.2	328.3	359.3	355.5	343.3	350.9
10 Business and professional[1]	270.0	288.0	305.9	296.3	300.3	304.2	307.2	312.0
11 Farm[1]	41.6	39.8	46.3	32.0	59.0	51.3	36.1	38.8
12 Rental income of persons[2]	13.4	15.7	8.0	16.1	11.8	9.8	5.4	5.1
13 Dividends	92.0	102.2	112.4	106.4	109.4	111.4	113.2	115.7
14 Personal interest income	523.2	571.1	657.8	598.6	629.0	655.1	667.8	679.5
15 Transfer payments	548.2	584.7	632.1	593.8	616.4	626.8	636.4	649.0
16 Old-age survivors, disability, and health insurance benefits	282.9	300.5	325.2	304.0	316.9	322.9	327.9	333.0
17 LESS: Personal contributions for social insurance	172.9	194.9	214.2	199.6	210.0	213.0	215.4	218.5
18 EQUALS: Personal income	3,777.6	4,064.5	4,428.7	4,185.2	4,317.8	4,400.3	4,455.9	4,540.9
19 LESS: Personal tax and nontax payments	571.7	586.6	648.7	597.8	628.3	652.6	649.1	665.0
20 EQUALS: Disposable personal income	3,205.9	3,477.8	3,780.0	3,587.4	3,689.5	3,747.7	3,806.8	3,875.9
21 LESS: Personal outlays	3,104.1	3,333.1	3,573.7	3,424.0	3,483.8	3,547.0	3,611.7	3,652.2
22 EQUALS: Personal saving	101.8	144.7	206.3	163.4	205.7	200.7	195.1	223.7
MEMO								
Per capita (1982 dollars)								
23 Gross national product	15,793.9	16,332.8	16,650.3	16,455.3	16,566.4	16,629.8	16,711.8	16,685.7
24 Personal consumption expenditures	10,302.0	10,545.5	10,725.5	10,625.6	10,653.5	10,678.9	10,799.3	10,765.8
25 Disposable personal income	10,970.0	11,337.0	11,681.0	11,466.0	11,625.0	11,622.0	11,717.0	11,761.0
26 Saving rate (percent)	3.2	4.2	5.5	4.6	5.6	5.4	5.1	5.8
GROSS SAVING								
27 **Gross saving**	**553.8**	**642.4**	**700.7**	**647.4**	**693.5**	**695.8**	**709.9**	n.a.
28 Gross private saving	663.8	738.6	805.6	769.3	792.1	793.7	809.7	n.a.
29 Personal saving	101.8	144.7	206.3	163.4	205.7	200.7	195.1	223.7
30 Undistributed corporate profits[1]	75.3	80.3	47.1	81.7	53.4	52.0	49.3	n.a.
31 Corporate inventory valuation adjustment	−18.9	−25.0	−18.5	−20.1	−38.3	−20.7	−6.3	−8.9
Capital consumption allowances								
32 Corporate	303.1	321.7	−344.8	329.7	335.2	339.7	−349.9	−354.5
33 Noncorporate	183.6	191.9	−207.4	194.4	197.8	201.3	−215.3	−215.1
34 Government surplus, or deficit (−), national income and product accounts	−110.1	−96.1	−104.9	−121.9	−98.7	−97.9	−99.8	n.a.
35 Federal	−161.4	−145.8	−149.9	−167.6	−147.5	−145.4	−144.7	n.a.
36 State and local	51.3	49.7	45.0	45.7	48.8	47.5	44.9	n.a.
37 **Gross investment**	**549.0**	**632.8**	**677.4**	**630.8**	**669.3**	**677.5**	**684.3**	**678.3**
38 Gross private domestic	699.9	750.3	777.1	752.8	769.6	775.0	779.1	784.8
39 Net foreign	−150.9	−117.5	−99.8	−122.0	−100.3	−97.5	−94.8	−106.5
40 **Statistical discrepancy**	**−4.7**	**−9.6**	**−23.4**	**−16.6**	**−24.1**	**−18.3**	**−25.5**	**−25.5**

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

SOURCE. *Survey of Current Business* (Department of Commerce).

3.10 U.S. INTERNATIONAL TRANSACTIONS Summary

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

Item credits or debits	1986	1987	1988	1988		1989		
				Q3	Q4	Q1	Q2	Q3p
1 Balance on current account	-133,249	-143,700	-126,548	-32,340	-28,677	-30,390	-32,084	-22,687
2 Not seasonally adjusted	....	....	....	-36,926	-28,191	-25,994	-31,888	-27,718
3 Merchandise trade balance[2]	-145,058	-159,500	-127,215	-30,339	-32,019	-28,378	-27,554	-27,751
4 Merchandise exports	223,367	250,266	319,251	80,604	83,729	87,919	91,423	91,569
5 Merchandise imports	-368,425	-409,766	-446,466	-110,943	-115,748	-116,297	-118,977	-119,320
6 Military transactions, net	-4,577	-2,856	-4,606	-1,006	-1,604	-1,498	-1,518	-968
7 Investment income, net	60,629	71,151	61,974	12,806	21,329	15,527	13,400	21,096
8 Other service transactions, net	10,517	10,585	17,702	4,971	5,475	5,428	5,977	7,077
9 Remittances, pensions, and other transfers	-4,049	-4,063	-4,279	-1,088	-1,090	-1,186	-1,011	-1,099
10 U.S. government grants (excluding military)	-11,730	-10,149	-10,377	-2,288	-3,928	-2,340	-1,857	-2,557
11 Change in U.S. government assets, other than official reserve assets, net (increase, -)	-2,024	997	2,999	1,961	3,413	1,049	-309	644
12 Change in U.S. official reserve assets (increase, -)	312	9,149	-3,566	-7,380	2,271	-4,000	-12,095	-5,996
13 Gold	0	0	0	0	0	0	0	0
14 Special drawing rights (SDRs)	-246	-509	474	-35	173	-188	68	-211
15 Reserve position in International Monetary Fund	1,501	2,070	1,025	202	307	316	-159	337
16 Foreign currencies	-942	7,588	-5,064	-7,547	1,791	-4,128	-12,004	-6,122
17 Change in U.S. private assets abroad (increase, -)	-97,953	-86,363	-81,544	-32,467	-38,332	-28,367	12,781	-41,804
18 Bank-reported claims[3]	-59,975	-42,119	-54,481	-26,229	-30,916	-22,132	27,238	-20,702
19 Nonbank-reported claims	-7,396	5,201	-1,684	255	4,569	1,835	-2,954	....
20 U.S. purchase of foreign securities, net	-4,271	-5,251	-7,846	-1,592	-3,047	-2,568	-5,737	-10,138
21 U.S. direct investments abroad, net	-26,311	-44,194	-17,533	-4,901	-8,938	-5,502	-5,766	-10,964
22 Change in foreign official assets in United States (increase, +)	35,594	45,193	38,882	-2,234	10,589	7,477	-5,201	11,246
23 U.S. Treasury securities	34,364	43,238	41,683	-3,769	11,897	4,634	-9,738	12,068
24 Other U.S. government obligations	-1,214	1,564	1,309	572	697	721	-97	190
25 Other U.S. government liabilities[4]	2,141	-2,520	-1,284	-232	-232	-304	417	-547
26 Other U.S. liabilities reported by U.S. banks[3]	1,187	3,918	-331	1,703	-1,036	1,974	3,620	-1,117
27 Other foreign official assets[5]	-884	-1,007	-2,495	-508	-737	452	597	652
28 Change in foreign private assets in United States (increase, +)	186,011	172,847	180,417	48,413	70,170	52,529	3,412	61,236
29 U.S. bank-reported liabilities[3]	79,783	89,026	68,832	23,291	32,223	13,261	-21,422	25,688
30 U.S. nonbank-reported liabilities	-2,641	2,450	6,558	2,350	2,702	2,852	-361	....
31 Foreign private purchases of U.S. Treasury securities, net	3,809	-7,643	20,144	3,422	5,336	8,590	2,252	13,034
32 Foreign purchases of other U.S. securities, net	70,969	42,120	26,448	7,454	6,871	8,665	9,676	11,082
33 Foreign direct investments in United States, net	34,091	46,894	58,435	11,896	23,038	19,161	13,267	11,432
34 Allocation of SDRs	0	0	0	0	0	0	0	0
35 Discrepancy	11,308	1,878	-10,641	24,047	-19,434	1,702	33,496	-2,639
36 Owing to seasonal adjustments	....	....	....	-4,556	4,431	4,127	-2,311	-5,115
37 Statistical discrepancy in recorded data before seasonal adjustment	11,308	1,878	-10,641	28,603	-23,865	-2,425	35,807	2,476
MEMO								
Changes in official assets								
38 U.S. official reserve assets (increase, -)	312	9,149	-3,566	-7,380	2,271	-4,000	-12,095	-5,996
39 Foreign official assets in United States (increase, +) excluding line 25	33,453	47,713	40,166	-2,002	10,821	7,781	-5,618	11,793
40 Change in Organization of Petroleum Exporting Countries official assets in United States (part of line 22 above)	-9,327	-9,956r	-3,109	-459	672	7,143	433	3,776
41 Transfers under military grant programs (excluded from lines 4, 6, and 10 above)	96	53	92	7	40	12	13	15

1. Seasonal factors are not calculated for lines 6, 10, 12–16, 18–20, 22–34, and 38–41.
2. Data are on an international accounts (IA) basis. Differs from the Census basis data, shown in table 3.11, for reasons of coverage and timing. Military exports are excluded from merchandise data and are included in line 6.
3. Reporting banks include all kinds of depository institutions besides commercial banks, as well as some brokers and dealers.
4. Primarily associated with military sales contracts and other transactions arranged with or through foreign official agencies.
5. Consists of investments in U.S. corporate stocks and in debt securities of private corporations and state and local governments.

NOTE. Data are from Bureau of Economic Analysis, *Survey of Current Business* (Department of Commerce).

3.11 U.S. FOREIGN TRADE[1]

Millions of dollars; monthly data are seasonally adjusted.

Item	1986	1987	1988	1989 May	1989 June	1989 July	1989 Aug.	1989 Sept.[r]	1989 Oct.[r]	1989 Nov.[p]
1 EXPORTS of domestic and foreign merchandise excluding grant-aid shipments, f.a.s. value	227,158	254,073	322,426	30,455	31,286	30,468	30,562	30,680	31,034	30,192
GENERAL IMPORTS including merchandise for immediate consumption plus entries into bonded warehouses										
2 Customs value	365,438	406,241	440,952	40,534	39,293	38,709	40,662	39,194	41,283	40,689
Trade balance										
3 **Customs value**	**−138,279**	**−152,169**	**−118,526**	**−10,079**	**−8,007**	**−8,241**	**−10,101**	**−8,513**	**−10,249**	**−10,498**

1. The Census basis data differ from merchandise trade data shown in table 3.10, U.S. International Transactions Summary, for reasons of coverage and timing. On the *export side*, the largest adjustment is the exclusion of military sales (which are combined with other military transactions and reported separately in the "service account" in table 3.10, line 6). On the *import side*, additions are made for gold, ship purchases, imports of electricity from Canada, and other transactions; military payments are excluded and shown separately as indicated above. As of Jan. 1, 1987 census data are released 45 days after the end of the month; the previous month is revised to reflect late documents. Total exports and the trade balance reflect adjustments for undocumented exports to Canada.

SOURCE. FT900 "Summary of U.S. Export and Import Merchandise Trade" (Department of Commerce, Bureau of the Census).

3.12 U.S. RESERVE ASSETS

Millions of dollars, end of period

Type	1986	1987	1988	1989 June	1989 July	1989 Aug.	1989 Sept.	1989 Oct.	1989 Nov.[r]	1989 Dec.[p]
1 **Total**	**43,186**	**48,511**	**45,798**	**60,502**	**63,462**	**62,364**	**68,418**	**70,560**	**70,560**	**74,609**
2 Gold stock, including Exchange Stabilization Fund[1]	11,090	11,064	11,078	11,063	11,066	11,066	11,065	11,062	11,060	11,059
3 Special drawing rights[2,3]	7,293	8,395	10,283	9,034	9,340	9,240	9,487	9,473	9,751	9,951
4 Reserve position in International Monetary Fund[2]	11,947	11,730	11,349	8,888	9,055	8,644	8,786	8,722	9,047	9,048
5 Foreign currencies[4]	12,856	17,322	13,088	31,517	34,001	33,413	39,080	41,552	42,702	44,551

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. Gold stock is valued at $42.22 per fine troy ounce.

2. Beginning July 1974, the IMF adopted a technique for valuing the SDR based on a weighted average of exchange rates for the currencies of member countries. From July 1974 through December 1980, 16 currencies were used; from January 1981, 5 currencies have been used. The U.S. SDR holdings and reserve position in the IMF also are valued on this basis beginning July 1974.

3. Includes allocations by the International Monetary Fund of SDRs as follows: $867 million on Jan. 1, 1970; $717 million on Jan. 1, 1971; $710 million on Jan. 1, 1972; $1,139 million on Jan. 1, 1979; $1,152 million on Jan. 1, 1980; and $1,093 million on Jan. 1, 1981; plus 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

Assets	1986	1987	1988	1989 June	1989 July	1989 Aug.	1989 Sept.	1989 Oct.	1989 Nov.	1989 Dec.
1 Deposits	287	244	347	275	371	265	325	252	307	589
Assets held in custody										
2 U.S. Treasury securities[2]	155,835	195,126	232,547	229,914	233,170	238,007	235,597	230,804	231,059	224,911
3 Earmarked gold[3]	14,048	13,919	13,636	13,545	13,530	13,516	13,506	13,460	13,458	13,456

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 payable in dollars and in foreign currencies.

3. Earmarked gold and the gold stock are valued at $42.22 per fine troy ounce. Earmarked gold is gold held for foreign and international accounts and is not included in the gold stock of the United States.

3.14 FOREIGN BRANCHES OF U.S. BANKS Balance Sheet Data[1]

Millions of dollars, end of period

Asset account	1986	1987	1988	1989						
				May	June	July	Aug.	Sept.	Oct.	Nov.
	All foreign countries									
1 **Total, all currencies**	**456,628**	**518,618**	**505,595r**	**521,436**	**523,674**	**534,200**	**522,489**	**520,845**	**533,641**	**549,126**
2 Claims on United States	114,563	138,034	169,111	177,987	177,445	179,615	177,299	182,440	184,505r	193,215
3 Parent bank	83,492	105,845	129,856	134,026	132,380	133,135	134,479	142,339	145,034r	152,021
4 Other banks in United States	13,685	16,416	14,918	13,040	14,218	15,744	15,225	14,164	14,248r	15,405
5 Nonbanks	17,386	15,773	24,337	30,921	30,847	30,736	27,595	25,937	25,223r	25,789
6 Claims on foreigners	312,955	342,520	299,728	302,808	303,720	310,426	299,265	289,996	300,814r	306,291
7 Other branches of parent bank	96,281	122,155	107,179	116,506	115,913	117,438	108,893	104,683	110,684r	113,732
8 Banks	105,237	108,859	96,932	94,042	94,902	95,621	92,465	90,510	93,357	95,249
9 Public borrowers	23,706	21,832	17,163	16,095	16,709	16,948	16,656	16,215	16,721	16,139
10 Nonbank foreigners	87,731	89,674	78,454	76,165	76,196	80,419	81,251	78,588	80,052	81,171
11 Other assets	29,110	38,064	36,756r	40,641	42,509	44,159	45,925	48,409	48,322r	49,620
12 **Total payable in U.S. dollars**	**317,487**	**350,107**	**357,573r**	**366,315**	**367,562**	**371,851**	**369,287**	**359,924**	**369,898r**	**380,948**
13 Claims on United States	110,620	132,023	163,456	169,796	169,520	171,041	170,497	174,628	176,228r	185,408
14 Parent bank	82,082	103,251	126,929	128,771	127,352	128,063	130,168	137,481	139,224r	147,104
15 Other banks in United States	12,830	14,657	14,167	11,909	13,207	14,734	14,688	13,217	13,597	14,648
16 Nonbanks	15,708	14,115	22,360	29,116	28,961	28,244	25,641	23,930	23,407r	23,656
17 Claims on foreigners	195,063	202,428	177,685	177,308	180,013	181,441	177,911	164,461	171,691r	171,506
18 Other branches of parent bank	72,197	88,284	80,736	86,625	88,874	90,077	83,036	77,858	83,945r	82,265
19 Banks	66,421	63,707	54,884	49,793	50,627	49,913	50,885	46,786	47,349	49,045
20 Public borrowers	16,708	14,730	12,131	11,282	11,815	11,616	11,774	11,646	11,579	11,446
21 Nonbank foreigners	39,737	35,707	29,934	29,608	28,697	29,835	32,216	28,171	28,818	28,750
22 Other assets	11,804	15,656	16,432r	19,211	18,029	19,369	20,879	20,835	21,979r	24,034
	United Kingdom									
23 **Total, all currencies**	**140,917**	**158,695**	**156,835**	**155,532**	**153,968**	**161,882**	**158,860**	**157,673**	**164,155**	**166,003**
24 Claims on United States	24,599	32,518	40,089	39,599	38,014	42,147	41,914	40,085	42,424r	44,662
25 Parent bank	19,085	27,350	34,243	35,642	33,763	37,713	38,031	36,046	38,938	40,743
26 Other banks in United States	1,612	1,259	1,123	1,243	1,125	1,121	1,112	1,265	1,200	1,303
27 Nonbanks	3,902	3,909	4,723	2,714	3,126	3,313	2,771	2,774	2,286r	2,616
28 Claims on foreigners	109,508	115,700	106,388	104,504	103,773	106,586	102,231	102,097	106,430	105,612
29 Other branches of parent bank	33,422	39,903	35,625	35,537	34,948	35,440	32,392	32,611	35,252	35,071
30 Banks	39,468	36,735	36,765	37,412	37,357	36,519	36,073	37,146	38,048	36,468
31 Public borrowers	4,990	4,752	4,019	3,627	3,599	3,788	3,586	3,265	3,346	3,172
32 Nonbank foreigners	31,628	34,310	29,979	27,928	27,869	30,839	30,180	29,075	29,784	30,901
33 Other assets	6,810	10,477	10,358	11,429	12,181	13,149	14,715	15,491	15,301r	15,729
34 **Total payable in U.S. dollars**	**95,028**	**100,574**	**103,503**	**101,612**	**99,028**	**103,512**	**104,036**	**99,238**	**106,869**	**106,727**
35 Claims on United States	23,193	30,439	38,012	36,675	34,990	38,506	39,135	37,108	39,715r	41,506
36 Parent bank	18,526	26,304	33,252	34,119	32,059	36,041	36,375	34,537	37,404	39,199
37 Other banks in United States	1,475	1,044	964	862	844	821	1,007	1,017	951	966
38 Nonbanks	3,192	3,091	3,796	1,694	2,087	1,644	1,753	1,554	1,360r	1,341
39 Claims on foreigners	68,138	64,560	60,472	58,395	58,746	59,137	57,706	55,340	59,389	57,029
40 Other branches of parent bank	26,361	28,635	28,474	26,036	26,541	27,955	25,368	25,542	28,084	26,969
41 Banks	23,251	19,188	18,494	18,458	18,745	17,080	18,298	17,612	18,275	16,963
42 Public borrowers	3,677	3,313	2,840	2,737	2,606	2,702	2,679	2,521	2,553	2,404
43 Nonbank foreigners	14,849	13,424	10,664	11,164	10,854	11,400	11,361	9,665	10,477	10,693
44 Other assets	3,697	5,575	5,019	6,542	5,292	5,869	7,195	6,790	7,765r	8,192
	Bahamas and Caymans									
45 **Total, all currencies**	**142,592**	**160,321**	**170,639**	**173,137**	**171,780**	**172,789**	**165,401**	**164,684**	**164,836**	**172,762**
46 Claims on United States	78,048	85,318	105,320	111,823	109,800	107,831	106,693	111,043	109,910	115,373
47 Parent bank	54,575	60,048	73,409	73,627	70,735	67,417	69,404	76,426	75,900	79,941
48 Other banks in United States	11,156	14,277	13,145	10,807	12,116	13,712	13,294	12,141	12,059r	13,185
49 Nonbanks	12,317	10,993	18,766	27,389	26,949	26,702	23,995	22,476	21,951r	22,247
50 Claims on foreigners	60,005	70,162	58,393	53,984	54,537	57,135	50,808	45,962	47,214	49,063
51 Other branches of parent bank	17,296	21,277	17,954	21,962	22,324	24,462	16,802	14,688	16,961	17,086
52 Banks	27,476	33,751	28,268	21,184	21,202	21,591	20,688	20,162	19,579	21,641
53 Public borrowers	7,051	7,428	5,830	5,280	5,540	5,405	5,407	5,435	5,289	5,340
54 Nonbank foreigners	8,182	7,706	6,341	5,558	5,471	5,677	7,911	5,677	5,385	4,996
55 Other assets	4,539	4,841	6,926	7,330	7,443	7,823	7,900	7,679	7,712	8,326
56 **Total payable in U.S. dollars**	**136,813**	**151,434**	**163,518**	**166,869**	**165,676**	**167,259**	**160,821**	**160,274**	**159,643**	**167,182**

1. Beginning with June 1984 data, reported claims held by foreign branches have been reduced by an increase in the reporting threshold for "shell" branches from $50 million to $150 million equivalent in total assets, the threshold now applicable to all reporting branches.

