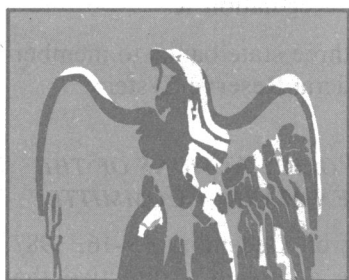

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FEDERAL RESERVE BULLETIN

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At its meeting on December 15-16, 1987, the Committee approved a directive that called for maintaining the existing degree of pressure on reserve positions and for phasing open market operations into a more normal approach to policy implementation keyed increasingly to a desired degree of reserve pressure while giving less emphasis than recently to money market conditions. The members recognized that the conduct of open market operations might continue to require a special degree of flexibility, given still quite sensitive conditions in financial markets and the uncertainties in the business outlook. Taking account of conditions in financial markets, the members indicated that somewhat less or somewhat more reserve restraint would be acceptable, depending on the strength of the business expansion, indications of inflation, the performance of the dollar in foreign exchange markets, with consideration also taken of the behavior of the monetary aggregates. If current reserve conditions were maintained, the members expected growth in M2 and M3 to pick up from the pace in recent months to annual rates of about 5 percent and 6 percent respectively over the four-month period from November to March. Growth of M1 was expected to remain

relatively limited over the same period; because of the substantial uncertainty that continued to surround the outlook for M1, the Committee continued its practice of not specifying a numerical expectation for its growth. The members agreed that the intermeeting range for the federal funds rate, which provides a mechanism for initiating consultation of the Committee when its boundaries are persistently exceeded, should be left unchanged at 4 to 8 percent.

At a telephone meeting on January 5, 1988, the Committee agreed that with the further passage of time since the October disturbances in financial markets and with year-end pressures in the money market in the process of unwinding, further progress could be made toward restoring a normal approach to open market operations. Some flexibility might continue to be needed in the conduct of operations, given the still somewhat unsettled conditions in financial markets and the uncertainties in the economic outlook.

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The Recent Behavior of Demand Deposits

Patrick I. Mahoney of the Board's Division of Monetary Affairs prepared this article. Mary T. Hoffman and Linda C. Rosenberg provided research assistance for the article, and Lyle S. Kumasaka provided extensive research assistance on the survey.

The monetary aggregate M1, consisting of currency, demand deposits, and other checkable deposits, has been less reliable as an economic indicator during the 1980s than it was during previous decades. In part, the deterioration in the link between M1 and economic activity is attributable to the inclusion in M1 of negotiable order of withdrawal (NOW) accounts. These deposits, which were authorized nationwide effective at the end of 1980, serve as a hybrid savings and transaction instrument and therefore blur the definition of M1 as a transaction aggregate and increase its interest sensitivity. In addition, the behavior of the demand-deposit component of M1 has changed in the 1980s. The shift of household transaction deposits to NOW accounts, changes in the way businesses manage cash and compensate banks for services, and innovations in financial instruments are among the factors responsible for that change. Demand deposits have become somewhat more volatile month to month and, more important from a policy perspective, their longer-run relationship to income and to interest rates appears to be changing. In particular, growth in demand deposits was considerably stronger in 1986 and considerably weaker in 1987 than historical relationships suggested.

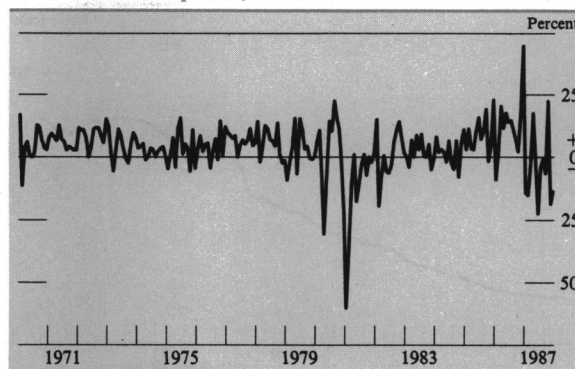
To obtain more information about the weakness of demand deposits in 1987 and in particular to understand better the role of compensating-balance arrangements in the behavior of these deposits, the staff at the Board of Governors of the Federal Reserve System and at the Federal Reserve Banks conducted a survey of senior financial officers of large banks in January of this

year. The results of the survey, reported in the second part of this article, confirm the influence of interest rate movements on the recent behavior of demand deposits and shed some light on changing ways of using demand balances to compensate banks for services.

DEMAND DEPOSIT BEHAVIOR IN THE 1980S

The short-run behavior of demand deposits has been more volatile in the 1980s than it was in the previous decade. For example, the monthly growth rates of demand deposits have varied over a wider range in the 1980s (chart 1). In statistical terms, the standard deviation of annualized monthly growth rates of seasonally adjusted demand deposits, which was slightly less than 6 percent over the 1970s, jumped to nearly 14 percent for the 1980–87 period. Because data on demand deposits for earlier years have been subject to the smoothing effects of more revisions in seasonal factors, the figures as first published for both periods were examined to provide the same review of seasonal factors. The standard deviation of these monthly growth rates was about 8 percent over the 1970s and has been 15 percent so far in the 1980s. And for not

1. Monthly growth rate
of demand deposits, 1970–87



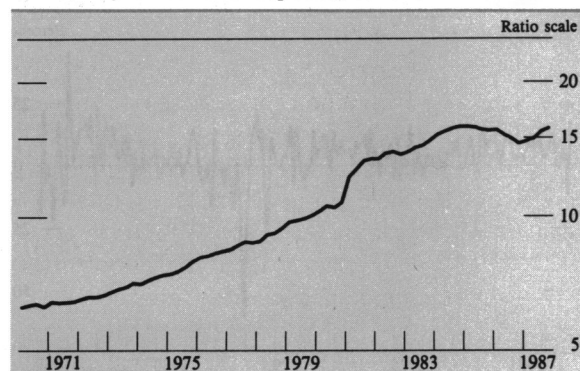
Seasonally adjusted.

seasonally adjusted data, the comparable standard deviations also rose though by smaller amounts, from 26 to 32 percent. Statistical tests confirmed the significance of the increases in variability. These wider monthly swings in growth have made it more difficult to predict and to interpret the behavior of demand deposits in the short run.

More important, the relationship between longer-run movements in demand deposits and aggregate spending, which was relatively stable in the 1960s and 1970s, has weakened in the 1980s. Movements in the velocity of demand deposits, the ratio of gross national product to demand deposits, were fairly steady and predictable through the end of the 1970s; over this period, velocity rose at an average annual rate of 4.1 percent per year, in part reflecting rising interest rates. Velocity jumped at the beginning of 1981, however, as consumers shifted funds out of demand deposits and into interest-bearing NOW accounts (chart 2). Later, in 1985 and particularly in 1986, the velocity of demand deposits declined substantially, and then it rebounded in 1987.

The shifts in velocity in the past three years appear to be related to the pattern of interest rate movements and to an increasing responsiveness to changes in rates. Rates declined in 1985 and 1986, reducing incentives for depositors to economize on cash balances and increasing the levels of balances businesses needed to compensate their banks for credit and operational services (see the discussion below). Rates then rose through most of 1987, reversing these effects.

2. Velocity of demand deposits, 1970-87



Quarterly data.

But the responses of demand deposits to changes in interest rates were greater than past norms suggested. This change is illustrated by the results of a simulation of a typical money-demand model for demand deposits (see the appendix for its specification and discussion of other work). The model explains the annual growth in demand deposits fairly accurately through 1985, but then underpredicts growth by 5.6 percentage points in 1986, when rates were falling, and overpredicts it by 5.2 percentage points in 1987, when rates were rising (table 1). The misses in the simulation generally are related to movements in interest rates; coupled with the results of estimations of the model over more recent periods, they suggest that the interest elasticity of demand deposits has increased, though to an uncertain extent.

This development has caused the growth of demand deposits to diverge increasingly from predictions implied by its historical relationship with spending and interest rates. To be sure, this relationship had had episodes of unpredictability before, such as the surprising weakness of these deposits in the mid-1970s. But, the divergence of demand deposits from their previously normal relationship to spending and interest rates has widened in the 1980s.

1. Results of a long-run simulation of demand-deposit growth

Year	Demand-deposit growth (percent)		Difference (percentage points)	Change in 3-month Treasury bill rate ² (basis points)
	Actual	Predicted ¹		
1981	-12.8	-12.8 ³	.0	200
1982 .....	.8	-1.0	1.8	-480
1983	2.4	4.9	-2.6	40
1984	1.5	2.1	-.6	60
1985	8.9	8.7	.1	-250
1986	11.8	6.3	5.6	-170
1987	-.9	4.2	-5.2	60

1. Simulation beginning in 1981.
2. Change from fourth quarter to fourth quarter of a two-quarter moving average.
3. The model includes a variable to capture the effects of the availability of NOW accounts.

FACTORS IN THE BEHAVIOR OF DEMAND DEPOSITS IN THE 1980s

The 1980s have been characterized by many financial events that have directly or indirectly affected the behavior of demand deposits, includ-

ing the deregulation of interest rates on other deposits, changes in the structure of federal income taxes, numerous innovations in financial instruments and in the technology for executing transactions, and greater volatility in interest rates and financial markets. In some cases single events have had easily identifiable effects, while in others the interactions of several developments appear to have contributed to the changes in the behavior of demand deposits.

Special Occurrences and Monthly Growth Rates

Certain unique developments, such as credit controls and the nationwide authorization of NOW accounts, explain some of the unusually wide short-run swings in the growth of demand deposits since 1979. Some affected the level of demand deposits permanently, as when households shifted transaction balances to NOW accounts. Others affected the monthly growth rates of demand deposits briefly, but had no long-run effect on their levels. Monthly growth in demand deposits can swing widely when the volumes of major types of transactions diverge markedly from their trends. For example, demand deposits jumped in late 1986 when investors scrambled to complete transactions under the more favorable capital gains and other tax provisions that the Tax Reform Act of 1986 eliminated or reduced. They then fell rapidly in January 1987 as the bulge worked its way through, only to rise markedly in April with income tax payments that were considerably higher than normal because they reflected the increase in income tax liabilities incurred by the transactions at the end of 1986. Another temporary surge in October 1987 resulted from the huge increase in financial transactions associated with the plunge in share prices in midmonth.

Financial Developments and the Interest Sensitivity of Demand Deposits

The relationship between movements in interest rates and the deviations of the velocity of demand deposits from historical patterns suggests that the interest sensitivity of demand deposits has increased. As this sensitivity increases,

movements in demand deposits are more likely to reflect unanticipated changes in interest rates than variations in aggregate spending. Even a one-time increase in this interest elasticity—that is, the percent change in demand-deposit balances demanded given a 1 percent change in the level of interest rates—loosens the observed linkage between demand deposits and underlying economic developments and produces wider swings in velocity. Because demand deposits are a significant component of the very narrow monetary aggregates, such an increase in interest elasticity lessens the usefulness of these aggregates as intermediate monetary targets. In addition, if the interest elasticity of demand deposits continually changes, both predicting the behavior of demand deposits and relating it to economic activity become even more uncertain and complicated.

The economic literature has identified two channels through which movements in interest rates affect the level of demand deposits: opportunity costs and, for business deposits, compensating-balance arrangements.

Opportunity Costs. The opportunity cost of holding demand-deposit balances is the return that could have been earned if those balances had been placed in an interest-bearing instrument, less any implicit return on the deposit itself. Managing balances in a demand-deposit account is not costless, however. Shifting funds to earning assets entails transaction costs and often reduces the liquidity of these funds. When market interest rates decline, the opportunity cost of holding demand-deposit balances also declines, and balances tend to rise, *ceteris paribus*, as the loss of liquidity and the transaction costs of frequent shifts of funds out of these deposits outweigh the explicit interest that might be earned elsewhere. When rates increase, the opportunity cost of holding demand-deposit balances also increases, and depositors, both households and businesses, have more incentive to economize on balances and invest funds in other instruments. The elasticities that opportunity costs impart to demand deposits probably are not large. Theoretical models of the behavior of demand deposits suggest that the interest elasticity from this channel is considerably less than

unity; that is, a 1 percent change in the level of interest rates results in a change of less than 1 percent in the level of balances demanded by depositors.

Compensating Balances. The other channel through which changes in interest rates affect the level of demand deposits is the use of compensating-balance arrangements by businesses. Under such arrangements, firms compensate their banks for credit and operational services by maintaining a specified level of demand-deposit balances. The amount of balances required to compensate the bank for a given level of services is determined by the earnings credit rate (ECR). The ECR usually is based on a short-term market interest rate, reduced by 12 percent to reflect the reserve requirements on demand deposits. Specifically, required compensating balances are calculated by the following formula:

$$RCB = \frac{S}{MR(1 - RR)}$$

where

- RCB* = required compensating balances
- S* = the dollar value of services used
- MR* = the market rate, expressed as a decimal
- RR* = the percentage reserve requirement, expressed as a decimal; $MR(1 - RR)$ = the earnings credit rate.

When market interest rates rise and thus the ECR rises, the balance that a firm must hold to compensate its bank for a given amount of services declines. As market interest rates fall, firms must hold higher compensating balances.

The ultimate effect of compensating-balance arrangements on the interest elasticity of business demand deposits is considerably more complex than this formula suggests, and it may vary with interest rates. If, for a given amount of services, the level of a firm's demand deposits on the margin is determined solely by compensating-balance requirements and thus changes in the ECR, its deposits will have a relatively large interest elasticity; specifically, it will be unity; that is, if interest rates and thus the ECR fall by

half, the firm's required compensating balances and thus its demand deposits will double.

But, while demand deposits held to compensate banks for services earn an implicit return, they still entail opportunity costs because of the existence of reserve requirements on demand deposits. As shown by the formula above, the implicit return on balances held for compensation purposes is lower than the market rate by the amount of reserves banks are required to hold against demand deposits. This reserve requirement, currently 12 percent, represents an opportunity cost. Firms thus have an incentive to reimburse their banks at least partially for services by paying explicit fees rather than holding compensating balances. This practice, in turn, can cause the interest elasticity of their demand deposits to be less than unity. When a firm—given the level of interest rates, its own funding needs, and its demand for services—can choose a combination of balances and fees to remunerate its bank, it may keep its balances at the level desired for transaction purposes and simply make up the difference in required compensation by paying higher explicit fees. Because the interest elasticity associated with the opportunity cost of holding balances for transactional purposes is less than unity, using such a combination reduces the interest elasticity of the firm's demand deposits below that implied by the strict application of the formula for computing required compensating balances.

When interest rates are low, however, the absolute value of the opportunity cost arising from reserve requirements is small relative to the transaction and liquidity costs of shifting balances out of demand deposits. Firms then have little incentive to reduce their balances below those required for compensation purposes and to make up the difference with fees. In this situation firms may stop paying fees and alter the level of their demand deposits in line with changes in their required compensating balances. When interest rates rise, firms may shift back to compensating banks by a combination of fees and balances. The importance of such shifts on movements of demand deposits as interest rates change is unknown, but to the extent that they are present, they may compound the difficulty of measuring interest elasticity empirically.

At a given level of interest rates, levels of demand deposits of some firms probably are determined on the margin primarily by transaction needs, while those of other firms are determined by required compensating balances, and this mix may vary with the level of interest rates. In addition, this mix and the importance of these types of demand-deposit arrangements to the behavior of aggregate demand deposits likely vary over time in response to technological change, deregulation, and changes in cash-management practices. Thus the rapid pace of change in financial markets in the 1980s probably has significantly altered the traditional channels through which interest elasticity is imparted to demand balances. New instruments have appeared, new cash-management techniques have developed that facilitate shifts of funds from non-interest-bearing demand deposits to interest-earning financial assets, and the ways businesses compensate banks for credit and operational services have been evolving. In addition, complex transactions involving the relatively new mortgage-backed securities market appear to have contributed to variations in demand-deposit holdings, and the ownership of demand deposits has shifted away somewhat from households following the introduction of NOW accounts.

Changes in the Ownership of Demand Deposits. Changes over the 1980s in the shares of demand deposits that various sectors of the economy hold partly explain an increase in the interest elasticity of these deposits. According to the Federal Reserve's Demand Deposit Ownership

Survey (DDOS), consumers held one-third of demand deposits at all insured commercial banks in 1980 (table 2). This share had declined to about one-quarter by 1987, largely because of the nationwide authorization of NOW accounts. Holdings of demand deposits by financial and nonfinancial businesses, which may not own NOW accounts, rose from three-fifths to about two-thirds of total demand deposits. The rise in businesses' share of demand deposits likely has increased the interest elasticity of demand deposits as a whole. Earlier empirical work at the Federal Reserve Board has shown that demand deposits of businesses are more interest elastic than are those of households, possibly because firms use compensating-balance arrangements and because they manage cash more carefully. But changes in ownership shares probably explain the apparent increase in the interest elasticity only partially; the increase in the business share of total demand deposits, while significant, was limited, and the shares have remained relatively stable over the past few years.

Effects of Innovations in Mortgage Markets.

The tremendous growth in the market for mortgage-backed securities in the 1980s appears to have opened a new channel through which interest rates affect demand deposits. When a mortgage underlying two types of mortgage-backed securities is prepaid, the proceeds must be placed in custodial accounts until they are disbursed to the security holders on a specific date the following month. For one of these types of mortgage-backed securities, mortgage servicers

2. Ownership of demand deposits, by type of holder, all insured commercial banks

Percent

Year	Business			Consumer	Foreign and other	Total ¹
	Nonfinancial	Financial	Total			
1980	50.6	9.7	60.3	33.5	6.2	100.0
1981	52.8	10.3	63.1	30.3	6.8	100.0
1982	51.7	11.1	62.8	30.5	6.7	100.0
1983	53.0	11.7	64.7	28.1	7.2	100.0
1984	54.6	10.8	65.4	27.5	7.1	100.0
1985	55.4	9.6	65.0	27.3	7.6	100.0
1986	55.3	10.7	66.0	26.3	7.8	100.0
1987 ²	55.0	10.8	65.8	26.4	7.9	100.0

1. Details may not add to totals because of rounding.

2. Data through 1987:3.

SOURCE. Board of Governors of the Federal Reserve System, Demand Deposit Ownership Survey.

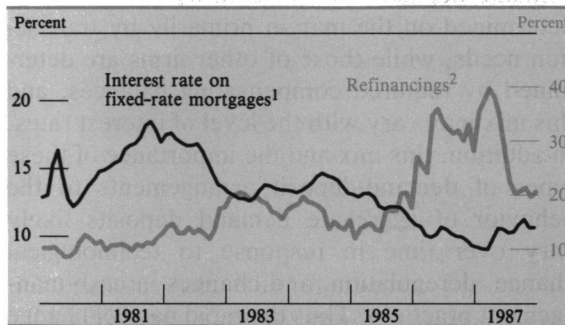
are required to use non-interest-bearing accounts, and they typically use demand deposits for custodial purposes. As a result, some prepayments may be held in demand deposits for as long as 49 days. Thus major changes in the pace of mortgage prepayments can affect both the level of demand deposits and their growth rates.

The wide variation in mortgage interest rates in the 1980s may have resulted in unexpected movements in demand deposits through this new channel. A substantial amount of mortgages was made at the very high interest rates prevailing earlier in the decade and, with the significant drop in mortgage interest rates over the last few years, mortgage refinancings—and thus prepayments—rose sharply. Commitments for refinancings as a share of all mortgage commitments at thrift institutions jumped from less than 20 percent in the early 1980s to more than 35 percent in 1986 and early 1987 (chart 3). Mortgage refinancing at thrift institutions is estimated to have risen from a monthly rate of \$1 billion or \$2 billion to more than \$15 billion over the same period; it fell off sharply in the late spring of 1987, both in dollar terms and as a share of total mortgage activity. As a result of the institutional practices discussed above, these movements may have been a factor in the strong growth in demand deposits in 1986 and in their subsequent weakness in the second half of last year. They also may have increased the volatility in the monthly growth rate of demand deposits, although in either case the effect is difficult to quantify.

It is too soon to determine the longer-run effects of this development on the behavior of demand deposits. The surge in refinancings resulted from the existence of a large stock of mortgages issued during the earlier period of very high interest rates, and that stock has been reduced. Another surge in refinancings likely would require another substantial, sustained drop in interest rates. Nevertheless, the size of the mortgage-backed securities market and its institutional practices have opened a new channel through which changes in interest rates apparently can affect the levels of demand deposits.

Evolving Cash-Management Practices. While empirical evidence points to an increase in the

3. Mortgage interest rates and refinancings as a percent of mortgage activity, 1980-87.



1. Commitment rate on 30-year fixed-rate mortgages at thrift institutions.

2. Commitments to refinance as a percent of total mortgage commitments at thrift institutions.
Monthly data.

interest elasticity of demand deposits over the past few years, it is difficult to sort through the interactions of the many financial innovations that facilitated the management of demand balances by businesses and to identify all of the changes in the ways businesses and banks interact. Rising interest rates spurred innovations in cash-management techniques and encouraged their implementation. In the mid-1970s, banks began aggressively to market instruments of very short maturity such as repurchase agreements and overnight dollar-denominated deposits at their offshore branches. The introduction of money market deposit accounts in December 1982 gave businesses, especially smaller firms for which the more sophisticated forms of cash management were not feasible, a new vehicle for obtaining returns on liquid balances. Together with more recent advances in telecommunications and the rise of electronic funds transfers, these innovations have allowed businesses to manage their demand deposits more effectively.

Theoretical models of money demand suggest that marginal changes in the transaction costs associated with managing demand balances will not affect the interest elasticity of demand deposits. At the same time, they imply that the quantum jumps in the availability of alternative investments and the spread of cash-management services can increase the interest elasticity of demand deposits of some firms, especially smaller ones. Smaller businesses may, for example, have been constrained in managing cash

balances by transaction costs that were high compared with their relatively small balances. By dramatically lowering these costs and by offering investments that theretofore were not available, the new instruments may have allowed these firms to adjust their balances more closely than before to changes in opportunity costs. Furthermore, small and medium-sized firms likely are making more use of cash-management services than they did in the past, as banks increasingly compete for business customers and market these services more aggressively. Finally, one legacy of the rise in interest rates in the late 1970s and early 1980s probably was an increase in businesses' sensitivity to the opportunity costs of holding demand deposits, with consequent investment in the technology and the professional staff needed to manage balances more closely. Indeed, the cash-management literature and corporate cash managers see a spread in this expertise, especially to medium-sized and small firms, which likely increases the interest sensitivity of demand deposits.

Other innovations are affecting the behavior of business demand deposits, but with uncertain implications for their interest elasticity. Banks have marketed sweep accounts, in which all balances remaining at the end of the day are placed in overnight investments, so that these balances are eliminated from the demand deposits reported in M1. Controlled disbursement accounts have the same effect: all debits are effectively cleared early in the day, allowing funds to be swept sooner. By removing demand-deposit balances of firms with extensive cash-management expertise from aggregate demand deposits, these innovations may be increasing the importance in aggregate demand deposits of accounts that exhibit more traditional responses to changes in opportunity costs; no available data measure this phenomenon, however. Perhaps more important, these innovations weaken the link between aggregate spending and demand deposits because changes in transaction activity in such accounts are not reflected in the levels of demand deposits.

Compensating-balance arrangements also have been changing, in reflection both of the spread of cash-management expertise and of the increase in competition among banks, which has

fostered the unbundling of fees for services. The trend in cash management has been to substitute explicit fees entirely for compensating-balance arrangements as the means for reimbursing banks for services. This transition has been slow for a variety of reasons; one reason often noted in the cash-management literature is that such changes require the education of senior management because explicit fees must be budgeted for and approved while the costs of compensating balances are indirect. Using a combination of fees and compensating balances narrows the opportunity cost associated with reserve requirements, but when interest rates are low, the absolute cost of this wedge, as discussed above, also is low. When interest rates rise, the cost of this wedge also rises, increasing the incentive for firms to shift entirely out of compensating-balance arrangements.

Changes in the use of compensating-balance arrangements and other innovations obviously have implications for the interest elasticity of demand deposits. To the extent that firms hold balances only to meet transaction needs and use fees for the rest of their reimbursement to banks, the interest sensitivity of their deposits could be lower. As firms shift out of compensating-balance arrangements completely to zero-balance accounts so that a larger proportion of the remaining demand deposits are held under compensating-balance arrangements, the interest elasticity of these deposits could increase. No data exist to determine whether such an increase has occurred over the 1980s.

SURVEY DATA ON COMPENSATING BALANCES AND THE BEHAVIOR OF DEMAND DEPOSITS IN LATE 1987

To obtain additional information about the behavior of demand deposits in late 1987 and compensating balances, the Federal Reserve surveyed senior financial officers at 60 large commercial banks in mid-January 1988. The demand deposits at these banks account for approximately 37 percent of total demand deposits at all federally insured commercial banks.

The results of the survey indicate that compensating balances are an important component of

business demand deposits and that movements in market interest rates continue to affect the levels of demand deposits both through compensating-balance arrangements and through changing opportunity costs, sometimes with a considerable lag. The survey also revealed an acceleration of shifts out of compensating balances in 1987. The interaction of these factors, coupled with volatile interest rates and shifts away from compensating-balance arrangements, underscores the difficulty in assessing seasonal patterns and interest elasticities for demand deposits. Because most compensating-balance arrangements effectively require year-end settlement of accounts, year-end flows of demand deposits may be affected in complex ways by rate movements and by other developments over the year.

Besides questions about compensating-balance arrangements, respondents were asked about the sharp declines in demand deposits in November and December 1987. These declines, at annual rates of nearly 19 and 14 percent respectively for the two months, were larger than could be accounted for by the runoff of the surge in demand deposits associated with the October plunge in the stock market. The results of this portion of the survey verify that movements in interest rates significantly affected the levels of demand deposits, if with considerable lags, and confirm that other factors, such as shifts by firms away from compensating-balance arrangements, also affected the growth of demand deposits.

The Current Structure of Compensating Balances

According to the survey, compensating-balance arrangements vary widely across banks and across customers within individual banks. Twelve percent of the responding banks report that 20 percent or less of their business demand deposits are held under formal compensating-balance arrangements, while a quarter of the respondents cited proportions of over 80 percent. (See table A.1. for detailed responses to this portion of the survey.) On average, about 62 percent of balances in business demand deposits at the respondent banks are made up of funds held under formal compensating-balance ar-

rangements. This proportion should be seen only as a confirmation that compensating balances are an important component of demand deposits; some may have been held in any event to meet current transaction needs, and the survey results do not indicate what proportion of business demand deposits are constrained at the margin by compensating-balance requirements.

Five out of six respondents based their ECR on the three-month Treasury bill rate, using either secondary market or auction rates. Other rates used included the federal funds rate and rates on wholesale certificates of deposit; all banks adjusted for reserve requirements. One-third of all respondents indicated that they lag their ECR a month or more in calculating required balances.

Compensating-balance requirements also are measured over a variety of periods. Although 83 percent of the respondents indicated that they measured balances primarily on a monthly basis and another 15 percent reported quarterly computation periods, many commented that such arrangements were open to negotiation with individual customers or were left to the discretion of the account manager. As a result, some banks use various periods for various customers. The lags in applying ECRs, coupled with varying computation periods, result in lags in the changes in the levels of demand deposits in response to changes in interest rates and, if these arrangements shift over time, contribute to the uncertainty and unpredictability of this response.

Variation in compensating-balance arrangements also is evident in the willingness of banks to allow carryovers of surpluses or deficits. About two-thirds of the respondents allow carryovers from one computation period to the next. Some allow it only for certain customers, and a few institutions allow carryovers only of overages, not deficits. About three-fourths of the respondents that allow carryovers do not allow them beyond the end of the calendar year, effectively requiring account settlement at year-end.

The survey results confirm the view expressed in the cash-management literature and by corporate cash managers that businesses have been moving away from compensating-balance arrangements in favor of reimbursing their banks

for services by explicit fees. Nearly three-fourths of the bank respondents reported such a shift, and 38 percent of these indicated that it had accelerated in 1987. Thus the combination of spreading cash-management expertise and the reserve-requirement wedge appears to have reduced the use of compensating-balance arrangements. Indeed, one bank commented that recent articles in cash-management journals have spurred shifts by some of their customers.

Evidence from November–December 1987

The most striking result from this section of the survey was the importance of lagged effects of changes in market interest rates on demand-deposit levels. Apart from any unusual movements related to the drop in the stock market, the weakness in demand deposits in November and December reflected most importantly the lagged adjustment of account levels to earlier increases in interest rates, which peaked in mid-October. This development was attributed both to closer management of balances and to reductions in required compensating balances as rates rose in 1987.

Half of the respondents reported that growth in demand deposits at their institutions was below normal or very weak in November and December (see table A.2.). Only a few reported above-normal growth in demand deposits, and none experienced very strong growth. Of those with growth that was lower than normal, 83 percent experienced weakness in business deposits, while slightly less than half cited weakness in household accounts. Data from the DDOS of weekly reporting banks for the fourth quarter of 1987 also point to weakness in business accounts. Demand deposits held by financial and nonfinancial business at these banks declined at seasonally adjusted annual rates of 12 percent and 9 percent respectively over the fourth quarter of last year. Consumer demand deposits grew at a 7 percent rate, noticeably below their pace of the fourth quarter of 1986.

Higher interest rates were the most important single factor in the weakness in demand deposits: 54 percent of the respondents to the senior financial officer survey who reported weakness in

business demand deposits attributed it to more careful cash management by firms in response to higher interest rates, and 29 percent indicated that higher rates (and thus higher ECRs) had permitted reductions in required compensating balances.

Other factors, including changes in cash-management practices, also affected growth in demand deposits in November and December. One-third of the respondents stated that customers switching from compensating-balance arrangements to explicit fees as payment for services had depressed demand-deposit levels at their banks. A few senior financial officers noted that some customers had reduced their balances below the minimums required late last year, making up the difference with fees; in the past corporate cash managers have stated that firms may be looking to reductions in compensating balances as a source of funds.

Twenty-nine percent of the survey respondents saw a slowing in business activity at some firms as a factor in the weakness in business demand deposits, while about 13 percent cited a reduction in financial activity associated with leveraged buyouts and merger financing. A reduction in demands by corporate customers for credit and operational services combined, which perhaps mirrored these developments, were reported as a factor by about 30 percent of the banks with lower than normal growth in business deposits. Slow loan growth and the financial troubles of one bank also were cited.

The contraction in business demand deposits was not concentrated in any one sector: over three-fourths of the respondents reported weakness across all of their business accounts. The fourth-quarter DDOS data for financial and nonfinancial businesses confirm this result. The respondents who cited specific sectors named real estate and mortgage banking most often. In terms of account structure, most of the institutions reported that the falloff in business demand deposits resulted from lower average balances; about 14 percent reported a decline in the number of accounts as some customers continued to consolidate demand accounts to reduce expenses and to facilitate cash management, a trend also noted in the cash-management literature.

SUMMARY

The behavior of demand deposits in the 1980s has diverged from previous patterns, and movements of these deposits have become more unpredictable, in both the short and the longer run, than they were in the 1970s. In the short run, the variability in monthly growth rates of demand deposits is greater than it was in the previous decade. Special factors, such as the nationwide introduction of NOW accounts, the Tax Reform Act of 1986, and the stock market plunge, have accounted for specific episodes of wide swings in the month-to-month growth of demand deposits. Practices in some relatively new markets, coupled with volatile interest rates, also appear to have had noticeable, if not readily quantifiable, effects on short- and longer-run movements in demand deposits.

The longer-run behavior of demand deposits also appears to have changed from what their historical relationships with income and interest rates suggest. Available evidence indicates that part of this change in the behavior of demand deposits reflects an increase in their interest elasticity. Financial innovations, improvements

in cash-management techniques, and retail deposit deregulation, all prompted to some extent by the high and rising market interest rates of the 1970s and early 1980s, may have contributed to a heightened interest elasticity of demand deposits by providing new techniques and vehicles for managing cash balances and by increasing the proportion of aggregate demand deposits that are held by businesses.

In addition, survey data tend to confirm previous indications that compensating-balance arrangements figure large in the interest sensitivity of demand deposits and also involve practices that add to the unpredictability of deposit movements resulting from changes in interest rates. A shift by firms from compensating-balance arrangements to explicit fees as a way of paying banks for services also affects movements in demand deposits and possibly their interest elasticity. Overall, there seem to have been significant shifts in the behavior and predictability of demand deposits in the 1980s. These shifts appear to have stemmed from a variety of causes, some of which probably will continue to operate in the future.

APPENDIX

This technical appendix presents the specification of the model of the demand for demand deposits, and detailed responses to the Senior Financial Officer Opinion Survey conducted by the staff at the Federal Reserve Board and at the Reserve Banks in January 1988.

Specification of the demand-deposit model

$$\begin{aligned}
 \Delta \log (DD) = & -.1192 - .0180 \log(RTBE)_{-1} \\
 & [-2.5] \quad [-3.2] \\
 & -.1686 [\log(DD) - \log(EPCEN)]_{-1} \\
 & [-2.5] \\
 & -.0009 TYME_{-1} - .0030 SHIFT_{-1} \\
 & [-2.2] \quad [-2.7] \\
 & + .1605 \log(1 - JNOWT)_{-1} \\
 & [2.2] \\
 & + \sum_{i=0}^1 dr_i \Delta \log (RTBE)_{-i} \\
 & + \sum_{i=0}^2 dy_i \Delta \log (EPCEN)_{-i} \\
 & - .0089 \Delta SHIFT \\
 & [-3.3] \\
 & + .8926 \Delta \log (1 - JNOWT) \\
 & [11.3] \\
 & + .1481 \Delta \log (DD)_{-1} \\
 & [2.5] \\
 & \sum dr_i = -.0295 \quad \sum dy_i = .8519 \\
 & \quad \quad \quad [-3.3] \quad \quad \quad [13.5] \\
 & dr_0 = -.0072 \quad dy_0 = .4889 \\
 & dr_1 = -.0222 \quad dy_1 = .1984 \\
 & \quad \quad \quad dy_2 = .1645
 \end{aligned}$$

where

DD = demand deposits (business and consumer)

$EPCEN$ = personal consumption expenditures in current dollars

$JNOWT$ = index of the availability of NOW accounts (held constant from 1985 onward)

$RTBE$ = rate on three-month Treasury bills (effective yield)

$SHIFT$ = 0 through 1974:2, 1 in 1974:3; increases in increments of 1 until reaching 10 in 1976:4 and remains at 10 thereafter (a dummy variable for the "missing money")

$TYME$ = time variable: 1947:1 = 1; increases in increments of 1 each quarter.

All variables are quarterly averages.

Sample period: 1961:1–1986:2; $\bar{R}^2 = .763$; Durbin H statistic = $-.7908$; standard error of regression = $.0069$. The numbers in brackets are t statistics.

One convergence restriction is imposed on the estimates:

$$\sum_{i=0}^2 dy_i + \text{coefficient on } \Delta \log (DD)_{-1} = 1.$$

This restriction imposes on the short-run dynamic terms the same unitary elasticity with respect to consumption that is imposed in the long run by the second line of the model.

This model and the results of the simulation are presented as an illustration of the extent to which the behavior of demand deposits in the 1980s has departed from that suggested by past relationships with interest rates and aggregate spending. The results presented in text table 1 are from a quarterly dynamic simulation of the model beginning in 1981:1. The parameter estimates of the model are based on quarterly data from 1961:1–1986:2 and thus incorporate data from the 1980s, including a part of 1986–87, the period when the most serious simulation errors emerge. By including information on demand-deposit behavior in the 1980s, rather than a pure out-of-sample simulation, this approach illustrates the extent to which the longer-run predictability of demand deposits has deteriorated. In addition, economists at the Board have run simulations of demand-deposit models with different specifications, estimated over 1961–86 and over 1983–87, and found similar patterns of errors in 1986 and 1987. As noted in the text, the apparent relation of the errors to movements in interest rates implies that the interest elasticity of demand deposits has increased.

Because of the wide swings in demand deposits in late 1986 and in various periods in 1987 induced by the special factors discussed in the text, it is difficult to sort out elasticity effects by estimating models over periods that include 1986:3–1987:4. The model specified here also was estimated from the early 1970s through mid-1986, and the results, when compared to those from estimating the model over the entire 1961:1–1986:2 period, indicate an increase in the long-run interest elasticity of demand deposits. This result supports the conclusion of a higher interest elasticity of demand deposits implied by the pattern of errors in the various simulations.

A detailed technical discussion of such empirical work at the Board is contained in a draft paper, “Modeling the Disaggregated Demands for M2 and M1 in the 1980s: the U.S. Experience,” by George Moore, Richard Porter, and David Small, presented at a workshop at the Board in mid-January 1988.

RESPONSES TO THE SENIOR FINANCIAL OFFICER OPINION SURVEY

Tables A.1. and A.2. contain detailed data on the responses to the January 1988 Senior Financial

Officer Opinion Survey. Of the survey panel of 60 banks, 59 responded. Not all of the 59 banks, however, responded to all questions on the survey. Nonresponses were not included in tabulating the survey results and computing the percent of institutions answering in a particular category of a question. For example, 51 banks responded to the question, reported in table A.1., about the proportion of business demand balances held under formal compensating-balance arrangements, and the percentage of responses in each category is based on 51 respondents. On questions to which 59 banks responded, the percentages are based on 59 respondents. Of course, some questions applied to only a subset of the panel, depending on their answers to a previous question. For example, only the 37 banks that reported a shift from compensating balances to explicit fees answered the question about whether such shifts had accelerated in 1987. In all cases, if a bank responded that it was uncertain as to the answer to a question, its response was included in the totals and reported in the “uncertain” category.

A.1. Importance and structure of compensating balances at selected large U.S. banks, 1987

Survey item	Number of banks	Percent of banks ¹	Survey item	Number of banks	Percent of banks ¹
<i>Proportion of business demand balances held under formal compensating-balance arrangements (percent)</i>			<i>Period for measuring interest rate used for ECR³</i>		
0-20.....	6	12	Week.....	1	2
21-40.....	2	4	Month.....	47	81
41-60.....	16	31	Quarter.....	9	16
61-80.....	14	27	Longer.....	1	2
Over 80.....	13	25	All banks.....	58	100
All banks ²	51	100	MEMO		
<i>Change in proportion in 1987</i>			Lagged ECR.....	19	33
Increase.....	2	4	Moving average.....	10	17
Decrease.....	6	12	<i>Period for measuring compensating balances</i>		
None.....	41	80	Month.....	49	83
Uncertain.....	2	4	Quarter.....	9	15
All banks.....	51	100	Year.....	1	2
<i>Shift from compensating balances to explicit fees in recent years</i>			All banks.....	59	100
Yes.....	37	73	<i>Carryover of surpluses or deficiencies permitted period to period</i>		
Acceleration in 1987			Yes.....	40	68
Yes.....	14	38	No.....	16	27
No.....	22	59	For some customers.....	3	5
Uncertain.....	1	3	All banks.....	59	100
All banks.....	37	100	<i>Limits on carryovers</i>		
No.....	14	27	Yes.....	4	9
All banks.....	51	100	No.....	38	88
<i>Most common ECR formula for compensating balance</i>			For some customers.....	1	2
Adjusted for required reserves ..	48	100	All banks.....	43	100
All banks.....	48	100	<i>Carryovers permitted beyond end of calendar year</i>		
<i>Interest rate used as basis for ECR</i>			Yes.....	10	23
Three-month Treasury bills.....	49	83	No.....	32	74
Ninety-day CDs.....	3	5	For some customers.....	1	2
Other.....	3	5	All banks.....	43	100
Average of several rates.....	4	7	<i>Change in ECR formula or other compensating-balance feature in 1987</i>		
All banks.....	59	100	No change.....	51	86
			Change by customer.....	2	3
			Change by bank.....	4	7
			Adjustment for FDIC insurance.....	2	3
			All banks.....	59	100

1. Details may not add to totals because of rounding.

2. Mean for all banks, 61.6 percent.

3. A bank may have responded in more than one category.

SOURCE: Board of Governors of the Federal Reserve System,

January 1988 Senior Financial Officer Opinion Survey. The survey panel consists of 60 large commercial banks with total combined domestic assets of \$810 billion as of June 30, 1987; all federally insured commercial banks have \$2.5 trillion in commercial assets.

A.2. Behavior of demand deposits at selected large U.S. banks, November and December 1987

Survey item	Number of banks	Percent of banks
<i>Strength of demand-deposit growth</i>		
Very strong.....	0	0
Above normal.....	4	7
About normal.....	25	43
Below normal.....	23	40
Very weak.....	6	10
All banks.....	58	100
<i>Accounts with below-normal or very weak growth¹</i>		
Business.....	24	83
Household.....	14	48
Other.....	5	17
All banks.....	29	...
<i>Reason for below-normal or very weak growth in business accounts¹</i>		
Slowing business activity.....	7	29
Less leveraged-buyout and merger activity.....	3	13
Stricter cash management.....	13	54
Reduction in compensating balances, by cause		
Higher interest rate.....	7	29
Less use of credit services.....	3	13
Less use of operational services.....	4	17
Overages earlier in the year.....	2	8
Shift from compensating balances to fees.....	8	33
Other.....	6	25
All banks.....	24	...
<i>Concentration of below-normal or very weak growth in business accounts, by type of business¹</i>		
Financial institutions.....	2	9
Securities firms.....	1	4
Real estate firms.....	3	13
Firms involved in merger and acquisition activity.....	1	4
Energy-related firms.....	1	4
No apparent concentration.....	18	78
All banks.....	23	...
<i>Manifestation of below-normal or very weak growth in business accounts¹</i>		
Reduction in number of accounts.....	2	7
Reduction in average account balance.....	20	69
Both.....	2	7
Uncertain.....	5	17
All banks.....	29	...

1. A bank may have responded in more than one category.

SOURCE. See table A.1.

Treasury and Federal Reserve Foreign Exchange Operations

This quarterly report, covering the period November 1987 through January 1988, provides information on Treasury and System foreign exchange operations. It was prepared by Sam Y. Cross, Manager of Foreign Operations of the System Open Market Account and Executive Vice President in charge of the Foreign Group of the Federal Reserve Bank of New York.¹

The dollar experienced recurrent periods of downward pressure throughout November and December, then firmed in early January. On balance, the dollar ended the three-month period $7\frac{1}{2}$ percent lower against the Japanese yen and 3 to 4 percent lower against most European currencies and the Canadian dollar. The U.S. authorities intervened to support the dollar at various times during the period, most heavily in early November and around the turn of the year.

EARLY NOVEMBER PRESSURE ON THE DOLLAR

In November, as the period under review opened, the dollar was already under selling pressure stemming from several sources.

Given the sharp decline in stock prices in October and the relatively greater importance of equity holdings in the United States than in other countries, the U.S. economy was seen to be in danger of weakening considerably, and more so than the economies of other countries. Under these circumstances and with the Federal Reserve acting to provide liquidity to the market, U.S. interest rates had declined significantly. Meanwhile interest rates in other countries had

declined less sharply. As a result, interest rate differentials favoring the dollar had narrowed.

Following the stock market developments in October, market participants looked to the administration and the Congress for decisive action to reduce the U.S. fiscal deficit. Progress was not yet visible, even though the administration and the Congress had begun discussions on a two-year deficit reduction program.

In light of these factors and the continuing large trade imbalances, many doubts were expressed in the press and in the market that the Group of Seven (G-7) countries would place a high priority on maintaining exchange rate stability and international policy coordination. As a result, market participants were looking for evidence that the economic policy coordinating mechanisms established at the February 1987 Louvre accord were still intact.

During the first week of November, the dollar's decline began to accelerate. Some press reports asserted that the U.S. authorities' primary concern, at least for the moment, was to prevent a recession, even at the risk of a further decline in the dollar. Other reports tended to reinforce doubts about the strength of the commitment of the G-7 countries to foster stability in exchange rates. The dollar's decline continued despite explicit reaffirmation of the U.S. adherence to the Louvre accord.

In fact, the Trading Desk at the Federal Reserve Bank of New York had already begun to intervene in the market on behalf of the U.S. monetary authorities. In concert with other central banks, the Desk purchased \$1,095 million from November 2 through November 10, of which \$717 million was against marks and \$378 million against yen. The dollar traded as low as DM1.6485 against the mark and Y133.20 against the yen on November 10.

Following these intervention operations and a

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.

statement by President Reagan on November 10 that he did not want to see a further decline of the dollar, the selling pressures subsided. The report a few days later that the U.S. trade deficit had declined in September, and President Reagan's subsequent statement that the budget negotiations could result in \$80 billion in deficit reductions over two years, seemed to suggest progress toward reducing the U.S. external and internal imbalances. At the same time, the Bundesbank took action to lower German short-term interest rates, which reduced the tendency for the German mark to appreciate against its partner currencies within the European Monetary System (EMS) as well as against the dollar. In that environment, market participants questioned whether the stage was being set for a G-7 meeting that would reaffirm the commitment to exchange rate stability. The dollar firmed to DM1.7170 against the mark and Y137.30 against the yen on November 16.

REEMERGENCE OF PRESSURE IN LATE NOVEMBER AND DECEMBER

The dollar came under pressure again as hopes faded for rapid progress in the budget reduction negotiations. Expectations of an early G-7 meeting receded after statements by several foreign officials seemed to indicate that a meeting would not occur until a U.S. budget accord had been negotiated and approved by the Congress. By November 20, when the administration and congressional negotiators agreed upon a plan to reduce the budget deficit about \$75 billion over two years, the dollar was already moving lower as market participants wondered whether the program would be adequate and how long it would take for the Congress to enact the measures. With market attention focused almost exclusively on the progress of the budget reduction plan through the Congress, news of coordinated interest rate adjustments in Germany and several other European countries on November 24 again helped to ease tensions within the European Monetary System but provided only limited support for the dollar. In the presence of continued doubts about the strength of the G-7 commitment

to foster stability in exchange rates, the dollar continued to move lower.

During late November and early December, the U.S. authorities again entered the market to contain the dollar's decline on various occasions when it came under pressure. Between November 27 and December 4, the U.S. authorities purchased \$272 million against marks and yen, again in cooperation with other central banks.

The dollar steadied during the first week of December. The Bundesbank cut its discount rate on December 3 to 2½ percent in a move accompanied by official rate cuts in France, the United Kingdom, Switzerland, Belgium, the Netherlands, and Austria. Market participants were encouraged by these signs of renewed international cooperation.

The announcement on December 10 that the U.S. trade deficit had jumped to a record \$17.6 billion (not seasonally adjusted) in October underlined the difficulties in reducing the U.S. external imbalance and had a strong market impact. As traders rushed to liquidate their dollar positions, the dollar gapped downward 1½ to 2 percent within a few minutes of the announcement. The U.S. authorities entered the market, in concert with several European central banks, to restrain the dollar's decline. The next day, when market conditions again deteriorated, the Desk reentered the market. Over the two-day period, the U.S. authorities purchased \$351 million against marks and yen.

For the rest of the month, market sentiment remained bearish as the dollar came under recurrent strong selling pressure in an atmosphere of pessimism and uncertainty. Market participants remained skeptical that the budget reductions being considered by the Congress would be sufficient to deal effectively with the U.S. fiscal deficit problem. Erroneous press reports, though quickly denied, raised doubts about the commitment of the administration to exchange rate stability and added to the uncertainty.

Meanwhile, market participants were reassessing the economic outlook generally and found the performance abroad to be mixed. The Japanese economy remained buoyant, driven by accelerating domestic demand, while in Germany the mark's continuing rise was seen as possibly leading to a decline in both German net exports

1. Federal Reserve reciprocal currency arrangements

Millions of dollars

Institution	Amount of facility, January 31, 1988
Austrian National Bank	250
National Bank of Belgium	1,000
Bank of Canada	2,000
National Bank of Denmark	250
Bank of England	3,000
Bank of France	2,000
German Federal Bank	6,000
Bank of Italy	3,000
Bank of Japan	5,000
Bank of Mexico	700
Netherlands Bank	500
Bank of Norway	250
Bank of Sweden	300
Swiss National Bank	4,000
<i>Bank for International Settlements</i>	
Dollars against Swiss francs	600
Dollars against other authorized European currencies	1,250
Total	30,100

and investment spending. The view that the Japanese economy was fairly strong, and that the Japanese authorities had less scope than others to lower interest rates, added to the selling pressure on the dollar against the yen. In these circumstances, the dollar fell more rapidly against the yen than other major foreign currencies during the second half of December. The strength of the yen relative to European currencies also was consistent with a view that, since Japan's trade surplus with Europe had widened in previous months, the yen had considerable scope to appreciate vis-à-vis the European currencies.

At the same time, market participants were no longer quite so pessimistic about the effect of the

October stock market decline on the U.S. economy. Evidence that consumer confidence may have fallen sharply in October and remained weak in November kept alive concerns about the possible effect of the stock market decline on U.S. economic growth. But the release of other statistics, including employment and industrial production figures for November that were better than expected, suggested that the market's initial worries that the decline might seriously weaken U.S. economic activity were exaggerated.

On December 22, officials of the G-7 nations issued a statement reaffirming the basic objectives and policy directions set forth in the Louvre accord agreeing that a further decline of the dollar could be counterproductive. However, traders were disappointed that the statement offered no explicit new economic policy moves aimed at stabilizing exchange rates and redressing trade imbalances.

Against this background, the dollar again came under strong downward pressure as the year drew to a close. U.S. corporations and Japanese banks sold dollars in thin holiday markets, at a time when most banks in Europe and the United States were unwilling to adjust their positions ahead of the year-end, and the market became one-sided. The U.S. monetary authorities intervened heavily in concerted intervention operations. During the period December 16 through December 31, the Desk purchased a total of \$1,707 million, approximately half of which was against marks and half against yen. By early morning January 4, the dollar had declined to record lows of DM1.5615 against the mark and ¥120.20 against the yen in the Asian-Pacific markets. At that point, the dollar was almost 10 percent lower against the mark and more than 13 percent lower against the yen from the start of the period.

2. Net profits or losses (–) on U.S. Treasury and Federal Reserve current foreign exchange operations¹

Millions of dollars

Period	Federal Reserve	U.S. Treasury Exchange Stabilization Fund
November 1, 1987– January 31, 1988	612.4	749.7
Valuation profits and losses on outstanding assets and liabilities as of January 31, 1988	1,846.8	1,350.5

1. Data are on a value-date basis.

RECOVERY OF THE DOLLAR IN JANUARY

Market sentiment changed dramatically beginning later that day, when active trading resumed in New York after New Year's Day, in response to unmistakable evidence of concerted, visible, and aggressive intervention operations. These operations provided a clear signal that U.S. and

foreign officials were seriously committed to fostering exchange rate stability and gave new weight to the December G-7 statement. Reported comments by foreign officials also reinforced the view that the new initiatives to halt the dollar's decline might be under way. The dollar advanced 1¾ percent against the mark and 2¼ percent against the yen by the close of New York trading, from its lows earlier that day, and continued to strengthen during the remainder of the first week of January.

In this context, the announcement of reductions in official interest rates in three European countries on January 5 was interpreted as a further sign that officials were willing to take steps to adjust their monetary stance and coordinate policy to support the dollar. The release on January 8 of U.S. employment statistics for December that were better than expected helped to strengthen the view that a sharp slowdown in domestic economic activity was not imminent, and accordingly, that there might be less downward pressure on U.S. interest rates. On January 13, Japanese Prime Minister Takeshita and President Reagan met in Washington and reaffirmed the December G-7 statement. They indicated that arrangements had been made to assure the adequacy of resources needed for their cooperative efforts.

On January 15, the report that the U.S. trade deficit for November had narrowed to \$13.2 billion (not seasonally adjusted) pushed the dollar sharply higher. Market participants were encouraged that the deficit, which had declined with virtually all geographic regions and across all commodity groups, was finally narrowing, albeit slowly and erratically. U.S. retail sales figures for December that were stronger than expected, released at about the same time, reinforced earlier evidence that a recession was not

*STATEMENT OF THE GROUP OF SEVEN
ON DECEMBER 22, 1987*

Paragraph 8

The Ministers and Governors agreed that either excessive fluctuation of exchange rates, a further decline of the dollar, or a rise in the dollar to an extent that becomes destabilizing to the adjustment process could be counterproductive by damaging growth prospects in the world economy. They re-emphasized their common interest in more stable exchange rates among their currencies and agreed to continue to cooperate closely in monitoring and implementing policies to strengthen underlying economic fundamentals to foster stability of exchange rates. In addition, they agreed to cooperate closely on exchange markets. The Ministers and Governors stressed the need for consistent and mutually supportive policies and believe that the measures being taken will accelerate progress toward the increased, more balanced economic growth and sustainable external positions necessary for greater exchange rate stability.

likely in the immediate future. The dollar closed on January 15 at Y130.85 against the yen and at DM1.6865 against the mark, 9 percent and 8 percent higher respectively, from its period lows on the morning of January 4. Although profit-taking brought the dollar back from its highs, market participants had gained confidence in the view that the dollar had stabilized, at least for the time being.

Between January 4 and January 15, intervention dollar purchases by the U.S. monetary authorities totaled \$685 million against marks and yen. The bulk was purchased during the first two business days of the new year.

3. Drawings and repayments by foreign central banks under special swap arrangement with the U.S. Treasury¹

Millions of dollars; drawings or repayments (—)

Central bank drawing on the U.S. Treasury	Amount of facility	Outstanding, November 1, 1987	November	December	January	Outstanding, January 31, 1988
Central Bank of Argentina	200	0	190	— 190	0	(2)
Central Bank of Ecuador	31	0	(2)	31	— 31	(2)

1. Data are on a value-date basis.

2. No facility.

The dollar traded within a narrow range from the release of the U.S. trade figures through the remainder of the month. Market participants were impressed by the early January intervention operations and expected the U.S. authorities to act forcefully to counter any renewed sharp decline of the dollar. As it happened, the U.S. authorities intervened on only one other occasion, purchasing \$30 million against yen on January 21 when the dollar came under some downward pressure. At the same time, events abroad reinforced the sense that policies were being directed toward lessening exchange market pressures. In Germany, the Bundesbank changed its monetary target to a broader aggregate (M3) from the narrower aggregate for central bank money. The Bundesbank issued a statement that the new target would allow the German authorities to pursue the twin goals of providing monetary stability and stimulating domestic demand. Although the change was technical, observers felt that it might imply a reduced likelihood of a tightening of monetary policy.

As the period came to a close, the exchange market was quiet and the dollar was trading in a narrow range. However, the dollar was perceived as still vulnerable to disappointing trade figures. Market participants, therefore, awaited further evidence that a bottom for the dollar had been reached and that the underlying economic conditions were in place for a more sustained period of exchange rate stability. The dollar closed the three-month period at DM1.68 against the mark and at Y128 against the yen, down on balance almost 3 percent and 7½ percent respectively, from levels at the end of October.

During the three-month period, the U.S. monetary authorities purchased a total of \$4,140 million dollars, of which \$2,388.5 million was against German marks and \$1,751.5 million against Japanese yen. The U.S. Treasury and the Federal Reserve intervened in nearly equal dollar amounts, though the currency composition differed. The Federal Reserve sold \$2,030 million equivalent of German marks and no yen; the Treasury's Exchange Stabilization Fund (ESF) sold \$358.5 million equivalent of marks and the entire \$1,751.5 million equivalent of yen.

Over the same period, the U.S. authorities acquired yen in a variety of ways. In particular, \$30.9 million equivalent was received representing interest payments under the Supplemental Financing Facility of the International Monetary Fund (IMF), \$184.5 million equivalent resulted from the exchange of SDRs with other monetary authorities, and \$1.4 million equivalent was purchased from customers.

In the November–January period, the Federal Reserve and the ESF realized profits of \$612.4 million and \$749.7 million respectively, from foreign currency operations. As of the end of January, cumulative bookkeeping or valuation gains on outstanding foreign currency balances were \$1,846.8 million for the Federal Reserve and \$1,350.5 million for the ESF. These valuation gains represent the increase in the dollar value of outstanding currency assets valued at end-of-period exchange rates, compared with the rates prevailing at the time the foreign currencies were acquired.

The Federal Reserve and the ESF regularly invest their foreign currency balances in a variety of instruments that yield market-related rates of return and that have a high degree of quality and liquidity. A portion of the balances is invested in securities issued by foreign governments. As of the end of January, holdings of such securities by the Federal Reserve amounted to \$1,051.7 million equivalent, and holdings by the Treasury amounted to the equivalent of \$996.1 million.

TREASURY SWAP ARRANGEMENTS WITH FOREIGN CENTRAL BANKS

During the period under review, the U.S. Treasury through the ESF provided short-term financing facilities to Argentina and Ecuador.

Argentina. As noted in the previous report (pages 14–17 of the January 1988 BULLETIN), on October 30, 1987, a near-term credit facility of \$500 million was made available jointly by the ESF, the Bank for International Settlements (acting for certain central banks), and the central banks of Mexico, Uruguay, and Colombia to the Central Bank of the Argentine Republic. On

November 12, the Argentine central bank drew \$190 million from the ESF's portion of \$200 million. The central bank of Argentina repaid \$90.1 million on December 7, \$84.3 million on December 21, \$10.3 million on December 23, and the remaining \$5.3 million on December 30.

Ecuador. On December 3, 1987, the ESF agreed to provide a \$31 million short-term credit facility for the Central Bank of Ecuador. On the next day, the Central Bank of Ecuador drew the full amount, which was subsequently repaid on January 26, 1988.

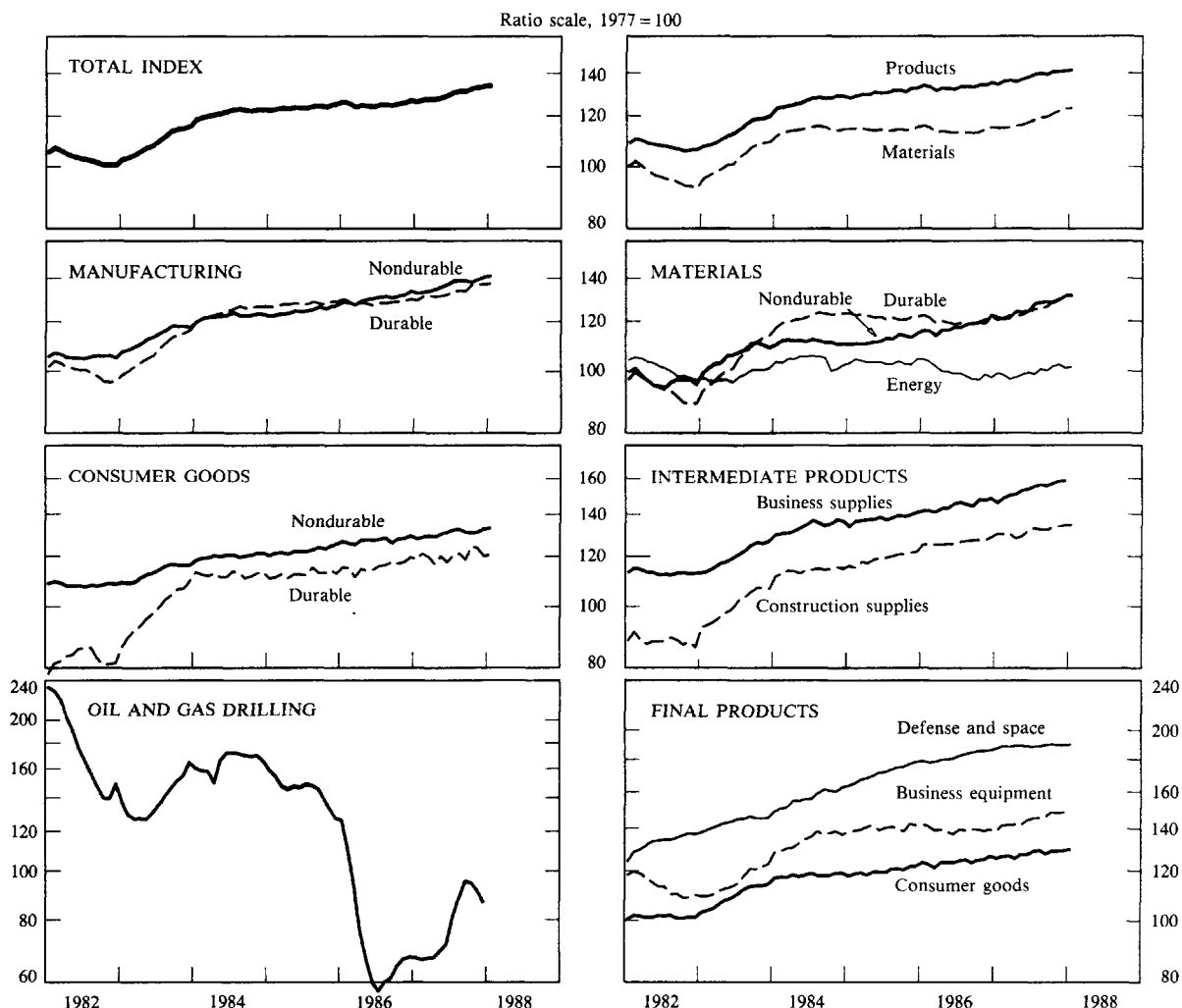
Industrial Production

Released for publication February 17

Industrial production increased 0.2 percent further in January after a revised rise of 0.4 percent in December. Gains were concentrated in the production of trucks for consumer use, nondurable consumer goods, business supplies, and manufacturing equipment; automobile production declined about 7.5 percent over the month. Output

of materials, which rose sharply throughout the second half of last year, was little changed in January. At 133.8 percent of the 1977 average, the total index in January was 6 percent higher than it was a year earlier.

In market groups, production of consumer goods rose 0.4 percent in January as large increases in lightweight truck assemblies and in nondurable consumer goods—particularly food



All series are seasonally adjusted. Latest figures: January.

Group	1977 = 100		Percentage change from preceding month					Percentage change, Jan. 1987 to Jan. 1988	
	1987	1988	1987				1988		
	Dec.	Jan.	Sept.	Oct.	Nov.	Dec.	Jan.		
Total industrial production	Major market groups								
	133.6	133.8	-.2	1.1	.4	.4	.2	6.0	
	141.1	141.5	-.4	1.1	.0	.1	.2	5.2	
	139.2	139.5	-.4	1.1	-.2	.1	.2	4.7	
	129.3	129.8	-1.3	1.1	.1	.1	.4	3.4	
	120.3	120.8	-2.2	4.8	-.5	-2.7	.4	1.6	
	132.6	133.1	-1.1	-.2	.3	1.1	.4	4.0	
	148.7	148.6	.4	1.6	-.3	.3	-.1	7.2	
	189.7	190.2	.4	.3	-.3	-.1	.3	1.5	
	147.7	148.2	-.3	.9	.7	.3	.4	6.8	
	134.6	134.6	-.2	.8	.5	.4	.0	3.3	
	123.3	123.4	.2	1.3	.9	.9	.1	7.4	
	Manufacturing	Major industry groups							
		138.5	138.9	-.1	1.2	.4	.5	.2	6.2
		137.1	137.2	-.1	2.3	.0	.2	.1	6.1
		140.6	141.2	-.1	-.3	1.0	.8	.4	6.4
		103.2	102.6	1.0	1.7	.5	-.9	-.6	3.2
		112.6	114.0	-1.4	.8	.8	-.3	1.3	5.6

NOTE. Indexes are seasonally adjusted.

and energy—were only partially offset by continued weakness in auto output. Auto assemblies were reduced in January to an annual rate of 6.0 million units from a rate of 6.5 million units in December. Output of business equipment was little changed, on balance. Production of manufacturing and power equipment advanced strongly, and output of commercial equipment, which includes computers, edged up. However, output of transit equipment fell more than 3.5

percent last month, largely reflecting a decline in assemblies of motor vehicles other than light trucks.

The indexes for both durable and nondurable materials were unchanged in January, but were appreciably stronger in December than originally published. In January, output of chemical materials and parts for equipment continued to post strong gains, but production of paper and basic metals registered declines. Production of energy materials was up in January, with generation of electricity providing the major impetus.

In industry groups, manufacturing output increased 0.2 percent in January. Although many machinery industries continued to show gains, production of iron and steel fell back in January following a sharp rise in December. As a result, durable manufacturing was about unchanged in January. Output of nondurable goods increased 0.4 percent in January, and production at utilities was up an estimated 1.3 percent. However, mining production declined 0.6 percent.

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
October.....	132.5	132.5	1.1	1.1
November.....	133.1	133.0	.4	.4
December.....	133.3	133.6	.2	.4
January.....	...	133.8	...	.2

Statements to Congress

Statement by Alan Greenspan, Chairman, Board of Governors of the Federal Reserve System, before the Committee on Banking, Housing, and Urban Affairs, U.S. Senate, February 2, 1988.

I appreciate this opportunity to appear before the Banking Committee to address questions about the Federal Reserve's response to the turbulence in financial markets last October, the functioning of our financial markets during that period, and proposals for structural and regulatory reforms.

FEDERAL RESERVE RESPONSE TO THE OCTOBER CRISIS

During the stock market crash, and in the days following, the Federal Reserve undertook a number of actions to deal with emerging problems and restore confidence. Our purpose was to limit any damage to the economy from the collapse in financial markets.

History teaches us that central banks have a crucial role to play in responding to episodes of acute financial distress. Before the founding of the Federal Reserve, the early stages of stock market crashes or their equivalent were compounded by a sharp escalation of short-term interest rates and a reduction in credit availability. For example, during the Panic of 1893, rates on call loans to brokers in New York City were quoted at the extraordinary level of as much as 74 percent per annum; the rates on prime commercial paper reached 18 percent. Interest rate quotes during the Panic of 1907 were similar. Moreover, these rates were for the most part purely formal quotes; even at such high interest rates, very little money was actually forthcoming from nervous lenders.

These rates are a product of natural market reactions to the dramatic increases in uncertainty that accompany such episodes. Fearful people tend to withdraw; they pull back; they endeavor

to become safer and more liquid. Savers and lenders attempt to disengage from markets, especially those involving risk-bearing instruments, and look for preservation of principal rather than capital gains and earnings potential. This increased demand for liquidity and safety is a phenomenon that in recent years has often been described as a flight to quality. At the same time, some private borrowers might find that their credit needs have been enlarged by a stock market crisis, especially the securities dealers who need to finance a larger inventory of equity shares acquired from a panicky public. Others may increase their borrowing just to have a larger cushion of cash on hand, given the financial uncertainties.

This combination of supply and demand factors can add up to a situation in which private borrowers could have difficulty obtaining credit, or at least find it very much more expensive. Short-term interest rates on private instruments and the cost of borrowing from intermediaries could rise sharply, compounding the crisis and increasing the potential for major damage to the economy and the financial markets.

There certainly can be a rational component underlying the heightened demand for liquidity and increased reluctance to lend to private borrowers. A stock market crash can patently increase the credit risk involved in lending to certain borrowers, such as those dealers holding large inventories of equity relative to their capital, or firms planning to retire debt by selling shares of stock, or companies that may experience reduced demand for their products as a result of the decline in equity prices. But there can be, and almost always is, an exaggerated market reaction as well, based on little hard evidence, that builds on itself and ultimately affects borrowers whose creditworthiness has not been materially impaired by the drop in equity values. This irrational component of the demand for liquidity may reflect concerns that

the crisis could affect the financial system or the economy more generally, spreading beyond the individual participants directly involved. It also can be a strong reaction to heightened uncertainties before firm information becomes available on which potential borrowers have been weakened and which are still sound.

The irrational aspect of the flight to liquidity and quality is similar in some respects to a run on a bank that is fundamentally sound. In the days before deposit insurance, banks attempted to fend off such runs by putting cash in the front window. By reassuring depositors that ample supplies were on hand, the run might be discouraged from even beginning.

In a sense, the Federal Reserve adopted a similar strategy after October 19, one aimed at shrinking irrational reactions in the financial system to an irreducible minimum. Early on Tuesday morning, October 20th, we issued a statement indicating that the Federal Reserve stood ready to provide liquidity to the economy and financial markets. In support of that policy, we maintained a highly visible presence through open market operations, arranging System repurchase agreements each day from October 19th to the 30th. These repurchase agreements were substantial in amount and were frequently arranged at an earlier time than usual, underscoring our intent to keep markets liquid.

By demonstrating openly our determination to meet liquidity demands, we could, in practice, reduce those demands to the extent that they arose from exaggerated fears. Through its actions, the central bank can help to assure market participants that systemic concerns are being addressed and the risk is being contained—that isolated problems will not be allowed to infect the entire financial system.

The Federal Reserve's activities seem to have contributed to a calming of the extreme concerns generated by the stock market collapse. Gradually, risk premiums for private borrowers subsided, suggesting that the flight to quality had abated. However, fear-based demands for liquidity remained, generated temporarily in the course of the financial turmoil, and there were also understandable and reasonable demands for excess reserves at depository institutions, whose reserve management appropriately turned more

cautious. In addition, demand deposits bulged after the stock market fall, probably in conjunction with the surge in financial transactions. The Federal Reserve supplied extra reserves to accommodate these needs.

By helping to reduce irrational liquidity demands and by accommodating the remainder, the Federal Reserve avoided a tightening in overall pressures on reserve positions and an increase in short-term interest rates. In fact, we went even further and eased policy moderately after the stock market collapse in light of the greater risk to continued economic expansion. The federal funds rate dropped from more than 7½ percent just before October 19th to about 6¾ percent in the first half of November, and regular adjustment and seasonal borrowing at the discount window fell from about \$500 million to less than \$300 million in November. Rather than the spikes in rates observed in panics earlier in our history, short-term rates actually declined after October 19, even on private instruments.

At the same time, I should add that it was very important that our actions not be perceived as merely flooding the markets with reserves. That would not have addressed the problem. We undertook open market operations in a measured and calibrated way. Haphazard or excessive reserve creation would have fostered a notion that the Federal Reserve was willing to tolerate a rise in inflation, which could itself have impaired market confidence. We were cautious to attack the problem that existed and not cause one that did not.

In addition, the Federal Reserve took a number of other steps after the stock market crash that were focused on the functioning of the markets and the financial strength of important participants. These steps were designed to enable us to be in a position to address the consequences of the crash on markets, especially if they threatened further disruption to the financial system, and to assure the markets of our efforts to contain the damage. Our actions dealt with a number of actual and potential specific problems, but more generally were also a key aspect of our strategy to contain the effects of the market disruption by maintaining a high visibility that would calm markets and reduce irrational demands for liquidity.

We recognized that the safety and stability of the banking system are essential to the success of this strategy. History teaches us that stock market declines that do not adversely affect the banking system have a much less serious effect on the overall economy than ones that do.

For example, the stock market crashed in March 1907, but the Panic of 1907 was not initiated until the failure of the Knickerbocker Trust Company in October. The damage to the economy after the stock market crash in October 1929 was much magnified by the series of bank failures that occurred in 1930–33. Conversely, the stock market fell sharply in May and June 1962; however, the banking system was not seriously affected, and the effect on the overall economy was limited.

Accordingly, during the recent events, the System placed examiners in major banking institutions and monitored bank developments carefully in several ways.

For example, the Federal Reserve Banks kept close track of currency shipments to banking institutions to identify potential emerging bank runs. These shipments did increase after October 19 but seemed to involve banks that were taking precaution against runs that never occurred. In addition, there was a generalized increase in the demand for precautionary balances in currency by the public, not associated with runs on banks, that was also satisfied.

We reviewed the potential impact of stock market activity on pending bank holding company mergers and acquisitions. We monitored the announced or unannounced intention of bank holding companies to buy back their stock. When discussing these possible actions with holding companies, we took the position that such purchases would be inappropriate other than on a limited basis to restore order in the market for their stock.

We paid particular attention to the credit relationships between banks and securities dealers. We assessed the banking industry's credit exposure to securities firms through loans, loan commitments, and letters of credit. We were in contact with both banks and securities firms regarding the liquidity and funding of brokers and dealers. We recognized that banks needed to exercise caution in their credit judgments to

protect their financial stability. At the same time, banks have always been relied upon as important sources of credit in financial markets, especially when those markets are troubled and normal access may have been impaired. In our conversations with banks, we stressed the importance of ensuring adequate liquidity to meet legitimate customer funding needs, even if they were unusually large, while recognizing explicitly the responsibility of market participants to make their own independent credit judgments.

In the event, banks did make a large volume of securities loans after the stock price decline. They apparently reviewed their credit exposure carefully, in some cases asking for additional collateral. However, our information suggests that there were only a few instances in which credit was withdrawn or requests for new credit were refused, and these instances involved relatively minor amounts. The generally good performance of this key lending function may be attributable, at least in part, to the knowledge that the Federal Reserve was making reserves freely available so that banks would not be facing escalating funding costs.

The Federal Reserve also took particular interest in the government securities market. We have long had a special involvement in this market through our open market operations and as fiscal agent for the Treasury.

In the wake of the stock market decline, we stepped up our daily monitoring of primary government securities dealers and interdealer government securities brokers. We held discussions with regulators and other market practitioners regarding particular situations in which firms were having difficulty meeting capital requirements. Officials of the Federal Reserve Bank of New York met with representatives of government securities dealers and with interdealer government securities brokers with regard to concerns about counterparty risk, especially in when-issued trading associated with the Treasury's November refunding.

One problem that arose resulted from a reluctance of some holders of government securities to lend them as freely as they typically do. As a consequence, the incidence of failures to deliver particular government securities rose, potentially disrupting trading and liquidity in this key mar-

ket. In response, the Federal Reserve temporarily liberalized the rules governing lending of securities from its portfolio. For a time, we lifted per-dealer and per-issue limits on such lending and set aside the rule against lending to facilitate short sales.

Beyond these efforts in the banking and government securities areas, the Federal Reserve was in frequent contact with market participants and officials at the Treasury and at other regulatory agencies regarding the functioning of other markets as well. The efforts proved essential to gather information, identifying developing problems, and coordinate responses with other authorities.

Many of the contacts occurred through the Federal Reserve Banks of New York and Chicago, which have special knowledge and understanding of nearby markets and contacts with key officials. Through them and at the Board of Governors, we were in touch with officials at the stock, options, and futures exchanges, as well as with the Securities and Exchange Commission (SEC) and the Commodity Futures Trading Commission (CFTC), regarding the liquidity of the markets, the functioning of market makers, operational problems, and settlement issues. In addition, we discussed the possible effect of sharp swings in markets on participants' financial conditions to obtain advance warning of any problems that might be developing. To facilitate timely margin collections in futures markets, the Federal Reserve extended the hours of operation of its funds transfer system on October 19 and 20.

Furthermore, we closely monitored the international ramifications of the stock market crash, and the effect of developments in foreign markets on U.S. market participants. We communicated with officials of foreign central banks with regard to general market conditions and with various market participants abroad regarding the effects of the stock market developments in specific markets.

In summary, the Federal Reserve acted in response to the stock market crash to reduce irrational fear-based demands for liquidity, to meet remaining unusual liquidity demands, and to monitor developments in the government securities and equities markets and in the banking system. Our reactions to provide liquidity appar-

ently prevented the sharp interest rate spikes observed in earlier crisis periods. Interest rate spreads have come back more into line, and market functioning appears to have returned toward more normal conditions. Although it appears that the acute crisis period has passed, markets remain quite sensitive, and could react strongly to developments that seemed to portend more market instability.