3.14—Continued

Liability account	1986	1987	1988	1989 May	June	July	Aug.	Sept.	Oct.	Nov.
					All foreign countries					
57 **Total, all currencies**	**456,628**	**518,618**	**505,595r**	**521,436**	**523,674**	**534,200**	**522,489**	**520,845**	**533,641**	**549,126**
58 Negotiable CDs	31,629	30,929	28,511	29,425	28,116	28,882	29,524	26,679	26,776	26,555
59 To United States	152,465	161,390	185,577	178,852r	179,902r	177,739r	177,542r	183,203r	183,576r	190,472
60 Parent bank	83,394	87,606	114,720	110,579	113,395	110,326	110,917	121,003	123,229r	128,739
61 Other banks in United States	15,646	20,355	14,737	13,564	12,951	13,323	13,269	13,015	11,476	11,179
62 Nonbanks	53,425	53,429	56,120	54,709r	53,556r	54,090r	53,356r	49,185r	48,871r	50,554
63 To foreigners	253,775	304,803	270,923	288,260r	289,559r	301,389r	288,566r	283,435r	294,486r	302,316
64 Other branches of parent bank	95,146	124,601	111,267	121,135	118,950	119,571	113,752r	104,853r	114,180r	116,016
65 Banks	77,809	87,274	72,842	72,897r	74,209r	80,069r	75,589r	77,618r	75,758r	80,668
66 Official institutions	17,835	19,564	15,183	17,795	17,559	18,846	17,591	17,349	19,361	18,937
67 Nonbank foreigners	62,985	73,364	71,631	76,433r	78,841r	82,903r	81,634r	83,615r	85,187r	86,695
68 Other liabilities	18,759	21,496	20,584r	24,899	26,097	26,190	26,857	27,528	28,803	29,783
69 **Total payable in U.S. dollars**	**336,406**	**361,438**	**367,483**	**376,474**	**378,331**	**381,879**	**379,771**	**371,301**	**384,495r**	**393,001**
70 Negotiable CDs	28,466	26,768	24,045	25,411	24,129	24,914	25,483	22,927	22,260	22,539
71 To United States	144,483	148,442	173,190	166,165r	167,261r	163,804r	166,041r	170,512r	171,458r	179,313
72 Parent bank	79,305	81,783	107,150	102,643	105,074	100,726	103,396	112,255	115,314r	121,914
73 Other banks in United States	14,609	18,951	13,468	11,944	11,537	11,845	11,964	11,837	10,273	9,881
74 Nonbanks	50,569	47,708	52,572	51,578r	50,650r	51,233r	50,681r	46,420r	45,871r	47,518
75 To foreigners	156,806	177,711	160,766	173,197r	175,349r	180,972r	175,270r	165,321r	177,703r	177,413
76 Other branches of parent bank	71,181	90,469	84,021	90,123	90,850	91,713	87,123r	77,987r	85,781r	83,520
77 Banks	33,850	35,065	28,493	29,561r	29,682r	31,215r	31,939r	30,232r	31,986r	32,775
78 Official institutions	12,371	12,409	8,224	9,255	9,852	11,176	10,680	10,195	11,445	11,712
79 Nonbank foreigners	39,404	39,768	40,028	44,258r	44,965r	46,868r	45,528r	46,907r	48,491r	49,406
80 Other liabilities	6,651	8,517	9,482	11,701	11,592	12,189	12,977	12,541	13,074	13,736
					United Kingdom					
81 **Total, all currencies**	**140,917**	**158,695**	**156,835**	**155,532**	**153,968**	**161,882**	**158,860**	**157,673**	**164,155**	**166,003**
82 Negotiable CDs	27,781	26,988	24,528	25,539	24,396	25,342	25,905	23,122	23,152	22,837
83 To United States	24,657	23,470	36,784	30,867	30,013	29,954	31,551	31,076	34,181	33,192
84 Parent bank	14,469	13,223	27,849	20,329	22,037	19,885	21,841	24,013	25,061	25,138
85 Other banks in United States	2,649	1,536	2,037	1,720	1,648	1,852	1,767	1,687	2,002	1,464
86 Nonbanks	7,539	8,711	6,898	8,818	6,328	8,217	7,943	5,376	7,118	6,590
87 To foreigners	79,498	98,689	86,026	88,985	88,381	94,335	88,661	91,101	93,700	96,711
88 Other branches of parent bank	25,036	33,078	26,812	26,867	24,974	26,556	24,326	24,769	26,936	26,660
89 Banks	30,877	34,290	30,609	30,925	31,066	33,047	30,790	31,330	30,688	33,179
90 Official institutions	6,836	11,015	7,873	8,946	8,650	9,586	8,868	8,878	10,132	9,723
91 Nonbank foreigners	16,749	20,306	20,732	22,247	23,691	25,146	24,677	26,124	25,944	27,149
92 Other liabilities	8,981	9,548	9,497	10,141	11,178	12,251	12,743	12,374	13,122	13,263
93 **Total payable in U.S. dollars**	**99,707**	**102,550**	**105,907**	**104,356**	**101,742**	**105,700**	**106,915**	**102,361**	**110,358**	**109,169**
94 Negotiable CDs	26,169	24,926	22,063	23,568	22,324	23,132	23,679	21,156	20,433	20,715
95 To United States	22,075	17,752	32,588	26,554	25,401	24,618	27,232	26,592	30,433	29,284
96 Parent bank	14,021	12,026	26,404	18,545	19,556	16,909	19,580	21,588	23,247	23,350
97 Other banks in United States	2,325	1,308	1,752	1,368	1,393	1,477	1,502	1,511	1,835	1,232
98 Nonbanks	5,729	4,418	4,432	6,641	4,452	6,232	6,150	3,493	5,351	4,702
99 To foreigners	48,138	55,919	47,083	49,006	48,491	52,179	49,913	48,557	52,902	52,321
100 Other branches of parent bank	17,951	22,334	18,561	18,030	16,467	18,388	17,060	16,673	18,926	16,925
101 Banks	15,203	15,580	13,407	13,930	13,545	14,173	13,578	12,331	13,177	13,687
102 Official institutions	4,934	7,530	4,348	4,796	5,579	6,131	5,825	5,532	6,605	6,754
103 Nonbank foreigners	10,050	10,475	10,767	12,250	12,900	13,487	13,450	14,021	14,194	14,955
104 Other liabilities	3,325	3,953	4,173	5,228	5,526	5,771	6,091	6,056	6,590	6,849
					Bahamas and Caymans					
105 **Total, all currencies**	**142,592**	**160,321**	**170,639**	**173,137**	**171,780**	**172,789**	**165,401**	**164,684**	**164,836**	**172,762**
106 Negotiable CDs	847	885	953	872	696	717	691	669	669	671
107 To United States	106,081	113,950	122,332	120,206r	117,781r	116,294r	113,179r	117,611r	114,701r	121,253
108 Parent bank	49,481	53,239	62,894	64,908	61,642	61,263	58,765	64,859	66,292	70,339
109 Other banks in United States	11,715	17,224	11,494	10,398	10,034	10,197	10,076	10,026	8,088	8,438
110 Nonbanks	44,885	43,487	47,944	44,900r	46,105r	44,834r	44,338r	42,726r	40,321r	42,476
111 To foreigners	34,400	43,815	45,161	48,958r	50,433r	52,848r	48,712r	43,818r	46,906r	47,289
112 Other branches of parent bank	12,631	19,185	23,686	26,478	27,763	29,085	25,770r	20,678r	23,086r	23,880
113 Banks	8,617	10,769	8,336	8,227r	8,318r	8,308r	8,613r	8,802r	8,985r	8,442
114 Official institutions	2,719	1,504	1,074	1,164	1,102	1,223	1,081	928	1,003	1,131
115 Nonbank foreigners	10,433	12,357	12,065	13,089r	13,250r	14,232r	13,248r	13,410r	13,832r	13,836
116 Other liabilities	1,264	1,671	2,193	3,101	2,870	2,930	2,819	2,586	2,560	3,549
117 **Total payable in U.S. dollars**	**138,774**	**152,927**	**162,950**	**166,954**	**165,593**	**166,988**	**160,800**	**160,133**	**160,028**	**167,835**

3.15 SELECTED U.S. LIABILITIES TO FOREIGN OFFICIAL INSTITUTIONS

Millions of dollars, end of period

Item	1987	1988	1989						
			May	June	July	Aug.	Sept.	Oct.	Nov.^p
1 **Total**[1]	**259,556**	**299,782^r**	**306,569^r**	**302,299^r**	**307,516^r**	**317,591^r**	**314,782^r**	**315,118^r**	**315,085**
By type									
2 Liabilities reported by banks in the United States[2]	31,838	31,519^r	38,185^r	37,490^r	39,216^r	38,171^r	36,393^r	42,148^r	39,203
3 U.S. Treasury bills and certificates[3]	88,829	103,722	91,798	87,190	87,734	88,325	86,350	81,465	82,474
U.S. Treasury bonds and notes									
4 Marketable	122,432	149,056	160,013	160,462	163,281	173,238	174,037	173,047	174,733
5 Nonmarketable[4]	300	523	542	545	549	553	557	561	564
6 U.S. securities other than U.S. Treasury securities[5]	16,157	14,962	16,031	16,612^r	16,736^r	17,304^r	17,445^r	17,897^r	18,111
By area									
7 Western Europe[1]	124,620	125,097	126,264^r	122,670^r	126,533^r	134,232	133,694^r	133,922^r	137,382
8 Canada	4,961	9,584	9,938	9,604	9,424	9,560	8,989	8,609	9,066
9 Latin America and Caribbean	8,328	10,099	6,091	5,925	7,166	7,986	9,511	10,074	10,221
10 Asia	116,098	145,608^r	156,180^r	155,454^r	155,786^r	157,197^r	154,315^r	154,084^r	149,503
11 Africa	1,402	1,369	1,182	1,271	949	810	867	910	1,019
12 Other countries[6]	4,147	7,501	6,371	6,830	7,113	7,257	6,849	6,959	7,329

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 (including those payable in foreign currencies through 1974) and Treasury bills issued to official institutions of foreign countries.
4. Excludes notes issued to foreign official nonreserve agencies. Includes bonds and notes payable in foreign currencies.
5. Debt securities of U.S. government corporations and federally sponsored agencies, and U.S. corporate stocks and bonds.
6. Includes countries in Oceania and Eastern Europe.

NOTE. Based on Treasury Department data and on data reported to the Treasury Department by banks (including Federal Reserve Banks) and securities dealers in the United States.

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

Millions of dollars, end of period

Item	1985	1986	1987	1988	1989		
				Dec.	Mar.^r	June^r	Sept.
1 Banks' own liabilities	15,368	29,702	55,438	74,980^r	76,545	69,067	72,560
2 Banks' own claims	16,294	26,180	51,271	68,983	72,904	62,758	70,715^r
3 Deposits	8,437	14,129	18,861	25,100	25,938	23,845	23,983
4 Other claims	7,857	12,052	32,410	43,884	46,966	38,913	46,731^r
5 Claims of banks' domestic customers[2]	580	2,507	551	364	376	723	2,558

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

Holder and type of liability	1986	1987	1988	1989 May	1989 June[r]	1989 July	1989 Aug.	1989 Sept.[r]	1989 Oct.[r]	1989 Nov.[p]
1 **All foreigners**	**540,996**	**618,874**	**685,339r**	**678,480r**	**673,402**	**665,330r**	**679,994r**	**694,304**	**701,035**	**723,141**
2 Banks' own liabilities	406,485	470,070	514,532r	512,755r	511,877	503,147r	516,883r	530,517	540,383	560,752
3 Demand deposits	23,789	22,383	21,863	21,930r	21,223	21,363r	19,718	21,550	21,089	21,657
4 Time deposits[2]	130,891	148,374	152,164r	154,169r	153,783	149,753r	155,494r	157,273	162,100	165,184
5 Other[3]	42,705	51,677	51,366r	59,073r	60,916	64,303r	63,732r	56,157	65,437	65,914
6 Own foreign offices[4]	209,100	247,635	289,138r	277,583r	275,955	267,728r	277,939r	295,536	291,757	307,997
7 Banks' custody liabilities[5]	134,511	148,804	170,807r	165,725	161,524	162,184	163,111	163,787	160,652	162,389
8 U.S. Treasury bills and certificates[6]	90,398	101,743	115,056	102,734	98,893	99,365	99,683	99,209	95,278	96,355
9 Other negotiable and readily transferable instruments[7]	15,417	16,776	16,426	18,541	17,077	16,893	17,260	17,091	16,741	16,116
10 Other	28,696	30,285	39,325r	44,451	45,555	45,925	46,168	47,487	48,633	49,918
11 **Nonmonetary international and regional organizations[8]**	**5,807**	**4,464**	**3,224**	**3,415**	**3,817**	**4,240**	**4,418**	**4,945**	**6,316**	**6,337**
12 Banks' own liabilities	3,958	2,702	2,527	2,980	2,895	2,716	3,402	3,347	4,280	5,019
13 Demand deposits	199	124	71	76	32	41	66	89	53	62
14 Time deposits[2]	2,065	1,538	1,183	1,202	1,454	918	1,079	1,702	1,615	1,446
15 Other[3]	1,693	1,040	1,272	1,702	1,409	1,756	2,257	1,555	2,613	3,512
16 Banks' custody liabilities[5]	1,849	1,761	698	435	922	1,524	1,016	1,598	2,036	1,318
17 U.S. Treasury bills and certificates[6]	259	265	57	95	181	345	107	84	568	321
18 Other negotiable and readily transferable instruments[7]	1,590	1,497	641	305	731	1,179	909	1,479	1,454	996
19 Other	0	0	0	35	10	0	1	35	14	0
20 **Official institutions[9]**	**103,569**	**120,667**	**135,241r**	**129,983r**	**124,680**	**126,951r**	**126,496r**	**122,743**	**123,613**	**121,676**
21 Banks' own liabilities	25,427	28,703	27,109r	31,886r	32,167	34,132r	33,238r	31,615	37,111	34,272
22 Demand deposits	2,267	1,757	1,917r	1,761	1,801	1,959r	1,625	2,026	2,057	2,118
23 Time deposits[2]	10,497	12,843	9,767r	11,180r	10,033	10,072r	8,837	8,994	11,877	11,200
24 Other[3]	12,663	14,103	15,425r	18,945r	20,332	22,101r	22,776r	20,595	23,177	20,954
25 Banks' custody liabilities[5]	78,142	91,965	108,132	98,097	92,513	92,818	93,258	91,127	86,502	87,404
26 U.S. Treasury bills and certificates[6]	75,650	88,829	103,722	91,798	87,190	87,734	88,325	86,350	81,465	82,474
27 Other negotiable and readily transferable instruments[7]	2,347	2,990	4,130	6,114	5,080	4,821	4,735	4,588	4,734	4,805
28 Other	145	146	280	185	244	263	198	189	303	125
29 **Banks[10]**	**351,745**	**414,280**	**459,523r**	**455,183r**	**452,396**	**443,172r**	**457,463r**	**476,027**	**477,952**	**501,912**
30 Banks' own liabilities	310,166	371,665	409,501r	400,564r	396,662	387,306r	400,975r	415,761	416,766	439,580
31 Unaffiliated foreign banks	101,066	124,030	120,362r	122,981r	120,707	119,578r	123,036r	120,225	125,009	131,582
32 Demand deposits	10,303	10,898	9,948r	11,172r	9,677	10,145	9,101	10,695	9,884	10,756
33 Time deposits[2]	64,232	79,717	80,189r	78,517r	77,874	75,166r	80,603r	80,789	83,327	86,690
34 Other[3]	26,531	33,415	30,226r	33,293r	33,156	34,267r	33,333r	28,741	31,798	34,136
35 Own foreign offices[4]	209,100	247,635	289,138r	277,583r	275,955	267,728r	277,939r	295,536	291,757	307,997
36 Banks' custody liabilities[5]	41,579	42,615	50,022r	54,619	55,734	55,865	56,488	60,265	61,186	62,332
37 U.S. Treasury bills and certificates[6]	9,984	9,134	7,602	7,114	7,759	7,674	7,838	9,032	9,251	9,499
38 Other negotiable and readily transferable instruments[7]	5,165	5,392	5,725	5,686	5,314	5,326	5,284	5,095	4,770	4,446
39 Other	26,431	28,089	36,694r	41,819	42,662	42,866	43,365	46,138	47,165	48,388
40 **Other foreigners**	**79,875**	**79,463**	**87,351r**	**89,898r**	**92,509**	**90,968r**	**91,617r**	**90,590**	**93,154**	**93,215**
41 Banks' own liabilities	66,934	67,000	75,396r	77,324r	80,153	78,992r	79,268r	79,793	82,226	81,881
42 Demand deposits	11,019	9,604	9,928	8,921	9,714	9,218	8,926	8,739	9,095	8,721
43 Time deposits[2]	54,097	54,277	61,025	63,270r	64,422	63,596r	64,975r	65,787	65,281	65,848
44 Other[3]	1,818	3,119	4,443r	5,133r	6,018	6,179r	5,367r	5,267	7,849	7,312
45 Banks' custody liabilities[5]	12,941	12,463	11,956	12,574	12,355	11,976	12,349	10,796	10,928	11,334
46 U.S. Treasury bills and certificates[6]	4,506	3,515	3,675	3,725	3,763	3,612	3,413	3,743	3,993	4,061
47 Other negotiable and readily transferable instruments[7]	6,315	6,898	5,929	6,436	5,952	5,566	6,332	5,929	5,783	5,869
48 Other	2,120	2,050	2,351	2,412	2,639	2,797	2,604	1,125	1,152	1,405
49 MEMO: Negotiable time certificates of deposit in custody for foreigners	7,496	7,314	6,425	5,625	5,337	5,261	5,199	5,237	5,160	4,799

1. Reporting banks include all kinds of depository institutions besides commercial banks, as well as some brokers and dealers.
2. Excludes negotiable time certificates of deposit, which are included in "Other negotiable and readily transferable instruments."
3. Includes borrowing under repurchase agreements.
4. U.S. banks: includes amounts due to own foreign branches and foreign subsidiaries consolidated in "Consolidated Report of Condition" filed with bank regulatory agencies. Agencies, branches, and majority-owned subsidiaries of foreign banks: principally amounts due to head office or parent foreign bank, and foreign branches, agencies, or wholly owned subsidiaries of 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.
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, and the Inter-American and Asian Development Banks. Data exclude "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—Continued

Area and country	1986	1987	1988	1989 May	June	July	Aug.	Sept.	Oct.r	Nov.p
1 **Total**	**540,996**	**618,874**	**685,339r**	**678,480r**	**673,402r**	**665,330r**	**679,994r**	**694,304r**	**701,035**	**723,141**
2 **Foreign countries**	**535,189**	**614,411**	**682,115r**	**675,064r**	**669,585r**	**661,091r**	**675,576r**	**689,359r**	**694,719**	**716,804**
3 Europe	180,556	234,641	231,912r	223,353r	222,164r	222,146r	226,366r	222,040r	232,219	240,938
4 Austria	1,181	920	1,155	1,405	1,508r	1,417	1,404	1,345	1,193	1,489
5 Belgium–Luxembourg	6,729	9,347	10,022	8,826r	8,631r	8,949	9,286	10,158r	10,841	10,306
6 Denmark	482	760	2,200r	1,642	1,179	1,348	1,956	1,265	1,280	1,794
7 Finland	580	377	285r	433r	451r	436r	460	519r	464	577
8 France	22,862	29,835	24,777r	24,203r	23,868r	22,290	24,864	23,031r	23,868	25,920
9 Germany	5,762	7,022	6,772	7,801r	9,363r	8,875r	7,651	8,345	8,700	9,017
10 Greece	700	689	672	1,172	889	862	828	797	847	1,024
11 Italy	10,875	12,073	14,599	12,532r	13,965r	12,892	14,597	14,542r	14,220	14,643
12 Netherlands	5,600	5,014	5,316	5,870	4,875	5,029	5,106	4,989r	5,415	7,039
13 Norway	735	1,362	1,559	1,479	1,485	1,522	1,453	1,698	1,342	1,952
14 Portugal	699	801	903	996r	1,100r	1,419	1,945	2,206	2,291	2,248
15 Spain	2,407	2,621	5,494	5,424r	5,090r	5,910	5,390	5,277	4,986	4,888
16 Sweden	884	1,379	1,284r	1,552	1,478	1,248	2,002	1,680r	1,663	1,920
17 Switzerland	30,534	33,766	34,199r	28,453r	28,811r	28,581	28,931	29,001r	29,552	31,492
18 Turkey	454	703	1,012	785	737	1,053	1,022	1,085r	1,199	1,397
19 United Kingdom	85,334	116,852	111,811r	107,742r	103,173r	105,310r	104,055r	102,210r	106,749	108,432
20 Yugoslavia	630	710	529	520r	558	604	691	774	858	1,016
21 Other Western Europe[1]	3,326	9,798	8,598	11,889r	14,342r	13,667r	13,824	12,312r	15,820	14,733
22 U.S.S.R.	80	32	138	193	164	175	201	244	338	286
23 Other Eastern Europe[2]	702	582	591	435	499	559	699	562	593	764
24 Canada	26,345	30,095	21,062r	18,353	17,514	17,472	16,958	17,960	16,670	18,161
25 Latin America and Caribbean	210,318	220,372	271,146r	275,600r	271,445r	266,403r	275,557r	284,996r	282,999	293,407
26 Argentina	4,757	5,006	7,804	6,459	6,320	7,397	8,047	8,446	8,068	7,693
27 Bahamas	73,619	74,767	86,863	90,950r	82,312r	84,526	90,317	90,622	93,119	96,273
28 Bermuda	2,922	2,344	2,621	2,451	2,321r	2,269	2,209	2,124	2,458	2,549
29 Brazil	4,325	4,005	5,314r	5,307r	5,004r	5,396	5,539	5,892	6,079	6,433
30 British West Indies	72,263	81,494	113,840r	116,491r	121,385r	113,243r	115,870r	122,677r	117,395	124,799
31 Chile	2,054	2,210	2,936	2,988	2,690r	2,683	2,739	2,765	3,013	3,116
32 Colombia	4,285	4,204	4,374	4,033	4,127	4,235	4,365	4,199	4,887	4,680
33 Cuba	7	12	10	15	10	9	10	14	10	15
34 Ecuador	1,236	1,082	1,379	1,285	1,351	1,411	1,376	1,363	1,342	1,324
35 Guatemala	1,123	1,082	1,195	1,232	1,251	1,297	1,279	1,293	1,276	1,289
36 Jamaica	136	160	269	188	294	227	231	233	206	189
37 Mexico	13,745	14,480	15,185	14,060	14,270r	13,705r	13,769	14,981	14,641	13,851
38 Netherlands Antilles	4,970	4,975	6,420	6,072	6,316	6,434	6,071	6,062r	5,950	6,243
39 Panama	6,886	7,414	4,353	4,453r	4,278	4,357	4,400	4,424	4,393	4,355
40 Peru	1,163	1,275	1,671	1,724	1,761	1,770	1,778	1,828	1,901	1,922
41 Uruguay	1,537	1,582	1,898	2,344	2,429	2,152	2,121	2,340	2,214	2,314
42 Venezuela	10,171	9,048	9,147	9,417r	9,423r	9,500	9,398	9,520	9,550	9,799
43 Other	5,119	5,234	5,868	6,130r	5,903	5,790	6,039	6,213	6,495	6,563
44 Asia	108,831	121,288	147,838r	147,393r	148,449r	144,106r	145,917r	153,564r	150,748	150,425
China										
45 Mainland	1,476	1,162	1,895r	1,652	1,432	1,522	1,700	1,804	1,985	1,635
46 Taiwan	18,902	21,503	26,058	26,931r	27,025	27,128r	25,427	24,119	22,402	21,359
47 Hong Kong	9,393	10,180	12,248r	12,215	12,134r	11,346	12,268	12,292	12,124	11,895
48 India	674	582	699	1,009	812	871	940	875	836	989
49 Indonesia	1,547	1,404	1,180	1,306	1,232	1,096	1,042	1,042	1,144	1,300
50 Israel	1,892	1,292	1,461	1,103	1,088	1,058	953	1,041	2,221	1,081
51 Japan	47,410	54,322	74,015r	70,505r	71,198r	68,700r	71,028r	78,824	73,361	74,657
52 Korea	1,141	1,637	2,541	3,166	3,047	3,556	2,907	3,037	3,099	3,359
53 Philippines	1,866	1,085	1,163	991	984	936	1,083	1,055	1,148	1,242
54 Thailand	1,119	1,345	1,236	1,162	1,274	1,254	1,776	1,430	1,686	1,887
55 Middle-East oil-exporting countries[3]	12,352	13,988	12,083	13,505	13,612	12,368	12,524	13,021r	13,450	13,574
56 Other	11,058	12,788	13,260r	13,851	14,612r	14,271	14,270	15,024r	17,293	17,448
57 Africa	4,021	3,945	3,991	3,802	3,904	3,618	3,265	3,536	3,486	3,747
58 Egypt	706	1,151	911	702	748	738	549	574	577	633
59 Morocco	92	194	68	68	67	66	72	96	71	75
60 South Africa	270	202	437	324	188	231	201	246	220	291
61 Zaire	74	67	85	92	98	92	87	81	71	60
62 Oil-exporting countries[4]	1,519	1,014	1,017	879	1,100	942	897	1,036	1,046	1,143
63 Other	1,360	1,316	1,474	1,737	1,702	1,548	1,459	1,502	1,501	1,546
64 Other countries	5,118	4,070	6,165	6,563	6,108	7,346	7,513	7,262r	8,597	10,126
65 Australia	4,196	3,327	5,293	5,700	5,192	6,620	6,721	6,518r	8,046	9,433
66 All other	922	744	872	863	916	726	792	744	551	692
67 Nonmonetary international and regional organizations	5,807	4,464	3,224	3,415	3,817r	4,240	4,418	4,945	6,316	6,337
68 International[5]	4,620	2,830	2,503	2,456	3,030r	2,881	3,084	3,390	4,998	5,201
69 Latin American regional	1,033	1,272	589	564	613	961	690	1,201	919	586
70 Other regional[6]	154	362	133	395	175	397	644	353	400	551

1. Includes the Bank for International Settlements and Eastern European countries that are not listed in line 23.
2. Comprises Bulgaria, Czechoslovakia, the German Democratic Republic, Hungary, Poland, and Romania.
3. Comprises Bahrain, Iran, Iraq, Kuwait, Oman, Qatar, Saudi Arabia, and United Arab Emirates (Trucial States).
4. Comprises Algeria, Gabon, Libya, and Nigeria.
5. Excludes "holdings of dollars" of the International Monetary Fund.
6. Asian, African, Middle Eastern, and European regional organizations, except the Bank for International Settlements, which is included in "Other Western 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 and country	1986	1987	1988	1989 May	1989 June[r]	1989 July[r]	1989 Aug.[r]	1989 Sept.[r]	1989 Oct.[r]	1989 Nov.[p]
1 **Total**	**444,745**	**459,877**	**491,165[r]**	**491,219[r]**	**491,103**	**481,051**	**488,861**	**499,388**	**514,552**	**534,211**
2 **Foreign countries**	**441,724**	**456,472**	**489,094[r]**	**487,437[r]**	**487,626**	**477,264**	**485,737**	**496,466**	**511,850**	**531,537**
3 Europe	107,823	102,348	116,928[r]	112,957[r]	112,201	106,459	107,359	111,180	113,432	111,948
4 Austria	728	793	483[r]	764	809	854	549	480	580	569
5 Belgium–Luxembourg	7,498	9,397	8,515[r]	8,441[r]	7,781	7,558	7,510	7,404	7,510	6,605
6 Denmark	688	717	483[r]	476[r]	774	562	768	557	513	609
7 Finland	987	1,010	1,065	1,280	1,175	1,395	1,401	1,233	1,707	1,179
8 France	11,356	13,548	13,243	16,108[r]	15,575	16,008	16,415	16,249	16,391	15,972
9 Germany	1,816	2,039	2,329[r]	3,965[r]	3,695	3,461	3,316	3,463	3,371	2,657
10 Greece	648	462	433	595	632	602	624	634	650	700
11 Italy	9,043	7,460	7,936	5,639[r]	6,813	5,994	5,494	6,043	5,577	5,717
12 Netherlands	3,296	2,619	2,541[r]	3,197[r]	2,032	1,957	1,454	1,994	1,899	2,259
13 Norway	672	934	455	567	667	796	665	644	647	635
14 Portugal	739	477	261[r]	291[r]	328	283	264	252	258	275
15 Spain	1,492	1,853	1,823	2,209	2,190	2,092	1,738	1,684	1,733	1,836
16 Sweden	1,964	2,254	1,977	2,158	1,946	2,003	2,046	2,286	2,087	2,555
17 Switzerland	3,352	2,718	3,895	3,975	5,485	4,123	4,479	5,018	4,522	4,940
18 Turkey	1,543	1,680	1,233	910	886	891	960	1,028	1,021	1,044
19 United Kingdom	58,335	50,823	65,706[r]	58,077[r]	56,844	53,464	54,809	57,187	59,840	59,906
20 Yugoslavia	1,835	1,700	1,390	1,366	1,359	1,406	1,346	1,338	1,373	1,281
21 Other Western Europe[2]	....	619	1,152	966	1,161	974	1,247	1,312	1,504	1,245
22 U.S.S.R.	345	389	1,255	1,155	1,212	1,227	1,456	1,574	1,453	1,080
23 Other Eastern Europe[3]	948	852	754	819[r]	838	810	819	799	794	884
24 Canada	21,006	25,368	18,889	16,075[r]	16,236	14,493	15,073	14,763	13,800	16,176
25 Latin America and Caribbean	208,825	214,789	214,264[r]	218,320[r]	219,855	217,371	216,073	219,948	219,974	231,742
26 Argentina	12,091	11,996	11,826	11,381	10,840	10,705	10,730	10,460	10,442	10,273
27 Bahamas	59,342	64,587	66,954[r]	70,552	66,611	70,488	68,113	70,906	71,422	78,609
28 Bermuda	418	471	483	449	391	463	522	1,104	804	847
29 Brazil	25,716	25,897	25,735	25,785	25,675	25,824	25,597	24,999	25,075	24,432
30 British West Indies	46,284	50,042	55,888[r]	58,326[r]	65,359	59,670	61,493	63,543	62,802	68,239
31 Chile	6,558	6,308	5,217	5,266	4,863	4,793	4,803	4,707	4,601	4,496
32 Colombia	2,821	2,740	2,944	2,600	2,583	2,525	2,504	2,477	2,800	2,784
33 Cuba	0	1	1	1	1	9	1	1	1	1
34 Ecuador	2,439	2,286	2,075	1,944	1,895	1,933	1,918	1,905	1,864	1,858
35 Guatemala[4]	140	144	198	207	201	189	203	196	188	190
36 Jamaica[4]	198	188	212	265	286	270	272	282	270	260
37 Mexico	30,698	29,532	24,637	24,052[r]	23,703	23,369	23,169	22,813	22,751	23,281
38 Netherlands Antilles	1,041	980	1,306[r]	978[r]	1,179	1,159	1,022	1,103	1,133	1,022
39 Panama	5,436	4,744	2,521[r]	2,453[r]	2,423	2,320	2,030	1,834	1,837	1,792
40 Peru	1,661	1,329	1,013	938	874	867	870	823	851	849
41 Uruguay	940	963	910	832	896	854	866	899	903	902
42 Venezuela	11,108	10,843	10,733	10,600	10,569	10,269	10,024	10,064	10,269	10,119
43 Other Latin America and Caribbean	1,936	1,738	1,612[r]	1,691[r]	1,503	1,665	1,936	1,833	1,960	1,787
44 Asia	96,126	106,096	130,881[r]	131,634[r]	130,590	130,369	137,687	140,704	153,753	158,912
China										
Mainland	787	968	762	952	920	644	575	615	594	610
46 Taiwan	2,681	4,592	4,184	3,718[r]	4,058	3,949	3,356	3,331	2,831	2,677
47 Hong Kong	8,307	8,218	10,143[r]	8,855	8,557	8,153	8,800	10,358	10,052	10,441
48 India	321	510	560	411	537	477	547	638	617	637
49 Indonesia	723	580	674	690	671	645	614	615	685	655
50 Israel	1,634	1,363	1,136	1,047[r]	1,021	964	911	859	1,185	758
51 Japan	59,674	68,658	90,149[r]	93,504[r]	91,103	91,806	96,118	97,699	110,444	114,658
52 Korea	7,182	5,148	5,213[r]	5,332[r]	5,608	5,774	6,007	5,686	5,713	5,846
53 Philippines	2,217	2,071	1,876	1,810	1,763	1,607	1,543	1,617	1,549	1,478
54 Thailand	578	496	848[r]	974[r]	1,056	1,060	1,117	1,203	1,058	1,076
55 Middle East oil-exporting countries[5]	4,122	4,858	6,213	5,522	6,550	5,550	8,879	8,581	8,357	8,750
56 Other Asia	7,901	8,635	9,122	8,818	8,745	9,741	9,221	9,502	10,669	11,324
57 Africa	4,650	4,742	5,718	6,083[r]	6,075	6,066	6,032	6,028	5,763	6,009
58 Egypt	567	521	507	541	534	577	494	501	475	471
59 Morocco	598	542	511	538	531	518	535	524	538	547
60 South Africa	1,550	1,507	1,681	1,753	1,746	1,702	1,713	1,709	1,679	1,686
61 Zaire	28	15	17	19	17	17	16	20	15	16
62 Oil-exporting countries[6]	694	1,003	1,523	1,504	1,503	1,587	1,608	1,629	1,546	1,641
63 Other	1,213	1,153	1,479	1,728[r]	1,744	1,664	1,666	1,645	1,510	1,648
64 Other countries	3,294	3,129	2,413[r]	2,368[r]	2,670	2,505	3,512	3,843	5,129	6,750
65 Australia	1,949	2,100	1,520[r]	1,170[r]	1,307	1,518	2,499	3,078	4,301	6,174
66 All other	1,345	1,029	894	1,198[r]	1,363	987	1,013	765	828	576
67 Nonmonetary international and regional organizations[7]	3,021	3,404	2,071	3,782	3,477	3,787	3,124	2,922	2,701	2,675

1. Reporting banks include all kinds of depository institutions besides commercial banks, as well as some brokers and dealers.
2. Includes the Bank for International Settlements. Beginning April 1978, also includes Eastern European countries not listed in line 23.
3. Beginning April 1978 comprises Bulgaria, Czechoslovakia, the German Democratic Republic, Hungary, Poland, and Romania.
4. Included in "Other Latin America and Caribbean" through March 1978.
5. Comprises Bahrain, Iran, Iraq, Kuwait, Oman, Qatar, Saudi Arabia, and United Arab Emirates (Trucial States).
6. Comprises Algeria, Gabon, Libya, and Nigeria.
7. Excludes the Bank for International Settlements, which is included in "Other Western 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	1986	1987	1988[r]	1989 May[r]	1989 June[r]	1989 July[r]	1989 Aug.[r]	1989 Sept.[r]	1989 Oct.[r]	1989 Nov.[p]
1 **Total**	**478,650**	**497,635**	**538,689**	....	**540,634**	....	....	**551,543**	....	....
2 Banks' own claims on foreigners	444,745	459,877	491,165	491,219	491,103	481,051	488,861	499,388	514,552	534,211
3 Foreign public borrowers	64,095	64,605	62,658	64,276	63,164	62,832	62,765	62,051	63,384	61,742
4 Own foreign offices[2]	211,533	224,727	257,436	257,514	258,548	248,987	252,281	265,786	276,422	296,552
5 Unaffiliated foreign banks	122,946	127,609	129,425	130,269	128,295	128,919	132,478	131,124	131,228	133,827
6 Deposits	57,484	60,687	65,898	67,331	68,177	68,888	72,576	72,654	72,229	75,599
7 Other	65,462	66,922	63,527	62,937	60,119	60,031	59,903	58,470	59,000	58,228
8 All other foreigners	46,171	42,936	41,646	39,160	41,095	40,313	41,336	40,428	43,517	42,090
9 Claims of banks' domestic customers[3]	33,905	37,758	47,524	....	49,531	....	....	52,154	....	....
10 Deposits	4,413	3,692	8,289	....	11,153	....	....	11,259	....	....
11 Negotiable and readily transferable instruments[4]	24,044	26,696	25,700	....	22,017	....	....	24,286	....	....
12 Outstanding collections and other claims	5,448	7,370	13,535	....	16,362	....	....	16,609	....	....
13 MEMO: Customer liability on acceptances	25,706	23,107	19,596	....	16,810	....	....	12,828	....	....
Dollar deposits in banks abroad, reported by nonbanking business enterprises in the United States[5]	43,984	40,909[r]	45,568	49,639	46,740	48,485	49,575	46,671	43,619	n.a.

1. Data for banks' own claims are given on a monthly basis, but the data for claims of banks' own domestic customers are available on a quarterly basis only.
Reporting banks include all kinds of depository institutions besides commercial banks, as well as some brokers and dealers.
2. *U.S. banks:* includes amounts due from own foreign branches and foreign subsidiaries consolidated in "Consolidated Report of Condition" filed with bank regulatory agencies. *Agencies, branches, and majority-owned subsidiaries of foreign banks:* principally amounts due from head office or parent foreign bank, and foreign branches, agencies, or wholly owned subsidiaries of head office or parent foreign bank.
3. Assets owned by customers of the reporting bank located in the United States that represent claims on foreigners held by reporting banks for the account of their domestic customers.
4. Principally negotiable time certificates of deposit and bankers acceptances.
5. Includes demand and time deposits and negotiable and nonnegotiable certificates of deposit denominated in U.S. dollars issued by banks abroad. For description of changes in data reported by nonbanks, see July 1979 *Bulletin*, p. 550.

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	1985	1986	1987	1988 Dec.[r]	1989 Mar.[r]	1989 June[r]	1989 Sept.
1 **Total**	**227,903**	**232,295**	**235,130**	**233,184**	**231,686**	**231,374**	**236,519**
By borrower							
2 Maturity of 1 year or less[2]	160,824	160,555	163,997	172,634	168,608	167,307	169,300
3 Foreign public borrowers	26,302	24,842	25,889	26,562	24,479	23,759	24,223
4 All other foreigners	134,522	135,714	138,108	146,071	144,129	143,548	145,078
5 Maturity over 1 year[2]	67,078	71,740	71,133	60,550	63,078	64,067	67,219
6 Foreign public borrowers	34,512	39,103	38,625	35,291	37,935	38,108	41,852
7 All other foreigners	32,567	32,637	32,507	25,259	25,142	25,959	25,367
By area							
Maturity of 1 year or less[2]							
8 Europe	56,585	61,784	59,027	55,909	57,741	58,340	52,421
9 Canada	6,401	5,895	5,680	6,282	5,119	5,693	6,206
10 Latin America and Caribbean	63,328	56,271	56,535	57,991	53,268	50,605	52,219
11 Asia	27,966	29,457	35,919	46,224	45,727	45,303	51,187
12 Africa	3,753	2,882	2,833	3,337	3,610	3,601	3,510
13 All other[3]	2,791	4,267	4,003	2,891	3,143	3,765	3,757
Maturity of over 1 year[2]							
14 Europe	7,634	6,737	6,696	4,666	4,508	4,664	8,862
15 Canada	1,805	1,925	2,661	1,922	2,309	2,592	2,459
16 Latin America and Caribbean	50,674	56,719	53,817	47,547	49,790	50,107	48,628
17 Asia	4,502	4,043	3,830	3,613	3,699	3,823	4,214
18 Africa	1,538	1,539	1,747	2,301	2,292	2,408	2,472
19 All other[3]	926	777	2,381	501	480	472	584

1. Reporting banks include all kinds of depository institutions besides commercial banks, as well as some brokers and dealers.
2. Remaining time to maturity.
3. Includes nonmonetary international and regional organizations.

3.21 CLAIMS ON FOREIGN COUNTRIES Held by U.S. Offices and Foreign Branches of U.S.-Chartered Banks[1,2]

Billions of dollars, end of period

Area or country	1985	1986	1987		1988				1989		
			Sept.	Dec.	Mar.	June	Sept.	Dec.	Mar.	June	Sept.
1 **Total**	**389.1**	**386.5**	**387.9**	**382.4**	**371.4**	**352.2**	**354.3**	**346.8**	**345.9r**	**339.2r**	**344.6r**
2 G-10 countries and Switzerland	147.0	156.6	154.8	159.7	156.8	151.0	148.9	153.1	145.7	144.7	145.7r
3 Belgium-Luxembourg	9.4	8.4	8.1	10.0	9.1	9.2	9.5	9.0	8.6	7.8	6.9
4 France	12.3	13.6	13.6	13.7	11.8	10.9	10.3	10.5	11.2	10.8	11.1
5 Germany	10.5	11.6	10.5	12.6	11.8	10.6	9.2	10.3	10.2	10.6	10.4
6 Italy	9.7	9.0	6.8	7.5	7.4	6.3	5.6	6.8	5.2	6.1	6.8
7 Netherlands	3.8	4.6	4.8	4.1	3.3	3.2	2.9	2.7	2.8	2.8	2.4
8 Sweden	2.8	2.4	2.6	2.1	2.1	1.9	1.9	1.8	2.3	1.8	2.0
9 Switzerland	4.4	5.8	5.4	5.6	5.1	5.6	5.2	5.4	5.1	5.4r	6.1
10 United Kingdom	63.3	70.9	72.0	68.8	71.7	70.4	67.6	66.2	65.3r	64.2r	63.3r
11 Canada	6.8	5.2	4.6	5.5	4.7	5.3	4.9	5.0	4.0	5.1	5.9
12 Japan	24.1	25.1	26.4	29.8	29.7	27.6	31.8	35.3	30.9	30.1	30.8
13 Other developed countries	30.3	26.1	26.3	26.4	26.4	24.0	23.0	21.0	21.0	21.1r	20.9r
14 Austria	1.6	1.7	1.8	1.9	1.6	1.6	1.6	1.5	1.4	1.7	1.5r
15 Denmark	2.4	1.7	1.6	1.7	1.4	1.1	1.2	1.1	1.1	1.4	1.1
16 Finland	1.6	1.4	1.4	1.2	1.0	1.2	1.3	1.1	1.0	1.0	1.1
17 Greece	2.6	2.3	1.9	2.0	2.3	2.1	2.1	1.8	2.1	2.3	2.3
18 Norway	2.9	2.4	2.0	2.2	1.9	1.9	2.0	1.8	1.6	1.8	1.4
19 Portugal	1.3	.9	.9	.6	.5	.4	.4	.4	.4	.6	.4
20 Spain	5.8	5.8	7.4	8.0	8.9	7.2	6.3	6.2	6.6	6.2	6.9
21 Turkey	2.0	2.0	1.9	2.0	2.0	1.8	1.6	1.5	1.3	1.1r	1.1
22 Other Western Europe	2.0	1.5	1.6	1.6	1.9	1.7	1.9	1.3	1.1	1.1	1.0
23 South Africa	3.2	3.0	2.9	2.9	2.8	2.8	2.7	2.4	2.2	2.1	2.1
24 Australia	5.0	3.4	2.9	2.4	2.0	2.2	1.8	1.8	2.4	1.9	2.1r
25 OPEC countries[3]	21.5	19.4	19.2	17.4	17.6	17.0	17.9	16.6	16.2	16.0	16.2
26 Ecuador	2.1	2.2	2.1	1.9	1.9	1.8	1.8	1.7	1.6	1.5	1.5
27 Venezuela	9.0	8.7	8.3	8.1	8.1	8.0	7.9	7.9	7.9	7.5	7.3
28 Indonesia	3.0	2.5	2.0	1.9	1.8	1.8	1.8	1.7	1.7	1.9	2.0
29 Middle East countries	5.4	4.3	5.0	3.6	3.9	3.5	4.6	3.4	3.3	3.4	3.5
30 African countries	2.0	1.8	1.8	1.9	1.9	1.9	1.9	1.9	1.7	1.6	1.9
31 Non-OPEC developing countries	105.0	99.6	98.0	97.8	94.4	91.8	87.2	85.3	85.4	83.1	80.8
Latin America											
32 Argentina	8.9	9.5	9.4	9.5	9.6	9.5	9.3	9.0	8.4	7.9	7.6
33 Brazil	25.5	25.3	25.1	24.7	23.8	23.7	22.4	22.4	22.7	22.0	20.8
34 Chile	7.0	7.1	7.1	6.9	6.6	6.4	6.3	5.6	5.7	5.1	4.9
35 Colombia	2.6	2.1	2.0	2.0	2.0	2.2	2.1	2.1	1.9	1.7	1.6
36 Mexico	24.3	24.0	24.7	23.5	22.4	21.1	20.4	18.8	18.0	17.5	17.0
37 Peru	1.8	1.4	1.2	1.1	1.1	.9	.8	.8	.7	.6	.6
38 Other Latin America	3.5	3.1	2.8	2.8	2.8	2.6	2.5	2.6	2.7	2.6r	2.9
Asia											
China											
39 Mainland	.5	.4	.3	.3	.4	.4	.2	.3	.5	.3	.3
40 Taiwan	4.5	4.9	6.0	8.2	6.1	4.9	3.2	3.7	4.9	5.2	5.0
41 India	1.2	1.2	1.9	1.9	2.1	2.3	2.0	2.1	2.6	2.4	2.7
42 Israel	1.6	1.5	1.3	1.0	1.0	1.0	1.0	1.2	.9	.8	.7
43 Korea (South)	9.3	6.7	5.0	5.0	5.7	5.9	6.0	6.1	6.1	6.6	6.5
44 Malaysia	2.4	2.1	1.6	1.5	1.5	1.5	1.7	1.6	1.7	1.6	1.7
45 Philippines	5.7	5.4	5.4	5.2	5.1	4.9	4.7	4.5	4.4	4.4	4.0
46 Thailand	1.4	.9	.7	.7	1.0	1.1	1.2	1.1	1.0	1.0	1.3
47 Other Asia	1.0	.7	.7	.7	.7	.8	.8	.9	.8	.8	1.0
Africa											
48 Egypt	1.0	.7	.6	.6	.5	.6	.5	.4	.5	.6	.5
49 Morocco	.9	.9	.9	.9	.9	.9	.8	.9	.9	.9	.8
50 Zaire	.1	.1	.1	.0	.1	.1	.0	.0	.0	.0	.0
51 Other Africa[4]	1.9	1.6	1.3	1.3	1.2	1.2	1.2	1.1	1.1	1.1	1.0
52 Eastern Europe	4.4	3.5	3.6	3.2	3.1	3.3	3.1	3.6	3.5	3.4	3.5r
53 U.S.S.R.	.1	.1	.4	.3	.3	.4	.4	.7	.7	.6	.8
54 Yugoslavia	2.4	2.0	1.9	1.8	1.9	1.9	1.8	1.8	1.7	1.7	1.7
55 Other	1.9	1.4	1.2	1.1	1.0	1.0	1.0	1.1	1.1	1.1	1.1r
56 Offshore banking centers	64.0	61.5	63.7	54.5	51.5	43.0	47.3	44.2r	48.5r	43.1	48.7r
57 Bahamas	21.5	22.4	25.7	17.3	15.9	8.9	12.9	11.0r	15.8	11.0	11.2r
58 Bermuda	.7	.6	.6	.6	.8	1.0	.9	.9	1.1	.7	1.3
59 Cayman Islands and other British West Indies	12.2	12.3	11.9	13.5	11.6	10.3	11.9	12.9	12.0r	10.8	15.1r
60 Netherlands Antilles	2.2	1.8	1.2	1.2	1.3	1.2	1.2	1.0	.9	.9	1.0
61 Panama[5]	6.0	4.0	3.7	3.7	3.2	3.0	2.6r	2.5r	2.2r	1.9	1.5
62 Lebanon	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
63 Hong Kong	11.5	11.1	12.3	11.2	11.3	11.6	10.5	9.6	9.6	10.4	10.7
64 Singapore	9.8	9.2	8.1	7.0	7.4	6.9	7.0	6.1	6.8	7.3	7.8
65 Others[6]	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
66 Miscellaneous and unallocated[7]	16.9	19.8	22.3	23.2	21.5	22.2	26.7	22.6	25.1	27.4	28.4r

1. The banking offices covered by these data are the U.S. offices and foreign branches of U.S.-owned banks and of U.S. subsidiaries of foreign-owned banks. Offices *not* covered include (1) U.S. agencies and branches of foreign banks, and (2) foreign subsidiaries of U.S. banks. To minimize 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. The data in this table combine foreign branch claims in table 3.14 (the sum of lines 7 through 10) with the claims of U.S. offices in table 3.18 (excluding those held by agencies and branches of foreign banks and those constituting claims on own foreign branches).