STOCK MARKET FUNCTIONING AT THE BREAK

Regarding the matter of the overall functioning of our markets for equities and derivative instruments during the October turbulence, we now have the benefit of several major studies. More studies will be forthcoming. Clearly, the findings and the recommendations of these studies deserve careful consideration. Senator Brady and the other members of the Presidential task force, along with their staff, have done a remarkable job of assembling information and preparing their report on the October plunge in so short a span of time. The nation owes them a debt of gratitude for their efforts. We find their analysis of the causes of the stock break particularly instructive and subscribe to its general lines. We differ, in part, on some of their recommendations for reform. The Brady report, along with those of the CFTC, the General Accounting Office (GAO), and various private organizations, are adding much to our understanding of these events and the vulnerabilities of our securities markets to rapidly changing developments.

It hardly needs to be said that we are dealing with an extremely complex set of issues involving the factors that influence price movements in securities markets and the capability of our financial institutions to withstand extreme shocks. Not only do the studies emerging on this matter reinforce the point that there are close relationships among the various domestic securities markets and between these markets and their derivative counterparts but also the extent to which our financial marketplace has become intertwined with those abroad.

In addressing the issues before us, we must keep these dependencies in mind. We must also

recognize that the financial system is in the process of evolution and that much of the change since mid-October has been in reaction to weaknesses displayed at that time. Some of these adaptations—such as a reduction in the use of portfolio insurance strategies—are taking forms that limit pressures that would be placed on the system if circumstances similar to those of mid-October were to recur. Others are adding to the system's capacity to bear large shocks.

A central question is the cause of the market collapse and its suddenness. Only if we understand why it happened can we gain insights into how the structure of markets for equities and their derivatives can be improved. Not only was the stock price break very large, but it was compressed into a very short span of time. We can point to a number of price declines in our history of a magnitude similar to last October, but none have been as rapid. Also, the plunge was an international phenomenon. The drop was of fairly uniform severity across the major equity markets, affecting those with well-developed and less-developed derivative markets similarly.

Before the drop, the market had run up to very high levels. The bull market from 1982 onward was nurtured by a favorable economic setting for businesses, which investors came increasingly to view as likely to be sustained. In particular, inflation expectations were greatly reduced over this period, even as the economic expansion continued. However, stock prices finally reached levels that stretched to incredulity expectations of rising real earnings and falling discount factors. Something had to snap. If it had not happened in October, it would have happened soon thereafter. The immediate cause of the break was incidental. The market plunge was an accident waiting to happen. Measures of real rates of return on equity investments indicated that such returns were at historically low levels last summer—a situation that in the past has been restored to more normal levels either by a subsequent sharp increase in earnings or a pronounced drop in share prices. In the event, we got the latter.

Probably contributing to high share prices were efforts by investors previous to October to extend their cash equity positions on the thought that the availability of liquid markets for deriva-

tive instruments would enable them to promptly trim their exposure and limit losses should they fear a turndown in prices. Many users of portfolio insurance strategies, especially those aggressive formal programs that were model driven and executed by computers, believed that they could limit their losses in a declining market, and hence were willing to be more than usually exposed in cash equity markets. However, the experience of last October vividly illustrates that timely execution cannot be assured, especially under those conditions when it matters the most—when the markets are under heavy selling pressure. In essence, there was an illusion of liquidity that likely encouraged larger equity positions on the part of many investors. Of course, while an individual investor can in principle reduce exposure to price declines, the system as a whole with rare exceptions cannot.¹ Thus strategies by so many investors to shed risk associated with a large decline in price were vulnerable in ways that had not been fully contemplated. The nearly simultaneous efforts of so many investors to contain losses pushed the system beyond its limits, exacerbating problems of execution and leading to portfolio losses that had not been envisioned when these strategies were adopted. The dramatic experience of October has, however, introduced more realism into such risk-shedding investment strategies, and in the process has defused some of the potential pressures on the system in the future. The mere fact of sharply lower prices has significantly reduced the risk of a replication of October 19.

Modern technology coupled with the greater presence of sophisticated institutional investors undoubtedly contributed to the suddenness of the October drop. Through modern telecommunications and information processing, investors can follow events as they unfold and react very promptly. What formerly took hours or days now can be done in seconds or minutes. Moreover, institutional investors have taken on a major role in the market for equities and derivative prod-

1. To the degree that derivative instruments facilitate a better redistribution of price risk to those most willing and able to bear it, they can add to the appeal of cash equity investments to investors, encouraging them to hold larger permanent equity positions.

ucts—accounting for about two-thirds of trading volume—and these sophisticated investors are capable of reacting almost instantaneously to information as it becomes available; these investors also were heavy users of portfolio insurance programs that key off movements in market prices and reinforce buying or selling pressures.

Modern technology, along with major institutional presence in the market, implies that an enormous volume of buy and sell orders can be sent to the markets at any moment, leading to very sudden pressures on prices. Furthermore, sharp downward price moves by themselves, such as those occurring last October, can act to heighten uncertainty in the markets and efforts to disengage, thereby compounding selling pressures. Under these circumstances, many potential buyers become reluctant to enter the market as the sharp price move, outside the range of normal experience, leads to doubts about underlying values. In other words, a rapid decline in prices can act to raise the uncertainty premium in share returns, adding, at least for a while, to downward price momentum and pressures on execution capacity. In earlier periods of large market declines, such as the Panic of 1907, news of the initial drop reached investors more slowly, for many, the next day. As a consequence, price declines were spread over a longer period of time and some of the trauma caused by a sudden price break and the corresponding pressures on system capacity was thus avoided.

On top of these factors, system capacity became an influence on investor behavior. As investors came to recognize that the capacity of the system to execute trades was faltering, they sought to get out while they could. In other words, the realization by investors that the system cannot simultaneously accommodate all the efforts under way to reduce long positions in stocks or their derivative instruments prompts still others to attempt to get out, too. This situation is not at all unlike the conditions associated with a classic bank run once it becomes apparent to depositors that the bank's liquidity will be exhausted. The problem is compounded. The confusion and uncertainty about execution last October likely contributed to uncertainty premiums in share returns and thus to additional downward pressures on prices.

The emerging incoherence between the prices of stocks, stock index futures, and options last October also contributed to uncertainty premiums and the downward pressure on prices. There is, of course, only one valuation process in these markets, that being the underlying value of the primary claims to corporate ownership. Index futures and options are claims on the primary claims and can have value only to the extent the underlying stocks have value. In fact, index futures and options merely gross up the demand and supply for equity-related products. Every such contract has equal outstanding long and short positions, the net of which is, of necessity, a wash. Stocks, in contrast, reflect a net long position representing the total value of the combined equity and derivative products. In normal circumstances, when markets are functioning efficiently, arbitrage keeps the prices of these so-called derivative instruments in line with equities. But under the strains of last October, the individual markets for these instruments were fragmented, generating considerable price disparities. These disparities were able to persist for extended periods of time—adding to confusion and doubt—owing to a breakdown of the arbitrage process associated with the withdrawal process and execution problems.

Other factors added to strains on the markets last October. The lack of coordination of margin collection and payment crimped the liquidity of some market makers and their ability to maintain positions. Also, rumors and discussion of exchange closings and possibly insolvent clearinghouses added to confusion in the markets and evidently encouraged some investors to liquidate portfolios before the markets shut down, further adding to strains on the system. In short, the initial rapidity of the price correction to an overvalued market, and a faltering execution capacity, sharply raised risk or uncertainty premiums, which contributed to historic declines in prices.

While much of the attention given to the performance of the equity and derivative markets last October has been on the strains and weaknesses displayed, we must nonetheless not lose sight of the fact that we came through the crisis remarkably well given what happened. No major brokerage firms failed, unprecedented margin calls by the futures clearinghouses were met by

their members, and stock prices reached a new trading range shortly after the plunge.

STRUCTURAL AND REGULATORY REFORMS

Turning to recommendations for structural reform, I particularly appreciate the opportunity to appear after Senator Brady. The Brady task force observes, as do others, that the weight of the evidence clearly indicates that the markets for securities and their derivative products are very closely interrelated and can and should be viewed as one market. They conclude that these circumstances require a common regulatory approach.

Recognizing that we are dealing fundamentally with a single market system is basic to addressing the structural and regulatory issues before us. We must appreciate that there is a single valuation process affecting stocks, index futures, and options, and that arbitrage across these markets in the normal course of events acts to keep the prices of these various instruments in alignment. Thus, we must not jump to the conclusion that movements in futures prices by themselves cause movements in the cash market just because they frequently precede them. We must be careful to avoid confusing symptoms with causes. When information affecting the value of equities becomes available, portfolio adjustments naturally occur first in those markets in which the costs of making adjustments are lowest, which commonly has been in the futures markets. Arbitrage, including index arbitrage, acts to ensure that values in the cash market and elsewhere reflect the new information.

We must also recognize that some of the factors contributing to the October break cannot realistically be corrected by public policy. In part, the sharpness of the October decline reflected modern telecommunications and information processing systems. But this technology also tends to enhance the efficiency of our markets and is beneficial to many other aspects of our welfare and, nevertheless, is here to stay. We must learn to adapt to this development, as we have to so many others that have advanced our society. Similarly, we do not want to lose sight of the important role that professional institutional

investors play in managing our retirement programs and the assets of nonprofit institutions, though their very sophistication and rapid response accelerated price moves in October. It also is important to realize that the so-called portfolio insurance programs that institutions have used are strategies and not products. These strategies frequently involve active use of derivative instruments, but they would exist, though probably on a smaller scale, even without the availability of such products. Moreover, the experience of last October demonstrated to these investors that aggressive strategies aimed at eking out a little more yield are inherently much more risky than had been thought, especially in those circumstances for which protection is most sought. Thus, the pressures that they would place on the system in the event of a future market contraction would be much diminished.

It is clear from the Brady report and from other studies that the capacity of the infrastructure of our financial system to absorb the extraordinary demands placed on it last October was insufficient. We must be aware that demands on the system could again exceed execution capability and that remedies may well be needed that expand capacity or that establish an orderly adjustment process once capacity limits have been reached.

Expansion of execution capacity, which rarely comes into play, may imply a misuse of resources. As a consequence, the Brady task force recommendation for circuit breakers has some appeal. We now have a better idea of the consequences of relying on a disorderly process for dealing with massive volume and demands on market-maker capital in the context of volatile price behavior. Relying on the disorderly process of last October discourages buyers from entering as well as compounds investor uncertainty. The Brady report suggests circuit breakers in the form of price limits and coordinated trading halts as worthy of consideration. In a sense, this could be viewed as a way of slowing things down when market conditions become hectic and threaten to get out of control, thereby replicating conditions of the past. The use of price limits, provided that they are known in advance and sufficiently wide to permit trading in all but the most extreme circumstances, could prove to be a constructive

measure for prompting a pause in trading, especially if there is unusual uncertainty on the part of lenders about the financial position of various market makers and brokers and uncertainties on the part of such borrowers about access to credit. They could also provide more time for policymakers to respond if the conditions giving rise to the trading halt were deemed to be an emergency.

On the other hand, large price moves may lead to fears that the limits will be reached and that portfolio adjustments will not then be possible, putting more pressure on the system and assuring that the limits are hit. The recent proposal of the New York Stock Exchange to place temporary price limits on individual stocks could prove helpful in assessing the viability of price limits. Ad hoc methods for closing markets should best be avoided, as reliance on such methods is likely to encourage rumors of closings and add to market confusion. Also, a system that leads to market closings should be one that is coordinated among the markets, perhaps internationally; if not, trading likely would shift to those markets remaining open, potentially pushing them beyond their capacity constraints. Price limits and other circuit breakers must be viewed as being inherently destabilizing, but they may be the least bad of all the solutions. When orders exceed execution capacity, the system will break down. The only question is whether it is better for it to take the form of a controlled disruption or leave the solution to a haphazard set of forces.

On the matter of regulatory structure, the Board in 1985 reviewed the appropriate form of margin regulation and suggested that margins on stocks and derivative instruments be set by self-regulatory organizations (SROs) subject to federal oversight. It was thought that SROs were in the best position to determine the appropriate level of margin and had the incentive to do so to protect the integrity of their markets. It also was thought that federal oversight would be appropriate to assure coordination of margin setting across cash, futures, and options markets, and a direct federal role might be needed in emergency situations. The CFTC and SEC were viewed as playing an important role in federal oversight, given their knowledge and expertise in the markets that they regulate. The Board expressed its willingness to be a part of such a system.

We have reviewed the matter of federal oversight again and believe that such a concept continues to be appropriate. We appreciate the confidence that the Brady task force has implicitly placed in the Federal Reserve and also its reasons for recommending that a single agency have full intermarket oversight authority. However, we seriously question this recommendation. To be effective, an oversight authority must have considerable expertise in the markets subject to regulation, something that the CFTC and SEC have developed over some time. Moreover, were the Federal Reserve to be given a dominant role in securities market regulation, there could be a presumption by many that the federal safety net applicable to depository institutions was being extended to these markets and that the Federal Reserve stood ready to jump in whenever a securities firm or clearing corporation was in difficulty. Coherence of federal oversight over the market for equity instruments could be achieved through merging the relevant portions of the CFTC with the SEC or by a joint oversight authority including the SEC, CFTC, and perhaps the Federal Reserve or the Treasury.

We continue to view the achievement of consistent margins across the various instruments as being appropriate and believe that a federal oversight authority would be well positioned to accomplish this. The proper level of margin, though, is a very complicated issue and must be addressed carefully. There are fundamental differences in the price behavior of individual stocks, stock indexes, options, and futures that are likely to call for different levels of margin if our primary objective is to preserve the integrity of these markets while promoting liquidity. We must recognize that setting margin too high on an equity instrument would discourage the use of such an instrument and reduce its liquidity, indirectly affecting the markets for the other instruments as well.

On the related matter of clearing mechanisms, we concur with the spirit of the Brady task force that improvements in the clearing system are needed, based on a more unified approach. The evidence for mid-October shows that lack of synchronization of margin collection and payment across the markets led to cases in which brokers or market makers were in a position of

having to pay out margin in one market before being able to collect from another; this situation tended to squeeze liquidity and contributed to the overall problem. The need for better coordination of margin calls and collection and payment seems clear if the system is to be better able to withstand the kinds of strains that were placed on it last October. Whether a single clearing organization servicing all of the exchanges or tighter coordination of the clearing process among the existing exchanges is required remains an open question at this point. Another approach would be for a new intermarket clearing corporation to be established to handle the accounts of brokers, market makers, and investors with intermarket positions. In any event, the relation between margin and clearing suggests a role for federal oversight in the intermarket clearing process.

Finally, the Brady task force proposes that detailed trading information be collected on a regular basis for purposes of monitoring market

developments and identifying market abuses. The information to be collected would include, besides the trade, the time of the trade and the ultimate customer. While recognizing the potential value of such information, my colleagues on the Board and I oppose such data collection, except on a voluntary basis. The right to privacy is important for a free society, and we believe that the case for collecting such information must be a compelling one, which this one does not seem to be. Also, such an action by the United States alone could well reduce the attractiveness of our securities markets to foreign investors at a time when we are heavily dependent on foreign capital for financing our external deficit.

In sum, the Brady proposals and those formulated by others represent an important basis for public discussion. Reactions to these and other proposals by a wide cross section of the public will prove helpful in clarifying methods for strengthening our securities markets. □

Statement by Alan Greenspan, Chairman, Board of Governors of the Federal Reserve System, before the Committee on Banking, Finance and Urban Affairs, U.S. House of Representatives, February 23, 1988.

I appreciate this opportunity to appear before you to discuss the conduct of monetary policy and the economic and financial situation. You have received the more formal Monetary Policy Report to the Congress of the Board of Governors detailing the economic and financial situation and reviewing our policy actions in 1987, and presenting our approach to monetary policy this year. (See pages 151–64 of the March 1988 BULLETIN.)

The setting for monetary policy for the year 1988 and beyond is more than normally complex. While the economy itself is well into the sixth year of expansion, the forward momentum of that expansion has been brought into question, and we continue to run sizable external deficits with associated dependencies on foreign savings; at the same time, inflation rates, while below

those of earlier in the decade, are still high in a long-term perspective. Moreover, uncertainties persist about key indicators of policy—the monetary aggregates—and their relation to the performance of the economy. Our approach to monetary policy in 1988 will require a delicate balancing of considerations that must take account of the difficult multiyear challenge that we face in seeking to wind down our external deficits in a manner that is consistent with the maintenance of sustainable growth in the United States and the world economy in 1988 and beyond.

Toward this end, the Federal Open Market Committee (FOMC) two weeks ago set somewhat lower target ranges for 1988, consistent with a moderate pace of monetary expansion this year. The ranges for M2 and M3 are 4 to 8 percent; for debt, we have set a monitoring range of 7 to 11 percent. The annual ranges are wider than in the past, recognizing that the linkage between money and credit growth and economic performance has become noticeably looser in recent years.

Before discussing our monetary policy plans

for 1988 in detail, I would like to review with you the developments of the past year.

1987 IN PERSPECTIVE

The year 1987 was a time of economic transition, and, like many periods of change, it had its difficult moments. Nevertheless, clear progress was made in achieving a healthier, more balanced economy. For the year as a whole, output and employment expanded strongly. As measured by the gross national product, production increased nearly 4 percent from fourth quarter 1986 to fourth quarter 1987, according to the Commerce Department's preliminary estimates. Almost 3 million persons were added to payrolls over this period. And the civilian unemployment rate dropped to about 5¼ percent—the lowest level in this decade.

We achieved this growth with a better relationship between domestic spending and domestic production. Growth of private domestic final purchases has slowed progressively from 7¾ percent in 1983 as the economy emerged from recession to about 1 percent last year. Meanwhile, real exports of goods and services rose more than 15 percent over the four quarters of 1987, as our international competitiveness was enhanced by the success of business and labor in increasing productivity and restraining cost pressures. In addition, the lower level of the dollar on foreign exchange markets, because much of it was not passed through into wage and other costs domestically, also helped our firms to price more competitively in foreign markets and to compete with imports in the United States. The improvement in the trade sector accounted for more than a quarter of the overall gain in gross national product.

One aspect of the improved trade situation was better balance of our economy internally, with previously lagging sectors showing particular strength. The manufacturing sector revived in 1987: industrial production in manufacturing surged 5½ percent between December 1986 and December 1987, and capacity utilization rose to its highest level in seven years. For example, output of steel rose especially strongly, which was the main factor in bringing capacity utiliza-

tion in this industry from about 65 percent at the end of 1986 to more than 90 percent at the end of 1987. And other areas of our economy, such as farming, mining, and oil extraction, that had been notably depressed earlier in the 1980s, showed some signs of improvement.

The robust growth of the economy—in combination with the budgetary actions of the Congress and the President, and a one-time boost from tax reform—brought about a major reduction in the federal budget deficit last year. To be sure, the flow of federal red ink was still heavy, but last December's agreement was at least a first step in needed actions for the future.

On the negative side, inflation increased in 1987. This development was not altogether surprising, given the bounceback in energy prices early in the year and the effects on import prices of the decline in the dollar. Although wage gains have remained subdued, we clearly need sustained effort to bring about a more stable price level.

As you may recall, the Federal Reserve set ranges for monetary growth in 1987 that were ½ percentage point lower than in 1986. We also noted that we would be conducting monetary policy with an eye toward a variety of economic indicators, including the strength of the economy, pressures on prices, and developments in international markets, as well as money growth relative to the ranges.

Although the aggregates from very early in the year tended to run low relative to the ranges, the challenge as we perceived it through much of 1987 was less to buoy money growth than to prevent one-time price rises related to developments in energy and foreign exchange markets from becoming rooted in a renewed inflation process. Concerns about potential inflationary pressures were clearly manifested in financial markets as well. During the spring and again in late summer, inflation worries pushed up commodities prices and long-term interest rates, and heavy downward pressures on the dollar developed in light of growing pessimism about the prospects for significant improvement in U.S. external balances; concerns about the financing of our external deficit in turn apparently added to pressures on interest rates during these episodes. In view of the inflationary potential, the Federal

Reserve increased somewhat restraint on reserves in both episodes, and in September raised the discount rate from 5½ to 6 percent.

The balance of risks shifted after the stock market collapse of October 19. The Federal Reserve immediately modified its approach to monetary policy in light of the turbulent financial market conditions. During the crisis, the System temporarily altered its focus somewhat from reserve positions to more direct measures of money market pressures, and took several steps to ensure adequate liquidity in the financial system. Moreover, we encouraged some decline in short-term interest rates, as a precautionary step in light of the possibility that the contraction in financial wealth and the deterioration in consumer and business confidence might lead to a significant drop-off in spending.

These actions helped to restore a degree of confidence in financial markets. As this occurred, the Federal Reserve returned some way toward our earlier focus on reserve positions in the day-to-day implementation of policy. But I think it is fair to say that markets still are exhibiting a certain edginess, and we cannot be sure yet that normal market functioning has been fully restored after the events of October. In addition, the effects of the stock market events on the economy may not be fully evident. Indeed, indications of some softening in the economy as the year began, against the background of a more stable dollar in foreign exchange markets, led us to take a further small easing step a few weeks earlier.

In the context of a monetary policy that, for much of the year, needed to counter inflationary pressures, and in light of the very rapid money growth in 1986 and marked variations in velocity in recent years, modest expansion of the monetary aggregates in 1987 was viewed as acceptable and appropriate. As market interest rates rose, interest rates on deposits became less competitive. This development encouraged a shifting away from monetary assets, and growth of all of the monetary aggregates slowed sharply. In addition, some special factors, such as the effects of the new tax law, changes in bank funding sources, and evolving business practices with respect to cash management and compensating balances, may also have damped money growth

last year. M2 and M3 grew 4 percent and 5½ percent respectively over the four quarters of last year, leaving them below and just at the lower ends of their annual ranges. M1 increased 6 percent.

Debt growth slowed to the midpoint of its monitoring range. The progress in reducing the federal budget deficit helped reduce borrowing, and debt issuance by the private sector dropped off as well. Debt growth could scarcely be characterized as slow; at 9½ percent, it continued the pattern of increases relative to GNP.

ECONOMIC OUTLOOK AND MONETARY POLICY FOR 1988

In formulating its monetary policy plans for 1988, the FOMC sought to further a number of complementary objectives. The Committee continued to focus on maintaining the economic expansion and on progress toward price stability, which was seen as a necessary condition for long-term sustained economic growth. It also recognized that satisfactory performance of the economy depended on moving over time toward better balance in our external accounts.

For 1988, the Committee members generally were optimistic that policy could be geared to meeting these goals. Most members foresee continued economic growth next year with no significant pickup in inflation, although at current levels of resource utilization and with rising prices of imports likely from recent dollar declines, vigilance against signs of a reemergence of greater inflationary pressures will continue to be needed. The central tendency of the forecasts of FOMC members and other Reserve Bank presidents is for growth in real GNP of about 2 to 2½ percent from the fourth quarter of 1987 to the fourth quarter of 1988—slower than in 1987, but likely close to what is a sustainable pace over the longer haul. The unemployment rate may not drop further, but employment gains could again be substantial and better distributed across industries and geographical regions. Much of the impetus to growth is expected to come from a rapid pace of expansion of net exports of goods and services, which would promote the process of adjustment to better balance internally and

externally. This should involve slow growth in domestic demand, probably encompassing damped gains in consumption and a much-reduced pace of inventory building from the pace near year-end.

Recent patterns of wage negotiations and settlements do not seem to indicate any imminent break from the restrained behavior of the mid-1980s. Although capacity utilization has risen in our manufacturing sector, bottlenecks are not as yet a problem and are not expected to become one if growth follows the subdued path of the Committee's outlook for real GNP. Even so, we cannot be complacent about the potential for higher inflation; by the time an acceleration of costs and price pressure were to become evident, the inflation process would already be well entrenched.

With its objectives in mind, as I noted earlier, the FOMC established ranges for M2 and M3 of 4 percent to 8 percent over the four quarters of 1988, with the debt of domestic nonfinancial sectors expected to increase between 7 and 11 percent. The growth ranges for money represent a decrease from those for 1987—1 percentage point in terms of the midpoints. This reduction is viewed as another step in the longer-term process of reducing targeted money growth to rates more in line with reasonable price stability. Moreover, the lower end of the ranges allows for the possibility of little pickup in money growth, especially M2, from 1987 under certain circumstances. If, for example, inflation expectations were to strengthen, market interest rates would tend to rise, and relatively slow money growth could again be an appropriate policy stance.

The FOMC does not anticipate that circumstances will call for such slow money growth. In fact, it expects some acceleration of monetary expansion in 1988, perhaps to around the middle of the ranges. But changing circumstances could easily require a considerably different outcome. In recognition of the unusual degree of uncertainty in the economic outlook and the large movements of money relative to income in recent years, we have widened the specified ranges for monetary growth from the more traditional 3 percentage points to 4 points.

This change was advisable partly because the linkage of money to spending and income ap-

pears to have become looser in the 1980s. As you know, most historical experience has suggested a fairly close relationship between spending and the quantity of money and, over a longer run, between money and prices. These relationships established the basis for adopting specific targets for growth of money to attain the ultimate goals of macroeconomic policy.

But these relationships appear to have changed considerably in the 1980s, partly reflecting the effects of deregulation, innovation, and changing technology. The spectrum of stores of value is extremely broad, extending from real capital, like plant and equipment and houses, on the one hand, through stocks, bonds, and time deposits, to perfectly liquid currency and checking accounts, on the other hand. Both households and businesses are continually adjusting their balance sheets and the allocation of their income flows between accumulation of financial assets of different sorts and acquisition of goods and services.

Transactions balances are on the edge of the exchange of financial claims for goods and services. Regulation and established practices previously acted to enforce a marked separation between transactions money balances and all other balances and supported a fairly close relationship between spending and the quantity of transactions money—as measured by M1—which allowed it to serve as a monetary policy guide. Businesses and households maintained transactions balances in demand deposits in fairly close relation to their spending requirements and relied on other forms of deposits to serve as longer-run stores of value.

But now, deregulation and improved information and communications technologies have blurred distinctions between transactions balances and other assets. Businesses can move unneeded transactions balances at each day's close into Eurodollars, repurchase agreements, commercial paper, or certificates of deposit (CDs), at little cost, with the choice among these instruments often depending on yield differentials of only a few basis points. In addition, firms now can maintain balances in hybrid instruments like money market deposit accounts (MMDAs) and money funds and retrieve them nearly as easily as they can from a regular checking ac-

count. Remaining business demand deposits serve importantly as balances that compensate banks for services, and these arrangements, too, are evolving over time. For households, negotiable order of withdrawal (NOW) accounts—interest-earning, fully checkable deposits—are important savings as well as transactions vehicles, and have contributed greatly to the decreasing usefulness of M1 as a monetary target.

This process of innovation and deregulation has affected the behavior of the monetary aggregates in several ways, only some of which we fully understand. To some extent, it seems simply to have introduced more “noise” in the money-spending relationship. In addition, though, it appears that one important consequence has been to increase the sensitivity of the demand for monetary assets to changes in market interest rates—at least over the short run. While deregulation has allowed institutions to vary the rates on deposits, in practice returns on many categories of deposits are adjusted sluggishly in response to changes in market rates, giving rise to relatively large swings in incentives to hold these instruments.

NOW accounts may be the most prominent example of this. Because these accounts are close substitutes for other liquid instruments as a store for savings, holders of NOW accounts are highly sensitive to changes in interest rates on these alternative investments. They place a larger volume of funds into NOW accounts when rates on other deposits at banks and thrift institutions are relatively low and deposit smaller amounts or actually draw down checking account balances when investment opportunities are more attractive elsewhere.

Widespread compensating-balance arrangements for businesses imply a strong interest responsiveness of demand deposits, as well. Changes in market interest rates alter the earnings value of these deposits to banks, with resulting adjustments to the balances required to compensate the bank for a given package of services.

M2 is a broader collection of the public’s liquid assets, and as a consequence internalizes some of the shifts that have plagued M1. But M2 is still somewhat limited in its coverage of financial wealth held in liquid forms, and shifts between M2 and other financial assets may not by them-

selves imply changes in spending tendencies. Such shifts have been responsive to movements in the rates on alternative investments relative to returns on M2 balances. This sensitivity, though considerably less than for M1, also seems to have increased since the late 1970s, perhaps as improved information and communications technologies have facilitated transfers of funds between M2 assets and those outside this aggregate. Over the longer run, once rates on instruments in M2 adjust to changes in market rates, this aggregate tends to grow in line with income, as it has on average over the postwar period.

M3 adds to M2 a number of the managed liabilities that banks and thrift institutions use to supplement their retail deposits to fund credit expansion. Unlike M1 and M2, it is highly responsive to the decisions of institutions as to how fast to expand their balance sheets and what particular sources of funds to rely on. Small changes in interest rate relationships can have very substantial impacts on the funding decisions of these institutions and consequently on M3, without major implications for income and prices.

M3, then, is determined largely by the decisions of depository institutions on how many liabilities and of what type they wish to supply to the markets. The managed liabilities in M3 are very close substitutes for other money market instruments in the public’s portfolio. M1 and M2, by contrast, can be thought of as depending more directly on the public’s desire to hold the assets included in these aggregates, given the returns on various alternative investments as well as levels of wealth and income. Banks and thrift institutions, of course, do vary the offering rates on their M2-type deposits to affect the quantity of these deposits that they receive. But these adjustments tend to lag market rates, and while the M2-holding public is sensitive to alternative yields, it is not nearly so sensitive as the money market investors holding managed liabilities. In these circumstances, the connection between M1 and M2 and the economy rests importantly on the effect of interest rates on the demand for these aggregates. For example, a more expansive monetary policy, increasing reserve availability or lowering the discount rate, boosts demand for

these aggregates as interest rates decline, and with a lag stimulates economic activity.

Given uncertainties about how financial market pressures in fact may need to vary in response to changing conditions in the economy, it is difficult to decide in advance on the appropriate growth of an aggregate that is sensitive to movements in interest rates. Such growth could range over a fairly wide spectrum and still be consistent with satisfactory performance of the economy. In these circumstances, the Committee decided that a modest widening of the ranges for M2 and M3 would better encompass appropriate monetary growth, while still providing a guide to policy.

This analysis also underlies our decision again not to establish a target range for M1. We have monitored the behavior of M1 and have conducted careful analyses of its properties. While some of the erratic behavior of M1 remains unexplained, we now believe that most of its unusual movements relative to income in recent years are attributable to a heightened and now quite large interest elasticity.

In view of this behavior, our calculations suggest that something like a 7-percentage-point range would be needed for M1 to encompass the same range of uncertainties as is captured by our 4-percentage-point range for M2. Such a wide range would be of little use in the conduct of monetary policy or in communicating the stance of monetary policy to the public.

One should not conclude from this that the Federal Reserve is giving up on monetary targeting. We are not. The linkages between money on the one hand and prices and spending on the other may have loosened, but that is mainly a problem over the short run. The chain still exists. We are continuing to study these relationships carefully; at some point, the shorter-run link could well become tighter again. In any event, economic theory as well as historical evidence are quite persuasive that, over the long run, money, income, and prices tend to move together.

The FOMC expects to achieve its aggregate ranges for 1988. We will, however, need to continue to interpret the incoming information on these measures in light of other data on the performance of the economy and prices, and

other indicators of the impact of monetary policy.

THE CHALLENGES AHEAD

We face formidable challenges over 1988 and beyond in meeting national economic goals of sustaining growth and progress toward price stability. Some of these challenges relate to the short-run outlook for the economy, as the possible effects of the stock market decline and the buildup of inventories late last year work through in 1988.

But our more fundamental task remains managing the process of restoring internal and external balance that is now under way. This is a challenge that cannot be negotiated by the Federal Reserve alone. It will require complementary and consistent actions by our colleagues in the Congress and the administration, as well as by our major trading partners.

For the United States, the most direct and beneficial approach would be to address the problem at its major source—the federal budget deficit. Reducing the deficit further would give us the opportunity to add to domestic saving and reduce dependence on foreign capital, while still encouraging much-needed investment spending. Because the United States is now operating at relatively high rates of resource utilization, domestic demand must be restrained if our international sector is to expand without more inflation. In the absence of fiscal restraint, greater pressure would be felt in financial markets, with negative consequences for investment and other private spending.

While recognizing the need to supply the liquidity required to keep our economy expanding, monetary policy cannot lose sight of the need to keep inflation pressures under control. We cannot permit the price level adjustments associated with restoring external balance to feed through into a renewed inflation process. Escalating prices and costs would reverse the hard-won gains in our international competitive position, leading inevitably to more difficult and wrenching adjustments down the road. Progress toward price stability is the foundation on which the longest peacetime expansion in our nation's his-

tory has been built, and continued efforts along this line will be the framework for future economic advances.

Our gains in international competitiveness have reflected a number of factors. But we should not underestimate the effects of the efforts of business and labor over recent years to enhance productivity and restrain costs. And government has made a contribution through deregulation and through the absence of major initiatives that would involve higher business costs.

Our adjustment process by definition has a counterpart for our trading partners. They must promote expansion in their demands and reduce trade barriers to assure active and receptive

markets for exports from the United States and elsewhere.

The buildup of imbalances occurred over a period of years, and has involved major adjustments to the structure of economies here and abroad. These imbalances will not be reversed easily—but they must be addressed. We must resist the lure of “short-cuts,” such as protectionist measures that would only entrench inefficiencies and reduce living standards at home as well as around the world. We can make this difficult transition, and monetary policy has a key role to play. But if we are to have a chance of doing so without dislocations and detours in our national economic advance, we will have to work together to utilize all the tools at our command.

Chairman Greenspan presented identical testimony before the Senate Committee on Banking, Housing, and Urban Affairs, February 24, 1988.

Announcements

MEETING OF CONSUMER ADVISORY COUNCIL

The Federal Reserve Board announced that its Consumer Advisory Council met on March 17 and 18.

The Consumer Advisory Council was established by the Board in 1976, at the direction of the Congress, to represent the interests of the financial industry and consumers. The Council advises and consults with the Board on the exercise of the Board's functions under the Consumer Credit Protection Act and on other consumer-related matters of interest to the Board.

AMENDMENT TO REGULATION K

The Federal Reserve Board announced on February 18, 1988, that it had further liberalized the provisions of Regulation K to permit investments abroad by U.S. banking organizations through debt-for-equity swaps in private sector nonfinancial companies in heavily indebted developing countries. The amendment was effective February 24, 1988.

This action is a follow-up step to the Board's revision of Regulation K in August 1987 to permit banking organizations, through debt-for-equity swaps, to own up to 100 percent of nonfinancial companies that are acquired from the government of a heavily indebted developing country.

The Board's regulation had already provided banking organizations with considerable flexibility to do the following: (1) reduce exposure by selling debt to other investors or (2) take advantage of debt-for-equity swap programs by exchanging debt obligations for controlling equity interests in companies engaged in financial activities or for portfolio investments in up to 20 percent of the shares of nonfinancial companies.

The Board's new amendment provides bank holding companies with broad flexibility to make

investments in up to 40 percent of the shares of any private sector company in a heavily indebted developing country. The amendment also substantially lengthens the permissible holding period for investments made through debt-for-equity swaps.

The key elements of the amendment are the following:

- A U.S. banking organization may invest in up to 40 percent of the shares of a private sector company through a debt-for-equity swap in a heavily indebted country.
- The U.S. banking organization that makes an investment in a private sector company under the revised regulation will also be permitted to provide loans or other financing in amounts up to 50 percent of the total loans and extensions of credit to the affiliated company.
- The U.S. banking organization may hold the investments made through debt-for-equity swaps for two years beyond the end of the period during which full repatriation of the investment is restricted by the debtor country, up to a maximum of 15 years.
- Investments may be made under revised general consent procedures, which require no prior notice to the Board unless the size of the investment exceeds the greater of \$15 million or 1 percent of the bank holding company's equity capital.

As a prudential measure, the amendment provides that if a bank holding company holds more than 25 percent of the voting shares of a private sector nonfinancial company, there must be another larger shareholder of the company unaffiliated with the bank holding company. In addition, the investment must be held through the bank holding company unless the Board specifically permits the investment to be held through a bank or bank subsidiary.

These measures will add to the menu of options available to banking organizations for man-

aging exposure to heavily indebted developing countries.

SYSTEM MEMBERSHIP:

ADMISSION OF STATE BANKS

The following banks were admitted to membership in the Federal Reserve System during the period February 1 through February 29, 1988:

Kansas

Overland Park Galleria Bank

Michigan

Manistee First of America
Bank-Manistee

Pennsylvania

Wayne United Valley Bank

Record of Policy Actions of the Federal Open Market Committee

MEETING HELD ON DECEMBER 15-16, 1987

1. Domestic Policy Directive

The data on the economy reviewed at this meeting largely reflected the impact of developments that were under way before the stock market collapse in mid-October. The ultimate effects of the decline in stock prices and associated developments in financial markets remained uncertain. Available data suggested that growth in output was moderating from a brisk pace in the third quarter. Spending indicators pointed to a considerable slowing in the expansion of domestic private final demands in the current quarter. Prices and wages continued to increase at about the same pace as in earlier months of the year.

Industrial production rose 0.4 percent in November, following a strong rise in the previous month. In November, gains were widespread with the exception of the motor vehicles industry. Capacity utilization in mining, manufacturing, and utilities rose slightly further in November, and the overall rate in manufacturing was at its highest level since August 1984.

Total nonfarm payroll employment continued to rise strongly over October and November. The manufacturing sector again recorded relatively large gains, with hiring increases widespread across durable and nondurable goods industries. At the same time, job growth in service industries continued at a brisk pace. Aggregate hours worked by production and non-supervisory workers remained on a strong up-trend. The civilian unemployment rate fell back to 5.9 percent in November.

Growth in consumer spending appeared to have weakened thus far in the fourth quarter, mainly because of a drop in purchases of new cars after incentive programs ended in September, although sales of other items also were

weak. Retail sales edged up in November after two months of substantial declines. Spending on furniture and appliances fell sharply in September and October and moved lower again in November. Outlays for apparel recovered a bit in November, but spending on general merchandise registered another decline.

Housing starts rebounded in November, but their average level in October and November remained somewhat below the averages in the second and third quarters. The improvement in November reflected a sharp rise in the multifamily category, which had dropped noticeably in October. Single-family starts edged up, supported by lower interest rates, but remained below their third-quarter average. The number of permits issued was about unchanged in November.

The expansion in business fixed investment appeared to have decelerated markedly from the exceptional pace of the third quarter. Outlays for capital equipment were damped by the drop in auto sales and a sharp decline in purchases of heavy trucks. Outside of motor vehicles, equipment demand remained strong early in the current quarter. Nominal shipments of nondefense capital goods, although down somewhat in October, remained above the third-quarter average. In addition, new orders moved up further, suggesting that shipments were likely to retain some momentum in the near term. Spending for non-residential structures softened in recent months; petroleum drilling appeared to have leveled off, and nonresidential construction put-in-place declined somewhat in September and October.

Inventory investment was strong in October. Nonetheless, factory stocks remained low relative to sales by historical standards. In the auto sector, production exceeded sales in both October and November, and dealer stocks again rose to relatively high levels. At other retail trade

establishments, inventory accumulation slowed in October.

The nominal U.S. merchandise trade deficit appeared to have deteriorated substantially in October from the average rate in the third quarter, reflecting in part large seasonal swings in both exports and imports. Exports were up slightly in October; about half of the increase was accounted for by a strong seasonal rise in agricultural products. The rise in nonagricultural exports was concentrated in shipments of a variety of products to Canada while exports of commercial aircraft dropped. Imports rose considerably in October. Most of the increase was in non-oil products, particularly machinery imports and imports of passenger cars from Japan, Canada, and Korea.

Economic growth in the major foreign industrial countries increased markedly in the third quarter. Real GNP rose substantially in Japan mainly because of a large increase in domestic demand, although net exports made a small positive contribution to growth; expansion in residential investment was particularly strong. German GNP, which had declined over the first half of the year, also increased sharply largely in response to domestic demand. Industrial production data for October showed some further expansion of activity in Japan and Germany. Available data suggested that GDP growth in the third quarter was strong in France, the United Kingdom, and Canada, as well.

The rise in most broad measures of prices and wages in recent months generally was close to that experienced earlier in the year. Retail energy prices dropped in October, and crude oil prices edged down in recent weeks. However, apart from energy, increases in consumer prices picked up recently, including higher prices for food, new cars, apparel, and rents. At the producer level, prices of finished goods turned down in October, but prices for intermediate and crude materials remained on a strong uptrend.

At its meeting on November 3, the Committee adopted a directive that called for maintaining the degree of pressure on reserve positions that had been sought around the time of that meeting. The Committee recognized that the volatile conditions in financial markets, including potential shifts in demands for liquidity, and uncertainties

in the economic outlook might continue to call for a special degree of flexibility in open market operations. Taking account of conditions in financial markets, the members decided that somewhat lesser reserve restraint would, or slightly greater reserve restraint might, be acceptable depending on the strength of the business expansion, indications of inflationary pressures, developments in foreign exchange markets, as well as the behavior of the monetary aggregates. The intermeeting range for the federal funds rate was reduced by 1 percentage point to 4 to 8 percent.

During the interval since the November meeting, reserves continued to be supplied on a more flexible basis than usual to help maintain relatively steady conditions in the money market at a time of unusual sensitivity and uncertainty in financial markets generally. Adjustment plus seasonal borrowing tended to be relatively low and averaged about \$225 million during the two maintenance periods ending December 2. As evidence of a reduced willingness to borrow accumulated, such borrowing behavior was accommodated through provision of nonborrowed reserves in order to keep money market conditions from firming. Borrowing declined somewhat further so far in the latest maintenance period. After expanding at a double-digit pace in October, total and nonborrowed reserves contracted in November, reflecting a drop in required reserves associated in large measure with the reversal of the postcrash bulge in transactions accounts and a lower average level of demands for excess reserves.

Federal funds traded mainly in the $6\frac{3}{4}$ to $6\frac{7}{8}$ percent range over the intermeeting period, close to the average level around the time of the November meeting. Most other short-term rates rose somewhat on balance. The increases apparently reflected some ebbing of preferences for liquidity as financial markets calmed further. In addition, expectations of further ease in monetary policy tended to diminish as incoming data suggested continued, albeit moderate, expansion in the economy and as the dollar fell in foreign exchange markets. To some extent rates on very short-term instruments increased because of positioning in advance of anticipated pressures in money markets around the year-end. Yields on

long-term Treasury securities were up about 20 basis points after early November, while corporate bond yields rose half that much. In contrast, municipal bond yields and mortgage rates fell over the intermeeting period. Stock prices declined slightly further on balance. In general, while financial markets appeared to be functioning more normally, they remained unsettled with occasional episodes of unusually wide price swings and of flights to liquidity and quality echoing the experience after mid-October.

Since the November meeting, the foreign exchange value of the dollar declined about 5 percent on a weighted-average basis in terms of the other G-10 currencies. The dollar came under pressure early in the period, partly because of market disappointment over U.S. efforts to reduce the budget deficit. In early December concerted reductions in official interest rates by Germany and several other European countries temporarily boosted the dollar; over the entire intermeeting period short-term interest rates declined about $\frac{1}{2}$ percentage point, on average, in major foreign industrial countries, while long-term rates were down slightly on balance. However, the dollar's decline resumed, especially after the very disappointing U.S. trade figures for October were released on December 10.

The monetary aggregates weakened substantially in November. While some of the weakness reflected a runoff of the bulge in demand deposits that followed the stock market plunge in October, demand deposits dropped below early October levels. Other checkable deposits also decreased. With the nontransactions portion of M2 expanding only sluggishly, the level of M2 was about unchanged in November. Only small time deposits and money fund shares showed any strength, as their yields remained attractive relative to rates on market instruments and liquid deposits. To supplement weak growth in core deposits, banks and thrift institutions issued managed liabilities at a robust pace in November, and flows into institution-only money funds moved up sharply, as returns on these funds lagged the downward movement of market rates in late October. Even so, M3 expanded at an annual rate of only $4\frac{3}{4}$ percent. For the year through November, M2 and M3 grew respectively at rates well below and at the lower ends of

the $5\frac{1}{2}$ to $8\frac{1}{2}$ percent annual ranges established by the Committee. M1 growth also slowed sharply this year. The reduced growth of these aggregates and a turnaround of their velocities appeared to be attributable primarily to the rebound in interest rates and opportunity costs in 1987 after steep declines in 1985 and 1986.

The staff projection continued to point to relatively sluggish growth in economic activity during the first part of 1988 and to some pickup later in the year. The contour of the projection was dominated by the anticipated effects of the decline in stock prices and the accompanying developments in financial markets, although these effects now were projected to be more muted than was expected in early November. In the context of recent decisions to reduce the federal budget deficit, fiscal policy would exert a moderately restraining impact on aggregate demand. As in the previous projection, consumer spending was projected to slow in coming quarters, but to strengthen later in 1988 as most of the adjustment to the lower level of stock market wealth was completed. Growth in spending for plant and equipment was likely to slow in response to the sluggish pace of domestic sales—offset only in part by further growth in export sales—and the resulting diminished requirements for additional capacity. The decline in mortgage interest rates was expected to stimulate a modest improvement in residential construction. The external sector would provide a substantial positive contribution to activity over the entire projection horizon. Prices were likely to rise at a moderate rate in 1988. Energy prices were expected to be flat, but nonpetroleum import prices were projected to continue to place upward pressure on inflation and nominal gains in compensation were anticipated to increase. However, continuing efforts to improve competitiveness were expected to damp real wages and labor costs over the projection horizon.

In the Committee's discussion of the economic situation and outlook, members referred to conflicting signs with regard to the prospective strength of the business expansion. On the one hand, employment and production had been well maintained in recent months and financial markets had calmed since late October. To date, the sharp decline in stock prices appeared to have

had little impact on domestic business activity, perhaps because it had merely reversed a runup in earlier months of the year and because it was associated with a reduction in market interest rates. Moreover, recent declines in the foreign exchange value of the dollar would help to sustain the improvement in net exports. In these circumstances, business investment also might remain fairly strong. Members cited favorable reports from businesses in many parts of the country that tended to support an optimistic outlook for overall business activity, although some areas or industries had recovered only slightly thus far from relatively depressed conditions. On the negative side, a number of members observed that the risks to the economy were in the direction of slower growth than foreseen in the staff forecast. Consumer spending in particular had been relatively weak, as evidenced by recent trends and the apparent need for widespread discounting to buttress sales. Moreover, growth in disposable incomes was believed likely to remain relatively sluggish, and together with an already low saving rate and rising consumer debt burdens would tend to retard expansion in retail sales. It also was noted that the full effects of the decline in stock prices might not yet have been felt. In addition, money growth had been quite weak, and at some point the slow growth might be reflected in incomes and spending. Several members commented that current projections were subject to a great deal of uncertainty, especially in light of still unusually sensitive conditions in domestic financial markets and the uncertain prospects for the dollar and the nation's foreign trade balance.

The members gave considerable attention during the discussion to the outlook for foreign trade and its implications for domestic economic activity. Recent data on nominal net exports were disappointing, but real net exports had shown considerable improvement so far this year. Gains in exports were especially encouraging. The data indicating an improved real trade balance were supported by members' observations from around the country. Many business contacts were reporting greatly enhanced export opportunities as a result of the dollar's depreciation, although there were exceptions, and they also indicated that their ability to compete in domes-

tic markets against imported goods had improved. The members generally agreed that the foreign trade sector was positioned to make an appreciable contribution to sustained expansion in domestic economic activity at a time when growth in overall domestic demands might be weakening. However, the likely extent of actual gains from trade would depend to some degree on the strength of the economies of foreign industrial nations.

In further discussion members observed that, given the higher rate of utilization of domestic capital and labor resources, substantial improvement in the nation's trade balance implied the need for relatively restrained growth in domestic demands over time as more production was diverted to export markets. The adjustment in trade, which appeared inevitable in light of the unsustainable size of the current trade deficit and the rapid growth in the nation's external indebtedness, appeared feasible over time without causing major disruptions in domestic business activity. However, such an adjustment would require the implementation of appropriate fiscal, monetary, and trade policies by the United States and its major trading partners.

Turning to the outlook for inflation, some members commented that inflationary expectations seemed to have abated to some extent since the collapse in stock prices during October. The depreciation of the dollar would continue to exert upward pressures on domestic prices, but increases in wages and other costs did not appear to be worsening, and in the view of some members inflation might be in the process of easing. Concern was expressed by a number of members, however, that wage and price pressures might well intensify if the economy were to expand at an appreciably faster pace than many members currently expected or if the dollar were to decline substantially in the foreign exchange markets.

At its meeting in July the Committee reviewed the basic policy objectives that it had set in February for growth of the monetary and debt aggregates in 1987 and established tentative objectives for expansion of those aggregates in 1988. For the period from the fourth quarter of 1986 to the fourth quarter of 1987, the Committee reaffirmed the ranges established in February

involving growth of $5\frac{1}{2}$ to $8\frac{1}{2}$ percent for both M2 and M3. Given developments through mid-year, the Committee agreed in July that growth in these aggregates around the lower ends of their ranges might be appropriate, depending on the circumstances. The monitoring range for expansion in total domestic nonfinancial debt also was left unchanged at 8 to 11 percent for 1987. For 1988 the Committee agreed on tentative reductions of $\frac{1}{2}$ percentage point to growth ranges of 5 to 8 percent for both M2 and M3. The Committee also reduced the associated range for growth in total domestic nonfinancial debt by $\frac{1}{2}$ percentage point to $7\frac{1}{2}$ to $10\frac{1}{2}$ percent for 1988. With respect to M1, the Committee decided at the July meeting not to set a specific target for the remainder of 1987 or to establish a tentative range for 1988. It was understood that all the ranges for 1988 were provisional and that they would be reviewed in early 1988 in the light of intervening developments. The issues involved with establishing a target for M1 would be carefully reappraised at the same time.

At this meeting the Committee held a preliminary discussion of issues relating to its target ranges for monetary growth in 1988. The behavioral characteristics of the aggregates in recent years were reviewed. Considerable attention was devoted to the question of whether or not to establish a target for M1 or some possible alternative such as M1A or the monetary base. While no decisions were made at this meeting, the members were not currently inclined to reestablish a range for M1, given the continued large interest rate sensitivity of the demand for this aggregate and the associated wide swings in its velocity. The Committee will complete its review of these issues and decide on its target ranges for 1988 at the February meeting.

In the Committee's discussion of policy for the next intermeeting period, most of the members agreed that on balance economic and financial developments called for unchanged conditions of reserve availability. Such a policy was viewed as consistent with continuing growth in the economy at a moderate pace. The members recognized that financial markets remained unsettled despite the emergence of a much calmer atmosphere since the latter part of October, and they believed that money market conditions might be

subject to considerable volatility around the year-end. In this situation most of the members felt that open market operations should continue to be conducted with a special degree of flexibility and should give considerable weight to conditions in the money market, at least over the nearer term, to accommodate shifting demands for liquidity and reserves and to temper potentially excessive fluctuations in short-term markets. However, most of the members also favored looking for opportunities to move toward more normal procedures for implementing policy if financial markets continued to stabilize.

In the majority view the risks associated with either firming or easing under current circumstances outweighed the potential benefits. It was noted, for example, that any significant firming would have unsettling effects on domestic financial markets and the associated rise in interest rates would pose considerable risks to the economic expansion. At the same time, many members felt that any appreciable easing would not be desirable currently, especially in light of the dollar's weakness and the risks to domestic financial markets and the economy that a sharp further decline in the dollar would incur. Other members weighed such risks differently, including one member who concluded that monetary policy should move toward somewhat easier reserve conditions in light of the potential for appreciably slower growth in the economy, given in this view the prospects for substantially reduced growth in domestic demands and the possibility that improvement in the nation's foreign trade balance would not provide a sufficient offset. In light of the differences among the members with regard to policy for the short run, including the Committee's operating procedures in the near term, and the uncertainties surrounding financial markets and the economy, it was understood that the members might need to consult on policy implementation before the next scheduled meeting on February 9–10, 1988.

Several members expressed some concern about the generally sluggish growth in the monetary aggregates since the early months of the year, including indications of little or no growth in M2 in recent weeks and much slower expansion in M3 than had been expected earlier. The members recognized that the relationship be-

tween monetary growth and economic performance had been very imprecise in recent years. Nonetheless, money growth and the economy were not unrelated and the reemergence of a stronger linkage could not be ruled out. In these circumstances, a continuation of sluggish growth of the monetary aggregates needed to be monitored closely as a potential danger signal with regard to the sustainability of the economic expansion.

The members also focused on the question of possible adjustments in policy implementation during the intermeeting period. A majority felt that there should be no presumptions about the likely direction of such adjustments, if any. In their view the risks that economic and financial developments might differ significantly from current expectations were fairly evenly balanced in both directions. A number of other members believed that the Committee should remain especially alert to developments that might call for somewhat easier reserve conditions. In particular, these members felt that incoming information regarding the performance of the economy should be evaluated with particular care for evidence of a possible slowing in the expansion. The members recognized that the performance of the dollar in foreign exchange markets might have a key bearing on policy implementation in this period. No member wanted to tie monetary policy exclusively to the dollar, but some strongly emphasized that further substantial depreciation in the dollar could have highly adverse repercussions on domestic financial markets and the economy.

During this meeting the members reviewed the Committee's operating procedures. These had been directed toward greater emphasis on stabilizing money market conditions since the stock market collapse in October and had given relatively less attention to the implementation of a specified degree of pressure on reserve positions. The members generally agreed that the Committee should return to its earlier operating procedures. The latter were seen to possess a number of advantages, including greater scope for market forces to be reflected in money market conditions. Given the still sensitive conditions in financial markets, however, the members expressed a range of views with regard to the appropriate timing of a return to the Committee's former

operating procedures. Some endorsed the prompt implementation of those procedures. However, a majority felt that a gradual shift toward greater emphasis on reserve objectives should be implemented during the intermeeting period. Such an approach would continue to give some attention to moderating fluctuations in money market conditions but would tolerate somewhat greater fluctuations than had occurred in recent weeks. A few members disagreed and indicated a preference for retaining the recent operating procedures at least for now. These members emphasized that a normal or predictable relationship between the provision of reserves and money market conditions had not been reestablished and was not likely to reemerge in the near term, at least in the period through the year-end when interest rates and reserves were expected to be subject to considerable variations associated with the bank statement date. The procedures could be reviewed in early January and a decision delayed until then.

At the conclusion of the Committee's discussion, all but two of the members indicated their support of a directive that called for maintaining the existing degree of pressure on reserve positions and that would phase open market operations into a more normal approach to policy implementation keyed increasingly to a desired degree of reserve pressure while giving less emphasis than recently to money market conditions. The members recognized that the conduct of open market operations might continue to require a special degree of flexibility, given still quite sensitive conditions in financial markets and the uncertainties in the business outlook. Taking account of conditions in financial markets, the members indicated that somewhat less or somewhat more reserve restraint would be acceptable, depending on the strength of the business expansion, indications of inflation, the performance of the dollar in foreign exchange markets, with consideration also taken of the behavior of the monetary aggregates. If current reserve conditions were maintained, the members expected growth in M2 and M3 to pick up from the pace in recent months to annual rates of about 5 percent and 6 percent respectively over the four-month period from November to March. Growth of M1 was expected to remain relatively

limited over the same period; because of the substantial uncertainty that continued to surround the outlook for M1, the Committee continued its practice of not specifying a numerical expectation for its growth. The members agreed that the intermeeting range for the federal funds rate, which provides a mechanism for initiating consultation of the Committee when its boundaries are persistently exceeded, should be left unchanged at 4 to 8 percent.

At the conclusion of the meeting the following domestic policy directive was issued to the Federal Reserve Bank of New York:

The economic information reviewed at this meeting largely reflected the influence of developments that were under way before the financial disturbances of mid-October. The extent to which those disturbances would affect the economy remained uncertain. Information available for the current quarter suggested that the expansion in economic activity was moderating from a brisk pace in the third quarter. Total nonfarm payroll employment rose strongly further over October and November, with the manufacturing sector recording relatively large gains. The civilian unemployment rate, at 5.9 percent in November, remained close to its level since mid-year. Industrial production also increased considerably further over October and November, following sizable advances since late spring. Retail sales edged up in November after two months of substantial declines. Recent indicators of business capital spending suggested modest further growth after a surge in the third quarter. Housing starts rose somewhat in November, after slowing in October, but were little changed from the average pace in the second and third quarters. The nominal U.S. merchandise trade deficit in October appeared to have deteriorated substantially from the average rate in the third quarter. The rise in broad measures of prices and wages in recent months generally has been close to that experienced earlier in the year.

Financial markets remained somewhat unsettled. Stock and bond prices continued to fluctuate over a relatively wide range during the period since the previous Committee meeting on November 3. On balance, share prices fell somewhat further in this period. Changes in long-term yields were mixed while short-term interest rates rose, especially on short-maturity private market instruments. The trade-weighted foreign exchange value of the dollar in terms of the other G-10 currencies declined considerably further.

The monetary aggregates weakened in November after strengthening in October in conjunction with a temporary surge in demands for transaction balances and other liquid assets in the latter part of that month.

For 1987 through November, expansion of M2 fell somewhat further below the lower end of the range established by the Committee for the year, while growth of M3 remained around the lower end of its range. Growth of M1 was close to that of nominal GNP for the year to date and expansion in total domestic nonfinancial debt remained well within the Committee's monitoring range for the year.

The Federal Open Market Committee seeks monetary and financial conditions that will foster reasonable price stability over time, promote growth in output on a sustainable basis, and contribute to an improved pattern of international transactions. In furtherance of these objectives, the Committee agreed at its meeting in July to reaffirm the ranges established in February for growth of $5\frac{1}{2}$ to $8\frac{1}{2}$ percent for both M2 and M3 measured from the fourth quarter of 1986 to the fourth quarter of 1987. The Committee agreed that growth in these aggregates around the lower ends of their ranges might be appropriate in light of developments with respect to velocity and signs of the potential for some strengthening in underlying inflationary pressures, provided that economic activity was expanding at an acceptable pace. The monitoring range for growth in total domestic nonfinancial debt set in February for the year was left unchanged at 8 to 11 percent.

For 1988, the Committee agreed in July on tentative ranges of monetary growth, measured from the fourth quarter of 1987 to the fourth quarter of 1988, of 5 to 8 percent for both M2 and M3. The Committee provisionally set the associated range for growth in total domestic nonfinancial debt at $7\frac{1}{2}$ to $10\frac{1}{2}$ percent.

With respect to M1, the Committee recognized that, based on experience, the behavior of that aggregate must be judged in the light of other evidence relating to economic activity and prices; fluctuations in M1 have become much more sensitive in recent years to changes in interest rates, among other factors. Because of this sensitivity, which had been reflected in a sharp slowing of the decline in M1 velocity over the first half of the year, the Committee again decided at the July meeting not to establish a specific target for growth in M1 over the remainder of 1987 and no tentative range was set for 1988. The appropriateness of changes in M1 this year would continue to be evaluated in the light of the behavior of its velocity, developments in the economy and financial markets, and the nature of emerging price pressures. The Committee welcomed substantially slower growth of M1 in 1987 than in 1986 in the context of continuing economic expansion and some evidence of greater inflationary pressures. The Committee indicated in July that in reaching operational decisions over the balance of the year it would take account of growth in M1 in the light of circumstances then prevailing. The issues involved with establishing a target for M1 will be carefully reappraised at the beginning of 1988.

In the implementation of policy for the immediate future, the Committee seeks to maintain the existing

degree of pressure on reserve positions. The Committee recognizes that still sensitive conditions in financial markets and uncertainties in the economic outlook may continue to call for a special degree of flexibility in open market operations. Taking account of conditions in financial markets, somewhat lesser reserve restraint or somewhat greater reserve restraint would be acceptable depending on the strength of the business expansion, indications of inflationary pressures, developments in foreign exchange markets, as well as the behavior of the monetary aggregates. The contemplated reserve conditions are expected to be consistent with growth in M2 and M3 over the period from November through March at annual rates of about 5 percent and 6 percent, respectively. Over the same period, growth in M1 is expected to remain relatively limited. The Chairman may call for Committee consultation if it appears to the Manager for Domestic Operations that reserve conditions during the period before the next meeting are likely to be associated with a federal funds rate persistently outside a range of 4 to 8 percent.

Votes for this action: Messrs. Greenspan, Corrigan, Angell, Boehne, Boykin, Heller, Keehn, Kelley, and Stern. Votes against this action: Mr. Johnson and Ms. Seger.

Mr. Johnson dissented because he believed that policy implementation should continue to focus on maintaining generally stable conditions in the money market, at least through the year-end, pending the emergence of more settled conditions in financial markets and a more predictable relationship between reserve objectives and money market conditions. He also preferred a directive that gave greater weight to the possibility for some easing, given potential developments during the intermeeting period.

Ms. Seger dissented because she favored some slight easing of reserve conditions in light of her concern about the downside risks in the economy, especially in the context of sluggish growth in reserves and the monetary aggregates over an extended period. She also wanted to continue to focus on money market conditions in System open market operations and in particular to counter upward pressures on short-term interest rates.

2. *Authorization for Domestic Open Market Operations*

Effective December 17, 1987, the Committee

approved a temporary increase of \$3 billion, to \$9 billion, in the limit between Committee meetings on changes in System Account holdings of U.S. government and federal agency securities specified in paragraph 1(a) of the Authorization for Domestic Open Market Operations. The increase was effective for the intermeeting period ending with the close of business on February 10, 1988.

Votes for this action: Messrs. Greenspan, Corrigan, Angell, Boehne, Boykin, Heller, Johnson, Keehn, Kelley, Ms. Seger, and Mr. Stern. Votes against this action: None.

This action was taken on the recommendation of the Manager for Domestic Operations. The Manager advised that the normal leeway of \$6 billion for changes in System Account holdings of securities probably would not be sufficient to accommodate desirable reductions in the intermeeting period because of seasonal declines in currency in circulation and required reserves.

On January 5, 1988, the Committee held a meeting by telephone conference to review monetary and financial developments since mid-December and to assess the Committee's decisions at the December meeting to begin to redirect its operating procedures toward more emphasis on achieving a desirable degree of pressure on reserve positions. In the period after the stock market collapse in October, open market operations had been guided to an important extent by the objective of restoring and sustaining stability in the money market, and less attention was given than previously to the implementation of objectives relating to reserve conditions.

In the Committee's discussion most of the members agreed that with the further passage of time since the October disturbances in financial markets and with year-end pressures in the money market now unwinding, further progress could be made toward restoring the Committee's earlier approach to open market operations. The members recognized that conditions in financial markets were still somewhat unsettled and that the relationship between reserves and money market conditions had not been reestablished on a fully normal or predictable basis. In the circumstances and in light of the uncertainties in the

economic outlook, it was agreed that some amount of flexibility might continue to be needed in the conduct of open market operations.

To reflect and endorse the further progress toward the operating procedures in use before mid-October, the Committee decided to amend the relevant reference in the operational paragraph of its directive issued at its December meeting. The amendment encompassed solely a change in emphasis relating to operating procedures and did not include any change in the Committee's short-run policy objectives.

At the conclusion of this telephone meeting, the Committee voted to change the operational paragraph of its directive to read as follows:

In the implementation of policy for the immediate future, the Committee seeks to maintain the existing degree of pressure on reserve positions. The Committee agrees that the passing of time and the year-end should permit further progress toward restoring a normal approach to open market operations, although still sensitive conditions in financial markets and uncertainties in the economic outlook may continue to call for some flexibility in operations. Taking account of conditions in financial markets, somewhat lesser reserve restraint or somewhat greater reserve restraint

would be acceptable depending on the strength of the business expansion, indications of inflationary pressures, developments in foreign exchange markets, as well as the behavior of the monetary aggregates. The contemplated reserve conditions are expected to be consistent with growth in M2 and M3 over the period from November through March at annual rates of about 5 percent and 6 percent, respectively. Over the same period, growth in M1 is expected to remain relatively limited. The Chairman may call for Committee consultation if it appears to the Manager for Domestic Operations that reserve conditions during the period before the next meeting are likely to be associated with a federal funds rate persistently outside a range of 4 to 8 percent.

Vote for this action: Messrs. Greenspan, Corrigan, Angell, Boehne, Boykin, Heller, Johnson, Keehn, Kelley, and Stern. Vote against this action: Ms. Seger.

Ms. Seger dissented because she continued to believe that open market operations should be directed toward some slight easing. She also felt that financial markets remained too unsettled to warrant any shift at this time in operational procedures toward more emphasis on reserve objectives.

Legal Developments

AMENDMENT TO REGULATION K

The Board of Governors is amending 12 C.F.R. Part 211, its Regulation K. The regulation is revised to permit investors to acquire up to 40 percent of the shares of foreign nonfinancial companies where sovereign debt obligations are being exchanged for ownership interests in the companies. The regulation also is revised to permit companies acquired through debt-for-equity conversions in heavily indebted developing countries to be held for up to 15 years and to liberalize the investment procedures for such investments.

Effective February 24, 1988, the Board amends 12 C.F.R. Part 211 as follows:

Part 211—International Banking Operations

1. The authority citation for 12 C.F.R. Part 211 continues to read as follows:

Authority: 12 U.S.C. 221 *et seq.*; 12 U.S.C. 1841 *et seq.*; Pub. L. 95-369; 92 Stat. 607; 12 U.S.C. 3101 *et seq.*; Title II, Pub. L. 97-290, 96 Stat. 1235; Title IX, Pub. L. 98-181, 97 Stat. 1153, 12 U.S.C. 3901 *et seq.*, unless otherwise noted.

2. Section 211.5 is amended by revising paragraph 211.5(f) to read as follows:

Section 211.5—Investments and Activities Abroad

* * * * *

(f) *Investments made through debt-for-equity conversions.*

(1) *Definitions.* For purposes of this paragraph:

(i) “eligible country” means a country that, since 1980, has restructured its sovereign debt held by foreign creditors, and any other country the Board deems to be eligible;

(ii) “equity” includes common stockholder’s equity and minority interests in consolidated subsidiaries, less goodwill;

(iii) “investment” has the meaning set forth in section 211.2(i) of this regulation and, for purposes of the investment procedures of this paragraph only, shall include loans or other extensions

of credit by the bank holding company or its affiliates to a company acquired pursuant to this paragraph;

(iv) “loans and extensions of credit” means all direct and indirect advances of funds to a person made on the basis of any obligation of that person to repay the funds.

(2) *Permissible investments.* In addition to investments that may be made under other provisions of this section, a bank holding company may make the following investments through the conversion of sovereign debt obligations of an eligible country, either through direct exchange of the debt obligations for the investment or by a payment for the debt in local currency, the proceeds of which are used to purchase the investment:

(i) *Public sector companies.* A bank holding company may acquire up to and including 100 percent of the shares of (or other ownership interests in) any foreign company located in an eligible country if the shares are acquired from the government of the eligible country or from its agencies or instrumentalities.

(ii) *Private sector companies.* A bank holding company may acquire up to and including 40 percent of the shares, including voting shares, of (or other ownership interests in) any other foreign company located in an eligible country subject to the following conditions:

(A) a bank holding company may acquire more than 25 percent of the voting shares of the foreign company only if another shareholder or control group of shareholders unaffiliated with the bank holding company holds a larger block of voting shares of the company;

(B) the bank holding company and its affiliates may not lend or otherwise extend credit to the foreign company in amounts greater than 50 percent of the total loans and extension of credit to the foreign company; and

(C) the bank holding company’s representation on the board of directors or on management committees of the foreign company may be no more than proportional to its shareholding in the foreign company.

(3) *Investments by bank subsidiary of bank holding company.* Upon application, the Board may permit

an investment to be made pursuant to this paragraph through an insured bank subsidiary of the bank holding company where the bank holding company demonstrates that such ownership is necessary due to special circumstances such as the requirements of local law. In granting its consent, the Board may impose such conditions as it deems necessary or appropriate to prevent adverse effects, including prohibiting loans from the bank to the company in which the investment is made.

(4) *Divestiture.*

(i) *Time limits for divestiture.* The bank holding company shall divest the shares of or other ownership interests in any company acquired pursuant to this paragraph (unless the retention of the shares or other ownership interest is otherwise permissible at the time required for divestiture) within two years of the date on which the bank holding company is permitted to repatriate in full the investment in the foreign company, but in any event within 15 years of the date of acquisition.

(ii) *Report to Board.* The bank holding company shall report to the Board on its plans for divesting an investment made under this paragraph no later than 10 years after the date the investment is made if the investment may be held for longer than 10 years and shall report to the Board again two years prior to the final date for divestiture, in a manner to be prescribed by the Board.

(iii) *Other conditions requiring divestiture.* All investments made pursuant to this paragraph shall be subject to paragraphs (b)(3)(i)(A) and (B) of this section requiring prompt divestiture (unless the Board upon application authorizes retention) if the company invested in engages in impermissible business in the United States.

(5) *Investment procedures.*

(i) *General consent.* Subject to the other limitations of this paragraph, the Board grants its general consent for investments made under this paragraph if the total amount invested does not exceed the greater of \$15 million or one percent of the equity of the investor.

(ii) All other investments shall be made in accordance with the procedures of paragraph (c) of this section requiring prior notice or specific consent.

(6) *Conditions.*

(i) *Name.* Any company acquired pursuant to this paragraph shall not bear a name similar to the name of the acquiring bank holding company or any of its affiliates.

(ii) *Confidentiality.* Neither the bank holding company nor its affiliates shall provide to any company acquired pursuant to this paragraph any confidential business information or other infor-

mation concerning customers that are engaged in the same or related lines of business as the company.

* * * * *

PREEMPTION DETERMINATION UNDER REGULATION Z

The Board of Governors has determined that a provision in the law of Indiana is inconsistent with the Truth in Lending Act and Regulation Z and therefore preempted.

Effective October 1, 1988, with compliance optional before that date, the Board has determined that the provision in the state law of Indiana specified below is preempted by 12 C.F.R. Part 226.

Part 226—Truth in Lending

1. The authority citation for 12 C.F.R. Part 226 continues to read as follows:

Authority: Sec. 105 as amended by sec. 605, Pub. L. 96-221, 94 Stat. 170 (15 U.S.C. 1604 *et seq.*).

2. In section 23-2-5-8 of Indiana's "Loan Broker" statute, the inclusion of the loan broker's fees and charges in the calculation of, among other items, the finance charge and annual percentage rate disclosed to potential borrowers is inconsistent with sections 106(a) and 226.4(a) of the Truth in Lending Act and Regulation Z, respectively, and is preempted in those instances where the use of the same term would disclose a different amount than that required to be disclosed under federal law.

ORDERS ISSUED UNDER BANK HOLDING COMPANY ACT

Orders Issued Under Section 3 of the Bank Holding Company Act

First Bancshares, Inc.
Grove Hill, Alabama

Order Approving Acquisition of a Bank

First Bancshares, Inc., Grove Hill, Alabama, a bank holding company within the meaning of the Bank Holding Company Act, as amended (the "Act") (12 U.S.C. § 1841 *et seq.*), has applied under section 3(a)(3) of the Act (12 U.S.C. § 1842(a)(3)) to acquire

all of the voting shares of Jackson Bank & Trust Company, Jackson, Alabama ("Bank").

Notice of the application, affording interested persons an opportunity to submit comments, has been given in accordance with section 3(b) of the Act, 52 *Federal Register* 42,340 (1987). The time for filing comments has expired, and the Board has considered the application and all comments received in light of the factors set forth in section 3(c) of the Act (12 U.S.C. § 1842(c)).

Applicant, with one subsidiary bank, is the 106th largest commercial banking organization in Alabama, controlling total deposits of \$34.6 million, representing approximately 0.1 percent of total deposits in commercial banks in the state.¹ Bank is the 99th largest commercial banking organization in Alabama, controlling total deposits of \$36.3 million, representing approximately 0.2 percent of total deposits in commercial banks in the state. Upon consummation of this proposal, Applicant would become the 42nd largest commercial banking organization in Alabama, with total domestic deposits of \$70.9 million, representing approximately 0.3 percent of total deposits in commercial banks in the state. Consummation of this proposal would not have any significant adverse effects on the concentration of banking resources in Alabama.

Applicant operates in the Jackson banking market,² where it is the fourth largest of seven commercial banking organizations, controlling 16.1 percent of total deposits in commercial banks in the market.³ Bank also operates in the Jackson banking market where it is the third largest commercial banking organization, controlling 16.9 percent of the total deposits in commercial banks in the market. Upon consummation of this proposal, Applicant would become the largest commercial banking organization in the market, controlling 33 percent of the total deposits in commercial banks in the market.

The Jackson banking market is considered highly concentrated, with a four-firm concentration ratio of 81.8 percent and a Herfindahl-Hirschman Index ("HHI") of 1950. Upon consummation of this proposal the four-firm concentration ratio would increase by 9.3 percentage points to 91.1 percent and the HHI would increase by 541 points to 2491.⁴

Although consummation of this proposal would eliminate existing competition between Applicant and Bank, the Board believes that the anticompetitive effects of this proposal are mitigated by several significant factors. First, the number of competitors remaining in the market upon consummation of the proposal is significant given the characteristics of the Jackson banking market. The Jackson banking market has a population of approximately 30,000 residents and is currently served by seven commercial banks with a total of 13 offices. The ratio of bank offices to the population in the market is more than double the comparable ratio statewide. Upon consummation of the proposal, the Jackson market will continue to be served by six unaffiliated commercial banks and two thrift institutions and will continue to have nearly twice as many bank offices per capita as the statewide average. In this connection, Applicant contends that the market's size and number of offices are largely responsible for the fact that the owners of Bank have been unable to obtain an acceptable bid from any out-of-market banking organization.

In addition, Bank has not been an aggressive competitor in the market. In this regard, Bank has lost approximately 33 percent of its market share in the last ten years, falling in rank from the largest bank to the third largest bank in the market. Moreover, Bank has not been an active lender in the market, with a loan-to-asset ratio below 30 percent. Applicant has proposed to increase the lending activities of Bank in the Jackson banking market.

The Board has also considered the presence of thrift institutions in the banking market in its analysis of this proposal. The Board has previously indicated that thrift institutions have become, or have the potential to become, major competitors of commercial banks.⁵ The largest and third largest savings and loan associations in Alabama operate branch offices in the Jackson banking market. These savings and loan associations offer a variety of transaction accounts, credit cards, consumer loans, and commercial loans. Based on the size, market share, and commercial lending activities of thrift institutions in the market, the Board has concluded that thrift institutions exert a competitive influence that also mitigates in part the anticom-

1. State deposit data are as of December 31, 1986.

2. The Jackson banking market is defined as Clarke County plus the towns of Sweet Water in Marengo County, Leroy in Washington County, and Pine Hill in Wilcox County, all in Alabama.