2. Beginning with June 1984 data, reported claims held by foreign branches have been reduced by an increase in the reporting threshold for "shell" branches from $50 million to $150 million equivalent in total assets, the threshold now applicable to all reporting branches.

3. This group comprises the 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).

4. Excludes Liberia.

5. Includes Canal Zone beginning December 1979.

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[1]

Millions of dollars, end of period

	Type, and area or country	1985	1986	1987r	1988			1989		
					June	Sept.	Dec.	Mar.	Juner	Sept.p
1	**Total**	**27,825**	**25,587**	**28,302**	**30,154r**	**32,405r**	**33,624r**	**37,440r**	**36,967**	**34,711**
2	Payable in dollars	24,296	21,749	22,785	24,852r	27,176r	28,037r	31,649r	31,894	29,850
3	Payable in foreign currencies	3,529	3,838	5,517	5,302	5,229	5,586	5,790	5,073	4,861
	By type									
4	Financial liabilities	13,600	12,133	12,424	13,934r	15,079r	15,118r	17,532r	16,920	15,857
5	Payable in dollars	11,257	9,609	8,643	10,274r	11,485r	11,250r	13,452r	13,060	11,998
6	Payable in foreign currencies	2,343	2,524	3,781	3,660	3,594	3,868	4,080	3,860	3,859
7	Commercial liabilities	14,225	13,454	15,878	16,220r	17,325r	18,506r	19,908r	20,047	18,854
8	Trade payables	6,685	6,450	7,305	6,768	6,480	6,454	7,009r	6,339	6,436
9	Advance receipts and other liabilities	7,540	7,004	8,573	9,452r	10,845r	12,052r	12,899r	13,708	12,418
10	Payable in dollars	13,039	12,140	14,142	14,578r	15,691r	16,788r	18,197r	18,834	17,852
11	Payable in foreign currencies	1,186	1,314	1,737	1,642	1,635	1,718	1,711	1,213	1,002
	By area or country									
	Financial liabilities									
12	Europe	7,700	7,917	8,320	9,071r	10,497r	9,912r	12,511r	11,217	10,188
13	Belgium-Luxembourg	349	270	213	282	339	289	320	357	308
14	France	857	661	382	371	372	267	249	274	258
15	Germany	376	368	551	544r	690r	749r	741r	838	807
16	Netherlands	861	542	866	862	996	879	933	834	853
17	Switzerland	610	646	558	638	687	1,163	954	936	839
18	United Kingdom	4,305	5,140	5,557	6,201	7,243	6,418	9,121	7,799	6,928
19	Canada	839	399	360	412	431	650	616	544	599
20	Latin America and Caribbean	3,184	1,944	1,189	1,448	1,057	1,239	677	1,216	1,334
21	Bahamas	1,123	614	318	250	238	184	189	165	204
22	Bermuda	4	4	0	0	0	0	0	0	0
23	Brazil	29	32	25	0	0	0	0	0	0
24	British West Indies	1,843	1,146	778	1,154	812	645	471	621	698
25	Mexico	15	22	13	26	2	1	15	17	4
26	Venezuela	3	0	0	0	0	0	0	0	0
27	Asia	1,815	1,805	2,451	2,928	3,088	3,313r	3,722	3,842	3,635
28	Japan	1,198	1,398	2,042	2,331	2,435	2,563	2,950	3,082	2,887
29	Middle East oil-exporting countries[2]	82	8	8	11	4	3	1	12	2
30	Africa	12	1	4	2	3	1	5	3	4
31	Oil-exporting countries[3]	0	1	1	1	1	0	3	2	2
32	All other[4]	50	67	100	74	3	2	2	97	97
	Commercial liabilities									
33	Europe	4,074	4,446	5,516	5,755r	6,688	7,348r	7,944r	7,865	7,989
34	Belgium-Luxembourg	62	101	132	147	206	170	134	117	138
35	France	453	352	426	408	438	459	579r	549	773
36	Germany	607	715	909	791	1,185	1,699	1,372r	1,190	1,195
37	Netherlands	364	424	423	508	647	591	670r	689	549
38	Switzerland	379	385	559	482	486	417	458r	458	415
39	United Kingdom	976	1,341	1,599	1,804r	2,110	2,063	2,585r	2,709	2,728
40	Canada	1,449	1,405	1,301	1,167	1,109	1,218	1,163r	1,132	1,195
41	Latin America and Caribbean	1,088	924	864	1,035	997	1,118	1,267r	1,669	1,091
42	Bahamas	12	32	18	61	19	49	35	34	27
43	Bermuda	77	156	168	272	222	286	426	388	305
44	Brazil	58	61	46	54	58	95	103r	541	113
45	British West Indies	44	49	19	28	30	34	31	42	30
46	Mexico	430	217	189	233	177	179	198r	182	191
47	Venezuela	212	216	162	140	204	177	179	185	140
48	Asia	6,046	5,080	6,565	6,286r	6,638r	6,916r	7,329r	6,970	6,859
49	Japan	1,799	2,042	2,578	2,659	2,763	3,091	3,059r	2,712	2,639
50	Middle East oil-exporting countries[2,5]	2,829	1,679	1,964	1,320	1,298	1,386	1,526	1,431	1,426
51	Africa	587	619	574	626	477	578	706	768	650
52	Oil-exporting countries[3]	238	197	135	115	106	202	272	253	246
53	All other[4]	982	980	1,057	1,351r	1,415	1,328	1,499r	1,643	1,071

1. For a description of the changes in the International Statistics tables, see July 1979 *Bulletin*, p. 550.
2. Comprises Bahrain, Iran, Iraq, Kuwait, Oman, Qatar, Saudi Arabia, and United Arab Emirates (Trucial States).
3. Comprises Algeria, Gabon, Libya, and Nigeria.
4. Includes nonmonetary international and regional organizations.
5. Revisions include a reclassification of transactions, which also affects the totals for Asia and the grand totals.

3.23 CLAIMS ON UNAFFILIATED FOREIGNERS Reported by Nonbanking Business Enterprises in the United States[1]

Millions of dollars, end of period

	Type, and area or country	1985	1986	1987	1988			1989		
					June	Sept.r	Dec.r	Mar.r	Juner	Sept.p
1	**Total**	**28,876**	**36,265**	**30,964**	**37,924r**	**38,465**	**33,574**	**31,667**	**33,833**	**32,272**
2	Payable in dollars	26,574	33,867	28,502	35,828r	35,967	31,252	29,371	31,727	30,027
3	Payable in foreign currencies	2,302	2,399	2,462	2,097r	2,498	2,323	2,296	2,106	2,245
	By type									
4	Financial claims	18,891	26,273	20,363	26,537r	27,341	21,638	19,743	21,774	19,550
5	Deposits	15,526	19,916	14,903	19,750r	19,383	15,906	14,838	17,043	13,191
6	Payable in dollars	14,911	19,331	13,775	18,964r	18,370	14,820	13,942	16,131	12,277
7	Payable in foreign currencies	615	585	1,128	786r	1,013	1,086	896	911	914
8	Other financial claims	3,364	6,357	5,460	6,787r	7,958	5,732	4,905	4,731	6,359
9	Payable in dollars	2,330	5,005	4,646	5,892r	7,016	5,001	4,012	4,016	5,520
10	Payable in foreign currencies	1,035	1,352	814	895	942	731	893	716	840
11	Commercial claims	9,986	9,992	10,600	11,387r	11,123	11,937	11,924	12,059	12,722
12	Trade receivables	8,696	8,783	9,535	10,347r	10,124	10,858	10,660	10,857	11,348
13	Advance payments and other claims	1,290	1,209	1,065	1,040r	1,000	1,079	1,265	1,202	1,375
14	Payable in dollars	9,333	9,530	10,081	10,971r	10,581	11,432	11,417	11,581	12,231
15	Payable in foreign currencies	652	462	519	415	543	505	507	479	491
	By area or country									
	Financial claims									
16	Europe	6,929	10,744	9,531	11,580r	10,719	10,051	9,208	8,629	7,947
17	Belgium-Luxembourg	10	41	7	16	49	10	11	155	166
18	France	184	138	332	181	278	224	230	191	209
19	Germany	223	116	102	168	123	138	180	218	147
20	Netherlands	161	151	350	335	356	344	383	290	292
21	Switzerland	74	185	65	105	84	215	203	70	123
22	United Kingdom	6,007	9,855	8,467	10,498r	9,503	8,768	7,890	7,390	6,750
23	Canada	3,260	4,808	2,844	2,917r	3,612	2,339	2,210	2,606	2,414
24	Latin America and Caribbean	7,846	9,291	7,012	10,952r	11,862	8,142	7,233	9,340	8,309
25	Bahamas	2,698	2,628	1,994	4,176	4,069	1,857	2,172	1,880	1,684
26	Bermuda	6	6	7	87	188	19	25	125	56
27	Brazil	78	86	63	46	44	47	49	78	70
28	British West Indies	4,571	6,078	4,433	6,142r	7,098	5,733	4,566	6,848	6,111
29	Mexico	180	174	172	146	133	151	117	114	105
30	Venezuela	48	21	19	27	27	21	25	31	36
31	Asia	731	1,317	879	971r	1,027	830	951	1,082	779
32	Japan	475	999	605	647r	737	561	627	630	440
33	Middle East oil-exporting countries[2]	4	7	8	5	5	5	8	8	7
34	Africa	103	85	65	60	95	106	89	80	75
35	Oil-exporting countries[3]	29	28	7	9	9	10	8	8	8
36	All other[4]	21	28	33	58	26	170	52	37	27
	Commercial claims									
37	Europe	3,533	3,725	4,180	4,713r	4,313	5,016	4,930	4,934	5,196
38	Belgium-Luxembourg	175	133	178	158	172	177	201	201	208
39	France	426	431	650	687r	544	673	760	775	848
40	Germany	346	444	562	774r	615	612	646	642	666
41	Netherlands	284	164	133	172	146	208	158	194	179
42	Switzerland	284	217	185	262	183	322	249	220	217
43	United Kingdom	898	999	1,073	1,107r	1,191	1,306	1,283	1,355	1,463
44	Canada	1,023	934	936	939r	979	975	1,114	1,181	1,228
45	Latin America and Caribbean	1,753	1,857	1,930	2,067	2,104	2,229	2,103	2,083	2,110
46	Bahamas	13	28	19	13	12	36	34	14	10
47	Bermuda	93	193	170	174	161	229	234	236	270
48	Brazil	206	234	226	232	234	298	277	313	223
49	British West Indies	6	39	26	25	22	21	23	29	32
50	Mexico	510	412	368	411	463	457	477	428	497
51	Venezuela	157	237	283	304	266	226	211	228	187
52	Asia	2,982	2,755	2,915	2,992r	3,028	2,954	3,097	3,115	3,424
53	Japan	1,016	881	1,158	1,169r	967	934	1,038	990	1,173
54	Middle East oil-exporting countries[2]	638	563	450	446	437	441	421	423	397
55	Africa	437	500	401	425	425	435	386	401	388
56	Oil-exporting countries[3]	130	139	144	136	137	122	95	111	79
57	All other[4]	257	222	238	251r	274	328	294	345	377

1. For a description of the changes in the International Statistics tables, see July 1979 *Bulletin*, p. 550.
2. Comprises Bahrain, Iran, Iraq, Kuwait, Oman, Qatar, Saudi Arabia, and United Arab Emirates (Trucial States).
3. Comprises Algeria, Gabon, Libya, and Nigeria.
4. Includes nonmonetary international and regional organizations.

3.24 FOREIGN TRANSACTIONS IN SECURITIES

Millions of dollars

Transactions, and area or country	1987	1988	1989 Jan.–Nov.	1989 May	June[r]	July[r]	Aug.[r]	Sept.[r]	Oct.[r]	Nov.[p]
					U.S. corporate securities					
Stocks										
1 Foreign purchases	249,122	181,185	197,556	17,913[r]	24,316	17,122	22,112	19,595	22,350	13,819
2 Foreign sales	232,849	183,185	186,609	16,849[r]	20,646	15,087	20,942	17,047	20,988	15,037
3 **Net purchases, or sales (−)**	**16,272**	**−2,000**	**10,948**	**1,064[r]**	**3,670**	**2,035**	**1,171**	**2,548**	**1,363**	**−1,218**
4 **Foreign countries**	**16,321**	**−1,825**	**11,145**	**1,066[r]**	**3,688**	**2,052**	**1,154**	**2,599**	**1,340**	**−1,217**
5 Europe	1,932	−3,350	486	−293	418	779	−98	1,461	−107	−1,698
6 France	905	−281	−445	−123	−15	75	−251	−5	−265	−296
7 Germany	−70	218	−824	−215	−155	−79	−238	−65	−117	−119
8 Netherlands	892	−535	158	−75[r]	131	12	−63	37	226	−54
9 Switzerland	−1,123	−2,243	−3,028	−293	−114	−23	−333	64	−244	−510
10 United Kingdom	631	−954	3,315	495[r]	329	546	773	894	−34	−739
11 Canada	1,048	1,087	−401	−75	168	8	14	−265	−140	−134
12 Latin America and Caribbean	1,318	1,238	3,519	391	166	109	250	602	149	−85
13 Middle East[1]	−1,360	−2,474	3,461	206	1,679	456	554	110	112	303
14 Other Asia	12,896	1,365	3,537	784	1,201	729	423	631	1,138	342
15 Japan	11,365	1,922	3,400	763	1,215	626	424	611	975	309
16 Africa	123	188	122	−1	16	2	22	24	−6	19
17 Other countries	365	121	421	55[r]	40	−30	−11	38	193	37
18 **Nonmonetary international and regional organizations**	**−48**	**−176**	**−197**	**−2**	**−18**	**−17**	**17**	**−52**	**23**	**−1**
Bonds[2]										
19 Foreign purchases	105,856	86,381[r]	106,726	8,343[r]	10,855	10,045	10,944	8,603	10,930	11,100
20 Foreign sales	78,312	58,417[r]	76,965	8,783[r]	9,185	7,552	9,361	6,857	6,772	6,667
21 **Net purchases, or sales (−)**	**27,544**	**27,964[r]**	**29,762**	**−440[r]**	**1,670**	**2,494**	**1,583**	**1,746**	**4,158**	**4,433**
22 **Foreign countries**	**26,804**	**28,506[r]**	**29,469**	**−563[r]**	**1,542**	**2,516**	**1,607**	**1,740**	**4,106**	**4,421**
23 Europe	21,989	17,239[r]	18,463	−55	2,132	1,976	−138	1,400	1,986	2,713
24 France	194	143	366	93	6	121	−35	78	−41	−14
25 Germany	33	1,344	−206	−170	−162	−53	−121	−33	113	−117
26 Netherlands	269	1,514	809	9	395	−22	96	28	30	143
27 Switzerland	1,587	505	112	−114	−110	81	−201	−27	74	54
28 United Kingdom	19,770	13,084[r]	16,153	665	1,881	1,937	−9	1,311	1,711	1,928
29 Canada	1,296	711	908	59	−188	79	76	155	175	−86
30 Latin America and Caribbean	2,857	1,931	3,180	136	271	300	63	233	247	529
31 Middle East[1]	−1,314	−178	−437	−93[r]	−619	19	44	20	140	−80
32 Other Asia	2,021	8,900	7,107	−615	−59	35	1,574	−108	1,553	1,343
33 Japan	1,622	7,686	4,603	−722	−209	−44	1,167	−179	1,263	1,045
34 Africa	16	−8	29	0	1	3	5	−3	0	8
35 Other countries	−61	−89	219	5	4	103	−17	42	4	−7
36 **Nonmonetary international and regional organizations**	**740**	**−542**	**292**	**122**	**128**	**−22**	**−24**	**6**	**53**	**12**
					Foreign securities					
37 Stocks, net purchases, or sales (−)[3]	1,081	−1,959[r]	−11,679	−1,306[r]	−2,100	−808	−1,706	−648	−1,345	−921
38 Foreign purchases	95,458	75,356[r]	93,406	7,792[r]	9,124	7,640	9,489	8,473	10,309	9,406
39 Foreign sales[3]	94,377	77,315[r]	105,085	9,098[r]	11,225	8,448	11,195	9,121	11,654	10,327
40 Bonds, net purchases, or sales (−)	−7,946	−7,434[r]	−5,438	−110[r]	−1,506	−1,406	1,005	−1,845	−615	520
41 Foreign purchases	199,089	218,521[r]	215,509	17,293[r]	21,061	20,222	24,106	18,325	21,266	20,487
42 Foreign sales	207,035	225,955[r]	220,948	17,403[r]	22,567	21,628	23,101	20,170	21,881	19,966
43 **Net purchases, or sales (−), of stocks and bonds**	**−6,865**	**−9,393[r]**	**−17,117**	**−1,416[r]**	**−3,607**	**−2,214**	**−701**	**−2,493**	**−1,960**	**−401**
44 **Foreign countries**	**−6,757**	**−9,873[r]**	**−17,084**	**−1,620[r]**	**−3,407**	**−2,366**	**−887**	**−1,926**	**−1,622**	**−478**
45 Europe	−12,101	−7,864[r]	−17,852	−1,537[r]	−3,945	−2,534	−860	−2,099	−2,487	−186
46 Canada	−4,072	−3,747[r]	−3,098	−555	−705	−697	−250	−201	924	−325
47 Latin America and Caribbean	828	1,384	700	−90	27	−75	314	−61	183	−102
48 Asia	9,299	979[r]	3,472	722[r]	1,262	921	327	412	−232	3
49 Africa	89	−54	38	13	3	12	−4	−3	12	13
50 Other countries	−800	−571[r]	−344	−173[r]	−49	8	−414	26	−21	119
51 **Nonmonetary international and regional organizations**	**−108**	**480**	**−33**	**203**	**−200**	**152**	**186**	**−568**	**−338**	**77**

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. As a result of the merger of a U.S. and U.K. company in July 1989, the former stockholders of the U.S. company received $5,453 million in shares of the new combined U.K. company. This transaction is not reflected in the data above.

3.25 MARKETABLE U.S. TREASURY BONDS AND NOTES Foreign Transactions

Millions of dollars

Country or area	1987	1988	1989 Jan.–Nov.	1989 May	June	July[r]	Aug.[r]	Sept.[r]	Oct.[r]	Nov.[p]
	Transactions, net purchases or sales (–) during period[1]									
1 **Estimated total[2]**	**25,587**	**48,832[r]**	**53,443**	**7,043**	**–5,202**	**–1,317**	**21,979**	**4,616**	**–2,150**	**8,196**
2 Foreign countries[2]	30,889	48,170[r]	52,976	5,518[r]	–5,322[r]	–761	22,409	5,698	–3,404	8,312
3 Europe[2]	23,716	14,319[r]	33,471	4,498	–1,305	4,357	15,191	2,494	–2,268	4,260
4 Belgium–Luxembourg	653	923	1,138	88	13	82	413	216	90	210
5 Germany[2]	13,330	–5,268	6,187	–179	–1,106	2,622	2,503	510	137	1,666
6 Netherlands	–913	–356	–750	–638	–674	100	1,304	302	–1,200	54
7 Sweden	210	–323	859	–69	647	110	241	–50	140	–232
8 Switzerland[2]	1,917	–1,074	1,452	–83	378	–361	–748	374	–187	–780
9 United Kingdom	3,975	9,640[r]	18,810	3,873	–133	1,024	9,863	339	–1,049	3,799
10 Other Western Europe	4,563	10,786	5,773	1,511	–423	786	1,614	802	–199	–481
11 Eastern Europe	–19	–10	4	–5	–6	–5	0	0	0	26
12 Canada	4,526	3,761	457	157	–478	–533	1,028	–373	150	375
13 Latin America and Caribbean	–2,192	713	1,380	–179	643	839	–280	23	–1,439	1,372
14 Venezuela	150	–109	347	0	1	71	120	29	72	163
15 Other Latin America and Caribbean	–1,142	1,130	318	–78	–14	104	217	–506	34	576
16 Netherlands Antilles	–1,200	–308	716	–101	656	665	–617	500	–1,545	634
17 Asia	4,488	27,603[r]	16,707	1,732[r]	–5,581[r]	–4,941	7,121	2,857	–101	1,646
18 Japan	868	21,750[r]	3,429	1,646	–7,780	–5,360	3,009	2,402	1,330	1,085
19 Africa	–56	–13	76	–3	66	–5	–48	0	13	9
20 All other	407	1,786	884	–687	1,332	–478	–602	697	240	650
21 Nonmonetary international and regional organizations	–5,302	661	467	1,525[r]	120[r]	–557	–431	–1,082	1,254	–116
22 International	–4,387	1,106	137	1,340	–253	–546	–576	–719	1,158	–143
23 Latin America regional	3	–31	231	70	191	3	75	–228	160	0
Memo										
24 Foreign countries[2]	30,889	48,170[r]	52,976	5,518[r]	–5,322[r]	–761	22,409	5,698	–3,404	8,312
25 Official institutions	31,064	26,624	25,677	–1,068	449	2,819	9,957	799	–990	1,686
26 Other foreign[2]	–176	21,546[r]	27,299	6,586[r]	–5,772[r]	–3,580	12,452	4,900	–2,414	6,627
Oil-exporting countries										
27 Middle East[3]	–3,142	1,963	8,786	–300[r]	667[r]	435	3,681	695	–2,183	–26
28 Africa[4]	16	1	–1	0	0	0	0	0	0	–1

1. Estimated official and private transactions in marketable U.S. Treasury securities with an original maturity of more than 1 year. Data are based on monthly transactions reports. Excludes nonmarketable U.S. Treasury bonds and notes held by official institutions of foreign countries.
2. Includes U.S. Treasury notes publicly issued to private foreign residents denominated in foreign currencies.
3. Comprises Bahrain, Iran, Iraq, Kuwait, Oman, Qatar, Saudi Arabia, and United Arab Emirates (Trucial States).
4. Comprises Algeria, Gabon, Libya, and Nigeria.

3.26 DISCOUNT RATES OF FOREIGN CENTRAL BANKS

Percent per year

Country	Rate on Jan. 31, 1990		Country	Rate on Jan. 31, 1990		Country	Rate on Jan. 31, 1990	
	Percent	Month effective		Percent	Month effective		Percent	Month effective
Austria	6.0	June 1989	France[1]	10.0	Dec. 1989	Norway	8.0	June 1983
Belgium	10.25	Oct. 1989	Germany, Fed. Rep. of	6.0	Oct. 1989	Switzerland	6.0	Oct. 1989
Brazil	49.0	Mar. 1981	Italy	13.5	Mar. 1989	United Kingdom[2]	....	....
Canada	12.29	Jan. 1990	Japan	4.25	Dec. 1989	Venezuela	8.0	Oct. 1985
Denmark	10.5	Oct. 1989	Netherlands	7.0	Oct. 1989			

1. As of the end of February 1981, the rate is that at which the Bank of France discounts Treasury bills for 7 to 10 days.
2. Minimum lending rate suspended as of Aug. 20, 1981.

NOTE. Rates shown are mainly those at which the central bank either discounts or makes advances against eligible commercial paper and/or government commercial banks or brokers. For countries with more than one rate applicable to such discounts or advances, the rate shown is the one at which it is understood the central bank transacts the largest proportion of its credit operations.