3. Market deposit data are as of June 30, 1986.

4. Under the revised Department of Justice Merger Guidelines (49 *Federal Register* 26,823 (June 29, 1984)) any market in which the post-merger HHI is over 1800 is considered highly concentrated, and the Department is likely to challenge a merger that increases the HHI by more than 50 points unless other factors indicate that the merger will not substantially lessen competition. In 1985, the Department of

Justice informed the Board that a bank merger or acquisition is not likely to be challenged (in the absence of other factors indicating an anticompetitive effect) unless the post-merger HHI is at least 1800 and the merger increases the HHI by at least 200 points. The Department of Justice has stated that the higher than normal HHI thresholds for screening bank acquisitions recognizes the competitive effects of limited purpose lenders and other non-depository financial entities.

5. See *Eastern Michigan Financial Corporation*, 74 *FEDERAL RESERVE BULLETIN* 49 (1988); *National City Corporation*, 70 *FEDERAL RESERVE BULLETIN* 743 (1984); *NCNB Corporation*, 70 *FEDERAL RESERVE BULLETIN* 225 (1984).

petitive effects of this proposal.⁶ Accordingly, in view of all the facts of record, the Board has concluded that consummation of this proposal would not have a significantly adverse effect on existing competition in the Jackson banking market.

The financial and managerial resources of Applicant, its subsidiary bank, and Bank, and their future prospects are consistent with approval. Applicant proposes upon consummation of this proposal to increase the number and size of the loans made by Bank, to extend Bank's business hours, and to build a new facility for Bank to accommodate customer needs. Accordingly, factors relating to the convenience and needs of the community to be served lend weight toward approval that outweighs any adverse competitive effects of this proposal.

Based on the foregoing and other facts of record, the Board has determined that the proposal should be, and hereby is, approved. The transaction shall not be consummated before the thirtieth calendar day following the effective date of this Order, or later than three months after the effective date of this Order, unless such period is extended for good cause by the Board or the Federal Reserve Bank of Atlanta, acting pursuant to delegated authority.

By order of the Board of Governors, effective February 8, 1988.

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

JAMES MCAFEE
Associate Secretary of the Board

First Bank System, Inc.
Minneapolis, Minnesota

Order Approving Acquisition of a Bank Holding Company

First Bank System, Inc., Minneapolis, Minnesota ("First Bank"), a bank holding company within the meaning of the Bank Holding Company Act (12 U.S.C. § 1841 *et seq.*) (the "Act"), has applied for the Board's approval under section 3(a)(3) of the Act (12 U.S.C. § 1842(a)(3)) to acquire Firststar Corporation, Bloomington, Minnesota ("Firststar") and thereby indirectly to acquire Firststar's subsidiary bank, Marine Bank, Bloomington, Minnesota.

6. If 50 percent of the deposits controlled by thrift institutions were included in the calculation of market concentration, Applicant and Bank would control 15.1 percent and 15.8 percent of total market deposits, respectively. The pre-merger HHI would be 1724, and upon consummation of this proposal, would increase by 477 points to 2201.

Notice of the application, affording interested persons an opportunity to submit comments, has been published (53 *Federal Register* 3,078 (1988)). The time for filing comments has expired, and the Board has considered the application and all comments received in light of the factors set forth in section 3(c) of the Act.

First Bank is the largest commercial banking organization in Minnesota, controlling deposits of \$11.1 billion, representing 28.5 percent of the total deposits in commercial banking organizations in the state.¹ Firststar is the 10th largest commercial banking organization in Minnesota, controlling deposits of \$196.0 million, representing 0.5 percent of total deposits in commercial banking organizations in the state. Upon consummation of this proposal, First Bank would control \$11.3 billion in deposits, representing 29.0 percent of total deposits in commercial banking organizations in the state. Consummation of the proposal would not increase significantly the concentration of banking resources in Minnesota.

First Bank competes directly with Firststar in the Minneapolis - St. Paul banking market.² First Bank is the largest commercial banking organization in the market, with deposits of \$9.1 billion, representing 39.2 percent of the total deposits in commercial banks in the market. Firststar is the 8th largest commercial banking organization in the market, with \$196.0 million in deposits, representing 0.8 percent of the total deposits in commercial banks in the market. Upon consummation of this proposal, First Bank would control \$9.3 billion in deposits, representing 40.0 percent of the total commercial banking deposits in the market. The Minneapolis - St. Paul banking market is considered concentrated, with a four-firm concentration ratio of 73.3 percent. The Herfindahl-Hirschman Index ("HHI") of the market is 2210 and would increase by 65 points to 2275 upon consummation of this proposal.³

1. Banking data are as of December 31, 1986. Thrift market data are as of June 30, 1986.

2. The Minneapolis - St. Paul banking market is defined as the Minneapolis - St. Paul Ranally Metropolitan Area adjusted to include all of Scott and Carver Counties and Lanesburgh Township in Le Sueur County.

3. Under the revised Department of Justice Merger Guidelines (49 *Federal Register* 26,823 (June 29, 1984)), any market in which the post-merger HHI is over 1800 is considered highly concentrated, and the Department is likely to challenge a merger that increases the HHI by more than 50 points unless other factors indicate that the merger will not substantially lessen competition. The Department of Justice has informed the Board that a bank merger or acquisition is not likely to be challenged (in the absence of other factors indicating an anticompetitive effect) unless the post-merger HHI is at least 1800 and the merger increases the HHI by at least 200 points. The Justice Department has stated that the higher than normal HHI thresholds for screening bank acquisitions for anti-competitive effects implicitly

Although consummation of this proposal would eliminate existing competition between First Bank and Firststar in the Minneapolis - St. Paul banking market, over 115 other commercial banks would continue to operate in the market after consummation of this proposal.⁴ In addition, the Board has considered the presence of thrift institutions in the banking market in its analysis of this proposal. The Board previously has indicated that thrift institutions have become, or have the potential to become, major competitors of commercial banks.⁵ Thrift institutions already exert a considerable competitive influence in the market as providers of NOW accounts and consumer loans, and many are engaged in the business of making commercial loans. Based upon the size, market share and commercial lending activities of thrift institutions in the market, the Board has concluded that thrift institutions exert a significant influence that mitigates the anticompetitive effects of this proposal in the Minneapolis - St. Paul banking market.⁶ Accordingly, in view of all of the facts of record, including the small increase in concentration in the market, the Board has determined that consummation of this proposal would not have a significant adverse effect on existing competition in the Minneapolis - St. Paul banking market.

The financial and managerial resources of First Bank and its subsidiary banks as well as Firststar and its subsidiary bank are consistent with approval. Considerations relating to the convenience and needs of the community to be served are also consistent with approval.

Based on the foregoing and other facts of record, the Board has determined that the application should be,

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

By order of the Board of Governors, effective February 29, 1988.

Voting for this action: Chairman Greenspan and Governors Johnson, Seger, Angell, and Heller. Absent and not voting: Governor Kelley.

JAMES MCAFEE
Associate Secretary of the Board

Tri-State Financial Bancorp, Inc.
Bryan, Ohio

Order Approving Acquisition of a Bank

Tri-State Financial Bancorp, Inc., Bryan, Ohio ("Tri-State"), a bank holding company within the meaning of the Bank Holding Company Act ("Act"), 12 U.S.C. § 1842 *et seq.*, has applied pursuant to section 3(a)(3) of the Act, 12 U.S.C. § 1842(a)(3), to acquire all of the voting shares of Mid American National Bank and Trust Company, Northwood, Ohio ("Mid American").

Notice of the application, affording interested persons an opportunity to submit comments, has been duly published (52 *Federal Register* 43,673 (1987)). The time for filing comments has expired, and the Board has considered the application and all comments received in light of the factors set forth in section 3(c) of the Act.

Tri-State is the 53rd largest commercial banking organization in Ohio, with deposits of \$116.8 million, representing less than 1 percent of total deposits in commercial banking organizations in the state.¹ Mid American is the 18th largest commercial banking organization in Ohio, controlling deposits of \$365.1 million, representing less than 1 percent of total deposits in commercial banking organizations in the state. Upon consummation of this proposal, Tri-State would become the 15th largest commercial banking organization in the state, controlling \$481.9 million in deposits, representing less than 1 percent of total deposits in commercial banking organizations in the state. Consummation of the proposal would not in-

recognizes the competitive effects of limited purpose lenders and other non-depository financial entities.

4. The Board received comments from the Minnesota Commissioner of Commerce expressing his concern about the competitive effects of this acquisition. Although the Commissioner did not disapprove First Bank's application, he requested that the Board hold a public hearing to consider the application. Because the Commissioner did not recommend denial of the application, the Board is not required to hold a hearing. 12 U.S.C. § 1842(b). The Board, however, has carefully reviewed the facts of record, and does not believe that a hearing would provide it with any additional facts that are not already in the record. The Board has also carefully considered the Commissioner's views regarding the competitive effects of this acquisition. Accordingly, the Commissioner's request for a hearing is denied, and, for the reasons set out below, the Board does not believe that the competitive effects of this acquisition are so adverse as to warrant denial of this application.

5. *National City Corporation*, 70 *FEDERAL RESERVE BULLETIN* 743 (1984); *NCNB Bancorporation*, 70 *FEDERAL RESERVE BULLETIN* 225 (1984); *General Bancshares Corporation*, 69 *FEDERAL RESERVE BULLETIN* 802 (1983); and *First Tennessee National Corporation*, 69 *FEDERAL RESERVE BULLETIN* 298 (1983).

6. If 50 percent of the deposits controlled by thrift institutions were included in the calculation of market concentration, First Bank and Firststar would control 35.4 percent and 0.8 percent of total market deposits, respectively. The HHI would increase by 55 points to 1890 upon consummation of this proposal.

1. All banking data are as of June 30, 1987.

crease significantly the concentration of banking resources in Ohio.

Tri-State competes directly with Mid American in the Williams County banking market.² Tri-State is the second largest commercial banking organization in the market, with deposits of \$67.2 million, representing 20.3 percent of the total deposits in commercial banks in the market. Mid American is the fourth largest commercial banking organization in the market, with \$35.6 million in deposits, representing 10.7 percent of total deposits in commercial banks in the market. Upon consummation of this proposal, Tri-State would remain the second largest commercial banking organization in the market, with \$102.8 million in deposits, representing 31.0 percent of the total commercial banking deposits in the market. The market is considered highly concentrated, with a four-firm concentration ratio of 76.4 percent. The Herfindahl-Hirschman Index ("HHI") of the market is 1906 and would increase by 435 points to 2341 upon consummation of this proposal.³

Although consummation of this proposal would eliminate existing competition between Tri-State and Mid American in the Williams County banking market, numerous other commercial banks would continue to operate in the market after consummation of this proposal. Moreover, the Board notes that the market is attractive for entry, as evidenced by the fact that two commercial banking organizations have entered the market in recent years, including one *de novo* entry. Furthermore, the record indicates that other commercial banking organizations have expressed interest in entering the market.

In addition, the Board has considered the presence of thrift institutions in the banking market in its analysis of this proposal. The Board previously has indicated that thrift institutions have become, or have the potential to become, major competitors of commercial banks.⁴ The two thrift institutions in the mar-

ket already exert a considerable competitive influence as providers of NOW accounts and consumer loans, and are engaged in the business of making commercial loans. Based upon the relative size, market share and commercial lending activities of thrift institutions in the market, the Board has concluded that thrift institutions exert a significant competitive influence that mitigates the anti-competitive effects of this proposal in the Williams County banking market.⁵

The financial and managerial resources of Tri-State and Mid American are consistent with approval.

In considering the convenience and needs of the communities to be served, the Board has taken into account a comment received from the Superintendent of Edgerton Local Schools located in Edgerton, Ohio. The Superintendent argues that Mid American and Tri-State are the only two commercial banking organizations in Edgerton, Ohio, one of the towns in the Williams County banking market. Upon consummation of the proposed transaction, Tri-State would be the only commercial banking organization in Edgerton, Ohio. The Superintendent states that consummation of the proposed transaction would eliminate some of the banking options available to the school district and requests that the Board not approve the application unless the vacated bank is purchased by another bank.

In analyzing the competitive effects of a proposal, the Board is required to examine an acquisition in light of the geographic area in which customers may practicably turn to for alternatives. The geographic market for banking services is generally an area larger than an individual town, and in this case, the Board believes that the area where customers can practicably turn to for banking services is approximated by Williams County. Because of the number of alternatives in the Williams County banking market and other facts of record, the Board concludes that the elimination of a competitor in the town of Edgerton does not warrant denial of the application.

Based on the foregoing and other facts of record, the Board has determined that the application should be, and hereby is, approved. The acquisition shall not be consummated before the thirtieth calendar day following the effective date of this Order, or later than three months after the effective date of this Order, unless such period is extended for good cause by the Board or

2. The Williams County banking market is approximated by Williams County, Ohio.

3. Under the revised Department of Justice Merger Guidelines (49 *Federal Register* 26,823 (June 29, 1984)), any market in which the post-merger HHI is over 1800 is considered highly concentrated, and the Department is likely to challenge a merger that increases the HHI by more than 50 points unless other factors indicate that the merger will not substantially lessen competition. The Department of Justice has informed the Board that a bank merger or acquisition is not likely to be challenged (in the absence of other factors indicating an anti-competitive effect) unless the post-merger HHI is at least 1800 and the merger increases the HHI by at least 200 points. The Justice Department has stated that the higher than normal HHI thresholds for screening bank acquisitions for anti-competitive effects implicitly recognizes the competitive effects of limited purpose lenders and other non-depository financial entities.

4. See, e.g., *National City Corporation*, 70 *FEDERAL RESERVE BULLETIN* 743 (1984); *NCNB Bancorporation*, 70 *FEDERAL RESERVE BULLETIN* 225 (1984); *General Bancshares Corporation*, 69 *FEDERAL*

RESERVE BULLETIN 802 (1983); and *First Tennessee National Corporation*, 69 *FEDERAL RESERVE BULLETIN* 298 (1983).

5. If 50 percent of the deposits controlled by thrift institutions were included in the calculation of market concentration, Tri-State and Mid American would control 17.6 percent and 9.3 percent of total market deposits, respectively. The HHI would increase by 329 points to 1912 upon consummation of the proposal.

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

By order of the Board of Governors, effective February 2, 1988.

Voting for this action: Chairman Greenspan and Governors Johnson, Seger, and Kelley. Voting against this action: Governor Angell. Absent and not voting: Governor Heller.

JAMES MCAFEE
Associate Secretary of the Board

Dissenting Statement of Governor Angell

I believe this application raises serious questions concerning the anticompetitive effects of mergers and acquisitions in those markets with a small number of banking competitors. Tri-State's subsidiary bank and Mid American are the only two banks competing in the town of Edgerton. Although there are banking alternatives in towns close to Edgerton, I am concerned that these distances might be sufficiently great to allow anticompetitive behavior with respect to the pricing and conditions of agricultural, small business and consumer loans in Edgerton.

February 2, 1988

Orders Issued Under Section 4 of the Bank Holding Company Act

The Bank of Nova Scotia
Toronto, Canada

Order Approving Application to Engage in Securities and Financial Advisory Activities

The Bank of Nova Scotia, Toronto, Canada ("Applicant"), a foreign bank subject to the Bank Holding Company Act, 12 U.S.C. § 1841 *et seq.* ("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 225.21(a) of the Board's Regulation Y, 12 C.F.R. § 225.21(a), to acquire McLeod Young Weir Incorporated, New York, New York ("Company"), and thereby engage in:

- (1) providing advice in connection with mergers and acquisitions, divestitures, loan syndications, interest rate swaps, interest rate caps and similar transactions to unaffiliated financial and nonfinancial institutions;
- (2) providing securities brokerage and investment advisory services to institutional customers on a combined basis; and

- (3) providing financial advice to the Canadian federal and provincial governments, such as with respect to the issuance of their securities in the U.S.¹

Company currently engages in a wide range of securities underwriting, dealing, brokerage and advisory activities.² Applicant has committed to limit Company to those activities for which it seeks approval here.

Notice of the application, affording interested persons an opportunity to submit comments, has been duly published (52 *Federal Register* 49,089 (1987)). 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.

Applicant, with total consolidated assets equivalent to approximately \$54 billion, is the 78th largest banking organization in the world.³ Applicant owns a bank subsidiary in San Juan, Puerto Rico and maintains branches in New York City, Portland and Boston and agencies in Atlanta, Miami and San Francisco. Applicant also owns The Bank of Nova Scotia Trust Company, New York, New York, an uninsured limited-purpose trust company that neither accepts deposits nor makes commercial loans, and engages in various activities in the United States under sections 4(c)(8) and 4(c)(9) of the BHC Act and the Board's Regulations Y and K (12 C.F.R. Parts 225 and 211, respectively).

1. Applicant has also applied to engage in providing discount brokerage services to non-institutional customers; furnishing general economic information and advice, general economic statistical forecasting services and industry studies to institutional customers; providing portfolio investment advice and research to institutional customers; and underwriting and dealing in obligations of the United States, general obligations of states and their political subdivisions, and other obligations that state member banks are authorized to underwrite and deal in under 12 U.S.C. §§ 24 and 335. The Board has previously found these activities, as proposed here, to be closely related to banking and a proper incident thereto. 12 C.F.R. §§ 225.25(b)(15), (4)(iv), (4)(iii) and (16) respectively.

2. Company's current activities consist of providing brokerage and execution services to institutional customers; acting as agent in the private placement of corporate securities; providing investment advice and research to institutional customers; trading for its own account in Canadian federal and provincial government securities, U.S. government and agency securities and corporate debt and equity securities; underwriting and distributing Canadian federal and provincial government securities and corporate debt and equity securities; and other incidental securities activities such as borrowing and lending securities and entering into repurchase and reverse repurchase arrangements involving U.S. government and agency securities. Company also provides financial advice to institutional customers relating to acquisitions, mergers, divestitures, restructurings and public and private financing transactions, and to the Canadian federal and provincial governments and agencies thereof relating to financing transactions in the U.S.

3. Asset data are as of June 30, 1987. Banking data are as of December 31, 1986.

I. Merger and Acquisition Advice to Unaffiliated Financial and Nonfinancial Institutions

Applicant has proposed that Company engage in certain financial advisory activities for unaffiliated financial and nonfinancial institutions. The Board previously has determined that, subject to certain limitations, these financial advisory activities are permissible nonbanking activities for bank holding companies. *Signet Banking Corporation*, 73 FEDERAL RESERVE BULLETIN 59 (1987). Applicant has committed to limit Company's financial advisory activities as set forth in that Order.

II. Providing Investment Advice and Securities Brokerage on a Combined Basis

The Board previously has determined that the combined offering of investment advice with securities brokerage services to institutional customers is a permissible nonbanking activity and does not violate the Glass-Steagall Act. *See, e.g., National Westminster Bank PLC*, 72 FEDERAL RESERVE BULLETIN 584 (1986) ("NatWest"); and *Manufacturers Hanover Corporation*, 73 FEDERAL RESERVE BULLETIN 930 (1987) ("Manufacturers Hanover"). That position has been upheld by the U.S. Court of Appeals for the District of Columbia Circuit in its affirmation of the Board's *NatWest* Order.⁴

Applicant has proposed to conduct its brokerage activity in accordance with the limitations approved by the Board in *NatWest* and *Manufacturers Hanover* with one exception.⁵ In *NatWest*, the Board permitted officer, director and employee interlocks between the brokerage subsidiary and its holding company but did not permit officer and director interlocks with its bank affiliates. Here, Applicant proposes that officers of Applicant, a foreign bank, be permitted to serve as

directors of Company. No officers of Applicant will serve as officers of Company.

The Board has determined that the proposed interlocks are consistent with *NatWest* because Applicant does not accept insured deposits in the U.S. and hence does not function as a domestic banking organization. Moreover, Applicant has committed that Company will not have officer or director interlocks with its U.S. bank subsidiaries, branches or agencies.

III. Financial Advisory Services to Canadian Governmental Entities

The Board has not previously approved Applicant's third proposed activity, providing financial advice to the Canadian federal and provincial governments, such as with respect to the issuance of their securities in the U.S.

In order to approve this aspect of the proposal, the Board must determine:

- (1) that the proposed activity is closely related to banking; and
- (2) that the public benefits associated with the proposed activity outweigh any possible adverse effects.⁶

In determining if an activity is closely related to banking under section 4(c)(8) of the BHC Act, the Board has relied on guidelines established by the federal courts. Under these guidelines, an activity may be found to be closely related to banking if it is demonstrated:

- (1) that banks generally have, in fact, provided the proposed services;
- (2) that banks generally provide services that are operationally or functionally so similar to the proposed services as to equip them particularly well to provide the proposed services; or
- (3) that banks generally provide services that are so integrally related to the proposed activity as to require their provision in a specialized form.⁷

In this case, the record reflects that banks in general, as well as Company, which currently engages in this activity, do provide services similar to those proposed here and have developed expertise in pro-

4. *Securities Industry Ass'n v. Board of Governors*, 821 F.2d 810 (D.C. Cir. 1987). The U.S. Supreme Court recently has declined to review that decision. *cert. denied*, 56 U.S.L.W. 3451 (U.S. Jan. 11, 1988) (No. 87-562).

5. As in *Manufacturers Hanover*, under this proposal, Company will not act as principal or take a position (i.e., bear the financial risk) in any securities it brokers or recommends. Company will execute a transaction only at the direction of a customer and will not exercise discretion with respect to any customer account. Company will not execute any transaction where an affiliate exercises investment discretion without customer authorization. Company will offer investment advice, as well as provide securities execution services, to institutional customers on an integrated basis, i.e., Company will not charge an explicit fee for the investment advice and will receive fees only for transactions executed for customers. In addition, as in *Manufacturers Hanover*, Company will employ a \$1 million threshold in determining institutional customers and will share customer lists with its affiliates, but not confidential information obtained from its customers.

6. 12 U.S.C. § 1843(c)(8).

7. *National Courier Association v. Board of Governors*, 516 F.2d 1229 (D.C. Cir. 1975). However, the *National Courier* guidelines are not the exclusive basis for finding a close relationship between a proposed activity and banking. The Board has stated that in acting on a request to engage in a new nonbanking activity, it will consider any other factor that an applicant may advance to demonstrate a reasonable or close connection or relationship of the activity to banking. 49 *Federal Register* 794, 806 (1984); *Securities Industry Association v. Board of Governors*, 468 U.S. 207, 210-11 n.5 (1984).

viding financial advice to foreign governments and their subdivisions.

The Board notes that the proposed activity is functionally and operationally similar to the activity of providing financial advice to state and local governments, such as with respect to the issuance of their securities, which the Board has found to be generally permissible for bank holding companies and incorporated into Regulation Y. 12 C.F.R. § 225.25(b)(4)(v). In addition, the Board's Regulation K authorizes the provision of such financial advisory services to foreign governmental entities. 12 C.F.R. § 211.5(d)(8). Accordingly, the Board concludes that the proposed activity is closely related to banking.

With respect to the "proper incident" requirement, section 4(c)(8) of the BHC Act requires the Board to consider whether the performance of the activity by an affiliate of a holding company "can reasonably be expected to produce benefits to the public, such as greater convenience, increased competition, or gains in efficiency that outweigh possible adverse effects, such as undue concentration of resources, decreased or unfair competition, conflicts of interests, or unsound banking practices."

The record indicates that no adverse effects are likely to occur from the provision of such advice to Canadian federal and provincial governments. Moreover, Company, through its association with a large financial institution, will have access to increased resources and will become a more effective competitor in this area. Hence, this aspect of the proposal will result in net public benefits.

Consummation of the proposal is not likely to result in decreased or unfair competition, conflicts of interest, unsound banking practices, concentration of resources, or other adverse effects. Based on the foregoing and other facts of record, 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. Accordingly, the Board has determined that the application should be, and hereby is, approved. This determination is further 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 the holding company or any of its subsidiaries as the Board finds necessary to assure compliance with the provisions and purposes of the BHC Act and the Board's regulations and orders issued thereunder, or to prevent evasion thereof.

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 New York, pursuant to delegated authority.

By order of the Board of Governors, effective February 12, 1988.

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

JAMES MCAFEE
Associate Secretary of the Board

FFB, Inc.
Newark, New Jersey
Philadelphia, Pennsylvania

Order Approving Acquisition of Nonbank Subsidiary

FFB, Inc., Newark, New Jersey, and Philadelphia, Pennsylvania ("FFB"), a bank holding company within the meaning of the Bank Holding Company Act ("Act") (12 U.S.C. § 1841 *et seq.*) has applied under section 4(c)(8) of the Act (12 U.S.C. § 1843(c)(8)) and section 225.25(b)(8) of the Board's Regulation Y (12 C.F.R. § 225.25(b)(8)) to acquire Broad & Lombardy Associates, Inc., Newark, New Jersey ("B & L"), a company which acts as an agent or broker for the sale of credit-related life, accident and health, property and casualty insurance.

Notice of the application, affording interested persons an opportunity to submit comments on the proposal, has been duly published (52 *Federal Register* 43,672 (1987)). The time for filing comments has expired, and the Board has considered the application and all comments received¹ in light of the public interest factors set forth in section 4(c)(8) of the Act.

FFB was formed to acquire First Fidelity Bancorporation, Newark, New Jersey, and Fidelcor, Inc., Philadelphia, Pennsylvania, and their respective banking and nonbanking subsidiaries.² B & L, a subsidiary of First Fidelity Bancorporation, conducts its insurance activities from one office in Newark, New Jersey, primarily serving the northern New Jersey and New York metropolitan areas.

On February 14, 1979, the Federal Reserve Bank of New York, acting pursuant to delegated authority, approved the application of First Fidelity Bancorporation to engage through a *de novo* subsidiary, B & L, in the activity of acting as agent or broker for the sale of

1. The Board has received comments in opposition to this proposal from the Independent Insurance Agents of America, Inc.; the National Association of Casualty and Surety Agents; the National Association of Surety Bond Producers; the National Association of Life Underwriters; and the National Association of Professional Insurance Agents (collectively, "Protestants").

2. The Board previously approved the application of FFB to acquire First Fidelity Bancorporation, Fidelcor, and their respective subsidiaries other than B & L, by Order dated January 11, 1988.

life, accident and health insurance and property and casualty insurance related to extensions of credit by its First Fidelity affiliates. Thus on May 1, 1982, B & L was engaged lawfully in acting as an insurance agent or broker for credit-related life, accident and health, property and casualty insurance and therefore meets the qualifications for grandfather rights under exemption D.

Protestants argue that even if B & L was authorized under section 4(c)(8)(D) of the Act to engage in insurance agency activities, these rights are not transferable and expire upon the acquisition of a grandfathered company by another bank holding company. As the Board previously has determined, however, a company that is entitled to engage in insurance activities under exemption D does not lose those rights upon its acquisition by another bank holding company, provided that the grandfathered entity retains its separate corporate structure and its insurance activities are not conducted by other companies within the acquiring banking organization.³ In the instant case, following its acquisition by FFB, First Fidelity Bancorporation would remain a separate bank holding company and B & L would remain a separate nonbank subsidiary thereof, and their grandfathered insurance activities would not be conducted by FFB or other entities within FFB's organization. First Fidelity Bancorporation and B & L therefore may retain their exemption D grandfather privileges after acquisition by FFB.⁴

The Protestants also request that the Board delay consideration of this proposal until the expiration of the insurance activities moratorium contained in the Competitive Equality Banking Act of 1987 ("CEBA"), Pub. L. No. 100-86, § 201, 101 Stat. 581 (1987). The Board notes that, by its terms, the moratorium on insurance activities in CEBA does not apply to insurance activities expressly authorized for bank holding companies under subparagraphs (A) through (G) of section 4(c)(8) of the Act (12 U.S.C. § 1843(c)(8) (A-G)). Inasmuch as the insurance agency activities of B & L are authorized pursuant to section 4(c)(8)(D), the continued conduct of those activities is explicitly preserved under CEBA.

The record reflects that FFB's acquisition of B & L would not significantly affect competition in any relevant market. Moreover, there is no evidence to indicate that approval of this proposal would result in

undue concentration of resources, unfair competition, conflicts of interest, unsound banking practices, or other adverse effects.

Based on the foregoing and other facts of record, the Board has determined that the balance of the public interest factors it must consider under section 4(c)(8) of the Act is favorable. Accordingly, the application should be, and hereby is, approved. This determination is subject to all of the conditions set forth in Regulation Y, including sections 225.4(d) and 225.23(b) (12 C.F.R. §§ 225.4(d) and 225.23(b)), 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 the provisions and purposes of the Act and the Board's regulations and orders issued thereunder, or to prevent evasion thereof.

The 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 Philadelphia, acting pursuant to delegated authority.

By order of the Board of Governors, effective February 19, 1988.

Voting for this action: Chairman Greenspan and Governors Angell, Heller, and Kelley. Absent and not voting: Governors Johnson and Seger.

JAMES MCAFEE
Associate Secretary of the Board

Midland Bank, PLC
London, England

*Order Approving Application to Issue Variably
Denominated Payment Instruments Payable in
Foreign Currencies With Unlimited Face Values*

Midland Bank, PLC, London, England ("Midland"), a foreign bank subject to the Bank Holding Company Act, 12 U.S.C. § 1841 *et seq.* ("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(a)(3) of the Board's Regulation Y (12 C.F.R. § 225.23(a)(3)), to engage *de novo* through its wholly owned subsidiary, Thomas Cook, Inc., Princeton, New Jersey ("TCI"), in the issuance and sale of foreign drafts and wire transfers (collectively, "payment instruments") that are payable in foreign currencies and are without limitation as to their face amount. Midland proposes to conduct these activities through TCI, as well as to market such instruments through a nationwide network of unaffiliated selling

3. See e.g., *U. S. Bancorp.*, 73 FEDERAL RESERVE BULLETIN 941 (1987); *Trustcorp, Inc.*, 73 FEDERAL RESERVE BULLETIN 934 (1987); *MNC Financial, Inc.*, 73 FEDERAL RESERVE BULLETIN 740 (1987); and *Sovran Financial Corporation*, 73 FEDERAL RESERVE BULLETIN 672 (1987).

4. Applicant also has committed that B & L will continue to abide by the geographic and functional limitations of exemption D with respect to its insurance activities.

agents, including commercial banks, thrift institutions and others.¹

Notice of the application, affording interested persons an opportunity to comment, has been published (52 *Federal Register* 46,003 (1987)). 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.

Midland, with total consolidated assets equivalent to approximately \$51.1 billion, is the 34th largest banking organization in the world.² Midland operates a U.S. branch and an Edge corporation both located in New York, New York, and engages in various activities in the United States under sections 4(c)(8) and 4(c)(9) of the BHC Act and the Board's Regulations Y and K (12 C.F.R. Parts 225 and 211 respectively).

The Board previously has determined that the issuance and sale of money orders and similar payment instruments with a maximum face value of \$1,000 are closely related to banking. 12 C.F.R. § 225.25(b)(12).³ The Board also has approved by order a limited number of applications to engage in the issuance and sale of payment instruments with a \$10,000 maximum face value.⁴ In addition, the Board has approved the issuance and sale of certain payment instruments with no maximum limitation on their face amount, subject to a number of operational restrictions and reporting requirements similar to those proposed in the instant application. *Wells Fargo & Company*, 72 *FEDERAL RESERVE BULLETIN* 148 (1986) ("Wells Fargo"). In the *Wells Fargo* Order, the Board determined that an increase in the denomination of such instruments would not affect the fundamental nature of the payment instruments, and the Board concluded that the issuance and sale of the proposed instruments in increased denominations, such as proposed here, are closely related to banking.

In order to approve this application under section 4(c)(8), the Board must also find that the performance of the proposed activity by Midland "can reasonably be expected to produce benefits to the public, such as greater convenience, increased competition, or gains

in efficiency, that outweigh possible adverse effects, such as undue concentration of resources, decreased or unfair competition, conflicts of interest, or unsound banking practices."

In considering previous applications regarding variably denominated payment instruments, the Board has expressed concern that the issuance of instruments in denominations larger than \$1,000 would result in an adverse effect on the reserve base because such instruments are not subject to transaction account reserve requirements. The Board has noted that because reserve requirements serve as an essential tool of monetary policy, the conduct of that policy could be adversely affected by the erosion of reservable deposits in the banking system. Accordingly, in order to guard against such potential adverse effects, the Board conditioned its approval of the Wells Fargo proposal on a commitment that Wells Fargo cause to be deposited into a demand deposit account at its bank subsidiary all of the proceeds of any official check having a face value in excess of \$10,000, thereby rendering the proceeds subject to reserve requirements. The Board also made its approval subject to certain reporting requirements, as well as its own continued evaluation of the activity's effects on monetary policy.

To address the monetary policy concerns expressed in the Board's *Wells Fargo* Order, Midland has committed that the proceeds of all sales of foreign-currency denominated instruments will be held in demand deposit accounts at U.S. commercial banks. Deposits stemming from the sale of instruments with denominations of \$10,000 or less will be swept daily into nonreservable instruments. The entire proceeds of the sale of any payment instrument with a face value greater than \$10,000 will be deposited in a demand deposit account at a U.S. depository institution. Such proceeds will then be used to purchase foreign currency for each particular payment instrument at the time of the transaction. Midland states that its purchases of foreign currency are typically value-dated two days hence, at which time the demand deposit account will be debited and the U.S. dollar funds will leave the U.S. monetary system. Midland has committed that the U.S. dollar fund proceeds of all instruments with a face value greater than \$10,000 will not be swept out overnight while in demand deposit accounts, and thus will be reservable. Midland has committed to submit to the Board weekly reports of balances held in demand deposit accounts.

Midland contends that implementation of the foregoing commitments and procedures will adequately address the Board's monetary policy concerns. After reviewing the proposal, the Board has determined that the commitments and procedures outlined therein adequately address the Board's concerns regarding po-

1. Midland also proposes to engage in data processing activities related to the issuance and sale of such payment instruments. The Board previously has determined that data processing activities for the processing and transmission of financial, banking, or economic data, such as proposed here, are closely related to banking. 12 C.F.R. § 225.25(b)(7)(ii).

2. Asset data are as of June 30, 1987. Banking data are as of December 31, 1986.

3. TCI currently issues and sells travelers checks in various foreign currencies with a maximum denomination of \$1,000 pursuant to that section.

4. See e.g., *BankAmerica Corporation*, 73 *FEDERAL RESERVE BULLETIN* 727 (1987).

tential adverse effects on the reserve base. The Board's approval for Midland to engage in this activity is subject to the continued evaluation of its potential for adverse effects on the conduct of monetary policy. If the Board discerns such effects in the future, the Board would require appropriate modification of the activity and/or imposition of additional reserve requirements.

The record reflects that the sale of these payment instruments by Midland would increase competition in an industry that currently is highly concentrated and enhance the convenience of purchasers. The Board finds that these instruments, which will be issued by a large financial organization, will enjoy ready acceptability and provide benefits to the public. Moreover, there is no evidence in the record that consummation of this proposal would result in adverse effects, such as unsound banking practices, unfair competition, conflicts of interest, or undue concentration of resources.

Based upon the foregoing and other considerations reflected in the record, the Board has determined that the balance of the public interest factors it is required to consider under section 4(c)(8) is favorable. This determination is subject to all of the conditions set forth in Regulation Y, including sections 225.4(d) and 225.23(b), 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 the provisions and purposes of the BHC Act and the Board's regulations and orders issued thereunder, or to prevent evasion thereof.

The activity shall be commenced no later than three months after the effective date of this Order, unless such period is extended for good cause by the Board or by the Federal Reserve Bank of New York, acting pursuant to delegated authority.

By order of the Board of Governors, effective February 3, 1988.

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

JAMES MCAFEE

Associate Secretary of the Board

National Westminster Bank PLC
London, England

NatWest Holdings, Inc.
New York, New York

Order Approving Application to Acquire Washington Analysis Corporation, Washington, D.C.

National Westminster Bank PLC, London, England
and NatWest Holdings, Inc., New York, New York

(collectively "NatWest"), both bank holding companies within the meaning of the Bank Holding Company Act (12 U.S.C. § 1841 *et seq.*) ("Act"), have applied for the Board's approval under section 4(c)(8) of the Act (12 U.S.C. § 1843(c)(8)) and section 225.25(b)(4)(iv) of the Board's Regulation Y (12 C.F.R. § 225.25(b)(4)(iv)) to acquire, through a wholly owned subsidiary, County NatWest Inc., New York, New York ("CNI"), 100 percent of the voting shares of Washington Analysis Corporation, Washington, D.C. ("WAC"), which engages in furnishing general economic information and advice, general economic statistical forecasting services and industry studies to "Institutional Customers."¹

Notice of the application, affording interested persons an opportunity to submit comments, has been duly published (52 *Federal Register* 49,508 (1987)). 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 Act.

National Westminster Bank PLC ("NatWest Bank PLC"), with approximately \$140.3 billion in total consolidated assets as of June 30, 1987, is the seventeenth largest banking organization in the world and provides a full range of retail and wholesale banking services worldwide. In the United States, NatWest Bank PLC operates four representative offices, branches in New York and Chicago, agencies in San Francisco and Dallas, and six nonbanking subsidiaries (engaged in data processing, factoring, and securities brokerage and dealing). NatWest Bank PLC also controls applicant NatWest Holdings, Inc., and its subsidiary National Westminster Bank USA, N.A., New

1. An Institutional Customer is defined by NatWest to be a person that is:

- (1) a bank (acting in an individual or fiduciary capacity); an insurance company; a registered investment company under the Investment Company Act of 1940; or a corporation, partnership, proprietorship, organization or institutional entity that regularly invests in types of securities as to which investment advice is given, or that regularly engages in transactions in securities;
- (2) an employee benefit plan with assets exceeding \$5,000,000, or whose investment decisions are made by a bank, insurance company or investment advisor registered under the Investment Advisors Act of 1940;
- (3) a natural person whose individual net worth (or joint net worth with his or her spouse) at a time of receipt of the investment advice or brokerage services exceeds \$5,000,000;
- (4) a broker-dealer or option trader registered under the Securities Exchange Act of 1934, or other securities professional; or
- (5) an entity all of the equity owners of which are institutional customers.

York, New York, which holds total deposits of approximately \$11.3 billion as of September 30, 1987.²

WAC engages in monitoring and analyzing U.S. legislative and regulatory developments exclusively within the context of probable effects on the general economy and individual markets, industries, companies and products. Upon consummation of this proposal, NatWest will transfer the activities of WAC to County Securities Corporation USA, New York, New York ("CSC"), an indirect subsidiary of NatWest wholly owned by CNI.³ CSC currently engages in the combined offering of investment advice and securities execution services to institutional customers, pursuant to prior Board approval. *National Westminster Bank PLC, et al.*, 72 FEDERAL RESERVE BULLETIN 584 (1986).⁴ CSC will offer WAC's services to its institutional customers either as a stand-alone service or in connection with brokerage services.⁵

Section 4(c)(8) imposes a two-step test for determining the permissibility of nonbanking activities for bank holding companies:

- (1) whether the activity is closely related to banking; and
- (2) whether the activity is a "proper incident" to banking—that is, whether the proposed activity can reasonably be expected to produce benefits to the public that outweigh possible adverse effects. 12 U.S.C. § 1843(c)(8).

The Board has previously determined that analysis of regulatory developments, in the context of providing investment research advice, is closely related to banking and permissible for bank holding companies under section 225.25(b)(4). *Security Pacific Corporation*, 71 FEDERAL RESERVE BULLETIN 118 (1984) ("Security Pacific Order"). WAC's activities are very similar to the activities approved in the Security Pacific Order. Moreover, the underlying rationale of the Board's decision in the Security Pacific Order, that analysis of the effects of regulatory developments on

individual industries within the context of providing investment advice to institutional customers is permissible, supports the permissibility of WAC's activities. On this basis, the Board finds the activities of WAC to be closely related to banking.

With regard to the "proper incident" requirement, section 4(c)(8) of the Act requires the Board to determine that NatWest's performance of WAC's activities could "reasonably be expected to produce benefits to the public, such as greater convenience, increased competition, or gains in efficiency, that outweigh possible adverse effects, such as undue concentration of resources, decreased or unfair competition, conflicts of interest, or unsound banking practices." 12 U.S.C. § 1843(c)(8).

Although NatWest and WAC both engage in providing investment advice, the market for their activities is relatively unconcentrated with no significant barriers to entry. In addition, NatWest, through CSC, currently engages in investment advice activities that emphasize security-specific analysis, unlike WAC's investment advice activities which emphasize the effects of legislative and regulatory developments on general industry and economic trends. Accordingly, the Board concludes that consummation of this proposal would not have a significant adverse effect on existing or potential competition. There is no evidence in the record that consummation of this proposal would result in unsound banking practices, unfair competition, conflicts of interest, or undue concentration of resources. NatWest's investment advice capabilities would be enhanced by offering WAC's services, allowing it to provide more comprehensive investment advice to its customers. Accordingly, the Board believes that the public benefits of the proposal outweigh any potential adverse effects.

Based upon the foregoing and other considerations reflected in the record, and NatWest's adherence to the commitments and conditions contained in *National Westminster Bank PLC, et al.*, the Board has determined that the balance of public interest factors that the Board is required to consider under section 4(c)(8) is favorable. Accordingly, the application is hereby approved. This determination is subject to all of the conditions set forth in Regulation Y, including sections 225.4(d) and 225.23(b), 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 the provisions and purposes of the Act and the Board's regulations and orders issued thereunder, or to prevent evasion thereof.

This transaction shall be consummated not later than three months after the effective date of this Order, unless such period is extended for good cause

2. Total deposit data reflects NatWest's acquisition of First Jersey National Corporation, Jersey City, New Jersey, approved by the Board on December 21, 1987.

3. WAC's former employees will operate as part of CSC's research staff. WAC's services will be offered as CSC's services to CSC's institutional customers.

4. The Board determined that the combined offering of investment advice with securities execution services to institutional customers from the same bank holding company subsidiary is closely related and a proper incident to banking under section 4(c)(8) of the Act and does not violate the Glass-Steagall Act. *National Westminster Bank PLC, et al.*, 72 FEDERAL RESERVE BULLETIN 584 (1986); *J.P. Morgan and Company, Inc.*, 73 FEDERAL RESERVE BULLETIN 810 (1987).

5. NatWest has reaffirmed its adherence to the commitments and conditions set forth in *National Westminster Bank PLC, et al.*, 72 FEDERAL RESERVE BULLETIN 584 (1986).

by the Board or by the Federal Reserve Bank of New York, pursuant to delegated authority.

By order of the Board of Governors, effective February 8, 1988.

Voting for this action: Chairman Greenspan and Governors Seger, Angell, Heller, and Kelley. Absent and not voting: Governor Johnson.

JAMES MCAFEE
Associate Secretary of the Board

Security Pacific Corporation
Los Angeles, California

*Order Vacating Prior Order Approving Application
To Establish an Automated Trading System for
Options on United States Government Securities*

By Order dated August 5, 1987, the Board of Governors of the Federal Reserve System ("Board") approved an application submitted by Security Pacific Corporation, Los Angeles, California ("Security Pacific") under section 4(c)(8) of the Bank Holding Company Act by issuing an Order Approving Application to Establish an Automated Trading System for Options on United States Government Securities ("August 5, 1987 Order").¹

On September 1, 1987, the Board of Trade of the City of Chicago, the Chicago Board Options Exchange, Inc., and the Chicago Mercantile Exchange ("Petitioners"), each of which had protested Security Pacific's application before the Board, filed a timely petition for review in the United States Court of Appeals for the Seventh Circuit ("Court of Appeals").

On December 9, 1987, Security Pacific advised the Board that its subsidiaries had sold all of their rights, title, and interest in and to the automated trading system that was the subject of the August 5, 1987 Order.

On December 11, 1987, Petitioners filed their brief in support of their petition for review with the Court of Appeals. On January 26, 1988, the Court of Appeals granted a motion by Petitioners and the Board to dismiss the pending petition for review and remand the August 5, 1987 Order to the Board so that the Board may vacate that Order. Because of the dismissal of the petition for review, the Order approving this application is hereby vacated and is no longer effective.

By order of the Board of Governors, effective February 4, 1988.

Voting for this action: Chairman Greenspan and Governors Johnson, Seger, and Angell. Absent and not voting: Governors Heller and Kelley.

JAMES MCAFEE
Associate Secretary of the Board

SunTrust Banks, Inc.
Atlanta, Georgia

*Order Approving an Application to Engage in
Certain Financial Advisory Activities*

SunTrust Banks, Inc., Atlanta, Georgia ("SunTrust"), a bank holding company within the meaning of the Bank Holding Company Act (12 U.S.C. § 1841 *et seq.*) (the "Act"), has applied for the Board's approval under section 4(c)(8) of the Act (12 U.S.C. § 1843(c)(8)) and section 225.23 of the Board's Regulation Y (12 C.F.R. § 225.23), to engage directly in certain financial advisory activities.

Notice of the application, affording interested persons an opportunity to submit comments on the proposal, has been duly published (52 *Federal Register* 46,002 (1987)). 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 Act.

SunTrust, with total consolidated assets of approximately \$25.9 billion,¹ controls banking subsidiaries in Florida, Georgia and Tennessee, and engages through other subsidiaries in various permissible nonbanking activities. SunTrust now proposes to engage directly in certain activities currently conducted by its lead bank and other banking affiliates. These activities are:

- (1) furnishing general economic information and advice, general economic statistical forecasting services and industry studies;
- (2) providing financial advice to state and local governments, such as with respect to the issuance of their securities;
- (3) providing advice regarding the structuring of and arranging for loan syndications, interest rate "swaps," interest rate "caps," and similar transactions;
- (4) providing advice in connection with financing transactions for nonaffiliated financial and nonfinancial institutions;
- (5) providing valuation services for nonaffiliated financial and nonfinancial institutions;

1. 73 FEDERAL RESERVE BULLETIN 815.

1. Banking data are as of September 30, 1987.

- (6) advising nonaffiliated financial and nonfinancial institutions in connection with merger, acquisition and divestiture considerations;
- (7) rendering fairness opinions in connection with merger, acquisition and similar transactions for non-affiliated financial and nonfinancial institutions; and
- (8) conducting feasibility studies for corporations.

The activities described in paragraphs (1) and (2) are included on the list of permissible nonbanking activities in the Board's Regulation Y (12 C.F.R. § 225.25(b)(4)(iv) and (v)). The Board has previously determined by Order that the remaining proposed activities are closely related to banking and permissible for bank holding companies.²

The Board previously has expressed its concerns regarding conflicts of interest and related adverse effects that, absent certain limitations, may be associated with financial feasibility studies that may be conducted as part of these activities. SunTrust has committed to abide by the conditions established in these cases in order to avoid such adverse effects. Specifically, SunTrust has agreed that:

- (1) SunTrust's financial advisory activities shall not encompass the performance of routine tasks or operations for a customer on a daily or continuous basis;
- (2) advice rendered by SunTrust on an explicit fee basis will be without regard to correspondent balances maintained by a customer of SunTrust at any depository subsidiary of SunTrust; and
- (3) SunTrust will not make available to any of its subsidiaries confidential information received from SunTrust's clients, except as authorized by the respective client.

Under these conditions, SunTrust's performance of this activity is unlikely to result in conflicts of interest or other potential adverse effects.

In order to approve this application, the Board must also find that performance of the proposed activities "can reasonably be expected to produce benefits to the public, such as greater convenience, increased competition, or gains in efficiency, that outweigh possible adverse effects, such as undue concentration of resources, decreased or unfair competition, conflicts of interest, or unsound banking practices." SunTrust's proposal represents a corporate reorganization wherein activities currently performed by its subsid-

aries will be conducted directly by SunTrust. Because the proposal essentially would result in a transfer of the activities within the same corporate structure, approval of the application would have no adverse competitive effects. Moreover, there is no evidence in the record that SunTrust's performance of these activities is likely to result in any undue concentration of resources, decreased or unfair competition, unsound banking practices, or other adverse effects.

Based upon a consideration of all the relevant facts, the Board concludes that the balance of the public interest factors that the Board is required to consider under section 4(c)(8) is favorable. Financial and managerial resources also are consistent with approval of the proposal. Accordingly, the application is hereby approved. This determination is subject to the conditions set forth in this Order and in sections 225.4(d) and 225.23(b)(3) of Regulation Y. This approval is also subject to the Board's authority to require such modification or termination of the activities of a bank holding company or any of its subsidiaries as the Board finds necessary to assure compliance with the provisions and purposes of the Act and the Board's regulations and orders issued thereunder, or to prevent evasion thereof.

The 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 Atlanta, pursuant to delegated authority.

By order of the Board of Governors, effective February 8, 1988.

Voting for this action: Chairman Greenspan and Governors Seger, Angell, Heller, and Kelley. Absent and not voting: Governor Johnson.

JAMES MCAFEE
Associate Secretary of the Board

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

The Bank of New York Company, Inc.
New York, New York

Order Conditionally Approving the Acquisition of a Bank Holding Company

The Bank of New York Company, Inc., New York, New York ("BNY"), a bank holding company within the meaning of the Bank Holding Company Act of 1956, as amended (the "Act" or the "BHC Act") (12 U.S.C. § 1841 *et seq.*), has applied for the Board's approval under section 3 of the Act (12 U.S.C.

2. *Signet Banking Corporation*, 73 FEDERAL RESERVE BULLETIN 59 (1987) (paragraphs (3), (5), (6) and (7)); *Sovran Financial Corporation*, 73 FEDERAL RESERVE BULLETIN 744 (1987) (paragraph (4)); and *Security Pacific Corporation* Duff & Phelps, Inc., 71 FEDERAL RESERVE BULLETIN 118 (1985) (paragraph (8)).

§ 1842) to acquire 100 percent of the voting shares of, and/or to effect a merger with, Irving Bank Corporation, New York, New York ("IBC"), and thereby to acquire IBC's subsidiary banks.¹

BNY also has applied under section 4(c)(8) of the Act (12 U.S.C. § 1843(c)(8)) to acquire the nonbanking subsidiaries of IBC listed in the Appendix to this Order. In addition, BNY has applied to acquire indirectly the shares of Irving Trust International Bank and Irving International Financing Corporation, corporations chartered pursuant to section 25(a) of the Federal Reserve Act (the "Edge Act") (12 U.S.C. §§ 611–631).

BNY also has provided notice of its intention to acquire indirectly Banca Della Svizzera Italiana, Lugano, Switzerland; Banco Irving Austral, Buenos Aires, Argentina; International Commercial Bank PLC, London, United Kingdom; Irving Bank Canada, Toronto, Ontario, Canada; Sociedad Financiera Consolidada, Caracas, Venezuela; Turkiye Tutunculer Bankasi A.S., Izmir, Turkey; Wing Hang Bank Limited, Hong Kong; and Banco Weng Hang, Hong Kong, under section 4(c)(13) of the Act (12 U.S.C. § 1843(c)(13)) and Irving International Trade, Inc., under section 4(c)(14) of the Act (12 U.S.C. § 1843(c)(14)).

Because of certain provisions of state law discussed below and IBC's Shareholders' Purchase Rights Plan, BNY may decide to acquire initially no more than 19.9 percent of IBC's voting stock and through a proxy solicitation to seek to elect at least a majority of IBC's board of directors. If BNY is successful, it would then proceed to acquire the remainder of IBC's shares. Accordingly, BNY has also requested approval under the BHC Act to acquire 19.9 percent of IBC's shares and to acquire voting control of such number of IBC's voting shares as will enable BNY to elect at least a majority of IBC's directors.

Notice of these applications, affording interested persons an opportunity to submit comments, has been published (52 *Federal Register* 38,273 and 45,689 (1987)). The time for filing comments has expired, and the Board has considered the applications and all comments received in light of the factors set forth in

sections 3(c) and 4 of the Act and the purposes of the Edge Act. The Board notes that on February 25, 1988, the New York State Banking Board unanimously approved BNY's proposal to acquire IBC, after examining the proposal from the standpoint of safety and soundness, banking competition, maintenance of financial services and the public convenience and needs and considering IBC's comments in opposition to the proposal.

The Board has received comments from IBC objecting to Board approval of the proposed acquisition. IBC also has requested that the Board hold a hearing regarding the applications.² IBC raises questions concerning, among other things, the ability of BNY to consummate this transaction under New York law and IBC's Shareholders' Purchase Rights Plan, the definitiveness of the proposal, the adequacy of the specifications in BNY's application regarding the proposal, the adequacy of the capital position of the resulting organization, its managerial resources and future prospects, BNY's plans regarding the retention and operation of certain IBC subsidiaries, the effect of the presence of a minority shareholder on the operations and future prospects of IBC, and the effect of the proposed acquisition on the convenience and needs of the communities served by IBC's subsidiaries.

The Board has considered these comments carefully, as well as the responses to these comments submitted by BNY, and has reviewed the application in light of all of the information presented and otherwise available to the Board. Based upon this consideration and subject to BNY's commitments and the conditions established by the Board as described below, the Board has concluded that BNY's proposal satisfies the criteria set out in the Act. Accordingly, the Board has determined to approve the applications subject to the fulfillment of BNY's commitments and the conditions established herein by the Board.

Board Policy in Evaluating Contested Proposals

BNY's proposal raises issues concerning the Board's general policy toward bank holding company acquisitions that are opposed by the management of the institution to be acquired and the adequacy of the Board's procedures in considering these applications.

Section 3(c) of the BHC Act requires the Board to review each application on its merits in light of the

1. These are Irving Trust Company, New York, New York; The Bank of Lake Placid, Lake Placid, New York; Bank of Long Island, Babylon, New York; Central Trust Company, Rochester, New York; Dutchess Bank & Trust Company, Poughkeepsie, New York; Endicott Trust Company, Endicott, New York; The First National Bank of Hancock, Hancock, New York; The First National Bank of Moravia, Moravia, New York; The Fulton County National Bank and Trust Company, Gloversville, New York; Hayes National Bank, Clinton, New York; The Merchants National Bank & Trust Company of Syracuse, Syracuse, New York; Nanuet National Bank, Nanuet, New York; Scarsdale National Bank and Trust Company, Scarsdale, New York; and Union National Bank, Albany, New York.

2. In addition to the IBC comments, the application was protested under the Community Reinvestment Act, 12 U.S.C. § 2901 *et seq.* The Board also received comments from members of the public, members of Congress, and various organizations. As discussed more fully in this Order, the Board has carefully considered all these comments in reaching its decision.

Act's competitive standards, the financial and managerial resources and future prospects of the companies and banks concerned, and the convenience and needs of the community to be served. The Act does not draw any distinction between acquisitions that are agreed to between the parties and those where, as here, there is no agreement. The Board's experience over the years indicates that the criteria established by Congress in the BHC Act are adequate for the Board to carry out the Congressional mandate of maintaining competition, assuring safety and soundness, and meeting community convenience and needs. The Board believes this is true regardless of whether the proposed acquisition is friendly or hostile.

In accordance with the requirements of the Act, the Board evaluates each bank holding company acquisition proposal to ensure that these criteria are satisfied. Where the statutory criteria are met, the Board would be acting outside its delegated discretion to withhold approval based upon other factors such as whether the proposal is acceptable to the management of the banking organization to be acquired.³ The Board thus applies the statutory criteria equally in the case of applications supported by the management of the acquired company as well as in those that are opposed by management.⁴

In some cases, however, the lack of agreement between the applicant and the organization to be acquired may introduce an element of uncertainty in the analysis of certain of the effects of the proposed acquisition on the statutory factors. The Board is mindful of the potential contested situations may pose for adverse effects on the financial and managerial resources of the company to be acquired as well as with respect to the acquiring organization. Thus, in the case of applications involving contested acquisitions, as in the case of the present application, the Board pays special attention to assuring that the statutory criteria are met.

The Board will also take into account the potential for adverse effects on bank safety and soundness in the event that a contested situation is prolonged. Thus, as discussed below, the Board intends to review carefully any request by BNY to extend the normal 90-day period provided for an applicant to consummate an

approved proposal. The Board would not expect to grant more than one extension of this period and then only if the Board is satisfied regarding bank safety and soundness considerations and the likelihood of consummation of the proposal within the extended period.

Adequacy of Board Procedures

The Board has also considered whether the Board's current procedures for processing bank holding company applications are sufficient in a contested situation such as presented here. The Board believes that these procedures are fully adequate to provide all interested parties the opportunity to review the proposal, to bring to the Board's attention any issue bearing on the statutory criteria, and to present evidence and comment on the issue. The Board's rules establish detailed procedures that govern the submission and content of applications, require notice of the application to the public in newspapers and in the *Federal Register*, and provide interested persons with an opportunity to comment on the proposal for at least 30 days.⁵ In addition, in 1984, the Board issued a policy statement setting out in detail the procedures that should be used in protested applications. 12 C.F.R. § 262.25. There are also detailed staff guidelines that govern every aspect of the application process, including procedures for the exchange of communications between applicant and protestants and relevant time periods for rebuttal.⁶ Under these procedures, the applicant and protesting party are provided an opportunity to comment on each other's submissions and to provide data and information to support their positions. In this case, for example, there have been numerous and lengthy submissions by both BNY and IBC throughout the application process regarding the issues raised by the application as well as each other's comments.

Moreover, in this case IBC has been provided, by stipulation between IBC, BNY, and the Board, access to major portions of the application normally not made available to the public, which contain Applicant's financial projections, underlying assumptions and other confidential business information. As a result, IBC was able to comment meaningfully on key financial considerations in the application that in a number of instances resulted in modifications of BNY's previous submissions. This procedure available under the Board's current rules has provided the Board with the benefit of extensive submissions by IBC regarding the

3. For example, where the Board rejected an application because the applicant's offer did not treat all shareholders equally, a reviewing court found that the Board's decision was unauthorized under the Act. *Western Bancshares, Inc. v. Board of Governors of the Federal Reserve System*, 480 F.2d 749 (10th Cir. 1973).

4. See *McLeod Bancshares, Inc.*, 73 FEDERAL RESERVE BULLETIN 724 (1987); *Crescent Holding Company*, 73 FEDERAL RESERVE BULLETIN 457 (1987); *Lloyds Bank PLC*, 72 FEDERAL RESERVE BULLETIN 841 (1986); *Simmer Development Company*, 72 FEDERAL RESERVE BULLETIN 494 (1986); *Hudson Financial Associates*, 72 FEDERAL RESERVE BULLETIN 150 (1986).

5. 12 C.F.R. § 262.3. This comment period may be extended by the Secretary of the Board, as it was in this application, for good cause. 12 C.F.R. § 265.2(a)(10).

6. *Manual on Procedures for Processing Applications*, AD 87-20 (FIS) (May, 1987).

issues and BNY's submissions and has produced, in the Board's view, a sufficient record for considering this application under the criteria in the Act. The Board believes these procedures have provided IBC with a fully adequate opportunity to comment on this proposal.

Competitive Considerations

BNY is the seventh largest commercial banking organization in New York, with one subsidiary bank that controls domestic deposits of \$11.9 billion, representing 5.0 percent of total domestic deposits in commercial banks (hereinafter "deposits") in New York.⁷ IBC operates fourteen banking subsidiaries in New York and is the ninth largest commercial banking organization in the state, controlling domestic deposits of \$9.9 billion, representing 4.1 percent of deposits in New York. Upon consummation of the proposed acquisition, BNY would become the fifth largest commercial banking organization in New York, controlling \$21.8 billion in domestic deposits, representing approximately 9.1 percent of deposits in that state. Consummation of this proposal would have no significant adverse effect upon the concentration of commercial banking resources in New York.

Insofar as the commercial banking product market is concerned, BNY and IBC compete directly in two relevant geographic banking markets: the Metropolitan New York-New Jersey and Mid-Hudson banking markets.⁸ In the Metropolitan New York-New Jersey banking market, BNY is the seventh largest of 159 commercial banking organizations, controlling \$10.5 billion in deposits, which represents 4.4 percent of the deposits in that market. IBC is the eleventh largest commercial banking organization in this market, controlling \$6.1 billion in deposits, which represents 2.5 percent of deposits in the market. Upon consummation of this proposal, BNY would become the fifth largest commercial banking organization, controlling \$16.6 billion in deposits, or 6.9 percent of the market's deposits. The Metropolitan New York-New Jersey banking market is considered to be unconcentrated and would remain so upon consummation of the proposal. The Herfindahl-Hirschman Index ("HHI")

for the market would increase by only 23 points to 710 upon consummation of the proposal. The four-firm concentration ratio (of 46.3 percent) for the market would remain unchanged.

In the Mid-Hudson banking market, BNY is the tenth largest of fifteen commercial banking organizations, with \$82 million in deposits, representing 5.0 percent of deposits in the market. IBC is the fourth largest commercial banking organization in the market, with \$188 million in deposits, representing 11.5 percent of deposits in the market. Upon consummation of the proposal, BNY would become the largest commercial bank organization in the market with a 16.5 percent market share. The Mid-Hudson banking market will become moderately concentrated, with the four largest commercial banking organizations controlling 51.8 percent of total deposits. Upon consummation of this proposal, the HHI would increase by 115 points to 1105 and the four-firm concentration ratio would increase to 56.5 percent.⁹

On the basis of the above facts, including the presence of numerous thrift institutions in each market, the Board concludes that consummation of the proposal is not likely to lessen substantially existing competition for banking services in any relevant geographic market or otherwise result in anticompetitive effects of the type described in sections 3(c)(1) or (2) of the BHC Act.

IBC operates in ten banking markets in which BNY does not operate.¹⁰ Nine of these markets are not concentrated and all of the markets have numerous probable future entrants. Based upon these and other facts of record, the Board concludes that consummation of the proposal would not substantially lessen probable future competition in any relevant banking market.

Government Securities Clearance and American Depository Receipts (ADR) Services

IBC and BNY each provide government securities clearance and settlement and ADR services to third

7. State deposit data are as of September 30, 1987, and market deposit data are as of June 30, 1986. BNY also operates a credit card bank in Delaware.

8. The Metropolitan New York-New Jersey market is defined to include New York City and Long Island, New York; Putnam, Sullivan, Westchester, Rockland, and Orange Counties in New York; Bergen, Essex, Hudson, Hunterdon, Middlesex, Monmouth, Morris, Ocean, Passaic, Somerset, Sussex, Union, and Warren Counties in New Jersey; and portions of Fairfield County in Connecticut.

The Mid-Hudson banking market consists of Dutchess and Ulster Counties in New York.

9. Under the revised Department of Justice Merger Guidelines (49 *Federal Register* 26,823 (June 29, 1984)), a market in which the post-merger HHI is between 1000 and 1800 is considered moderately concentrated. In such markets, the Department is likely to challenge a merger that increases the HHI by more than 50 points. The Department has informed the Board that a bank merger or acquisition generally will not be challenged (in the absence of other factors indicating anticompetitive effects) unless the post-merger HHI is at least 1800 and the merger increases the HHI by at least 200 points. The Justice Department has stated that the higher than normal HHI thresholds for screening bank mergers for anticompetitive effects implicitly recognizes the competitive effect of limited purpose lenders and other non-depository financial entities.

10. These markets are the Albany, Binghamton, Buffalo, Elmira-Corning, Ithaca, Oneonta, Plattsburgh, Rochester, Syracuse and Utica-Rome banking markets.

parties.¹¹ As part of its protest, IBC contends that the Board must consider the competitive effects of the proposal viewing government securities clearance and ADR services each as separate product markets. IBC asserts that these products constitute highly concentrated markets separately defined from the commercial banking product market and that competition in each market will be adversely affected by the merger of IBC and BNY. BNY asserts that commercial banking is the appropriate line of commerce; or, in the alternative, if the activities are separate lines of commerce, that consummation will not result in any substantial competitive harm.

In delineating the relevant product market in which to assess the probable competitive effects of a bank acquisition or merger, the Supreme Court has determined that "commercial banking" is the appropriate line of commerce on the basis that the "cluster of products . . . and services" provided by commercial banks is unique relative to other institutions.¹² Underlying this analysis is the recognition that the relationship among the products and services that constitute commercial banking creates an "economic significance well beyond the various products and services involved."¹³ To measure the "cluster of products," the Court has used bank deposits as a proxy for the market share of the bank. This approach has reasonably approximated economic reality in commercial banking and has provided a practical and workable basis for competitive assessments.

Government securities clearing and settlement services are generally provided by depository institutions and involve a combination of services that banks have

traditionally provided, such as funds transmissions, settlement services and custodial services. Clearing services are also closely tied to lending activities because clearing may involve credit extension by the bank to the dealer. Similarly, ADR services have been provided only by banks and are composed of traditional banking activities such as custodial and trust services, depository services, transfer agency services and lending services. On the basis of these factors, the Board believes that government securities clearing and ADR services should be viewed as elements of the cluster of services that traditionally has constituted the commercial banking line of commerce, as articulated by the Supreme Court in *Philadelphia*. As discussed above, in this product market, consummation of the proposal would have no substantial adverse effect on competition in any relevant geographic area or otherwise violate the competitive standards in section 3(c) of the Act.

Even if government securities clearance and ADR services were each viewed as constituting separate lines of commerce that are distinct from the commercial banking product market delineated in *Philadelphia*, the Board does not believe that consummation of this proposal would substantially lessen competition in either market.

In defining the government securities clearing market, IBC includes only those depository institutions that provide clearing and settlement services for the more active government securities dealers and brokers unaffiliated with a depository institution.¹⁴ Under this approach, BNY has the second largest market share of the five clearing banks in the business with a 28.3 percent market share. IBC is the fourth largest participant with a 18.7 percent market share. Upon consummation of the proposal, IBC projects that BNY would be the largest participant in the market, with almost a 47.0 percent market share and that the four-firm concentration ratio would increase to 100 percent, with an increase in the HHI of over 1000 points to over 3400.¹⁵ If transactions cleared for affiliates are not excluded, BNY's market share would upon consummation be about 43 percent and the HHI would increase by 900 points to just over 3100.

BNY disputes IBC's market definition as being too narrow. BNY would include all depository institutions

11. ADRs are receipts, similar to domestic stock certificates, issued by a U.S. bank that represent a stated number of shares of a foreign security. The foreign securities represented by the ADRs are held by a foreign depository trust company, which serves as agent for the issuing domestic bank. ADRs are dollar denominated and permit a United States investor to own and trade foreign stocks without directly trading on the foreign stock exchange. The bank issuing ADRs effectively commits to the valid ownership rights in the shares, monitors all foreign corporate activities and subscription rights associated with the shares, and distributes dividends (less applicable taxes and fees) to the ADR holders in dollars. ADRs do not, of course, provide the only available means of foreign stock ownership. For example, United States investors may purchase foreign shares directly and, in instances where a foreign issuer has appointed its own United States transfer agent, purchase United States equity equivalents known as "New York shares." Additionally, for some investors a mutual fund specializing in international markets could provide a substitute for direct stock ownership.

12. *United States v. Philadelphia National Bank*, 374 U.S. 321, 356 (1963) ("Philadelphia"). In *United States v. Phillipsburg National Bank*, 399 U.S. 350 (1970), the Court stressed that banks were the only financial institution in which a wide variety of financial products and services were gathered in one place and that this "clustering" of financial products and services facilitated convenient access to them for all banking customers. 399 U.S. at 359.

13. *United States v. Phillipsburg Nat'l Bank*, 399 U.S. at 361.

14. Market shares are estimated by analyzing the number of transactions performed by these clearing banks, excluding transactions originated by their own affiliates.

15. Under the revised Department of Justice Merger Guidelines, a market in which the post-merger HHI is above 1800 is considered highly concentrated. In such markets, the Department is likely to challenge a merger that increases the HHI by more than 50 points, in the absence of other factors indicating that the merger would not substantially lessen competition.

that clear government securities transfers, including those that are technically unable to meet the clearing requirements of dealers and brokers or that do not choose to provide clearing services to third parties. Under this market definition, IBC and BNY would control 11.7 percent and 15.7 percent of the market, respectively. Upon consummation, BNY would control 27 percent of the market; the four-firm concentration ratio would increase from 57.7 to 63.7 percent; and the HHI would increase from 368 points to 1397.

The Board is inclined to the view that the product market for clearing government securities should include only those depository institutions that clear for third parties, although the Board notes that under the Department of Justice Merger Guidelines, banks that clear only for themselves or affiliates would be included, since these organizations could offer such services to third parties within one year.¹⁶ While this view excludes from the market institutions clearing only for themselves or their affiliates, the Board believes that the presence of these institutions, which include at least five large money-center banks on the fringe of the market, exerts a strong mitigating effect on the potential for a significant reduction in competition in the market.¹⁷ This influence, along with the other mitigating factors described below, would, in the Board's view, be likely to prevent substantial anticompetitive effects from arising as a result of consummation of the proposal.

Although the market for clearing government securities (as defined by IBC) is concentrated, there is substantial competition in the market for customers on the basis of price and quality of service,¹⁸ and the

market is likely to remain competitive after the proposed acquisition. In this market, a relatively small number of large, sophisticated customers account for a significant portion of the clearing transactions.¹⁹ These large customers promote competition among clearing banks through their ability to move, or threaten to move, their large volume of business to another clearer. In addition, dealers often divide business among clearing banks based on the type of security. Because of these established business relationships and technological interface, changing from one clearing bank to another can be relatively easy. Customers have been successful in promoting competition in this manner because of sensitivity of clearing bank profits to the volume of transactions. Indeed, the significant economies of scale in the government securities clearing business serve to explain the high concentration ratios.

The Board also has considered two other factors that should provide added pressure to ensure that the market remains competitive after consummation of the proposal. Government securities industry participants have recently explored using industry associations to develop a more efficient and cost-effective clearing system, which should result in the reduction of transaction volume handled by the clearing banks. For example, the Government Securities Clearing Corporation ("GSCC"), which is organized by primary dealers and major banks, is developing a computer system to reduce the volume of transactions currently processed by clearing banks through netting the trades among participating brokers and dealers before the trades are cleared by a clearing bank. The resulting decline in demand for clearing bank services should create excess capacity, which should in turn promote competition among clearing banks.

Second, as noted, the potential for *de novo* entry provides a strong force preventing anticompetitive behavior in the market. There are numerous banking organizations large enough to enter the clearing market. For these organizations, entry cost and start-up time do not present insurmountable barriers. The highest estimate in the record, \$25 million, is still relatively small in relation to the resources of most potential entrants. Furthermore, currently available software packages permit *de novo* entrants to begin operations more quickly than if they were required to develop this software in-house. As noted above, there are at least five large money-center banks that clear for

16. If the five large New York City banks that clear for themselves (Citibank, Morgan Guaranty, Bankers Trust, Chase Manhattan and Chemical Bank) were included in the product market, BNY would control, upon consummation, 27.3 percent of the market and the HHI would increase by 598 points to 2118. The Board notes that these five clearing banks are among the nation's largest financial institutions and have in place, or readily available, the personnel and technology to be able to provide within a short period of time clearing services for third parties.

17. While three of these institutions have terminated clearing services for third parties within the last few years, there have been significant improvements in clearing technology since and technology is available through purchase of software packages.

18. The Board notes that significant concentration ratios can be unreliable indicators of actual market behavior, and the *prima facie* case that is established by such ratios under relevant judicial precedent may be rebutted by a showing that these ratios do not accurately reflect the true economic characteristics of the relevant market. *United States v. Marine Bancorporation*, 418 U.S. 602, 631 (1973). *Accord: Brown Shoe v. United States*, 370 U.S. 294, 322 n.38 (1961) (statistics concerning market share are not conclusive, as "only a further examination of the particular market—its structure, history, and probable future—can provide the appropriate setting for judging the probable anticompetitive effect of the merger"); *United States v. General Dynamics Corp.*, 415 U.S. 486, 497–98 (1973); *United States v. First National State Bancorporation*, 499 F. Supp. 793, 804–805 (D.N.J. 1980) (concentration ratios are useful only as a starting point

of analysis; one must thereafter study actual performance of market participants to determine the competitiveness of the market).

19. Large customers include primary dealers, aspiring primary dealers and the seven interdealer brokers, who are among the major participants in the government securities market.

themselves that could readily provide the same services to third parties should competition in the market falter significantly.²⁰ If the degree of customer dissatisfaction over price or quality of service is sufficient, potential entrants could be encouraged by commitments by the customer to provide business to the entrant. Finally, past history in this area demonstrates that market participants are able and will take action to reduce costs and improve services.

ADR Services

As with government securities clearing services, IBC and BNY present significantly different market structures for ADRs. IBC defines the market as the number of shares against which each bank has issued ADRs. IBC estimates that the post-merger share would make BNY the second largest participant with a market share of 28 percent.²¹ The four-firm concentration ratio would be 100 percent and the HHI would increase 384 points to 4823.

BNY disputes IBC's definition of the market as being too narrowly limited to the number of foreign shares against which banks issue ADRs. According to BNY, other methods of foreign share ownership, such as direct investments and mutual funds comprised of foreign shares, should be included when defining the applicable market. Under this approach, and assuming that ADRs represented one-third of all foreign shares owned by U.S. investors (an over-estimation according to BNY), the relevant market would be 200 percent larger than IBC projects with an HHI below 1000 and a post-merger change of less than 40 points.

Even if IBC's market definition is accepted, the Board concludes that the number of potential entrants, the ease of entry into the ADR market, the rapid growth in the use of ADRs, as well as the availability of close substitutes for ADRs would preclude consummation of the proposal from substantially lessening competition in the market.

The number of potential entrants into the ADR market is large; major New York banks, other large United States banks with experience in clearing and transfer operations, large foreign banks with a pres-

ence in the United States and large brokerage houses are potential entrants into this market. The activities required to offer ADR services are relatively common for the potential entrants.²² ADR marketing requires custodial, depositary transfer agent and lending activities. Custodians to hold the foreign securities underlying the ADRs can be provided without large capital costs through foreign offices or agency agreements with foreign institutions.

To provide ADR services, an entrant must have personnel and a computer system capable of tracking ADR ownership, collecting and converting dividends, exercising rights offerings, controlling pre-release lending²³ and monitoring the lending limits of brokers. These services do not differ materially from the requirements for establishing other securities trading operations and therefore would not constitute a significant barrier to entry into the ADR service market.

A *de novo* entrant may experience a cost disadvantage in securing sponsored ADRs²⁴ because a foreign company that wishes to convert to sponsored ADRs must pay a cancellation fee to the holders of all previously issued unsponsored ADRs. Banks with large holdings of shares against which unsponsored ADRs have been issued could have a cost advantage over a new entrant because they do not have to pay cancellation fees for the shares they are holding, thus reducing the cost of switching to a sponsored ADR. A new entrant without the benefit of such holdings would be forced to absorb the cancellation fees on an outstanding unsponsored ADR which the issuer of the underlying security has determined to convert to a sponsored ADR. This cost disadvantage is not present when introducing sponsored ADRs that have not previously been traded on an unsponsored basis, however. By aggressively competing for this type of ADR, a *de novo* entrant can overcome this cost disadvantage.

20. Moreover, the Board notes that the true dimension of the government securities clearing market, as proposed by IBC, ignores the fact that a number of nonbanking companies engage in the clearing business even though they ultimately must clear their net positions through a depository institution. The figures supplied by IBC do not include the full volume of clearing business effected by these firms. This volume of business would tend to reduce the concentration figures noted above.

21. On this basis, this market would be dominated by Morgan Guaranty Trust Company of New York with a market share of approximately 63 percent. IBC traditionally has been the second largest firm in the market with a 17 percent market share.

22. For example, a number of banks and other firms issue custody receipts for securities other than foreign securities, including instruments representing interests in the "stripped" U.S. government securities known by acronyms: LIONS, TIGRS, and CATS. The services provided to holders of these receipts are very similar to those provided to holders of ADRs.

23. Pre-release lending occurs when depositaries provide short-term loans that cover the ADR until the actual underlying foreign security is delivered. This process is necessary because foreign countries often do not require the delivery of purchased securities within the same time frame required under United States law.

24. Unsponsored ADRs are issued by a bank without the participation of the company whose securities underlie the receipt. They may be issued by a number of different banks for the same underlying security issue. Sponsored ADRs are issued by only one bank under an agreement with the foreign issuer. Although unsponsored ADRs constitute approximately 75 percent of the market, sponsored ADRs account for an increasing share of all ADRs traded in this country.

tage. The rapid growth of the ADR market²⁵ makes it attractive for entry and entry is presently occurring.²⁶

Finally, the Board notes the availability of a number of substitutes for ADR services for certain types of customers, principally direct investment in foreign shares, particularly by larger financially sophisticated customers and mutual funds with portfolios of foreign securities. As in the case of government clearing services, the immediate customers of ADRs are brokers and similar financially sophisticated customers, who are able to demand competitive prices and services by moving or threatening to move their business to another competitor or potential competitor or utilizing competitive alternatives, such as direct investment for certain types of investors.

For the above reasons, the Board concludes that the proposed transaction would not have a significant adverse effect on competition in government securities clearing and ADR services even assuming these services were considered to constitute distinct product markets. In this regard, the Board has been advised by the Antitrust Division of the U.S. Department of Justice, which has investigated the competitive effect of the proposal, that it has concluded that the proposal would not have a significantly adverse effect on competition.

Financial Factors

In evaluating these applications, the Board has carefully considered the financial resources of the companies and banks involved and the effect on those resources of the proposed acquisition. The Board has stated and continues to believe that capital adequacy is an especially important factor in the analysis of bank holding company expansion proposals, particularly in transactions, such as this, where a major acquisition is proposed.²⁷

In this regard, the Board has stated that it expects banking organizations contemplating expansion proposals to maintain strong capital levels substantially above the minimum levels specified in the Board's

Capital Adequacy Guidelines²⁸ without significant reliance on intangibles, particularly goodwill. The Board carefully analyzes the effect of expansion 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.²⁹

The proposed transaction represents a substantial acquisition for BNY that would double its size in terms of total assets and make it one of the nation's largest banking organizations. BNY proposes to acquire all of the outstanding common shares of IBC stock through a stock and cash offer based on a \$60.00 per share value of IBC stock.³⁰ The cash portion of the purchase amounts to \$264 million and will be funded through the liquidation of \$220 million of investments and the issuance of \$44 million of short-term debt.

While financial projections submitted by the Applicant indicate that the capital ratios of the resulting organization would remain above the minimum levels specified in the Board's Capital Adequacy Guidelines,³¹ the proposal will result in a lessening of the capital strength of the two organizations on a combined basis as a result of the proposed \$264 million payment of a portion of the purchase price in cash. To address these effects, BNY has committed that, at consummation of the acquisition of IBC, its consolidated tangible common equity to assets ratio will equal at least 3.5 percent and that it will achieve a 4.1 percent tangible common equity to assets ratio within one year of consummation.³²

These commitments, however, are not fully sufficient to satisfy the Board's policy regarding the avoidance of declines in existing capital levels and the maintenance of strong capital levels in significant bank

25. For example, based on trading volume, as measured by the volume of ADRs traded on NASDAQ, the market increased by 38 percent from 1985 through 1986.

26. For example, the Bankers Trust Company appears to be expanding its involvement in the market. The Board also notes that BNY itself entered the market only four years ago and has accumulated an 11 percent market share.

27. *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); *Banks of Mid-America, Inc.*, 70 FEDERAL RESERVE BULLETIN 460 (1984); *Manufacturers Hanover Corporation (CIT)*, 70 FEDERAL RESERVE BULLETIN 452 (1984).

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

29. Thus, for example, the Board has generally approved proposals involving a decline in capital only where the applicants have promptly restored their capital to pre-acquisition levels following consummation of the proposals and have implemented programs of capital improvement to raise capital significantly above minimum levels. See, e.g., *Citicorp*, 72 FEDERAL RESERVE BULLETIN 726 (1986); *Security Pacific Corporation*, 72 FEDERAL RESERVE BULLETIN 800 (1986). See also *Security Banks of Montana*, 71 FEDERAL RESERVE BULLETIN 246 (1985).

30. Each share of IBC common stock will be exchanged for 1.575 shares of BNY's common stock and \$15.00 net to the seller in cash. The total consideration for the acquisition is \$1.1 billion.

31. In analyzing the financial aspects of the proposal, the Board has used financial statements as of December 31, 1987, for both parties, adjusted for projected operations of the organizations through April 30, 1988, BNY's anticipated consummation date, as well as IBC's issuance on February 23, 1988, of approximately \$100 million of cumulative convertible preferred stock.

32. BNY's commitments are based on the deduction of all intangibles from the calculation of this ratio, not only goodwill.

expansion proposals. To achieve full compliance with this policy, particularly given the size of the proposed combination, the Board believes that, in order for BNY to proceed with consummation of its proposal, BNY should support at least 60 percent of the cash outlay required by its proposed purchase through the issuance of an equal amount of new equity capital in the form of common stock or noncumulative, perpetual preferred stock. Moreover, the Board believes that, within six months of consummation of the proposal, the remaining 40 percent of the cash outlay for the purchase should be supported by common stock or perpetual preferred stock. The Board conditions its order on compliance with these capital requirements. The new equity capital BNY must raise to comply with these capital requirements will not be considered in determining whether BNY has complied with its commitment to the Board that at consummation BNY would have a tangible common equity to assets ratio of at least 3.5 percent.

On the basis of these requirements, the capital of the combined organization would be restored to pre-acquisition levels within a short period of time after consummation. The proposal, thus, would be consistent with the Board's capital policy that an expansionary acquisition not interfere with an applicant's ability to maintain a strong capital position above the minimum levels required under the Board's guidelines, without significant reliance on intangibles.

Further, on the basis of these capital requirements, BNY's capital position at consummation would not only be in full compliance with the Board's Capital Adequacy Guidelines but would also be at or above the current average levels of its peer group of the nation's largest banking organizations. The increased capital will serve to offset the goodwill BNY would incur to effect the acquisition and will provide additional capital to cushion the impact of any potentially adverse financial effects raised in an acquisition of this magnitude.³³ These capital requirements fully address IBC's contention that BNY's cash payment to IBC shareholders and the costs of effecting the acquisition will weaken the capital position of the combined organization.

IBC has challenged BNY's *pro forma* capital ratio commitments on the basis of the purchase accounting adjustments projected by BNY for certain IBC

assets.³⁴ The primary dispute concerns the accounting treatment of IBC's loans to heavily indebted developing countries and IBC's nonperforming loans.³⁵

BNY proposes to write down the value of \$250 million of IBC's debt to heavily indebted developing countries to be sold within one year following consummation to reflect the estimated secondary market value of this debt but proposes to make no further accounting adjustments for the remaining portion of this portfolio or IBC's nonperforming loans. BNY relies on its interpretation of generally accepted accounting principles governing purchase transactions to support its accounting treatment of IBC's loans.

IBC counters with its interpretation of prevailing accounting principles that would require all of its debt to heavily indebted developing countries and nonperforming loans to be written down to current market values. Under these accounting adjustments, additional goodwill would be created thus requiring BNY to raise more capital in absolute terms to achieve its capital ratio commitments.

The Board's requirement for additional capital at and shortly after consummation of the proposal assumes the purchase accounting adjustments submitted by BNY and in the amounts stated in its proposal. As noted, this capital level, higher than that proposed by BNY, was established in part on the basis of the Board's consideration of asset quality and the uncertainties that are naturally raised in an acquisition of this size. Thus, the Board's requirement for a strong tangible equity position takes into account the concerns raised by IBC.

Based on the above considerations, including the capital requirements established by the Board in this Order and the commitments by BNY regarding its tangible common equity to assets ratio at consummation and within 12 months of consummation, and the facts of record, the Board concludes that the financial resources of BNY and the banks and companies involved are consistent with approval of the proposal.

In its application, BNY requested approval for the acquisition of IBC's shares under three different purchase prices, which included variations on the cash and stock portions of the purchase price. BNY also has reserved the right to modify its offer and, as noted, has done so during the pendency of this application.

33. For example, this would allow for any additional costs that BNY might incur in rationalizing the computer systems of the two organizations or offset any reduction in BNY's projected cost savings arising from the acquisition.

34. Accounting adjustments directly impact on these commitments by potentially increasing the amount of goodwill generated by the acquisition and producing a complementary diminution in the capital ratios if all other circumstances remained unchanged.

35. Recent loan loss reserve provisions for the debt to heavily indebted developing countries taken by IBC in the fourth quarter have significantly reduced the quantitative impact of this dispute.

The Board's approval in this Order, however, is limited to the current offer made by BNY for IBC's shares as described in this Order. Accordingly, if BNY further amends or alters the offer, it must consult with the Board to determine whether the amendment is so material, as it relates to the Board's analysis and conclusions under the statutory factors, that it would require a new application or further proceedings before the Board.

Managerial Resources and Future Prospects

The Board has also considered the managerial resources of the companies and banks involved, including those of the combined organization upon consummation, as well as their future prospects, as required under section 3(c) of the Act. At the outset, the Board notes that both organizations have management resources which have established records of positive earnings and operations.

IBC comments that several considerations in the proposal will result in inadequate managerial resources for the combined organization. In its view, disparate technological systems and management philosophies will make it extremely difficult to combine successfully the two organizations. IBC predicts significant employee defection, with an irreplaceable loss of expertise in such key areas as its international operations. Additionally, IBC criticizes BNY's past management record and questions the propriety of the BNY employee pension plan's purchase of BNY stock.

BNY disputes any negative managerial considerations by focusing on its commitment to retain IBC's management personnel after consummation of the transaction. BNY has offered contracts to senior management and has committed to establish a committee comprised of officers from each institution for the purpose of determining staffing decisions for the combined institutions solely on the basis of merit. According to BNY, its decision to foster the goodwill of IBC management and personnel through these commitments significantly reduces potential difficulties involved in merging the two organizations. BNY also defends its past management record and maintains that the pension benefits of its employees were increased by the purchase of BNY stock.

The Board believes that BNY's personnel commitments and the involvement of IBC management in future staffing decisions mitigate potential concerns raised by a consolidation of this magnitude and complexity. Through these commitments, BNY enhances the availability of experienced employees to assist in both the technological and organizational integrations. To the extent that IBC employees voluntarily depart,

BNY would have the resources to be able to attract adequate replacement personnel. Further, BNY has demonstrated its ability to manage a large banking organization. The Board finds no evidence to support a finding that BNY's managerial resources are inadequate to undertake the proposal. The Board also finds no evidence that pension fund purchases of BNY stock reflect adversely on the integrity or the managerial ability of BNY.

IBC also questions the future prospects of the combined institutions on the following bases:

- (1) BNY's proposed asset divestitures are necessitated by its commitment to meet capital ratios and will adversely affect IBC's core business operations by significantly weakening its future financial resources;
- (2) disparate IBC technology will make BNY's systems integration difficult, costly and extremely risky; and
- (3) BNY's cost savings projections are unrealistic and ill-conceived.

BNY responds that:

- (1) proposed asset divestitures are based on strategic planning incorporating BNY's greater emphasis on profit;
- (2) IBC's and BNY's technological systems are not so dissimilar as to prevent an efficient integration; and
- (3) cost savings are based on reasonable projections of employee attrition and more efficient use of present resources.

IBC attributes a loss of core business primarily to BNY's proposed \$1 billion reductions in its interest-bearing foreign deposits and foreign short-term loans. Additionally, BNY's proposed reduction in trading assets and federal funds transactions will, according to IBC, impair its current status as a primary dealer thereby making it more difficult to attract foreign institutional customers. The Board finds, however, that BNY's strategic planning differs from IBC's approach in allocating financial resources. In short, BNY does not propose to run IBC's international operations under IBC's business assumptions. Moreover, when these reductions are considered in the context of the combined organization's resources for international operations, there appears to be sufficient flexibility for BNY to make adjustments that may be required if IBC's projections are accurate. BNY also has adequate alternatives for achieving its capital commitments without total reliance on these proposed divestitures.

IBC has alleged in detail the incompatibility of the IBC and BNY technological systems, and although the

extent of the difficulty and costs involved in integrating these systems is in dispute, the Board recognizes that this process is a significant undertaking that requires careful consideration. BNY has committed to devote its internal resources as well as those of outside experts toward extensive analysis and planning before the integration is initiated, and the record in this application does not demonstrate that BNY is unable to undertake this process. The Board recognizes that there may be significant costs in integrating the two systems. However, even if BNY's projected cost savings from the acquisition are totally eliminated, the Board believes that BNY will have sufficient financial resources to meet the challenge of integrating the technological systems, particularly given the level of capital required of BNY in order for it to consummate the acquisition.

IBC states that other BNY costs savings resulting from staff reductions through attrition and reduced office space needs for the combined organizations are unrealistic. The record in this application does not, however, support a finding that BNY's projections on employee attrition are unrealistic.³⁶ Additionally, BNY's decision not to sell immediately IBC's building at 1 Wall Street increases BNY's flexibility to provide sufficient office space for the combined workforce.

Regarding its future prospects, BNY submitted financial projections showing certain cost savings from reduction in salaries, benefits, advertising and marketing, and occupancy. In evaluating the future prospects of the organization, the Board has excluded BNY's projected cost savings (due to their inherently subjective nature and the fact they could be offset by additional expenses in integrating the two organizations, particularly with respect to their data processing systems) and has projected earnings on a more conservative basis than advocated by BNY based upon the historical performance of the two organizations. Even at this level, however, BNY would be able to meet its 4.1 percent tangible common equity commitment, particularly given the Board's requirement for new equity capital to offset the cash portion of the purchase price.³⁷

On the basis of its review of the record, including the organizations' records of earnings and capital improvement, the Board concludes that the managerial resources and future prospects of the companies

and banks involved are consistent with approval of the application.³⁸

Convenience and Needs Considerations

IBC contends that the public convenience and needs would not be served by BNY's proposal for the following reasons:

- (1) an increase in concentration in the government securities clearing market would increase operational risks to federal debt financing;
- (2) problems associated with the integration of IBC and BNY would decrease IBC's present quality of service to local communities;
- (3) services to certain local counties would be lost because branches would replace local subsidiary banks; and
- (4) non-negotiated takeovers threaten the public interest.

The Board has carefully considered the potential in this proposal for aggravating the risks posed by the possible operational failure of a major participant in the government securities clearing market. In this regard, BNY has committed to run both BNY's and IBC's clearing systems separately for a considerable period of time while BNY conducts an extensive review and analysis to determine how the systems may be properly integrated. During this period the two systems will be operated as they are now by generally the same personnel. BNY further commits to fully inform the Federal Reserve Bank of New York of its plans and progress and not to effect any consolidation without Federal Reserve Bank approval. Under these circumstances, the Board concludes that the acquisition of IBC's government securities clearing operation is not a negative consideration in this proposal.

The record of this application does not support IBC's second and third concerns. As previously discussed, BNY's personnel plans will minimize any disruption caused by combining the two companies. Similarly, BNY appears to have sufficient financial flexibility to minimize the possibility of any abnormal disruption in customer service when integrating the technological systems. The record is equally unresponsive of IBC's assertion that conversion of current IBC subsidiary banks into branches of BNY would be injurious to the public convenience and needs of certain local New York counties. The Board has never determined that, as a general matter, one form of

36. In light of BNY's personnel commitments, IBC's suggested cost to account for involuntary termination benefits has diminished relevance.

37. The Board has considered growth in assets above that projected by BNY. The Board notes, however, that BNY would be required to limit asset growth to deal with any capital demand that is not met by earnings retention or issuance of additional capital.

38. The Board requires as a condition of approval that BNY submit to the Federal Reserve Bank of New York the names and qualifications of the persons it intends to nominate to the IBC board.

corporate organization provides superior services to the public over the other. In the context of this specific application, the record fails to demonstrate that BNY will be any less able than IBC to serve the public convenience and needs through its branches instead of through individually chartered banks.³⁹ The Board notes that there are in New York and in many areas of United States, large numbers of banking organizations that effectively serve different communities through branch systems rather than through individual banks.

As noted, the Board does not believe the non-negotiated nature of the proposal in and of itself should be given negative weight in the Board's evaluation under the financial and public convenience and needs criteria Congress has set out in the Act. Moreover, the Board does not believe that the non-negotiated nature of the proposal would, under the facts and circumstances and given the conditions established in this Order, result in adverse effects on the public convenience and needs, or the financial or managerial resources and future prospects of the organizations involved, that would warrant denial under the Act's statutory criteria.

Community Reinvestment Act

In considering the convenience and needs of the community to be served, the Board has taken into account the record of BNY under the Community Reinvestment Act ("CRA") (12 U.S.C. § 2901 *et seq.*). The CRA requires the federal bank supervisory agencies to encourage financial institutions to help meet the credit needs of the local communities in which they operate, including low- and moderate-income neighborhoods, consistent with the safe and sound operation of the institutions. To accomplish this end, the CRA requires the appropriate supervisory authority to "assess the 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." The Board is required to "take such record into account in its evaluation" of applications under section 3 of the Act.

With regard to BNY's CRA record, the Board received comments from the New York chapter of the Association of Community Organizations for Reform Now ("ACORN") and the United Tenants of Albany ("UTA") (collectively "Protestants") opposing ap-

proval of the application. On February 19, 1988, ACORN advised the Board that it had reached a community reinvestment agreement with BNY to strengthen substantially BNY's commitment to help meet the housing credit needs of low- and moderate-income neighborhoods in the City of New York. ACORN further stated that it therefore recommends approval of the proposal.

In accordance with the Board's practice and procedure the Board has reviewed the CRA record of BNY's subsidiary bank, the allegations made by protestants, and BNY's response.⁴⁰ The Board notes that while the CRA record of BNY's subsidiary bank ("Bank") has been generally satisfactory, there are certain areas where the Board believes Bank needs to take steps to strengthen its CRA performance. In particular, the Board believes Bank must reassess its local community delineations in the New York City area to ensure that they reflect Bank's lending territory and do not arbitrarily exclude major portions of New York City, including low- and moderate-income neighborhoods.⁴¹ In addition, upon consummation, BNY should also take steps to reassess the community delineations for Irving Trust Company to ensure that they reflect that institution's lending territory and do not arbitrarily exclude low- and moderate-income neighborhoods.

Regarding Bank's efforts to ascertain and help meet community credit needs, to participate in community development and to institute appropriate procedures

40. Although UTA joined with ACORN's protest of this application, its primary concern was the potential negative impact on banking services in low- and moderate-income neighborhoods in the Albany-Troy SMSA that may be caused by BNY's proposed sale of IBC's bank subsidiary located in this area. To the extent that these concerns are based on a potential lack of effective competition, BNY has committed to sell IBC's subsidiary banks only to purchasers satisfying current Department of Justice competitive guidelines. Other concerns may best be addressed in the context of a specific proposal before the appropriate federal or state regulatory authority required to approve the purchase. Under the relevant statutory criteria that would be applied, the reviewing authority would have to determine that the acquisition would not be competitively harmful, that the acquiror has the financial and managerial resources to manage the institution effectively, and that the convenience and needs of the community would continue to be served by the institution.

Other commentators have viewed BNY's proposed sale of IBC's upstate bank subsidiaries as potentially causing widespread unemployment. There is, however, no evidence that the proposed sales will cause significant unemployment because the purchasers will need personnel to staff offices. Moreover, immediate, significant changes in personnel at these banks would be inconsistent with BNY's announced intent to sell the upstate subsidiaries. Accordingly, BNY's response to these concerns reflects an intent to continue current personnel levels at the bank subsidiaries proposed for divestiture. As noted by the New York State Banking Board, BNY has pledged to attempt to achieve any necessary personnel reductions in the resulting organization through attrition.

41. The Board notes that while Bank's CRA delineations appear too narrow under the standards in the Board's regulations (12 C.F.R. § 228.3), the Board finds no evidence that Bank has discriminated in its lending geographically.

39. BNY has committed that it will not close any branch acquired from IBC if, as a consequence, any neighborhood previously served by a particular IBC branch is left without a branch of either BNY or IBC.

to monitor CRA performance, the Board has considered the action taken by the board of directors of Bank on February 16, 1988, to adopt a formal CRA statement for Bank. The statement pledges Bank's commitment to the goals of CRA and institutes a four-point plan to strengthen Bank's service to its local communities, including low- and moderate-income neighborhoods. In particular, the statement requires Bank to:

- adopt an education and information program for bank officers and employees regarding their responsibilities under CRA and fair lending practices laws, including information regarding Bank's policies regarding loans to small and minority-owned businesses and low- and moderate-income housing;

- designate a lending officer for each of its principal geographical areas who will be responsible for monitoring the availability of Bank's lending programs for small and minority-owned business and low- and moderate-income housing in that area;

- provide specialized training to designated CRA officers to assist Bank's lending employees and officers in connection with specialized government and community development programs directed to low- and moderate-income communities;

- continue Bank's broad-based advertising and marketing programs to inform low- and moderate-income groups and minority communities of Bank's lending programs and services, including making available in branches in New York City and other appropriate areas, marketing and informational materials printed in Spanish as well as English;

- inform itself of community credit needs through a program of periodic meetings with public and private community groups to discuss the credit needs of low- and moderate-income groups and minorities and provide a mechanism by which these communications regarding the community needs are made available to Bank's officers with responsibility in the CRA area;

- develop loan programs responsive to the credit needs of low- and moderate-income neighborhoods, by providing financing for low- and moderate-income housing, small business and commercial real estate projects in its communities consistent with safe and sound banking practices;

- attempt to be flexible in the application of its general underwriting credit criteria within the bounds of prudent lending practices and safe and sound banking operations;

- emphasize home mortgage and home improvement loans for development and rehabilitation of one-to-four-family structures, as well as housing development loans for multi-family structures; and

- implement a CRA compliance reporting and monitoring system, with at least quarterly reports by local CRA officers to Bank's CRA compliance officer as well as review of the reports by a CRA committee of Bank's board of directors and the entire board of directors.

The Board believes that Bank's effective implementation of the measures spelled out in this statement will strengthen Bank's CRA performance in the areas noted. In light of this statement, and the other facts of record, including Bank's overall satisfactory CRA record, and subject to Bank's reassessment of its local communities as discussed above, the Board concludes that convenience and needs considerations are consistent with approval.

In order to monitor implementation of Bank's statement, particularly Bank's emphasis on housing-related lending, as well as Bank's reassessment of its local communities in New York City, the Board requires that BNY submit periodically reports to the Federal Reserve Bank of New York describing Bank's progress in these areas beginning six months after consummation of its acquisition and continuing thereafter until the Federal Reserve Bank is satisfied that the statement has been implemented and the reassessment of its communities has been accomplished.

Provisions of New York Law and IBC's Shareholders' Purchase Rights Plan

IBC argues that New York corporate takeover law and IBC's shareholders' rights plan present potential barriers to BNY's contested acquisition of IBC.⁴² Under New York law ("Section 912"),⁴³ a shareholder acquiring more than 20 percent of the stock in a target corporation without the approval of its board of directors may not subsequently merge the two organizations for a minimum period of five years. Similarly, IBC's Shareholders' Purchase Rights Plan permits IBC stockholders to acquire \$400 of BNY's stock after the acquisition for \$200, the current exercise price for the rights, unless these rights are redeemed by IBC's

42. In recognition of these issues, BNY has conditioned its tender offer upon their satisfactory resolution. Other conditions to the tender offer include a valid tendering of at least two-thirds of the total number of outstanding IBC shares on a fully diluted basis, approval by BNY's shareholders, and other appropriate regulatory approvals without material conditions unacceptable to BNY.

43. N.Y. Bus. Corp. Law § 912 (McKinney 1986).

board of directors before a third party acquires 20 percent of IBC's voting shares.⁴⁴

At the outset, the Board notes that BNY proposes to initiate a tender offer for all of IBC's shares, and has applied to the Board for approval under the Act to acquire the shares tendered. If the tender is successful, IBC's board of directors could reconsider and approve the acquisition of 20 percent or more of IBC's shares or its merger with BNY, thus satisfying Section 912. Similarly, in such a situation, the board of directors may decide to redeem the Shareholders' Purchase Rights Plan.

BNY has presented an alternative proposal to overcome these obstacles, however, in the event IBC's board does not consent to the acquisition. With Board approval under the BHC Act, BNY proposes to initiate a proxy contest at its next annual meeting for control of IBC's board of directors at IBC's next annual shareholders meeting (scheduled for April 21, 1988) and to acquire up to 19.9 percent of IBC's voting shares prior to that time to increase the likelihood of a successful proxy solicitation. If this approach is successful, the newly constituted board could, according to BNY, approve BNY's offer and redeem the shareholders' rights before the 20 percent thresholds in Section 912 or the rights plan are triggered. BNY has committed not to elect its nominees to IBC's board, however, unless the nominees constitute at least a majority of the IBC directors.⁴⁵

44. Under this plan, holders of the rights are entitled to purchase one share of new IBC common stock for \$200. If IBC is subsequently acquired in a merger or other business combination transaction, or 50 percent or more of its consolidated assets are sold, each holder of an unexercised right is entitled to purchase that number of the acquirer's common shares that have a market value of two times the then-current exercise price.

45. BNY also proposes alternative resolutions to these state law questions, such as litigation to challenge the legality of these provisions or a continuing refusal of IBC's directors to accept the offer. IBC challenges these alternatives by asserting the constitutionality of New York law and the legality of all actions by the IBC board of directors under BNY's view of applicable corporate case law precedent.

Regarding constitutional challenges to state laws, the Board has previously stated that it will not hold a state statute unconstitutional without "clear and unequivocal evidence of the inconsistency of the state law with the federal Constitution." *Chemical New York Corporation*, 73 FEDERAL RESERVE BULLETIN 609, 610 (1987); *Bank of New England Corporation*, 70 FEDERAL RESERVE BULLETIN 374, 376 (1984); *NCNB Corp.*, 68 FEDERAL RESERVE BULLETIN 54, 56 (1982); *Whitney National Bank in Jefferson Parish v. Bank of New Orleans & Trust Company*, 379 U.S. 411, 419 (1965). The Board concludes that Section 912 has not been demonstrated to be unconstitutional under this standard. In any event, the Board finds it unnecessary to resolve the remaining legal issues presented by BNY's alternative proposals. BNY's proposed proxy contest to elect a majority of the IBC board provides a reasonably certain resolution of the issues presented by both of these potential barriers. If BNY is unable to effect its proposal within three months, under the terms of this Order the Board will have the opportunity at that time to reassess BNY's ability to consummate the transaction.

IBC challenges BNY's approach under the Depository Institution Management Interlocks Act ("Interlocks Act") (12 U.S.C. § 3201 *et seq.*) and the Board's decision in *NBC Co.*⁴⁶ The Interlocks Act prohibits director interlocks between two nonaffiliated institutions in the same metropolitan statistical area and between large bank holding companies unless an institution is a "subsidiary" for purposes of section 2(d) of the Bank Holding Company Act.⁴⁷ In light of BNY's proposal to acquire at least 19.9 percent of IBC's shares and its commitment to elect at least a majority of the IBC board of directors, the Board concludes that the two organizations would become "affiliates" for purposes of the Interlocks Act, and thus the interlocking directors between IBC and BNY would not be prohibited.

IBC also challenges BNY's proposed acquisition under the Board's decision in *NBC Co.* In that case, the Board denied a bank holding company's application to acquire between 20 to 25 percent of the voting shares of a bank. In *NBC Co.*, the Board stated that, because a single shareholder held over 50 percent of the voting shares of the bank and vigorously opposed the acquisition, the proposal "would only perpetuate or aggravate dissension in Bank's management" without the applicant having any opportunity to obtain control of the bank.⁴⁸ The Board also noted that the proposed acquisition in *NBC Co.* could detract from the overall financial condition of the applicant, which planned to rely on the bank's dividends to service the applicant's acquisition debt.

The Board has considered the effects of BNY's proposed minority ownership position on the management of IBC. In this case, unlike in *NBC Co.*, BNY will become the largest single shareholder of IBC, and its acquisition of a minority interest is a first step in seeking control of IBC. The Board has recently approved the acquisition of a minority interest in a bank holding company "where there is a possibility or likelihood that the applicant will eventually gain control, despite claims by management of possible dissension."⁴⁹ Moreover, the proposed 19.9 percent

46. 60 FEDERAL RESERVE BULLETIN 782 (1974).

47. Under the relevant alternative tests in the Act, a "subsidiary" is: (i) "any company the election of a majority of whose directors is controlled in any manner by such bank holding company"; or (ii) "any company with respect to the management or policies of which such bank holding company has the power, directly or indirectly, to exercise a controlling influence . . ." 12 U.S.C. § 1841(d).

48. *Id.* at 784.

49. *Crescent Holding Company*, 73 FEDERAL RESERVE BULLETIN 457 (1987). See also *Lloyds Bank PLC*, 72 FEDERAL RESERVE BULLETIN 841, 844 (1986). The position taken by IBC could preclude the Board from approving any proposal to acquire less than an absolute majority of the shares of a bank holding company if the management of the bank holding company disapproves the acquisition. *Crescent Holding Company* at 458; *Lloyds Bank PLC* at 844.

investment will not impair the financial resources or capital position of BNY, and BNY would not be dependent upon dividends from IBC to meet any debt servicing requirement. Consequently, even if BNY is unsuccessful in its proxy solicitation, this case more closely resembles the facts of several cases approved by the Board, which involved acquisitions by bank holding companies of minority positions in other institutions without the consent of the institutions' management.⁵⁰ The Board finds no evidence in the record that BNY's retention of a 19.9 percent interest in IBC, if BNY's efforts to acquire all of the shares of IBC are unsuccessful, would adversely affect in a significant manner IBC's operations. In this regard, the Board notes that BNY has committed that if it is unsuccessful in electing at least a majority of IBC's board through the proposed proxy solicitation, BNY would not elect any representative to the IBC board. BNY has stated that if it decides to acquire this 19.9 percent interest, it will fund the acquisition with the issuance of new primary capital, thus avoiding any diminution of BNY's capital position. The Board's approval for BNY to acquire these shares, as proposed, is, however, conditioned upon BNY raising common equity in an amount that is at least equal to the cost of these shares. This common equity must be raised within six months following the expiration of the period provided in this Order for BNY to consummate its proposal to acquire 100 percent of IBC, or within six months of any extension of such period by the Board.

Hearing Request

IBC has requested a formal hearing on the application. Section 3(b) of the BHC Act does not require the Board to hold a hearing concerning an application unless the appropriate banking authority for the banks to be acquired makes a timely written recommendation of denial of the application. In this case, no such recommendation of denial has been received from the Comptroller of the Currency or the New York Superintendent of Banks, and thus no hearing is required under the terms of the BHC Act.⁵¹

Further, IBC has been given the opportunity, and has submitted, extensive written facts and arguments to the Board regarding this application. These materi-

als, as well as responses from BNY have not provided any basis to support the belief that the facts already before the Board are incomplete or insufficient to permit the Board to carry out its responsibility under the BHC Act to evaluate the applications under the statutory criteria or that further investigation would produce additional relevant information. The Board is not required to hold a formal hearing where a party disputes the conclusions to be drawn from established facts or where such proceedings would not serve to develop new or useful facts.

IBC asserts several factual disputes, including whether BNY has satisfied the Board's capital adequacy requirements with accurate *pro forma* financial projections; whether proposed assets sales would adversely affect IBC's business; whether BNY's cost savings estimates are justified; whether the technological systems can be integrated; whether the managerial resources will be sufficient; whether government securities clearance and ADR operations are distinct product markets; and whether the combined institution will serve the needs of the community. These assertions are not designed to dispute facts in the record or even to elicit new facts. Rather than challenging existing facts, these assertions draw into question inferences and conclusions drawn from the factual presentations in the application.⁵² The Board finds that IBC and BNY have had ample opportunity to present evidence and arguments in writing and to respond to one another's submissions and concludes that the parties' extensive written submissions have been an adequate means of clarifying the issues in this case, including the factual questions raised by IBC. A formal hearing is unnecessary to develop new or useful facts and, accordingly, IBC's request for a hearing is denied.

Other Matters

IBC has raised the question regarding the propriety of certain communications between the New York Reserve Bank staff and BNY concerning BNY's *pro forma* tangible common equity. The record in this case, however, demonstrates that these communications occurred early in the application process, well before the time IBC protested the application. Accordingly, the Board does not regard the communications as *ex parte* or improper. The Board notes that the existence and substance of these communications were made known to IBC and IBC has commented thereon.

50. *Hudson Financial Associates*, 72 FEDERAL RESERVE BULLETIN 151 (1986); *See, e.g., City Holding Company*, 71 FEDERAL RESERVE BULLETIN 575 (1985).

51. 12 U.S.C. § 1842(b); *Farmers & Merchants Bank of Las Cruces v. Board of Governors*, 567 F.2d 1082, 1085 (D.C. Cir. 1977); *Grandview Bank & Trust Co. v. Board of Governors*, 550 F.2d 415, 421 (8th Cir. 1977), *cert. denied*, 434 U.S. 821 (1977); and *Northwest Bancorporation v. Board of Governors*, 303 F.2d 832, 842-44 (8th Cir. 1962).

52. For example, IBC's contentions regarding financial projections and cost savings have been addressed by the Board through the requirement for stronger capital initially.

IBC has questioned the propriety of BNY's supplementation of its application to the Board with copies of Securities and Exchange Commission filings and other materials, instead of restating and refiling the application with the Board. The Board's procedures and practice do not require an applicant to file a new restated application to reflect changes occurring during the application process, but permit the applicant to amend the initial application by letter or other written submissions to reflect the changes. In this case, that practice was followed. BNY's proposal is fully detailed in the initial application (FR Form Y-2) and subsequent amendments filed to reflect changes occurring during the pendency of the application, and BNY has responded fully to all requests by the Board for information regarding the proposal. The Board finds no inadequacies in BNY's amendatory submissions that would impair the Board's ability to evaluate the financial or other relevant aspects of the proposal under the criteria specified in the Act. Accordingly, the Board does not believe that it is necessary or appropriate to require BNY to restate or refile its original application.

Extension of the 90-day Period for Consummation

As discussed at the outset, the Board is concerned that the extension of the post-approval consummation period over a prolonged period in a contested situation could result in adverse effects on the financial and managerial resources of the organizations in a variety of different areas. For example, when ownership of an institution is in doubt over a prolonged period of time, the personnel and financial resources of both the offeror and the target are subject to strain.

Accordingly, the Board has determined not to follow its normal procedure of permitting the appropriate Reserve Bank to extend the 90-day consummation period upon a showing by the applicant of no material change in the facts and circumstances underlying the Board's approval decision. The Board will carefully evaluate any request by BNY to extend the period for consummation of the application in light of bank safety and soundness concerns. The Board would not expect to extend the 90-day period more than once and then only if the Board is satisfied regarding bank safety and soundness considerations and that consummation of the proposal is likely within the extended period.

Nonbanking Acquisitions

BNY also has applied, pursuant to section 4(c)(8), to acquire certain nonbanking subsidiaries of IBC. BNY operates loan production and loan servicing, mortgage

banking, equipment lease financing, credit life, accident and health insurance, corporate trust and custody, personal trust and retail discount brokerage subsidiaries that directly compete with IBC and its subsidiaries in these activities. Consummation of the proposal, however, would have a *de minimis* effect on existing competition in each of these markets and there are numerous competitors for these services. Accordingly, the Board concludes that the proposal would not have any significant adverse effect on existing or probable future competition 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 Act is favorable and consistent with approval of the applications to acquire the nonbanking subsidiaries of IBC.

The Board has also considered the notice of BNY's proposed investment in Irving International Trade Inc., under section 4(c)(14) of the BHC Act and the acquisition of Irving International Financing Corporation under the Edge Act. Based on all the facts of record, the Board has determined that disapproval of the proposed investment is not warranted.

Conclusion

Based on the foregoing and other facts of record, the Board has determined that the applications under sections 3 and 4 of the BHC Act and under the Edge Act should be and hereby are approved. This approval is also subject to the condition that BNY obtain all required state approvals and comply with all conditions and commitments stated in this Order. The acquisition of IBC shall not be consummated before the thirtieth calendar day following the effective date of this Order, or later than three months after the effective date of this Order, unless such period is extended by the Board.

The determinations as to BNY's nonbanking activities are subject to all of the conditions contained in Regulation Y, including those in section 225.4(d) and 225.23(b)(3) (12 C.F.R. §§ 225.4(d) & 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 the provisions and purposes of the Act and the Board's regulations and orders issued thereunder, or to prevent evasion thereof.

By order of the Board of Governors, effective February 25, 1988.

Voting for this action: Chairman Greenspan and Governors Johnson, Seger, Angell, and Heller. Absent and not voting: Governor Kelley.

WILLIAM W. WILES
Secretary of the Board

APPENDIX

Nonbanking Subsidiaries To Be Acquired

Irving Business Center, Inc., and thereby engage in the business of marketing the lending and leasing products and services of Irving Trust Company; Irving Financial Centers, Inc., and thereby engage in consumer lending and commercial lending to local business; Irving Life Insurance Company, and thereby engage in providing credit-related life, mortgage and health insurance sold in connection with extensions of credit to customers of IBC's bank and nonbank subsidiaries; Irving Securities, Inc., and thereby engage in securities trading activities, including acting as a primary dealer in United States government securities;

Irving Services Corporation, and thereby engage in servicing loans primarily related to credit card purchases and providing data processing services to others; Irving Trust Company California, and thereby engage in providing fiduciary, custody and investment management services; Irving Trust Company Florida, and thereby engage in providing fiduciary, custody and investment management services; One Wall Street Brokerage, Inc., and thereby engage in securities brokerage activities; Briggs, Schaedle Futures Inc., and thereby engage in futures commission merchant for nonaffiliated persons in the execution and clearance of futures contracts and options on futures contracts; Liberty Brokerage, Inc., and thereby engage as interdealer broker of United States government securities; and Irving Leasing Corporation and its twelve subsidiaries (Airlease Incorporated, Airlease Foreign Sales Corporation, IRE-AC Inc., IRE-AC, Parent, Inc., IRE-AC, Subsidiary, Inc., IRE-BC, Inc., IRE-1, Inc., IRE-3, Inc., IRE-4, Inc., Irving Leasing Foreign Sales Corporation, ITC Leasing Corporation and SDM Development Enterprises, Inc.), and thereby engage in leasing personal or real property or acting as agent, broker or advisor in leasing such property. The Board has determined that these activities are closely related to banking and permissible for bank holding companies. 12 C.F.R. §§ 225.25 (b)(1), (3), (5), (7), (8), (15), (16), and (18).

ORDERS APPROVED UNDER BANK HOLDING COMPANY ACT

By Federal Reserve Banks

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

Section 3

Applicant	Bank(s)	Reserve Bank	Effective date
Anmer Corporation, Neligh, Nebraska	First United Bank, Neligh, Nebraska	Kansas City	February 12, 1988
Banc One Corporation, Columbus, Ohio	Universal Corporation, Ypsilanti, Michigan	Cleveland	February 16, 1988
Capital Directions, Inc., Mason, Michigan	Mason State Bank, Mason, Michigan	Chicago	February 22, 1988
CB&T Bancshares, Inc., Columbus, Georgia	Northwest Florida Banking Corporation, Quincy, Florida	Atlanta	January 11, 1988
Central of Kansas, Inc., Junction City, Kansas	The Peoples National Bank of Clay Center, Clay Center, Kansas	Kansas City	February 4, 1988

Section 3—Continued

Applicant	Bank(s)	Reserve Bank	Effective date
Century Financial Corporation, Rochester, Pennsylvania	Century National Bank and Trust Company, Rochester, Pennsylvania	Cleveland	February 23, 1988
Citizens Holdings, Newport Beach, California	El Camino Bancorp., Anaheim, California	San Francisco	February 11, 1988
CNB Financial Corporation, Kansas City, Kansas	First National Bank of Overland Park, Overland Park, Kansas	Kansas City	February 16, 1988
Community Bancorp, Inc., Manchester, Missouri	Three Cities Bancorp, Inc., Manchester, Missouri Second Illinois Bancorp, Inc., Manchester, Missouri Third Illinois Bancorp, Inc., Manchester, Missouri First Bank of Red Bud, N.A., Red Bud, Illinois Citizens State Bank of Pleasant Hill, Pleasant Hill, Illinois Roodhouse National Bank, Roodhouse, Illinois The Winchester National Bank, Winchester, Illinois	St. Louis	January 28, 1988
C.P. Burnett & Sons, Inc., Eldorado, Illinois	C.P. Burnett & Sons, Bankers, Eldorado, Illinois	St. Louis	January 29, 1988
Dominion Bankshares Corporation, Roanoke, Virginia	Citizens Union Corporation, Rogersville, Tennessee	Richmond	February 22, 1988
Dominion Bankshares Corporation, Roanoke, Virginia	Merchants & Planters Corporation, Newport, Tennessee	Richmond	February 18, 1988
Farmers State Holding Company, Marion, South Dakota	Farmers State Bank, Marion, South Dakota	Minneapolis	February 9, 1988
Fidelity BancShares (N.C.), Inc., Fuquay-Varina, North Carolina	The Fidelity Bank, Fuquay-Varina, North Carolina	Richmond	February 11, 1988
First Bancorp of Louisiana, Inc., Employee Stock Ownership Plan, West Monroe, Louisiana	First Bancorp of Louisiana, Inc., West Monroe, Louisiana	Dallas	February 2, 1988
First Commerce Corporation, New Orleans, Louisiana	First Commercial Bancshares, Inc., Chalmette, Louisiana	Atlanta	February 9, 1988
First Farmers Financial Corporation, Converse, Indiana	First Farmers National Bank, Converse, Indiana	Chicago	February 19, 1988
First National Agency of Baudette, Inc., Baudette, Minnesota	Blackduck State Bank, Blackduck, Minnesota	Minneapolis	February 2, 1988
First National Financial Corporation, Mt. Pulaski, Illinois	The First National Bank of Mt. Pulaski, Mt. Pulaski, Illinois	Chicago	January 29, 1988

Section 3—Continued

Applicant	Bank(s)	Reserve Bank	Effective date
First National Massillon Corporation, Massillon, Ohio	The First National Bank in Massillon, Massillon, Ohio	Cleveland	February 8, 1988
First United Corporation, Oakland, Maryland	The First National Bank of Piedmont, Piedmont, West Virginia	Richmond	February 11, 1988
First West Virginia Bancorp, Inc., Wheeling, West Virginia	Farmers and Merchants National Bank in Bellaire, Bellaire, Ohio	Cleveland	January 29, 1988
First Woburn Bancorp, Inc., Woburn, Massachusetts	Woburn Five Cents Savings Bank, Woburn, Massachusetts	Boston	February 1, 1988
FSB Bancorp, Show Low, Arizona	Frontier State Bank, Show Low, Arizona	San Francisco	February 5, 1988
Harrison Bankshares, Inc., Lost Creek, West Virginia	The Harrison County Bank, Lost Creek, West Virginia	Richmond	February 17, 1988
Independent Community Bancorp, Inc., Frankfort, Kentucky	Kentucky Independent Bank, Inc., Frankfort, Kentucky	St. Louis	February 17, 1988
Jasand, Inc., Cedar Rapids, Iowa	City National Bank of Cedar Rapids, Cedar Rapids, Iowa	Chicago	February 4, 1988
Lake City Bancorporation, Lake City, Iowa	Lake City State Bank, Lake City, Iowa	Chicago	February 5, 1988
Liberty National Bancorp, Inc., Louisville, Kentucky	The Bank of Elizabethtown, Inc., Elizabethtown, Kentucky	St. Louis	February 23, 1988
Lincoln Financial Corporation, Fort Wayne, Indiana	WABANC, Inc., Wabash, Indiana	Chicago	February 25, 1988
Logan Bancshares, Inc., Logan, Kansas	The First National Bank of Logan, Logan, Kansas	Kansas City	February 19, 1988
Market Place Bancshares, Inc., Champaign, Illinois	Market Place National Bank, Champaign, Illinois	Chicago	February 19, 1988
NCB Corp., Culver, Indiana	NorCen Bank, Culver, Indiana	Chicago	February 22, 1988
Ormside Proprietary Limited, Melbourne, Australia	El Camino Bank, Anaheim, California	San Francisco	February 11, 1988
Overseas Finance Holdings Proprietary Limited, Melbourne, Australia			
Aylworth Proprietary Limited, Melbourne, Australia			
Costa Mesa Limited, London, England			
Costa Mesa Holding N.V., Curacao, Netherlands Antilles			
Citizens Financial Holdings, B.V., Amsterdam, Netherlands			
Orrstown Financial Services, Inc., Orrstown, Pennsylvania	Orrstown Bank, Orrstown, Pennsylvania	Philadelphia	February 5, 1988

Section 3—Continued

Applicant	Bank(s)	Reserve Bank	Effective date
PBT Bancshares, Inc., McPherson, Kansas	Peoples Bank and Trust Company, McPherson, Kansas	Kansas City	January 29, 1988
Premier Bancorporation, Inc., Jackson, Michigan	Michigan Bank-Midwest, Jackson, Michigan Michigan Bank - Mid South, Litchfield, Michigan	Chicago	February 3, 1988
Sea Island Bankshares, Inc., Statesboro, Georgia	Sea Island Bank, Statesboro, Georgia	Atlanta	February 17, 1988
Southold Bancorp, Inc., Southold, New York	Southold Savings Bank, Southold, New York	New York	February 22, 1988
T & C Bancorp, Inc., Lewistown, Missouri	LaBelle Bancshares, Inc., LaBelle, Missouri Great River Bancshares, Inc., La Grange, Missouri	St. Louis	February 19, 1988
Unibancorp, Inc., Chicago, Illinois	The Farmers State Bank of Lostant, Lostant, Illinois	Chicago	February 10, 1988

Section 4

Applicant	Nonbanking Company/Activity	Reserve Bank	Effective date
Bank of Boston Corporation, Boston, Massachusetts	First Trust Company of Florida, National Association, Sarasota, Florida	Boston	January 29, 1988
Business Bancorp, San Jose, California	provide data processing services throughout the state of California	San Francisco	February 19, 1988
CoreStates Financial Corp., Philadelphia, Pennsylvania	First Interstate Commercial Corporation, Pasadena, California	Philadelphia	February 8, 1988
Lane Financial, Inc., Northbrook, Illinois	Lane Data Services, Inc., Northbrook, Illinois	Chicago	February 5, 1988
MCorp, Dallas, Texas	Security Courier Corporation, Carrollton, Texas	Dallas	February 9, 1988
MCorp Financial, Inc., Wilmington, Delaware	acquire certain additional assets and certain liabilities of related companies		
Paducah Bank Shares, Inc., Paducah, Kentucky	assets of Commonwealth Financial Services Corporation, Bowling Green, Kentucky	St. Louis	January 29, 1988

Sections 3 and 4

Applicant	Bank(s)/Nonbanking Company	Reserve Bank	Effective date
AmSouth Bancorporation, Birmingham, Alabama	Gulf First Holding Corporation, Panama City, Florida ATM Network, Inc., Panama City, Florida	Atlanta	February 18, 1988
Carlson Bankshares, Inc., Comfrey, Minnesota	First State Bank of New London, New London, Minnesota New London Agency, Inc., New London, Minnesota	Minneapolis	February 25, 1988
Sioux National Company, Lincoln, Nebraska	Security State Bank, Holbrook, Nebraska engage in the sale of general insurance in a town with a population of less than 5,000	Kansas City	February 19, 1988

ORDERS APPROVED UNDER BANK MERGER ACT

By Federal Reserve Banks

Applicant	Bank(s)	Reserve Bank	Effective date
Farmer & Merchants Bank and Trust Company, Aberdeen, South Dakota	Bank of Cresbard, Cresbard, South Dakota	Minneapolis	February 3, 1988
Farmers State Bank of Alpha, Alpha, Illinois	Bank of Viola, Viola, Illinois	Chicago	February 18, 1988

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.

National Association of Casualty and Surety Agents, et al., v. Board of Governors, Nos. 87-1644, 87-1801, 88-1001 (D.C. Cir., filed Nov. 4, Dec. 21, 1987, Jan. 4, 1988).

Securities Industry Association v. Board of Governors, No. 87-4161 (2d Cir., filed Dec. 15, 1987).

Independent Insurance Agents of America, Inc. v. Board of Governors, No. 87-1686 (D.C. Cir., filed Nov. 19, 1987).

Teichgraeber v. Board of Governors, No. 87-2505-0 (D. Kan., filed Oct. 16, 1987).

Securities Industry Association v. Board of Governors, No. 87-4135 (2d Cir., filed Oct. 8, 1987).

Independent Insurance Agents of America, Inc. v. Board of Governors, No. 87-4118 (2d Cir., filed Sept. 17, 1987).

Citicorp v. Board of Governors, No. 87-1475 (D.C. Cir., filed Sept. 9, 1987).

Securities Industry Association v. Board of Governors, No. 87-4115 (2d Cir., filed Sept. 9, 1987).

Barrett v. Volcker, No. 87-2280 (D.D.C., filed Aug. 17, 1987).

Northeast Bancorp v. Board of Governors, No. 87-1365 (D.C. Cir., filed July 31, 1987).

National Association of Casualty & Insurance Agents v. Board of Governors, Nos. 87-1354, 87-1355 (D.C. Cir., filed July 29, 1987).

The Chase Manhattan Corporation v. Board of Governors, No. 87-1333 (D.C. Cir., filed July 20, 1987).

Securities Industry Association v. Board of Governors, Nos. 87-4091, 87-4093, 87-4095 (2d Cir., filed July 1 and July 15, 1987).

Lewis v. Board of Governors, Nos. 87-3455, 87-3545 (11th Cir., filed June 25, Aug. 3, 1987).

Securities Industry Association v. Board of Governors, et al. No. 87-4041 and consolidated cases (2d Cir., filed May 1, 1987).

Securities Industry Association v. Board of Governors, et al., No. 87-1169 (D.C. Cir., filed April 17, 1987).

Independent Insurance Agents of America, et al. v. Board of Governors, Nos. 86-1572, 1573, 1576 (D.C. Cir., filed Oct. 24, 1986).

Independent Community Bankers Association of South Dakota v. Board of Governors, No. 86-5373 (8th Cir., filed Oct. 3, 1986).

Jenkins v. Board of Governors, No. 86-1419 (D.C. Cir., filed July 18, 1986).

CBC, Inc. v. Board of Governors, No. 86-1001 (10th Cir., filed Jan. 2, 1986).

Urwyler, et al. v. Internal Revenue Service, et al., No. 85-2877 (9th Cir., filed July 18, 1985).

Wight, et al. v. Internal Revenue Service, et al., No. 85-2826 (9th Cir., filed July 12, 1985).

Brown v. United States Congress, et al., No. 84-2887-6(1G) (S.D. Cal., filed Dec. 7, 1984).

Melcher v. Federal Open Market Committee, No. 86-5692 (D.C. Cir., filed April 30, 1984).

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

Item	Monetary and credit aggregates (annual rates of change, seasonally adjusted in percent) ¹								
	1987 ^r				1987 ^r				1988
	Q1	Q2	Q3	Q4	Sept.	Oct.	Nov.	Dec.	Jan.
<i>Reserves of depository institutions²</i>									
1 Total.....	16.4	8.0	-1.6	1.4	-1.0	13.9	-10.4	-11.4	18.4
2 Required.....	16.5	8.4	-5	.3	4.0	7.1	-6.4	-13.8	13.0
3 Nonborrowed.....	18.5	5.4	-4	1.2	-7.2	14.1	-4.0	-14.7	12.2
4 Monetary base ³	11.1	6.9	5.1	7.7	6.0	11.0	6.9	3.1	16.7
<i>Concepts of money, liquid assets, and debt⁴</i>									
5 M1.....	13.2	6.6	.8	3.9	1.6	14.0	-5.6	-3.0	12.9
6 M2.....	6.5	2.6	2.8	4.0	4.7	6.0	1.0	1.8	9.8
7 M3.....	6.5	4.7	4.5	5.5	5.0	7.5	4.9	1.5	8.5
8 L.....	6.1	4.1	4.2	6.1	7.0	8.4	3.9	1.9	n.a.
9 Debt.....	10.5	8.7	8.1	9.7	9.0	10.1	11.3	8.1	n.a.
<i>Nontransaction components</i>									
10 In M2 ⁵	4.2	1.2	3.5	4.0	5.8	3.2	3.3	3.5	8.7
11 In M3 only ⁶	6.7	13.2	11.1	11.5	6.0	13.4	20.0	.3	3.9
<i>Time and savings deposits</i>									
<i>Commercial banks</i>									
12 Savings.....	35.2	22.4	10.1	.7	2.7	-2.0	-1.3	.0	5.4
13 Small-denomination time ⁸	-5.6	-2.7	7.4	14.8	5.2	19.2	23.7	9.4	10.6
14 Large-denomination time ^{9,10}	8.7	17.1	6.8	10.5	3.8	14.1	18.1	4.5	-12.6
<i>Thrift institutions</i>									
15 Savings.....	25.4	19.2	7.0	-3.8	2.5	-7.0	-9.1	-4.1	-3.1
16 Small-denomination time.....	-4.2	1.2	9.3	16.0	11.3	12.6	25.9	19.4	19.1
17 Large-denomination time ⁹	-12.6	-5.1	9.9	22.2	15.2	26.1	25.6	23.5	11.2
<i>Debt components⁴</i>									
18 Federal.....	12.2	8.8	5.9	7.5	6.5	3.9	12.6	8.0	n.a.
19 Nonfederal.....	10.0	8.7	8.8	10.4	9.8	12.0	10.9	8.1	n.a.
20 Total loans and securities at commercial banks ¹¹	10.4	8.2	6.2	5.8	8.6	7.0	2.6	-1.0	5.9

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.

11. Changes calculated from figures shown in table 1.23.

1.12 RESERVES AND BORROWINGS Depository Institutions

Millions of dollars

Reserve classification	Monthly averages ⁸									
	1985	1986	1987	1987						
	Dec.	Dec.	Dec.	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1 Reserve balances with Reserve Banks ¹	27,620	37,360	37,673	36,309	36,110	35,616	36,685	37,249	37,453	37,673
2 Total vault cash ²	22,953	24,079	26,155	24,369	24,613	24,644	24,854 ³	25,587 ³	25,431	26,155
3 Vault ³	20,522	22,199	24,449	22,475	22,728	22,745	23,128	23,857	23,752	24,449
4 Surplus ⁴	2,431	1,879	1,706	1,893	1,885	1,899	1,726 ³	1,730 ³	1,679	1,706
5 Total reserves ⁵	48,142	59,560	62,123	58,784	58,838	58,361	59,813	61,106	61,205	62,123
6 Required reserves	47,085	58,191	61,094	57,594	58,078	57,329	59,020	59,977	60,282	61,094
7 Excess reserve balances at Reserve Banks ⁶	1,058	1,369	1,029	1,190	761	1,032	793	1,129 ³	923	1,029
8 Total borrowings at Reserve Banks	1,318	827	777	776	672	647	940	943 ³	625	777
9 Seasonal borrowings at Reserve Banks	56	38	93	259	283	279	231	189	126	93
10 Extended credit at Reserve Banks ⁷	499	303	483	273	194	132	409	449	394	483
Biweekly averages of daily figures for weeks ending										
1987							1988			
	Oct. 21	Nov. 4	Nov. 18	Dec. 2	Dec. 16	Dec. 30	Jan. 13	Jan. 27	Feb. 10	Feb. 24
11 Reserve balances with Reserve Banks ¹	36,672	38,353	37,525	37,069	38,272	37,055	39,175	37,002	33,691	34,087
12 Total vault cash ²	26,183	25,174	25,188	25,802	25,372	26,960	26,566	26,533	29,417	27,954
13 Vault ³	24,410	23,464	23,622	23,999	23,824	25,105	24,937	24,840	26,965	25,673
14 Surplus ⁴	1,773	1,710	1,566	1,803	1,549	1,855	1,629	1,694	2,452	2,282
15 Total reserves ⁵	61,082	61,817	61,147	61,068	62,095	62,160	64,112	61,842	60,656	59,759
16 Required reserves	60,115	60,256	60,665	59,855	60,890	61,354	62,805	60,554	59,368	58,688
17 Excess reserve balances at Reserve Banks ⁶	967	1,561	492	1,213	1,206	806	1,307	1,288	1,288	1,071
18 Total borrowings at Reserve Banks	1,007	677	561	683	815	671	1,945	508	287	425
19 Seasonal borrowings at Reserve Banks	183	169	125	114	83	102	66	54	55	77
20 Extended credit at Reserve Banks ⁷	482	390	334	465	653	316	485	332	144	232

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

2. 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.

3. 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.

4. 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.

5. 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.

6. Reserve balances with Federal Reserve Banks plus vault cash used to satisfy reserve requirements less required reserves.

7. 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.

8. Before February 1984, data are prorated monthly averages of weekly averages; beginning February 1984, data are prorated monthly averages of biweekly averages.

NOTE. These data also appear in the Board's H.3 (502) release. For address, see inside front cover.

A6 Domestic Financial Statistics □ April 1988

1.13 SELECTED BORROWINGS IN IMMEDIATELY AVAILABLE FUNDS Large Member Banks¹

Averages of daily figures, in millions of dollars

Maturity and source	1987 week ending Monday								
	Aug. 10	Aug. 17	Aug. 24	Aug. 31	Sept. 7	Sept. 14	Sept. 21	Sept. 28	Oct. 5
<i>Federal funds purchased, repurchase agreements, and other selected borrowing in immediately available funds</i>									
From commercial banks in the United States									
1 For one day or under continuing contract	72,747	71,952	69,808	70,480	75,786	75,048	70,262	66,374	74,386
2 For all other maturities	9,252	8,970	9,098	9,442	9,171	8,848	8,888	9,170	8,209
From other depository institutions, foreign banks and foreign official institutions, and United States government agencies									
3 For one day or under continuing contract	32,923	32,524	30,368	30,994	29,160	30,085	27,159	25,696	25,513
4 For all other maturities	6,753	6,517	6,387	6,622	6,160	6,560	6,895	6,773	5,978
<i>Repurchase agreements on U.S. government and federal agency securities in immediately available funds</i>									
Brokers and nonbank dealers in securities									
5 For one day or under continuing contract	13,744	12,715	12,756	13,002	13,332	13,966	13,289	13,685	15,505
6 For all other maturities	12,363	12,546	13,455	13,619	13,880	13,827	15,032	15,720	12,059
All other customers									
7 For one day or under continuing contract	27,417	27,613	27,496	27,128	26,288	26,501	26,808	26,957	27,240
8 For all other maturities	8,165	8,550	9,188	9,657	9,120	9,036	8,943	8,891	8,054
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	30,410	29,547	28,622	29,053	30,568	28,193	30,303	29,348	33,209
10 To all other specified customers ²	12,886	11,853	13,676	14,024	14,062	14,067	14,172	14,600	14,751

1. Banks with assets of \$1 billion or more as of Dec. 31, 1977.

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

Federal Reserve Bank	Current and previous levels									
	Adjustment credit and Seasonal credit ¹			Extended credit ²						
				First 30 days of borrowing			After 30 days of borrowing ³			
	On 2/24/88	Effective date	Previous rate	On 2/24/88	Effective date	Previous rate	On 2/24/88	Effective date	Previous rate	Effective date
Boston.....	6	9/9/87	5½	6	9/9/87	5½	7.10	2/11/88	7.30	1/28/88
New York.....	↑	9/4/87	↑	↑	9/4/87	↑	↑	2/11/88	↑	1/28/88
Philadelphia.....	↑	9/4/87	↑	↑	9/4/87	↑	↑	2/11/88	↑	1/28/88
Cleveland.....	↑	9/4/87	↑	↑	9/4/87	↑	↑	2/11/88	↑	1/28/88
Richmond.....	↑	9/5/87	↑	↑	9/5/87	↑	↑	2/11/88	↑	1/28/88
Atlanta.....	↑	9/4/87	↑	↑	9/4/87	↑	↑	2/11/88	↑	1/28/88
Chicago.....	↑	9/4/87	↑	↑	9/4/87	↑	↑	2/11/88	↑	1/28/88
St. Louis.....	↑	9/9/87	↑	↑	9/9/87	↑	↑	2/11/88	↑	1/28/88
Minneapolis.....	↑	9/8/87	↑	↑	9/8/87	↑	↑	2/11/88	↑	1/28/88
Kansas City.....	↑	9/8/87	↑	↑	9/8/87	↑	↑	2/11/88	↑	1/28/88
Dallas.....	↑	9/11/87	↑	↑	9/11/87	↑	↑	2/11/88	↑	1/28/88
San Francisco.....	6	9/9/87	5½	6	9/9/87	5½	7.10	2/11/88	7.30	1/28/88

Range of rates for adjustment credit in recent years⁴

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	Sept. 29.....	10	10	13.....	9	9
20.....	6½	6½	Nov. 17.....	11	11	Nov. 21.....	8½–9	8½
May 11.....	6½–7	7	Dec. 5.....	12–13	12	26.....	8½	8½
12.....	7	7			13	Dec. 24.....	8	8
July 3.....	7–7¼	7¼	1981—May 5.....	13–14	14	1985—May 20.....	7½–8	7½
10.....	7¼	7¼	8.....	14	14	24.....	7½	7½
Aug. 21.....	7¾	7¾	Nov. 2.....	13–14	13			
Sept. 22.....	8	8	6.....	13	13	1986—Mar. 7.....	7–7½	7
Oct. 16.....	8–8½	8½	Dec. 4.....	12	12	10.....	7	7
20.....	8½	8½				Apr. 21.....	6½–7	6½
Nov. 1.....	8½–9½	9½	1982—July 20.....	11½–12	11½	July 11.....	6	6
3.....	9½	9½	23.....	11½	11½	Aug. 12.....	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	In effect February 24, 1988....	6	6
10.....	12	12	13.....	9½	9½			
1980—Feb. 15.....	12–13	13	Nov. 22.....	9–9½	9			
19.....	13	13	26.....	9	9			
May 29.....	12–13	13	Dec. 14.....	8½–9	9			
30.....	12	12	15.....	8½–9	8½			
June 13.....	11–12	11	17.....	8½	8½			
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 on Feb. 18, 1986 and again on Jan. 28, 1987; the rate may be either the same as that for adjustment credit or a fixed rate ½ percent higher.

2. Extended credit is available to depository institutions, where 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 4 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 INSTITUTIONS¹

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
<i>Net transaction accounts</i> ^{3,4}		
\$0 million–\$40.5 million	3	12/15/87
More than \$40.5 million	12	12/15/87
<i>Nonpersonal time deposits</i> ⁵		
By original maturity		
Less than 1½ years	3	10/6/86
1½ years or more	0	10/6/83
<i>Eurocurrency liabilities</i>		
All types	3	11/13/80

1. Reserve requirements in effect on Dec. 31, 1987. Required reserves must be held in the form of deposits with Federal Reserve Banks or vault cash. Nonmembers 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* and of 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. 15, 1987, the exemption was raised from \$2.9 million to \$3.2 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 increase in transaction accounts held by all depository institutions, determined as of June 30 each year. Effective Dec. 15, 1987 for institutions reporting quarterly and Dec. 29, 1987 for institutions reporting weekly, the amount was increased from \$36.7 million to \$40.5 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 TRANSACTIONS¹

Millions of dollars

Type of transaction		1985	1986	1987	1987						
					June	July	Aug.	Sept.	Oct.	Nov.	Dec.
U.S. TREASURY SECURITIES											
Outright transactions (excluding matched transactions)											
Treasury bills											
1	Gross purchases	22,214	22,602	18,983	575	575	499	4,528	1,095	3,388	150
2	Gross sales	4,118	2,502	6,050	22	912	0	0	300	0	0
3	Exchange	0	0	0	0	0	0	0	0	0	0
4	Redemptions	3,500	1,000	9,029	0	4,572	0	3,657	0	0	0
Others within 1 year											
5	Gross purchases	1,349	190	3,658	535	0	0	443	300	670	479
6	Gross sales	0	0	300	0	0	0	300	0	0	0
7	Maturity shift	19,763	18,673	21,502	1,715	1,437	2,723	1,500	816	2,247	1,400
8	Exchange	-17,717	-20,179	-20,388	-1,812	-613	-1,787	-917	-1,178	-3,728	-1,742
9	Redemptions	0	0	70	0	0	0	0	0	70	0
1 to 5 years											
10	Gross purchases	2,185	893	10,231	1,394	0	5	2,551	0	50	2,589
11	Gross sales	0	0	452	0	200	0	0	0	0	0
12	Maturity shift	-17,459	-17,058	-17,974	-1,715	-1,397	-2,122	-1,500	-761	-1,900	-1,400
13	Exchange	13,853	16,984	18,938	1,812	613	1,612	917	1,178	3,278	1,742
5 to 10 years											
14	Gross purchases	458	236	2,441	312	0	0	619	0	0	596
15	Gross sales	100	0	0	0	0	0	0	0	0	0
16	Maturity shift	-1,857	-1,620	-3,529	0	-40	-601	0	-55	-347	0
17	Exchange	2,184	2,050	950	0	0	100	0	0	300	0
Over 10 years											
18	Gross purchases	293	158	1,858	251	0	0	493	0	0	445
19	Gross sales	0	0	0	0	0	0	0	0	0	0
20	Maturity shift	-447	0	0	0	0	0	0	0	0	0
21	Exchange	1,679	1,150	500	0	0	75	0	0	150	0
All maturities											
22	Gross purchases	26,499	24,078	37,171	3,066	575	504	8,633	1,395	4,108	4,259
23	Gross sales	4,218	2,502	6,802	22	1,112	0	300	300	0	0
24	Redemptions	3,500	1,000	9,099	0	4,572	0	3,657	0	70	0
Matched transactions											
25	Gross sales	866,175	927,997	950,923	87,228	80,304	60,731	61,321	77,497	85,288	104,833
26	Gross purchases	865,968	927,247	950,935	87,128	80,037	62,594	61,347	73,779	85,494	105,917
Repurchase agreements ²											
27	Gross purchases	134,253	170,431	314,620	24,167	3,298	9,013	34,080	65,675	15,853	23,512
28	Gross sales	132,351	160,268	324,666	22,108	2,058	12,311	34,080	57,380	18,751	25,264
29	Net change in U.S. government securities	20,477	29,989	11,235	5,002	-4,136	-931	4,702	5,673	1,346	3,591
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	162	398	276	0	59	0	0	56	1	13
Repurchase agreements ²											
33	Gross purchases	22,183	31,142	80,353	3,907	929	2,369	7,174	18,523	6,786	9,718
34	Gross sales	20,877	30,522	81,351	2,910	996	3,298	7,174	15,607	7,425	10,679
35	Net change in federal agency obligations	1,144	222	-1,274	997	-126	-929	0	2,860	-640	-975
36	Total net change in System Open Market Account	21,621	30,211	9,961	5,999	-4,262	-1,861	4,702	8,533	706	2,617

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.

A10 Domestic Financial Statistics □ April 1988

1.18 FEDERAL RESERVE BANKS Condition and Federal Reserve Note Statements¹

Millions of dollars

Account	Wednesday					End of month		
	1987	1988				1987		1988
	Dec. 30	Jan. 6	Jan. 13	Jan. 20	Jan. 27	Nov.	Dec.	Jan.
Consolidated condition statement								
ASSETS								
1 Gold certificate account	11,078	11,077	11,075	11,072	11,071	11,082	11,078	11,068
2 Special drawing rights certificate account	5,018	5,018	5,018	5,018	5,018	5,018	5,018	5,018
3 Coin	413	401	409	442	465	446	408	478
Loans								
4 To depository institutions	951	749	2,717	450	363	790	3,815	333
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	7,553	7,553	7,553	7,423	7,423	7,567	7,553	7,423
8 Held under repurchase agreements	1,796	876	0	0	611	2,277	1,316	0
U.S. Treasury securities								
Bought outright								
9 Bills	107,334	107,648	108,117	107,227	107,677	106,457	107,691	107,196
10 Notes	82,973	82,973	82,973	82,973	82,973	79,345	82,973	82,973
11 Bonds	28,242	28,242	28,242	28,242	28,242	27,761	28,242	28,242
12 Total bought outright	218,549	218,863	219,332	218,442	218,892	213,563	218,906	218,411
13 Held under repurchase agreements	3,834	2,120	0	0	1,390	5,397	3,645	0
14 Total U.S. Treasury securities	222,383	220,983	219,332	218,442	220,282	218,960	222,551	218,411
15 Total loans and securities	232,683	230,161	229,602	226,315	228,679	229,594	235,235	226,167
16 Items in process of collection	7,973	10,643	7,692	18,168	7,086	4,901	7,990	6,489
17 Bank premises	704	705	705	707	704	698	705	705
Other assets								
18 Denominated in foreign currencies ³	7,757	7,451	7,420	7,364	7,371	8,064	7,773	6,714
19 All other ⁴	7,793	7,767	7,598	7,595	8,170	6,688	7,359	8,535
20 Total assets	273,419	273,223	269,519	276,681	268,564	266,491	275,566	265,174
LIABILITIES								
21 Federal Reserve notes	213,090	211,721	209,682	208,298	206,319	207,873	212,890	205,871
Deposits								
22 To depository institutions	41,570	41,694	41,989	45,848	38,559	41,781	41,784	35,338
23 U.S. Treasury—General account	4,773	4,098	3,421	3,859	9,481	3,594	5,313	10,276
24 Foreign—Official accounts	207	237	212	231	220	352	244	355
25 Other	364	284	289	358	383	450	1,027	315
26 Total deposits	46,914	46,313	45,911	50,296	48,643	46,177	48,368	46,284
27 Deferred credit items	5,962	7,813	6,488	10,787	6,143	4,473	7,179	6,093
28 Other liabilities and accrued dividends	3,053	3,015	2,985	2,857	3,020	2,985	3,035	2,654
29 Total liabilities	269,019	268,862	265,066	272,238	264,125	261,508	271,472	260,902
CAPITAL ACCOUNTS								
30 Capital paid in	2,045	2,044	2,049	2,058	2,060	2,032	2,047	2,062
31 Surplus	1,873	2,047	2,047	2,047	2,047	1,873	2,047	2,042
32 Other capital accounts	482	270	357	338	332	1,078	0	168
33 Total liabilities and capital accounts	273,419	273,223	269,519	276,681	268,564	266,491	275,566	265,174
34 MEMO: Marketable U.S. Treasury securities held in custody for foreign and international account	198,823	201,499	204,386	205,233	210,231	193,044	198,288	210,410
Federal Reserve note statement								
35 Federal Reserve notes outstanding issued to bank	253,508	252,950	252,838	252,883	253,163	254,499	253,313	253,303
36 LESS: Held by bank	40,418	41,229	43,156	44,585	46,844	46,626	40,423	47,432
37 Federal Reserve notes, net	213,090	211,721	209,682	208,298	206,319	207,873	212,890	205,871
Collateral held against notes net:								
38 Gold certificate account	11,078	11,077	11,075	11,072	11,071	11,082	11,078	11,068
39 Special drawing rights certificate account	5,018	5,018	5,018	5,018	5,018	5,018	5,018	5,018
40 Other eligible assets	0	0	0	0	0	0	0	0
41 U.S. Treasury and agency securities	196,994	195,626	193,589	192,208	190,230	191,773	196,794	189,785
42 Total collateral	213,090	211,721	209,682	208,298	206,319	207,873	212,890	205,871

1. Some of these data also appear in the Board's H.4.1 (503) release. For address, see inside front cover.

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

Millions of dollars

Type and maturity groupings	Wednesday					End of month		
	1987	1988				1987		1988
	Dec. 30	Jan. 6	Jan. 13	Jan. 20	Jan. 27	Nov. 30	Dec. 31	Jan. 29
1 Loans—Total.....	951	749	2,717	450	363	790	3,815	333
2 Within 15 days.....	943	738	2,639	445	362	765	3,806	326
3 16 days to 90 days.....	8	11	78	5	1	25	9	7
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.....	222,383	220,983	219,332	218,442	220,282	218,960	222,551	218,411
10 Within 15 days.....	11,583	10,503	7,667	8,554	9,123	9,805	11,363	4,402
11 16 days to 90 days.....	50,901	50,752	52,124	53,598	52,598	52,165	46,112	55,664
12 91 days to 1 year.....	71,993	71,479	71,292	68,248	70,519	72,716	76,827	70,303
13 Over 1 year to 5 years.....	47,169	47,512	47,512	47,410	47,410	44,580	47,512	47,410
14 Over 5 years to 10 years.....	15,313	15,313	15,313	15,208	15,208	14,717	15,313	15,208
15 Over 10 years.....	25,424	25,424	25,424	25,424	25,424	24,977	25,424	25,424
16 Federal agency obligations—Total.....	9,349	8,429	7,553	7,423	8,034	9,843	8,868	7,423
17 Within 15 days.....	2,041	1,046	151	165	781	2,527	1,560	170
18 16 days to 90 days.....	691	836	926	781	886	568	691	886
19 91 days to 1 year.....	1,653	1,583	1,473	1,473	1,538	1,621	1,653	1,538
20 Over 1 year to 5 years.....	3,416	3,416	3,441	3,481	3,323	3,524	3,416	3,323
21 Over 5 years to 10 years.....	1,358	1,358	1,373	1,333	1,317	1,387	1,358	1,317
22 Over 10 years.....	190	190	189	190	189	216	190	189

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

1.20 AGGREGATE RESERVES OF DEPOSITORY INSTITUTIONS AND MONETARY BASE

Billions of dollars, averages of daily figures

Item	1984 Dec.	1985 Dec.	1986 Dec.	1987 Dec.	1987							1988
					June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
Seasonally adjusted												
ADJUSTED FOR CHANGES IN RESERVE REQUIREMENTS ¹												
1 Total reserves ²	39.91	46.06	56.17	57.44	57.71	57.60	57.88	57.83	58.50	57.99	57.44	58.32
2 Nonborrowed reserves	36.72	44.74	55.34	56.66	56.93	56.93	57.23	56.89	57.55	57.36	56.66	57.24
3 Nonborrowed reserves plus extended credit ³	39.33	45.24	55.64	57.14	57.20	57.12	57.36	57.29	58.00	57.76	57.14	57.61
4 Required reserves	39.06	45.00	54.80	56.41	56.52	56.84	56.84	57.03	57.37	57.06	56.41	57.02
5 Monetary base ⁴	199.60	217.34 ⁵	239.52 ⁵	256.68 ⁵	248.48	249.51 ⁵	251.00 ⁵	252.25 ⁵	254.56 ⁵	256.02 ⁵	256.68 ⁵	260.25
Not seasonally adjusted												
6 Total reserves ²	40.94	47.24	57.64	58.96	57.63	57.74	57.39	57.50	58.04	58.09	58.96 ⁵	60.17
7 Nonborrowed reserves	37.75	45.92	56.81	58.19	56.85	57.07	56.74	56.56	57.09	57.47	58.19	59.09
8 Nonborrowed reserves plus extended credit ³	40.35	46.42	57.11	58.67	57.12	57.27	56.88	56.96	57.54	57.86	58.67	59.46
9 Required reserves	40.08	46.18	56.27	57.94	56.43	56.98	56.36	56.70	56.91	57.17	57.94	58.88
10 Monetary base ⁴	202.70	220.82	243.63	261.21	249.29	251.42	251.42	251.60	253.29	256.82	261.21	261.21
NOT ADJUSTED FOR CHANGES IN RESERVE REQUIREMENTS ⁵												
11 Total reserves ²	40.70	48.14	59.56	62.12	58.78	58.84	58.36	59.81	61.11	61.20	62.12	62.64
12 Nonborrowed reserves	37.51	46.82	58.73	61.35	58.01	58.17	57.71	58.87	60.16	60.58	61.35	61.56
13 Nonborrowed reserves plus extended credit ³	40.09	47.41	59.04	61.86	58.34	58.37	57.76	58.85	61.22	60.79	61.86	62.13
14 Required reserves	39.84	47.08	58.19	61.09	57.59	58.08	57.33	59.02	59.98	60.28	61.09	61.34
15 Monetary base ⁴	204.18	223.53	247.71	266.16	252.54	254.67	254.36	255.69	258.08	261.67	266.16	265.79

1. 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.