3.27 FOREIGN SHORT-TERM INTEREST RATES

Percent per year, averages of daily figures

Country, or type	1987	1988	1989	1989						1990
				July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
1 Eurodollars	7.07	7.85	9.16	8.85	8.71	8.85	8.67	8.42	8.39	8.22
2 United Kingdom	9.65	10.28	13.87	13.91	13.86	13.99	15.03	15.07	15.07	15.13
3 Canada	8.38	9.63	12.20	12.24	12.30	12.32	12.29	12.35	12.34	12.24
4 Germany	3.97	4.28	7.04	7.00	6.99	7.37	8.08	8.22	8.06	8.22
5 Switzerland	3.67	2.94	6.83	6.92	7.01	7.42	7.63	7.68	8.14	9.35
6 Netherlands	5.24	4.72	7.28	7.07	7.15	7.53	8.08	8.40	8.47	8.82
7 France	8.14	7.80	9.27	9.05	8.95	9.20	9.89	10.41	10.71	11.19
8 Italy	11.15	11.04	12.44	12.46	12.52	12.40	12.63	12.67	12.83	12.88
9 Belgium	7.01	6.69	8.65	8.46	8.44	8.66	9.51	9.81	10.03	10.48
10 Japan	3.87	3.96	4.73	4.71	4.80	4.88	5.25	5.71	5.80	6.02

NOTE. Rates are for 3-month interbank loans except for Canada, finance company paper; Belgium, 3-month Treasury bills; and Japan, Gensaki rate.

3.28 FOREIGN EXCHANGE RATES[1]

Currency units per dollar

Country/currency	1987	1988	1989	1989 Aug.	1989 Sept.	1989 Oct.	1989 Nov.	1989 Dec.	1990 Jan.
1 Australia/dollar[2]	70.137	78.409	79.186	76.345	77.271	77.421	78.295	78.586	78.111
2 Austria/schilling	12.649	12.357	13.236	13.570	13.733	13.140	12.860	12.241	11.904
3 Belgium/franc	37.358	36.785	39.409	40.310	40.841	39.197	38.403	36.544	35.451
4 Canada/dollar	1.3259	1.2306	1.1842	1.1758	1.1828	1.1749	1.1697	1.1613	1.1720
5 China, P.R./yuan	3.7314	3.7314	3.7673	3.7314	3.7314	3.7314	3.7314	4.1825	4.7339
6 Denmark/krone	6.8478	6.7412	7.3210	7.4938	7.5872	7.2781	7.1138	6.7610	6.5620
7 Finland/markka	4.4037	4.1933	4.2963	4.3504	4.4219	4.2817	4.2619	4.1231	4.0080
8 France/franc	6.0122	5.9595	6.3802	6.5085	6.5855	6.3339	6.2225	5.9391	5.7568
9 Germany/deutsche mark	1.7981	1.7570	1.8808	1.9268	1.9502	1.8662	1.8300	1.7378	1.6914
10 Greece/drachma	135.47	142.00	162.60	166.26	169.03	165.88	164.97	160.32	157.68
11 Hong Kong/dollar	7.7986	7.8072	7.8008	7.8078	7.8078	7.8081	7.8140	7.8102	7.8116
12 India/rupee	12.943	13.900	16.213	16.609	16.745	16.819	16.925	16.932	16.963
13 Ireland/punt[2]	148.79	152.49	141.80	138.43	136.71	142.50	144.73	151.65	156.31
14 Italy/lira	1,297.03	1,302.39	1,372.28	1,384.24	1,404.18	1,369.24	1,343.83	1,291.93	1,261.87
15 Japan/yen	144.60	128.17	138.07	141.49	145.07	142.21	143.53	143.69	144.98
16 Malaysia/ringgit	2.5186	2.6190	2.7079	2.6825	2.6980	2.6945	2.7028	2.7032	2.7041
17 Netherlands/guilder	2.0264	1.9778	2.1219	2.1726	2.1992	2.1072	2.0652	1.9619	1.9073
18 New Zealand/dollar[2]	59.328	65.560	59.354	59.217	59.144	55.937	56.301	59.458	60.220
19 Norway/krone	6.7409	6.5243	6.9131	7.0480	7.1264	6.9502	6.9010	6.7021	6.5462
20 Portugal/escudo	141.20	144.27	157.53	161.15	163.36	159.08	157.65	152.34	149.17
21 Singapore/dollar	2.1059	2.0133	1.9511	1.9604	1.9769	1.9622	1.9588	1.9183	1.8873
22 South Africa/rand	2.0385	2.2773	2.6215	2.7247	2.7882	2.6403	2.6295	2.5679	2.5532
23 South Korea/won	825.94	734.52	674.29	671.13	672.73	673.86	674.94	677.66	686.18
24 Spain/peseta	123.54	116.53	118.44	120.64	122.14	118.77	116.58	112.24	109.71
25 Sri Lanka/rupee	29.472	31.820	35.947	36.276	39.572	40.018	40.017	40.018	40.018
26 Sweden/krona	6.3469	6.1370	6.4559	6.5481	6.6103	6.4580	6.4306	6.2920	6.1776
27 Switzerland/franc	1.4918	1.4643	1.6369	1.6605	1.6865	1.6302	1.6189	1.5686	1.5175
28 Taiwan/dollar	31.753	28.636	26.407	25.685	25.737	25.739	26.029	26.139	26.081
29 Thailand/baht	25.775	25.312	25.725	25.912	26.012	25.868	25.877	25.778	25.745
30 United Kingdom/pound[2]	163.98	178.13	163.82	159.47	157.15	158.74	157.26	159.65	165.12
MEMO									
31 United States/dollar[3]	96.94	92.72	98.60	100.44	101.87	98.92	97.99	94.88	93.00

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) release. For address, see inside front cover.
2. Value in U.S. cents.
3. Index of weighted-average exchange value of U.S. dollar against the currencies of 10 industrial countries. The weight for each of the 10 countries is the 1972–76 average world trade of that country divided by the average world trade of all 10 countries combined. Series revised as of August 1978 (see *Federal Reserve Bulletin*, vol. 64, August 1978, p. 700).

Guide to Tabular Presentation, Statistical Releases, and Special Tables

GUIDE TO TABULAR PRESENTATION

Symbols and Abbreviations

c	Corrected	0	Calculated to be zero
e	Estimated	n.a.	Not available
p	Preliminary	n.e.c.	Not elsewhere classified
r	Revised (Notation appears on column heading when about half of the figures in that column are changed.)	IPCs	Individuals, partnerships, and corporations
*	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)	REITs	Real estate investment trusts
		RPs	Repurchase agreements
		SMSAs	Standard metropolitan statistical areas
		. . .	Cell not applicable

General Information

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.

In some of the tables, details do not add to totals because of rounding.

STATISTICAL RELEASES—List Published Semiannually, with Latest Bulletin Reference

SPECIAL TABLES—Published Irregularly, with Latest Bulletin Reference

Special tables begin on page A73.

4.23 TERMS OF LENDING AT COMMERCIAL BANKS Survey of Loans Made, May 1–5, 1989[1]▲

A. Commercial and Industrial Loans

Characteristic	Amount of loans (thousands of dollars)	Average size (thousands of dollars)	Weighted average maturity[2]	Loan rate (percent)			Loans made under commitment (percent)	Participation loans (percent)	Most common base pricing rate[6]
			Days	Weighted average effective[3]	Standard error[4]	Interquartile range[5]			
ALL BANKS									
1 Overnight[7]	9,048,047	4,504	*	10.98	.08	10.65–11.14	65.8	16.6	Fed funds
2 One month and under	6,517,757	579	17	11.37	.14	10.68–11.66	77.4	10.6	Domestic
3 Fixed rate	4,632,654	742	17	11.19	.10	10.68–11.46	72.7	9.3	Domestic
4 Floating rate	1,885,103	375	18	11.80	.24	10.71–13.24	89.2	13.7	Prime
5 Over one month and under a year	9,429,494	112	137	12.24	.16	11.17–13.24	75.9	15.0	Prime
6 Fixed rate	4,583,393	115	107	11.75	.21	10.74–12.62	72.4	16.5	Other
7 Floating rate	4,846,101	110	166	12.70	.12	12.02–13.42	79.3	13.6	Prime
8 Demand[8]	19,009,291	279	*	12.34	.12	11.40–13.24	81.5	7.2	Prime
9 Fixed rate	1,961,921	574	*	11.14	.14	10.58–11.49	88.6	13.3	Domestic
10 Floating rate	17,047,370	264	*	12.47	.13	12.01–13.24	80.7	6.4	Prime
11 **Total short term**	**44,004,589**	**266**	**57**	**11.89**	**.14**	**10.84–12.75**	**76.5**	**11.3**	**Prime**
12 Fixed rate (thousands of dollars)	20,140,462	390	32	11.22	.10	10.65–11.52	71.0	14.7	Fed funds
13 1–24	254,916	7	97	13.53	.16	12.64–14.63	20.8	.3	Other
14 25–49	136,808	32	116	13.47	.22	12.96–13.97	25.4	.0	Other
15 50–99	209,946	66	138	13.12	.19	12.36–14.20	44.0	.0	Prime
16 100–499	473,757	218	129	12.62	.12	12.00–13.39	46.2	1.9	Prime
17 500–999	397,907	637	102	11.90	.15	11.07–12.19	80.0	7.5	Prime
18 1000 and over	18,667,128	6,518	25	11.10	.06	10.65–11.38	72.8	15.6	Fed funds
19 Floating rate (thousands of dollars)	23,864,126	210	123	12.46	.13	11.83–13.24	81.1	8.5	Prime
20 1–24	535,104	10	169	13.67	.11	12.96–14.37	75.3	1.4	Prime
21 25–49	588,253	34	165	13.47	.09	12.75–14.17	79.1	4.1	Prime
22 50–99	1,004,307	67	159	13.24	.07	12.68–13.80	82.5	2.7	Prime
23 100–499	3,911,973	199	154	13.01	.05	12.19–13.52	84.2	6.0	Prime
24 500–999	1,960,014	669	173	12.76	.08	12.13–13.24	87.7	7.9	Prime
25 1000 and over	15,864,476	4,624	101	12.16	.14	11.09–13.24	79.7	9.9	Prime
			Months						
26 **Total long term**	**4,188,833**	**228**	**46**	**12.76**	**.10**	**12.11–13.65**	**65.2**	**8.0**	**Prime**
27 Fixed rate (thousands of dollars)	907,193	106	45	12.13	.30	10.86–13.30	62.1	19.6	None
28 1–99	143,759	18	36	13.16	.20	12.68–14.17	12.1	.2	Other
29 100–499	66,851	221	61	13.00	.27	11.79–13.80	44.5	1.6	Other
30 500–999	61,846	705	43	11.45	.61	10.25–13.65	55.8	9.3	None
31 1000 and over	634,737	3,863	46	11.88	.54	10.81–12.68	76.0	26.9	Foreign
32 Floating rate (thousands of dollars)	3,281,640	336	46	12.94	.11	12.13–13.65	66.0	4.8	Prime
33 1–99	171,887	25	49	13.74	.12	13.10–14.37	27.4	1.2	Prime
34 100–499	426,840	218	48	13.23	.13	12.68–13.80	48.4	17.4	Prime
35 500–999	176,796	674	48	12.71	.21	12.13–13.31	69.7	9.2	Prime
36 1000 and over	2,506,117	4,548	46	12.85	.16	12.13–13.65	71.4	2.6	Prime

Characteristic	Amount of loans (thousands of dollars)	Average size (thousands of dollars)	Days	Loan rate (percent)		Prime rate[10]	Loans made under commitment (percent)	Participation loans (percent)	Most common base pricing rate[6]
				Effective[3]	Nominal[9]				
LOANS MADE BELOW PRIME[11]									
37 Overnight[7]	8,510,957	6,992	*	10.89	10.34	11.50	64.2	16.6	
38 One month and under	5,347,703	2,429	16	10.96	10.42	11.51	77.6	9.8	
39 Over one month and under a year	3,996,237	344	97	11.00	10.50	11.57	83.8	18.1	
40 Demand[8]	5,658,433	2,064	*	10.90	10.42	11.52	64.9	6.3	
41 **Total short term**	**23,513,329**	**1,323**	**27**	**10.93**	**10.40**	**11.52**	**70.7**	**12.8**	
42 Fixed rate	17,225,971	1,446	23	10.91	10.39	11.51	71.2	16.1	
43 Floating rate	6,287,358	1,071	54	10.96	10.44	11.55	69.5	3.6	
			Months						
44 **Total long term**	**972,541**	**391**	**42**	**11.18**	**10.78**	**11.67**	**82.8**	**16.2**	
45 Fixed rate	459,540	291	46	10.96	10.60	11.59	75.4	17.3	
46 Floating rate	513,002	565	39	11.37	10.94	11.74	89.5	15.3	

For notes see end of table.

4.23 TERMS OF LENDING AT COMMERCIAL BANKS Survey of Loans Made, May 1-5, 1989[1]—Continued
A. Commercial and Industrial Loans—Continued

Characteristic	Amount of loans (thousands of dollars)	Average size (thousands of dollars)	Weighted average maturity[2]	Loan rate (percent): Weighted average effective[3]	Loan rate (percent): Standard error[4]	Loan rate (percent): Inter-quartile range[5]	Loans made under commitment (percent)	Participation loans (percent)	Most common base pricing rate[6]
			Days						
LARGE BANKS									
1 Overnight[7]	7,378,179	6,680	*	10.99	.13	10.59–11.18	63.1	19.9	Fed funds
2 One month and under	5,118,295	3,067	17	11.26	.20	10.68–11.54	78.3	12.8	Domestic
3 Fixed rate	3,798,187	4,085	18	11.17	.14	10.68–11.44	72.8	10.8	Domestic
4 Floating rate	1,320,108	1,786	16	11.51	.43	10.46–12.19	94.4	18.5	Domestic
5 Over one month and under a year	5,448,135	818	112	11.81	.09	10.79–13.03	82.0	20.2	Prime
6 Fixed rate	3,157,624	1,448	92	11.43	.20	10.61–12.08	80.4	23.3	Other
7 Floating rate	2,290,511	512	139	12.33	.14	11.47–13.25	84.3	16.0	Prime
8 Demand[8]	11,829,673	603	*	12.11	.15	10.95–13.10	75.5	6.5	Prime
9 Fixed rate	1,220,780	2,130	*	11.19	.21	10.68–11.51	86.9	7.2	Domestic
10 Floating rate	10,608,893	557	*	12.22	.16	11.09–13.24	74.2	6.5	Prime
11 Total short term	**29,774,281**	**1,025**	**39**	**11.63**	**.08**	**10.75–12.19**	**74.1**	**13.4**	**Prime**
12 Fixed rate (thousands of dollars)	15,554,686	3,252	25	11.14	.11	10.65–11.42	70.8	17.3	Fed funds
13 1–24	10,587	10	94	13.13	.19	12.57–14.20	26.5	.1	Prime
14 25–49	11,775	33	82	13.07	.34	12.55–13.73	23.0	.0	Prime
15 50–99	21,443	67	67	12.98	.34	12.47–13.65	47.7	.3	Prime
16 100–499	143,711	223	55	12.53	.18	11.74–13.31	69.8	3.7	Prime
17 500–999	189,945	656	45	11.91	.27	11.21–12.47	82.7	5.3	None
18 1000 and over	15,177,225	7,222	25	11.11	.11	10.65–11.39	70.8	17.7	Fed funds
19 Floating rate (thousands of dollars)	14,219,596	586	94	12.17	.16	11.09–13.24	77.7	9.1	Prime
20 1–24	86,602	11	156	13.49	.21	12.68–14.37	79.1	.4	Prime
21 25–49	124,038	34	161	13.34	.17	12.68–13.88	79.8	.8	Prime
22 50–99	251,191	67	151	13.23	.13	12.55–13.80	82.1	1.0	Prime
23 100–499	1,311,132	210	142	12.88	.07	12.13–13.31	85.8	3.9	Prime
24 500–999	840,066	669	147	12.70	.08	12.13–13.24	90.1	9.1	Prime
25 1000 and over	11,606,566	6,360	85	12.00	.17	10.88–13.10	75.8	10.0	Prime
			Months						
26 Total long term	**2,358,090**	**1,153**	**48**	**12.69**	**.18**	**11.87–13.65**	**84.8**	**4.7**	**Prime**
27 Fixed rate (thousands of dollars)	443,239	1,177	54	11.81	.58	10.62–12.17	85.8	13.9	Foreign
28 1–99	4,949	23	45	13.70	.24	12.50–14.94	30.3	.0	None
29 100–499	14,705	228	54	12.97	.15	11.79–13.95	24.4	.0	Prime
30 500–999	15,900	782	56	12.31	1.12	11.46–13.66	73.4	16.0	None
31 1000 and over	407,684	5,409	54	11.73	1.08	10.44–12.03	89.2	14.5	Foreign
32 Floating rate (thousands of dollars)	1,914,851	1,147	47	12.89	.20	12.13–13.65	84.6	2.6	Prime
33 1–99	28,490	32	36	13.79	.21	12.68–14.37	70.8	1.4	Prime
34 100–499	107,171	223	46	12.89	.16	12.13–13.52	77.5	8.4	Prime
35 500–999	79,081	697	50	12.67	.44	12.01–13.51	83.2	7.7	Prime
36 1000 and over	1,700,110	8,663	47	12.89	.25	12.13–13.65	85.3	2.0	Prime
			Days	Loan rate (percent): Effective[3]	Loan rate (percent): Nominal[9]	Prime rate[10]			
LOANS MADE BELOW PRIME[11]									
37 Overnight[7]	6,860,977	8,039	*	10.89	10.34	11.50	60.9	20.0	
38 One month and under	4,464,955	6,140	16	10.97	10.43	11.50	76.5	10.5	
39 Over one month and under a year	3,240,337	4,263	96	10.92	10.42	11.50	85.5	20.4	
40 Demand[8]	4,585,870	4,950	*	10.88	10.42	11.50	58.0	3.2	
41 Total short term	**19,152,139**	**5,862**	**27**	**10.91**	**10.39**	**11.50**	**68.0**	**13.9**	
42 Fixed rate	13,739,303	5,947	24	10.92	10.40	11.50	68.9	18.1	
43 Floating rate	5,412,836	5,655	46	10.90	10.38	11.50	65.8	3.1	
			Months						
44 Total long term	**663,859**	**3,156**	**47**	**11.03**	**10.70**	**11.50**	**90.9**	**12.1**	
45 Fixed rate	294,376	3,184	51	11.03	10.72	11.50	86.2	19.1	
46 Floating rate	369,482	3,134	43	11.03	10.68	11.50	94.7	6.5	

For notes see end of table.

4.23—Continued
A. Commercial and Industrial Loans—Continued

Characteristic	Amount of loans (thousands of dollars)	Average size (thousands of dollars)	Weighted average maturity[2]	Loan rate (percent)			Loans made under commitment (percent)	Participation loans (percent)	Most common base pricing rate[6]
			Days	Weighted average effective[3]	Standard error[4]	Interquartile range[5]			
OTHER BANKS									
1 Overnight[7]	1,669,868	1,847	*	10.92	.12	10.65–11.00	77.7	2.2	Fed funds
2 One month and under	1,399,462	146	18	11.74	.13	10.86–12.69	74.0	2.6	Prime
3 Fixed rate	834,467	157	16	11.26	.16	10.72–11.61	72.1	2.6	None
4 Floating rate	564,995	132	22	12.46	.24	11.62–13.25	76.9	2.5	Prime
5 Over one month and under a year	3,981,359	52	172	12.83	.07	12.13–13.47	67.6	8.0	Prime
6 Fixed rate	1,425,769	38	140	12.46	.14	11.23–13.31	54.8	1.6	Prime
7 Floating rate	2,555,590	65	191	13.04	.05	12.19–13.60	74.7	11.6	Prime
8 Demand[8]	7,179,618	148	*	12.71	.10	12.13–13.24	91.5	8.2	Prime
9 Fixed rate	741,141	261	*	11.05	.20	10.58–11.33	91.2	23.4	Domestic
10 Floating rate	6,438,478	141	*	12.90	.09	12.13–13.31	91.5	6.4	Prime
11 Total short term	**14,230,307**	**104**	**101**	**12.44**	**.13**	**11.43–13.24**	**81.5**	**6.9**	**Prime**
12 Fixed rate (thousands of dollars)	4,585,777	98	56	11.48	.12	10.65–11.92	71.5	5.6	Fed funds
13 1–24	244,330	7	97	13.55	.19	12.64–14.65	20.6	.3	Other
14 25–49	125,033	32	119	13.51	.31	12.96–14.00	25.7	.0	Other
15 50–99	188,503	66	146	13.13	.18	12.36–14.20	43.6	.0	Prime
16 100–499	330,046	215	160	12.66	.13	12.01–13.65	35.9	1.1	Prime
17 500–999	207,962	620	152	11.90	.15	11.06–12.12	77.5	9.5	Prime
18 1000 and over	3,489,903	4,578	27	11.03	.06	10.65–11.21	81.2	6.6	Fed funds
19 Floating rate (thousands of dollars)	9,644,531	108	156	12.90	.07	12.13–13.37	86.2	7.5	Prime
20 1–24	448,502	9	170	13.70	.09	12.96–14.37	74.5	1.6	Prime
21 25–49	464,214	34	165	13.51	.07	12.96–14.20	78.9	4.9	Prime
22 50–99	753,116	66	160	13.25	.04	12.68–13.80	82.6	3.2	Prime
23 100–499	2,600,841	194	158	13.08	.03	12.26–13.65	83.4	7.1	Prime
24 500–999	1,119,948	669	185	12.81	.13	12.13–13.24	86.0	7.1	Prime
25 1000 and over	4,257,909	2,651	140	12.59	.20	12.13–13.24	90.6	9.5	Prime
			Months						
26 Total long term	**1,830,743**	**112**	**44**	**12.86**	**.11**	**12.13–13.52**	**39.9**	**12.3**	**Prime**
27 Fixed rate (thousands of dollars)	463,954	56	37	12.44	.20	11.13–13.59	39.5	25.0	None
28 1–99	138,809	18	35	13.14	.34	12.68–14.09	11.4	.2	Other
29 100–499	52,146	219	62	13.01	.54	11.71–13.80	50.1	2.0	Other
30 500–999	45,947	681	38	11.16	.70	10.25–13.65	49.7	7.0	None
31 1000 and over	227,052	2,553	31	12.14	.32	10.86–13.59	52.2	49.1	None
32 Floating rate (thousands of dollars)	1,366,789	169	46	13.00	.11	12.13–13.52	40.0	8.0	Prime
33 1–99	143,397	23	51	13.73	.09	13.10–14.37	18.7	1.2	Prime
34 100–499	319,669	216	48	13.34	.16	12.68–13.92	38.6	20.4	Prime
35 500–999	97,715	657	46	12.75	.22	12.13–13.24	58.7	10.4	Prime
36 1000 and over	806,007	2,271	45	12.76	.17	12.13–13.37	42.1	3.9	Prime
			Days	Loan rate (percent)		Prime rate[10]			
				Effective[3]	Nominal[9]				
LOANS MADE BELOW PRIME[11]									
37 Overnight[7]	1,649,980	4,534	*	10.88	10.33	11.50	78.0	2.3	
38 One month and under	882,748	599	15	10.92	10.38	11.57	83.3	6.0	
39 Over one month and under a year	755,900	70	99	11.35	10.81	11.88	76.6	7.8	
40 Demand[8]	1,072,562	591	*	10.96	10.45	11.59	94.4	19.3	
41 Total short term	**4,361,190**	**301**	**27**	**10.99**	**10.45**	**11.60**	**82.9**	**8.2**	
42 Fixed rate	3,486,668	363	18	10.90	10.36	11.55	80.4	8.4	
43 Floating rate	874,522	178	83	11.36	10.80	11.82	92.8	7.2	
			Months						
44 Total long term	**308,683**	**135**	**33**	**11.51**	**10.94**	**12.02**	**65.4**	**25.1**	
45 Fixed rate	165,164	111	37	10.84	10.37	11.74	56.1	14.0	
46 Floating rate	143,519	182	28	12.27	11.61	12.35	76.1	37.8	

For notes see end of table.