2. 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.

3. 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.

4. 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 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 and the remaining items seasonally adjusted as a whole.

5. 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.

NOTE. 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 Banking Section, Division of Research and Statistics, Board of Governors of the Federal Reserve System, Washington, D.C. 20551.

1.21 MONEY STOCK, LIQUID ASSETS, AND DEBT MEASURES

Billions of dollars, averages of daily figures

Item ¹	1984 Dec. ²	1985 Dec. ²	1986 Dec. ²	1987 Dec. ²	1987 ³			1988 Jan.
					Oct.	Nov.	Dec.	
Seasonally adjusted								
1 M1	551.9	620.1	725.4	750.8	756.2	752.7	750.8	758.9
2 M2	2,363.6	2,562.6	2,807.8	2,901.3	2,894.6	2,897.0	2,901.3	2,925.0
3 M3	2,978.3	3,196.0	3,490.4	3,663.0	3,643.5	3,658.5	3,663.0	3,689.1
4 L	3,519.4	3,825.4	4,134.1	4,332.8	4,312.0	4,325.9	4,332.8	n.a.
5 Debt	5,932.9	6,746.9	7,598.5	8,284.9	8,161.5	8,231.7	8,284.9	n.a.
M1 components								
6 Currency ⁴	156.1	167.7	180.4	196.5	193.1	195.0	196.5	198.4
7 Travelers checks ⁵	5.2	5.9	6.5	7.1	7.0	7.0	7.1	7.2
8 Demand deposits ⁶	244.1	267.2	303.3	288.0	295.9	291.3	288.0	289.9
9 Other checkable deposits ⁷	146.4	179.2	235.2	259.3	260.3	259.4	259.3	263.3
Nontransactions components								
10 In M2 ⁸	1,811.7	1,942.5	2,082.4	2,150.5	2,138.4	2,144.3	2,150.5	2,166.1
11 In M3 only ⁹	614.7	633.3	682.6	761.6	748.9	761.4	761.6	764.1
Savings deposits ⁸								
12 Commercial Banks	122.6	124.8	155.5	178.2	178.4	178.2	178.2	179.0
13 Thrift institutions	162.9	176.6	215.2	236.0	238.6	236.8	236.0	235.4
Small denomination time deposits ⁹								
14 Commercial Banks	386.3	383.3	364.6	384.6	374.2	381.6	384.6	388.0
15 Thrift institutions	497.0	496.2	488.6	528.5	509.1	520.1	528.5	536.9
Money market mutual funds								
16 General purpose and broker-dealer	167.5	176.5	208.0	222.2	218.8	220.9	222.2	226.2
17 Institution-only	62.7	64.5	84.4	89.6	82.5	89.5	89.6	94.4
Large denomination time deposits ¹⁰								
18 Commercial Banks ¹¹	270.2	284.9	288.9	323.5	317.5	322.3	323.5	320.1
19 Thrift institutions	146.8	151.6	150.3	161.2	154.8	158.1	161.2	162.7
Debt components								
20 Federal debt	1,365.3	1,584.3	1,804.5	1,953.3	1,919.3	1,939.6	1,953.3	n.a.
21 Nonfederal debt	4,567.6	5,162.6	5,794.0	6,331.7	6,242.1	6,292.0	6,331.7	n.a.
Not seasonally adjusted								
22 M1	564.5	633.5	740.6	765.9	753.7	756.0	765.9	764.8
23 M2	2,373.2	2,573.9	2,821.5	2,915.0	2,895.2	2,900.5	2,915.0	2,937.3
24 M3	2,991.4	3,210.5	3,507.2	3,679.5	3,643.5	3,665.8	3,679.5	3,701.6
25 L	3,532.7	3,840.9	4,152.1	4,350.9	4,312.3	4,335.8	4,350.9	n.a.
26 Debt	5,927.1	6,740.6	7,591.7	8,277.6	8,147.3	8,216.5	8,277.6	n.a.
M1 components								
27 Currency ⁴	158.5	170.2	183.0	199.4	192.6	195.9	199.4	197.1
28 Travelers checks ⁵	4.9	5.5	6.0	6.5	7.0	6.6	6.5	6.6
29 Demand deposits ⁶	253.0	276.9	314.4	298.5	295.7	294.1	298.5	295.8
30 Other checkable deposits ⁷	148.2	180.9	237.3	261.5	258.4	259.3	261.5	265.3
Nontransactions components								
31 M2 ⁸	1,808.7	1,940.3	2,080.8	2,149.1	2,141.5	2,144.5	2,149.1	2,172.5
32 M3 only ⁹	618.2	636.7	685.7	764.5	748.3	765.2	764.5	764.3
Money market deposit accounts								
33 Commercial Banks	267.4	332.8	379.6	358.2	360.0	358.1	358.2	358.9
34 Thrift institutions	149.4	180.8	192.9	167.0	173.9	169.6	167.0	165.2
Savings deposits ⁸								
35 Commercial Banks	121.5	123.7	154.2	176.7	178.6	177.5	176.7	178.2
36 Thrift institutions	161.5	174.8	212.9	233.3	239.3	235.7	233.3	233.0
Small denomination time deposits ⁹								
37 Commercial Banks	386.9	384.0	365.3	385.2	375.0	382.6	385.2	389.3
38 Thrift institutions	498.2	497.5	489.7	529.3	510.5	521.1	529.3	540.5
Money market mutual funds								
39 General purpose and broker-dealer	167.5	176.5	208.0	222.2	218.8	220.9	222.2	226.2
40 Institution-only	62.7	64.5	84.4	89.6	82.5	89.5	89.6	94.4
Large denomination time deposits ¹⁰								
41 Commercial Banks ¹¹	270.9	285.4	289.1	323.6	317.3	322.4	323.6	321.1
42 Thrift institutions	146.8	151.9	150.7	161.7	155.7	159.0	161.7	163.8
Debt components								
43 Federal debt	1,364.7	1,583.7	1,804.0	1,952.7	1,909.8	1,935.3	1,952.7	n.a.
44 Nonfederal debt	4,562.4	5,156.9	5,787.8	6,324.9	6,237.5	6,281.2	6,324.9	n.a.

For notes see following page.

NOTES TO TABLE 1.21

1. 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.

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

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

4. 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.

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

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

7. 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.

8. Savings deposits exclude MMDAs.

9. 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.

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

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

NOTE. Latest monthly and weekly figures are available from the Board's H.6 (508) release. Historical data are available from the Banking Section, Division of Research and Statistics, Board of Governors of the Federal Reserve System, Washington, D.C. 20551.

1.22 BANK DEBITS AND DEPOSIT TURNOVER¹

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	1985 ²	1986 ²	1987 ²	1987					
				June	July	Aug.	Sept.	Oct.	Nov.
DEBITS TO	Seasonally adjusted								
Demand deposits ³									
1 All insured banks	156,091.6	188,345.8	217,115.9	212,414.4	219,501.3	221,729.0	219,182.9	234,398.3	219,386.1
2 Major New York City banks	70,585.8	91,397.3	104,496.3	103,027.6	106,428.9	109,062.5	105,149.4	110,833.6	103,693.6
3 Other banks	85,505.9	96,948.8	112,619.8	109,386.8	113,072.3	112,666.5	114,033.4	123,564.6	115,692.5
4 ATS-NOW accounts ⁴	1,823.5	2,182.5	2,402.7	2,417.6	2,498.7	2,333.1	2,349.0	2,591.3	2,536.1
5 Savings deposits ⁵	384.9	403.5	526.5	565.8	548.2	518.8	524.0	582.4	570.8
DEPOSIT TURNOVER									
Demand deposits ³									
6 All insured banks	500.3	556.5	612.1	601.6	628.6	623.3	625.3	654.9	619.0
7 Major New York City banks	2,196.9	2,498.2	2,670.6	2,671.6	2,837.4	2,718.2	2,715.1	2,744.7	2,620.2
8 Other banks	305.7	321.2	357.0	347.8	362.8	357.0	365.7	389.1	367.4
9 ATS-NOW accounts ⁴	15.8	15.6	13.8	13.9	14.3	13.2	13.2	14.4	14.2
10 Savings deposits ⁵	3.2	3.0	3.1	3.3	3.1	3.0	3.0	3.3	3.3
DEBITS TO	Not seasonally adjusted								
Demand deposits ³									
11 All insured banks	156,052.3	188,506.4	217,124.8	221,038.4	228,764.2	214,145.9	216,728.0	233,999.8	202,230.1
12 Major New York City banks	70,559.2	91,500.0	104,518.6	106,171.3	111,157.7	103,822.8	104,234.0	111,398.9	96,035.9
13 Other banks	85,493.1	97,006.6	112,606.1	114,867.0	117,606.5	110,323.1	112,494.0	122,600.8	106,194.2
14 ATS-NOW accounts ⁴	1,826.4	2,184.6	2,404.8	2,466.9	2,466.0	2,226.4	2,414.9	2,577.7	2,375.8
15 MMDA ⁶	1,223.9	1,609.4	1,954.2	1,987.9	2,002.7	1,752.7	1,846.6	2,247.8	1,959.8
16 Savings deposits ⁵	385.3	404.1	526.8	565.2	576.5	524.2	519.0	604.3	519.9
DEPOSIT TURNOVER									
Demand deposits ³									
17 All insured banks	499.9	556.7	612.3	625.0	651.7	612.5	620.2	657.8	565.6
18 Major New York City banks	2,196.3	2,499.1	2,674.9	2,801.5	2,928.4	2,721.9	2,751.0	2,824.8	2,467.8
19 Other banks	305.6	321.2	356.9	363.8	375.7	354.2	361.1	387.6	333.3
20 ATS-NOW accounts ⁴	15.8	15.6	13.8	14.3	14.3	12.8	13.7	14.6	13.3
21 MMDA ⁶	4.0	4.5	5.3	5.4	5.5	4.8	5.1	6.3	5.5
22 Savings deposits ⁵	3.2	3.0	3.1	3.3	3.3	3.0	3.0	3.5	3.0

1. These series have been revised to reflect new benchmark adjustments and revised seasonal factors as well as some revisions of reported data. Historical tables containing revised data for earlier periods may be obtained from the Banking 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.

A16 Domestic Financial Statistics □ April 1988

1.23 LOANS AND SECURITIES All Commercial Banks¹

Billions of dollars; averages of Wednesday figures

Category	1987 ²											1988
	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
Seasonally adjusted												
1 Total loans and securities ²	2,120.1	2,130.7	2,152.0	2,166.0	2,176.7	2,181.3	2,199.0	2,214.7	2,227.6	2,232.1	2,230.6	2,242.0
2 U.S. government securities	314.7	315.4	318.1	321.3	321.3	322.9	328.5	331.3	331.7	331.1	333.2	334.1
3 Other securities	192.0	193.1	194.4	195.5	195.9	194.3	193.7	193.7	194.2	196.2	196.0	194.0
4 Total loans and leases ³	1,613.5	1,622.3	1,639.6	1,649.3	1,659.6	1,664.1	1,676.8	1,689.8	1,701.7	1,704.8	1,701.4	1,713.9
5 Commercial and industrial	548.0	546.2	549.1	551.9	554.4	553.6	554.0	559.0	562.8	563.1	565.5	568.5
6 Bankers acceptances held ⁴	5.0	4.7	4.8	4.8	4.6	4.5	5.3	5.4	5.6	4.6	4.3	4.5
7 Other commercial and industrial	543.0	541.5	544.3	547.1	549.8	549.1	548.7	553.6	557.3	558.5	561.2	564.0
8 U.S. addressees ⁴	534.3	533.2	536.0	539.0	541.3	540.8	540.5	545.6	549.3	550.9	553.0	555.0
9 Non-U.S. addressees ⁴	8.8	8.3	8.3	8.1	8.4	8.4	8.2	8.0	8.0	7.6	8.2	8.9
10 Real estate	509.7	517.1	524.8	532.6	542.6	549.6	556.8	561.7	569.4	576.2	582.3	586.9
11 Individual	316.0	316.8	317.8	319.1	318.9	319.7	321.5	322.8	324.1	325.0	325.9	327.8
12 Security	39.8	40.1	44.6	43.6	44.0	43.9	45.4	46.1	47.1	39.3	33.6	36.6
13 Nonbank financial institutions	35.1	35.4	35.6	35.8	34.6	32.9	32.0	31.8	32.1	32.3	32.3	32.0
14 Agricultural	30.7	30.2	29.9	30.0	30.0	29.8	29.7	29.6	29.6	29.4	29.3	29.4
15 State and political subdivisions	56.4	56.6	56.4	56.2	55.9	55.3	54.5	54.5	54.1	53.4	51.2	53.9
16 Foreign banks	9.5	9.1	9.3	9.3	9.6	9.0	9.1	9.2	9.6	8.8	8.2	8.3
17 Foreign official institutions	6.2	6.8	6.8	6.1	5.8	5.7	5.7	5.7	5.8	5.7	5.6	5.7
18 Lease financing receivables	22.5	22.7	23.3	23.7	23.9	23.9	24.0	24.1	24.3	24.5	24.8	25.0
19 All other loans	39.3	41.2	42.0	41.1	39.9	40.5	44.0	45.2	42.7	47.1	42.7	41.6
Not seasonally adjusted												
20 Total loans and securities ²	2,124.0	2,130.7	2,153.1	2,163.4	2,173.7	2,172.8	2,188.8	2,211.6	2,222.4	2,231.3	2,247.0	2,254.7
21 U.S. government securities	319.3	317.4	318.0	320.0	318.4	322.1	328.3	331.3	329.3	331.0	333.1	335.6
22 Other securities	192.7	192.7	194.0	195.5	195.3	193.0	193.6	193.8	193.3	195.6	196.6	196.7
23 Total loans and leases ³	1,612.0	1,620.6	1,641.1	1,647.9	1,660.0	1,657.7	1,666.9	1,686.6	1,699.8	1,704.7	1,717.3	1,722.4
24 Commercial and industrial	547.3	550.7	552.8	554.4	555.9	551.3	549.5	555.7	558.7	562.0	569.6	568.1
25 Bankers acceptances held ⁴	5.0	4.6	4.8	4.8	4.7	4.6	5.3	5.5	5.4	4.6	4.4	4.3
26 Other commercial and industrial	542.3	546.1	548.0	549.6	551.2	546.7	544.2	550.2	553.3	557.4	565.2	563.8
27 U.S. addressees ⁴	533.8	537.9	539.9	541.4	542.7	538.1	535.9	542.1	545.2	549.2	557.0	555.7
28 Non-U.S. addressees ⁴	8.5	8.1	8.2	8.2	8.5	8.6	8.3	8.2	8.1	8.2	8.2	8.1
29 Real estate	509.1	516.4	523.9	532.0	542.4	549.7	556.8	562.4	570.0	576.8	583.2	587.3
30 Individual	315.4	313.8	315.0	316.5	316.9	318.4	321.5	324.3	325.7	326.7	330.2	331.2
31 Security	38.4	39.6	46.4	43.9	45.4	43.3	44.8	44.8	45.6	39.4	35.3	37.5
32 Nonbank financial institutions	34.1	34.3	35.5	35.6	34.7	32.7	31.9	32.3	32.2	32.7	33.6	32.3
33 Agricultural	29.7	29.2	29.1	29.7	30.3	30.5	30.6	30.7	30.4	29.6	29.1	28.7
34 State and political subdivisions	57.8	57.6	56.9	56.2	55.5	54.5	53.9	53.7	53.2	52.3	51.2	53.9
35 Foreign banks	9.8	9.0	8.9	9.0	9.5	9.0	8.9	9.5	9.8	8.8	8.6	8.5
36 Foreign official institutions	6.2	6.8	6.8	6.1	5.8	5.7	5.7	5.7	5.8	5.7	5.6	5.7
37 Lease financing receivables	22.7	22.9	23.5	23.8	24.0	23.9	23.9	24.0	23.9	24.2	24.8	25.2
38 All other loans	41.5	40.3	42.4	40.7	39.6	38.7	40.8	43.6	44.4	46.4	46.2	44.1

1. Data have been revised because of benchmarking and new seasonal factors. 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 G.7 (407) release.

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 BANKS¹

Monthly averages, billions of dollars

Source	1987 ²											1988
	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
Total nondeposit funds												
1 Seasonally adjusted ³	159.7	165.4	161.6	170.8	167.1	160.3	166.6	177.2	176.2	173.6	176.9	177.3
2 Not seasonally adjusted	162.3	166.5	161.1	170.9	164.0	156.6	166.7	177.6	176.2	175.9	177.8	177.7
Federal funds, RPs, and other borrowings from nonbanks ³												
3 Seasonally adjusted	172.0	171.9	172.1	170.5	168.3	167.2	167.1	165.0	164.6	165.7	161.8	169.0
4 Not seasonally adjusted	174.5	173.0	171.6	170.6	165.2	163.6	167.2	165.4	164.7	168.1	162.7	169.4
5 Net balances due to foreign-related institutions, not seasonally adjusted	-12.3	-6.5	-10.5	.2	-1.2	-6.9	-.4	12.2	11.5	7.8	15.1	8.3
MEMO												
6 Domestically chartered banks' net positions with own foreign branches, not seasonally adjusted ⁴	-23.8	-21.1	-23.0	-15.5	-15.5	-22.2	-17.7	-11.8	-14.7	-17.1	-14.1	-17.4
7 Gross due from balances	68.3	66.0	70.5	68.5	67.1	66.4	64.5	63.8	67.7	70.4	69.6	72.1
8 Gross due to balances	44.5	44.9	47.5	53.0	51.5	44.2	46.8	52.0	53.0	53.3	55.5	54.7
9 Foreign-related institutions' net positions with directly related institutions, not seasonally adjusted ⁵	11.5	14.6	12.5	15.7	14.3	15.3	17.3	24.0	26.2	24.9	29.2	25.6
10 Gross due from balances	73.9	71.7	73.1	75.8	77.4	77.4	77.6	77.2	79.7	83.2	79.8	85.2
11 Gross due to balances	85.4	86.3	85.6	91.5	91.7	92.7	94.9	101.3	105.9	108.0	109.0	110.8
Security RP borrowings												
12 Seasonally adjusted ⁶	97.9	96.4	99.2	99.9	101.8	103.0	105.2	107.5	107.6	106.9	106.2	108.5
13 Not seasonally adjusted	100.4	97.4	98.7	100.0	98.7	99.4	103.3	107.9	107.7	109.2	107.1	108.9
U.S. Treasury demand balances ⁷												
14 Seasonally adjusted	22.7	18.9	21.4	25.3	26.9	24.4	28.5	24.9	34.2	35.7	26.1	18.6
15 Not seasonally adjusted	28.6	17.1	21.6	30.8	25.5	26.6	21.6	25.5	30.7	25.8	22.4	24.9
Time deposits, \$100,000 or more ⁸												
16 Seasonally adjusted	354.2	355.9	358.9	365.7	372.1	372.5	372.3	373.0	380.5	387.0	389.2	389.1
17 Not seasonally adjusted	354.1	357.7	358.5	366.3	371.4	370.0	371.8	373.2	380.4	387.0	389.3	390.2

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.

Data have been revised because of benchmarking to new Call Reports and to new seasonal factors. 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 G. 10(411) release.

2. Includes seasonally adjusted federal funds, RPs, and other borrowings from nonbanks and not seasonally adjusted net Eurodollars.

3. Other borrowings are borrowings on 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 foreignbanks, term federal funds, overdrawn due from bank balances, loan RPs, and participations in pooled loans.

4. Averages of daily figures for member and nonmember banks.

5. Averages of daily data.

6. Based on daily average data reported by 122 large banks.

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

8. Averages of Wednesday figures.

1.25 ASSETS AND LIABILITIES OF COMMERCIAL BANKING INSTITUTIONS Last-Wednesday-of-Month Series¹

Billions of dollars

Account	1987 ²											1988
	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	
ALL COMMERCIAL BANKING INSTITUTIONS³												
1 Loans and securities	2,286.1	2,314.2	2,325.8	2,321.0	2,331.6	2,348.8	2,374.8	2,402.4	2,389.9	2,430.5	2,415.2	
2 Investment securities	484.6	491.7	494.5	492.7	497.1	501.1	501.7	503.8	508.0	514.4	515.2	
3 U.S. government securities	299.6	305.6	307.4	304.6	309.4	313.7	313.8	316.0	317.3	321.4	322.9	
4 Other	185.0	186.1	187.0	188.0	187.7	187.4	187.9	187.9	190.7	193.1	192.4	
5 Trading account assets	25.3	23.4	21.4	20.2	20.4	19.5	19.5	19.6	20.3	16.9	18.3	
6 Total loans	1,776.3	1,799.2	1,810.0	1,808.2	1,814.1	1,828.2	1,853.6	1,878.9	1,861.6	1,899.2	1,881.6	
7 Interbank loans	158.6	154.0	161.8	150.7	156.5	160.8	157.4	172.9	162.0	172.1	160.5	
8 Loans excluding interbank	1,617.7	1,645.2	1,648.1	1,657.5	1,657.6	1,667.5	1,696.2	1,706.1	1,699.7	1,727.2	1,721.1	
9 Commercial and industrial	551.4	551.9	555.1	554.6	548.1	548.2	560.7	559.7	561.1	576.4	565.3	
10 Real estate	517.2	526.4	533.8	544.4	552.9	558.2	564.1	571.7	577.4	586.3	588.5	
11 Individual	313.8	316.3	316.9	317.3	319.4	322.1	325.3	326.9	326.9	332.4	330.8	
12 All other	235.4	250.6	242.3	241.1	237.2	239.0	246.0	248.0	234.3	232.1	236.5	
13 Total cash assets	205.8	211.6	231.9	214.2	208.4	210.7	223.8	223.5	215.2	232.5	209.6	
14 Reserves with Federal Reserve Banks	30.7	29.4	37.5	33.5	32.5	37.3	32.9	38.3	33.8	36.2	33.3	
15 Cash in vault	22.8	24.0	25.1	24.2	24.5	24.7	24.5	25.0	24.0	28.5	25.8	
16 Cash items in process of collection	68.3	74.8	81.6	74.7	69.0	65.9	81.6	79.0	76.1	79.9	70.7	
17 Demand balances at U.S. depository institutions	32.0	33.1	36.5	30.4	31.0	30.8	32.7	32.3	32.9	36.6	31.4	
18 Other cash assets	51.9	50.3	51.2	51.4	51.5	52.1	52.1	48.9	48.4	51.4	48.5	
19 Other assets	198.9	199.2	203.7	197.4	182.5	184.5	193.6	186.3	187.5	184.0	176.0	
20 Total assets/total liabilities and capital	2,690.8	2,724.9	2,761.4	2,732.6	2,722.6	2,744.0	2,792.2	2,812.2	2,792.6	2,847.1	2,800.7	
21 Deposits	1,903.0	1,922.8	1,942.5	1,927.4	1,928.8	1,930.4	1,972.4	1,971.2	1,974.1	2,009.1	1,968.1	
22 Transaction deposits	569.7	591.6	598.1	579.6	575.3	574.1	612.4	598.1	592.0	623.3	576.0	
23 Savings deposits	542.0	537.6	541.0	537.6	538.7	537.9	535.3	531.7	531.1	528.0	531.4	
24 Time deposits	791.2	793.6	803.4	810.1	814.8	814.4	824.7	841.4	851.0	857.9	860.6	
25 Borrowings	415.4	420.2	429.9	419.5	414.6	426.4	416.3	435.7	420.1	426.2	443.2	
26 Other liabilities	186.2	194.1	200.0	202.0	202.5	209.6	224.7	225.5	218.9	231.5	208.7	
27 Residual (assets less liabilities)	186.2	187.8	189.0	183.7	176.7	177.6	178.8	179.8	179.5	180.4	180.7	
MEMO												
28 U.S. government securities (including trading account)	316.8	319.4	321.0	317.0	323.8	326.8	327.7	329.9	331.7	332.4	336.9	
29 Other securities (including trading account)	193.0	195.6	194.8	195.8	193.8	193.8	193.5	193.5	196.6	198.9	196.7	
DOMESTICALLY CHARTERED COMMERCIAL BANKS³												
30 Loans and securities	2,125.3	2,152.0	2,160.3	2,157.0	2,162.8	2,179.6	2,195.4	2,218.6	2,213.8	2,238.5	2,231.2	
31 Investment securities	461.0	468.1	469.5	468.1	472.1	476.2	475.9	478.7	482.6	488.3	487.0	
32 U.S. Treasury securities	289.2	295.5	296.9	295.1	299.4	303.5	302.9	305.7	306.4	311.0	311.3	
33 Other	171.7	172.6	172.5	173.0	172.7	172.6	173.0	173.0	176.2	177.3	175.8	
34 Trading account assets	25.3	23.4	21.4	20.2	20.4	19.5	19.5	19.6	20.3	16.9	18.3	
35 Total loans	1,639.1	1,660.5	1,669.5	1,668.7	1,670.3	1,684.0	1,700.0	1,720.3	1,711.0	1,733.3	1,725.9	
36 Interbank loans	124.9	124.3	128.7	120.9	122.0	128.6	125.0	133.3	130.5	135.3	131.0	
37 Loans excluding interbank	1,514.2	1,536.3	1,540.8	1,547.8	1,548.3	1,555.4	1,575.0	1,587.0	1,580.4	1,598.0	1,594.9	
38 Commercial and industrial	474.5	473.4	475.1	471.3	465.2	464.4	470.2	470.6	472.0	479.4	472.6	
39 Real estate	509.2	517.8	525.0	535.5	543.5	548.4	554.0	561.9	567.3	575.0	577.1	
40 Individual	313.5	316.0	316.5	317.0	319.1	321.8	325.0	326.4	326.6	332.1	330.5	
41 All other	217.1	229.1	224.2	224.0	220.4	220.8	225.8	228.1	214.6	211.6	214.7	
42 Total cash assets	189.3	195.2	215.4	197.7	191.6	192.7	204.8	207.8	199.3	214.9	191.9	
43 Reserves with Federal Reserve Banks	29.7	27.2	35.9	32.1	31.3	36.2	30.9	36.5	31.5	35.1	31.7	
44 Cash in vault	22.8	24.0	25.0	24.1	24.4	24.6	24.4	24.9	24.0	28.4	25.7	
45 Cash items in process of collection	68.0	74.3	81.2	74.2	68.5	65.4	81.0	78.4	75.7	79.5	70.2	
46 Demand balances at U.S. depository institutions	30.4	31.3	34.5	28.7	29.3	29.2	30.8	30.6	31.4	34.7	29.7	
47 Other cash assets	38.4	38.5	38.8	38.6	38.0	37.2	37.7	37.3	36.7	37.3	34.6	
48 Other assets	142.1	142.6	142.3	132.8	120.5	119.9	134.2	130.0	123.7	127.2	118.8	
49 Total assets/liabilities and capital	2,456.8	2,489.7	2,517.9	2,487.5	2,474.9	2,492.2	2,534.5	2,556.4	2,536.8	2,580.7	2,542.0	
50 Deposits	1,844.4	1,860.7	1,880.1	1,865.7	1,868.3	1,868.8	1,910.3	1,909.1	1,912.4	1,944.6	1,905.9	
51 Transaction deposits	562.3	583.7	590.0	571.4	567.4	566.0	603.9	589.5	583.7	614.9	567.7	
52 Savings deposits	540.0	535.6	539.0	535.6	536.6	535.7	533.2	529.5	528.8	525.7	529.1	
53 Time deposits	742.1	741.5	751.1	758.7	764.3	767.1	773.3	790.1	799.9	804.1	809.1	
54 Borrowings	320.3	328.2	336.3	327.0	318.9	333.0	324.7	345.7	323.2	331.9	344.7	
55 Other liabilities	109.2	116.2	115.8	114.4	114.2	116.0	123.8	125.0	124.8	127.0	113.9	
56 Residual (assets less liabilities)	182.9	184.6	185.7	180.5	173.5	174.4	175.6	176.6	176.3	177.2	177.5	

1. Data have been revised because of benchmarking to new Call Reports beginning July 1986. Back data are available from the Banking and Monetary Statistics section, Board of Governors of the Federal Reserve System, Washington, D.C., 20551.

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 ALL LARGE WEEKLY REPORTING COMMERCIAL BANKS with Domestic Assets of \$1.4 Billion or More on December 31, 1982, Assets and Liabilities

Millions of dollars, Wednesday figures

Account	1987									
	Nov. 4	Nov. 11	Nov. 18	Nov. 25	Dec. 2	Dec. 9	Dec. 16	Dec. 23	Dec. 30 ¹	
1 Cash and balances due from depository institutions	104,047	106,338	100,794	99,175	108,378 ²	97,636 ²	105,037 ²	106,811 ²	113,394	
2 Total loans, leases, and securities, net	1,029,460 ²	1,020,093 ²	1,020,636 ²	1,014,084 ²	1,023,781 ²	1,012,808 ²	1,024,791 ²	1,016,071 ²	1,024,441	
3 U.S. Treasury and government agency	116,718	115,659	118,856	117,548	119,364 ²	119,092 ²	118,436 ²	118,239 ²	116,679	
4 Trading account	14,666	13,988	15,399	14,452	15,383	14,787	13,483	12,242	11,022	
5 Investment account, by maturity	102,052	101,671	103,457	103,096	103,981 ²	104,305 ²	104,953 ²	105,996 ²	105,658	
6 One year or less	15,884	15,953	15,934	15,798	16,193	16,075	16,075	16,034	15,891	
7 Over one through five years	44,412	44,332	44,997	44,952	45,854	46,142	46,773	46,730	46,705	
8 Over five years	41,757	41,385	42,525	42,346	41,933	42,086	42,102	43,230	43,060	
9 Other securities	68,571	68,499	68,772	69,038	68,360 ²	68,156 ²	68,295 ²	68,442 ²	69,370	
10 Trading account	2,596	2,467	2,415	2,551	2,187	1,981	2,230	2,377	2,953	
11 Investment account	65,975	66,031	66,357	66,486	66,173 ²	66,175 ²	66,066 ²	66,064 ²	66,417	
12 States and political subdivisions, by maturity	47,846	47,797	47,598	47,541	47,256	47,201	47,083	46,982	47,012	
13 One year or less	5,212	5,216	5,227	5,219	5,144	5,192	5,187	5,186	5,201	
14 Over one year	42,633	42,580	42,370	42,322	42,112	42,008	41,896	41,796	41,811	
15 Other bonds, corporate stocks, and securities	18,129	18,234	18,759	18,945	18,917 ²	18,974 ²	18,982 ²	19,083 ²	19,404	
16 Other trading account assets	2,960	3,027	3,114	3,293	3,161	2,869	2,629	2,675	2,880	
17 Federal funds sold ¹	74,436	69,181	66,010	61,422	67,365	59,129	66,172	56,107	63,563	
18 To commercial banks	46,827	40,005	40,003	37,024	43,149	36,279	44,741	35,884	44,223	
19 To nonbank brokers and dealers in securities	19,153	20,972	18,031	16,687	17,442	15,957	14,506	13,776	13,109	
20 To others	8,455	8,204	7,976	7,712	6,774	6,893	6,925	6,447	6,231	
21 Other loans and leases, gross	805,708 ²	802,686 ²	802,814 ²	801,693 ²	804,288 ²	802,283 ²	807,894 ²	809,020 ²	810,060	
22 Other loans, gross	785,712 ²	782,504 ²	782,636 ²	781,488 ²	784,353 ²	782,273 ²	787,816 ²	788,820 ²	789,740	
23 Commercial and industrial	276,918 ²	276,351 ²	276,558 ²	275,645 ²	276,665 ²	275,938 ²	277,657 ²	278,380 ²	279,499	
24 Bankers acceptances and commercial paper	2,289	2,275	2,353	2,224	2,180	2,200	2,063	1,996	2,010	
25 All other	274,628 ²	274,075 ²	274,204 ²	273,421 ²	274,485 ²	273,738 ²	275,594 ²	276,384 ²	277,489	
26 U.S. addressees	271,598 ²	271,001 ²	271,254 ²	270,462 ²	271,495 ²	270,676 ²	272,549 ²	273,295 ²	274,507	
27 Non-U.S. addressees	3,030	3,075	2,950	2,959	2,990	3,061	3,045	3,089	2,982	
28 Real estate loans	241,261 ²	242,024 ²	242,755 ²	243,111 ²	243,577 ²	243,778 ²	244,746 ²	245,420 ²	245,894	
29 Revolving, home equity	14,174	14,240	14,318	14,428	14,436	14,532	14,676	14,784	15,026	
30 All other	227,087 ²	227,784 ²	228,436 ²	228,683 ²	229,140 ²	229,246 ²	230,070 ²	230,636 ²	230,868	
31 To individuals for personal expenditures	142,520 ²	142,567 ²	142,333 ²	142,321 ²	142,448 ²	142,896 ²	143,944 ²	144,953 ²	144,541	
32 To depository and financial institutions	51,347 ²	51,020 ²	50,739 ²	49,766 ²	50,652 ²	50,494 ²	50,516 ²	50,295 ²	50,062	
33 Commercial banks in the United States	22,429 ²	22,735 ²	22,058 ²	22,112 ²	22,422 ²	21,993 ²	22,006 ²	21,694 ²	21,723	
34 Banks in foreign countries	5,289	4,770	4,970	4,314	4,400	4,516	4,225	4,506	4,210	
35 Nonbank depository and other financial institutions	23,628	23,514	23,711	23,341	23,647 ²	23,803 ²	24,102 ²	23,912 ²	24,128	
36 For purchasing and carrying securities	14,679	12,650	12,407	12,488	12,898	12,507	13,064 ²	12,792 ²	12,861	
37 To finance agricultural production	5,601	5,504	5,573	5,508	5,531	5,522	5,557	5,560	5,713	
38 To states and political subdivisions	31,474	31,366	31,443	31,301	31,124	30,894	30,807	30,609	30,413	
39 To foreign governments and official institutions	2,888	2,840	2,844	2,813	2,799	2,752	2,810	2,734	2,660	
40 All other	19,024 ²	18,184 ²	17,985 ²	18,534 ²	18,656 ²	17,488 ²	18,714 ²	18,075 ²	18,099	
41 Lease financing receivables	19,996 ²	20,181 ²	20,178 ²	20,204 ²	19,935 ²	20,011 ²	20,077 ²	20,200 ²	20,320	
42 LESS: Unearned income	4,586 ²	4,592 ²	4,601 ²	4,548 ²	4,499 ²	4,523 ²	4,524 ²	4,545 ²	4,428	
43 Loan and lease reserve	34,336	34,356	34,318	34,352	34,498	34,439	34,351	34,108	33,925	
44 Other loans and leases, net	766,775 ²	763,727 ²	763,884 ²	762,782 ²	765,531 ²	763,561 ²	769,259 ²	770,607 ²	771,948	
45 All other assets	127,818 ²	125,462 ²	124,154 ²	119,758 ²	121,954 ²	120,564 ²	124,501 ²	121,937 ²	122,137	
46 Total assets	1,261,325 ²	1,251,892 ²	1,245,584 ²	1,233,016 ²	1,254,113 ²	1,231,008 ²	1,254,330 ²	1,244,819 ²	1,259,988	
47 Demand deposits	234,023	223,223	224,965	217,809	225,666 ²	213,082 ²	237,814 ²	230,206 ²	239,164	
48 Individuals, partnerships, and corporations	180,167	175,482	173,804	171,882	177,824	168,885	183,331	180,792	184,002	
49 States and political subdivisions	5,493	5,140	5,344	5,601	5,658	5,193	6,192	6,096	5,887	
50 U.S. government	4,581	1,460	3,852	2,190	1,364	3,716	3,716	3,427	3,139	
51 Depository institutions in the United States	24,947	25,261	24,805	23,154	23,529 ²	21,663 ²	27,731 ²	23,980 ²	26,991	
52 Banks in foreign countries	6,928	6,445	6,604	6,467	7,090	7,017	6,499	6,652	6,889	
53 Foreign governments and official institutions	810	848	651	755	809	763	1,035	689	1,199	
54 Certified and officers' checks	11,098	8,587	9,906	7,761	9,282	8,195	9,309	8,570	11,063	
55 Transaction balances other than demand deposits	62,477	61,824	61,228	60,792	62,753	62,306	62,399	62,574	62,235	
56 Nontransaction balances	535,335	535,904	536,595	535,801	536,090	536,826	536,098	536,529	534,985	
57 Individuals, partnerships, and corporations	498,289	499,007	499,467	498,327	499,014	499,662	498,785	498,816	497,334	
58 States and political subdivisions	25,345	25,159	25,088	25,357	25,022	25,292	25,381	25,425	25,370	
59 U.S. government	773	748	764	832	779	763	910	898	892	
60 Depository institutions in the United States	10,095	10,165	10,452	10,451	10,429	10,778	10,208	10,580	10,602	
61 Foreign governments, official institutions, and banks	833	825	824	834	846	831	815	810	788	
62 Liabilities for borrowed money	258,040 ²	259,414 ²	250,946 ²	245,596 ²	257,183 ²	242,752 ²	246,563 ²	242,417 ²	250,072	
63 Borrowings from Federal Reserve Banks	345	260	369	330	415	630	565	185	430	
64 Treasury tax-and-loan notes	14,033	20,490	16,626	16,895	16,117	5,382	12,394	22,168	23,170	
65 All other liabilities for borrowed money ²	243,662 ²	238,663 ²	233,952 ²	228,370 ²	240,651 ²	236,740 ²	233,604 ²	220,064 ²	226,321	
66 Other liabilities and subordinated note and debentures	92,020 ²	91,586 ²	92,244 ²	94,202 ²	92,820 ²	95,612 ²	91,834 ²	93,468 ²	94,630	
67 Total liabilities	1,181,895 ²	1,171,951 ²	1,165,978 ²	1,154,200 ²	1,174,513 ²	1,150,579 ²	1,174,709 ²	1,165,195 ²	1,181,087	
68 Residual (total assets minus total liabilities) ³	79,430	79,942	79,606	78,816	79,600	80,429	79,621	79,624	78,901	
MEMO										
69 Total loans and leases (gross) and investments adjusted ⁴	999,137 ²	996,311 ²	997,505 ²	993,858 ²	997,219 ²	993,510 ²	996,931 ²	997,157 ²	996,859	
70 Total loans and leases (gross) adjusted ⁴	810,888 ²	809,126 ²	806,763 ²	803,980 ²	806,082 ²	803,141 ²	807,319 ²	807,549 ²	807,677	
71 Time deposits in amounts of \$100,000 or more	172,558	172,597	172,906	172,866	171,172	172,264	172,002	173,729	173,501	
72 Loans sold outright to affiliates—total ⁵	1,708	1,718	1,778	1,812	1,731	1,699	1,557	1,500	1,366	
73 Commercial and industrial	1,248	1,263	1,321	1,352	1,270	1,245	1,126	1,080	1,057	
74 Other	459	455	456	460	461	454	431	420	309	
75 Nontransaction savings deposits (including MMDAs)	224,976	224,971	225,070	224,050	225,674	225,236	224,754	223,278	222,410	

1. Includes securities purchased under agreements to resell.

2. 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.

3. This is not a measure of equity capital for use in capital-adequacy analysis or for other analytic uses.

4. Exclusive of loans and federal funds transactions with domestic commercial banks.

5. 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 LARGE WEEKLY REPORTING COMMERCIAL BANKS IN NEW YORK CITY Assets and Liabilities

Millions of dollars, Wednesday figures except as noted

Account	1987								
	Nov. 4	Nov. 11	Nov. 18	Nov. 25	Dec. 2	Dec. 9	Dec. 16	Dec. 23	Dec. 30
1 Cash balances due from depository institutions	25,488	26,426	23,107	22,068	25,598	25,475	24,132	25,476	29,583
2 Total loans, leases and securities, net ¹	219,192 ²	214,775 ²	215,004 ²	210,788 ²	216,198 ²	210,923 ²	216,740 ²	211,881 ²	215,055 ²
<i>Securities</i>									
3 U.S. Treasury and government agency ²	0	0	0	0	0	0	0	0	0
4 Trading account ²	0	0	0	0	0	0	0	0	0
5 Investment account, by maturity	14,141	13,821	14,368	13,718	14,311	14,224	14,451	14,333	14,553
6 One year or less	1,441	1,469	1,517	1,498	1,452	1,417	1,523	1,245	1,381
7 Over one through five years	4,216	4,122	4,640	4,663	4,681	4,608	4,609	4,643	4,707
8 Over five years	8,483	8,230	8,212	7,557	8,178	8,199	8,319	8,445	8,465
9 Other securities ²	0	0	0	0	0	0	0	0	0
10 Trading account ²	0	0	0	0	0	0	0	0	0
11 Investment account	16,572	16,657	16,736	16,753	16,926	16,953	17,029	16,927	17,144
12 States and political subdivisions, by maturity	13,482	13,453	13,355	13,291	13,262	13,258	13,262	13,274	13,302
13 One year or less	788	795	786	775	874	880	865	879	868
14 Over one year	12,694	12,659	12,568	12,515	12,387	12,379	12,397	12,395	12,434
15 Other bonds, corporate stocks, and securities	3,090	3,203	3,381	3,462	3,664	3,694	3,766	3,653	3,842
16 Other trading account assets ²	0	0	0	0	0	0	0	0	0
<i>Loans and leases</i>									
17 Federal funds sold ³	31,439	29,539	30,165	26,826	30,182	26,163	28,858	24,645	26,753
18 To commercial banks	14,259	11,479	14,241	11,953	15,313	11,985	16,333	12,412	15,081
19 To nonbank brokers and dealers in securities	11,826	12,850	10,959	9,992	10,779	9,544	8,947	8,312	8,320
20 To others	5,354	5,209	4,965	4,881	4,090	4,635	3,578	3,921	3,352
21 Other loans and leases, gross	172,576 ²	170,326 ²	169,285 ²	169,035 ²	170,345 ²	169,153 ²	171,924 ²	171,384 ²	172,395 ²
22 Other loans, gross	168,068 ²	165,813 ²	164,796 ²	164,515 ²	165,860 ²	164,614 ²	167,378 ²	166,830 ²	167,830 ²
23 Commercial and industrial	59,181	58,562	57,841	56,954	57,463	57,105	58,195	58,010	58,447
24 Bankers acceptances and commercial paper	438	380	411	358	357	336	318	306	304
25 All other	2,313	2,329	2,353	2,373	2,389	2,407	2,424	2,441	2,463
26 U.S. addressees	42,374 ²	42,506 ²	42,653 ²	42,708 ²	42,972 ²	43,209 ²	43,668 ²	44,201 ²	44,699 ²
27 Non-U.S. addressees	58,742	58,182	57,430	56,596	57,105	56,769	57,878	57,704	58,142
28 Real estate loans	58,214	57,635	56,957	56,142	56,655	56,277	57,406	57,244	57,743
29 Revolving, home equity	529	547	473	455	450	491	472	460	400
30 All other	44,687 ²	44,836 ²	45,006 ²	45,080 ²	45,361 ²	45,616 ²	46,092 ²	46,642 ²	47,162 ²
31 To individuals for personal expenditures	21,331 ²	21,405 ²	21,037 ²	21,163 ²	21,180 ²	21,255 ²	21,451 ²	21,581 ²	21,747 ²
32 To depository and financial institutions	21,918 ²	21,804 ²	21,541 ²	21,380 ²	21,649 ²	21,727 ²	21,999 ²	21,897 ²	21,704 ²
33 Commercial banks in the United States	11,836 ²	12,222 ²	11,799 ²	11,997 ²	12,185 ²	12,088 ²	12,208 ²	12,253 ²	12,196 ²
34 Banks in foreign countries	3,287	2,784	2,968	2,460	2,487	2,682	2,342	2,625	2,316
35 Nonbank depository and other financial institutions	6,795	6,798	6,774	6,923	6,978	6,957	7,449	7,020	7,193
36 For purchasing and carrying securities	5,882	4,394	4,794	5,037	5,560	4,824	5,291	4,944	4,724
37 To finance agricultural production	331	324	342	300	297	307	323	284	282
38 To states and political subdivisions	7,721	7,697	7,770	7,745	7,665	7,502	7,423	7,347	7,386
39 To foreign governments and official institutions	742	638	664	625	663	610	712	657	597
40 All other	6,274 ²	6,152 ²	5,801 ²	6,230 ²	6,022 ²	5,667 ²	5,891 ²	5,468 ²	5,780 ²
41 Lease financing receivables	4,509	4,452	4,489	4,520	4,485	4,539	4,546	4,554	4,565
42 Less: Unearned income	1,346 ²	1,352 ²	1,365 ²	1,348 ²	1,329 ²	1,338 ²	1,346 ²	1,360 ²	1,365 ²
43 Loan and lease reserve	14,190	14,216	14,186	14,196	14,237	14,233	14,176	14,048	13,975
44 Other loans and leases, net	157,040 ²	154,758 ²	153,734 ²	153,491 ²	154,779 ²	153,583 ²	156,402 ²	155,975 ²	157,055 ²
45 All other assets ⁴	61,178 ²	58,434 ²	60,186 ²	55,869 ²	57,380 ²	53,896 ²	55,736 ²	51,836 ²	53,385 ²
46 Total assets	305,858	299,635	298,296	288,726	299,176	290,294	296,608	289,192	298,474
<i>Deposits</i>									
47 Demand deposits	63,618	56,801	60,251	54,185	56,287	53,403	62,863	58,495	63,743
48 Individuals, partnerships, and corporations	44,225	39,952	40,612	38,671	39,683	37,296	43,119	41,654	42,692
49 States and political subdivisions	879	1,066	889	791	912	846	968	810	758
50 U.S. government	870	261	717	367	192	187	595	566	593
51 Depository institutions in the United States	6,118	5,871	7,116	5,715	5,292	5,434	7,680	5,999	7,573
52 Banks in foreign countries	5,623	5,226	5,303	5,223	5,846	5,759	5,337	5,277	5,640
53 Foreign governments and official institutions	671	703	517	587	678	626	889	553	1,061
54 Certified and officers' checks	5,232	3,722	5,098	2,831	3,684	3,255	4,274	3,636	5,424
55 Transaction balances other than demand deposits (ATS, NOW, Super NOW, telephone transfers)	8,073	8,094	8,002	7,932	8,171	8,062	8,163	8,249	8,337
56 Nontransaction balances	101,446	101,376	101,404	101,097	101,566	101,144	101,300	101,225	101,540
57 Individuals, partnerships, and corporations	92,300	92,527	92,574	92,342	93,046	92,551	92,737	92,647	92,979
58 States and political subdivisions	6,794	6,530	6,542	6,481	6,238	6,326	6,248	6,127	6,122
59 U.S. government	67	55	57	56	57	60	59	50	50
60 Depository institutions in the United States	1,870	1,876	1,844	1,833	1,829	1,833	1,886	2,015	2,015
61 Foreign governments, official institutions, and banks	415	388	388	385	395	373	370	386	373
62 Liabilities for borrowed money	70,652	73,380	69,556	64,759	73,560	65,077	63,327	58,880	61,299
63 Borrowings from Federal Reserve Banks	0	0	0	0	0	0	0	0	0
64 Treasury tax-and-loan notes	3,283	5,007	4,222	4,327	4,173	1,269	3,602	5,570	5,642
65 All other liabilities for borrowed money ⁵	67,369	68,372	65,334	60,432	69,387	63,808	59,726	53,310	55,656
66 Other liabilities and subordinated note and debentures	38,767	36,398	35,763	37,632	36,196	39,044	37,553	38,953	40,347
67 Total liabilities	282,557	276,049	274,976	265,606	275,780	266,731	273,208	265,802	275,266
68 Residual (total assets minus total liabilities) ⁶	23,301	23,586	23,321	23,120	23,396	23,562	23,401	23,390	23,208
MEMO									
69 Total loans and leases (gross) and investments adjusted ^{1,7}	208,633 ²	206,641 ²	204,515 ²	202,383 ²	204,266 ²	202,420 ²	203,721 ²	202,624 ²	203,569 ²
70 Total loans and leases (gross) adjusted ¹	177,920 ²	176,163 ²	173,410 ²	171,912 ²	173,029 ²	171,243 ²	172,241 ²	171,363 ²	171,871 ²
71 Time deposits in amounts of \$100,000 or more	38,448	38,397	38,361	38,016	37,776	37,761	37,476	37,881	37,437

1. Excludes trading account securities.

2. Not available due to confidentiality.

3. Includes securities purchased under agreements to resell.

4. Includes trading account securities.

5. Includes federal funds purchased and securities sold under agreements to repurchase.

6. Not a measure of equity capital for use in capital adequacy analysis or for other analytic uses.

7. Exclusive of loans and federal funds transactions with domestic commercial banks.

NOTE: These data also appear in the Board's H.4.2 (504) release. For address, see inside front cover.

1.30 LARGE WEEKLY REPORTING U.S. BRANCHES AND AGENCIES OF FOREIGN BANKS¹ Assets and Liabilities

Millions of dollars, Wednesday figures

Account	1987								
	Nov. 4	Nov. 11	Nov. 18	Nov. 25	Dec. 2	Dec. 9	Dec. 16	Dec. 23	Dec. 30
1 Cash and due from depository institutions . . .	10,434	10,013	10,922	9,970	11,801	9,920	10,326	10,150	10,878
2 Total loans and securities . . .	97,204	96,081	98,486	96,156	96,785	99,280	100,996	102,108	106,201
3 U.S. Treasury and government agency securities . . .	7,466	7,290	7,558	7,328	7,681	7,626	7,511	7,370	7,056
4 Other securities . . .	7,402	7,516	7,456	7,450	7,394	7,299	7,341	7,474	7,811
5 Federal funds sold ² . . .	8,474	8,073	10,615	7,679	6,947	8,988	10,272	9,364	11,688
6 To commercial banks in the United States . . .	6,730	6,081	8,191	5,663	4,174	6,354	8,152	7,490	10,136
7 To others . . .	1,744	1,992	2,423	2,016	2,772	2,634	2,120	1,874	1,552
8 Other loans, gross . . .	73,860	73,202	72,857	73,698	74,763	75,367	75,872	77,899	79,645
9 Commercial and industrial . . .	49,111	47,548	48,072	47,700	48,231	49,280	49,217	50,530	52,252 ³
10 Bankers acceptances and commercial paper . . .	3,361	1,553	1,448	1,501	1,488	1,524	1,457	1,528	1,668
11 All other . . .	45,751	45,995	46,624	46,199	46,744	47,756	47,760	49,002	50,584 ⁴
12 U.S. addressees . . .	43,421	43,597	44,234	43,743	44,400	45,281	45,192	46,751	48,526
13 Non-U.S. addressees . . .	2,330	2,398	2,391	2,456	2,344	2,475	2,568	2,251	2,183
14 To financial institutions . . .	15,597	15,815	15,605	16,805	16,618	16,237	16,279	16,901	16,766
15 Commercial banks in the United States . . .	11,644	11,872	11,437	12,688	12,218	11,806	11,924	12,429	12,153
16 Banks in foreign countries . . .	1,012	913	1,133	1,093	1,288	1,272	1,223	1,208	1,245
17 Nonbank financial institutions . . .	2,940	3,029	3,035	3,024	3,112	3,159	3,132	3,264	3,368
18 To foreign governments and official institutions . . .	388	400	407	403	401	411	398	400	418
19 For purchasing and carrying securities . . .	2,062	2,339	1,655	1,738	1,991	1,971	2,200	2,201	2,121
20 All other . . .	6,701	7,100	7,118	7,052	7,522	7,468	7,777	7,866	7,962
21 Other assets (claims on nonrelated parties) . . .	28,927	31,776	31,619	31,805	31,787	31,798	31,264	31,427	31,500
22 Net due from related institutions . . .	15,953	14,071	13,816	16,081	14,182	13,879	12,498	13,256	12,676
23 Total assets . . .	152,517	151,942	154,844	154,012	154,555	154,877	155,084	156,942	161,255
24 Deposits or credit balances due to other than directly related institutions . . .	42,747	42,397	41,917	41,849	41,773	42,366	43,088	43,349	44,244
25 Transaction accounts and credit balances . . .	3,527	3,341	3,221	2,918	2,841	3,092	3,206	3,033	3,461
26 Individuals, partnerships, and corporations . . .	1,865	1,908	1,932	1,714	1,709	1,969	1,876	1,909	1,895
27 Other . . .	1,662	1,432	1,289	1,204	1,132	1,123	1,330	1,124	1,566
28 Nontransaction accounts . . .	39,219	39,056	38,696	38,931	38,932	39,274	39,882	40,315	40,783
29 Individuals, partnerships, and corporations . . .	31,889	31,954	31,655	31,912	31,234	31,430	32,290	32,718	33,190
30 Other . . .	7,330	7,102	7,042	7,018	7,699	7,844	7,592	7,597	7,593
31 Borrowings from other than directly related institutions . . .	56,494	54,297	57,873	58,464	58,777	56,187	56,865	54,285	56,753
32 Federal funds purchased ⁵ . . .	27,448	25,598	28,195	27,249	28,495	25,886	25,380	22,167	24,201
33 From commercial banks in the United States . . .	17,568	15,592	17,030	16,924	16,373	13,943	15,256	12,413	15,115
34 From others . . .	9,880	10,007	11,166	10,326	12,122	11,943	10,124	9,754	9,086
35 Other liabilities for borrowed money . . .	29,046	28,699	29,678	31,215	30,282	30,302	31,486	32,118	32,552
36 To commercial banks in the United States . . .	22,743	22,672	23,826	24,299	23,841	23,081	24,295	24,359	25,128
37 To others . . .	6,303	6,027	5,851	6,916	6,441	7,221	7,190	7,759	7,424
38 Other liabilities to nonrelated parties . . .	33,004	32,830	32,928	33,016	33,304	33,338	32,544	32,639	32,557
39 Net due to related institutions . . .	20,272	22,417	22,124	20,683	20,701	22,986	22,587	26,668	27,701
40 Total liabilities . . .	152,517	151,942	154,844	154,012	154,555	154,877	155,084	156,942	161,255
MEMO									
41 Total loans (gross) and securities adjusted ⁶ . . .	78,829	78,128	78,857	77,804	80,393	81,121	80,920	82,189	83,912
42 Total loans (gross) adjusted ⁶ . . .	63,960	63,322	63,843	63,026	65,317	66,195	66,068	67,344	69,044

1. Effective Jan. 1, 1986, the reporting panel includes 65 U.S. branches and agencies of foreign banks that include 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.

2. Includes securities purchased under agreements to resell.

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

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

5. Includes securities sold under agreements to repurchase.

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

1.31 GROSS DEMAND DEPOSITS Individuals, Partnerships, and Corporations¹

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

Type of holder	Commercial banks									
	1982 Dec.	1983 Dec.	1984 Dec.	1985 Dec. ^{3,4}	1986		1987			
					Sept.	Dec.	Mar.	June	Sept.	Dec.
1 All holders—Individuals, partnerships, and corporations	291.8	293.5	302.7	321.0	333.6	363.6	335.9	340.2	339.0	↑ n.a. ↓
2 Financial business	35.4	32.8	31.7	32.3	35.9	41.4	35.9	36.6	36.5	
3 Nonfinancial business	150.5	161.1	166.3	178.5	185.9	202.0	183.0	187.2	188.2	
4 Consumer	85.9	78.5	81.5	85.5	86.3	91.1	88.9	90.1	88.7	
5 Foreign	3.0	3.3	3.6	3.5	3.3	3.3	2.9	3.2	3.2	
6 Other	17.0	17.8	19.7	21.2	22.2	25.8	25.2	23.1	22.4	
	Weekly reporting banks									
	1982 Dec.	1983 Dec.	1984 Dec. ²	1985 Dec. ^{3,4}	1986		1987			
					Sept.	Dec.	Mar.	June	Sept.	Dec.
7 All holders—Individuals, partnerships, and corporations	144.2	146.2	157.1	168.6	174.7	195.1	178.1	179.3	179.1	187.0
8 Financial business	26.7	24.2	25.3	25.9	28.9	32.5	28.7	29.3	29.3	29.5
9 Nonfinancial business	74.3	79.8	87.1	94.5	94.8	106.4	94.4	94.8	96.0	100.8
10 Consumer	31.9	29.7	30.5	33.2	35.0	37.5	36.8	37.5	37.2	39.4
11 Foreign	2.9	3.1	3.4	3.1	3.2	3.3	2.8	3.1	3.1	3.3
12 Other	8.4	9.3	10.9	12.0	12.8	15.4	15.5	14.6	13.5	14.0

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.

1.32 COMMERCIAL PAPER AND BANKERS DOLLAR ACCEPTANCES OUTSTANDING

Millions of dollars, end of period

Instrument	1983 Dec.	1984 Dec.	1985 Dec.	1986 Dec.	1987 Dec.	1987					
						July	Aug.	Sept.	Oct.	Nov. ¹	Dec.
	Commercial paper (seasonally adjusted unless noted otherwise)										
1 All issuers	187,658	237,586	300,899	331,016	357,130	349,976	350,780	357,019	356,578	351,846	357,130
Financial companies ²											
Dealer-placed paper ³											
2 Total	44,455	56,485	78,443	100,207	101,958	108,470	109,941	114,435	109,020	105,197	101,958
3 Bank-related (not seasonally adjusted)	2,441	2,035	1,602	2,265	1,428	2,311	2,404	2,590	2,689	1,893	1,428
Directly placed paper ⁴											
4 Total	97,042	110,543	135,504	152,385	173,940	162,764	162,674	165,344	170,403	169,779	173,940
5 Bank-related (not seasonally adjusted)	35,566	42,105	44,778	40,860	43,173	46,354	45,487	46,815	46,249	45,353	43,173
6 Nonfinancial companies ⁵	46,161	70,558	86,952	78,424	81,232	78,742	78,165	77,240	77,155	76,870	81,232
	Bankers dollar acceptances (not seasonally adjusted) ⁶										
7 Total	78,309	78,364	68,413	64,974	70,565	68,495	68,645	68,771	71,891	71,068	70,565
Holder											
8 Accepting banks	9,355	9,811	11,197	13,423	10,942	10,664	10,870	10,521	10,856	10,701	10,942
9 Own bills	8,125	8,621	9,471	11,707	9,464	9,630	9,905	9,400	9,742	9,714	9,464
10 Bills bought	1,230	1,191	1,726	1,716	1,479	1,035	965	1,121	1,114	987	1,479
Federal Reserve Banks											
11 Own account	418	0	0	0	0	0	0	0	0	0	0
12 Foreign correspondents	729	671	937	1,317	965	1,463	1,397	1,467	1,400	1,134	965
13 Others	67,807	67,881	56,279	50,234	58,658	56,367	56,378	56,784	59,635	59,234	58,658
Basis											
14 Imports into United States	15,649	17,845	15,147	14,670	16,483	17,431	17,087	17,198	17,814	16,942	16,483
15 Exports from United States	16,880	16,305	13,204	12,960	15,227	14,659	14,967	15,046	15,949	15,435	15,227
16 All other	45,781	44,214	40,062	37,344	38,847	36,405	36,590	36,526	38,122	38,691	38,847

1. A change in the reporting panel in November resulted in a slight understatement of outstanding volume.

2. 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.

3. Includes all financial company paper sold by dealers in the open market.

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 October 1984, the number of respondents in the bankers acceptance survey were reduced from 340 to 160 institutions—those with \$50 million or more in total acceptances. The new reporting group accounts for over 95 percent of total acceptances activity.

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

Percent per year

Effective date	Rate	Effective Date	Rate	Month	Average rate	Month	Average rate
1985—Jan. 15	10.50	1987—Apr. 1	7.75	1985—Jan.	10.61	1986—Sept.	7.50
May 20	10.00	May 1	8.00	Feb.	10.50	Oct.	7.50
June 18	9.50	May 15	8.25	Mar.	10.50	Nov.	7.50
		Sept. 4	8.75	Apr.	10.50	Dec.	7.50
1986—Mar. 7	9.00	Oct. 7	9.25	May	10.31		
Apr. 21	8.50	Nov. 22	9.00	June	9.78	1987—Jan.	7.50
July 11	8.00		8.75	July	9.50	Feb.	7.50
Aug. 27	7.50			Aug.	9.50	Mar.	7.50
				Sept.	9.50	Apr.	7.75
				Oct.	9.50	May	8.14
				Nov.	9.50	June	8.25
				Dec.	9.50	July	8.25
						Aug.	8.25
				1986—Jan.	9.50	Sept.	8.70
				Feb.	9.50	Oct.	9.07
				Mar.	9.10	Nov.	8.78
				Apr.	8.83	Dec.	8.75
				May	8.50		
				June	8.50	1988—Jan.	8.50
				July	8.16		
				Aug.	7.90		

NOTE. These data also appear in the Board's H.15 (519) release. For address, see inside front cover.

1.35 INTEREST RATES Money and Capital Markets

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

Instrument	1985	1986	1987 ¹	1987			1988	1988, week ending				
				Oct.	Nov.	Dec.	Jan.	Jan. 1	Jan. 8	Jan. 15	Jan. 22	Jan. 29
MONEY MARKET RATES												
1 Federal funds ^{1,2}	8.10	6.80	6.66	7.29	6.69	6.77	6.83	6.81	7.02	6.81	6.89	6.66
2 Discount window borrowing ^{1,2,3}	7.69	6.33	5.66	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00
Commercial paper ^{4,5}												
3 1-month	7.94	6.62	6.73	7.38	6.77	7.76	6.76	7.45	6.85	6.80	6.75	6.66
4 3-month	7.95	6.49	6.81	7.89	7.17	7.61	6.87	7.30	6.95	6.92	6.85	6.75
5 6-month	8.01	6.39	6.84	7.96	7.17	7.49	6.92	7.22	7.00	7.00	6.91	6.78
Finance paper, directly placed ^{4,5}												
6 1-month	7.91	6.58	6.61	7.28	6.63	7.23	6.65	6.97	6.74	6.69	6.61	6.54
7 3-month	7.77	6.38	6.54	7.40	6.91	6.97	6.62	6.78	6.67	6.68	6.61	6.51
8 6-month	7.75	6.31	6.37	7.17	6.69	6.64	6.53	6.63	6.59	6.60	6.53	6.41
Bankers acceptances ^{5,6}												
9 3-month	7.92	6.39	6.74	7.85	7.07	7.48	6.77	7.17	6.89	6.83	6.73	6.61
10 6-month	7.96	6.29	6.77	7.92	7.07	7.41	6.83	7.14	6.97	6.93	6.76	6.63
Certificates of deposit, secondary market ⁷												
11 1-month	7.97	6.61	6.74	7.39	6.80	7.86	6.78	7.57	6.87	6.81	6.76	6.66
12 3-month	8.05	6.52	6.86	8.02	7.24	7.66	6.92	7.38	7.03	6.99	6.87	6.77
13 6-month	8.25	6.51	7.00	8.19	7.31	7.67	7.10	7.40	7.21	7.21	7.07	6.09
14 Eurodollar deposits, 3-month ⁸	8.28	6.71	7.06	8.29	7.41	7.86	7.11	7.69	7.23	7.23	7.11	7.03
U.S. Treasury bills ⁹												
Secondary market ⁹												
15 3-month	7.48	5.98	5.78	6.13	5.69	5.77	5.81	5.73	5.86	5.81	5.85	5.74
16 6-month	7.65	6.03	6.03	6.69	6.19	6.36	6.25	6.26	6.36	6.29	6.25	6.11
17 1-year	7.81	6.08	6.32	7.05	6.50	6.69	6.52	6.66	6.66	6.63	6.45	6.33
Auction average ¹⁰												
18 3-month	7.49	5.97	5.82	6.40	5.81	5.80	5.90	5.73	5.90	5.85	5.98	5.85
19 6-month	7.66	6.02	6.05	6.86	6.23	6.36	6.31	6.32	6.35	6.33	6.37	6.19
20 1-year	7.81	6.07	6.33	6.89	6.48	6.74	6.67	n.a.	n.a.	n.a.	6.67	n.a.
CAPITAL MARKET RATES												
U.S. Treasury notes and bonds ¹¹												
Constant maturities ¹²												
21 1-year	8.43	6.46	6.77	7.59	6.96	7.17	6.99	7.15	7.15	7.12	6.90	6.77
22 2-year	9.27	6.87	7.41	8.40	7.69	7.86	7.63	7.82	7.81	7.75	7.57	7.39
23 3-year	9.64	7.06	7.67	8.75	7.99	8.13	7.87	8.08	8.05	7.99	7.80	7.63
24 5-year	10.13	7.31	7.94	9.08	8.35	8.45	8.18	8.38	8.37	8.33	8.08	7.91
25 7-year	10.51	7.55	8.22	9.37	8.69	8.82	8.48	8.69	8.69	8.65	8.37	8.19
26 10-year	10.62	7.68	8.39	9.52	8.86	8.99	8.67	8.85	8.84	8.84	8.57	8.39
27 20-year	10.97	7.85	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
28 30-year	10.79	7.80	8.58	9.61	8.95	9.12	8.83	8.95	8.98	9.01	8.74	8.56
Composite ¹³												
29 Over 10 years (long-term)	10.75	8.14	8.63	9.61	8.99	9.12	8.82	8.96	9.00	9.01	8.72	8.55
State and local notes and bonds												
Moody's series ¹⁴												
30 Aaa	8.60	6.95	7.14	7.90	7.50	7.45	7.29	n.a.	7.40	7.35	7.25	7.15
31 Baa	9.58	7.76	8.17	8.85	8.47	8.42	8.12	n.a.	8.40	8.30	8.00	7.80
32 Bond Buyer series ¹⁵	9.11	7.32	7.64	8.70	7.95	7.96	7.70	n.a.	7.86	7.83	7.61	7.51
Corporate bonds												
Seasoned issues ¹⁶												
33 All industries	12.05	9.71	9.91	10.97	10.54	10.59	10.37	10.53	10.49	10.48	10.34	10.16
34 Aaa	11.37	9.02	9.38	10.52	10.01	10.11	9.88	10.06	10.00	10.00	9.88	9.64
35 Aa	11.82	9.47	9.68	10.74	10.27	10.33	10.09	10.25	10.19	10.19	10.06	9.90
36 A	12.28	9.95	9.99	10.98	10.63	10.62	10.43	10.58	10.54	10.52	10.41	10.58
37 Baa	12.72	10.39	10.58	11.62	11.23	11.29	11.07	11.24	11.22	11.19	11.02	10.85
38 A-rated, recently-offered utility bonds ¹⁷	12.06	9.61	9.95	11.07	10.39	10.42	10.05	10.25	10.30	9.99	9.92	9.76
MEMO: Dividend/price ratio ¹⁸												
39 Preferred stocks	10.49	8.76	8.37	8.99	9.11	9.08	9.04	9.12	9.14	9.11	8.99	8.93
40 Common stocks	4.25	3.48	3.08	3.25	3.66	3.71	3.66	3.66	3.51	3.70	3.75	3.66

1. Weekly and monthly 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	1985	1986	1987	1987								1988
				May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
	Prices and trading (averages of daily figures)											
<i>Common stock prices</i>												
1 New York Stock Exchange (Dec. 31, 1965 = 50)	108.09	136.00	161.70	163.00	169.58	174.28	184.18	178.39	157.13	137.21	134.88	140.55
2 Industrial	123.79	155.85	195.31	198.78	206.61	214.12	226.49	219.52	189.86	163.42	162.19	168.47
3 Transportation	104.11	119.87	140.39	141.30	150.39	157.49	164.02	158.58	140.95	117.57	115.85	121.20
4 Utility	56.75	71.36	74.29	71.64	74.25	74.18	78.20	76.13	73.27	69.86	67.39	70.01
5 Finance	114.21	147.19	146.48	145.97	152.73	152.27	160.94	154.08	137.35	118.30	111.47	119.40
6 Standard & Poor's Corporation (1941-43 = 10) ¹	186.84	236.34	286.83	289.12	301.36	310.09	329.36	318.66	280.16	245.01	240.96	250.48
7 American Stock Exchange ² (Aug. 31, 1973 = 50)	229.10	264.38	316.61	328.77	334.49	348.68	361.52	353.72	306.34	249.42	248.52	267.29
<i>Volume of trading (thousands of shares)</i>												
8 New York Stock Exchange	109,191	141,385	188,642	170,898	163,380	180,356	193,477	177,319	277,026	179,481	178,517	174,754
9 American Stock Exchange	8,355	11,846	13,832	11,655	12,813	12,857	13,604	12,381	18,173	11,268	13,422	9,853
	Customer financing (end-of-period balances, in millions of dollars)											
10 Margin credit at broker-dealers ³	28,390	36,840	31,990	38,890	38,420	40,250	41,640	44,170	38,250	34,180	31,990	31,320
<i>Free credit balances at brokers⁴</i>												
11 Margin-account ⁵	2,715	4,880	4,750	4,355	3,680	4,095	4,240	4,270	8,415	6,700	4,750	4,675
12 Cash-account	12,840	19,000	15,640	16,985	15,405	15,930	16,195	15,895	18,455	15,360	15,640	15,270
	Margin requirements (percent of market value and effective date) ⁶											
	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	1985	1986	1987										
			Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.
Savings and loan associations													
1 Assets	948,781	963,316	935,438 ^r	936,858 ^r	939,721 ^r	944,229 ^r	952,671 ^r	949,069 ^r	949,238 ^r	955,253	956,744	973,992	975,809
2 Mortgage-backed securities	97,303	123,257	129,338 ^r	128,856	129,274 ^r	134,746 ^r	141,023 ^r	142,241 ^r	140,897 ^r	144,058	146,247	150,230	151,986
3 Cash and investment securities ¹	126,712	142,700	133,028 ^r	135,885 ^r	138,746 ^r	136,370	138,303 ^r	138,125 ^r	138,520 ^r	137,323	131,729	139,675	135,297
4 Other	238,833	251,769	261,858 ^r	263,829 ^r	266,393 ^r	274,812 ^r	283,644 ^r	285,473 ^r	287,550 ^r	292,737	295,225	301,229	304,686
5 Liabilities and net worth	948,781	963,316	935,438 ^r	936,858 ^r	939,721 ^r	944,229 ^r	952,671 ^r	949,069 ^r	949,238 ^r	955,253	956,744	973,992	975,809
6 Savings capital	750,071	741,081	721,714 ^r	722,226 ^r	722,548	716,798	718,633	715,662	716,389	717,259	721,409	727,274	730,324
7 Borrowed money	138,798	159,742	153,381 ^r	152,176 ^r	158,192 ^r	165,883 ^r	171,279 ^r	175,394 ^r	174,357	178,642	180,360	190,706	188,778
8 FHLBB	73,888	80,194	75,552	75,671	76,469	77,857	78,583	79,188	78,888	79,546	80,848	83,303	84,421
9 Other	64,910	79,548	77,829 ^r	76,505 ^r	81,723 ^r	88,026 ^r	92,696 ^r	96,206 ^r	95,469	99,096	99,512	107,403	104,357
10 Other	19,045	20,071	19,829 ^r	21,878 ^r	18,958	20,869 ^r	22,628 ^r	19,584 ^r	20,682 ^r	21,941	19,158	20,996	21,587
11 Net worth ²	41,064	42,423	40,514 ^r	40,579 ^r	40,023 ^r	40,678 ^r	40,127 ^r	38,428 ^r	37,809 ^r	37,406	35,814	35,003	35,106
FSLIC-insured federal savings banks													
12 Assets	131,868	210,562	235,428	235,763	241,418	246,277	253,006	264,106	268,813	272,088	272,789	276,490	279,153
13 Mortgages	72,355	113,638	136,782 ^r	136,505 ^r	138,882	140,854	144,581	150,421	152,881 ^r	154,058	154,658	156,460	158,874
14 Mortgage-backed securities	15,676	29,766	33,570	34,634	36,088	37,500	39,371	40,969	42,713 ^r	43,531	44,422	45,132	45,255
15 Other	11,723	19,034	15,769	16,060	16,605	17,034	17,200	17,924	17,546	17,779	17,559	17,383	17,325
16 Liabilities and net worth	131,868	210,562	235,428	235,763	241,418	246,277	253,006	264,106	268,813	272,088	272,789	276,490	279,153
17 Savings capital	103,462	157,872	176,938 ^r	177,355 ^r	178,672	180,637	182,802	189,998	193,890	194,853	195,213	197,296	199,114
18 Borrowed money	19,323	37,329	40,614	39,777	43,919	46,125	49,896	53,255	53,652	55,660	56,540	57,551	58,276
19 FHLBB	10,510	19,897	20,730	20,226	21,104	21,718	22,788	24,486	24,981	25,546	26,287	27,350	27,947
20 Other	8,813	17,432	19,884	19,551	22,815	24,407	27,108	28,769	28,671	30,114	30,253	30,201	30,329
21 Other	2,732	4,263	5,308 ^r	5,484 ^r	5,264 ^r	5,547	6,044	5,987 ^r	6,142 ^r	6,454	5,630	6,308	6,361
22 Net worth	6,351	11,098	12,774	13,151	13,564	13,978	14,272	14,871	15,134	15,123	15,408	15,348	15,415
Savings banks													
23 Assets	216,776	236,866	235,603	238,074	240,739	243,454	245,906	244,760	246,833	249,888	251,472	255,989	260,600
Loans													
24 Mortgage	110,448	118,323	119,199	119,737	121,178	122,769	124,936	128,217	129,624	130,721	133,298	135,317	137,044
25 Other	30,876	35,167	36,122	37,207	38,012	37,136	37,313	35,200	35,591	36,793	36,134	36,471	37,189
Securities													
26 U.S. government	13,111	14,209	13,332	13,525	13,631	13,743	13,650	13,549	13,498	13,720	13,122	13,817	15,694
27 Mortgage-backed securities	19,481	25,836	26,220	26,893	27,463	28,700	28,739	27,785	28,252	28,913	29,655	30,202	31,144
28 State and local government	2,323	2,185	2,180	2,168	2,041	2,063	2,053	2,059	2,050	2,038	2,023	2,034	2,046
29 Corporate and other	21,199	20,459	19,795	19,770	19,598	19,768	19,956	18,803	18,821	18,573	18,431	18,062	17,583
30 Cash	6,225	6,894	5,239	5,143	5,703	5,308	5,176	4,939	4,806	4,823	4,484	5,529	5,063
31 Other assets	13,113	13,793	13,516	13,631	13,713	13,967	14,083	14,208	14,191	14,307	14,325	14,557	14,837
32 Liabilities	216,776	236,866	235,603	238,074	240,739	243,454	245,906	244,760	246,833	249,888	251,472	255,989	260,600
Deposits													
33 Regular	185,972	192,194	191,441	192,559	193,693	193,347	194,742	193,274	194,549	195,895	196,824	199,336	202,030
34 Ordinary savings	181,921	186,345	186,385	187,597	188,432	187,791	189,048	187,669	188,783	190,335	191,376	193,777	196,724
35 Time	33,018	37,717	38,467	39,370	40,558	41,326	41,967	42,178	41,928	41,767	41,773	42,045	42,493
36 Other	103,311	100,809	100,604	100,922	100,896	100,308	100,607	100,604	102,603	105,133	107,063	109,486	112,231
37 Other	4,051	5,849	5,056	4,962	5,261	5,556	5,694	5,605	5,766	5,560	5,448	5,559	5,306
38 Other liabilities	17,414	25,274	24,710	25,663	27,003	29,105	30,436	30,515	31,655	32,467	32,827	34,226	36,167
39 General reserve accounts	12,823	18,105	18,236	18,486	18,830	19,423	19,603	19,549	19,718	20,471	20,407	20,365	21,133

1.37—Continued

Account	1985	1986	1987										
			Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.
Credit unions ⁴													
40 Total assets/liabilities and capital	118,010	147,726	149,383	149,751	153,253	154,549	156,086	160,644	↑	↑	↑	↑	↑
41 Federal	77,861	95,483	96,801	96,753	98,799	99,751	100,153	104,150	↑	↑	↑	↑	↑
42 State	40,149	52,243	52,586	52,998	54,454	54,798	55,933	56,494	↑	↑	↑	↑	↑
43 Loans outstanding ..	73,513	86,137	85,984	85,651	86,101	87,089	87,765	90,912	n.a.	n.a.	n.a.	n.a.	n.a.
44 Federal	47,933	55,304	55,313	54,912	55,118	55,740	55,952	58,432	↑	↑	↑	↑	↑
45 State	25,580	30,833	30,671	30,739	30,983	31,349	31,813	32,480	↑	↑	↑	↑	↑
46 Savings	105,963	134,327	135,907	136,441	138,810	140,014	141,635	148,283	↑	↑	↑	↑	↑
47 Federal	70,926	87,954	89,717	89,485	91,042	92,012	97,189	96,137	↑	↑	↑	↑	↑
48 State	35,037	46,373	46,130	46,956	47,768	48,002	49,248	52,146	↑	↑	↑	↑	↑
Life insurance companies													
49 Assets	825,901	937,551	948,665	961,937	978,455	978,455	985,942	995,576	1,005,592	1,017,018	1,026,919	1,021,148	↑
Securities													
50 Government	75,230	84,640	84,923	88,003	90,337	89,711	89,554	87,279	88,199	89,924	89,408	90,782	↑
51 United States	51,700	59,033	59,596	62,724	65,661	64,621	64,201	61,405	62,461	64,150	63,352	64,880	↑
52 State and local ..	9,708	11,659	11,245	11,315	10,860	11,068	11,208	11,485	11,277	11,190	11,087	11,363	↑
53 Foreign ⁶	13,822	13,948	14,082	13,964	13,816	14,022	14,145	14,389	14,461	14,584	14,969	14,539	↑
54 Business	423,712	492,807	504,582	514,328	519,766	522,097	528,789	537,507	555,423	551,701	558,787	549,426	↑
55 Bonds	346,216	401,943	408,788	415,004	417,933	420,474	425,788	432,095	448,146	442,604	451,453	455,678	↑
56 Stocks	77,496	90,864	95,794	99,324	101,833	101,623	103,001	105,412	107,277	109,097	107,334	93,748	↑
57 Mortgages	171,797	193,842	194,213	194,935	195,743	197,315	198,760	200,382	201,297	202,241	204,264	206,507	↑
58 Real estate	28,822	31,615	31,718	32,003	31,834	32,011	32,149	32,357	32,699	32,992	33,048	33,235	↑
59 Policy loans	54,369	54,055	53,832	53,806	53,652	53,572	53,468	53,378	53,338	53,330	53,422	53,413	↑
60 Other assets	71,971	80,592	79,397	78,842	82,105	83,749	83,222	84,390	85,420	86,830	87,991	87,785	↑

1. Holdings of stock of the Federal Home Loan Banks are in "other assets."

2. Includes net undistributed income accrued by most associations.

3. Excludes checking, club, and school accounts.

4. Data include all federally insured credit unions, both federal and state chartered, serving natural persons.

5. Direct and guaranteed obligations. Excludes federal agency issues not guaranteed, which are shown in the table under "Business" securities.

6. Issues of foreign governments and their subdivisions and bonds of the International Bank for Reconstruction and Development.

NOTE. *Savings and loan associations:* Estimates by the FHLBB for all associations in the United States based on annual benchmarks for non-FSLIC-insured associations and the experience of FSLIC-insured associations.

FSLIC-insured federal savings banks: Estimates by the FHLBB for federal savings banks insured by the FSLIC and based on monthly reports of federally insured institutions.

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."

1.38 FEDERAL FISCAL AND FINANCING OPERATIONS

Millions of dollars

Type of account or operation	Fiscal year 1986	Fiscal year 1987 ¹	Calendar year					
			1987					1988
			Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
<i>U.S. budget²</i>								
1 Receipts, total.....	769,091	854,143	60,213	92,410	62,354	56,987	85,525	81,791
2 On-budget.....	568,862	640,741	43,511	73,755	45,992	40,630	67,645	60,645
3 Off-budget.....	200,228	213,402	16,703	18,656	16,362	13,357	17,880	21,146
4 Outlays, total.....	990,258	1,004,586	81,890	76,980	93,095	83,920	109,741	65,706
5 On-budget.....	806,760	810,754	65,021	60,337	76,910	67,150	77,845	66,493
6 Off-budget.....	183,498	193,832	16,869	16,643	16,185	16,770	31,896	-787
7 Surplus, or deficit (-), total.....	-221,167	-150,444	-21,677	15,430	-30,741	-26,934	-24,216	16,085
8 On-budget.....	-237,898	-170,014	-21,511	13,417	-30,918	-26,520	-10,200	-5,848
9 Off-budget.....	16,731	19,570	-166	2,013	176	-414	-14,016	21,933
Source of financing (total)								
10 Borrowing from the public.....	236,187	150,070	33,060	-8,060	27,282	23,603	9,766	5,281
11 Operating cash (decrease, or increase (-)).....	-14,324	-5,052	-3,219	-13,800	-1,879	17,164	-1,218	-17,555
12 Other.....	-696	5,426	-8,165	6,430	5,338	-13,833	15,668	-3,810
MEMO								
13 Treasury operating balance (level, end of period).....	31,384	36,436	22,635	36,436	38,315	21,151	22,369	39,924
14 Federal Reserve Banks.....	7,514	9,120	3,764	9,120	8,898	3,595	5,313	10,276
15 Tax and loan accounts.....	23,870	27,316	18,872	27,316	29,416	17,556	17,056	29,648

1. FY 1987 total outlays and deficit do not correspond to the monthly data because the *Monthly Treasury Statement* has not completed the monthly distribution of revisions reflected in the fiscal year total in *The Budget of the U.S. Government, Fiscal Year 1989*.

2. 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.

3. 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 OUTLAYS¹

Millions of dollars

Source or type	Fiscal year 1986	Fiscal year 1987 ²	Calendar year						
			1986		1987		1987		1988
			H1	H2	H1	H2	Nov.	Dec.	Jan.
RECEIPTS									
1 All sources	769,091	854,143	394,345	387,524	447,282	421,712	56,987	85,525	81,791
2 Individual income taxes, net	348,959	392,557	169,444	183,156	205,157	192,575	25,039	36,537	43,987
3 Withheld	314,803	322,463	153,919	164,071	156,760	170,203	24,888	34,020	24,979
4 Presidential Election Campaign Fund	36	33	31	4	30	4	0	0	0
5 Nonwithheld	105,994	142,957	78,981	27,733	112,421	31,223	1,664	3,309	19,262
6 Refunds	71,873	72,896	63,488	8,652	64,052	8,853	1,512	793	255
Corporation income taxes									
7 Gross receipts	80,442	102,859	41,946	42,108	52,396	52,821	2,558	18,633	4,450
8 Refunds	17,298	18,933	9,557	8,230	10,881	7,119	891	884	820
9 Social insurance taxes and contributions, net	283,901	303,318	156,714	134,006	163,519	143,755	23,756	23,361	28,162
10 Employment taxes and contributions ³	255,062	273,185	139,706	122,246	146,696	130,388	20,731	22,735	26,920
11 Self-employment taxes and contributions ³	11,840	13,987	10,581	1,338	12,020	1,889	144	0	819
12 Unemployment insurance	24,098	25,418	14,674	9,328	14,514	10,977	2,661	170	883
13 Other net receipts ⁴	4,742	4,715	2,333	2,429	2,310	2,390	364	457	360
14 Excise taxes	32,919	32,510	15,944	15,947	15,845	17,680	2,854	3,838	2,393
15 Customs deposits	13,327	15,032	6,369	7,282	7,129	7,993	1,247	1,361	1,195
16 Estate and gift taxes	6,958	7,493	3,487	3,649	3,818	3,610	617	540	531
17 Miscellaneous receipts ⁵	19,884	19,307	10,002	9,605	10,299	10,399	1,807	2,141	1,893
OUTLAYS									
18 All types	990,231	1,004,586	486,058 ⁶	505,980 ⁶	502,206 ⁶	532,045 ⁶	83,920 ⁷	109,741 ⁷	65,706
19 National defense	273,375	281,999	135,367	138,544	142,886	147,009	21,366	29,070	19,895
20 International affairs	14,152	11,649	5,384	8,876	4,374	4,589	65	517	1,074
21 General science, space, and technology	8,976	9,216	12,519	4,594	4,324	5,441	867	937	773
22 Energy	4,735	4,115	2,484	2,735	2,335	1,531	316	316	247
23 Natural resources and environment	13,639	13,363	6,245	7,141	6,175	7,452	1,121	1,371	1,097
24 Agriculture	31,449	27,356	14,482	16,160	11,824	13,775	3,139	1,278	2,275
25 Commerce and housing credit	4,823	6,182	860	3,647	4,893	1,402	585	-688	1,216
26 Transportation	28,117	26,228	12,658	14,745	12,113	14,096	2,304	2,287	1,990
27 Community and regional development	7,233	5,051	3,169	3,494	3,108	2,358	450	701	452
28 Education, training, employment, and social services	30,585	29,724	14,712	15,287	14,182	14,590	3,045	2,301	2,771
29 Health	35,935	39,968	17,872	18,795	20,318	20,750	3,744	3,176	3,577
30 Social security and medicare	268,921	282,473	135,214	138,299	142,864	158,469	23,153	40,992	6,951
31 Income security	119,796	123,250	60,786	60,628	62,248	61,449	9,595	11,485	10,220
32 Veterans benefits and services	26,356	26,782	12,193	14,447	12,264	14,974	899	3,773	1,207
33 Administration of justice	6,603	7,548	3,352	3,360	3,626	4,251	649	774	706
34 General government	6,104	5,948	3,566	2,786	3,344	3,617	1,085	1,577	-52
35 General-purpose fiscal assistance	6,431	1,621	2,179	2,886	337	1,175	148	129	403
36 Net interest ⁸	136,008	138,570	68,054	65,816	70,110	71,882	13,215	12,177	13,551
37 Undistributed offsetting receipts ⁹	-33,007	-36,455	-17,193	-17,376	-18,104	-18,149	-2,990	-2,770	-2,647

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 1988*.

1.40 FEDERAL DEBT SUBJECT TO STATUTORY LIMITATION

Billions of dollars

Item	1985		1986				1987		
	Sept. 30	Dec. 31	Mar. 31	June 30	Sept. 30	Dec. 31	Mar. 31	June 30	Sept. 30
1 Federal debt outstanding	1,827.5	1,950.3	1,991.1	2,063.6	2,129.5	2,218.9	2,250.7	2,313.1	2,354.3
2 Public debt securities	1,823.1	1,945.9	1,986.8	2,059.3	2,125.3	2,214.8	2,246.7	2,309.3	2,350.3
3 Held by public	1,506.6	1,597.1	1,634.3	1,684.9	1,742.4	1,811.7	1,839.3	1,871.1	1,893.1
4 Held by agencies	316.5	348.9	352.6	374.4	382.9	403.1	407.5	438.1	457.2
5 Agency securities	4.4	4.4	4.3	4.3	4.2	4.0	4.0	3.8	4.0
6 Held by public	3.3	3.3	3.2	3.2	3.2	3.0	2.9	2.8	3.0
7 Held by agencies	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.0	1.0
8 Debt subject to statutory limit	1,823.8	1,932.4	1,973.3	2,060.0	2,111.0	2,200.5	2,232.4	2,295.0	2,336.0
9 Public debt securities	1,822.5	1,931.1	1,972.0	2,058.7	2,109.7	2,199.3	2,231.1	2,293.7	2,334.7
10 Other debt ¹	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
11 MEMO: Statutory debt limit	1,823.8	2,078.7	2,078.7	2,078.7	2,111.0	2,300.0	2,300.0	2,320.0	2,800.0

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	1983	1984	1985	1986	1986	1987		
					Q4	Q1	Q2	Q3
1 Total gross public debt	1,410.7	1,663.0	1,945.9	2,214.8	2,214.8	2,246.7	2,309.3	2,350.3
By type								
2 Interest-bearing debt	1,400.9	1,660.6	1,943.4	2,212.0	2,212.0	2,244.0	2,306.7	2,347.8
3 Marketable	1,050.9	1,247.4	1,437.7	1,619.0	1,619.0	1,635.7	1,659.0	1,676.0
4 Bills	343.8	374.4	399.9	426.7	426.7	406.2	391.0	378.3
5 Notes	573.4	705.1	812.5	927.5	927.5	955.3	984.4	1,005.1
6 Bonds	133.7	167.9	211.1	249.8	249.8	259.3	268.6	277.6
7 Nonmarketable ¹	350.0	413.2	505.7	593.1	593.1	608.3	647.7	671.8
8 State and local government series	36.7	44.4	87.5	110.5	110.5	118.5	125.4	129.0
9 Foreign issues ²	10.4	9.1	7.5	4.7	4.7	4.9	5.1	4.4
10 Government	10.4	9.1	7.5	4.7	4.7	4.9	5.1	4.4
11 Public	0	0	0	0	0	0	0	0
12 Savings bonds and notes	70.7	73.1	78.1	90.6	90.6	93.0	95.2	97.0
13 Government account series ³	231.9	286.2	332.2	386.9	386.9	391.4	421.6	440.7
14 Non-interest-bearing debt	9.8	2.3	2.5	2.8	2.8	2.7	2.6	2.5
By holder ⁴								
15 U.S. government agencies and trust funds	236.3	289.6	348.9	403.1	403.1	407.5	438.1	457.2
16 Federal Reserve Banks	151.9	160.9	181.3	211.3	211.3	196.4	212.3	211.9
17 Private investors	1,022.6	1,212.5	1,417.2	1,602.0	1,602.0	1,641.4	1,657.7	1,682.6
18 Commercial banks	188.8	183.4	192.2	230.1 ⁵	230.1 ⁵	232.0	237.1	250.5
19 Money market funds	22.8	25.9	25.1	28.6	28.6	18.8	20.6	n.a.
20 Insurance companies	56.7	76.4	95.8	106.9	106.9	n.a.	n.a.	n.a.
21 Other companies	39.7	50.1	59.0	68.8	68.8	73.4	78.7	80.2
22 State and local Treasuries	150.5 ⁶	173.4 ⁶	235.8 ⁶	273.1 ⁶	273.1 ⁶	n.a.	n.a.	n.a.
Individuals								
23 Savings bonds	71.5	74.5	79.8	92.3	92.3	94.7	96.8	98.5
24 Other securities	61.9	69.3	75.0	70.5	70.5	68.3	68.6	70.4
25 Foreign and international ⁵	166.3	192.9	212.5	251.5	251.5	250.7	270.1	268.4
26 Other miscellaneous investors ⁶	264.4 ⁶	366.6 ⁶	442.0 ⁶	486.0 ⁶	486.0 ⁶	n.a.	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 Transactions¹

Par value; averages of daily figures, in millions of dollars

Item	1985	1986	1987 ²	1987		1988	1987 and 1988					
				Nov.	Dec. ³		Dec. 23 ⁴	Dec. 30 ⁴	Jan. 6	Jan. 13	Jan. 20	Jan. 27
Immediate delivery ²												
1 U.S. Treasury securities	75,331	95,445	109,866	95,689	75,157	108,588	81,517	54,635	82,922	99,913	111,025	111,057
By maturity												
2 Bills	32,900	34,247	37,853	30,259	25,227	31,965	25,862	19,753	25,198	30,252	38,800	30,052
3 Other within 1 year	1,811	2,115	3,266	4,070	2,965	3,788	2,488	3,027	4,389	3,287	3,665	3,564
4 1-5 years	18,361	24,667	27,857	28,364	20,802	28,717	24,191	17,076	20,836	26,382	26,401	29,863
5 5-10 years	12,703	20,456	23,949	19,153	15,796	27,346	17,507	9,365	19,905	25,196	26,979	28,853
6 Over 10 years	9,556	13,961	16,922	13,844	10,367	16,773	11,469	5,415	12,594	14,797	15,180	17,726
By type of customer												
7 U.S. government securities dealers	3,336	3,670	2,923	1,894	2,089	2,757	2,866	1,775	2,023	2,492	2,975	2,726
8 U.S. government securities brokers	36,222	49,558	61,493	55,448	43,458	63,586	46,317	28,602	48,800	61,263	63,180	63,046
9 All others ³	35,773	42,218	45,449	38,346	29,609	42,244	32,334	24,257	32,098	36,157	44,869	44,285
10 Federal agency securities	11,640	16,748	18,882	17,919	14,394	18,103	12,262	11,763	15,867	16,761	19,410	16,341
11 Certificates of deposit	4,016	4,355	4,106	3,392	3,019	4,723	2,870	2,819	6,057	4,172	4,471	3,996
12 Bankers acceptances	3,242	3,272	2,966	2,727	2,259	3,201	1,938	1,804	3,841	2,950	3,059	3,069
13 Commercial paper	12,717	16,660	17,104	16,007	15,163	19,442	14,625	11,229	19,199	18,562	20,279	17,654
Futures contracts ⁴												
14 Treasury bills	5,561	3,311	3,224	2,774	2,342	2,783	1,451	1,708	1,438	2,517	3,383	3,105
15 Treasury coupons	6,085	7,175	8,956	8,489	7,364	9,410	7,511	3,993	7,704	9,512	8,321	9,792
16 Federal agency securities	252	16	5	2	5	1	0	25	0	0	0	0
Forward transactions ⁵												
17 U.S. Treasury securities	1,283	1,876	2,061	2,167	1,097	1,698	1,632	360	1,567	1,343	1,016	1,690
18 Federal agency securities	3,857	7,831	9,824	7,191	5,704	6,545	6,268	3,364	3,978	7,464	8,615	4,972

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 Financing¹

Averages of daily figures, in millions of dollars

Item	1985	1986	1987	1987		1988	1987 and 1988				
				Nov.	Dec. ²	Jan.	Dec. 30 ²	Jan. 6	Jan. 13	Jan. 20	Jan. 27
Positions											
Net immediate ²											
1 U.S. Treasury securities	7,391	12,912	-6,258	-6,865	-8,657	-13,257	-7,310	11,424	-15,083	-12,145	-13,476
2 Bills	10,075	12,761	4,325	5,702	2,506	2,269	1,529	179	-340	4,641	3,700
3 Other within 1 year	1,050	3,706	1,556	-565	-564	-712	-1,238	-1,639	-961	-629	-79
4 1-5 years	5,154	9,146	592	1,750	785	-61	5,486	4,351	634	-1,391	-1,994
5 5-10 years	-6,202	-9,505	-6,560	-6,214	-3,565	-5,615	-4,695	-5,321	-4,869	-5,354	-617
6 Over 10 years	-2,686	-3,197	-6,172	-7,538	-7,819	-9,138	-8,392	-8,994	-9,547	-9,413	-8,933
7 Federal agency securities	22,860	32,984	31,900	29,108	25,314	23,944	22,226	23,375	24,374	24,630	23,164
8 Certificates of deposit	9,192	10,485	8,187	6,821	6,815	5,863	7,844	7,654	6,040	5,451	5,289
9 Bankers acceptances	4,586	5,526	3,661	3,151	2,409	2,246	2,838	2,573	2,056	2,191	2,321
10 Commercial paper	5,570	8,089	7,492	7,729	7,953	5,533	9,095	6,873	5,054	5,528	5,213
Futures positions											
11 Treasury bills	-7,322	-18,059	-3,372	1,158	450	-2,162	-1,354	-2,159	-1,411	-2,125	-2,727
12 Treasury coupons	4,465	3,473	5,989	9,170	8,179	7,829	7,709	8,189	8,833	8,342	7,223
13 Federal agency securities	-722	-153	-95	-90	-84	0	-72	0	0	0	0
Forward positions											
14 U.S. Treasury securities	-911	-2,144	-1,190	145	-1,641	-1,174	-315	-1,364	-1,302	-2,287	-609
15 Federal agency securities	-9,420	-11,840	-18,817	-18,489	-15,024	-14,389	-12,499	-13,870	-15,875	-14,933	-13,015
Financing ³											
Reverse repurchase agreements ⁴											
16 Overnight and continuing	68,035	98,954	n.a.	117,696	n.a.	126,667	121,267	128,224	122,371	125,177	131,187
17 Term	80,509	108,693	n.a.	164,332	n.a.	155,658	130,567	145,945	150,236	153,567	n.a.
Repurchase agreements ⁵											
18 Overnight and continuing	101,410	141,735	n.a.	152,504	n.a.	160,399	149,481	162,475	153,439	162,704	n.a.
19 Term	70,076	102,640	n.a.	138,724	n.a.	122,464	108,767	114,106	115,756	118,393	n.a.

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	1984	1985	1986	1987					
				July	Aug.	Sept.	Oct.	Nov.	Dec.
1 Federal and federally sponsored agencies	271,220	293,905	307,361	313,859	316,940	320,789	328,990	334,678	↑
2 Federal agencies	35,145	36,390	36,958	36,963	37,845	37,177	37,207	37,303	
3 Defense Department ¹	142	71	33	18	16	15	15	15	
4 Export-Import Bank ^{2,3}	15,882	15,678	14,211	13,416	13,416	12,650	12,470	12,470	
5 Federal Housing Administration ⁴	133	115	138	175	174	178	182	182	
6 Government National Mortgage Association participation certificates ⁵	2,165	2,165	2,165	1,965	1,965	1,965	1,965	1,965	n.a.
7 Postal Service ⁶	1,337	1,940	3,104	3,718	4,603	4,603	4,603	4,603	
8 Tennessee Valley Authority	15,435	16,347	17,222	17,586	17,586	17,766	17,972	18,068	
9 United States Railway Association ⁸	51	74	85	85	85	0	0	0	
10 Federally sponsored agencies⁷	237,012	257,515	270,553	276,896	279,095	283,612	291,783	297,375	↑
11 Federal Home Loan Banks	65,085	74,447	88,752	100,976	102,422	104,380	108,108	111,185	115,725
12 Federal Home Loan Mortgage Corporation	10,270	11,926	13,589	12,309	14,150	14,949	16,703	17,762	n.a.
13 Federal National Mortgage Association	83,720	93,896	93,563	91,637	91,568	92,618	94,298	95,096	97,057
14 Farm Credit Banks	72,192	68,851	62,478	55,715	55,408	55,276	55,854	55,629	54,964
15 Student Loan Marketing Association ⁹	5,745	8,395	12,171	16,259	15,547	16,389	16,220	16,362	16,503
16 Financing Corporation ¹⁰	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	600	1,200	1,200
MEMO									
17 Federal Financing Bank debt¹⁰	145,217	153,373	157,510	157,302	158,117	157,252	156,919[*]	156,850	n.a.
<i>Lending to federal and federally sponsored agencies</i>									
18 Export-Import Bank ³	15,852	15,670	14,205	13,410	13,410	12,644	12,464	12,464	↑
19 Postal Service ⁶	1,087	1,690	2,854	3,468	4,353	4,353	4,353	4,353	
20 Student Loan Marketing Association	5,000	5,000	4,970	4,970	4,970	4,970	4,970 [*]	4,970	
21 Tennessee Valley Authority	13,710	14,622	15,797	16,206	16,206	16,386	16,592	16,688	n.a.
22 United States Railway Association ⁸	51	74	85	85	85	0	0	0	
<i>Other Lending¹¹</i>									
23 Farmers Home Administration	58,971	64,234	65,374	65,049	65,069	65,009	64,934	64,934	↓
24 Rural Electrification Administration	20,693	20,654	21,680	21,529	21,503	21,197	21,226	21,215	
25 Other	29,853	31,429	32,545	32,585	32,521	32,693	32,380 [*]	32,226	

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. Before late 1981, the Association obtained financing through the Federal Financing Bank (FFB).

9. The Financing Corporation, established in August 1987 to recapitalize the Federal Savings and Loan Insurance Corporation, undertook its first borrowing in October 1987.

10. 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.

11. 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.

1.45 NEW SECURITY ISSUES Tax-Exempt State and Local Governments

Millions of dollars

Type of issue or issuer, or use	1985	1986	1987	1987							1988
				June	July	Aug.	Sept.	Oct.	Nov.	Dec. ^r	
1 All issues, new and refunding¹	214,189	147,011	95,029	10,718	6,967	6,500	5,510	6,257	7,758	7,671	5,202
<i>Type of issue</i>											
2 General obligation	52,622	46,346	29,599	3,329	2,238	1,975	1,755	1,127	2,449	1,894	1,243
3 Revenue	161,567	100,664	65,430	7,389	4,729	4,525	3,755	5,130	5,309	5,777	3,959
<i>Type of issuer</i>											
4 State	13,004	14,474	8,426	1,138	834	398	535	385	431	550	423
5 Special district and statutory authority ²	134,363	89,997	61,663	6,453	3,951	4,508	3,712	4,668	4,612 ^r	4,972	3,055
6 Municipalities, counties, and townships	66,822	42,541	24,940	3,126 ^r	2,182	1,594	1,263	1,204	2,715 ^r	2,149	1,724
7 Issues for new capital, total	156,050	83,490	53,677	7,552	4,478	5,084	4,340	4,095	6,628	5,351	2,886
<i>Use of proceeds</i>											
8 Education	16,658	16,948	9,217	1,554	773	869	653	480	1,006	748	851
9 Transportation	12,070	11,666	3,589	705	647	226	311	168	329	451	176
10 Utilities and conservation	26,852	35,383	7,299	1,313	823	424	491	590	1,042	350	302
11 Social welfare	63,181	17,332	9,627	1,082	465	903	647	896	1,784	1,134	833
12 Industrial aid	12,892	5,594	6,083	498	469	1,630	412	683	229	1,155	133
13 Other purposes	24,398	47,433	17,862	2,399	1,301	1,033	1,826	1,278	2,238	1,513	591

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	1985	1986	1987	1987							
				May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1 All issues ¹	239,015	423,726	286,320	19,977 ^r	28,450 ^r	27,411	21,888	29,363	20,682 ^r	14,230 ^r	11,383
2 Bonds ²	203,500	355,293	232,969	13,439 ^r	22,098 ^r	22,071	17,685	23,705	17,603 ^r	13,532 ^r	10,609
Type of offering											
3 Public, domestic.....	119,559	231,936	208,670	11,402 ^r	20,568 ^r	19,045	14,852	22,045	16,107 ^r	12,799 ^r	10,274
4 Private placement, domestic ³	46,195	80,761	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5 Sold abroad.....	37,781	42,596	24,299	2,037	1,530	3,026	2,833	1,660	1,496	733	335
Industry group											
6 Manufacturing.....	63,973	91,548	45,209	5,035	4,104	5,552	3,343	3,506	2,724 ^r	1,280 ^r	860
7 Commercial and miscellaneous.....	17,066	40,124	19,918	754	2,061	1,037	1,281	1,479	1,165	483	2,577
8 Transportation.....	6,020	9,971	2,039	21	0	343	296	25	263	0	226
9 Public utility.....	13,649	31,426	17,382	572	2,091	1,654	1,533	1,702	997	893	1,570
10 Communication.....	10,832	16,659	5,772	138	205	119	856	930	1,384	270	510
11 Real estate and financial.....	91,958	165,564	142,633	6,920 ^r	13,636 ^r	13,366	10,377	16,063	11,071	10,586 ^r	4,865
12 Stocks ³	35,515	68,433	53,351	6,538	6,352	5,340	4,203	5,658	3,079	698 ^r	774
Type											
13 Preferred.....	6,505	11,514	10,123	1,170	1,202	1,157	906	1,112	236	162	61
14 Common.....	29,010	50,316	43,228	5,368	5,150	4,183	3,297	4,546	2,843	533	713
15 Private placement ³	35,515	68,433	53,351	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Industry group											
16 Manufacturing.....	5,700	15,027	9,642	1,066	1,438	1,046	370	858	703	237	76
17 Commercial and miscellaneous.....	9,149	10,617	11,461	1,516	1,353	879	996	807	656	86	14
18 Transportation.....	1,544	2,427	1,795	3	492	379	0	11	40	149	1
19 Public utility.....	1,966	4,020	3,839	374	329	472	85	529	75	25	0
20 Communication.....	978	1,825	1,264	200	199	294	277	75	107	1	11
21 Real estate and financial.....	16,178	34,517	25,350	3,379	2,541	2,270	2,475	3,378	1,498	200	672

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.

SOURCES: IDD Information Services, Inc., U.S. Securities and Exchange Commission and the Board of Governors of the Federal Reserve System.

1.47 OPEN-END INVESTMENT COMPANIES Net Sales and Asset Position

Millions of dollars

Item	1986	1987	1987							
			May	June	July	Aug.	Sept.	Oct.	Nov. ^r	Dec.
INVESTMENT COMPANIES ¹										
1 Sales of own shares ²	411,751	380,260	28,295	28,637	27,970	26,455	24,834	25,990	21,927	26,494
2 Redemptions of own shares ³	239,394	314,253	23,453	23,693	22,807	22,561	28,323	34,597	20,400	28,100
3 Net sales	172,357	66,007	4,842	4,944	5,763	3,894	-3,489	-8,607	1,507	-1,606
4 Assets ⁴	424,156	453,793	500,634	516,866	531,022	539,171	521,007	456,422	446,479	453,793
5 Cash position ⁵	30,716	38,175	39,158	41,467	41,587	40,802	42,397	40,929	41,432	38,175
6 Other	393,440	415,618	461,476	475,099	489,435	498,369	478,610	415,493	405,047	415,618

1. Excluding money market 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.

1.48 CORPORATE PROFITS AND THEIR DISTRIBUTION

Billions of dollars; quarterly data are at seasonally adjusted annual rates.

Account	1984	1985	1986	1985	1986					1987		
				Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	
1 Corporate profits with inventory valuation and capital consumption adjustment.....	266.9	277.6	284.4	277.8	288.0	282.3	286.4	281.1	294.0	296.8	314.9	
2 Profits before tax.....	239.9	224.8	231.9	233.5	218.9	224.4	236.3	247.9	257.0	268.7	284.9	
3 Profits tax liability.....	93.9	96.7	105.0	99.1	98.1	102.1	106.1	113.9	128.0	134.2	143.0	
4 Profits after tax.....	146.1	128.1	126.8	134.4	120.9	122.3	130.2	134.0	129.0	134.5	141.9	
5 Dividends.....	79.0	81.3	86.8	81.7	84.3	86.6	87.7	88.6	90.3	92.4	95.2	
6 Undistributed profits.....	67.0	46.8	40.0	52.7	36.6	35.7	42.5	45.4	38.7	42.1	46.7	
7 Inventory valuation.....	-5.8	-8	6.5	-9.8	17.8	11.3	6.0	-8.9	-11.3	-20.0	-17.6	
8 Capital consumption adjustment.....	32.8	53.5	46.0	54.2	51.3	46.7	44.0	42.1	48.2	48.0	47.7	

SOURCE. Survey of Current Business (Department of Commerce).

A36 Domestic Financial Statistics □ April 1988

1.49 NONFINANCIAL CORPORATIONS Assets and Liabilities¹

Billions of dollars, except for ratio

Account	1980	1981	1982	1983	1984	1985				1986
						Q1	Q2	Q3	Q4	
1 Current assets	1,328.3	1,419.6	1,437.1	1,565.9	1,703.0	1,722.7	1,734.6	1,763.0	1,784.6	1,795.7
2 Cash	127.0	135.6	147.8	171.8	173.6	167.5	167.1	176.3	189.2	195.3
3 U.S. government securities	18.7	17.7	23.0	31.0	36.2	35.7	35.4	32.6	33.0	31.0
4 Notes and accounts receivable	507.5	532.5	517.4	583.0	633.1	650.3	654.1	661.0	671.5	663.4
5 Inventories	543.0	584.0	579.0	603.4	656.9	665.7	666.7	675.0	666.0	679.6
6 Other	132.1	149.7	169.8	186.7	203.2	203.5	211.2	218.0	224.9	226.3
7 Current liabilities	890.6	971.3	986.0	1,059.6	1,163.6	1,174.1	1,182.9	1,211.9	1,233.6	1,222.3
8 Notes and accounts payable	514.4	547.1	550.7	595.7	647.8	636.9	651.7	670.4	682.7	668.4
9 Other	376.2	424.1	435.3	463.9	515.8	537.1	531.2	541.5	550.9	553.9
10 Net working capital	437.8	448.3	451.1	516.3	539.5	548.6	551.7	551.1	551.0	573.4
11 MEMO: Current ratio ²	1.492	1.462	1.459	1.487	1.464	1.467	1.466	1.455	1.447	1.469

1. For a description of this series, see "Working Capital of Nonfinancial Corporations" in the July 1978 BULLETIN, pp. 533-37. Data are not currently available after 1986:1.

2. Ratio of total current assets to total current liabilities.
SOURCE: Federal Trade Commission and Bureau of the Census.

1.50 TOTAL NONFARM BUSINESS EXPENDITURES on New Plant and Equipment ▲

Billions of dollars; quarterly data are at seasonally adjusted annual rates.

Industry	1985	1986	1987 ¹	1986			1987				1988
				Q2	Q3	Q4	Q1	Q2	Q3	Q4 ¹	
1 Total nonfarm business	387.13	379.47	390.57	376.21	375.50	386.09	374.23	377.65	393.13	417.25	427.97
<i>Manufacturing</i>											
2 Durable goods industries	73.27	69.14	71.85	68.56	69.42	69.87	70.47	68.76	71.78	76.40	78.41
3 Nondurable goods industries	80.21	73.56	76.01	73.62	70.01	74.20	70.18	72.03	75.78	86.05	86.27
<i>Nonmanufacturing</i>											
4 Mining	15.88	11.22	11.18	11.29	10.14	10.31	10.31	11.02	11.64	11.74	11.86
5 Transportation											
6 Railroad	7.08	6.66	6.15	6.70	7.02	6.41	5.55	5.77	6.21	7.08	7.66
7 Air	4.79	6.26	6.53	5.87	5.78	6.84	7.46	5.72	5.91	7.03	8.35
8 Other	6.15	5.89	6.42	5.83	6.01	6.25	5.97	6.19	7.05	6.48	6.92
Public utilities											
9 Electric	36.11	33.91	31.65	33.77	33.81	33.78	30.85	31.13	31.31	33.32	31.65
10 Gas and other	12.71	12.47	12.88	12.66	12.00	12.34	12.75	12.35	13.58	12.84	13.72
11 Commercial and other	150.94	160.38	167.89	157.91	161.31	166.08	160.70	164.69	169.87	176.29	183.15

▲ Trade and services are no longer being reported separately. They are included in Commercial and other, line 10.
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

Billions of dollars, end of period

Account	1983	1984	1985	1986			1987			
				Q2	Q3	Q4	Q1	Q2	Q3	Q4
ASSETS										
Accounts receivable, gross										
1 Consumer	83.3	89.9	113.4	125.1	137.1	136.5	133.9	138.0	144.4	143.8
2 Business	113.4	137.8	158.3	167.7	161.0	174.8	182.8	189.0	188.7	202.6
3 Real estate	20.5	23.8	28.9	30.8	32.1	33.7	35.1	36.9	38.3	40.3
4 Total	217.3	251.5	300.6	323.6	330.2	345.0	351.8	363.9	371.5	386.8
Less:										
5 Reserves for unearned income	30.3	33.8	39.2	40.7	42.4	41.4	40.4	41.2	42.8	45.3
6 Reserves for losses	3.7	4.2	4.9	5.1	5.4	5.8	5.9	6.2	6.6	6.8
7 Accounts receivable, net	183.2	213.5	256.5	277.8	282.4	297.8	305.5	316.5	322.1	334.7
8 All other	34.4	35.7	45.3	48.8	59.9	57.9	59.0	57.7	65.0	58.2
9 Total assets	217.6	249.2	301.9	326.6	342.3	355.6	364.5	374.2	387.1	392.9
LIABILITIES										
10 Bank loans	18.3	20.0	20.6	19.2	20.2	22.2	17.3	17.2	16.2	16.5
11 Commercial paper	60.5	73.1	99.2	108.4	112.8	117.8	119.1	120.4	123.5	126.5
Debt										
12 Other short-term	11.1	12.9	12.5	15.4	16.0	17.2	21.6	24.4	26.9	27.0
13 Long-term	67.7	77.2	93.1	105.2	109.8	115.6	118.4	121.5	128.0	130.1
14 All other liabilities	31.2	34.5	40.9	40.1	44.1	43.4	46.3	48.3	48.7	50.1
15 Capital, surplus, and undivided profits	28.9	31.5	35.7	38.4	39.4	39.4	41.8	42.3	43.8	42.6
16 Total liabilities and capital	217.6	249.2	301.9	326.6	342.3	355.6	364.5	374.2	387.1	392.9

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

1.52 DOMESTIC FINANCE COMPANIES Business Credit

Millions of dollars, seasonally adjusted except as noted

Type	Accounts receivable outstanding Dec. 31 1987 ¹	Changes in accounts receivable			Extensions			Repayments		
		1987			1987			1987		
		Oct.	Nov.	Dec.	Oct.	Nov.	Dec.	Oct.	Nov.	Dec.
1 Total	202,585	4,337	1,250	1,070	30,929	30,336	31,262	26,592	29,087	30,192
Retail financing of installment sales										
2 Automotive (commercial vehicles)	34,387	735	447	991	1,159	1,283	1,676	424	836	684
3 Business, industrial, and farm equipment	24,945	258	-25	376	1,526	1,395	1,564	1,268	1,420	1,188
Wholesale financing										
4 Automotive	30,760	3,485	261	-167	12,557	12,662	12,188	9,072	12,401	12,355
5 Equipment	5,512	249	61	-116	886	623	679	637	562	795
6 All other	7,948	-1,455	121	171	2,983	3,043	3,182	4,437	2,921	3,011
Leasing										
7 Automotive	21,711	-197	211	71	1,117	1,117	1,086	1,314	906	1,015
8 Equipment	41,675	188	-92	-494	1,245	881	608	1,057	973	1,102
9 Loans on commercial accounts receivable and factored commercial accounts receivable	18,358	704	331	-337	8,241	8,005	8,564	7,537	7,674	8,901
10 All other business credit	17,289	369	-67	573	1,215	1,326	1,714	846	1,393	1,141

These data also appear in the Board's G.20 (422) release. For address, see inside front cover.

1. Not seasonally adjusted.

1.53 MORTGAGE MARKETS

Millions of dollars; exceptions noted.

Item	1985	1986	1987 ¹	1987						1988
				July	Aug.	Sept.	Oct.	Nov.	Dec. ²		Jan.
	Terms and yields in primary and secondary markets									
PRIMARY MARKETS										
Conventional mortgages on new homes										
Terms										
1 Purchase price (thousands of dollars).....	104.1	118.1	137.0	134.6	141.2	140.2	145.3	135.9	147.3	150.8
2 Amount of loan (thousands of dollars).....	77.4	86.2	100.5	99.4	102.6	100.8	106.1	100.2	107.7	109.4
3 Loan/price ratio (percent).....	77.1	75.2	75.2	75.4	75.0	74.6	75.0	75.4	74.9	74.5
4 Maturity (years).....	26.9	26.6	27.8	27.9	27.8	27.3	28.3	28.3	28.2	28.3
5 Fees and charges (percent of loan amount) ³	2.53	2.48	2.26	2.42	2.19	2.08	2.34	2.33	2.22	2.22
6 Contract rate (percent per year).....	11.12	9.82	8.94	9.01	9.01	9.03	8.86	8.92	8.78	8.77
Yield (percent per year)										
7 FHLBB series ⁴	11.58	10.25	9.31	9.41	9.38	9.37	9.25	9.30	9.15	9.13
8 HUD series ⁴	12.28	10.07	10.13	10.22	10.37	10.86	10.87	10.59	10.52	n.a.
SECONDARY MARKETS										
Yield (percent per year)										
9 FHA mortgages (HUD series) ⁵	12.24	9.91	10.12	10.38	10.55	10.71	10.90	10.76	10.63	n.a.
10 GNMA securities ⁶	11.61	9.30	9.42	9.59	9.77	10.40	10.53	9.96	10.18	9.83
	Activity in secondary markets									
FEDERAL NATIONAL MORTGAGE ASSOCIATION										
Mortgage holdings (end of period)										
11 Total.....	94,574	98,048	95,030	94,154	94,600	94,884	95,097	95,411	96,649	↑
12 FHA/VA-insured.....	34,244	29,683	21,660	21,730	21,555	21,620	21,481	21,510	20,288	↓
13 Conventional.....	60,331	68,365	73,370	72,424	73,045	73,264	73,617	73,902	76,361	↑
Mortgage transactions (during period)										
14 Purchases.....	21,510	30,826	20,531	1,569	1,613	1,743	1,278	1,297	3,747	n.a.
Mortgage commitments ⁷										
15 Contracted (during period).....	20,155	32,987	25,415	2,373	2,276	1,842	1,566	2,899	3,115	↓
16 Outstanding (end of period).....	3,402	3,386	4,886	5,071	5,690	5,627	5,046	5,845	4,886	↓
FEDERAL HOME LOAN MORTGAGE CORPORATION										
Mortgage holdings (end of period) ⁸										
17 Total.....	12,399	13,517	↑	12,834	12,924	12,940	12,782	12,904	↑	↑
18 FHA/VA.....	841	746	↑	684	679	672	666	663	↑	↑
19 Conventional.....	11,559	12,771	↑	12,150	12,245	12,269	12,115	12,240	↑	↑
Mortgage transactions (during period)										
20 Purchases.....	44,012	103,474	n.a.	7,252	5,031	4,297	3,079	2,978	n.a.	n.a.
21 Sales.....	38,905	100,236	↓	6,831	4,723	4,160	3,111	2,742	↓	↓
Mortgage commitments ⁹										
22 Contracted (during period).....	48,989	110,855	↓	5,611	4,506	3,507	3,011	2,668	↓	↓

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 permissible 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 OUTSTANDING¹

Millions of dollars, end of period

Type of holder, and type of property	1985	1986	1987	1986	1987			
				Q4	Q1	Q2	Q3'	Q4
1 All holders	2,269,173	2,568,562'	2,906,394	2,568,562'	2,665,207'	2,756,124'	2,831,431	2,906,394
2 1- to 4-family	1,467,409	1,668,209'	1,889,364	1,668,209'	1,714,213'	1,783,521'	1,835,671	1,889,364
3 Multifamily	214,045	247,024'	272,604	247,024'	257,615'	263,513'	268,322	272,604
4 Commercial	482,029	556,569	654,288	556,569	599,822'	616,968'	636,508	654,288
5 Farm	105,690	96,760	90,138	96,760	93,557'	92,122'	90,930	90,138
6 Selected financial institutions	1,390,394	1,507,289	1,699,702	1,507,289	1,559,549'	1,606,622'	1,650,462	1,699,702
7 Commercial banks	429,196	502,534	587,557	502,534	519,474	544,381	566,213	587,557
8 1- to 4-family	213,434	235,814	273,214	235,814	243,518	255,672	262,869	273,214
9 Multifamily	23,373	31,173	32,433	31,173	29,515	30,496	31,311	32,433
10 Commercial	181,032	222,799	267,221	222,799	233,234	244,385	257,882	267,221
11 Farm	11,357	12,748	14,689	12,748	13,207	13,828	14,151	14,689
12 Savings institutions ³	760,499	777,312	861,233	777,312	809,245'	824,961'	841,658	861,233
13 1- to 4-family	554,301	558,412	602,740	558,412	555,693'	572,075'	586,221	602,740
14 Multifamily	89,739	97,059	107,054	97,059	104,035'	102,933'	104,764	107,054
15 Commercial	115,771	121,236	150,680	121,236	148,712'	149,183'	149,904	150,680
16 Farm	688	605	n.a.	605	805'	n.a.	n.a.	n.a.
17 Life insurance companies	171,797	193,842	210,563	193,842	195,743	200,382	204,263	210,563
18 1- to 4-family	12,381	12,827	13,142	12,827	12,903	12,745	12,742	13,142
19 Multifamily	19,894	20,952	22,168	20,952	20,934	21,663	21,968	22,168
20 Commercial	127,670	149,111	165,364	149,111	151,420	155,611	159,464	165,364
21 Farm	11,852	10,952	9,889	10,952	10,486	10,363	10,089	9,889
22 Finance companies ⁴	28,902	33,601	40,349	33,601	35,087	36,898	38,328	40,349
23 Federal and related agencies	166,928	203,800	192,401	203,800	199,509	196,514	191,520	192,401
24 Government National Mortgage Association	1,473	889	455	889	687	667	458	455
25 1- to 4-family	539	47	24	47	46	45	25	24
26 Multifamily	934	842	431	842	641	622	433	431
27 Farmers Home Administration ⁵	733	48,421	42,978	48,421	48,203	48,085	42,978	42,978
28 1- to 4-family	183	21,625	18,111	21,625	21,390	21,157	18,111	18,111
29 Multifamily	113	7,608	7,903	7,608	7,710	7,808	7,903	7,903
30 Commercial	159	8,446	6,592	8,446	8,463	8,553	6,592	6,592
31 Farm	278	10,742	10,372	10,742	10,640	10,567	10,372	10,372
32 Federal Housing and Veterans Administration	4,920	5,047	5,479	5,047	5,177	5,268	5,330	5,479
33 1- to 4-family	2,254	2,386	2,551	2,386	2,447	2,531	2,452	2,551
34 Multifamily	2,666	2,661	2,928	2,661	2,730	2,737	2,878	2,928
35 Federal National Mortgage Association	98,282	97,895	96,649	97,895	95,140	94,064	94,884	96,649
36 1- to 4-family	91,966	90,718	89,666	90,718	88,106	87,013	87,901	89,666
37 Multifamily	6,316	7,177	6,983	7,177	7,034	7,051	6,983	6,983
38 Federal Land Banks	47,498	33,930	33,930	33,930	37,362	35,833	34,930	33,930
39 1- to 4-family	2,798	2,353	1,996	2,353	2,198	2,108	2,055	1,996
40 Farm	44,700	37,631	31,934	37,631	35,164	33,725	32,875	31,934
41 Federal Home Loan Mortgage Corporation	14,022	11,564	12,910	11,564	12,940	12,597	12,940	12,910
42 1- to 4-family	11,881	10,010	11,580	10,010	11,774	11,172	11,570	11,580
43 Multifamily	2,141	1,554	1,330	1,554	1,166	1,425	1,370	1,330
44 Mortgage pools or trusts ⁶	415,042	531,591'	671,749	531,591'	575,435'	615,142'	648,219	671,749
45 Government National Mortgage Association	212,145	262,697'	319,360	262,697'	281,116'	293,246'	308,996	319,360
46 1- to 4-family	207,198	256,920'	311,567	256,920'	274,710'	286,091'	301,456	311,567
47 Multifamily	4,947	5,777'	7,793	5,777'	6,406'	7,155'	7,540	7,793
48 Federal Home Loan Mortgage Corporation	100,387	171,372	212,105	171,372	186,295	200,284	208,350	212,105
49 1- to 4-family	99,515	166,667	205,460	166,667	180,602	194,238	201,786	205,460
50 Multifamily	872	4,705	6,645	4,705	5,693	6,046	6,564	6,645
51 Federal National Mortgage Association	54,987	97,174	139,960	97,174	107,673	121,270	130,540	139,960
52 1- to 4-family	54,036	95,791	137,988	95,791	106,068	119,617	128,770	137,988
53 Multifamily	951	1,383	1,972	1,383	1,605	1,653	1,770	1,972
54 Farmers Home Administration ⁵	47,523	348	324	348	351	342	333	324
55 1- to 4-family	22,186	142	139	142	154	149	144	139
56 Multifamily	6,675	0	0	0	0	0	0	0
57 Commercial	8,190	132	122	132	127	126	124	122
58 Farm	10,472	74	63	74	70	67	65	63
59 Individuals and others ⁷	296,809	325,882	342,542	325,882	330,714	337,846	341,230	342,542
60 1- to 4-family	165,835	180,896	180,837	180,896	179,517	182,010	181,241	180,837
61 Multifamily	55,424	66,133	74,964	66,133	70,146	73,924	74,838	74,964
62 Commercial	49,207	54,845	64,309	54,845	57,866	59,110	62,542	64,309
63 Farm	26,343	24,008	22,432	24,008	23,185	22,802	22,609	22,432

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.

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.

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 CREDIT¹ Total Outstanding, and Net Change, seasonally adjusted

Millions of dollars

Holder, and type of credit	1986	1987	1987								
			Apr.	May	June	July	Aug.	Sept.	Oct.	Nov. ¹	Dec.
Amounts outstanding (end of period)											
1 Total	577,784	612,571	583,595	583,276	587,821	591,175	596,182	602,607	605,488	608,122	612,571
By major holder											
2 Commercial banks	261,604	274,984	263,433	263,463	264,396	265,085	265,893	269,155	270,836	272,274	274,984
3 Finance companies ²	136,494	143,788	137,091	136,398	138,038	138,745	140,689	142,648	143,118	142,767	143,788
4 Credit unions	77,857	84,839	79,255	79,476	80,585	81,492	82,486	83,340	83,639	84,419	84,839
5 Retailers ³	40,586	40,647	40,467	40,318	40,287	40,364	40,391	40,482	40,678	40,559	40,647
6 Savings institutions	58,037	64,788	59,826	60,045	60,983	61,910	63,080	63,279	63,525	64,502	64,788
7 Gasoline companies	3,205	3,525	3,522	3,576	3,532	3,580	3,643	3,703	3,691	3,600	3,525
By major type of credit											
8 Automobile	245,055	261,654	247,663	247,578	250,130	250,980	254,013	257,470	258,710	259,134	261,654
9 Commercial banks	100,709	106,487	101,781	102,189	102,810	102,829	103,382	104,662	105,382	106,036	106,487
10 Credit unions	39,029	42,529	39,730	39,841	40,396	40,851	41,349	41,777	41,927	42,318	42,529
11 Finance companies	93,274	99,195	93,738	93,089	94,270	94,455	96,193	97,900	98,219	97,395	99,195
12 Savings institutions	12,043	13,444	12,414	12,459	12,654	12,846	13,089	13,130	13,182	13,384	13,444
13 Revolving	134,938	145,940	136,706	136,869	137,401	138,741	139,837	141,704	143,142	143,620	145,940
14 Commercial banks	85,652	95,273	86,929	87,133	87,590	88,685	89,535	91,226	92,459	92,992	95,273
15 Retailers	36,240	36,213	36,139	36,009	35,971	36,021	36,022	36,087	36,264	36,148	36,213
16 Gasoline companies	3,205	3,525	3,522	3,576	3,532	3,580	3,643	3,703	3,691	3,600	3,525
17 Savings institutions	7,713	8,610	7,951	7,980	8,105	8,228	8,383	8,410	8,443	8,572	8,610
18 Credit unions	2,128	2,319	2,166	2,172	2,202	2,227	2,254	2,278	2,286	2,307	2,319
19 Mobile home	25,710	25,612	25,626	25,542	25,685	25,860	25,695	25,699	25,677	25,731	25,612
20 Commercial banks	8,812	8,357	8,698	8,615	8,609	8,626	8,518	8,538	8,453	8,407	8,357
21 Finance companies	9,028	8,470	8,816	8,785	8,807	8,839	8,623	8,580	8,610	8,578	8,470
22 Savings institutions	7,870	8,785	8,112	8,142	8,269	8,395	8,554	8,581	8,614	8,746	8,785
23 Other	172,081	179,365	173,600	173,287	174,605	175,594	176,637	177,733	177,959	179,637	179,365
24 Commercial banks	66,431	64,867	66,026	65,527	65,387	64,945	64,458	64,728	64,542	64,840	64,867
25 Finance companies	34,192	36,123	34,537	34,524	34,962	35,452	35,874	36,168	36,289	36,794	36,123
26 Credit unions	36,700	39,992	37,359	37,463	37,986	38,413	38,882	39,285	39,426	39,794	39,992
27 Retailers	4,346	4,433	4,328	4,310	4,315	4,343	4,369	4,395	4,415	4,411	4,433
28 Savings institutions	30,412	33,949	31,349	31,463	31,955	32,441	33,054	33,158	33,287	33,799	33,949
Net change (during period)											
29 Total	54,979	34,787	3,682	-319	4,545	3,354	5,007	6,425	2,881	2,634	4,449
By major holder											
30 Commercial banks	19,520	13,380	1,500	30	933	689	808	3,262	1,681	1,438	2,710
31 Finance companies ²	23,424	7,294	1,041	-693	1,640	707	1,944	1,959	470	-351	1,021
32 Credit unions	5,738	6,982	686	221	1,109	907	994	854	299	780	420
33 Retailers ³	1,722	61	-2	-149	31	77	27	91	196	-119	88
34 Savings institutions	5,604	6,751	338	219	938	927	1,170	199	246	977	286
35 Gasoline companies	-1,030	320	117	54	-44	48	63	60	-12	-91	-75
By major type of credit											
36 Automobile	36,998	16,599	1,373	-85	2,552	850	3,033	3,457	1,240	424	2,520
37 Commercial banks	7,706	5,778	253	408	621	19	553	1,280	720	654	451
38 Credit unions	3,394	3,500	344	111	555	455	498	428	150	391	211
39 Finance companies	23,183	5,921	706	-649	1,181	185	1,738	1,707	319	-824	1,800
40 Savings institutions	2,715	1,401	70	45	195	192	243	41	52	202	60
41 Revolving	12,917	11,002	1,540	163	532	1,340	1,096	1,867	1,438	478	2,320
42 Commercial banks	9,786	9,621	1,362	204	457	1,095	850	1,691	1,233	533	2,281
43 Retailers	1,545	-27	-2	-130	-38	50	1	65	177	-116	65
44 Gasoline companies	-1,030	320	117	54	-44	48	63	60	-12	-91	-75
45 Savings institutions	2,008	897	45	29	125	123	155	27	33	129	38
46 Credit unions	608	191	19	6	30	25	27	24	8	21	12
47 Mobile home	222	-98	12	-84	143	175	-165	4	-22	54	-119
48 Commercial banks	-726	-455	-27	-83	-6	17	-108	20	-85	-46	-50
49 Finance companies	-363	-558	-7	-31	22	32	-216	-43	30	-32	-108
50 Savings institutions	1,311	915	45	30	127	126	159	27	33	132	39
51 Other	4,842	7,284	756	-313	1,318	389	1,043	1,096	226	1,678	-272
52 Commercial banks	2,754	-1,564	-87	-499	-140	-442	-487	270	-186	298	27
53 Finance companies	604	1,931	341	-13	438	490	422	294	121	505	-671
54 Credit unions	1,736	3,292	323	104	523	427	469	403	141	368	198
55 Retailers	177	87	1	-18	5	28	26	26	20	-4	22
56 Savings institutions	-429	3,537	177	114	492	486	613	104	129	512	150

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.

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.

1.56 TERMS OF CONSUMER INSTALLMENT CREDIT

Percent unless noted otherwise

Item	1985	1986	1987	1987						
				June	July	Aug.	Sept.	Oct.	Nov.	Dec.
INTEREST RATES										
Commercial banks ¹										
1 48-month new car ²	12.91	11.33	n.a.	n.a.	n.a.	10.37	n.a.	n.a.	10.86	n.a.
2 24-month personal	15.94	14.82	n.a.	n.a.	n.a.	14.22	n.a.	n.a.	14.58	n.a.
3 120-month mobile home ²	14.96	13.99	n.a.	n.a.	n.a.	13.24	n.a.	n.a.	13.62	n.a.
4 Credit card	18.69	18.26	n.a.	n.a.	n.a.	17.85	n.a.	n.a.	17.82	n.a.
Auto finance companies										
5 New car	11.98	9.44	10.73	10.64	10.52	9.63	8.71	10.31	12.24	12.23
6 Used car	17.59	15.95	14.60	14.47	14.53	14.53	14.58	14.76	14.90	14.97
OTHER TERMS ³										
Maturity (months)										
7 New car	51.5	50.0	53.5	53.6	53.4	52.1	50.7	52.8	55.4	55.5
8 Used car	41.4	42.6	45.2	45.4	45.5	45.4	45.2	45.2	45.3	45.3
Loan-to-value ratio										
9 New car	91	91	93	93	93	93	93	93	94	93
10 Used car	94	97	98	98	98	98	98	99	99	99
Amount financed (dollars)										
11 New car	9,915	10,665	11,203	11,214	11,267	11,374	11,455	11,585	11,630	11,645
12 Used car	6,089	6,555	7,420	7,479	7,527	7,763	7,476	7,537	7,646	7,718

1. Data for midmonth of quarter only.

2. Before 1983 the maturity for new car loans was 36 months, and for mobile home loans was 84 months.

3. At auto finance companies.

NOTE. These data also appear in the Board's G.19 (421) release. For address, see inside front cover.

1.57 FUNDS RAISED IN U.S. CREDIT MARKETS

Billions of dollars; half-yearly data are at seasonally adjusted annual rates.

Transaction category, sector	1982	1983	1984	1985	1986	1984		1985		1986		1987
						H1	H2	H1	H2	H1	H2		H1
Nonfinancial sectors												
1 Total net borrowing by domestic nonfinancial sectors	388.9	550.2	753.9	854.8	833.4	717.3	790.4	722.7	986.8	676.9	989.9	568.3
By sector and instrument												
2 U.S. government	161.3	186.6	198.8	223.6	214.3	190.4	207.2	204.8	242.5	207.2	221.5	151.4
3 Treasury securities	162.1	186.7	199.0	223.7	214.7	190.7	207.3	204.9	242.5	207.4	222.0	151.7
4 Agency issues and mortgages	-9	-1	-2	-1	-3	-2	-1	-1	-1	-1	-5	-4
5 Private domestic nonfinancial sectors	227.6	363.6	555.1	631.1	619.0	526.9	583.3	518.0	744.3	469.6	768.4	417.0
6 Debt capital instruments	148.3	253.4	313.6	447.8	445.0	284.7	342.5	350.4	545.2	363.4	546.7	407.1
7 Tax-exempt obligations	44.2	53.7	50.4	136.4	35.4	33.8	67.0	67.0	205.8	-16.9	87.7	20.0
8 Corporate bonds	18.7	16.0	46.1	73.8	121.7	22.5	69.8	62.2	85.3	135.3	108.1	89.0
9 Mortgages	85.4	183.6	217.1	237.7	298.0	228.5	205.7	221.2	254.2	245.0	350.9	298.1
10 Home mortgages	50.5	117.5	129.7	151.9	199.4	139.5	119.9	139.2	164.7	163.8	234.9	217.5
11 Multifamily residential	5.4	14.2	25.1	29.2	33.0	27.8	22.4	25.0	33.4	31.2	34.8	27.7
12 Commercial	25.2	49.3	63.2	62.5	73.9	62.6	63.8	59.5	65.5	58.9	88.9	62.5
13 Farm	4.2	2.6	-9	-6.0	-8.3	-1.4	-4	-2.5	-9.5	-8.9	-7.7	-9.6
14 Other debt instruments	79.3	110.2	241.5	183.3	164.0	242.2	240.8	167.5	199.1	106.2	221.8	9.9
15 Consumer credit	19.3	56.6	90.4	94.6	65.8	94.7	86.2	95.3	93.9	71.0	60.6	15.7
16 Bank loans n.e.c.	50.4	23.2	67.1	38.6	66.5	71.2	63.0	21.0	56.2	12.2	120.8	-40.2
17 Open market paper	-6.1	-8	21.7	14.6	-9.3	26.6	16.8	14.4	14.8	-13.1	-5.5	4.5
18 Other	15.8	31.3	62.2	35.5	41.0	49.7	74.7	36.8	34.2	36.2	45.9	29.9
19 By borrowing sector	227.6	363.6	555.1	631.1	619.0	526.9	583.3	518.0	744.3	469.6	768.4	417.0
20 State and local governments	21.5	34.0	27.4	91.8	46.4	16.2	38.6	56.3	127.2	3.1	89.7	28.6
21 Households	90.0	188.2	234.6	293.4	279.9	235.0	234.2	259.8	327.1	232.8	326.9	224.0
22 Farm	6.8	4.1	-1	-13.9	-15.1	-5	4	-7.0	-20.8	-16.8	-13.3	-19.5
23 Nonfarm noncorporate	40.2	77.0	97.0	93.1	115.9	101.8	92.2	85.7	100.5	96.2	135.5	92.8
24 Corporate	69.0	60.3	196.0	166.7	192.0	174.3	217.8	123.2	210.3	154.3	229.7	91.2
25 Foreign net borrowing in United States	16.0	17.3	8.3	1.2	9.0	36.1	-19.4	-5.8	8.2	21.5	-3.5	-12.6
26 Bonds	6.6	3.1	3.8	3.8	2.6	1.3	6.3	5.5	2.1	6.2	-1.1	-1.1
27 Bank loans n.e.c.	-5.5	3.6	-6.6	-2.8	-1.0	-1.3	-11.9	-5.8	1	1.5	-3.5	-3.5
28 Open market paper	1.9	6.5	6.2	6.2	11.5	16.6	-4.3	2.8	9.6	19.1	3.9	-5.3
29 U.S. government loans	13.0	4.1	5.0	-6.0	-4.0	19.5	-9.6	-8.2	-3.7	-5.3	-2.7	-2.8
30 Total domestic plus foreign	404.8	567.5	762.2	856.0	842.4	753.4	771.0	716.9	995.0	698.3	986.4	555.7
Financial sectors												
31 Total net borrowing by financial sectors	90.3	99.3	151.9	199.0	291.1	153.0	150.7	175.1	222.8	238.8	343.4	317.5
By instrument												
32 U.S. government related	64.9	67.8	74.9	101.5	174.3	72.5	77.3	96.8	106.3	133.8	214.8	180.2
33 Sponsored credit agency securities	14.9	1.4	30.4	20.6	13.2	29.4	31.5	26.6	14.6	6.4	20.0	7.8
34 Mortgage pool securities	49.5	66.4	44.4	79.9	161.4	43.1	45.8	70.3	89.5	126.6	196.3	171.8
35 Loans from U.S. government . . . . .	.4			1.1	-4				2.2	.8	-1.5	.5
36 Private financial sectors	25.4	31.5	77.0	97.4	116.8	80.5	73.5	78.3	116.5	105.0	128.6	137.4
37 Corporate bonds	12.7	17.4	36.2	48.6	68.7	30.8	41.5	48.9	48.3	70.9	66.5	92.5
38 Mortgages . . . . .	.1	*	.4	.1	.1	.4	.4	*	.1	.6	-.5	.2
39 Bank loans n.e.c.	1.9	-1	.7	2.6	4.0	.6	.7	2.3	2.9	4.0	4.0	-7.4
40 Open market paper	9.9	21.3	24.1	32.0	24.2	32.1	16.0	14.6	49.4	15.1	33.4	38.3
41 Loans from Federal Home Loan Banks . . . . .	.8	-7.0	15.7	14.2	19.8	16.5	14.9	12.5	15.9	14.4	25.2	13.6
By sector												
42 Sponsored credit agencies	15.3	1.4	30.4	21.7	12.9	29.4	31.5	26.6	16.8	7.2	18.5	8.3
43 Mortgage pools	49.5	66.4	44.4	79.9	161.4	43.1	45.8	70.3	89.5	126.6	196.3	171.8
44 Private financial sectors	25.4	31.5	77.0	97.4	116.8	80.5	73.5	78.3	116.5	105.0	128.6	137.4
45 Commercial banks	11.7	5.0	7.3	-4.9	-3.6	19.8	-5.3	-4.7	-5.0	-2.7	-4.6	4.4
46 Bank affiliates	6.8	12.1	15.6	14.5	4.6	20.4	10.8	10.2	18.9	-1.7	10.9	21.6
47 Savings and loan associations	2.5	-2.1	22.7	22.3	29.3	22.0	23.3	14.2	30.4	25.5	33.1	30.7
48 Finance companies	4.5	12.9	18.9	53.9	50.2	8.2	29.6	49.7	58.1	53.1	47.2	27.2
49 REITs	-2	-1	.1	-7	-3	.2	.1	-6	-8	.6	-1.3	-2
50 CMO Issuers . . . . .	.2	3.7	12.4	12.2	36.7	9.8	15.0	9.5	14.9	30.2	43.3	53.7
All sectors												
51 Total net borrowing	495.1	666.8	914.1	1,054.9	1,133.5	906.4	921.8	892.1	1,217.8	937.1	1,329.8	873.2
52 U.S. government securities	225.9	254.4	273.8	324.2	389.0	263.1	284.5	301.7	346.6	340.2	437.8	331.0
53 State and local obligations	44.2	53.7	50.4	136.4	35.4	33.8	67.0	67.0	205.8	-16.9	87.7	20.0
54 Corporate and foreign bonds	38.0	36.5	86.1	126.1	192.9	54.6	117.6	116.6	135.7	212.4	173.5	180.5
55 Mortgages	85.4	183.6	217.4	237.7	298.0	228.8	206.0	221.2	254.2	245.6	350.4	298.3
56 Consumer credit	19.3	56.6	90.4	94.6	65.8	94.7	86.2	95.3	93.9	71.0	60.6	15.7
57 Bank loans n.e.c.	46.7	26.7	61.1	38.3	69.5	70.4	51.8	17.5	59.2	17.7	121.3	-51.0
58 Open market paper	5.7	26.9	52.0	52.8	26.4	75.4	28.6	31.8	73.7	21.0	31.7	37.5
59 Other loans	30.0	28.4	82.9	44.8	56.5	85.7	80.0	41.1	48.6	46.1	66.9	41.1
External corporate equity funds raised in United States												
60 Total new share issues	25.8	61.8	-36.4	19.9	91.6	-47.9	-24.9	3.0	36.7	100.8	82.3	61.8
61 Mutual funds	8.8	27.2	29.3	85.7	163.3	26.5	32.2	64.2	107.1	155.5	171.1	123.3
62 All other	17.0	34.6	-65.7	-65.8	-71.7	-74.4	-57.1	-61.2	-70.4	-54.7	-88.7	-61.5
63 Nonfinancial corporations	11.4	28.3	-74.5	-81.5	-80.8	-79.5	-69.4	-75.5	-87.5	-68.7	-92.7	-70.0
64 Financial corporations	4.2	2.6	7.8	12.0	8.3	6.8	8.8	11.2	12.8	7.5	9.1	6.7
65 Foreign shares purchased in United States	1.4	3.7	.9	3.7	.7	-1.6	3.5	3.1	4.3	6.6	-5.1	1.9

1.58 DIRECT AND INDIRECT SOURCES OF FUNDS TO CREDIT MARKETS

Billions of dollars, except as noted; half-yearly data are at seasonally adjusted annual rates.

Transaction category, or sector	1982	1983	1984	1985	1986	1984		1985		1986		1987
						H1	H2	H1	H2	H1	H2	
1 Total funds advanced in credit markets to domestic nonfinancial sectors	388.9	550.2	753.9	854.8	833.4	717.3	790.4	722.7	986.8	676.9	989.9	568.3
<i>By public agencies and foreign</i>												
2 Total net advances	114.9	114.0	157.6	202.3	317.3	132.7	182.5	195.8	208.7	264.1	370.6	241.3
3 U.S. government securities	22.3	26.3	39.3	47.1	84.8	27.6	51.0	50.3	43.9	74.0	95.6	46.3
4 Residential mortgages	61.0	76.1	56.5	94.6	158.5	55.5	57.4	88.6	100.7	123.8	193.2	164.9
5 FHLB advances to savings and loans	.8	-7.0	15.7	14.2	19.8	16.5	14.9	12.5	15.9	14.4	25.2	13.6
6 Other loans and securities	30.8	18.6	46.2	46.3	54.2	33.2	59.2	44.4	48.2	52.0	56.5	16.5
Total advanced, by sector												
7 U.S. government	15.9	9.7	17.1	16.8	9.5	7.5	26.6	25.1	8.4	10.8	8.2	-4.1
8 Sponsored credit agencies	65.5	69.8	74.3	101.5	175.5	73.3	75.2	96.4	106.7	128.2	222.8	167.7
9 Monetary authorities	9.8	10.9	8.4	21.6	30.2	12.0	4.8	27.5	15.8	13.2	47.2	10.8
10 Foreign	23.7	23.7	57.9	62.3	102.1	39.8	75.9	46.8	77.8	111.9	92.3	66.9
Agency and foreign borrowing not in line 1												
11 Sponsored credit agencies and mortgage pools	64.9	67.8	74.9	101.5	174.3	72.5	77.3	96.8	106.3	133.8	214.8	180.2
12 Foreign	16.0	17.3	8.3	1.2	9.0	36.1	-19.4	-3.8	8.2	21.5	-3.5	-12.6
<i>Private domestic funds advanced</i>												
13 Total net advances	354.8	521.3	679.5	755.2	699.3	693.2	665.7	618.0	892.5	568.0	830.6	494.6
14 U.S. government securities	203.6	228.1	234.5	277.0	304.2	235.5	233.5	251.3	302.7	266.3	342.2	284.7
15 State and local obligations	44.2	53.7	50.4	136.4	35.4	33.8	67.0	67.0	205.8	-16.9	87.7	20.0
16 Corporate and foreign bonds	14.7	14.5	35.1	40.8	84.3	17.3	53.0	39.7	42.0	100.8	67.8	61.6
17 Residential mortgages	-5.3	55.0	98.2	86.4	73.8	111.7	84.8	75.5	97.4	71.3	76.4	80.3
18 Other mortgages and loans	98.3	162.4	276.9	228.8	221.4	311.5	242.3	197.0	260.6	161.0	281.8	61.6
19 Less: Federal Home Loan Bank advances	.8	-7.0	15.7	14.2	19.8	16.5	14.9	12.5	15.9	14.4	25.2	13.6
<i>Private financial intermediation</i>												
20 Credit market funds advanced by private financial institutions	274.2	395.8	559.8	579.5	726.1	587.5	532.1	483.8	675.2	638.9	813.2	485.1
21 Commercial banking	110.2	144.3	168.9	186.3	194.7	192.2	145.5	143.3	229.4	117.2	272.3	49.9
22 Savings institutions	22.9	135.6	150.2	83.0	105.8	167.0	133.5	54.5	111.4	94.5	117.2	85.7
23 Insurance and pension funds	96.6	100.1	121.8	156.0	175.9	148.3	95.3	139.4	172.5	170.6	181.2	213.3
24 Other finance	44.5	15.8	118.9	154.2	249.6	80.0	157.8	146.5	161.9	256.7	242.4	136.2
25 Sources of funds	274.2	395.8	559.8	579.5	726.1	587.5	532.1	483.8	675.2	638.9	813.2	485.1
26 Private domestic deposits and RPs	196.2	215.4	316.9	213.2	272.8	280.2	353.5	191.4	235.0	252.2	293.4	15.1
27 Credit market borrowing	25.4	31.5	77.0	97.4	116.8	80.5	73.5	78.3	116.5	105.0	128.6	137.4
28 Other sources	52.6	148.9	165.9	268.9	336.4	226.8	105.1	214.1	323.6	281.7	391.1	332.6
29 Foreign funds	-31.4	16.3	5.4	17.7	12.4	10.9	-1	21.3	14.2	12.3	12.5	41.8
30 Treasury balances	6.1	-5.3	4.0	10.3	1.7	-2.8	10.8	13.9	6.6	-4.2	7.6	-4.4
31 Insurance and pension reserves	106.0	109.7	118.6	141.0	152.5	162.5	74.6	118.6	163.4	138.6	166.4	234.4
32 Other, net	-28.1	28.2	37.9	99.9	169.8	56.1	19.7	60.3	139.4	134.9	204.6	60.8
<i>Private domestic nonfinancial investors</i>												
33 Direct lending in credit markets	106.0	157.0	196.7	273.2	90.1	186.2	207.1	212.5	333.9	34.1	146.1	146.9
34 U.S. government securities	68.5	99.3	123.6	145.3	43.4	162.8	84.3	156.2	134.5	37.4	49.4	69.9
35 State and local obligations	25.0	40.3	30.4	47.6	-8	10.4	50.4	14.8	80.4	-68.7	67.2	21.7
36 Corporate and foreign bonds	*	-11.6	5.2	11.8	34.4	-26.4	36.9	15.4	8.2	68.1	.8	39.0
37 Open market paper	-5.7	12.0	9.3	43.9	-4.8	15.6	3.0	3.5	84.2	-16.3	6.7	7.7
38 Other	18.2	17.0	28.1	24.6	17.9	23.8	32.5	22.6	26.6	13.6	22.1	8.5
39 Deposits and currency	205.5	232.8	320.4	223.5	293.2	286.8	354.0	198.3	248.7	262.0	324.4	10.2
40 Currency	9.7	14.3	8.6	12.4	14.4	13.7	3.6	15.9	8.8	10.7	18.2	10.0
41 Checkable deposits	18.0	28.6	27.9	41.4	97.7	26.0	29.8	14.6	68.2	79.9	115.5	-28.5
42 Small time and savings accounts	136.0	215.7	150.1	139.1	122.5	129.0	171.2	161.5	116.7	115.4	129.5	33.9
43 Money market fund shares	33.5	-39.0	49.0	8.9	43.8	24.5	73.4	10.6	7.1	46.9	40.6	-4.6
44 Large time deposits	-2.4	-8.4	84.9	7.2	-9.3	92.0	77.9	-7.6	21.9	*	-18.7	1.5
45 Security RPs	11.1	18.5	5.0	16.6	18.3	8.7	1.2	12.2	21.1	10.0	26.5	12.7
46 Deposits in foreign countries	-4	3.1	-5.1	-2.1	5.9	-7.1	-3.1	-9.0	4.9	-9	12.8	-14.9
47 Total of credit market instruments, deposits, and currency	311.5	389.9	517.1	496.7	383.3	473.0	561.1	410.7	582.6	296.0	470.5	157.1
48 Public holdings as percent of total	28.4	20.1	20.7	23.6	37.7	17.6	23.7	27.3	21.0	37.8	37.6	43.4
49 Private financial intermediation (in percent)	77.3	75.9	82.4	76.7	103.8	84.7	79.9	78.3	75.6	112.5	97.9	98.1
50 Total foreign funds	-7.7	40.0	63.3	80.1	114.5	50.7	75.8	68.1	92.0	124.2	104.9	108.7
MEMO: Corporate equities not included above												
51 Total net issues	25.8	61.8	-36.4	19.9	91.6	-47.9	-24.9	3.0	36.7	100.8	82.3	61.8
52 Mutual fund shares	8.8	27.2	29.3	85.7	163.5	26.5	32.2	64.2	107.1	155.5	171.1	123.3
53 Other equities	17.0	34.6	-65.7	-65.8	-71.7	-74.4	-57.1	-61.2	-70.4	-54.7	-88.7	-61.5
54 Acquisitions by financial institutions	25.9	51.1	19.7	42.8	48.2	-2	39.7	58.8	26.8	56.6	39.7	65.5
55 Other net purchases	-1	10.7	-56.1	-22.9	43.4	-47.7	-64.6	-55.8	10.0	44.2	42.6	-3.6

NOTES BY LINE NUMBER.