4.23 TERMS OF LENDING AT COMMERCIAL BANKS Survey of Loans Made, May 1–5, 1989[1]—Continued
B. Construction and Land Development Loans[1]

Characteristic	Amount of loans (thousands of dollars)	Average size (thousands of dollars)	Weighted average maturity (months)[3]	Loan rate (percent): Weighted average effective[4]	Loan rate (percent): Standard error[5]	Loan rate (percent): Interquartile range[6]	Loans made under commitment (percent)	Participation loans (percent)
ALL BANKS								
1 **Total**	**2,741,952**	**163**	**7**	**12.60**	**.11**	**12.06–13.24**	**93.2**	**32.2**
2 Fixed rate (thousands of dollars)	978,562	270	3	11.89	.25	11.51–12.13	93.4	37.3
3 1–24	15,089	7	18	13.58	.34	12.47–14.37	51.8	.1
4 25–49	17,117	34	19	14.22	.41	12.68–14.93	94.4	.0
5 50–99	22,590	72	19	12.70	.28	12.13–13.52	55.7	1.7
6 100–499	67,082	168	27	12.94	.43	12.13–14.93	85.4	2.3
7 500 and over	856,685	8,658	1	11.71	.28	11.46–12.06	95.7	42.3
8 Floating rate (thousands of dollars)	1,763,389	134	9	12.99	.09	12.68–13.24	93.1	29.4
9 1–24	77,455	9	10	13.65	.09	13.03–14.17	88.0	1.4
10 25–49	64,934	34	12	13.21	.07	12.68–13.65	90.7	1.7
11 50–99	75,801	68	15	13.42	.10	12.96–13.88	81.8	13.4
12 100–499	285,173	217	16	13.24	.05	12.96–13.52	82.9	9.5
13 500 and over	1,260,027	3,000	8	12.85	.09	12.55–13.19	96.5	37.9
By type of construction								
14 Single family	408,552	41	12	13.38	.11	12.96–13.80	84.1	4.4
15 Multifamily	113,521	116	8	13.43	.16	12.96–13.77	93.8	3.3
16 Nonresidential	2,219,879	375	6	12.41	.13	11.51–12.82	94.8	38.8
LARGE BANKS[13]								
1 **Total**	**2,035,329**	**1,019**	**5**	**12.35**	**.10**	**11.51–12.68**	**96.6**	**41.5**
2 Fixed rate (thousands of dollars)	858,141	4,036	2	11.70	.26	11.46–12.06	95.3	42.4
3 1–24	643	11	20	12.29	.35	11.85–12.91	64.1	.0
4 25–49	832	34	12	11.98	.46	11.71–12.68	66.5	.0
5 50–99	*	*	*	*	*	*	*	*
6 100–499	5,884	226	15	11.93	.46	11.41–12.46	58.7	26.6
7 500 and over	849,880	9,591	1	11.70	.32	11.46–12.06	95.7	42.7
8 Floating rate (thousands of dollars)	1,177,188	660	8	12.81	.13	12.55–12.96	97.6	40.9
9 1–24	5,581	11	11	13.37	.11	12.96–13.80	89.1	3.3
10 25–49	10,947	35	16	13.33	.09	12.96–13.80	89.6	3.9
11 50–99	17,660	71	14	13.23	.14	12.68–13.63	96.1	6.7
12 100–499	109,892	233	17	13.13	.08	12.68–13.52	96.4	11.9
13 500 and over	1,033,107	4,209	8	12.77	.15	12.55–12.96	97.9	45.1
By type of construction								
14 Single family	103,199	184	11	13.13	.09	12.96–13.24	80.4	5.7
15 Multifamily	27,288	144	8	13.59	.23	13.24–13.80	84.5	2.9
16 Nonresidential	1,904,902	1,528	5	12.28	.08	11.51–12.68	97.7	44.0
OTHER BANKS								
1 **Total**	**706,623**	**48**	**14**	**13.32**	**.06**	**12.96–13.80**	**83.3**	**5.2**
2 Fixed rate (thousands of dollars)	120,422	35	23	13.20	.33	12.13–14.93	79.6	.3
3 1–24	14,466	6	18	13.64	.48	12.51–14.37	51.2	.1
4 25–49	16,285	34	20	14.33	.63	13.24–14.93	95.8	.0
5 50–99	21,688	72	19	12.74	.41	12.13–14.17	56.4	1.8
6 100–499	61,198	164	32	13.04	.77	12.13–14.93	88.0	.0
7 500 and over	*	*	*	*	*	*	*	*
8 Floating rate (thousands of dollars)	586,201	52	12	13.34	.03	12.96–13.80	84.0	6.2
9 1–24	71,873	9	10	13.68	.14	13.03–14.20	88.0	1.3
10 25–49	53,987	34	11	13.19	.11	12.26–13.65	90.9	1.2
11 50–99	58,141	68	15	13.48	.14	12.96–13.88	77.4	15.4
12 100–499	175,281	208	15	13.30	.07	12.96–13.80	74.5	8.0
13 500 and over	226,919	1,300	11	13.26	.07	12.96–13.77	90.3	5.2
By type of construction								
14 Single family	305,353	33	12	13.47	.21	12.96–13.88	85.3	4.0
15 Multifamily	86,293	109	8	13.38	.23	12.96–13.77	96.7	3.4
16 Nonresidential	314,977	67	18	13.15	.12	12.68–13.80	77.7	6.9

For notes see end of table.

4.23—Continued
C. Loans to Farmers[12]

Characteristic	Size class of loans (thousands)						
	All sizes	$1–9	$10–24	$25–49	$50–99	$100–249	$250 and over
All Banks							
1 Amount of loans (thousands of dollars)	$ 1,294,324	$ 146,990	$ 184,720	$ 130,554	$ 208,631	$ 252,758	$ 370,670
2 Number of loans	62,312	40,498	12,617	3,838	3,059	1,713	587
3 Weighted average maturity (months)[2]	8.9	8.0	9.4	9.1	12.7	8.1	6.7
4 Weighted average interest rate (percent)[3]	12.86	13.05	12.85	12.99	13.18	13.33	12.23
5 Standard error[4]	.56	.35	.33	.28	.48	.41	.92
6 Interquartile range[5]	12.21–13.52	12.59–13.80	12.27–13.56	12.19–13.52	12.47–14.09	12.60–13.53	12.01–12.96
By purpose of loan							
7 Feeder livestock	12.92	13.74	12.81	12.68	13.37	13.15	12.59
8 Other livestock	12.79	13.30	13.38	12.97	12.98	*	*
9 Other current operating expenses	12.89	12.87	12.73	13.07	13.38	13.77	12.16
10 Farm machinery and equipment	13.18	13.41	13.07	*	*	*	*
11 Farm real estate	12.06	13.56	13.03	*	*	*	*
12 Other	12.89	13.65	13.11	13.73	13.22	13.18	11.92
Percentage of amount of loans							
13 With floating rates	51.8	57.1	46.9	53.4	46.3	49.5	56.3
14 Made under commitment	54.0	53.3	45.9	45.9	46.1	48.6	69.2
By purpose of loan							
15 Feeder livestock	17.4	6.9	9.4	14.9	16.3	22.4	23.8
16 Other livestock	9.2	6.4	9.1	16.6	6.4	*	*
17 Other current operating expenses	55.9	71.8	67.0	56.1	52.0	45.4	53.2
18 Farm machinery and equipment	2.8	6.9	5.4	*	*	*	*
19 Farm real estate	4.6	1.7	3.5	*	*	*	*
20 Other	10.1	6.2	5.5	8.0	14.7	12.9	10.3
Large Banks[12]							
1 Amount of loans (thousands of dollars)	$ 381,270	$ 13,317	$ 21,522	$ 22,474	$ 30,525	$ 58,342	$ 235,090
2 Number of loans	6,482	3,235	1,460	657	465	386	279
3 Weighted average maturity (months)[2]	9.3	7.6	9.5	10.5	8.7	12.6	8.6
4 Weighted average interest rate (percent)[3]	12.78	13.92	13.68	13.52	13.23	13.22	12.40
5 Standard error[4]	.53	.30	.28	.17	.41	.26	.42
6 Interquartile range[5]	12.13–13.52	13.24–14.45	13.03–14.37	13.03–14.17	12.75–13.80	12.75–13.65	12.01–13.10
By purpose of loan							
7 Feeder livestock	12.65	13.13	13.29	12.83	13.07	13.06	12.53
8 Other livestock	12.68	14.12	13.51	14.02	*	*	*
9 Other current operating expenses	13.18	13.98	13.68	13.59	13.35	13.35	12.84
10 Farm machinery and equipment	13.61	13.65	13.72	*	*	*	*
11 Farm real estate	11.29	14.70	13.60	*	*	*	*
12 Other	12.60	13.86	13.79	13.49	13.08	13.31	11.74
Percentage of amount of loans							
13 With floating rates	81.1	89.4	91.4	92.7	90.4	90.1	75.1
14 Made under commitment	84.0	84.2	84.6	86.7	82.7	90.5	82.2
By purpose of loan							
15 Feeder livestock	28.8	5.7	5.2	11.1	18.5	27.3	35.7
16 Other livestock	7.9	4.0	2.3	6.8	*	*	*
17 Other current operating expenses	37.5	71.3	66.8	54.4	44.0	32.1	31.7
18 Farm machinery and equipment	1.7	3.6	4.6	*	*	*	*
19 Farm real estate	5.3	1.4	2.9	*	*	*	*
20 Other	18.9	14.0	18.4	24.4	30.1	30.1	14.4
Other Banks[12]							
1 Amount of loans (thousands of dollars)	$ 913,054	$ 133,673	$ 163,198	$ 108,080	$ 178,107	$ 194,415	$ 135,581
2 Number of loans	55,830	37,263	11,157	3,181	2,595	1,326	308
3 Weighted average maturity (months)[2]	8.8	8.0	9.4	8.9	13.2	7.4	5.0
4 Weighted average interest rate (percent)[3]	12.89	12.97	12.74	12.88	13.18	13.37	11.93
5 Standard error[4]	.15	.17	.16	.22	.24	.31	.82
6 Interquartile range[5]	12.24–13.50	12.55–13.80	12.26–13.45	12.11–13.31	12.47–14.45	12.60–13.53	10.43–12.52
By purpose of loan							
7 Feeder livestock	13.19	13.79	12.78	12.65	13.43	*	*
8 Other livestock	12.83	13.25	13.38	12.89	*	*	*
9 Other current operating expenses	12.82	12.76	12.60	12.96	13.37	13.85	*
10 Farm machinery and equipment	13.08	13.40	13.00	*	*	*	*
11 Farm real estate	12.44	*	*	*	*	*	*
12 Other	13.25	13.59	12.68	*	*	*	*

For notes see end of table.

4.23 TERMS OF LENDING AT COMMERCIAL BANKS Survey of Loans Made, May 1–5, 1989[1]—Continued
C. Loans to Farmers[12]—Continued

Characteristic	Size class of loans (thousands)						
	All sizes	$1–9	$10–24	$25–49	$50–99	$100–249	$250 and over
Percentage of amount of loans							
13 With floating rates	39.6	53.9	41.1	45.2	38.7	37.3	*
14 Made under commitment	41.4	50.2	40.8	37.4	39.9	36.0	*
By purpose of loan							
15 Feeder livestock	12.7	7.1	10.0	15.7	15.9	*	*
16 Other livestock	9.7	6.6	10.0	18.6	*	*	*
17 Other current operating expenses	63.5	71.9	67.1	56.4	53.4	49.4	*
18 Farm machinery and equipment	3.2	7.2	5.5	*	*	*	*
19 Farm real estate	4.4	*	*	*	*	*	*
20 Other	6.5	5.5	3.8	*	*	*	*

▲Note. These data should have appeared in the November 1989 issue but were inadvertently replaced with August 7–11, 1989 data.

*Fewer than 10 sample loans.

1. The survey of terms of bank lending to business collects data on gross loan extensions made during the first full business week in the mid-month of each quarter by a sample of 340 commercial banks of all sizes. A subsample of 250 banks also report loans to farmers. The sample data are blown up to estimate the lending terms at all insured commercial banks during that week. The estimated terms of bank lending are not intended for use in collecting the terms of loans extended over the entire quarter or residing in the portfolios of those banks. Mortgage loans, purchased loans, foreign loans, and loans of less than $1,000 are excluded from the survey.

As of Dec. 31, 1988, assets of most of the large banks were at least $6.0 billion. For all insured banks total assets averaged $220 million.

2. Average maturities are weighted by loan size and exclude demand loans.

3. Effective (compounded) annual interest rates are calculated from the stated rate and other terms of the loan and weighted by loan size.

4. The chances are about two out of three that the average rate shown would differ by less than this amount from the average rate that would be found by a complete survey of lending at all banks.

5. The interquartile range shows the interest rate range that encompasses the middle 50 percent of the total dollar amount of loans made.

6. The most common base rate is that rate used to price the largest dollar volume of loans. Base pricing rates include the prime rate (sometimes referred to as a bank's "basic" or "reference" rate); the federal funds rate; domestic money market rates other than the federal funds rate; foreign money market rates; and other base rates not included in the foregoing classifications.

7. Overnight loans are loans that mature on the following business day.

8. Demand loans have no stated date of maturity.

9. Nominal (not compounded) annual interest rates are calculated from survey data on the stated rate and other terms of the loan and weighted by loan size.

10. The prime rate reported by each bank is weighted by the volume of loans extended and then averaged.

11. The proportion of loans made at rates below prime may vary substantially from the proportion of such loans outstanding in banks' portfolios.

12. Among banks reporting loans to farmers (Table B), most "large banks" (survey strata 1 to 2) had over $20 million in farm loans, and most "other banks" (survey strata 3 to 5) had farm loans below $20 million.

The survey of terms of bank lending to farmers now includes loans secured by farm real estate. In addition, the categories describing the purpose of farm loans have now been expanded to include "purchase or improve farm real estate." In previous surveys, the purpose of such loans was reported as "other."

4.23 TERMS OF LENDING AT COMMERCIAL BANKS Survey of Loans Made, November 6–10, 1989[1]

A. Commercial and Industrial Loans

Characteristic	Amount of loans (thousands of dollars)	Average size (thousands of dollars)	Weighted average maturity[2]	Loan rate (percent)			Loans made under commitment (percent)	Participation loans (percent)	Most common base pricing rate[6]
			Days	Weighted average effective[3]	Standard error[4]	Interquartile range[5]			
ALL BANKS									
1 Overnight[7]	13,762,089	5,861	*	9.56	.41	9.21–9.73	54.7	8.7	Other
2 One month and under	7,774,661	806	19	10.17	.10	9.52–10.56	84.2	8.8	Domestic
3 Fixed rate	4,832,909	983	21	10.18	.08	9.61–10.34	79.6	11.8	Domestic
4 Floating rate	2,941,751	623	16	10.15	.20	9.33–11.02	91.8	4.0	Domestic
5 Over one month and under a year	9,856,562	138	153	11.11	.17	10.03–12.13	80.8	14.0	Prime
6 Fixed rate	4,307,635	130	131	10.72	.18	9.86–11.66	75.9	13.0	Other
7 Floating rate	5,548,927	145	170	11.42	.16	10.38–12.19	84.6	14.7	Prime
8 Demand[8]	12,651,826	217	*	11.24	.14	10.47–12.19	86.8	6.4	Prime
9 Fixed rate	1,869,578	419	*	10.09	.27	9.25–10.52	78.0	11.7	Domestic
10 Floating rate	10,782,248	200	*	11.44	.15	11.02–12.40	88.4	5.4	Prime
11 Total short term	**44,045,138**	**311**	**53**	**10.50**	**.16**	**9.46–11.30**	**75.0**	**9.2**	**Prime**
12 Fixed rate (thousands of dollars)	24,769,253	554	30	9.92	.14	9.31–10.23	65.0	10.3	Other
13 1–24	221,280	7	111	12.67	.15	11.84–13.44	24.0	1.6	Other
14 25–49	125,337	33	120	12.46	.18	12.00–12.89	28.0	.1	Prime
15 50–99	209,130	66	146	12.01	.24	11.50–13.12	18.2	6.6	Prime
16 100–499	527,537	207	76	11.56	.18	10.73–12.68	44.2	3.3	Prime
17 500–999	437,327	697	79	10.60	.14	9.96–11.07	55.6	5.7	Other
18 1000 and over	23,248,642	7,752	26	9.81	.13	9.28–10.07	66.7	10.7	Other
19 Floating rate (thousands of dollars)	19,275,885	199	117	11.24	.15	10.26–12.19	87.8	7.9	Prime
20 1–24	469,932	10	153	12.64	.09	12.01–13.24	73.8	.6	Prime
21 25–49	501,634	34	146	12.45	.05	11.85–13.24	79.5	1.6	Prime
22 50–99	921,658	66	160	12.26	.05	11.57–12.75	82.2	3.6	Prime
23 100–499	3,432,317	203	153	11.95	.06	11.07–12.64	85.3	6.2	Prime
24 500–999	1,577,865	673	156	11.58	.06	11.02–12.15	90.7	9.4	Prime
25 1000 and over	12,372,478	4,727	100	10.82	.15	9.73–11.67	89.4	9.0	Prime
			Months						
26 Total long term	**5,180,184**	**260**	**43**	**11.36**	**.15**	**10.92–12.19**	**74.2**	**12.2**	**Prime**
27 Fixed rate (thousands of dollars)	910,099	114	49	10.68	.29	9.37–11.63	54.1	.9	Other
28 1–99	153,314	22	41	12.28	.23	11.57–13.23	15.8	.3	Other
29 100–499	126,685	181	46	12.08	.18	11.30–12.75	23.9	3.2	Prime
30 500–999	38,287	670	76	11.32	.19	10.97–12.13	39.1	.0	Other
31 1000 and over	591,813	4,339	50	9.93	.24	9.33–10.98	71.4	.7	Other
32 Floating rate (thousands of dollars)	4,270,086	359	41	11.51	.15	11.02–12.19	78.5	14.6	Prime
33 1–99	207,194	25	52	12.48	.12	11.85–13.24	52.2	2.4	Prime
34 100–499	520,021	206	38	12.23	.16	11.30–12.68	65.2	11.2	Prime
35 500–999	376,052	628	41	11.89	.13	11.07–12.75	66.8	12.9	Prime
36 1000 and over	3,166,819	4,987	41	11.28	.12	10.92–12.13	83.8	16.1	Prime
			Days	Loan rate (percent) Effective[3]	Nominal[9]	Prime rate[10]			
LOANS MADE BELOW PRIME[11]									
37 Overnight[7]	13,280,063	7,900	*	9.48	9.06	10.50	53.8	8.9	
38 One month and under	6,097,250	2,836	17	9.77	9.34	10.51	86.7	7.6	
39 Over one month and under a year	4,347,067	548	134	9.87	9.47	10.57	91.0	16.1	
40 Demand[8]	3,726,833	1,264	*	9.68	9.29	10.54	79.0	10.2	
41 Total short term	**27,451,213**	**1,865**	**30**	**9.64**	**9.22**	**10.52**	**70.4**	**9.9**	
42 Fixed rate	21,452,877	2,339	22	9.61	9.19	10.51	64.7	10.7	
43 Floating rate	5,998,335	1,081	70	9.73	9.32	10.55	90.8	7.1	
			Months						
44 Total long term	**1,402,820**	**541**	**45**	**9.79**	**9.40**	**10.63**	**82.8**	**12.0**	
45 Fixed rate	528,022	282	44	9.57	9.23	10.62	73.0	14.3	
46 Floating rate	874,798	1,210	46	9.92	9.51	10.63	88.7	10.6	

For notes see end of table.

4.23 TERMS OF LENDING AT COMMERCIAL BANKS Survey of Loans Made, November 6–10, 1989[1]—Continued
A. Commercial and Industrial Loans—Continued

Characteristic	Amount of loans (thousands of dollars)	Average size (thousands of dollars)	Weighted average maturity[2]	Loan rate (percent)			Loans made under commitment (percent)	Participation loans (percent)	Most common base pricing rate[6]
			Days	Weighted average effective[3]	Standard error[4]	Interquartile range[5]			
LARGE BANKS									
1 Overnight[7]	11,804,163	8,363	*	9.56	.04	9.21–9.74	47.6	10.1	Other
2 One month and under	6,223,515	4,567	19	10.07	.16	9.49–10.24	85.3	7.1	Domestic
3 Fixed rate	3,992,273	5,795	22	10.13	.14	9.54–10.31	80.5	9.2	Domestic
4 Floating rate	2,231,241	3,311	13	9.95	.36	9.01–10.22	93.8	3.4	Domestic
5 Over one month and under a year	5,911,897	1,053	150	10.72	.17	9.92–11.66	90.5	18.6	Prime
6 Fixed rate	2,899,355	3,685	132	10.35	.06	9.86–10.89	88.7	18.5	Other
7 Floating rate	3,012,542	624	167	11.08	.23	10.12–12.13	92.3	18.8	Prime
8 Demand[8]	7,851,684	438	*	11.01	.19	9.96–12.13	82.8	7.5	Prime
9 Fixed rate	1,235,547	685	*	9.97	.24	9.12–10.50	69.8	16.0	Domestic
10 Floating rate	6,616,137	411	*	11.20	.24	10.54–12.19	85.3	5.9	Prime
11 Total short term	**31,791,258**	**1,209**	**43**	**10.23**	**.15**	**9.38–11.02**	**71.7**	**10.5**	**Other**
12 Fixed rate (thousands of dollars)	19,928,382	4,254	26	9.82	.09	9.28–10.10	61.5	11.5	Other
13 1–24	8,623	10	100	12.02	.26	11.50–12.50	26.7	.0	Prime
14 25–49	10,820	32	76	11.70	.24	11.50–12.13	34.5	.0	Prime
15 50–99	20,247	66	126	11.59	.13	11.02–12.50	38.2	.0	Prime
16 100–499	141,106	227	57	10.93	.17	10.33–11.50	66.6	7.3	Prime
17 500–999	187,140	678	30	10.59	.21	9.73–11.25	70.1	6.1	Domestic
18 1000 and over	19,560,445	8,455	26	9.80	.08	9.28–10.06	61.5	11.6	Other
19 Floating rate (thousands of dollars)	11,862,876	549	102	10.94	.23	9.83–12.01	88.7	8.7	Prime
20 1–24	82,720	11	148	12.33	.17	11.57–13.24	76.7	.5	Prime
21 25–49	103,240	34	152	12.31	.09	11.57–12.96	84.8	1.0	Prime
22 50–99	222,580	66	146	12.10	.08	11.35–12.68	87.4	2.0	Prime
23 100–499	1,092,501	208	164	11.75	.06	11.02–12.19	89.6	4.2	Prime
24 500–999	631,503	671	153	11.57	.08	11.02–12.19	91.2	7.1	Prime
25 1000 and over	9,730,332	5,800	96	10.75	.25	9.68–11.63	88.6	9.6	Prime
			Months						
26 Total long term	**3,397,972**	**1,116**	**42**	**11.04**	**.19**	**10.12–12.01**	**86.3**	**13.5**	**Prime**
27 Fixed rate (thousands of dollars)	513,629	1,346	46	9.89	.35	9.20–10.22	68.8	.8	Fed funds
28 1–99	5,231	25	44	12.28	.27	11.57–13.31	25.6	2.7	None
29 100–499	12,841	217	45	11.66	.28	10.75–12.68	45.3	.0	None
30 500–999	10,995	599	45	11.39	.38	10.73–12.13	52.0	.0	Other
31 1000 and over	484,561	5,113	46	9.79	.33	9.20–10.22	70.3	.8	Fed funds
32 Floating rate (thousands of dollars)	2,884,343	1,083	41	11.25	.16	10.68–12.13	89.4	15.8	Prime
33 1–99	38,540	37	36	12.44	.19	11.57–12.96	79.9	4.4	Prime
34 100–499	208,403	230	38	11.90	.10	11.02–12.55	85.7	11.5	Prime
35 500–999	168,373	668	41	11.73	.10	11.02–12.19	84.4	15.8	Prime
36 1000 and over	2,469,027	5,486	41	11.14	.19	10.41–12.13	90.2	16.3	Prime
			Days	Loan rate (percent)		Prime rate[10]			
				Effective[3]	Nominal[9]				
LOANS MADE BELOW PRIME[11]									
37 Overnight[7]	11,325,433	9,380	*	9.47	9.05	10.50	46.2	10.5	
38 One month and under	5,185,025	7,563	17	9.76	9.33	10.50	86.7	5.3	
39 Over one month and under a year	3,350,076	5,168	131	9.84	9.45	10.50	92.3	19.2	
40 Demand[8]	2,918,581	3,163	*	9.68	9.29	10.50	74.2	11.7	
41 Total short term	**22,779,114**	**6,576**	**27**	**9.62**	**9.20**	**10.50**	**65.8**	**10.7**	
42 Fixed rate	17,847,501	7,285	22	9.60	9.19	10.50	59.2	11.8	
43 Floating rate	4,931,613	4,863	57	9.68	9.27	10.50	89.6	6.7	
			Months						
44 Total long term	**1,147,113**	**4,041**	**45**	**9.65**	**9.29**	**10.50**	**87.7**	**9.1**	
45 Fixed rate	403,745	3,362	40	9.41	9.11	10.50	79.2	17.6	
46 Floating rate	743,369	4,540	48	9.79	9.39	10.50	92.3	4.4	

For notes see end of table.