- Line 1 of table 1.57.
- Sum of lines 3-6 or 7-10.
- Includes farm and commercial mortgages.
- Credit market funds raised by federally sponsored credit agencies, and net issues of federally related mortgage pool securities.
- 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.
- Includes farm and commercial mortgages.
- Line 39 less lines 40 and 46.
- Excludes equity issues and investment company shares. Includes line 19.
- 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.
- 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.

2.10 NONFINANCIAL BUSINESS ACTIVITY Selected Measures¹

1977 = 100; monthly and quarterly data are seasonally adjusted. Exceptions noted.

Measure	1985	1986	1987	1987								1988
				May	June	July	Aug.	Sept.	Oct. ⁷	Nov. ⁷	Dec. ⁷	
1 Industrial production	123.8	125.1	129.8	128.2	129.1	130.6	131.2	131.0	132.5	133.0	133.6	133.8
<i>Market groupings</i>												
2 Products, total	130.8	133.2	138.3	136.9	137.8	139.5	139.9	139.4	140.9	140.9	141.1	141.5
3 Final, total	131.1	132.3	136.8	135.5	136.2	137.9	138.4	137.8	139.3	139.1	139.2	139.5
4 Consumer goods	120.2	124.5	127.7	127.3	127.2	128.9	129.4	127.7	129.0	129.1	129.3	129.8
5 Equipment	145.4	142.7	148.8	146.3	148.1	149.7	150.2	151.2	153.0	152.4	152.4	152.4
6 Intermediate	130.0	136.4	143.5	141.8	143.3	145.0	145.3	144.9	146.1	147.2	147.7	148.2
7 Materials	114.2	113.9	118.2	116.3	117.2	118.5	119.4	119.7	121.2	122.2	123.3	123.4
<i>Industry groupings</i>												
8 Manufacturing	126.4	129.1	134.6	133.2	134.0	135.6	135.9	135.7	137.3	137.9	138.5	138.9
Capacity utilization (percent) ²												
9 Manufacturing	80.1	79.8	.....	80.4	80.8	81.5	81.5	81.3	82.0	82.2	82.4	82.4
10 Industrial materials industries	80.2	78.5	.....	79.3	79.8	80.6	81.1	81.2	82.1	82.7	83.3	83.3
11 Construction contracts (1982 = 100) ³	136.0 ⁷	158.0 ⁷	162.0	157.0 ⁷	167.0 ⁷	165.0 ⁷	174.0 ⁷	160.0 ⁷	164.0	157.0	157.0	145.0
12 Nonagricultural employment, total ⁴	118.3	120.8	123.8	123.3	123.5	123.8	124.0	124.2	124.9	125.2	125.6	125.7
13 Goods-producing, total	102.4	102.4	102.2	101.7	101.7	102.1	102.2	102.4	103.0	103.4	103.8	103.6
14 Manufacturing, total	97.8	96.5	97.1	96.6	96.6	97.0	97.2	97.4	97.8	98.2	98.4	98.6
15 Manufacturing, production-worker	92.6	91.2	92.1	91.6	91.6	92.1	92.2	92.5	92.9	93.3	93.6	93.7
16 Service-producing	125.0	128.9	132.9	132.4	132.6	132.9	133.1	133.4	134.1	134.4	134.8	135.0
17 Personal income, total	207.0	219.9	233.1	230.7	231.1	232.6	233.9	235.3	239.8	238.8	240.5	241.3
18 Wages and salary disbursements	198.7	210.2	222.6	220.7	221.2	222.3	224.2	225.4	227.1	228.6	229.5	231.0
19 Manufacturing	172.8	176.4	181.5	179.9	180.0	180.1	182.0	183.7	184.7	185.7	186.1	186.8
20 Disposable personal income ⁵	206.0	219.1	230.7	229.6	228.9	230.4	231.6	232.9	237.9	236.4	237.9	239.4
21 Retail sales ⁶	190.6	199.9	208.7	207.3	209.6	210.9	214.0	210.5	208.5	209.1	211.6	212.6
<i>Prices⁷</i>												
22 Consumer (1967 = 100)	107.6 ⁷	109.6 ⁷	113.6	113.1 ⁷	113.5 ⁷	113.8 ⁷	114.4 ⁷	115.0 ⁷	115.3	115.4	115.4	115.7
23 Producer finished goods (1967 = 100) ...	104.7 ⁷	103.2 ⁷	105.4	105.4 ⁷	105.5 ⁷	106.0 ⁷	105.9 ⁷	105.7 ⁷	106.3	106.2	105.7	106.2

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	1985	1986	1987	1987							1988
				June	July	Aug.	Sept.	Oct.	Nov.	Dec. ¹	Jan.
HOUSEHOLD SURVEY DATA											
1 Noninstitutional population ¹	180,440	182,822	185,010	184,941	185,127	185,264	185,428	185,575	185,737	185,882	186,083
2 Labor force (including Armed Forces) ¹	117,695	120,078	122,122	121,846	122,132	122,568	122,230	122,651	122,861	122,984	123,436
3 Civilian labor force	115,461	117,834	119,865	119,608	119,890	120,306	119,963	120,387	120,594	120,722	121,175
<i>Employment</i>											
4 Nonagricultural industries ²	103,971	106,434	109,232	109,108	109,427	109,907	109,688	109,961	110,332	110,529	110,836
5 Agriculture	3,179	3,163	3,208	3,192	3,212	3,143	3,184	3,249	3,172	3,215	3,293
<i>Unemployment</i>											
6 Number	8,312	8,237	7,425	7,308	7,251	7,256	7,091	7,177	7,090	6,978	7,046
7 Rate (percent of civilian labor force)	7.2	7.0	6.2	6.1	6.0	6.0	5.9	6.0	5.9	5.8	5.8
8 Not in labor force	62,745	62,744	62,888	63,095	62,995	62,696	63,198	62,924	62,876	62,898	62,647
ESTABLISHMENT SURVEY DATA											
9 Nonagricultural payroll employment ³	97,519	99,610	102,105	101,818	102,126	102,275	102,434	102,983	103,285 ¹	103,596	103,703
10 Manufacturing	19,260	18,994	19,112	19,015	19,104	19,129	19,169	19,247	19,336	19,377	19,402
11 Mining	927	783	742	738	744	751	759	764	759 ¹	759	745
12 Contract construction	4,673	4,904	5,032	5,008	5,002	5,006	4,989	5,053	5,074 ¹	5,122	5,072
13 Transportation and public utilities	5,238	5,244	5,377	5,350	5,363	5,377	5,416	5,436	5,459 ¹	5,468	5,476
14 Trade	23,073	23,580	24,056	24,007	24,071	24,063	24,129	24,239	24,294 ¹	24,306	24,479
15 Finance	5,955	6,297	6,588	6,586	6,608	6,624	6,629	6,650	6,657 ¹	6,667	6,671
16 Service	22,000	23,099	24,136	24,083	24,214	24,279	24,295	24,406	24,493 ¹	24,623	24,651
17 Government	16,394	16,710	17,063	17,031	17,020	17,046	17,048	17,188	17,213 ¹	17,274	17,207

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).

A46 Domestic Nonfinancial Statistics □ April 1988

2.12 OUTPUT, CAPACITY, AND CAPACITY UTILIZATION

Seasonally adjusted

Series			1987				1987				1987						
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
			Output (1977 = 100)				Capacity (percent of 1977 output)				Utilization rate (percent)						
1 Total industry			126.9	128.2	130.9	133.0	159.5	160.4	161.3	162.2	79.5	79.9	81.2	82.0			
2 Mining			98.8	99.0	100.6	103.2	130.4	129.7	129.0	128.4	75.8	76.3	78.0	80.3			
3 Utilities			108.1	108.3	111.6	112.5	137.7	138.3	138.8	139.4	78.5	78.3	80.5	80.7			
4 Manufacturing			131.6	133.2	135.7	137.9	164.5	165.6	166.7	167.7	80.0	80.5	81.4	82.2			
5 Primary processing			114.3	116.1	119.2	122.1	138.2	139.0	139.8	140.6	82.7	83.5	85.3	86.9			
6 Advanced processing			142.0	143.5	145.8	147.5	180.3	181.6	182.9	184.1	78.7	79.0	79.7	80.1			
7 Materials			115.0	116.5	119.1	121.9	146.1	146.7	147.2	147.8	78.7	79.4	81.0	82.5			
8 Durable goods			121.4	122.9	125.5	129.6	162.3	163.1	163.9	164.7	74.8	75.4	76.7	78.7			
9 Metal materials			74.7	77.0	83.6	91.1	110.6	110.0	109.4	108.8	67.5	70.0	76.5	83.8			
10 Nondurable goods			121.2	124.0	128.2	129.3	145.6	143.8	144.7	145.6	84.8	86.2	88.6	91.0			
11 Textile, paper, and chemical			122.3	125.1	130.5	132.3	142.4	143.4	144.4	145.4	85.9	87.2	90.4	.....		
12 Paper			136.4	137.7	144.5	.....	142.8	143.9	145.1	.....	95.5	95.7	.....	.....	
13 Chemical			122.9	125.3	130.7	.....	148.8	149.8	150.9	.....	82.6	83.6	.....	.....	
14 Energy materials			98.3	98.7	100.0	101.8	120.3	120.2	120.1	119.9	81.7	82.1	83.3	84.9			
			Previous cycle ¹		Latest cycle ²		1987		1987								1988
			High	Low	High	Low	Jan.	May	June	July	Aug.	Sept.	Oct. ^f	Nov. ^f	Dec. ^f	Jan.	
			Capacity utilization rate (percent)														
15 Total industry			88.6	72.1	86.9	69.5	79.2	79.9	80.3	81.1	81.4	81.1	81.9	82.0	82.2	82.2	
16 Mining			92.8	87.8	95.2	76.9	76.1	76.5	76.6	76.8	78.2	79.1	80.6	81.1	80.5	80.2	
17 Utilities			95.6	82.9	88.5	78.0	78.5	79.2	79.0	80.2	81.3	80.0	80.5	81.0	80.7	81.6	
18 Manufacturing			87.7	69.9	86.5	68.0	79.6	80.4	80.8	81.5	81.5	81.3	82.0	82.2	82.4	82.4	
19 Primary processing			91.9	68.3	89.1	65.1	82.7	83.2	84.0	85.4	85.3	85.1	86.2	87.0	88.1	88.1	
20 Advanced processing			86.0	71.1	85.1	69.5	78.2	79.2	79.2	79.8	79.9	79.5	80.1	80.0	79.8	79.9	
21 Materials			92.0	70.5	89.1	68.5	78.7	79.3	79.8	80.6	81.1	81.2	82.1	82.7	83.3	83.3	
22 Durable goods			91.8	64.4	89.8	60.9	74.4	75.1	75.9	76.5	76.6	77.0	78.3	78.9	79.9	79.8	
23 Metal materials			99.2	67.1	93.6	45.7	66.2	69.7	71.5	73.9	77.5	78.3	82.4	83.1	87.3	85.9	
24 Nondurable goods			91.1	66.7	88.1	70.7	85.1	86.2	86.1	88.4	88.6	88.7	88.2	88.9	90.0	89.8	
25 Textile, paper, and chemical			92.8	64.8	89.4	68.8	86.4	87.1	87.1	90.0	90.5	90.7	90.4	91.1	92.3	92.3	
26 Paper			98.4	70.6	97.3	79.9	96.4	95.7	96.3	100.5	99.9	98.5	97.4	98.1	99.8	
27 Chemical			92.5	64.4	87.9	63.5	83.4	83.9	83.1	85.1	86.4	87.4	88.0	88.6	90.0	
28 Energy materials			94.6	86.9	94.0	82.3	82.5	82.1	82.8	82.4	84.0	83.5	84.9	85.4	84.5	84.8	

1. Monthly high 1973; monthly low 1975.

2. Monthly highs 1978 through 1980; monthly lows 1982.

NOTE. These data also appear in the Board's G.3 (402) release. For address, see inside front cover.

2.13 INDUSTRIAL PRODUCTION Indexes and Gross Value ▲

Monthly data are seasonally adjusted

Groups	1977 pro- por- tion	1986 avg.	1987												1988
			Dec.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct. ^r	Nov.	Dec. ^p	Jan. ^f
Index (1977 = 100)															
MAJOR MARKET															
1 Total index.....	100.00	125.0	126.7	127.2	127.3	127.4	128.4	129.1	130.6	131.2	131.0	132.5	133.0	133.6	133.8
2 Products.....	57.72	133.2	135.0	136.1	136.2	137.2	137.2	137.8	139.5	139.9	139.4	140.9	140.9	141.1	141.5
3 Final products.....	44.77	132.3	133.7	135.0	135.0	134.5	135.8	136.2	137.9	138.4	137.8	139.3	139.1	139.2	139.5
4 Consumer goods.....	25.52	124.5	127.2	127.5	127.5	126.6	128.2	127.2	128.9	129.4	127.7	129.0	129.1	129.3	129.8
5 Equipment.....	19.25	142.7	142.2	144.9	145.0	144.9	145.8	148.1	149.7	150.2	151.2	153.0	152.4	152.4	152.4
6 Intermediate products.....	12.94	136.4	139.7	139.7	140.4	139.9	142.1	143.3	145.0	145.3	144.9	146.1	147.2	147.7	148.2
7 Materials.....	42.28	113.9	115.2	115.1	115.2	116.2	116.3	117.2	118.5	119.4	119.7	121.2	122.2	123.3	123.4
Consumer goods															
8 Durable consumer goods.....	6.89	116.2	121.5	122.4	121.2	118.1	120.2	117.4	120.4	121.2	118.6	124.3	123.7	120.3	120.8
9 Automotive products.....	2.98	115.1	117.7	123.5	121.2	115.7	118.0	114.9	117.5	118.0	114.2	124.3	121.4	116.0	117.2
10 Autos and trucks.....	1.79	112.9	115.6	125.2	121.6	111.5	113.1	107.9	112.3	112.4	107.2	122.2	118.7	110.2	112.8
11 Autos, consumer.....	1.16	97.3	99.5	105.3	100.9	91.8	91.0	87.4	86.4	76.8	79.1	94.7	91.9	83.7	77.5
12 Trucks, consumer.....	.63	141.8	145.6	162.1	159.9	148.1	154.2	146.0	160.4	178.4	159.4	173.2	168.5	.....	.....
13 Auto parts and allied goods.....	1.19	118.4	120.8	121.0	120.5	121.9	125.3	125.4	125.3	126.6	124.8	127.5	125.4	124.6	123.9
14 Home goods.....	3.91	117.1	124.4	121.6	121.2	119.9	121.8	119.3	122.5	123.6	121.9	124.3	125.4	123.6	123.9
15 Appliances, A/C and TV.....	1.24	139.5	153.2	145.2	142.9	137.7	142.2	133.4	141.7	147.1	141.8	145.7	150.1	143.5	142.5
16 Appliances and TV.....	1.19	141.6	155.1	146.7	143.8	139.2	142.3	133.4	142.6	145.5	140.6	146.1	150.5	143.4	.....
17 Carpeting and furniture.....	.96	125.8	132.0	130.8	131.3	133.5	133.3	132.3	134.1	132.0	131.6	132.9	133.0	132.9	.....
18 Miscellaneous home goods.....	1.71	96.0	99.4	99.3	99.8	99.4	100.7	101.8	102.2	102.0	102.2	104.1	103.4	104.0	.....
19 Nondurable consumer goods.....	18.63	127.5	129.4	129.4	129.8	129.8	131.1	130.9	132.1	132.5	131.0	130.8	131.1	132.6	133.1
20 Consumer staples.....	15.29	97.0	136.0	135.9	136.5	136.4	137.7	137.6	138.9	139.2	137.8	137.4	137.9	139.9	140.5
21 Consumer foods and tobacco.....	7.80	134.1	133.9	134.0	134.8	134.4	135.6	136.0	137.2	137.4	137.0	137.5	137.1	139.0	.....
22 Nonfood staples.....	7.49	131.9	138.2	137.9	138.2	138.5	139.9	139.2	140.6	141.2	138.6	137.2	138.6	140.8	141.2
23 Consumer chemical products.....	2.75	136.5	163.1	164.7	165.7	164.7	165.9	164.4	165.7	167.4	163.6	160.0	162.1	166.6	.....
24 Consumer paper products.....	1.88	161.2	150.1	147.8	147.5	148.9	152.9	153.1	153.8	153.9	153.2	151.8	153.0	154.6	.....
25 Consumer energy.....	2.86	147.4	106.4	105.7	105.8	106.5	106.4	105.9	108.0	107.7	105.0	105.8	106.7	107.0	.....
26 Consumer fuel.....	1.44	105.7	92.2	92.5	94.1	94.5	92.1	91.9	92.7	91.4	91.6	92.4	93.2	94.7	.....
27 Residential utilities.....	1.42	92.8	120.8	119.2	117.7	118.7	121.0	120.2	123.6	124.3	118.7	119.4	120.5	.....	.....
Equipment															
28 Business and defense equipment.....	18.01	147.1	147.0	150.1	150.1	150.0	150.8	153.2	154.4	154.5	155.2	157.2	156.7	157.0	157.1
29 Business equipment.....	14.34	138.6	137.1	140.8	140.8	140.8	141.7	144.2	145.6	145.6	146.3	148.7	148.3	148.7	148.6
30 Construction, mining, and farm.....	2.08	59.8	58.2	56.8	58.1	58.6	61.2	63.0	65.0	66.4	66.1	66.5	67.1	67.0	67.1
31 Manufacturing.....	3.27	112.0	108.8	111.5	110.9	111.1	111.5	117.2	120.4	120.9	122.0	120.5	120.0	121.3	122.5
32 Power.....	1.27	81.6	80.2	81.2	81.7	82.4	84.0	84.0	81.8	82.8	81.1	83.0	83.8	84.7	85.5
33 Commercial.....	5.22	214.6	213.7	218.4	219.7	220.9	222.0	226.7	227.9	227.7	229.1	232.4	231.9	232.8	233.3
34 Transit.....	2.49	109.2	108.9	117.4	114.0	110.4	110.1	105.4	106.1	104.7	105.1	112.5	111.2	109.5	105.6
35 Defense and space equipment.....	3.67	180.3	185.8	186.5	186.6	186.1	186.5	188.6	188.7	189.1	189.8	190.3	189.8	189.7	190.2
Intermediate products															
36 Construction supplies.....	5.95	124.7	127.9	128.4	128.5	127.3	128.3	131.5	133.1	132.5	132.3	133.3	134.0	134.6	134.6
37 Business supplies.....	6.99	146.4	149.8	149.4	150.5	150.5	153.8	153.4	155.2	156.3	155.6	157.1	158.5	158.8	.....
38 General business supplies.....	5.67	150.6	154.3	154.1	155.2	155.5	158.2	158.5	160.5	161.0	160.9	162.3	164.3	164.5	.....
39 Commercial energy products.....	1.31	128.3	130.3	128.8	130.3	129.0	135.0	131.1	132.3	135.8	132.7	134.6	133.2	134.2	.....
Materials															
40 Durable goods materials.....	20.50	119.7	120.7	121.5	121.8	122.2	121.6	124.0	125.2	125.5	126.4	128.7	130.0	131.8	131.9
41 Durable consumer parts.....	4.92	98.5	98.8	100.0	98.9	96.2	95.2	99.2	98.5	99.6	99.0	102.3	103.0	103.7	103.0
42 Equipment parts.....	5.94	153.9	154.2	155.6	155.8	157.1	156.0	158.3	159.3	159.5	161.1	162.2	163.2	164.8	166.0
43 Durable materials n.e.c.....	9.64	109.4	111.2	111.5	112.6	114.1	113.9	115.5	117.7	117.9	118.9	121.6	123.2	125.9	125.7
44 Basic metal materials.....	4.64	80.0	80.3	80.3	80.8	81.8	81.9	83.6	86.6	90.4	91.3	95.3	96.3	100.7	99.5
45 Nondurable goods materials.....	10.09	118.3	123.2	122.5	122.8	125.4	125.3	124.1	127.6	128.3	128.6	128.2	129.4	131.3	131.4
46 Textile, paper, and chemical materials.....	7.53	118.9	124.7	123.6	124.0	126.9	126.5	125.1	129.6	130.6	131.2	131.0	132.4	134.5	134.9
47 Textile materials.....	1.52	110.6	116.1	115.8	118.5	125.0	.....	111.9	117.8	116.7	116.0	113.0	114.2	114.6	.....
48 Pulp and paper materials.....	1.55	132.1	140.2	136.7	134.7	137.4	137.4	139.0	145.4	145.0	143.3	142.0	143.5	146.4	.....
49 Chemical materials.....	4.46	117.1	122.3	121.8	122.1	125.0	125.0	124.9	128.1	130.4	132.2	133.4	134.7	137.2	.....
50 Miscellaneous nondurable materials.....	2.57	116.5	118.5	119.0	119.2	121.1	122.0	120.9	122.0	121.4	120.9	119.7	120.9	.....	.....
51 Energy materials.....	11.69	99.9	98.8	97.6	97.0	97.5	99.3	99.4	99.0	100.9	100.2	101.8	102.4	101.3	101.6
52 Primary energy.....	7.57	105.5	105.1	102.6	101.5	102.3	103.6	104.0	102.5	104.6	104.6	106.8	107.8	106.3	.....
53 Converted fuel materials.....	4.12	89.6	87.3	88.5	88.9	88.7	91.4	91.0	92.5	94.1	92.2	92.7	92.6	92.1	.....

2.13 INDUSTRIAL PRODUCTION Indexes and Gross Value—Continued

Groups	SIC code	1977 proportion	1986 avg.	1986	1987												1988
				Dec.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct. ^r	Nov.	Dec. ^p	Jan. ^e	
				Index (1977 = 100)													
MAJOR INDUSTRY																	
1 Mining and utilities.....		15.79	103.4	101.6	102.4	101.9	101.4	103.1	103.0	103.7	105.4	105.4	106.8	107.5	106.8	106.9	
2 Mining.....		9.83	99.6	97.1	98.8	98.3	98.6	99.2	99.2	99.2	100.9	101.9	103.6	104.2	103.2	102.6	
3 Utilities.....		5.96	109.6	109.0	108.5	107.9	106.0	109.6	109.4	111.2	112.9	111.2	112.1	112.9	112.6	114.0	
4 Manufacturing.....		84.21	129.1	131.3	131.6	132.4	132.4	133.2	134.0	135.6	135.9	135.7	137.3	137.9	138.5	138.9	
5 Nondurable.....		35.11	130.9	133.4	132.9	133.7	134.6	135.7	136.9	138.5	138.8	138.6	138.1	139.4	140.6	141.2	
6 Durable.....		49.10	127.9	129.7	130.8	131.5	130.9	131.4	132.0	133.5	133.8	133.7	136.8	136.7	137.1	137.2	
<i>Mining</i>																	
7 Metal.....	10	.50	.....	76.2	73.6	71.2	65.7	71.7	70.7	71.4	79.3	86.5	85.6	90.0	.....	.....
8 Coal.....	11.12	1.60	124.2	125.4	131.7	122.3	121.9	127.2	128.8	127.9	130.5	133.3	140.3	142.9	140.6	139.0	
9 Oil and gas extraction.....	13	7.07	94.7	89.8	90.9	92.4	93.1	92.1	91.8	91.8	93.0	93.3	94.1	93.6	92.7	92.3	
10 Stone and earth minerals.....	14	.66	113.9	122.5	122.1	123.8	125.4	127.6	128.5	130.7	130.3	130.0	131.0	134.1	135.7	.....
<i>Nondurable manufactures</i>																	
11 Foods.....	20	7.96	133.6	136.7	136.4	137.3	136.0	137.4	137.7	138.5	138.8	139.5	138.0	138.4	139.4	.....
12 Tobacco products.....	21	.62	96.6	93.4	99.9	101.1	99.6	106.6	107.0	.....	110.4	101.7	103.7	103.4	.....	.....
13 Textile mill products.....	22	2.29	113.2	113.4	110.8	112.6	116.6	115.7	117.2	118.3	119.8	118.2	116.8	118.3	119.2	.....
14 Apparel products.....	23	2.79	103.6	104.9	106.5	105.4	105.3	106.4	107.7	109.7	108.4	107.6	108.0	109.3	.....	.....
15 Paper and products.....	26	3.15	136.4	141.1	139.9	139.9	140.5	141.3	142.6	148.8	148.9	147.4	146.0	148.3	149.8	.....
16 Printing and publishing.....	27	4.54	163.4	166.4	164.4	167.6	169.2	171.4	174.1	174.0	174.7	174.9	175.2	175.6	175.9	178.0	
17 Chemicals and products.....	28	8.05	133.0	135.7	135.7	135.3	137.3	138.1	139.3	140.8	142.3	142.4	141.5	144.2	146.8	.....
18 Petroleum products.....	29	2.40	92.1	93.5	91.6	92.1	94.0	92.6	92.3	94.1	92.9	93.5	94.6	93.3	96.0	97.4	
19 Rubber and plastic products.....	30	2.80	153.3	157.1	156.2	158.6	160.5	162.2	165.4	167.2	164.8	165.2	166.7	169.4	169.9	.....
20 Leather and products.....	31	.53	61.3	60.2	59.8	59.4	60.2	61.4	60.8	59.2	61.3	60.7	59.6	60.7	58.3	.....
<i>Durable manufactures</i>																	
21 Lumber and products.....	24	2.30	123.4	133.5	129.6	128.9	127.8	130.3	131.1	132.8	131.1	126.9	129.8	134.0	135.8	.....
22 Furniture and fixtures.....	25	1.27	146.7	148.8	145.0	149.9	148.2	150.5	153.9	156.2	155.2	155.9	156.0	158.1	159.2	.....
23 Clay, glass, stone products.....	32	2.72	120.2	119.4	118.8	119.8	120.6	117.2	117.9	118.8	116.5	118.6	118.9	120.5	122.1	.....
24 Primary metals.....	33	5.33	75.8	73.4	75.1	77.0	76.1	77.0	78.8	81.4	85.1	84.5	90.6	90.0	92.6	91.0	
25 Iron and steel.....	331.2	3.49	63.4	61.3	62.3	65.4	65.0	65.7	68.3	70.9	76.0	74.6	82.0	79.7	85.0	.....
26 Fabricated metal products.....	34	6.46	107.4	109.6	108.3	110.5	109.9	108.5	111.1	111.1	110.1	111.1	113.5	113.8	115.5	116.0	
27 Nonelectrical machinery.....	35	9.54	141.9	144.8	145.5	148.5	150.4	149.7	151.8	155.3	154.3	156.6	158.0	157.3	158.6	159.2	
28 Electrical machinery.....	36	7.15	166.5	170.4	171.0	168.5	168.4	171.1	170.5	172.5	174.3	173.4	175.5	175.7	175.3	176.3	
29 Transportation equipment.....	37	9.13	125.8	126.8	132.7	132.2	127.8	129.4	126.5	127.6	128.1	125.5	132.0	130.4	128.4	128.0	
30 Motor vehicles and parts.....	371	5.25	110.9	109.7	117.7	116.5	109.8	112.0	107.4	109.4	109.1	105.6	116.0	114.0	110.5	109.0	
31 Aerospace and miscellaneous transportation equipment.....	372-6.9	3.87	146.1	150.1	153.0	153.4	152.3	153.1	152.4	152.3	153.9	152.5	153.7	152.8	152.6	153.8	
32 Instruments.....	38	2.66	141.3	140.2	142.0	140.3	142.8	142.1	144.5	143.8	146.3	145.6	146.7	147.3	144.8	145.8	
33 Miscellaneous manufactures.....	39	1.46	99.3	103.8	101.6	103.9	101.4	101.9	101.2	100.5	102.2	102.1	104.6	104.5	103.6	.....
<i>Utilities</i>																	
34 Electric.....	.....	4.17	122.2	122.6	122.3	123.6	122.3	128.8	128.8	131.0	132.0	127.5	126.8	127.5	126.9	.....
Gross value (billions of 1982 dollars, annual rates)																	
MAJOR MARKET																	
35 Products, total.....	.....	517.5	1,702.2	1,700.7	1,718.7	1,725.2	1,710.0	1,723.0	1,720.4	1,732.5	1,741.7	1,735.9	1,774.1	1,771.1	1,771.0	1,780.2	
36 Final.....	.....	405.7	1,314.5	1,307.3	1,329.2	1,330.3	1,316.5	1,324.7	1,320.1	1,326.6	1,334.9	1,330.3	1,360.9	1,358.5	1,355.3	1,363.1	
37 Consumer goods.....	.....	272.7	853.8	857.1	865.3	868.1	857.1	862.8	855.1	863.2	866.4	856.9	876.6	877.9	878.2	885.5	
38 Equipment.....	.....	133.0	458.2	450.2	463.9	462.2	459.4	461.9	465.0	463.5	468.5	473.4	484.4	480.6	477.1	477.6	
39 Intermediate.....	.....	111.9	387.6	393.4	389.5	394.9	393.6	398.4	400.3	405.9	406.8	405.6	413.2	412.6	415.7	417.1	

▲ 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.

NOTE: These data also appear in the Board's G.12.3 (414) release. For address, see inside front cover.

2.14 HOUSING AND CONSTRUCTION

Monthly figures are at seasonally adjusted annual rates except as noted.

Item	1985	1986	1987	1987									
				Mar.	Apr.	May	June	July	Aug.	Sept.	Oct. ^r	Nov. ^r	Dec.
Private residential real estate activity (thousands of units)													
NEW UNITS													
1 Permits authorized	1,733	1,750	1,524	1,719	1,598	1,493	1,517	1,487	1,502	1,502	1,463	1,469	1,361
2 1-family	957	1,071	1,030	1,150	1,058	1,009	1,039	993	1,023	992	977	983	974
3 2-or-more-family	777	679	495	569	540	484	478	494	479	510	486	486	387
4 Started	1,742	1,805	1,621	1,723 ^r	1,635 ^r	1,599 ^r	1,583 ^r	1,594 ^r	1,583 ^r	1,679 ^r	1,538	1,661	1,404
5 1-family	1,072	1,179	1,147	1,206 ^r	1,201 ^r	1,125 ^r	1,086 ^r	1,142 ^r	1,109 ^r	1,211	1,105	1,129	1,041
6 2-or-more-family	669	626	474	517 ^r	434 ^r	474 ^r	497 ^r	452 ^r	474	468 ^r	433	532	363
7 Under construction, end of period ¹ ..	1,063	1,074	1,002	1,085	1,070	1,061	1,059	1,053	1,049	1,052	1,049	1,050	1,030
8 1-family	539	583	599	618	623	621	620	623	625	631	631	630	625
9 2-or-more-family	524	490	403	467	446	441	439	430	424	421	418	420	406
10 Completed	1,703	1,756	1,664	1,689	1,830	1,621	1,601	1,698	1,666	1,581	1,549	1,562	1,635
11 1-family	1,072	1,120	1,120	1,141	1,148	1,158	1,101	1,120	1,067	1,112	1,111	1,080	1,110
12 2-or-more-family	631	637	545	548	682	463	500	578	599	469	438	482	525
13 Mobile homes shipped	284	244	233	230 ^r	229 ^r	224 ^r	234 ^r	243 ^r	234 ^r	240 ^r	234	222	227
Merchant builder activity in 1-family units													
14 Number sold	688	748	675	720	733	649	641	671	675	644 ^r	659	643	603
15 Number for sale, end of period ¹	350	361	371	358	359	355	359	359	361	361	360	363	366
Price (thousands of dollars) ²													
16 Median	84.3	92.2	104.4	98.4	96.5	104.9	109.0	105.0	106.8	106.5 ^r	106.0	117.0	108.9
17 Average	101.0	112.2	127.8	119.5	118.1	126.6	135.8	128.6	128.5	133.5 ^r	125.0	139.0	135.8
EXISTING UNITS (1-family)													
18 Number sold	3,217	3,566	3,523	3,680	3,560	3,770	3,500	3,430	3,410	3,450	3,570	3,370	3,330
Price of units sold (thousands of dollars) ²													
19 Median	75.4	80.3	84.9	85.6	85.0	85.2	85.2	86.2	85.1	85.1	84.8	83.7	85.4
20 Average	90.6	98.3	105.3	104.9	105.0	106.3	106.0	107.6	105.3	106.2	106.3	105.0	107.1
Value of new construction ³ (millions of dollars)													
CONSTRUCTION													
21 Total put in place	355,995	388,815	399,468	388,303	396,222	396,680	397,191	398,465	402,872	402,782 ^r	403,482	411,325	409,730
22 Private	291,665	316,589	324,065	312,203	320,483	321,414	324,256	323,847	329,831	324,857 ^r	326,658	333,581	330,090
23 Residential	158,475	187,147	198,103	190,812	199,523	195,871	200,864	198,005	200,241	196,969 ^r	198,803	199,823	200,762
24 Nonresidential, total	133,190	129,442	125,962	121,391	120,960	125,543	123,392	125,842	129,590	127,888	127,855	133,758	129,328
25 Buildings	15,769	13,747	13,072	11,354	11,492	13,376	13,023	13,005	13,659	14,387	13,561	14,363	13,412
26 Industrial	51,315	48,592	43,892	52,285	50,924	53,224	51,831	52,537	54,055	52,800	53,788	57,602	53,935
27 Commercial	12,619	13,216	15,199	15,143	14,950	14,926	14,769	15,317	14,888	15,079	15,567	16,158	16,515
28 Other	53,487	53,887	53,799	42,609	43,594	44,017	43,769	44,983	46,988	45,622	44,939	45,635	45,466
29 Public	64,326	72,225	75,401	76,100	75,739	75,266	72,935	74,618	73,041	77,924	76,824	77,744	79,641
30 Military	3,283	3,919	4,204	3,893	3,403	4,397	4,352	5,009	4,193	6,083	4,308	4,738	3,164
31 Highway	21,756	23,360	23,275	23,575	22,673	22,607	21,704	22,441	22,005	23,489	24,975	24,832	26,400
32 Conservation and development	4,746	4,668	5,222	4,792	5,551	4,839	5,498	5,328	5,127	4,978	5,491	5,188	6,060
33 Other	34,541	40,278	42,700	43,840	44,112	43,423	41,381	41,840	41,716	43,374	42,050	42,986	44,017

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 prior 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.

A50 Domestic Nonfinancial Statistics □ April 1988

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 Jan. 1988 (1967 = 100) ¹
	1987 Jan.	1988 Jan.	1987 ²				1987 ²				1988 Jan.	
			Mar.	June	Sept.	Dec.	Sept.	Oct.	Nov.	Dec.		
CONSUMER PRICES ²												
1 All items	1.5	4.0	6.3	4.3	3.9	3.2	.3	.3	.3	.2	.3	115.7
2 Food	4.2	3.2	3.6	5.8	2.1	2.8	.5	.2	.1	.4	.3	115.7
3 Energy items	-17.1	4.2	25.5	6.6	6.0	-3.9	-4	-6	.3	-8	-7	87.4
4 All items less food and energy	3.8	4.3	4.9	3.8	3.8	4.4	.2	.5	.3	.2	.5	120.8
5 Commodities	1.4	3.4	4.8	3.7	2.9	2.5	.4	.4	.4	-2	.4	113.2
6 Services	5.0	4.8	4.8	4.4	4.3	5.0	.2	.6	.2	.4	.6	125.2
PRODUCER PRICES												
7 Finished goods	-1.4	2.1	4.3	3.5	3.8	-2.6	.4	-2	-1	-4	.4	106.2
8 Consumer foods	1.8	2.4	-2.5	9.6	-1.8	-5.7	.6	-4	.3	-1.4	1.7	110.6
9 Consumer energy	-31.9	1.7	40.6	2.0	16.5	-12.5	-5	-8	-9	-1.6	-4.5	59.0
10 Other consumer goods	3.1	2.7	2.9	1.8	4.6	1.4	.5	.1	-1	.3	.6	116.3
11 Capital equipment	2.4	1.2	1.1	1.1	4.0	-7	.5	-3	-1	.2	.2	112.7
12 Intermediate materials ³	-3.3	5.1	6.7	5.3	5.6	4.8	.2	.5	.5	.2	.3	104.2
13 Excluding energy .....	.7	5.8	4.2	4.2	5.3	7.6	.6	.7	.5	.5	.9	111.7
Crude materials												
14 Foods	-1.8	5.6	-2.5	25.2	-4.8	-5.2	.0	.5	-2.7	.8	.9	96.9
15 Energy	-21.1	-1.9	50.0	11.3	5.9	-15.7	-2.8	-1.6	-1.2	-1.5	-3.8	70.7
16 Other	1.8	22.4	8.7	27.2	39.4	16.9	3.4	2.8	.7	.5	1.3	128.6

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	1985	1986	1987 ¹	1986	1987			
				Q4	Q1	Q2	Q3	Q4 ²
GROSS NATIONAL PRODUCT								
1 Total	4,010.3	4,235.0	4,487.7	4,288.1	4,377.7	4,445.1	4,524.0	4,604.0
By source								
2 Personal consumption expenditures	2,629.4	2,799.8	2,967.0	2,858.6	2,893.8	2,943.7	3,011.3	3,019.2
3 Durable goods	368.7	402.4	413.8	419.8	396.1	409.0	436.8	413.1
4 Nondurable goods	913.1	939.4	981.6	946.3	969.9	982.1	986.4	988.1
5 Services	1,347.5	1,458.0	1,571.6	1,492.4	1,527.7	1,552.6	1,588.1	1,617.9
6 Gross private domestic investment	641.6	671.0	716.7	660.2	699.9	702.6	707.4	756.8
7 Fixed investment	631.6	655.2	671.3	666.6	648.2	662.3	684.5	690.1
8 Nonresidential	442.6	436.9	442.9	439.7	422.8	434.6	456.6	457.8
9 Structures	152.5	137.4	133.9	132.9	128.7	129.7	137.1	140.1
10 Producers' durable equipment	290.1	299.5	309.0	306.7	294.1	304.9	319.5	317.6
11 Residential structures	189.0	218.3	228.4	226.9	225.4	227.7	227.9	232.3
12 Change in business inventories	10.0	15.7	45.4	-6.4	51.6	40.3	22.9	66.7
13 Nonfarm	13.6	16.8	36.6	5.1	48.7	27.3	11.1	59.3
14 Net exports of goods and services	-79.2	-105.5	-120.3	-116.9	-112.2	-118.4	-123.7	-126.9
15 Exports	369.9	376.2	427.4	383.3	397.3	416.5	439.2	456.8
16 Imports	449.2	481.7	547.7	500.2	509.5	534.8	562.9	583.7
17 Government purchases of goods and services	818.6	869.7	924.3	886.3	896.2	917.1	929.0	954.8
18 Federal	353.9	366.2	380.9	368.6	366.9	379.6	382.1	395.1
19 State and local	464.7	503.5	543.4	517.7	529.3	537.6	546.9	559.7
By major type of product								
20 Final sales, total	4,000.3	4,219.3	4,442.3	4,294.6	4,326.0	4,404.8	4,501.1	4,537.3
21 Goods	1,637.9	1,693.8	1,782.5	1,698.9	1,738.7	1,763.5	1,798.3	1,829.4
22 Durable	704.3	726.8	772.9	737.3	747.0	756.7	785.7	802.2
23 Nondurable	933.6	967.0	1,009.6	961.6	991.7	1,006.8	1,012.6	1,027.2
24 Services	1,969.2	2,116.2	2,270.1	2,160.0	2,212.0	2,252.2	2,289.3	2,327.0
25 Structures	403.1	425.0	435.1	429.3	426.9	429.4	436.4	447.6
26 Change in business inventories	10.0	15.7	45.4	-6.4	51.6	40.3	22.9	66.7
27 Durable goods	7.3	4.8	24.8	-4.5	35.2	22.1	-1.9	43.7
28 Nondurable goods	2.7	10.9	20.6	-1.9	16.5	18.2	24.8	23.0
29 MEMO								
Total GNP in 1982 dollars	3,607.5	3,713.3	3,820.3	3,731.5	3,772.2	3,795.3	3,835.9	3,877.9
NATIONAL INCOME								
30 Total	3,229.9	3,422.0	3,637.7	3,471.0	3,548.3	3,593.3	3,659.0	n.a.
31 Compensation of employees	2,370.8	2,504.9	2,647.5	2,552.0	2,589.9	2,623.4	2,663.5	2,713.4
32 Wages and salaries	1,974.7	2,089.1	2,212.7	2,128.5	2,163.3	2,191.4	2,226.5	2,269.8
33 Government and government enterprises	372.3	394.8	421.4	403.8	412.2	418.1	424.5	430.9
34 Other	1,602.6	1,694.3	1,791.3	1,724.7	1,751.1	1,773.3	1,801.9	1,838.9
35 Supplement to wages and salaries	396.1	415.8	434.8	423.5	426.6	432.0	437.0	443.6
36 Employer contributions for social insurance	203.8	214.7	224.6	219.1	220.0	222.5	225.9	230.0
37 Other labor income	192.3	201.1	210.2	204.4	206.7	209.5	211.1	213.5
38 Proprietors' income ¹	257.3	289.8	327.8	297.8	320.9	323.1	322.7	344.5
39 Business and professional ¹	227.6	252.6	279.0	261.2	269.7	275.8	282.1	288.4
40 Farm ¹	29.7	37.2	48.8	36.6	51.3	47.3	40.6	56.1
41 Rental income of persons ²	9.0	16.7	19.1	18.4	20.0	18.9	17.3	20.1
42 Corporate profits ¹	277.6	284.4	306.5	281.1	294.0	296.8	314.9	n.a.
43 Profits before tax ³	224.8	231.9	275.7	247.9	257.0	268.7	284.9	n.a.
44 Inventory valuation adjustment	-7	6.5	-17.3	-8.9	-11.3	-20.0	-17.6	-20.4
45 Capital consumption adjustment	53.5	46.0	48.2	42.1	48.2	48.0	47.7	48.7
46 Net interest	315.3	326.1	336.7	321.7	323.6	331.1	340.6	351.6

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	1985	1986	1987 ¹	1986	1987				
				Q4	Q1	Q2	Q3	Q4 ²	
PERSONAL INCOME AND SAVING									
1 Total personal income	3,327.0	3,534.3	3,746.3	3,593.6	3,662.0	3,708.6	3,761.0	3,853.6	
2 Wage and salary disbursements	1,974.9	2,089.1	2,212.7	2,128.5	2,163.3	2,191.4	2,226.1	2,270.2	
3 Commodity-producing industries	609.2	623.3	641.1	628.4	632.9	635.0	641.8	654.8	
4 Manufacturing	460.9	470.5	484.0	474.5	477.2	479.0	485.1	494.7	
5 Distributive industries	473.0	497.1	522.9	504.7	511.5	518.9	526.3	534.8	
6 Service industries	520.4	573.9	627.3	591.6	606.7	619.3	633.9	649.3	
7 Government and government enterprises	372.3	394.8	421.4	403.8	412.2	418.1	424.2	431.2	
8 Other labor income	192.3	201.1	210.2	204.4	206.7	209.5	211.1	213.5	
9 Proprietors' income ¹	257.3	289.8	327.8	297.8	320.9	323.1	322.7	344.5	
10 Business and professional ¹	227.6	252.6	279.0	261.2	269.7	275.8	282.1	288.4	
11 Farm ¹	29.7	37.2	48.8	36.6	51.3	47.3	40.6	56.1	
12 Rental income of persons ²	9.0	16.7	19.1	18.4	20.0	18.9	17.3	20.1	
13 Dividends	76.3	81.2	87.5	82.9	84.5	86.3	88.7	90.5	
14 Personal interest income	476.5	497.6	515.8	496.8	499.8	506.3	520.0	537.2	
15 Transfer payments	489.7	518.3	543.0	526.6	533.7	541.5	545.8	551.2	
16 Old-age survivors, disability, and health insurance benefits	253.4	269.2	282.8	273.5	278.0	282.3	284.4	286.5	
17 LESS: Personal contributions for social insurance	148.9	159.6	169.8	161.8	166.7	168.4	170.7	173.6	
18 EQUALS: Personal income	3,327.0	3,534.3	3,746.3	3,593.6	3,662.0	3,708.6	3,761.0	3,853.6	
19 LESS: Personal tax and nontax payments	485.9	512.2	564.8	532.0	536.1	578.0	565.7	579.4	
20 EQUALS: Disposable personal income	2,841.1	3,022.1	3,181.5	3,061.6	3,125.9	3,130.6	3,195.3	3,274.2	
21 LESS: Personal outlays	2,714.1	2,891.5	3,061.9	2,952.6	2,987.5	3,037.4	3,106.5	3,116.4	
22 EQUALS: Personal saving	127.1	130.6	119.6	109.0	138.4	93.2	88.8	157.9	
MEMO									
Per capita (1982 dollars)									
23 Gross national product	15,073.7	15,369.6	15,669.8	15,387.6	15,523.4	15,586.4	15,714.4	15,847.5	
24 Personal consumption expenditures	9,830.2	10,142.8	10,239.1	10,228.8	10,188.9	10,215.6	10,326.5	10,220.2	
25 Disposable personal income	10,622.0	10,947.0	10,979.0	10,956.0	11,008.0	10,865.0	10,958.0	11,083.0	
26 Saving rate (percent)	4.5	4.3	3.8	3.6	4.4	3.0	2.8	4.8	
GROSS SAVING									
27 Gross saving	531.3	532.0	566.2	515.3	554.3	551.3	559.3	n.a.	
28 Gross private saving	664.2	679.8	673.3	653.4	683.8	639.9	648.7	n.a.	
29 Personal saving	127.1	130.6	119.6	109.0	138.4	93.2	88.8	157.9	
30 Undistributed corporate profits ³	99.6	92.6	74.6	78.5	75.6	70.1	76.8	n.a.	
31 Corporate inventory valuation adjustment	-7	6.5	-17.3	-8.9	-11.3	-20.0	-17.6	-20.4	
Capital consumption allowances									
32 Corporate	269.1	282.8	296.2	289.3	291.8	294.5	297.8	300.9	
33 Noncorporate	168.5	173.8	182.9	176.6	178.0	182.1	185.3	186.3	
34 Government surplus, or deficit (-), national income and product accounts	-132.9	-147.8	-107.1	-138.1	-129.5	-88.6	-89.3	n.a.	
35 Federal	-196.0	-204.7	-151.4	-188.7	-170.5	-139.2	-135.8	n.a.	
36 State and local	63.1	56.8	44.3	50.6	41.0	50.6	46.5	n.a.	
37 Gross investment	525.7	527.1	559.5	503.7	552.1	548.1	548.4	589.2	
38 Gross private domestic	641.6	671.0	716.7	660.2	699.9	702.6	707.4	756.8	
39 Net foreign	-115.9	-143.9	-157.2	-156.5	-147.7	-154.5	-159.0	-167.7	
40 Statistical discrepancy	-5.6	-4.9	-6.8	-11.6	-2.2	-3.1	-10.9	-10.9	

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	1984	1985	1986	1986		1987		
				Q3	Q4	Q1	Q2	Q3 ^p
1 Balance on current account	-107,013	-116,394	-141,352	-36,583	-37,977	-36,784	-41,190	-43,378
2 Not seasonally adjusted				-40,230	-36,398	-33,435	-42,006	-48,525
3 Merchandise trade balance	-112,522	-122,148	-144,339	-37,115	-38,595	-38,757	-39,558	-39,832
4 Merchandise exports	219,900	215,935	224,361	56,534	57,021	56,992	60,097	65,263
5 Merchandise imports	-332,422	-338,083	-368,700	-93,649	-95,616	-95,749	-99,655	-105,095
6 Military transactions, net	-1,942	-3,338	-3,662	-815	-495	-37	29	-443
7 Investment income, net ³	18,490	25,398	20,844	5,339	4,492	5,500	1,577	-267
8 Other service transactions, net	1,138	-1,005	1,463	342	759	-387	-146	95
9 Remittances, pensions, and other transfers	-3,637	-4,079	-3,885	-875	-1,151	-1,017	-865	-872
10 U.S. government grants (excluding military)	-8,541	-11,222	-11,772	-3,459	-2,987	-2,086	-2,227	-2,059
11 Change in U.S. government assets, other than official reserve assets, net (increase, -)	-5,476	-2,831	-1,920	-1,454	15	225	-177	232
12 Change in U.S. official reserve assets (increase, -)	-3,130	-3,858	312	280	132	1,956	3,419	32
13 Gold	0	0	0	0	0	0	0	0
14 Special drawing rights (SDRs)	-979	-897	-246	163	-31	76	-171	-210
15 Reserve position in International Monetary Fund	-995	908	1,500	508	283	606	335	407
16 Foreign currencies	-1,156	-3,869	-942	-391	-120	1,274	3,255	-165
17 Change in U.S. private assets abroad (increase, -) ³	-13,685	-24,711	-94,374	-23,304	-32,351	13,352	-18,137	-29,467
18 Bank-reported claims	-11,127	-1,323	-59,039	-18,878	-31,800	25,686	-15,685	-21,249
19 Nonbank-reported claims	5,019	1,361	-3,986	685	170	-1,163	2,603	.....
20 U.S. purchase of foreign securities, net	-4,756	-7,481	-3,302	620	3,113	-1,345	384	-930
21 U.S. direct investments abroad, net ³	-2,821	-17,268	-28,047	-5,731	-3,834	-9,826	-5,439	-7,288
22 Change in foreign official assets in the United States (increase, +)	2,987	-1,140	34,698	15,551	1,003	13,953	10,070	359
23 U.S. Treasury securities	4,690	-838	34,515	12,167	4,572	12,145	11,084	1,200
24 Other U.S. government obligations	13	-301	-1,214	-276	-117	-62	256	714
25 Other U.S. government liabilities ⁴	586	823	1,723	999	-607	-1,381	-1,504	-506
26 Other U.S. liabilities reported by U.S. banks	555	645	554	2,963	-2,435	3,611	547	-425
27 Other foreign official assets ⁵	-2,857	-1,469	-880	-302	-410	-360	-313	-624
28 Change in foreign private assets in the United States (increase, +) ³	99,481	131,012	178,689	54,040	57,428	12,802	39,494	67,650
29 U.S. bank-reported liabilities	33,849	41,045	77,350	30,360	34,604	-13,614	14,823	48,872
30 U.S. nonbank-reported liabilities	4,704	-450	-2,791	-80	1,035	1,761	1,526	.....
31 Foreign private purchases of U.S. Treasury securities, net	23,001	20,433	8,275	609	-3,074	-1,570	-2,211	-2,832
32 Foreign purchases of other U.S. securities, net	12,568	50,962	70,802	17,074	12,269	18,499	15,870	12,669
33 Foreign direct investments in the United States, net ³	25,359	19,022	25,053	6,077	12,594	7,726	9,486	8,941
34 Allocation of SDRs	0	0	0	0	0	0	0	0
35 Discrepancy	26,837	17,920	23,947	-8,530	11,750	-5,504	6,521	4,572
36 Owing to seasonal adjustments				-4,153	3,904	2,652	-2,009	-5,177
37 Statistical discrepancy in recorded data before seasonal adjustment	26,837	17,920	23,947	-4,377	7,846	-8,156	8,530	9,749
MEMO								
38 Changes in official assets								
39 U.S. official reserve assets (increase, -)	-3,130	-3,858	312	280	132	1,956	3,419	32
40 Foreign official assets in the United States (increase, +) excluding line 25	2,401	-1,963	32,975	14,552	1,610	15,334	11,574	865
41 Change in Organization of Petroleum Exporting Countries official assets in the United States (part of line 22 above)	-4,504	-6,709	-8,508	-3,023	-5,195	-2,901	-2,651	-1,681
42 Transfers under military grant programs (excluded from lines 4, 6, and 10 above)	153	46	101	19	53	8	26	10

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. Includes reinvested earnings.

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 TRADE¹

Millions of dollars; monthly data are not seasonally adjusted.

Item	1985	1986	1987	1987						
				June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1 EXPORTS of domestic and foreign merchandise excluding grant-aid shipments, f.a.s. value.....	218,815	226,808	252,866	21,126	21,008	20,222	20,986	21,752	23,799	24,801
2 GENERAL IMPORTS including merchandise for immediate consumption plus entries into bonded warehouses, c.i.f. value	352,463	382,964	424,082	36,838	37,483	35,905	35,062	39,383	37,016	37,003
3 Trade balance	-133,648	-156,156	-171,217	-15,711	-16,475	-15,683	-14,076	-17,631	-13,218	-12,202

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 transac-

tions; 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. 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	1984	1985	1986	1987						1988
				July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
1 Total	34,934	43,186	48,511	44,318	45,944	45,070	46,200	46,779	45,798	42,955
2 Gold stock, including Exchange Stabilization Fund ¹	11,096	11,090	11,064	11,069	11,068	11,075	11,085	11,082	11,078	11,068
3 Special drawing rights ^{2,3}	5,641	7,293	8,395	8,813	9,174	9,078	9,373	9,937	10,283	9,765
4 Reserve position in International Monetary Fund ²	11,541	11,947	11,730	10,964	11,116	10,918	11,157	11,369	11,349	10,804
5 Foreign currencies ⁴	6,656	12,856	17,322	13,472	14,586	13,999	14,585	14,391	13,088	11,318

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 BANKS¹

Millions of dollars, end of period

Assets	1984	1985	1986	1987						1988
				July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
1 Deposits	267	480	287	261	294	456	236	351	244	355
<i>Assets held in custody</i>										
2 U.S. Treasury securities ²	118,000	121,004	155,835	171,269	179,484	179,097	182,072	187,767	195,126	206,675
3 Earmarked gold ³	14,242	14,245	14,048	14,010	14,022	14,015	13,998	13,965	13,919	13,882

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 Data¹

Millions of dollars, end of period

Asset account	1984	1985	1986	1987							
				June	July	Aug.	Sept.	Oct.	Nov.	Dec. ^p	
	All foreign countries										
1 Total, all currencies	453,656	458,012	456,628	475,188	470,391	473,540	489,692 ^r	520,860 ^r	524,980	518,149	
2 Claims on United States	113,393	119,706	114,563	123,400	123,687	124,737	137,218	138,016 ^r	140,693	137,751	
3 Parent bank	78,109	87,201	83,492	89,376	89,793	89,958	101,635	99,245 ^r	102,609	105,562	
4 Other banks in United States	13,664	13,057	13,685	15,981	14,303	14,739	15,949	17,826	16,701	16,416	
5 Nonbanks	21,620	19,448	17,386	18,043	19,591	20,040	19,634	20,945	21,383	15,773	
6 Claims on foreigners	320,162	315,676	312,955	319,546	314,078	314,727	319,365	347,014 ^r	345,735	341,936	
7 Other branches of parent bank	95,184	91,399	96,281	101,326	96,582	97,988	103,277	116,547 ^r	116,498	122,057	
8 Banks	100,397	102,960	105,237	107,747	110,124	108,068	108,230	118,051	115,372	108,643	
9 Public borrowers	23,343	23,478	23,706	22,590	21,412	21,537	21,463	21,843	22,131	21,659	
10 Nonbank foreigners	101,238	97,839	87,731	87,883	85,960	87,134	86,395	90,573	91,734	89,577	
11 Other assets	20,101	22,630	29,110	32,242	32,626	34,076	33,109 ^r	35,830	38,552	38,462	
12 Total payable in U.S. dollars	350,636	336,520	317,487	329,499	322,300	322,286	340,653 ^r	354,122	352,584	350,166	
13 Claims on United States	111,426	116,638	110,620	118,411	118,563	118,964	131,684	131,454 ^r	133,911	131,740	
14 Parent bank	77,229	85,971	82,082	87,540	87,779	87,844	99,776	97,052 ^r	99,844	102,968	
15 Other banks in United States	13,500	12,454	12,830	14,669	12,794	12,830	13,942	15,627	14,632	14,657	
16 Nonbanks	20,697	18,213	15,708	16,202	17,990	18,290	17,966	18,775	19,435	14,115	
17 Claims on foreigners	228,600	210,129	195,063	198,465	190,590	189,958	195,075	208,934 ^r	203,298	202,280	
18 Other branches of parent bank	78,746	72,727	72,197	75,771	72,515	73,327	77,699	86,687 ^r	85,545	88,186	
19 Banks	76,940	71,868	66,421	67,287	65,673	64,106	64,506	68,888	65,728	63,704	
20 Public borrowers	17,626	17,260	16,708	16,271	15,062	15,115	14,942	14,889	14,854	14,730	
21 Nonbank foreigners	55,288	48,274	39,737	39,136	37,340	37,410	37,928	38,470	37,171	35,660	
22 Other assets	10,610	9,753	11,804	12,623	13,147	13,364	13,894 ^r	13,734	15,375	16,146	
	United Kingdom										
23 Total, all currencies	144,385	148,599	140,917	146,678	149,760	148,039	149,633 ^r	163,472	167,726	159,186	
24 Claims on United States	27,675	33,157	24,599	30,859	32,694	31,377	32,581	33,904 ^r	35,406	32,518	
25 Parent bank	21,862	26,970	19,085	25,944	27,288	25,627	27,128	27,710 ^r	29,553	27,350	
26 Other banks in United States	1,429	1,106	1,612	1,194	1,537	1,585	1,349	1,870	1,694	1,259	
27 Nonbanks	4,384	5,081	3,902	3,721	3,869	4,165	4,104	4,324	4,159	3,909	
28 Claims on foreigners	111,828	110,217	109,508	107,407	108,732	108,293	108,562	120,079 ^r	121,473	115,700	
29 Other branches of parent bank	37,953	31,576	33,422	32,641	31,241	30,794	33,334	37,402 ^r	39,138	39,903	
30 Banks	37,443	39,250	39,468	37,745	41,219	40,082	38,390	42,929	41,649	36,735	
31 Public borrowers	5,334	5,644	4,990	4,684	4,617	4,761	4,725	4,881	5,272	4,752	
32 Nonbank foreigners	31,098	33,747	31,628	32,337	31,655	32,656	32,113	34,867	35,414	34,310	
33 Other assets	4,882	5,225	6,810	8,412	8,334	8,369	8,490 ^r	9,489	10,847	10,968	
34 Total payable in U.S. dollars	112,809	108,626	95,028	97,672	99,170	96,510	99,656 ^r	105,515	107,215	101,065	
35 Claims on United States	26,868	32,092	23,193	29,252	31,076	29,519	30,791	31,820 ^r	33,335	30,439	
36 Parent bank	21,495	26,568	18,526	25,286	26,661	24,853	26,423	26,850 ^r	28,611	26,304	
37 Other banks in United States	1,363	1,005	1,475	950	1,294	1,309	1,105	1,504	1,408	1,044	
38 Nonbanks	4,010	4,519	3,192	3,016	3,121	3,357	3,263	3,466	3,316	3,091	
39 Claims on foreigners	82,945	73,475	68,138	64,676	64,024	63,265	64,561	69,276 ^r	68,864	64,560	
40 Other branches of parent bank	33,607	26,011	26,361	25,409	23,827	23,155	25,600	27,810 ^r	29,166	28,635	
41 Banks	26,805	26,139	23,251	21,355	22,975	22,646	21,522	22,941	21,833	19,188	
42 Public borrowers	4,030	3,999	3,677	3,470	3,400	3,473	3,377	3,426	3,472	3,313	
43 Nonbank foreigners	18,503	17,326	14,849	14,442	13,822	13,991	14,062	15,099	14,393	13,424	
44 Other assets	2,996	3,059	3,697	3,744	4,070	3,726	4,304 ^r	4,419	5,016	6,066	
	Bahamas and Caymans										
45 Total, all currencies	146,811	142,055	142,592	142,170	140,512	139,986	151,909	156,752	154,901	159,940	
46 Claims on United States	77,296	74,864	78,048	72,541	72,772	72,558	81,679	83,187	82,629	84,937	
47 Parent bank	49,449	50,553	54,575	45,891	46,256	45,697	53,668	53,093	52,563	59,667	
48 Other banks in United States	11,544	11,204	11,156	13,684	11,824	12,111	13,538	14,721	13,980	14,277	
49 Nonbanks	16,303	13,107	12,317	12,966	14,692	14,750	14,473	15,373	16,086	10,993	
50 Claims on foreigners	65,598	63,882	60,005	65,280	63,027	62,336	65,619	68,710	67,196	70,160	
51 Other branches of parent bank	17,661	19,042	17,296	18,873	17,493	18,228	18,698	18,936	18,905	21,277	
52 Banks	30,246	28,192	27,476	30,987	30,372	29,160	31,690	35,012	33,477	33,749	
53 Public borrowers	6,089	6,458	7,051	7,025	7,046	6,873	6,987	7,017	7,195	7,428	
54 Nonbank foreigners	11,602	10,190	8,182	8,395	8,116	8,075	8,244	7,745	7,619	7,706	
55 Other assets	3,917	3,309	4,539	4,349	4,713	5,092	4,611	4,855	5,076	4,843	
56 Total payable in U.S. dollars	141,562	136,794	136,813	135,323	131,636	130,985	142,385	145,642	144,326	151,053	

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	1984	1985	1986	1987						
				June	July	Aug.	Sept.	Oct.	Nov.	Dec. ^P
All foreign countries										
57 Total, all currencies	453,656	458,012	456,628	475,188	470,391	473,540	489,692 ^r	520,860 ^r	524,980	518,149
58 Negotiable CDs	37,725	34,607	31,629	31,776	32,993	33,648	35,724	36,796	34,630	30,929
59 To United States	147,583	156,281 ^r	152,465 ^r	150,939 ^r	144,267 ^r	141,913 ^r	153,758 ^r	156,598 ^r	156,007	161,213
60 Parent bank	78,739	84,657 ^r	83,394 ^r	78,976 ^r	72,376 ^r	74,361 ^r	80,559 ^r	79,592 ^r	83,308	86,326
61 Other banks in United States	18,409	16,894	15,646	16,814	15,005	15,289	17,229	18,853 ^r	18,843	20,476
62 Nonbanks	50,435	54,730	53,425	55,149	56,886	52,263	55,970	58,153 ^r	53,856	54,411
63 To foreigners	247,907	245,939	253,775	274,061	274,407	278,883	280,651	306,472	311,997	304,080
64 Other branches of parent bank	93,909	89,529	95,146	100,826	95,376	97,908	103,921	114,559	116,809	123,527
65 Banks	78,203	76,814	77,809	81,229	87,734	87,449	85,512	98,025	97,342	87,969
66 Official institutions	20,281	19,520	17,835	22,264	21,528	21,016	20,116	20,235	21,777	19,464
67 Nonbank foreigners	55,514	60,076	62,985	69,742	69,769	72,510	71,102	73,653	76,069	73,120
68 Other liabilities	20,441	21,185 ^r	18,759 ^r	18,412 ^r	18,724 ^r	19,096 ^r	19,559 ^r	20,994	22,346	21,927
69 Total payable in U.S. dollars	367,145	353,712	336,406	340,985	334,218	333,673	351,879 ^r	365,244 ^r	361,068	360,272
70 Negotiable CDs	35,227	31,063	28,466	27,929	28,781	29,634	30,933	32,117	30,075	26,768
71 To United States	143,571	150,905 ^r	144,483 ^r	142,491 ^r	135,564 ^r	132,907 ^r	143,707 ^r	145,326 ^r	143,027	148,134
72 Parent bank	76,254	81,631 ^r	79,305 ^r	74,833 ^r	67,707 ^r	69,581 ^r	75,282 ^r	74,111 ^r	77,227	80,527
73 Other banks in United States	17,935	16,264	14,609	15,602	13,895	14,086	15,812	17,298 ^r	17,169	19,072
74 Nonbanks	49,382	53,010	50,569	52,056	53,962	49,240	52,613	53,917 ^r	48,631	48,535
75 To foreigners	178,260	163,583	156,806	163,505	162,766	163,723	169,342	179,011	179,063	176,860
76 Other branches of parent bank	77,770	71,078	71,181	74,202	70,911	72,620	78,036	84,208	84,409	89,395
77 Banks	45,123	37,365	33,850	31,812	35,250	35,104	35,202	40,078	38,772	35,384
78 Official institutions	15,773	14,359	12,371	15,985	15,806	15,527	14,209	13,323	14,119	12,351
79 Nonbank foreigners	39,594	40,781	39,404	41,506	40,799	40,472	41,895	41,402	41,763	39,730
80 Other liabilities	10,087	8,161 ^r	6,651 ^r	7,060 ^r	7,107 ^r	7,409 ^r	7,897 ^r	8,790	8,903	8,510
United Kingdom										
81 Total, all currencies	144,385	148,599	140,917	146,678	149,760	148,039	149,633 ^r	163,472	167,726	159,186
82 Negotiable CDs	34,413	31,260	27,781	27,511	28,590	29,363	31,451	32,523	30,475	26,988
83 To United States	25,250	29,422	24,657	24,512	24,347	22,202	22,462	22,868	24,961	23,625
84 Parent bank	14,651	19,330	14,469	14,745	14,010	13,234	13,357	12,251	14,018	13,223
85 Other banks in United States	3,125	2,974	2,649	2,109	2,021	1,875	2,073	2,382 ^r	2,103	1,740
86 Nonbanks	7,474	7,118	7,539	7,658	8,316	7,093	7,032	8,235 ^r	8,840	8,662
87 To foreigners	77,424	78,525	79,498	86,041	87,942	87,745	86,813	98,215	101,686	98,534
88 Other branches of parent bank	21,631	23,389	25,036	25,350	23,572	23,379	26,094	29,718	30,727	32,600
89 Banks	30,436	28,581	30,877	32,036	35,647	34,414	31,681	38,502	37,690	34,768
90 Official institutions	10,154	9,676	6,836	9,748	9,241	9,670	10,387	10,248	12,000	11,015
91 Nonbank foreigners	15,203	16,879	16,749	18,907	19,482	20,282	18,651	19,747	21,269	20,151
92 Other liabilities	7,298	9,392	8,981	8,614	8,881	8,729	8,907 ^r	9,866	10,604	10,039
93 Total payable in U.S. dollars	117,497	112,697	99,707	100,031	101,593	99,459	102,202 ^r	108,440	108,481	102,072
94 Negotiable CDs	33,070	29,337	26,169	25,695	26,397	27,264	28,776	29,991	27,999	24,926
95 To United States	24,105	27,756	22,075	21,850	21,689	19,578	19,528	18,819	19,800	17,752
96 Parent bank	14,339	18,956	14,021	14,252	13,399	12,608	12,609	11,283	12,792	12,026
97 Other banks in United States	2,980	2,826	2,325	1,899	1,776	1,694	1,883	2,080 ^r	1,789	1,512
98 Nonbanks	6,786	5,974	5,729	5,699	6,514	5,276	5,036	5,456 ^r	5,219	4,214
99 To foreigners	56,923	51,980	48,138	49,089	50,294	49,479	50,386	55,209	56,443	55,441
100 Other branches of parent bank	18,294	18,493	17,951	17,654	16,171	15,565	17,994	20,018	20,826	21,856
101 Banks	18,356	14,344	15,203	13,566	16,330	15,767	14,359	17,786	17,024	15,580
102 Official institutions	8,871	7,661	4,934	7,283	7,203	7,872	8,060	7,115	7,970	7,530
103 Nonbank foreigners	11,402	11,482	10,050	10,586	10,590	10,275	9,973	10,290	10,623	10,475
104 Other liabilities	3,399	3,624	3,325	3,397	3,213	3,138	3,512 ^r	4,421	4,239	3,953
Bahamas and Caymans										
105 Total, all currencies	146,811	142,055	142,592	142,170	140,512	139,986	151,909	156,752	154,901	159,940
106 Negotiable CDs	615	610	847	1,067	1,119	975	886	890	801	885
107 To United States	102,955	104,556 ^r	106,081 ^r	103,831 ^r	100,073 ^r	98,085 ^r	108,100 ^r	111,925	107,967	113,735
108 Parent bank	47,162	45,554 ^r	49,481 ^r	44,112 ^r	40,675 ^r	41,730 ^r	46,745 ^r	48,793	49,568	52,075
109 Other banks in United States	13,938	12,778	11,715	13,382	11,989	12,276	13,579	14,857	15,179	17,142
110 Nonbanks	41,855	46,224	44,885	46,337	47,409	44,079	47,776	48,275	43,220	44,518
111 To foreigners	40,320	35,053	34,400	36,004	37,988	39,437	41,277	42,147	44,331	43,650
112 Other branches of parent bank	16,782	14,075	12,631	14,023	14,803	16,465	16,925	17,032	17,812	18,745
113 Banks	12,405	10,669	8,617	7,943	9,393	9,514	10,395	11,587	12,611	11,119
114 Official institutions	2,054	1,776	2,719	3,185	3,263	2,935	1,786	2,113	2,023	1,466
115 Nonbank foreigners	9,079	8,533	10,433	10,853	10,527	10,523	12,171	11,415	11,885	12,320
116 Other liabilities	2,921	1,836 ^r	1,264 ^r	1,268 ^r	1,332 ^r	1,489 ^r	1,646 ^r	1,790	1,802	1,670
117 Total payable in U.S. dollars	143,582	138,322	138,774	137,763	135,376	134,354	145,166	149,273	146,286	152,546

3.15 SELECTED U.S. LIABILITIES TO FOREIGN OFFICIAL INSTITUTIONS

Millions of dollars, end of period

Item	1985	1986	1987 ^r						
			June	July	Aug.	Sept.	Oct.	Nov.	Dec. ^p
1 Total ¹	178,380	211,782	238,797	232,370	237,728	239,534	252,476	253,852	259,410
<i>By type</i>									
2 Liabilities reported by banks in the United States ²	26,734	27,868	32,079	31,513	29,638	31,869	38,273	34,038	31,627
3 U.S. Treasury bills and certificates ³	53,252	75,650	80,663	73,435	78,210	75,701	78,819	82,542	88,829
4 U.S. Treasury bonds and notes	77,154	91,368	110,238	112,490	115,101	116,462	118,898	120,755	122,544
5 Nonmarketable ⁴	3,550	1,300	700	500	300	300	300	300	300
6 U.S. securities other than U.S. Treasury securities ⁴	17,690	15,596	15,117	14,432	14,479	15,202	16,186	16,217	16,110
<i>By area</i>									
7 Western Europe ¹	74,447	88,623	111,625	107,823	106,873	108,248	116,360	117,372	124,341
8 Canada	1,315	2,004	3,502	3,559	4,189	4,529	5,152	4,884	4,961
9 Latin America and Caribbean	11,148	8,372	7,583	7,904	8,712	8,561	9,217	8,916	8,308
10 Asia	86,448	105,868	108,702	105,505	109,529	109,482	114,160	116,464	116,276
11 Africa	1,824	1,503	1,400	1,590	1,837	1,618	1,474	1,562	1,402
12 Other countries ⁶	3,199	5,412	5,985	5,989	6,589	7,094	6,109	4,655	4,122

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 Currencies¹

Millions of dollars, end of period

Item	1983	1984	1985	1986	1987		
				Dec.	Mar.	June	Sept. ^r
1 Banks' own liabilities	5,219	8,586	15,368	29,702	37,873	38,470	45,515
2 Banks' own claims	7,231	11,984	16,294	26,180	34,153	34,006	41,159
3 Deposits	2,731	4,998	8,437	14,129	16,102	12,735	15,404
4 Other claims	4,501	6,986	7,857	12,052	18,050	21,271	25,755
5 Claims of banks' domestic customers ²	1,059	569	580	2,507	2,012	889	1,067

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

Payable in U.S. dollars

Millions of dollars, end of period

Holder and type of liability	1984	1985	1986	1987						
				June	July	Aug.	Sept.	Oct.	Nov.	Dec. ^P
1 All foreigners	407,306	435,726	540,996	551,362	545,630	555,185	584,448	605,009 ¹	604,540	620,140
2 Banks' own liabilities	306,898	341,070	406,485	410,834	410,881	415,824	446,520	462,879 ¹	457,081	469,816
3 Demand deposits	19,571	21,107	23,789	22,837	20,219	22,117	21,150	23,201 ¹	24,046	23,125
4 Time deposits	110,413	117,278	130,891	133,393	134,127	137,861	148,354	152,292	147,183	148,115
5 Other ²	26,268	29,305	42,705	42,385	44,721	42,317	48,903	52,797 ¹	52,210	52,534
6 Own foreign offices ³	150,646	173,381	209,100	212,219	211,814	213,530	228,113	234,589 ¹	233,642	246,042
7 Banks' custody liabilities ⁴	100,408	94,656	134,511	140,528	134,749	139,361	137,928	142,130 ¹	147,460	150,325
8 U.S. Treasury bills and certificates	76,368	69,133	90,398	93,695	88,193	92,705	89,747	91,374	95,869	101,794
9 Other negotiable and readily transferable instruments ⁵	18,747	17,964	15,417	16,371	15,632	15,259	16,042	15,933 ¹	17,500	16,717
10 Other	5,293	7,558	28,696	30,462	30,924	31,397	32,139	34,823	34,090	31,814
11 Nonmonetary international and regional organizations ⁶	4,454	5,821	5,807	4,005	5,946	5,332	7,845	3,594 ¹	5,703	5,065
12 Banks' own liabilities	2,014	2,621	3,958	2,515	2,367	2,498	4,674	1,680 ¹	3,089	3,304
13 Demand deposits	254	85	199	72	76	44	80	107	74	328
14 Time deposits	1,267	2,067	2,065	987	599	807	1,235	986	1,094	1,523
15 Other ²	493	469	1,693	1,456	1,692	1,647	3,358	586 ¹	1,921	1,452
16 Banks' custody liabilities ⁴	2,440	3,200	1,849	1,490	3,579	2,834	3,171	1,914	2,614	1,761
17 U.S. Treasury bills and certificates	916	1,736	259	266	2,339	1,635	1,793	285	747	265
18 Other negotiable and readily transferable instruments ⁵	1,524	1,464	1,590	1,224	1,240	1,193	1,378	1,624	1,811	1,497
19 Other	0	0	0	0	0	6	0	6	55	0
20 Official institutions ⁸	86,065	79,985	103,569	112,742	104,948	107,848	107,570	117,092 ¹	116,580	120,456
21 Banks' own liabilities	19,039	20,835	25,427	28,690	28,343	26,342	28,169	34,720 ¹	30,873	28,510
22 Demand deposits	1,823	2,077	2,267	1,743	1,711	1,907	1,800	1,905	1,810	1,948
23 Time deposits	9,374	10,949	10,497	13,266	13,567	13,489	14,246	16,574 ¹	13,505	12,480
24 Other ²	7,842	7,809	12,663	13,680	13,065	10,946	12,123	16,241 ¹	15,557	14,082
25 Banks' custody liabilities ⁴	67,026	59,150	78,142	84,052	76,605	81,505	79,401	82,372 ¹	85,707	91,947
26 U.S. Treasury bills and certificates	59,976	53,252	75,650	80,663	73,435	78,210	75,701	78,819	82,542	88,829
27 Other negotiable and readily transferable instruments ⁵	6,966	5,824	2,347	3,141	2,950	3,151	3,540	3,328 ¹	2,965	2,972
28 Other	84	75	145	248	220	144	160	225	200	146
29 Banks ⁹	248,893	275,589	351,745	357,145	358,378	362,883	388,625	405,027 ¹	400,043	414,885
30 Banks' own liabilities	225,368	252,723	310,166	314,621	315,096	319,883	344,886	358,706 ¹	353,816	370,808
31 Unaffiliated foreign banks	74,722	79,341	101,066	102,402	103,283	106,353	116,772	124,117 ¹	120,174	124,766
32 Demand deposits	10,556	10,271	10,303	10,293	8,741	9,901	9,801	11,364	11,877	10,842
33 Time deposits	47,095	49,510	64,232	67,045	66,865	69,588	77,743	79,995 ¹	77,077	79,860
34 Other ²	17,071	19,561	26,531	25,063	27,677	26,864	29,228	32,758 ¹	31,220	34,064
35 Own foreign offices ³	150,646	173,381	209,100	212,219	211,814	213,530	228,113	234,589 ¹	233,642	246,042
36 Banks' custody liabilities ⁴	23,525	22,866	41,579	42,524	43,281	43,000	43,739	46,321	46,227	44,077
37 U.S. Treasury bills and certificates	11,448	9,832	9,984	9,066	9,142	9,100	9,206	8,961	8,792	9,185
38 Other negotiable and readily transferable instruments ⁵	7,236	6,040	5,165	5,611	5,850	5,320	5,221	5,454	6,292	5,461
39 Other	4,841	6,994	26,431	27,848	28,289	28,581	29,312	31,906	31,143	29,430
40 Other foreigners	67,894	74,331	79,875	77,470	76,359	79,122	80,408	79,296 ¹	82,215	79,734
41 Banks' own liabilities	60,477	64,892	66,934	65,009	65,075	67,101	68,791	67,773 ¹	69,303	67,194
42 Demand deposits	6,938	8,673	11,019	10,729	9,691	10,264	9,468	9,825 ¹	10,285	10,006
43 Time deposits	52,678	54,752	54,097	52,095	53,096	53,977	55,130	54,736	55,507	54,251
44 Other ²	861	1,467	1,818	2,185	2,287	2,860	4,193	3,211	3,511	2,936
45 Banks' custody liabilities ⁴	7,417	9,439	12,941	12,462	11,284	12,022	11,617	11,523	12,912	12,540
46 U.S. Treasury bills and certificates	4,029	4,314	4,506	3,701	3,276	3,761	3,046	3,309	3,787	3,515
47 Other negotiable and readily transferable instruments ⁵	3,021	4,636	6,315	6,395	5,592	5,594	5,904	5,527	6,432	6,787
48 Other	367	489	2,120	2,366	2,415	2,667	2,668	2,686	2,693	2,238
49 MEMO: Negotiable time certificates of deposit in custody for foreigners	10,476	9,845	7,496	7,356	6,313	6,458	6,501	6,676 ¹	7,521	7,340

1. Excludes negotiable time certificates of deposit, which are included in "Other negotiable and readily transferable instruments."