4.23—Continued

A. Commercial and Industrial Loans—Continued

Characteristic	Amount of loans (thousands of dollars)	Average size (thousands of dollars)	Weighted average maturity[2]	Loan rate (percent): Weighted average effective[3]	Loan rate (percent): Standard error[4]	Loan rate (percent): Interquartile range[5]	Loans made under commitment (percent)	Participation loans (percent)	Most common base pricing rate[6]
			Days						
OTHER BANKS									
1 Overnight[7]	1,957,926	2,090	*	9.55	.83	9.33–9.69	97.8	.0	Domestic
2 One month and under	1,551,146	187	20	10.59	.05	9.76–11.07	80.0	15.5	Prime
3 Fixed rate	840,636	199	17	10.42	.08	9.81–10.71	75.4	23.8	Foreign
4 Floating rate	710,510	175	22	10.79	.19	9.48–11.07	85.4	5.6	Prime
5 Over one month and under a year	3,944,665	60	158	11.69	.14	11.02–12.68	66.1	7.0	Prime
6 Fixed rate	1,408,280	44	129	11.47	.16	9.85–12.67	49.5	1.7	Prime
7 Floating rate	2,536,386	76	174	11.82	.14	11.02–12.68	75.3	9.9	Prime
8 Demand[8]	4,800,143	119	*	11.62	.06	11.02–12.55	93.4	4.6	Prime
9 Fixed rate	634,032	239	*	10.30	.51	9.33–10.88	94.1	3.3	Other
10 Floating rate	4,166,111	110	*	11.83	.06	11.07–12.55	93.3	4.8	Prime
11 Total short term	**12,253,880**	**106**	**88**	**11.18**	**.11**	**9.81–12.19**	**83.6**	**6.0**	**Prime**
12 Fixed rate (thousands of dollars)	4,840,871	121	47	10.36	.20	9.42–11.07	79.4	5.0	Domestic
13 1–24	212,657	7	111	12.70	.10	11.90–13.47	23.9	1.6	Other
14 25–49	114,516	33	120	12.53	.15	12.06–13.03	27.4	.1	Other
15 50–99	188,883	66	146	12.06	.45	11.57–13.24	16.1	7.3	Prime
16 100–499	386,431	201	80	11.79	.16	10.73–12.75	36.1	1.8	Prime
17 500–999	250,186	711	108	10.61	.21	9.97–11.07	44.8	5.3	Other
18 1000 and over	3,688,197	5,380	27	9.90	.26	9.35–10.07	94.3	5.6	Domestic
19 Floating rate (thousands of dollars)	7,413,009	98	141	11.72	.10	11.02–12.55	86.4	6.6	Prime
20 1–24	387,212	10	153	12.71	.06	12.13–13.31	73.1	0.7	Prime
21 25–49	398,394	34	145	12.49	.06	11.85–13.24	78.2	1.7	Prime
22 50–99	699,078	66	162	12.31	.05	11.63–12.75	80.5	4.0	Prime
23 100–499	2,339,816	200	150	12.04	.07	11.30–12.68	83.3	7.1	Prime
24 500–999	946,362	675	158	11.59	.11	11.05–12.15	90.3	11.0	Prime
25 1000 and over	2,642,146	2,811	120	11.08	.20	10.44–11.85	92.4	6.8	Prime
			Months						
26 Total long term	**1,782,213**	**106**	**44**	**11.96**	**.10**	**11.20–12.68**	**51.2**	**9.6**	**Prime**
27 Fixed rate (thousands of dollars)	396,470	52	52	11.70	.26	11.02–12.75	34.9	1.1	Other
28 1–99	148,082	21	41	12.28	.40	11.57–13.23	15.4	.2	Other
29 100–499	113,844	178	46	12.12	.23	11.35–12.96	21.5	3.6	Prime
30 500–999	27,292	704	89	11.29	.24	10.97–11.99	33.9	.0	Other
31 1000 and over	107,251	2,578	65	10.54	.30	9.80–11.35	76.2	.0	Other
32 Floating rate (thousands of dollars)	1,385,743	150	42	12.04	.18	11.25–12.68	55.9	12.1	Prime
33 1–99	168,654	24	56	12.49	.12	11.91–13.24	45.9	1.9	Prime
34 100–499	311,618	192	38	12.46	.28	11.57–12.96	51.5	11.0	Prime
35 500–999	207,678	600	42	12.01	.24	11.25–12.75	52.6	10.5	Prime
36 1000 and over	697,792	3,773	40	11.76	.11	11.07–12.19	61.3	15.4	Prime
			Days	Loan rate (percent): Effective[3]	Loan rate (percent): Nominal[9]	Prime rate[10]			
LOANS MADE BELOW PRIME[11]									
37 Overnight[7]	1,954,630	4,127	*	9.54	9.12	10.50	97.8	.0	
38 One month and under	912,225	623	15	9.85	9.40	10.55	86.3	20.5	
39 Over one month and under a year	996,991	137	146	9.98	9.56	10.78	86.5	5.6	
40 Demand[8]	808,252	399	*	9.70	9.27	10.70	96.1	4.7	
41 Total short term	**4,672,098**	**415**	**42**	**9.72**	**9.29**	**10.61**	**92.8**	**6.0**	
42 Fixed rate	3,605,376	536	23	9.65	9.22	10.55	91.8	5.3	
43 Floating rate	1,066,722	235	123	9.98	9.55	10.79	96.2	8.6	
			Months						
44 Total long term	**255,707**	**111**	**45**	**10.39**	**9.91**	**11.20**	**60.9**	**25.1**	
45 Fixed rate	124,278	71	55	10.09	9.63	11.00	52.7	3.5	
46 Floating rate	131,430	235	36	10.67	10.16	11.39	68.6	45.4	

For notes see end of table.

4.23 TERMS OF LENDING AT COMMERCIAL BANKS Survey of Loans Made, November 6–10, 1989[1]—Continued
B. Loans to Farmers[12]

Characteristic	Size class of loans (thousands)						
	All sizes	$1–9	$10–24	$25–49	$50–99	$100–249	$250 and over
All Banks							
1 Amount of loans (thousands of dollars)	$ 1,132,505	$ 110,182	$ 154,326	$ 197,356	$ 158,728	$ 205,328	$ 306,586
2 Number of loans	49,391	28,997	10,446	5,685	2,316	1,357	590
3 Weighted average maturity (months)[2]	8.0	6.9	6.9	8.8	9.0	8.1	8.0
4 Weighted average interest rate (percent)[3]	12.16	12.70	12.53	12.51	12.04	12.25	11.95
5 Standard error[4]	.50	.44	.20	.23	.23	.28	.58
6 Interquartile range[5]	11.50–12.75	12.19–13.21	12.01–13.05	11.96–13.03	11.56–12.69	11.67–12.84	11.02–12.08
By purpose of loan							
7 Feeder livestock	12.20	12.69	12.65	12.60	12.26	12.28	11.48
8 Other livestock	12.19	13.03	12.80	12.65	12.63	12.53	11.55
9 Other current operating expenses	12.08	12.63	12.45	12.45	11.53	12.18	11.39
10 Farm machinery and equipment	12.37	12.94	12.16	12.28	*	*	*
11 Farm real estate	12.26	12.23	12.61	12.22	11.17	*	*
12 Other	12.16	12.81	12.34	12.20	12.50	12.01	11.97
Percentage of amount of loans							
13 With floating rates	62.5	45.1	44.0	54.6	57.5	73.4	78.6
14 Made under commitment	55.9	42.0	40.4	51.1	41.8	62.7	74.5
By purpose of loan							
15 Feeder livestock	29.1	13.1	23.4	35.9	38.5	31.0	27.1
16 Other livestock	17.2	10.1	13.8	19.4	13.2	8.2	28.3
17 Other current operating expenses	37.1	61.8	50.8	29.3	33.2	33.9	30.7
18 Farm machinery and equipment	2.9	7.8	4.6	5.1	*	*	*
19 Farm real estate	5.1	2.1	2.1	7.6	3.6	*	*
20 Other	8.6	5.1	5.3	2.7	9.7	18.3	8.3
Large Banks[12]							
1 Amount of loans (thousands of dollars)	$ 500,097	$ 15,226	$ 29,809	$ 44,387	$ 48,331	$ 107,771	$ 254,674
2 Number of loans	9,018	3,920	1,989	1,251	711	708	440
3 Weighted average maturity (months)[2]	7.5	6.9	7.6	9.0	7.2	7.5	7.4
4 Weighted average interest rate (percent)[3]	11.77	12.74	12.49	12.31	12.18	11.97	11.38
5 Standard error[4]	.48	.43	.16	.21	.14	.16	.53
6 Interquartile range[5]	11.07–12.47	12.19–13.31	12.01–12.96	11.91–12.75	11.63–12.70	11.42–12.47	11.02–12.01
By purpose of loan							
7 Feeder livestock	11.76	12.58	12.54	12.43	12.06	11.90	11.33
8 Other livestock	11.33	12.87	12.64	12.78	12.30	*	11.14
9 Other current operating expenses	11.82	12.70	12.47	12.25	12.23	12.01	11.39
10 Farm machinery and equipment	12.32	13.30	12.13	*	*	*	*
11 Farm real estate	11.79	12.23	12.33	11.99	11.48	*	*
12 Other	12.09	12.88	12.51	11.97	12.40	11.92	12.03
Percentage of amount of loans							
13 With floating rates	85.7	85.5	86.2	88.7	87.4	92.1	82.1
14 Made under commitment	80.7	79.4	75.3	73.5	77.4	89.4	79.6
By purpose of loan							
15 Feeder livestock	27.7	13.0	25.1	37.2	28.2	31.9	25.4
16 Other livestock	14.9	5.0	6.9	5.3	3.4	*	25.4
17 Other current operating expenses	38.7	60.9	47.0	42.5	40.7	35.2	36.9
18 Farm machinery and equipment	1.4	5.0	3.0	*	*	*	*
19 Farm real estate	4.1	2.1	3.7	3.0	6.6	*	*
20 Other	13.1	14.1	14.3	9.9	19.2	24.5	7.5
Other Banks[12]							
1 Amount of loans (thousands of dollars)	$ 632,408	$ 94,956	$ 124,516	$ 152,969	$ 110,397	$ 97,557	*
2 Number of loans	40,374	25,078	8,457	4,434	1,605	650	*
3 Weighted average maturity (months)[2]	8.3	6.9	6.8	8.8	9.6	8.6	*
4 Weighted average interest rate (percent)[3]	12.46	12.70	12.54	12.57	11.99	12.55	*
5 Standard error[4]	.12	.07	.10	.09	.17	.23	*
6 Interquartile range[5]	11.97–13.03	12.19–13.16	12.01–13.10	12.00–13.10	10.88–12.68	11.91–12.89	*
By purpose of loan							
7 Feeder livestock	12.53	12.71	12.68	12.66	12.31	*	*
8 Other livestock	12.72	13.04	12.82	12.64	*	*	*
9 Other current operating expenses	12.30	12.62	12.44	12.55	11.11	*	*
10 Farm machinery and equipment	12.39	12.90	12.17	*	*	*	*
11 Farm real estate	12.52	12.22	*	12.24	*	*	*
12 Other	12.29	12.76	*	*	*	*	*

For notes see end of table.

4.23—Continued
B. Loans to Farmers[12]—Continued

Characteristic	Size class of loans (thousands)						
	All sizes	$1–9	$10–24	$25–49	$50–99	$100–249	$250 and over
Percentage of amount of loans							
13 With floating rates	44.2	38.6	33.9	44.7	44.5	52.7	*
14 Made under commitment	36.3	36.0	32.0	44.6	26.3	33.3	*
By purpose of loan							
15 Feeder livestock	30.1	13.1	23.0	35.5	43.0	*	*
16 Other livestock	19.1	10.9	15.5	23.5	*	*	*
17 Other current operating expenses	35.9	62.0	51.7	25.5	30.0	*	*
18 Farm machinery and equipment	4.0	8.3	5.0	*	*	*	*
19 Farm real estate	5.9	2.1	*	9.0	*	*	*
20 Other	5.0	3.6	*	*	*	*	*

*Fewer than 10 sample loans.

1. The survey of terms of bank lending to business collects data on gross loan extensions made during the first full business week in the mid-month of each quarter by a sample of 340 commercial banks of all sizes. A subsample of 250 banks also report loans to farmers. The sample data are blown up to estimate the lending terms at all insured commercial banks during that week. The estimated terms of bank lending are not intended for use in collecting the terms of loans extended over the entire quarter or residing in the portfolios of those banks. Mortgage loans, purchased loans, foreign loans, and loans of less than $1,000 are excluded from the survey.

As of Dec. 31, 1988, assets of most of the large banks were at least $6.0 billion. For all insured banks total assets averaged $220 million.

2. Average maturities are weighted by loan size and exclude demand loans.

3. Effective (compounded) annual interest rates are calculated from the stated rate and other terms of the loan and weighted by loan size.

4. The chances are about two out of three that the average rate shown would differ by less than this amount from the average rate that would be found by a complete survey of lending at all banks.

5. The interquartile range shows the interest rate range that encompasses the middle 50 percent of the total dollar amount of loans made.

6. The most common base rate is that rate used to price the largest dollar volume of loans. Base pricing rates include the prime rate (sometimes referred to as a bank's "basic" or "reference" rate); the federal funds rate; domestic money market rates other than the federal funds rate; foreign money market rates; and other base rates not included in the foregoing classifications.

7. Overnight loans are loans that mature on the following business day.

8. Demand loans have no stated date of maturity.

9. Nominal (not compounded) annual interest rates are calculated from survey data on the stated rate and other terms of the loan and weighted by loan size.

10. The prime rate reported by each bank is weighted by the volume of loans extended and then averaged.

11. The proportion of loans made at rates below prime may vary substantially from the proportion of such loans outstanding in banks' portfolios.

12. Among banks reporting loans to farmers (Table B), most "large banks" (survey strata 1 to 2) had over $20 million in farm loans, and most "other banks" (survey strata 3 to 5) had farm loans below $20 million.

The survey of terms of bank lending to farmers now includes loans secured by farm real estate. In addition, the categories describing the purpose of farm loans have now been expanded to include "purchase or improve farm real estate." In previous surveys, the purpose of such loans was reported as "other."

4.30 ASSETS AND LIABILITIES of U.S. Branches and Agencies of Foreign Banks, September 30, 1989[1]

Millions of dollars

Item	All states[2] Total including IBFs	All states[2] IBFs only[3]	New York Total including IBFs	New York IBFs only[3]	California Total including IBFs	California IBFs only[3]	Illinois Total including IBFs	Illinois IBFs only[3]
1 **Total assets**[4]	**561,461**	**264,602**	**414,924**	**210,081**	**78,029**	**28,788**	**41,394**	**16,091**
2 Claims on nonrelated parties	504,359	214,215	372,026	170,991	70,893	22,972	40,955	14,812
3 Cash and balances due from depository institutions	144,548	123,285	120,685	102,570	9,858	8,939	12,168	10,651
4 Cash items in process of collection and unposted debits	836	0	783	0	31	0	5	0
5 Currency and coin (U.S. and foreign)	23	n.a.	17	n.a.	2	n.a.	1	n.a.
6 Balances with depository institutions in United States	80,380	61,522	67,035	50,963	5,419	4,686	7,114	5,638
7 U.S. branches and agencies of other foreign banks (including their IBFs)	70,469	58,428	59,005	48,274	4,840	4,544	6,171	5,431
8 Other depository institutions in United States (including their IBFs)	9,911	3,095	8,030	2,689	579	142	943	206
9 Balances with banks in foreign countries and with foreign central banks	62,579	61,763	52,244	51,608	4,371	4,253	5,014	5,013
10 Foreign branches of U.S. banks	1,741	1,700	1,091	1,050	593	593	50	50
11 Other banks in foreign countries and foreign central banks	60,838	60,062	51,153	50,558	3,778	3,660	4,964	4,963
12 Balances with Federal Reserve Banks	730	n.a.	607	n.a.	35	n.a.	34	n.a.
13 **Total securities and loans**	**283,392**	**78,364**	**188,429**	**58,131**	**50,962**	**12,477**	**26,470**	**3,590**
14 Total securities, book value	35,113	11,338	29,194	9,193	3,901	1,511	1,258	544
15 U.S. Treasury	5,559	n.a.	5,122	n.a.	188	n.a.	188	n.a.
16 Obligations of U.S. government agencies and corporations	4,909	n.a.	4,758	n.a.	101	n.a.	10	n.a.
17 Other bonds, notes, debentures and corporate stock (including state and local securities)	24,645	11,338	19,314	9,193	3,612	1,511	1,060	544
18 Federal funds sold and securities purchased under agreements to resell	20,139	3,760	18,779	3,310	642	305	349	114
19 U.S. branches and agencies of other foreign banks	11,038	2,240	10,075	1,789	565	305	283	114
20 Commercial banks in United States	5,160	12	4,951	12	68	0	24	0
21 Other	3,941	1,508	3,752	1,508	9	0	42	0
22 Total loans, gross	248,491	67,067	159,368	48,975	47,115	10,969	25,228	3,048
23 Less: Unearned income on loans	213	41	133	37	55	2	16	2
24 Equals: Loans, net	248,278	67,026	159,236	48,938	47,061	10,967	25,212	3,046
Total loans, gross, by category								
25 Real estate loans	28,033	347	15,333	213	7,238	128	3,128	0
26 Loans to depository institutions	57,553	33,208	40,301	20,574	10,693	8,004	4,161	2,603
27 Commercial banks in United States (including IBFs)	33,464	11,528	23,578	5,992	6,598	4,002	3,019	1,474
28 U.S. branches and agencies of other foreign banks	29,348	10,984	20,279	5,681	6,253	3,778	2,555	1,464
29 Other commercial banks in United States	4,116	544	3,299	310	345	224	464	10
30 Other depository institutions in United States (including IBFs)	111	3	55	3	50	0	5	0
31 Banks in foreign countries	23,979	21,677	16,669	14,579	4,045	4,002	1,137	1,129
32 Foreign branches of U.S. banks	499	367	430	299	42	42	25	25
33 Other banks in foreign countries	23,480	21,310	16,239	14,281	4,003	3,960	1,111	1,104
34 Other financial institutions	7,480	857	5,403	658	981	157	541	28
35 Commercial and industrial loans	130,972	15,780	78,675	13,409	25,878	1,708	16,998	330
36 U.S. addressees (domicile)	109,947	193	62,169	90	23,111	94	16,537	9
37 Non-U.S. addressees (domicile)	21,026	15,586	16,506	13,319	2,767	1,614	460	320
38 Acceptances of other banks	1,346	15	833	15	432	0	10	0
39 U.S. banks	283	4	229	4	40	0	0	0
40 Foreign banks	1,063	11	603	11	392	0	10	0
41 Loans to foreign governments and official institutions (including foreign central banks)	18,023	16,629	15,037	13,881	1,023	972	132	88
42 Loans for purchasing or carrying securities (secured and unsecured)	2,745	79	1,944	79	800	0	0	0
43 All other loans	2,339	152	1,843	145	70	0	259	0
44 All other assets	56,281	8,805	44,133	6,981	9,431	1,250	1,968	458
45 Customers' liability on acceptances outstanding	31,092	n.a.	23,324	n.a.	6,805	n.a.	718	n.a.
46 U.S. addressees (domicile)	21,633	n.a.	14,587	n.a.	6,265	n.a.	711	n.a.
47 Non-U.S. addressees (domicile)	9,459	n.a.	8,737	n.a.	539	n.a.	8	n.a.
48 Other assets including other claims on nonrelated parties	25,189	8,805	20,809	6,981	2,626	1,250	1,249	458
49 Net due from related depository institutions[5]	57,103	50,388	42,898	39,089	7,136	5,816	439	1,279
50 Net due from head office and other related depository institutions[5]	57,103	n.a.	42,898	n.a.	7,136	n.a.	439	n.a.
51 Net due from establishing entity, head offices, and other related depository institutions[5]	n.a.	50,388	n.a.	39,089	n.a.	5,816	n.a.	1,279
52 **Total liabilities**[4]	**561,461**	**264,602**	**414,924**	**210,081**	**78,029**	**28,788**	**41,394**	**16,091**
53 Liabilities to nonrelated parties	484,914	232,388	370,349	186,115	70,822	26,744	26,715	11,245

4.30—Continued

Millions of dollars

	Item	All states[2] Total excluding IBFs	All states[2] IBFs only[3]	New York Total excluding IBFs	New York IBFs only[3]	California Total excluding IBFs	California IBFs only[3]	Illinois Total excluding IBFs	Illinois IBFs only[3]
54	Total deposits and credit balances	76,085	183,336	63,033	160,512	3,382	9,746	3,460	7,014
55	Individuals, partnerships, and corporations	60,514	15,577	49,204	10,107	2,640	335	2,791	69
56	U.S. addressees (domicile)	46,898	312	40,730	288	962	0	1,916	24
57	Non-U.S. addressees (domicile)	13,616	15,265	8,474	9,820	1,678	335	875	45
58	Commercial banks in United States (including IBFs)	10,859	64,142	9,551	55,417	619	4,856	652	3,535
59	U.S. branches and agencies of other foreign banks	4,617	56,257	4,024	48,300	6	4,326	561	3,332
60	Other commercial banks in United States	6,242	7,885	5,528	7,117	613	530	91	203
61	Banks in foreign countries	1,534	94,775	1,392	86,476	42	4,489	1	3,391
62	Foreign branches of U.S. banks	175	6,903	155	5,859	20	482	0	557
63	Other banks in foreign countries	1,360	87,872	1,237	80,617	22	4,007	1	2,834
64	Foreign governments and official institutions (including foreign central banks)	1,065	8,072	938	7,746	24	67	2	20
65	All other deposits and credit balances	1,328	770	1,233	767	31	0	2	0
66	Certified and official checks	785	n.a.	714	n.a.	26	n.a.	12	n.a.
67	Transaction accounts and credit balances (excluding IBFs)	7,561		6,477		266		247	
68	Individuals, partnerships, and corporations	4,874		3,978		223		231	
69	U.S. addressees (domicile)	3,578		3,044		179		225	
70	Non-U.S. addressees (domicile)	1,296		935		44		6	
71	Commercial banks in United States (including IBFs)	254		245		2		0	
72	U.S. branches and agencies of other foreign banks	59		58		0		0	
73	Other commercial banks in United States	195	n.a.	187	n.a.	2	n.a.	0	n.a.
74	Banks in foreign countries	871		804		10		1	
75	Foreign branches of U.S. banks	14		14		0		0	
76	Other banks in foreign countries	856		789		10		1	
77	Foreign governments and official institutions (including foreign central banks)	507		475		2		1	
78	All other deposits and credit balances	271		261		3		1	
79	Certified and official checks	785		714		26		12	
80	Demand deposits (included in transaction accounts and credit balances)	6,570		5,712		197		237	
81	Individuals, partnerships, and corporations	4,267		3,587		156		222	
82	U.S. addressees (domicile)	3,168		2,741		133		216	
83	Non-U.S. addressees (domicile)	1,099		846		24		5	
84	Commercial banks in United States (including IBF)s	131		126		1		0	
85	U.S. branches and agencies of other foreign banks	17		16		0		0	
86	Other commercial banks in United States	113	n.a.	110	n.a.	1	n.a.	0	n.a.
87	Banks in foreign countries	748		686		10		1	
88	Foreign branches of U.S. banks	14		14		0		0	
89	Other banks in foreign countries	733		671		10		1	
90	Foreign governments and official institutions (including foreign central banks)	463		431		2		1	
91	All other deposits and credit balances	177		168		2		1	
92	Certified and official checks	785		714		26		12	
93	Non-transaction accounts (including MMDAs, excluding IBFs)	68,523		56,556		3,116		3,213	
94	Individuals, partnerships, and corporations	55,640		45,226		2,417		2,560	
95	U.S. addressees (domicile)	43,320		37,686		784		1,690	
96	Non-U.S. addressees (domicile)	12,320		7,539		1,634		869	
97	Commercial banks in United States (including IBFs)	10,605		9,306		617		652	
98	U.S. branches and agencies of other foreign banks	4,558		3,966		6		561	
99	Other commercial banks in United States	6,048	n.a.	5,340	n.a.	611	n.a.	91	n.a.
100	Banks in foreign countries	664		588		32		0	
101	Foreign branches of U.S. banks	161		141		20		0	
102	Other banks in foreign countries	503		448		12		0	
103	Foreign governments and official institutions (including foreign central banks)	559		463		22		1	
104	All other deposits and credit balances	1,056		972		28		1	
105	IBF deposit liabilities		183,336		160,512		9,746		7,014
106	Individuals, partnerships, and corporations		15,577		10,107		335		69
107	U.S. addressees (domicile)		312		288		0		24
108	Non-U.S. addressees (domicile)		15,265		9,820		335		45
109	Commercial banks in United States (including IBFs)		64,142		55,417		4,856		3,535
110	U.S. branches and agencies of other foreign banks		56,257		48,300		4,326		3,332
111	Other commercial banks in United States	n.a.	7,885	n.a.	7,117	n.a.	530	n.a.	203
112	Banks in foreign countries		94,775		86,476		4,489		3,391
113	Foreign branches of U.S. banks		6,903		5,859		482		557
114	Other banks in foreign countries		87,872		80,617		4,007		2,834
115	Foreign governments and official institutions (including foreign central banks)		8,072		7,746		67		20
116	All other deposits and credit balances		770		767		0		0

For notes see end of table.

4.30 ASSETS AND LIABILITIES of U.S. Branches and Agencies of Foreign Banks, September 30, 1989[1]—Continued

Millions of dollars

Item	All states[2]		New York		California		Illinois	
	Total including IBFs	IBFs only[3]	Total including IBFs	IBFs only[3]	Total including IBFs	IBFs only[3]	Total including IBFs	IBFs only[3]
117 Federal funds purchased and securities sold under agreements to repurchase	51,026	4,680	36,880	2,568	10,503	1,725	3,105	327
118 U.S. branches and agencies of other foreign banks	13,707	2,100	8,811	868	4,169	1,055	602	168
119 Other commercial banks in United States	18,487	748	11,420	285	5,078	453	1,712	10
120 Other	18,832	1,832	16,650	1,414	1,256	217	792	148
121 Other borrowed money	118,785	36,493	67,775	16,721	36,714	14,208	10,918	3,545
122 Owed to nonrelated commercial banks in United States (including IBFs)	72,225	14,795	37,000	4,111	26,447	8,443	6,709	1,291
123 Owed to U.S. offices of nonrelated U.S. banks	30,901	1,910	18,337	835	8,264	792	3,756	115
124 Owed to U.S. branches and agencies of nonrelated foreign banks	41,324	12,884	18,663	3,275	18,183	7,651	2,953	1,176
125 Owed to nonrelated banks in foreign countries	20,219	19,369	11,088	10,307	5,783	5,740	2,270	2,254
126 Owed to foreign branches of nonrelated U.S. banks	2,543	2,459	1,172	1,089	947	946	302	302
127 Owed to foreign offices of nonrelated foreign banks	17,676	16,910	9,916	9,218	4,836	4,794	1,968	1,952
128 Owed to others	26,341	2,329	19,687	2,304	4,484	25	1,938	0
129 All other liabilites	55,682	7,879	42,148	6,314	10,477	1,065	2,218	360
130 Branch or agency liability on acceptances executed and outstanding	33,490	n.a.	23,581	n.a.	8,185	n.a.	1,218	n.a.
131 Other liabilities to nonrelated parties	22,193	7,879	18,567	6,314	2,292	1,065	1,001	360
132 Net due to related depository institutions[5]	76,547	32,215	44,575	23,965	7,207	2,044	14,679	4,846
133 Net due to head office and other related depository institutions[5]	76,547	n.a.	44,575	n.a.	7,207	n.a.	14,679	n.a.
134 Net due to establishing entity, head office, and other related depository institutions[5]	n.a.	32,215	n.a.	23,965	n.a.	2,044	n.a.	4,846
MEMO								
135 Non-interest bearing balances with commercial banks in United States	2,178	5	1,948	5	96	0	71	0
136 Holding of commercial paper included in total loans	998		733		219		45	
137 Holding of own acceptances included in commercial and industrial loans	3,378		1,913		1,190		134	
138 Commercial and industrial loans with remaining maturity of one year or less	68,788		38,913		14,325		9,413	
139 Predetermined interest rates	39,366	n.a.	20,541	n.a.	10,291	n.a.	5,135	n.a.
140 Floating interest rates	29,422		18,372		4,034		4,278	
141 Commercial and industrial loans with remaining maturity of more than one year	62,185		39,762		11,553		7,585	
142 Predetermined interest rates	20,468		13,826		3,667		2,309	
143 Floating interest rates	41,717		25,937		7,886		5,276	

4.30—Continued

Millions of dollars

Item	All states[2] Total excluding IBFs	All states[2] IBFs only[3]	New York Total excluding IBFs	New York IBFs only[3]	California Total excluding IBFs	California IBFs only[3]	Illinois Total excluding IBFs	Illinois IBFs only[3]
144 Components of total nontransaction accounts, included in total deposits and credit balances of nontransactional accounts, including IBFs	89,969		77,373		3,551		3,577	
145 Time CDs in denominations of $100,000 or more	50,385		42,436		2,165		1,618	
146 Other time deposits in denominations of $100,000 or more	12,906	n.a.	10,628	n.a.	677	n.a.	1,430	n.a.
147 Time CDs in denominations of $100,000 or more with remaining maturity of more than 12 months	26,679		24,309		710		530	

Item	All states[2] Total including IBFs	All states[2] IBFs only[3]	New York Total including IBFs	New York IBFs only[3]	California Total including IBFs	California IBFs only[3]	Illinois Total including IBFs	Illinois IBFs only[3]
148 Market value of securities held	34,269	10,898	28,708	8,865	3,549	1,399	1,254	544
149 Immediately available funds with a maturity greater than one day included in other borrowed money	66,939	n.a.	37,549	n.a.	24,129	n.a.	3,973	n.a.
150 Number of reports filed[6]	531	0	253	0	127	0	53	0

1. Data are aggregates of categories reported on the quarterly form FFIEC 002, "Report of Assets and Liabilities of U.S. Branches and Agencies of Foreign Banks." Details may not add to totals because of rounding. This form was first used for reporting data as of June 30, 1980, and was revised as of December 31, 1985. From November 1972 through May 1980, U.S. branches and agencies of foreign banks had filed a monthly FR 886a report. Aggregate data from that report were available through the Federal Reserve statistical release G.11, last issued on July 10, 1980. Data in this table and in the G.11 tables are not strictly comparable because of differences in reporting panels and in definitions of balance sheet items.

2. Includes the District of Columbia.

3. Effective December 1981, the Federal Reserve Board amended Regulations D and Q to permit banking offices located in the United States to operate International Banking Facilities (IBFs). As of December 31, 1985 data for IBFs are reported in a separate column. These data are either included in or excluded from the total columns as indicated in the headings. The notation "n.a." indicates that no IBF data re reported for that item, either because the item is not an eligible IBF asset or liability or because that level of detail is not reported for IBFs. From December 1981 through September 1985, IBF data were included in all applicable items reported.

4. Total assets and total liabilities include *net* balances, if any, due from or due to related banking institutions in the United States and in foreign countries (see footnote 5). On the former monthly branch and agencyu report, available through the G.11 statistical release, *gross* balances were included in total assets and total liabilities. Therefopre, total asset and total liability figures in this table are not comparable to those in the G.11 tables.

5. "Related banking institutions" includes the foreign head office and other U.S. and foreign branches and agencies of the bank, the bank's parent holding company, and majority-owned banking subsidiaries of the bank and of its parent holding company (including subsidiaries owned both directly and indirectly).

6. In some cases two or more offices of a foreign bank within the same metropolitan area file a consolidated report.

4.31 Pro forma balance sheet for priced services of the Federal Reserve System[1]

Millions of dollars

Item	September 30, 1989		September 30, 1988	
Short-term assets[2]				
Imputed reserve requirement on clearing balances	217.9		214.3	
Investment in marketable securities	1,598.1		1,571.7	
Receivables	55.1		54.7	
Materials and supplies	6.6		6.1	
Prepaid expenses	18.6		19.5	
Items in process of collection	3,243.7		3,999.5	
Total short-term assets		5,140.0		5,865.8
Long-term assets[3]				
Premises	285.1		267.2	
Furniture and equipment	122.0		124.3	
Leases and leasehold improvements	6.1		5.7	
Prepaid pension costs	48.4		20.8	
Total long-term assets		461.6		418.0
Total assets		**5,601.6**		**6,283.7**
Short-term liabilities				
Clearing balances and balances arising from early credit of uncollected items	2,199.9		2,748.5	
Deferred available items	2,859.7		3,037.1	
Short-term debt	80.3		80.2	
Total short-term liabilities		5,140.0		5,865.8
Long-term liabilities				
Obligations under capital leases	1.2		1.2	
Long-term debt	131.0		125.9	
Total long-term liabilities		132.2		127.1
Total liabilities		**5,272.2**		**5,992.9**
Equity		329.4		290.9
Total liabilities and equity[4]		**5,601.6**		**6,283.7**

1. Details may not sum to totals because of rounding.

2. The imputed reserve requirement on clearing balances and investment in marketable securities reflect the Federal Reserve's treatment of clearing balances maintained on deposit with Reserve Banks by depository institutions. For presentation of the balance sheet and the income statement, clearing balances are reported in a manner comparable to the way correspondent banks report compensating balances held with them by respondent institutions. That is, respondent balances held with a correspondent are subject to a reserve requirement established by the Federal Reserve. This reserve requirement must be satisfied with either vault cash or with nonearning balances maintained at a Reserve Bank. Following this model, clearing balances maintained with Reserve Banks for priced service purposes are subjected to imputed reserve requirements. Therefore, a portion of the clearing balances held with the Federal Reserve is classified on the asset side of the balance sheet as required reserves and is reflected in a manner similar to vault cash and due from bank balances normally shown on a correspondent bank's balance sheet. The remainder of clearing balances is assumed to be available for investment. For these purposes, the Federal Reserve assumes that all such balances are invested in three-month Treasury bills.

The account "items in the process of collection" (CIPC) represents the gross amount of Federal Reserve CIPC as of the balance sheet date, stated on a basis comparable with a commercial bank. Adjustments have been made for intra-System items that would otherwise be double-counted on a consolidated Federal Reserve balance sheet; items associated with nonpriced items, such as items collected for government agencies; and items associated with providing fixed availability or credit prior to receipt and processing of items. The cost base for providing services that must be recovered under the Monetary Control Act includes the cost of float (the difference between the value of gross CIPC and the value of deferred availability items) incurred by the Federal Reserve during the period, valued at the federal funds rate. The amount of float, or net CIPC, represents the portion of gross CIPC that involves a financing cost.

3. Long-term assets on the balance sheet have been allocated to priced services with the direct determination method, which uses the Federal Reserve's Planning and Control System (PACS) to ascertain directly the value of assets used solely in priced services operations and to apportion the value of jointly used assets between priced services and nonpriced services. Also, long-term assets include an estimate of the assets of the Board of Governors directly involved in the development of priced services.

Long-term assets include amounts for capital leases and leasehold improvements and for prepaid pension costs associated with priced services. Effective January 1, 1987, the Federal Reserve Banks implemented Financial Accounting Standards Board Statement No. 87, Employer's Accounting for Pensions.

4. A matched-book capital structure has been used for those assets that are not "self-financing" in determining liability and equity amounts. Short-term assets are financed with short-term debt. Long-term assets are financed with long-term debt and equity in a proportion equal to the ratio of long-term debt to equity for the bank holding companies used in the model for the private sector adjustment factor (PSAF).

4.32 Pro forma income statement for priced services of the Federal Reserve System[1]

Millions of dollars

Item	Quarter ending September 30			
	1989		1988	
Income services provided to depository institutions[2]		178.7		165.9
Production expenses[3]		138.2		114.2
Income from operations		40.5		51.6
Imputed costs[4]				
Interest on float	9.6		10.0	
Interest on debt	12.6		12.1	
Sales taxes	1.9		2.0	
FDIC insurance	.4	24.5	.4	24.5
Income from operations after imputed costs		16.0		27.1
Other income and expenses[5]				
Investment income	37.4		34.6	
Earnings credits	35.0	2.4	32.6	2.0
Income before income taxes		18.4		29.1
Imputed income taxes[6]		6.2		9.4
Net income		**12.2**		**19.7**
MEMO				
Targeted return on equity[6]		8.2		8.2

Item	Nine months ending June 30			
	1989		1988	
Income services provided to depository institutions[2]		536.5		493.6
Production expenses[3]		441.3		376.3
Income from operations		95.1		117.3
Imputed costs[4]				
Interest on float	33.0		21.6	
Interest on debt	21.1		28.3	
Sales taxes	5.6		6.3	
FDIC insurance	1.2	60.9	1.2	57.4
Income from operations after imputed costs		34.2		59.9
Other income and expenses[5]				
Investment income	116.3		90.1	
Earnings credits	109.3	7.0	85.1	5.0
Income before income taxes		41.2		64.9
Imputed income taxes[6]		18.3		23.6
Net income		**22.9**		**41.3**
MEMO				
Targeted return on equity[6]		24.6		24.6

1. The income statement reflects income and expenses for priced services. Included in these amounts are the imputed costs of float, imputed financing costs, and the income related to clearing balances.

Details may not add to totals because of rounding.

2. Income represents charges to depository institutions for priced services. This income is realized through one of two methods: direct charges to an institution's account or charges against accumulated earnings credits. Income includes charges for per-item fees, fixed fees, package fees, explicitly priced float, account maintenance fees, shipping and insurance fees, and surcharges.

3. Production expenses include direct, indirect, and other general administrative expenses of the Federal Reserve Banks for providing priced services. Also included are the expenses of staff members of the Board of Governors working directly on the development of priced services, which amounted to $0.4 million in the third quarter and $1.3 million in the first nine months for both 1989 and 1988.

4. Imputed float costs represent the value of float to be recovered, either explicitly or through per-item fees, during the period. Float costs include those for checks, book-entry securities, noncash collection, ACH, and wire transfers.

The following table depicts the daily average recovery of float by the Federal Reserve Banks for the second quarter of 1989. In the table, unrecovered float includes that generated by services to government agencies or by other central bank services.

Float recovered through income on clearing balances represents increased investable clearing balances as a result of reducing imputed reserve requirements through the use of a deduction for float for cash items in process of collection when calculating the reserve requirement. This income then reduces the float required to be recovered through other means.

As-of adjustments and direct charges refer to midweek closing float and interterritory check float, which may be recovered from depositing institutions through adjustments to the institution's reserve or clearing balance or by valuing the float at the federal funds rate and billing the institution directly.

Float recovered through per-item fees is valued at the federal funds rate and has been added to the cost base subject to recovery in the second quarter of 1989

Total float	721.2
Unrecovered float	48.9
Float subject to recovery	672.3
Sources of float recovery	
Income on clearing balances	80.7
As of adjustments	279.5
Direct charges	85.8
Per-item fees	226.3

Also included in imputed costs is the interest on debt assumed necessary to finance priced-service assets and the sales taxes and FDIC insurance assessment that the Federal Reserve would have paid had it been a private-sector firm.

5. Other income and expenses consist of income on clearing balances and the cost of earnings credits granted to depository institutions on their clearing balances. Income on clearing balances represents the average coupon-equivalent yield on three-month Treasury bills applied to the *total* clearing balance maintained, adjusted for the effect of reserve requirements on clearing balances. Expenses for earnings credits are derived by applying the average federal funds rate to the *required* portion of the clearing balances, adjusted for the net effect of reserve requirements on clearing balances.

6. Imputed income taxes are calculated at the effective tax rate derived from a model consisting of the 25 largest bank holding companies. The targeted return on equity represents the after-tax rate of return on equity that the Federal Reserve would have earned had it been a private business firm, based on the bank holding company model.

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Index to Statistical Tables

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		John R. Miller	William H. Hendricks	
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2. Executive Vice President.

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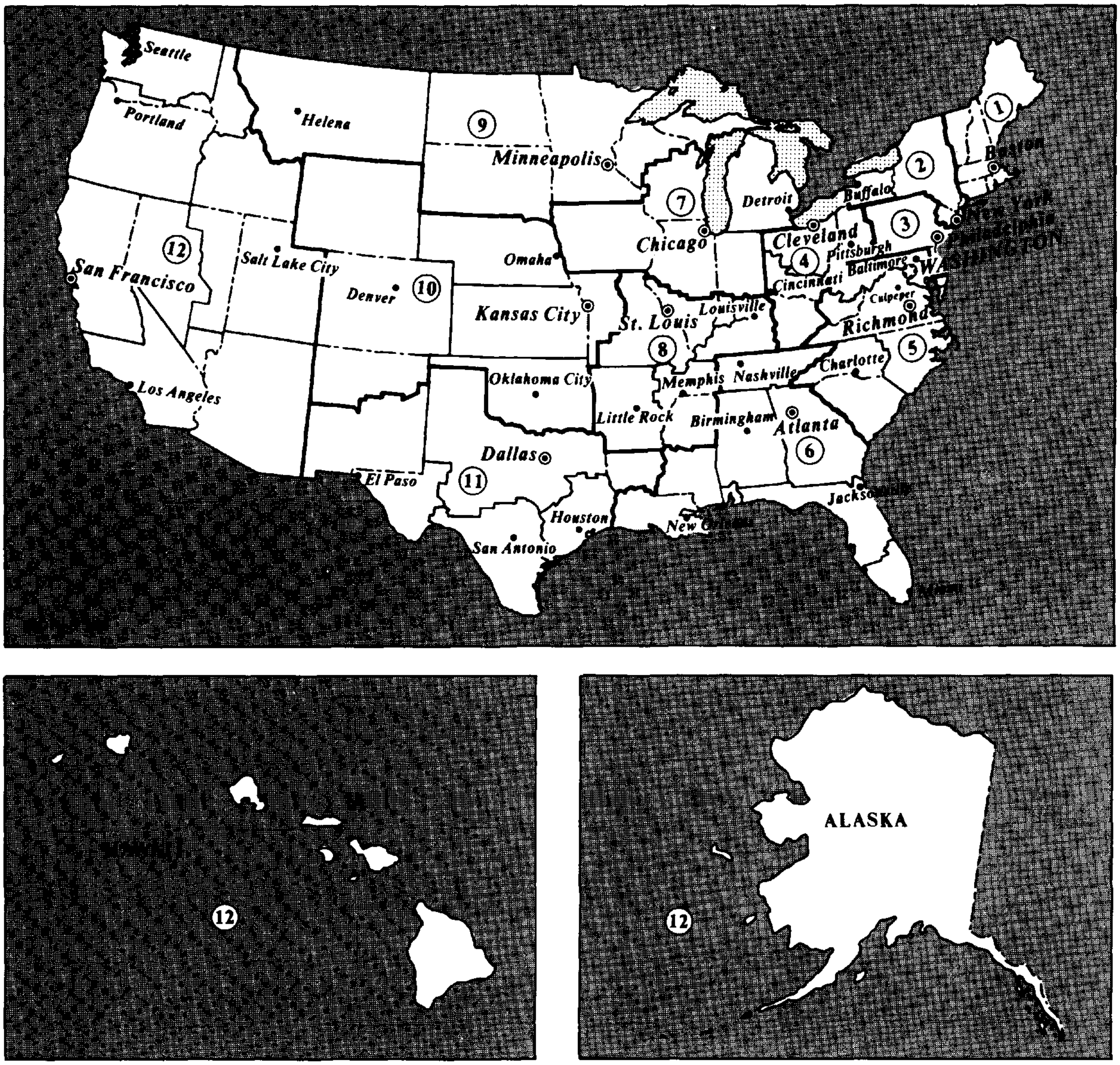

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— Boundaries of Federal Reserve Districts

— Boundaries of Federal Reserve Branch Territories

✪ Board of Governors of the Federal Reserve System

◉ Federal Reserve Bank Cities

• Federal Reserve Branch Cities

· Federal Reserve Bank Facility