2. Includes borrowing under repurchase agreements.

3. 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.

4. Financial claims on residents of the United States, other than long-term

securities, held by or through reporting banks.

5. Includes nonmarketable certificates of indebtedness and Treasury bills issued to official institutions of foreign countries.

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

7. 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.

8. Foreign central banks, foreign central governments, and the Bank for International Settlements.

9. Excludes central banks, which are included in "Official institutions."

3.17 Continued

Area and country	1984	1985	1986	1987						
				June	July	Aug.	Sept.	Oct.	Nov.	Dec. ^p
1 Total	407,306	435,726	540,996	551,362	545,630	555,185	584,448	605,009 ^q	604,540	620,140
2 Foreign countries	402,852	429,905	535,189	547,358	539,685	549,853	576,603	601,415 ^r	598,838	615,075
3 Europe	153,145	164,114	180,556	210,606	204,865	208,715	214,145	233,370 ^r	228,976	235,098
4 Austria	615	693	1,181	974	795	1,066	1,281	1,166	1,262	920
5 Belgium-Luxembourg	4,114	5,243	6,729	9,577	9,154	9,754	10,460	10,743	10,909	9,263
6 Denmark	438	513	482	425	486	576	590	704	628	811
7 Finland	418	496	580	616	497	545	517	581	471	372
8 France	12,701	15,541	22,862	27,951	25,486	27,003	27,899	28,255	27,519	29,980
9 Germany	3,358	4,835	5,762	8,218	7,162	7,715	6,823	8,557 ^r	8,527	7,206
10 Greece	699	666	700	690	667	636	690	738	699	688
11 Italy	10,762	9,667	10,875	11,990	10,031	7,667	8,410	10,254	9,936	12,050
12 Netherlands	4,731	4,212	5,600	5,367	5,447	5,461	6,106	6,773 ^r	6,490	5,016
13 Norway	1,548	948	735	502	562	593	663	1,179	1,074	1,374
14 Portugal	597	652	699	704	586	700	684	724	858	799
15 Spain	2,082	2,114	2,407	2,340	2,103	2,287	2,526	2,683	2,614	2,618
16 Sweden	1,676	1,422	884	1,296	1,387	1,639	1,639	2,567	2,862	1,363
17 Switzerland	31,740	29,020	30,534	27,796	24,607	28,260	27,325	29,153 ^r	30,178	34,634
18 Turkey	584	429	454	454	365	514	398	550 ^r	433	703
19 United Kingdom	68,671	76,728	85,334	105,296	107,641	107,369	109,269	119,478	115,308	116,994
20 Yugoslavia	602	673	630	433	459	491	519	508	485	711
21 Other Western Europe ¹	7,192	9,635	3,326	5,284	6,410	6,016	7,808	9,060 ^r	8,085	8,950
22 U.S.S.R.	79	105	80	36	550	45	51	87	36	31
23 Other Eastern Europe ²	537	523	702	656	622	629	485	609 ^r	601	612
24 Canada	16,059	17,427	26,345	21,942	21,232	22,556	26,066	25,733	28,557	30,080
25 Latin America and Caribbean	153,381	167,856	210,318	198,010	200,119	201,441	214,364	217,763 ^r	214,132	220,911
26 Argentina	4,394	6,032	4,757	4,794	5,122	5,074	4,674	5,075	5,277	5,000
27 Bahamas	56,897	57,657	73,619	66,313	62,518	62,470	71,502	72,768 ^r	70,886	73,673
28 Bermuda	2,370	2,765	2,922	2,050	2,317	2,267	2,234	2,437	2,246	2,749
29 Brazil	5,275	5,373	4,325	3,672	3,783	3,955	4,377	3,943 ^r	4,090	4,028
30 British West Indies	36,773	42,674	72,263	68,830	73,678	73,722	78,116	79,702 ^r	78,162	81,481
31 Chile	2,001	2,049	2,054	1,971	2,035	2,119	2,248	2,191	2,218	3,041
32 Colombia	2,514	3,104	4,285	4,304	4,424	4,426	4,195	4,190	4,299	4,205
33 Cuba	10	11	7	8	8	7	7	12	9	12
34 Ecuador	1,092	1,239	1,236	1,118	1,088	1,101	1,097	1,115	1,087	1,081
35 Guatemala	896	1,071	1,123	1,121	1,109	1,087	1,072	1,053	1,032	1,078
36 Jamaica	183	122	136	158	146	171	156	140	150	159
37 Mexico	12,303	14,060	13,745	13,855	14,159	14,549	14,290	14,338	14,508	14,534
38 Netherlands Antilles	4,220	4,875	4,970	5,192	5,291	5,338	5,218	5,305	5,234	4,972
39 Panama	6,951	7,514	6,886	7,157	6,994	7,130	7,188	7,467	7,513	7,403
40 Peru	1,266	1,167	1,163	1,139	1,147	1,203	1,206	1,205	1,268	1,268
41 Uruguay	1,394	1,552	1,537	1,504	1,536	1,485	1,492	1,493	1,526	1,579
42 Venezuela	10,545	11,922	10,171	9,739	9,679	10,146	9,824	9,882	9,032	9,000
43 Other	4,297	4,668	5,119	5,085	5,085	5,189	5,469	5,447	5,657	5,648
44 Asia	71,187	72,280	108,831	108,162	104,394	106,999	111,401	115,626 ^r	118,741	120,931
45 China	1,153	1,607	1,476	1,737	1,744	2,011	1,775	1,699	1,435	1,157
46 Taiwan	4,990	7,786	18,902	16,353	16,436	15,377	15,197	18,302	21,564	21,488
47 Hong Kong	6,581	8,067	9,393	9,109	8,595	9,015	8,637	9,579	10,531	10,116
48 India	507	712	674	714	572	902	771	606	701	586
49 Indonesia	1,033	1,466	1,547	1,773	1,404	1,541	1,435	1,336	1,677	1,399
50 Israel	1,268	1,601	1,892	1,229	1,036	1,105	1,105	1,271	1,271	2,676
51 Japan	21,640	23,077	47,410	50,867	48,145	49,872	52,945	53,212	52,634	52,878
52 Korea	1,730	1,665	1,141	1,406	1,410	1,388	1,714	1,577	1,591	1,573
53 Philippines	1,383	1,140	1,866	1,222	1,148	1,208	1,152	1,331	1,259	1,082
54 Thailand	1,257	1,358	1,119	1,144	1,096	1,190	1,118	1,275	1,483	1,344
55 Middle-East oil-exporting countries ³	16,804	14,523	12,352	11,463	11,676	12,676	14,043	13,660	13,373	13,954
56 Other	12,841	9,276	11,058	11,145	11,241	10,782	11,507	10,878	11,222	12,677
57 Africa	3,396	4,883	4,021	3,751	4,023	4,194	4,011	3,919	4,066	3,942
58 Egypt	647	1,363	706	1,009	1,113	1,158	1,118	1,104	1,169	1,148
59 Morocco	118	163	92	106	75	81	70	75	194	194
60 South Africa	328	388	270	188	229	199	280	246	202	67
61 Zaire	153	163	74	58	64	69	81	71	82	67
62 Oil-exporting countries ⁴	1,189	1,494	1,519	1,111	1,275	1,331	1,178	1,081	1,108	1,014
63 Other	961	1,312	1,360	1,281	1,267	1,335	1,354	1,313	1,386	1,316
64 Other countries	5,684	3,347	5,118	4,887	5,052	5,948	6,616	5,005	4,367	4,114
65 Australia	5,300	2,779	4,196	4,113	4,333	5,019	5,641	4,011	3,666	3,323
66 All other	384	568	922	774	718	929	975	994	701	791
67 Nonmonetary international and regional organizations	4,454	5,821	5,807	4,005	5,946	5,332	7,845	3,594 ^r	5,703	5,065
68 International ⁵	3,747	4,806	4,620	2,597	4,486	3,819	6,197	2,107 ^r	3,617	3,432
69 Latin American regional	587	894	1,033	1,047	1,075	1,070	1,126	1,155	1,478	1,272
70 Other regional ⁶	120	121	154	362	384	443	522	331	608	362

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
Payable in U.S. Dollars
Millions of dollars, end of period

Area and country	1984	1985	1986	1987						
				June	July	Aug.	Sept.	Oct.	Nov.	Dec. ^p
1 Total	400,162	401,608	444,745	435,817	424,392	427,057	447,727	461,110 ^r	458,854	457,223
2 Foreign countries	399,363	400,577	441,724	433,685	421,289	423,993	443,043	458,280 ^r	451,684	452,769
3 Europe	99,014	106,413	107,823	114,469	108,062	104,180	105,930	110,999 ^r	107,223	101,111
4 Austria	433	598	728	758	698	785	684	930	1,038	790
5 Belgium-Luxembourg	4,794	5,772	7,498	9,828	10,239	9,550	9,591	10,131	9,441	9,355
6 Denmark	648	706	688	706	604	868	747	795	886	722
7 Finland	898	823	987	1,045	1,037	1,031	1,266	1,089	1,030	992
8 France	9,157	9,124	11,356	12,036	11,673	12,530	12,781	14,350	13,513	13,479
9 Germany	1,306	1,267	1,816	1,612	2,009	1,333	1,485	2,092 ^r	1,546	2,042
10 Greece	817	991	648	457	433	375	406	430	452	463
11 Italy	9,119	8,848	9,043	8,409	6,784	6,407	6,541	7,418	7,296	7,271
12 Netherlands	1,356	1,258	3,296	5,744	4,429	3,078	3,247	3,976	3,798	2,747
13 Norway	675	706	672	774	830	803	722	812	938	933
14 Portugal	1,243	1,058	739	659	645	667	638	570	542	472
15 Spain	2,884	1,908	1,492	1,872	1,830	1,945	2,233	1,859	2,032	1,832
16 Sweden	2,230	2,219	1,964	2,330	2,287	2,473	2,752	2,533	2,646	2,225
17 Switzerland	2,123	3,171	3,352	2,618	2,464	2,664	2,612	2,825	2,880	2,638
18 Turkey	1,130	1,200	1,543	1,785	1,753	1,757	1,689	1,564	1,566	1,674
19 United Kingdom	56,185	62,566	58,335	59,937	56,544	54,144	54,710	55,860 ^r	53,908	49,845
20 Yugoslavia	1,886	1,964	1,835	1,757	1,764	1,742	1,741	1,750	1,697	1,700
21 Other Western Europe ¹	596	998	539	567	647	548	619	549	672	670
22 U.S.S.R.	142	130	345	582	420	521	549	473	437	394
23 Other Eastern Europe ²	1,389	1,107	948	993	974	958	915	994 ^r	904	865
24 Canada	16,109	16,482	21,006	20,731	18,676	18,494	21,578	21,402	25,313	25,347
25 Latin America and Caribbean	207,862	202,674	208,825	202,378	200,728	202,384	214,716	216,783 ^r	209,138	212,597
26 Argentina	11,050	11,462	12,091	12,212	12,151	12,221	11,857	12,117 ^r	12,052	11,963
27 Bahamas	58,009	58,258	59,342	56,670	53,842	55,935	65,309	63,699 ^r	59,333	64,154
28 Bermuda	592	499	418	297	387	359	328	423	331	529
29 Brazil	26,315	25,283	25,716	25,522	25,999	26,594	26,056	25,820 ^r	25,472	25,258
30 British West Indies	38,205	38,881	46,284	43,939	44,626	43,290	47,512	51,473	48,926	48,758
31 Chile	6,839	6,603	6,558	6,339	6,500	6,510	6,469	6,388 ^r	6,429	6,282
32 Colombia	3,499	3,249	2,821	2,649	2,743	2,784	2,729	2,730 ^r	2,758	2,734
33 Cuba	0	0	0	0	0	0	0	0	0	2
34 Ecuador	2,420	2,390	2,439	2,354	2,396	2,384	2,367	2,449	2,334	2,282
35 Guatemala ³	158	194	140	109	107	105	124	131	145	145
36 Jamaica	252	224	198	182	268	202	198	191	184	233
37 Mexico	34,885	31,799	30,698	30,353	30,271	30,638	30,542	30,259 ^r	30,044	29,493
38 Netherlands Antilles	1,350	1,340	1,041	1,346	1,084	994	1,041	1,019	1,115	1,125
39 Panama	7,707	6,645	5,436	4,986	4,633	4,616	4,579	4,546 ^r	4,666	4,571
40 Peru	2,384	1,947	1,661	1,568	1,567	1,549	1,479	1,457	1,459	1,323
41 Uruguay	1,088	960	940	950	949	966	946	961	975	963
42 Venezuela	11,017	10,871	11,108	10,982	11,306	11,366	11,308	11,200 ^r	11,098	10,981
43 Other Latin America and Caribbean	2,091	2,067	1,936	1,920	1,902	1,872	1,872	1,920	1,818	1,799
44 Asia	66,316	66,212	96,126	88,401	86,516	91,429	93,322	100,440 ^r	102,132	105,865
45 China	710	639	787	993	929	919	894	543 ^r	615	981
46 Mainland	1,849	1,535	2,681	3,303	2,487	2,772	2,980	4,224 ^r	4,784	4,413
47 Hong Kong	7,293	6,797	8,307	7,731	7,495	6,556	6,933	6,889	7,301	8,112
48 India	425	450	321	430	416	565	541	527	517	499
49 Indonesia	724	698	723	677	639	624	622	625	601	580
50 Israel	2,088	1,991	1,634	1,450	1,413	1,450	1,591	1,331	1,293	1,362
51 Japan	29,066	31,249	59,674	55,415	54,596	61,072	60,121	65,787	64,767	69,002
52 Korea	9,285	9,226	7,182	5,325	4,954	4,589	4,606	4,996 ^r	4,807	4,952
53 Philippines	2,555	2,224	2,217	2,112	2,211	2,148	2,126	2,082	2,040	2,070
54 Thailand	1,125	845	578	538	565	545	453	446 ^r	439	487
55 Middle East oil-exporting countries ⁴	5,044	4,298	4,122	3,808	3,914	4,315	4,848	5,063	5,157	4,833
56 Other Asia	6,152	6,260	7,901	6,619	6,897	5,875	7,607	7,926 ^r	9,811	8,575
57 Africa	6,615	5,407	4,650	4,704	4,705	4,739	4,704	5,376	4,669	4,719
58 Egypt	728	721	567	600	572	586	541	538	526	521
59 Morocco	583	575	598	563	568	603	582	605	527	542
60 South Africa	2,795	1,942	1,550	1,501	1,479	1,497	1,504	1,546	1,494	1,507
61 Zaire	18	20	28	39	38	35	40	38	36	15
62 Oil-exporting countries ⁵	842	630	694	818	866	862	888	1,531	963	1,004
63 Other	1,649	1,520	1,213	1,184	1,182	1,156	1,149	1,118	1,123	1,130
64 Other countries	3,447	3,390	3,294	3,001	2,601	2,766	2,794	3,280	3,208	3,131
65 Australia	2,769	2,413	1,949	1,980	1,693	1,686	1,834	2,034	2,090	2,100
66 All other	678	978	1,345	1,021	908	1,080	959	1,246	1,118	1,031
67 Nonmonetary international and regional organizations ⁶	800	1,030	3,021	2,132	3,103	3,063	4,684	2,830	7,170	4,454

1. Includes the Bank for International Settlements. Beginning April 1978, also includes Eastern European countries not listed in line 23.

2. Beginning April 1978 comprises Bulgaria, Czechoslovakia, the German Democratic Republic, Hungary, Poland, and Romania.

3. Included in "Other Latin America and Caribbean" through March 1978.

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

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

6. Excludes the Bank for International Settlements, which is included in "Other Western Europe."

3.19 BANKS' OWN AND DOMESTIC CUSTOMERS' CLAIMS ON FOREIGNERS Reported by Banks in the United States¹
Payable in U.S. Dollars
Millions of dollars, end of period

Type of claim	1984	1985	1986	1987						
				June	July	Aug.	Sept.	Oct. ^r	Nov.	Dec. ^p
1 Total.....	433,078	430,489	478,650	468,876	424,392	427,057	481,652	461,110	458,854	457,223
2 Banks' own claims on foreigners.....	400,162	401,608	444,745	435,817	424,392	427,057	447,727	461,110	458,854	457,223
3 Foreign public borrowers.....	62,237	60,507	64,095	63,516	65,857	65,808	67,077	65,147	69,329	65,157
4 Own foreign offices ²	156,216	174,261	211,533	201,501	189,142	196,182	210,503	218,391	219,952	222,478
5 Unaffiliated foreign banks.....	124,932	116,634	122,946	126,462	124,364	121,939	127,285	134,106	126,397	126,790
6 Deposits.....	49,226	48,372	57,484	61,004	59,612	56,788	59,696	62,872	57,683	59,996
7 Other.....	75,706	68,282	65,462	65,458	64,753	65,151	67,589	71,234	68,714	66,794
8 All other foreigners.....	56,777	50,185	46,171	44,337	45,029	43,128	42,863	43,466	43,176	42,798
9 Claims of banks' domestic customers ³	32,916	28,881	33,905	33,059	.....	.....	33,925	.....	.....	.....
10 Deposits.....	3,380	3,335	4,413	3,474	.....	.....	3,218	.....	.....	.....
11 Negotiable and readily transferable instruments ⁴	23,805	19,332	24,044	21,384	.....	.....	22,071	.....	.....	.....
12 Outstanding collections and other claims.....	5,732	6,214	5,448	8,202	.....	.....	8,636	.....	.....	.....
13 MEMO: Customer liability on acceptances.....	37,103	28,487	25,706	23,691	.....	.....	21,782	.....	.....	.....
Dollar deposits in banks abroad, reported by nonbanking business enterprises in the United States ⁵	40,714	38,102	42,079	38,061	40,302	41,412	39,768	42,951	38,819	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.

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
Payable in U.S. Dollars
Millions of dollars, end of period

Maturity; by borrower and area	1983	1984	1985	1986	1987		
				Dec.	Mar.	June	Sept.
1 Total	243,715	243,952	227,903	232,295	226,426	236,392	235,812
<i>By borrower</i>							
2 Maturity of 1 year or less ¹	176,158	167,858	160,824	160,555	154,789	167,244	165,451
3 Foreign public borrowers.....	24,039	23,912	26,302	24,842	24,154	23,270	27,008
4 All other foreigners.....	152,120	143,947	134,522	135,714	130,635	143,973	138,442
5 Maturity over 1 year ¹	67,557	76,094	67,078	71,740	71,637	69,149	70,361
6 Foreign public borrowers.....	32,521	38,695	34,512	39,103	39,168	39,483	39,757
7 All other foreigners.....	35,036	37,399	32,567	32,637	32,468	29,665	30,605
<i>By area</i>							
8 Maturity of 1 year or less ¹							
9 Europe.....	56,117	58,498	56,585	61,784	58,042	68,891	62,045
10 Canada.....	6,211	6,028	6,401	5,895	5,625	5,622	5,733
11 Latin America and Caribbean.....	73,660	62,791	63,328	56,271	54,223	55,429	58,138
12 Asia.....	34,403	33,504	27,966	29,457	29,714	30,936	32,065
13 Africa.....	4,199	4,442	3,753	2,882	3,154	2,980	2,878
14 All other ²	1,569	2,593	2,791	4,267	4,031	3,385	4,592
15 Maturity of over 1 year ¹							
16 Europe.....	13,576	9,605	7,634	6,737	6,742	6,417	6,747
17 Canada.....	1,857	1,882	1,805	1,925	1,873	1,631	1,577
18 Latin America and Caribbean.....	43,888	56,144	50,674	56,719	56,705	55,572	55,097
19 Asia.....	4,850	5,323	4,502	4,043	4,122	3,387	3,535
20 Africa.....	2,286	2,033	1,538	1,539	1,630	1,522	1,612
21 All other ²	1,101	1,107	926	777	564	621	1,793

1. Remaining time to maturity.

2. 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	1983	1984	1985		1986				1987		
			Sept.	Dec.	Mar.	June	Sept.	Dec.	Mar.	June	Sept.
1 Total	434.0	405.7	394.9	391.2'	393.4'	389.7'	389.5'	389.6'	398.9'	391.1'	391.7'
2 G-10 countries and Switzerland	167.8	148.1	152.0	148.5	157.0	160.3	159.0	158.0	164.5'	161.8'	156.8'
3 Belgium-Luxembourg	12.4	8.7	9.5	9.3	8.4	9.0	8.5	8.4	9.1	8.5	8.3'
4 France	16.2	14.1	14.8	12.3	13.8	15.1	14.7	13.8	13.4	12.6	13.8
5 Germany	11.3	9.0	9.8	10.5	11.3	11.5	12.5	11.7	12.8	11.4	10.6
6 Italy	11.4	10.1	8.4	9.8	8.5	9.3	8.1	9.0	8.6	7.5	6.7
7 Netherlands	3.5	3.9	3.4	3.7	3.5	3.4	3.9	4.6	4.4	7.3	4.8
8 Sweden	5.1	3.2	3.1	2.8	2.9	2.9	2.7	2.4	3.0	2.4	2.7
9 Switzerland	4.3	3.9	4.1	4.4	5.4	5.6	4.8	5.8	5.8	5.7	5.4
10 United Kingdom	65.3	60.3	67.1	64.6	68.8	69.2	70.3	71.9	74.0'	72.7'	72.1'
11 Canada	8.3	7.9	7.6	7.0	6.4	7.0	6.2	5.4	5.3	6.9	4.7
12 Japan	29.9	27.1	24.3	24.2	28.1	27.2	27.4	25.0	28.1	26.7	27.8'
13 Other developed countries	36.0	33.6	32.0	30.4	31.6	30.7	29.5	26.2	26.0	25.7	26.8'
14 Austria	1.9	1.6	1.7	1.6	1.6	1.7	1.7	1.7	1.9	1.8	1.9
15 Denmark	3.4	2.2	2.1	2.4	2.5	2.4	2.3	1.7	1.7	1.5	1.6
16 Finland	2.4	1.9	1.8	1.6	1.9	1.6	1.7	1.4	1.4	1.5	1.4
17 Greece	2.8	2.9	2.8	2.6	2.5	2.6	2.3	2.3	2.1	2.0	1.9
18 Norway	3.3	3.0	3.4	2.9	2.7	3.0	2.7	2.4	2.2	2.2	2.4
19 Portugal	1.5	1.4	1.4	1.3	1.1	1.1	1.0	.8	.9	.8	.8
20 Spain	7.1	6.5	6.1	5.8	6.5	6.4	6.7	5.8	6.3	6.1	7.4
21 Turkey	1.7	1.9	2.1	1.9	2.3	2.5	2.1	2.0	1.9	2.1	1.9
22 Other Western Europe	1.8	1.7	1.7	2.0	2.4	2.1	1.6	1.4	1.4	1.6	1.6'
23 South Africa	4.7	4.5	3.3	3.2	3.2	3.1	3.1	3.1	3.1	3.1	3.0
24 Australia	5.4	6.0	5.6	5.0	4.9	4.2	4.1	3.5	3.2	3.1	2.9
25 OPEC countries ³	28.4	24.9	22.7	21.6	20.7	20.6	20.0	19.6	20.5	19.2	19.4'
26 Ecuador	2.2	2.2	2.2	2.1	2.2	2.1	2.2	2.2	2.1	2.1	2.1
27 Venezuela	9.9	9.3	9.0	8.9	8.7	8.8	8.7	8.6	8.8	8.7	8.5
28 Indonesia	3.4	3.3	3.1	3.0	3.3	3.0	2.8	2.5	2.4	2.2	2.0
29 Middle East countries	9.8	7.9	6.2	5.5	4.7	5.0	4.6	4.5	5.5	4.5	5.1
30 African countries	3.0	2.3	2.3	2.0	1.8	1.7	1.7	1.7	1.7	1.7	1.7
31 Non-OPEC developing countries	110.8	111.8	107.8	105.1	103.9	102.0	100.0	99.7	99.9	100.3'	97.4
<i>Latin America</i>											
32 Argentina	9.5	8.7	8.9	8.9	8.9	9.2	9.3	9.5	9.5	9.5	9.3
33 Brazil	23.1	26.3	25.5	25.6	25.8	25.5	25.4	25.3	25.7	24.6	24.6
34 Chile	6.4	7.0	6.6	7.0	7.1	7.1	7.2	7.1	7.3	7.2	7.1
35 Colombia	3.2	2.9	2.6	2.7	2.3	2.2	2.0	2.1	2.0	2.0	2.0
36 Mexico	25.8	25.7	24.4	24.2	24.1	24.0	24.0	24.0	23.7	25.4	24.7
37 Peru	2.4	2.2	1.9	1.8	1.7	1.6	1.5	1.5	1.4	1.4	1.2
38 Other Latin America	4.2	3.9	3.5	3.4	3.3	3.3	3.3	3.1	3.0	3.0	2.8
<i>Asia</i>											
39 China											
40 Mainland .....	.3	.7	1.1	.5	.6	.6	.6	.4	.9	.6	.3
41 Taiwan	5.2	5.1	5.1	4.5	4.3	3.7	4.3	4.9	5.5	6.6	5.9
42 India .....	.9	.9	1.1	1.2	1.2	1.3	1.3	1.2	1.6	1.7	1.9
43 Israel	1.9	1.8	1.5	1.6	1.3	1.6	1.4	1.5	1.4	1.3	1.3
44 Korea (South)	11.2	10.6	10.4	9.4	9.5	8.7	7.3	6.7	6.2	5.7'	5.1
45 Malaysia	2.8	2.7	2.7	2.4	2.2	2.0	2.1	2.1	1.9	1.7	1.6
46 Philippines	6.1	6.0	6.0	5.7	5.6	5.7	5.4	5.4	5.4	5.4	5.4
47 Thailand	2.2	1.8	1.7	1.4	1.3	1.1	1.0	.9	.9	.8	.7
48 Other Asia	1.0	1.1	.9	1.0	.9	.8	.7	.7	.6	.8	.7
<i>Africa</i>											
49 Egypt	1.5	1.2	1.0	1.0	.9	.9	.7	.7	.6	.6	.6
50 Morocco .....	.8	.8	.9	.9	.9	.9	.9	.9	.9	.9	.8
51 Zaire .....	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
52 Other Africa ⁴	2.3	2.1	2.0	1.9	1.9	1.7	1.6	1.6	1.4	1.3	1.3
53 Eastern Europe	5.3	4.4	4.6	4.2	4.0	4.0	3.4	3.2	3.1	3.4	3.4
54 U.S.S.R.	2	.1	2	.1	.3	.3	.1	.1	.1	.3	.5
55 Yugoslavia	2.4	2.3	2.4	2.2	2.0	2.0	1.9	1.7	1.6	1.7	1.7
56 Other	2.8	2.0	1.9	1.8	1.7	1.7	1.4	1.4	1.3	1.4	1.3
57 Offshore banking centers	68.9	65.6	58.8	64.6'	59.4'	55.4'	60.5'	63.2'	65.1'	62.6'	66.6'
58 Bahamas	21.7	21.5	16.6	21.4	21.4	17.1	19.9	22.3	24.1	20.0	26.4
59 Bermuda .....	.9	.9	.8	.7	.7	.4	.7	.7	.8	.6	.6
60 Cayman Islands and other British West Indies	12.2	11.8	12.3	12.7'	10.6'	12.2'	12.8'	13.6'	12.7'	14.2'	12.4'
61 Netherlands Antilles	4.2	3.4	2.3	2.3	2.3	2.4	1.9	1.8	1.7	1.3	1.2
62 Panama ⁵	5.8	6.7	6.1	6.0	4.4	4.2	5.1	4.1	5.4	5.3	5.3
63 Lebanon .....	.1	.1	.0	.1	.1	.1	.1	.1	.1	.1	.1
64 Hong Kong	13.8	11.4	11.4	11.5	11.5	9.5	10.5	11.2	11.4	12.6	12.3
65 Singapore	10.3	9.8	9.4	9.9	8.5	9.3	9.7	9.4	8.8	8.5	8.3
66 Others ⁶ .....	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
66 Miscellaneous and unallocated ⁷	16.8	17.3	17.3	16.9	16.8	16.8	17.2	19.8	19.8	18.0'	21.4'

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 States¹

Millions of dollars, end of period

Type, and area or country	1983	1984	1985	1986		1987		
				Sept.	Dec.	Mar.	June	Sept.
1 Total	25,346	29,357	27,825	26,429	25,717	27,432	28,751	28,167
2 Payable in dollars	22,233	26,389	24,296	22,432	21,885	23,264	24,286	23,846
3 Payable in foreign currencies	3,113	2,968	3,529	3,997	3,833	4,169	4,466	4,321
By type								
4 Financial liabilities	10,572	14,509	13,600	13,501	12,239	13,114	13,946	12,667
5 Payable in dollars	8,700	12,553	11,257	11,071	9,774	10,398	11,068	9,955
6 Payable in foreign currencies	1,872	1,955	2,343	2,430	2,464	2,716	2,878	2,712
7 Commercial liabilities	14,774	14,849	14,225	12,929	13,479	14,318	14,805	15,500
8 Trade payables	7,765	7,005	6,685	5,728	6,447	6,985	7,139	7,389
9 Advance receipts and other liabilities	7,009	7,843	7,540	7,201	7,032	7,333	7,666	8,111
10 Payable in dollars	13,533	13,836	13,039	11,361	12,110	12,865	13,218	13,891
11 Payable in foreign currencies	1,241	1,013	1,186	1,567	1,368	1,453	1,587	1,609
By area or country								
Financial liabilities								
12 Europe	5,742	6,728	7,700	8,907	8,023	8,383	9,645	9,081
13 Belgium-Luxembourg	302	471	349	448	270	232	257	230
14 France	843	995	857	501	644	742	807	574
15 Germany	502	489	376	319	270	368	305	291
16 Netherlands	621	590	861	741	704	693	669	677
17 Switzerland	486	569	610	567	646	711	703	684
18 United Kingdom	2,839	3,297	4,305	5,880	5,199	5,378	6,642	6,349
19 Canada	764	863	839	362	399	431	441	407
20 Latin America and Caribbean	2,596	5,086	3,184	2,283	1,964	2,369	1,747	961
21 Bahamas	751	1,926	1,123	842	614	669	398	280
22 Bermuda	13	13	4	4	4	0	0	0
23 Brazil	32	35	29	28	32	26	22	22
24 British West Indies	1,041	2,103	1,843	1,291	1,163	1,545	1,223	581
25 Mexico	213	367	15	18	22	30	29	17
26 Venezuela	124	137	3	5	3	3	5	3
27 Asia	1,424	1,777	1,815	1,881	1,784	1,861	2,046	2,140
28 Japan	991	1,209	1,198	1,446	1,377	1,459	1,666	1,653
29 Middle East oil-exporting countries ²	170	155	82	3	8	7	7	7
30 Africa	19	14	12	4	1	3	1	2
31 Oil-exporting countries ³	0	0	0	2	1	1	0	0
32 All other ⁴	27	41	50	63	67	67	66	76
Commercial liabilities								
33 Europe	3,245	4,001	4,074	4,344	4,494	4,521	4,987	4,973
34 Belgium-Luxembourg	62	48	62	75	101	85	111	56
35 France	437	438	453	370	351	379	422	437
36 Germany	427	622	607	633	722	591	594	679
37 Netherlands	268	245	364	581	460	372	339	350
38 Switzerland	241	257	379	361	387	484	557	556
39 United Kingdom	732	1,095	976	1,142	1,346	1,309	1,380	1,475
40 Canada	1,841	1,975	1,449	1,313	1,393	1,352	1,253	1,263
41 Latin America and Caribbean	1,473	1,871	1,088	848	890	1,089	1,037	1,050
42 Bahamas	1	7	12	37	32	28	13	22
43 Bermuda	67	114	77	172	132	297	245	223
44 Brazil	44	124	58	44	61	82	88	40
45 British West Indies	6	32	44	45	48	89	64	44
46 Mexico	585	586	430	197	213	185	160	231
47 Venezuela	432	636	212	207	217	224	203	176
48 Asia	6,741	5,285	6,046	4,856	5,098	5,818	5,921	6,516
49 Japan	1,247	1,256	1,799	2,137	2,051	2,468	2,480	2,422
50 Middle East oil-exporting countries ^{2,5}	4,178	2,372	2,829	1,507	1,686	1,948	1,870	2,109
51 Africa	553	588	587	585	622	520	524	571
52 Oil-exporting countries ³	167	233	238	176	197	170	166	150
53 All other ⁴	921	1,128	982	982	981	1,019	1,083	1,128

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 States¹

Millions of dollars, end of period

Type, and area or country	1983	1984	1985	1986		1987		
				Sept.	Dec.	Mar.	June	Sept.
1 Total	34,911	29,901	28,876	34,157	33,451	34,034	31,515	31,211
2 Payable in dollars	31,815	27,304	26,574	31,446	30,923	31,238	28,405	28,546
3 Payable in foreign currencies	3,096	2,597	2,302	2,711	2,528	2,796	3,110	2,666
By type								
4 Financial claims	23,780	19,254	18,891	24,833	23,357	24,080	21,580	20,906
5 Deposits	18,496	14,621	15,526	18,953	17,899	17,994	15,437	15,920
6 Payable in dollars	17,993	14,202	14,911	18,389	17,343	17,168	14,253	15,086
7 Payable in foreign currencies	503	420	615	565	555	826	1,183	834
8 Other financial claims	5,284	4,633	3,364	5,880	5,458	6,086	6,143	4,985
9 Payable in dollars	3,328	3,190	2,330	4,506	4,110	4,740	4,868	3,860
10 Payable in foreign currencies	1,956	1,442	1,035	1,374	1,349	1,345	1,275	1,125
11 Commercial claims	11,131	10,646	9,986	9,324	10,095	9,954	9,935	10,305
12 Trade receivables	9,721	9,177	8,696	8,079	8,902	8,898	8,892	9,364
13 Advance payments and other claims	1,410	1,470	1,290	1,245	1,192	1,056	1,043	942
14 Payable in dollars	10,494	9,912	9,333	8,551	9,471	9,330	9,283	9,599
15 Payable in foreign currencies	637	735	652	773	624	624	652	706
By area or country								
Financial claims								
16 Europe	6,488	5,762	6,929	10,545	8,759	9,337	9,859	9,336
17 Belgium-Luxembourg	37	15	10	67	41	15	6	23
18 France	150	126	184	418	138	172	154	169
19 Germany	163	224	223	129	111	163	92	83
20 Netherlands	71	66	161	73	86	69	75	94
21 Switzerland	38	66	74	138	182	74	95	44
22 United Kingdom	5,817	4,864	6,007	9,478	7,957	8,491	9,237	8,709
23 Canada	5,989	3,988	3,260	3,970	3,964	3,779	3,329	2,883
24 Latin America and Caribbean	10,234	8,216	7,846	9,438	9,207	9,547	7,539	7,491
25 Bahamas	4,771	3,306	2,698	2,806	2,624	3,945	2,572	2,507
26 Bermuda	102	6	6	19	6	3	6	2
27 Brazil	53	100	78	105	73	71	103	102
28 British West Indies	4,206	4,043	4,571	6,060	6,078	5,128	4,349	3,687
29 Mexico	293	215	180	173	174	164	167	173
30 Venezuela	134	125	48	40	24	23	22	18
31 Asia	764	961	731	715	1,320	1,193	779	1,105
32 Japan	297	353	475	365	999	931	439	721
33 Middle East oil-exporting countries ²	4	13	4	2	11	11	10	10
34 Africa	147	210	103	84	85	84	58	71
35 Oil-exporting countries ³	55	85	29	18	28	19	9	14
36 All other ⁴	159	117	21	81	22	140	16	20
Commercial claims								
37 Europe	3,670	3,801	3,533	3,389	3,718	3,703	3,850	4,114
38 Belgium-Luxembourg	135	165	175	125	133	145	137	168
39 France	459	440	426	415	410	417	435	411
40 Germany	349	374	346	401	447	451	531	550
41 Netherlands	334	335	284	157	173	165	182	199
42 Switzerland	317	271	284	233	217	196	187	208
43 United Kingdom	809	1,063	898	874	998	1,070	1,071	1,224
44 Canada	829	1,021	1,023	960	928	927	927	903
45 Latin America and Caribbean	2,695	2,052	1,753	1,686	1,981	1,944	1,878	1,844
46 Bahamas	8	8	13	29	28	11	14	12
47 Bermuda	190	115	93	132	170	157	153	125
48 Brazil	493	214	206	202	235	217	202	226
49 British West Indies	7	7	6	23	51	25	17	20
50 Mexico	884	583	510	317	411	445	346	365
51 Venezuela	272	206	157	192	234	171	201	188
52 Asia	3,063	3,073	2,982	2,588	2,751	2,707	2,640	2,772
53 Japan	1,114	1,191	1,016	797	881	926	950	1,018
54 Middle East oil-exporting countries ²	737	668	638	682	565	529	455	436
55 Africa	588	470	437	470	495	432	379	407
56 Oil-exporting countries ³	139	134	130	168	135	141	123	123
57 All other ⁴	286	229	257	231	222	240	261	267

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	1985	1986	1987	1987						
			Jan.-Dec.	June	July	Aug.	Sept.	Oct.	Nov.	Dec. ^P
	U.S. corporate securities									
STOCKS										
1 Foreign purchases	81,995	148,114	248,887	18,687	23,645	24,774	22,473	30,207	13,616	13,632
2 Foreign sales	77,054	129,395	232,613	17,054	21,883	24,554	19,433	27,768	20,302	16,620
3 Net purchases, or sales (-)	4,941	18,719	16,273	1,634	1,763	220	3,040	2,438	-6,687	-2,988
4 Foreign countries	4,857	18,927	16,322	1,679	1,749	117	2,951	2,424	-6,639	-2,927
5 Europe	2,057	9,559	1,864	669	717	81	1,312	138	-5,948	-2,326
6 France	-438	459	903	107	66	-69	-15	58	-541	-395
7 Germany	730	341	-74	-155	-96	28	-12	380	-183	-149
8 Netherlands	-123	936	890	232	153	135	79	-40	-169	32
9 Switzerland	-75	1,560	-1,162	-206	-80	-325	435	294	-1,574	-741
10 United Kingdom	1,665	4,826	517	671	635	125	770	-624	-3,407	-956
11 Canada	356	816	1,116	-238	255	-21	-46	238	181	120
12 Latin America and Caribbean	1,718	3,031	1,318	296	387	188	157	-512	-561	-46
13 Middle East ¹	238	976	-1,361	-26	-913	-255	135	569	-83	-448
14 Other Asia	296	3,876	12,896	1,009	1,290	171	1,242	2,014	-28	-160
15 Africa	24	297	123	-30	-14	16	20	7	11	-6
16 Other countries	168	373	365	-1	27	-63	132	-30	-211	-61
17 Nonmonetary international and regional organizations	84	-208	-48	-45	14	102	90	15	-48	-61
BONDS ²										
18 Foreign purchases	86,587	123,169	105,802	10,432	9,414	7,027	8,662	9,158 ^c	5,691	6,838
19 Foreign sales	42,455	72,520	78,116	8,311	6,533	5,638	4,786	7,275 ^c	5,346	5,470
20 Net purchases, or sales (-)	44,132	50,648	27,686	2,121	2,881	1,389	3,876	1,883 ^c	345	1,368
21 Foreign countries	44,227	49,801	26,945	2,030	2,872	1,548	3,836	1,874 ^c	88	939
22 Europe	40,047	39,313	22,143	2,266	2,328	1,616	3,149	922 ^c	417	565
23 France	210	389	195	43	64	26	-37	55	-34	-12
24 Germany	2,001	-251	-8	80	116	-22	-56	-98	-26	17
25 Netherlands	222	387	269	37	-65	44	116	36	-16	1
26 Switzerland	3,987	4,529	1,650	105	245	306	166	136	-39	-203
27 United Kingdom	32,762	33,900	19,911	1,857	1,897	1,317	2,828	1,012 ^c	379	776
28 Canada	190	548	1,296	49	87	-8	47	305	68	114
29 Latin America and Caribbean	498	1,476	2,473	-4	305	44	682	524	-15	292
30 Middle East ¹	-2,648	-2,961	-551	-128	-166	-14	-87	42	-92	-20
31 Other Asia	6,091	11,270	1,630	-169	301	-93	52	65	-247	-14
32 Africa	11	16	16	8	1	-17	-6	24	-10	3
33 Other countries	38	139	-61	8	15	20	-1	-9	-33	0
34 Nonmonetary international and regional organizations	-95	847	740	91	9	-159	40	10	257	429
Foreign securities										
35 Stocks, net purchases, or sales (-)	-3,941	-2,360	1,422	-257	-15	-373	448	2,053 ^c	725	928
36 Foreign purchases	20,861	49,587	94,231	8,781	8,585	8,674	8,657	12,857 ^c	7,534	4,898
37 Foreign sales	24,803	51,947	92,809	9,038	8,599	9,047	8,208	10,804 ^c	6,809	3,970
38 Bonds, net purchases, or sales (-)	-3,999	-3,555	-7,051	2,285	-588	-241	-674	-2,566 ^c	-1,929	-1,153
39 Foreign purchases	81,216	166,992	198,564	25,797	16,303	12,292	12,923	18,118 ^c	17,674	12,399
40 Foreign sales	85,214	170,548	205,615	23,512	16,891	12,532	13,597	20,684 ^c	19,603	13,552
41 Net purchases, or sales (-), of stocks and bonds	-7,940	-5,915	-5,629	2,028	-602	-614	-226	-513 ^c	-1,204	-225
42 Foreign countries	-9,003	-7,000	-5,773	1,985	-329	-1,207	-546	253 ^c	-1,104	90
43 Europe	-9,887	-18,533	-11,800	-27	-572	-896	-510	-931 ^c	-1,591	-354
44 Canada	-1,686	-876	-3,855	-489	-596	-484	-263	-71	-465	133
45 Latin America and Caribbean	1,797	3,476	829	106	-62	83	-20	-152	329	4
46 Asia	659	10,858	9,553	2,513	1,078	224	82	1,333	418	193
47 Africa	75	52	89	6	5	5	14	16	3	10
48 Other countries	38	-1,977	-590	-124	-182	-140	150	59 ^c	201	105
49 Nonmonetary international and regional organizations	1,063	1,084	144	44	-274	594	320	-767	-101	-314

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 securi-

ties sold abroad by U.S. corporations organized to finance direct investments abroad.

3.25 MARKETABLE U.S. TREASURY BONDS AND NOTES Foreign Transactions

Millions of dollars

Country or area	1985	1986	1987	1987						
			Jan.-Dec.	June	July	Aug.	Sept.	Oct.	Nov.	Dec. ^p
			Transactions, net purchases or sales (-) during period ¹							
1 Estimated total ²	29,208	19,388	25,936	12,281	807	1,110	523	-1,262 ^r	6,380	2,675
2 Foreign countries ²	28,768	20,491	31,027	8,646	3,610	2,787	704	-5,527 ^r	7,676	4,290
3 Europe ²	4,303	16,326	23,610	3,640	4,453	-1,007	-1,167	-954 ^r	6,340	1,282
4 Belgium-Luxembourg	476	-245	653	58	-2	366	-25	165 ^r	-2	-103
5 Germany ²	1,917	7,670	13,295	1,534	1,516	780	130	31	1,820	1,121
6 Netherlands	269	1,283	-911	111	204	-254	-296	-707	314	-76
7 Sweden	976	132	233	-183	76	-153	-156	4	182	51
8 Switzerland ²	773	329	1,925	585	512	-688	-99	-609	-297	-522
9 United Kingdom	-1,810	4,546	3,955	617	1,105	-431	-985	-642 ^r	3,163	1,200
10 Other Western Europe	1,701	2,613	4,479	913	1,042	-631	259	804 ^r	1,158	-391
11 Eastern Europe	0	0	-19	5	0	4	5	0	3	1
12 Canada	-188	881	4,534	413	654	378	203	-389	679	720
13 Latin America and Caribbean	4,315	926	-2,146	780	-673	-675	-29	-117	472	-141
14 Venezuela	248	-96	150	-17	-4	30	55	-63	35	1
15 Other Latin America and Caribbean	2,336	1,130	-1,096	-514	15	-49	-155	-227	367	167
16 Netherlands Antilles	1,731	-108	-1,200	1,311	-684	-656	72	173	69	-309
17 Asia	19,919	1,345	4,677	3,531	-676	4,318	1,762	-5,333	1,476	2,429
18 Japan	17,909	-22	877	4,199	-597	1,839	799	-5,272	1,757	2,020
19 Africa	112	-54	-56	-18	20	-24	3	2	-29	49
20 All other	308	1,067	407	300	-168	-204	-68	1,263	-1,260	-48
21 Nonmonetary international and regional organizations	442	-1,104	-5,090	3,635	-2,802	-1,677	-180	4,265	-1,296	-1,615
22 International	-436	-1,430	-4,177	3,517	-2,875	-1,722	111	4,326	-1,492	-1,620
23 Latin American regional	18	157	3	3	0	0	-10	0	0	0
Memo										
24 Foreign countries ²	28,768	20,491	31,027	8,646	3,610	2,787	704	-5,527 ^r	7,676	4,290
25 Official institutions	8,135	14,214	31,176	3,719	2,251	2,612	1,360	2,437	1,857	1,789
26 Other foreign ²	20,631	6,283	-152	4,927	1,358	175	-657	-7,964 ^r	5,819	2,502
Oil-exporting countries										
27 Middle East ³	-1,547	-1,529	-3,111	-857	107	329	-509	-695	-891	368
28 Africa ⁴	7	5	16	1	0	0	0	-1	-1	-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 Feb. 29, 1988		Country	Rate on Feb. 29, 1988		Country	Rate on Feb. 29, 1988	
	Percent	Month effective		Percent	Month effective		Percent	Month effective
Austria	3.0	Dec. 1987	France ¹	7.25	Jan. 1988	Norway	8.0	June 1983
Belgium	6.75	Jan. 1988	Germany, Fed. Rep. of ...	2.5	Dec. 1987	Switzerland	2.5	Dec. 1987
Brazil	49.0	Mar. 1981	Italy	12.0	Aug. 1987	United Kingdom ²	8.0	Oct. 1985
Canada	8.58	Feb. 1988	Japan	2.5	Feb. 1987	Venezuela		
Denmark	7.0	Oct. 1983	Netherlands	3.25	Jan. 1988			

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	1985	1986	1987	1987					1988	
				Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.
1 Eurodollars	8.27	6.70	7.07	6.91	7.51	8.29	7.41	7.86	7.11	6.73
2 United Kingdom	12.16	10.87	9.65	9.95	10.12	9.92	8.87	8.71	8.84	9.18
3 Canada	9.64	9.18	8.38	9.11	9.32	9.12	8.70	8.95	8.75	8.58
4 Germany	5.40	4.58	3.97	3.93	3.98	4.70	3.92	3.65	3.40	3.29
5 Switzerland	4.92	4.19	3.67	3.55	3.51	4.03	3.65	3.51	2.09	1.48
6 Netherlands	6.29	5.56	5.24	5.27	5.31	5.63	4.99	4.65	4.24	3.98
7 France	9.91	7.68	8.14	7.88	7.85	8.15	8.66	8.48	8.19	7.54
8 Italy	14.86	12.60	11.15	11.96	12.36	11.85	11.36	11.25	10.47	10.80
9 Belgium	9.60	8.04	7.01	6.55	6.56	6.84	6.93	6.57	6.49	6.19
10 Japan	6.47	4.96	3.87	3.71	3.77	3.89	3.90	3.90	3.88	3.82

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

Currency units per dollar

Country/currency	1985	1986	1987	1987				1988	
				Sept.	Oct.	Nov.	Dec.	Jan.	Feb.
1 Australia/dollar ¹	70.026	67.093	70.136	72.68	71.12	68.60	71.06	71.11	71.40
2 Austria/schilling	20.676	15.260	12.649	12.765	12.674	11.843	11.500	11.635	11.920
3 Belgium/franc	59.336	44.662	37.357	37.657	37.494	35.190	34.186	34.576	35.473
4 Canada/dollar	1.3658	1.3896	1.3259	1.3154	1.3097	1.3167	1.3075	1.2855	1.2682
5 China, P.R./yuan	2.9434	3.4615	3.7314	3.7314	3.7314	3.7314	3.7314	3.7314	3.7314
6 Denmark/krone	10.598	8.0954	6.8477	6.9893	6.9262	6.4962	6.3043	6.3562	6.4918
7 Finland/markka	6.1971	5.0721	4.4036	4.3954	4.3570	4.1392	4.0462	4.0391	4.1159
8 France/franc	8.9799	6.9256	6.0121	6.0555	6.0160	5.7099	5.5375	5.5808	5.7323
9 Germany/deutsche mark	2.9419	2.1704	1.7981	1.8134	1.8006	1.6821	1.6335	1.6537	1.6963
10 Greece/drachma	138.40	139.93	135.47	138.40	138.61	132.42	129.46	131.92	135.56
11 Hong Kong/dollar	7.7911	7.8037	7.7985	7.8035	7.8077	7.7968	7.7726	7.7872	7.7978
12 India/rupee	12.332	12.597	12.943	12.993	12.995	12.972	12.934	13.040	13.065
13 Ireland/punt ¹	106.62	134.14	148.79	147.54	148.72	158.08	162.63	160.64	156.87
14 Italy/lira	1908.90	1491.16	1297.03	1310.86	1302.58	1238.89	1203.74	1216.88	1249.62
15 Japan/yen	238.47	168.35	144.60	143.29	143.32	135.40	128.24	127.69	129.17
16 Malaysia/ringgit	2.4806	2.5830	2.5185	2.5189	2.5308	2.4989	2.4944	2.5400	2.5812
17 Netherlands/guilder	3.3184	2.4484	2.0263	2.0413	2.0267	1.8931	1.8382	1.8584	1.9051
18 New Zealand/dollar ¹	49.752	52.456	59.327	63.352	64.031	61.915	64.664	65.818	66.386
19 Norway/krone	8.5933	7.3984	6.7408	6.6505	6.6311	6.4233	6.3820	6.3538	6.4167
20 Portugal/escudo	172.07	149.80	141.20	142.94	142.82	136.84	133.77	135.87	138.84
21 Singapore/dollar	2.2008	2.1782	2.1059	2.0924	2.0891	2.0444	2.0127	2.0261	2.0185
22 South Africa/rand ¹	45.57	43.952	49.081	48.86	48.79	50.67	51.22	50.62	48.73
23 South Korea/won	861.89	884.61	825.93	810.07	808.47	802.30	798.34	791.31	776.85
24 Spain/peseta	169.98	140.04	123.54	121.34	118.60	113.26	110.80	112.34	114.36
25 Sri Lanka/rupee	27.187	27.933	29.471	29.902	30.347	30.519	30.644	30.825	30.859
26 Sweden/krona	8.6031	7.1272	6.3468	6.3844	6.3560	6.0744	5.9473	5.9749	6.0524
27 Switzerland/franc	2.4551	1.7979	1.4918	1.5029	1.4940	1.3825	1.3304	1.3466	1.3916
28 Taiwan/dollar	39.889	37.837	31.756	30.151	30.036	29.813	29.004	28.628	28.665
29 Thailand/baht	27.193	26.314	25.774	25.765	25.783	25.495	25.249	25.235	25.324
30 United Kingdom/pound ¹	129.74	146.77	163.98	164.46	166.20	177.54	182.88	180.09	175.82
MEMO									
31 United States/dollar ²	143.01	112.22	96.94	97.23	96.65	91.49	88.70	89.29	91.08

1. Value in U.S. cents.

2. 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).

3. Currency reform.

NOTE: 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.

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

	<i>Issue</i>	<i>Page</i>
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SPECIAL TABLES

Published Irregularly, with Latest Bulletin Reference

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Assets and liabilities of commercial banks, March 31, 1987.....	October 1987	A70
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Assets and liabilities of commercial banks, September 30, 1987.....	April 1988	A70
Assets and liabilities of U.S. branches and agencies of foreign banks, December 31, 1986.....	May 1987	A76
Assets and liabilities of U.S. branches and agencies of foreign banks, March 31, 1987.....	August 1987	A70
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Assets and liabilities of U.S. branches and agencies of foreign banks, September 30, 1987.....	February 1988	A76
Terms of lending at commercial banks, November 1986.....	February 1987	A70
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Pro forma balance sheet and income statements for priced service operations, June 30, 1987.....	November 1987	A74
Pro forma balance sheet and income statements for priced service operations, September 30, 1987 .	February 1988	A80

Special tables begin on next page.

4.20 DOMESTIC AND FOREIGN OFFICES, Insured Commercial Bank Assets and Liabilities^{1,2}
 Consolidated Report of Condition, September 30, 1987
 Millions of dollars

Item	Total	Banks with foreign offices ^{5,7}			Banks with domestic offices only ⁸	
		Total	Foreign	Domestic	Over 100	Under 100
1 Total assets ⁶	2,894,489	1,684,802	441,058	1,296,832	803,068	406,619
2 Cash and balances due from depository institutions	328,029	233,616	125,439	108,178	61,028	33,384
3 Cash items in process of collection, unposted debits, and currency		73,102	1,858	71,244	24,871	
4 Cash items in process of collection and unposted debits and coin		n.a.	n.a.	59,488	16,407	
5 Currency and coin		n.a.	n.a.	11,756	8,464	
6 Balances due from depository institutions in the United States		37,255	22,757	14,498	21,284	n.a.
7 Balances due from banks in foreign countries and foreign central banks		103,562	100,565	2,997	4,673	
8 Balances due from Federal Reserve Banks		19,697	258	19,439	10,200	
MEMO						
9 Noninterest-bearing balances due from commercial banks in the United States (included in balances due from depository institutions in the U.S.)		n.a.	n.a.	9,349	12,457	10,672
10 Total securities, loans and lease financing receivables, net	2,348,381	1,284,886	n.a.	n.a.	708,080	355,415
11 Total securities, book value	496,588	202,781	27,242	175,539	173,136	120,672
12 U.S. Treasury securities and U.S. government agency and corporation obligations	302,730	107,629	786	106,843	108,696	86,405
13 U.S. Treasury securities	n.a.	64,907	581	64,326	64,732	n.a.
14 U.S. government agency and corporation obligations	n.a.	42,722	205	42,517	43,965	n.a.
15 All holdings of U.S. government-issued or guaranteed certificates of participation in pools of residential mortgages	64,103	33,001	159	32,841	17,799	13,304
16 All other	n.a.	9,721	46	9,675	26,166	n.a.
17 Securities issued by states and political subdivisions in the United States	122,788	51,248	951	50,297	45,929	25,611
18 Taxable	1,733	344	1	343	661	727
19 Tax-exempt	121,055	50,904	950	49,954	45,268	24,884
20 Other securities	71,070	43,904	25,504	18,400	18,510	8,656
21 Other domestic securities	n.a.	17,881	1,096	16,785	18,159	
22 All holdings of private certificates of participation in pools of residential mortgages	7,240	3,759	8	3,751	2,619	863
23 All other	37,456	14,122	1,089	13,034	15,541	7,793
24 Foreign securities	n.a.	26,023	24,408	1,615	351	
25 Federal funds sold and securities purchased under agreements to resell	130,388	65,748	257	65,491	41,408	23,233
26 Total loans and lease financing receivables, gross	1,782,977	1,058,176	224,842	833,334	507,238	217,563
27 Less: Unearned income on loans	14,814	6,553	1,972	4,581	5,637	2,624
28 Total loans and leases (net of unearned income)	1,768,163	1,051,624	222,870	828,753	501,600	214,939
29 Less: Allowance for loan and lease losses	46,580	35,088	n.a.	n.a.	8,063	3,429
30 Less: Allocated transfer risk reserves	179	178	n.a.	n.a.	1	
31 EQUALS: Total loans and leases, net	1,721,404	1,016,357	n.a.	n.a.	493,537	211,511
Total loans, gross, by category						
32 Loans secured by real estate	570,590	270,494	18,433	252,061	202,322	97,774
33 Construction and land development				77,476	31,460	7,895
34 Farmland				1,561	3,884	8,673
35 1-4 family residential properties	n.a.	n.a.	n.a.	96,511	95,133	53,561
36 Multifamily (5 or more) residential properties				8,828	5,942	2,013
37 Nonfarm nonresidential properties				67,685	65,904	25,631
38 Loans to depository institutions	65,049	58,880	28,204	30,676	5,293	877
39 To commercial banks in the United States	n.a.	22,600	1,063	21,537	4,345	n.a.
40 To other depository institutions in the United States	n.a.	4,730	212	4,518	786	n.a.
41 To banks in foreign countries	n.a.	31,550	26,930	4,621	162	n.a.
42 Loans to finance agricultural production and other loans to farmers	31,001	5,645	360	5,285	6,685	18,670
43 Commercial and industrial loans	577,911	404,193	110,296	293,897	126,139	47,579
44 To U.S. addressees (domicile)	n.a.	307,996	17,412	290,584	125,774	n.a.
45 To non-U.S. addressees (domicile)	n.a.	96,197	92,884	3,313	365	n.a.
46 Acceptances of other banks	3,332	1,027	336	691	1,255	1,049
47 U.S. banks	n.a.	313	6	307	n.a.	n.a.
48 Foreign banks	n.a.	715	330	384	n.a.	n.a.
49 Loans to individuals for household, family, and other personal expenditures (includes purchased paper)	323,845	144,387	11,543	132,844	133,385	46,072
50 Credit cards and related plans	82,759	43,044	n.a.	n.a.	37,527	2,188
51 Other (includes single payment and installment)	241,086	101,344	n.a.	n.a.	95,858	43,885
52 Obligations (other than securities) of states and political subdivisions in the U.S. (includes nonrated industrial development obligations)	54,679	33,878	665	33,213	18,285	2,516
53 Taxable	1,615	433	-183	615	1,038	144
54 Tax-exempt	53,064	33,445	848	32,597	17,247	2,372
55 All other loans	127,838	115,700	50,781	64,919	9,700	2,439
56 Loans to foreign governments and official institutions	n.a.	38,932	35,907	3,025	228	n.a.
57 Other loans	n.a.	76,768	14,874	61,894	9,472	n.a.
58 Loans for purchasing and carrying securities	n.a.	n.a.	n.a.	19,373	1,977	n.a.
59 All other loans	n.a.	n.a.	n.a.	42,521	7,494	n.a.
60 Lease financing receivables	28,733	23,972	4,224	19,748	4,174	587
61 Assets held in trading accounts	36,864	36,014	17,085	18,929	660	190
62 Premises and fixed assets (including capitalized leases)	43,761	22,618		n.a.	13,840	7,303
63 Other real estate owned	10,729	4,532		n.a.	3,441	2,755
64 Investments in unconsolidated subsidiaries and associated companies	2,498	1,758		n.a.	677	63
65 Customers' liability on acceptances outstanding	35,512	35,077	n.a.	n.a.	409	25
66 Net due from own foreign offices, Edge and agreement subsidiaries, and IBFs	n.a.	n.a.		35,070	n.a.	n.a.
67 Intangible assets	4,515	2,893		n.a.	1,455	168
68 Other assets	84,201	63,409		n.a.	13,477	7,316

4.20 Continued

Item	Total	Banks with foreign offices ^{3,4}			Banks with domestic offices only ⁵	
		Total	Foreign	Domestic	Over 100	Under 100
69 Total liabilities, limited-life preferred stock, and equity capital	2,894,489	1,684,802	n.a.	n.a.	803,067	406,619
70 Total liabilities ⁷	2,717,730	1,601,815	441,846	1,213,056	744,938	370,977
71 Limited-life preferred stock	84	67	n.a.	n.a.	16	1
72 Total deposits	2,229,527	1,206,885	343,443	863,442	661,372	361,271
73 Individuals, partnerships, and corporations	↑	↑	186,525	763,834	601,890	329,997
74 U.S. government	↑	↑	4,000	4,000	2,037	833
75 States and political subdivisions in the United States	↑	↑	36,607	36,607	38,986	24,974
76 Commercial banks in the United States	n.a.	n.a.	33,060	33,060	10,449	1,821
77 Other depository institutions in the United States	↓	↓	5,141	5,141	2,598	1,153
78 Banks in foreign countries	↓	↓	7,967	7,967	154	n.a.
79 Foreign governments and official institutions	↓	32,763	31,002	1,761	236	n.a.
80 Certified and official checks	19,340	11,854	779	11,075	5,021	2,464
81 All other ⁸	n.a.	n.a.	125,138	...	...	28
82 Total transaction accounts	↑	↑	↑	308,721	194,067	97,208
83 Individuals, partnerships, and corporations	↑	↑	↑	250,889	171,036	86,719
84 U.S. government	↑	↑	↑	3,161	1,566	634
85 States and political subdivisions in the United States	↑	↑	↑	7,921	8,821	6,451
86 Commercial banks in the United States	n.a.	n.a.	n.a.	23,383	6,100	547
87 Other depository institutions in the United States	↓	↓	↓	3,927	1,447	384
88 Banks in foreign countries	↓	↓	↓	7,344	66	n.a.
89 Foreign governments and official institutions	↓	↓	↓	1,021	8	n.a.
90 Certified and official checks	↓	↓	↓	11,075	5,021	2,464
91 All other	↓	↓	↓	...	...	10
92 Demand deposits (included in total transaction accounts)	↑	↑	↑	246,031	125,468	53,390
93 Individuals, partnerships, and corporations	↑	↑	↑	189,766	106,566	46,983
94 U.S. government	↑	↑	↑	3,148	1,548	618
95 States and political subdivisions in the United States	↑	↑	↑	6,371	4,720	2,394
96 Commercial banks in the United States	↑	↑	↑	23,383	6,098	546
97 Other depository institutions in the United States	↑	↑	↑	3,926	1,443	376
98 Banks in foreign countries	↑	↑	↑	7,337	66	n.a.
99 Foreign governments and official institutions	↑	↑	↑	1,020	8	n.a.
100 Certified and official checks	↑	↑	↑	11,075	5,021	2,464
101 All other	↑	↑	↑	...	...	10
102 Total nontransaction accounts	n.a.	n.a.	n.a.	554,721	467,305	264,062
103 Individuals, partnerships, and corporations	n.a.	n.a.	n.a.	512,946	430,854	243,277
104 U.S. government	n.a.	n.a.	n.a.	839	471	200
105 States and political subdivisions in the United States	n.a.	n.a.	n.a.	28,686	30,165	18,524
106 Commercial banks in the United States	n.a.	n.a.	n.a.	9,677	4,349	1,274
107 U.S. branches and agencies of foreign banks	n.a.	n.a.	n.a.	884	806	n.a.
108 Other commercial banks in the United States	n.a.	n.a.	n.a.	8,794	3,542	n.a.
109 Other depository institutions in the United States	n.a.	n.a.	n.a.	1,214	1,150	770
110 Banks in foreign countries	n.a.	n.a.	n.a.	623	88	n.a.
111 Foreign branches of other U.S. banks	n.a.	n.a.	n.a.	4	4	n.a.
112 Other banks in foreign countries	n.a.	n.a.	n.a.	620	84	n.a.
113 Foreign governments and official institutions	n.a.	n.a.	n.a.	740	228	n.a.
114 All other	n.a.	n.a.	n.a.	...	...	18
115 Federal funds purchased and securities sold under agreements to repurchase	234,089	184,795	605	184,190	46,050	3,244
116 Demand notes issued to the U.S. Treasury	n.a.	n.a.	n.a.	21,701	4,881	764
117 Other borrowed money	97,426	77,682	35,116	42,566	18,757	987
118 Banks liability on acceptances executed and outstanding	35,648	35,213	7,019	28,194	409	25
119 Notes and debentures subordinated to deposits	17,289	14,899	n.a.	n.a.	2,019	370
120 Net due to own foreign offices, Edge and agreement subsidiaries, and IBFs	n.a.	n.a.	n.a.	18,017	n.a.	n.a.
121 All other liabilities	76,405	60,639	n.a.	n.a.	11,450	4,316
122 Total equity capital ⁹	176,675	82,920	n.a.	n.a.	58,114	35,641
MEMO						
123 Holdings of commercial paper included in total loans, gross	↑	1,755	1,245	511	720	n.a.
124 Total individual retirement accounts (IRA) and Keogh plan accounts	↑	↑	↑	32,901	32,219	15,948
125 Total brokered deposits	↑	↑	↑	24,590	4,519	627
126 Total brokered retail deposits	↑	↑	↑	4,937	2,553	459
127 Issued in denominations of \$100,000 or less	↑	↑	↑	1,439	1,967	391
128 Issued in denominations greater than \$100,000 and participated out by the broker in shares of \$100,000 or less	↑	↑	↑	3,497	586	68
Savings deposits						
129 Money market deposit accounts (MMDAs)	↑	↑	↑	166,942	129,345	55,939
130 Other savings deposits (excluding MMDAs)	↑	↑	↑	71,546	68,833	34,895
131 Total time deposits of less than \$100,000	↑	↑	↑	137,990	177	129,451
132 Time certificates of deposit of \$100,000 or more	n.a.	n.a.	n.a.	151,138	88,272	42,163
133 Open-account time deposits of \$100,000 or more	↑	↑	↑	27,106	3,987	1,614
134 All NOW accounts (including Super NOW)	↑	↑	↑	58,475	65,713	41,893
135 Total time and savings deposits	↑	↑	↑	617,410	535,903	307,880
Quarterly averages						
136 Total loans	↑	↑	↑	796,738	491,920	211,743
137 Obligations (other than securities) of states and political subdivisions in the United States	↑	↑	↑	33,971	18,065	n.a.
138 Transaction accounts in domestic offices (NOW accounts, ATS accounts, and telephone and preauthorized transfer accounts)	↑	↑	↑	64,390	68,970	43,551
Nontransaction accounts in domestic offices						
139 Money market deposit accounts (MMDAs)	↑	↑	↑	167,909	131,021	56,455
140 Other savings deposits	↑	↑	↑	72,379	69,156	34,633
141 Time certificates of deposit of \$100,000 or more	↑	↑	↑	148,426	87,607	41,611
142 All other time deposits	↑	↑	↑	163,070	178,191	130,481
143 Number of banks	13,687	254	↓	n.a.	2,342	11,091

Footnotes appear at the end of table 4.22

4.21 DOMESTIC OFFICES, Insured Commercial Banks with Assets of \$100 Million or more or with foreign offices^{1,2,3}
 Consolidated Report of Condition, September 30, 1987
 Millions of dollars

Item	Total	Members			Non-members
		Total	National	State	
1 Total assets ⁶	2,099,900	1,705,750	1,334,944	370,807	394,149
2 Cash and balances due from depository institutions	169,206	141,480	108,781	32,698	27,727
3 Cash items in process of collection and unposted debits	75,896	69,692	52,099	17,592	6,204
4 Currency and coin	20,220	16,718	13,787	2,931	3,502
5 Balances due from depository institutions in the United States	35,782	24,862	20,046	4,816	10,920
6 Balances due from banks in foreign countries and foreign central banks	7,669	5,797	4,491	1,306	1,873
7 Balances due from Federal Reserve Banks	29,638	24,411	18,358	6,054	5,227
8 Total securities, loans and lease financing receivables, (net of unearned income)	1,785,926	1,437,867	1,138,567	299,300	348,060
9 Total securities, book value	348,674	267,957	209,949	58,007	80,718
10 U.S. Treasury securities	129,058	99,874	79,852	20,022	29,184
11 U.S. government agency and corporation obligations	86,481	64,707	52,755	11,952	21,774
12 All holdings of U.S. government-issued or guaranteed certificates of participation in pools of residential mortgages	50,640	41,940	33,493	8,447	8,701
13 All other	35,841	22,767	19,262	3,505	13,073
14 Securities issued by states and political subdivisions in the United States	96,226	76,391	56,185	20,206	19,835
15 Taxable	1,004	703	588	115	301
16 Tax-exempt	95,222	75,688	55,597	20,091	19,534
17 Other domestic securities	34,944	25,272	20,636	4,636	9,672
18 All holdings of private certificates of participation in pools of residential mortgages	6,369	5,125	3,171	1,955	1,244
19 All other	28,575	20,147	17,466	2,681	8,428
20 Foreign securities	1,966	1,713	521	1,192	252
21 Federal funds sold and securities purchased under agreements to resell	106,899	90,524	65,607	24,917	16,374
22 Total loans and lease financing receivables, gross	1,340,572	1,087,160	868,932	218,228	253,412
23 LESS: Unearned income on loans	10,218	7,773	5,922	1,851	2,444
24 Total loans and leases (net of unearned income)	1,330,353	1,079,386	863,010	216,375	250,968
<i>Total loans, gross, by category</i>					
25 Loans secured by real estate	454,383	347,823	295,467	52,356	106,559
26 Construction and land development	108,935	88,933	72,878	16,055	20,002
27 Farmland	5,445	3,669	3,226	444	1,776
28 1-4 family residential properties	191,644	144,031	123,305	20,726	47,613
29 Multifamily (5 or more) residential properties	14,770	11,507	10,010	1,497	3,263
30 Nonfarm nonresidential properties	133,589	99,683	86,048	13,635	33,905
31 Loans to commercial banks in the United States	25,883	22,351	16,881	5,469	3,532
32 Loans to other depository institutions in the United States	5,304	5,060	3,769	1,292	244
33 Loans to banks in foreign countries	4,782	4,699	2,698	2,001	83
34 Loans to finance agricultural production and other loans to farmers	11,971	9,542	8,444	1,098	2,429
35 Commercial and industrial loans	420,036	347,701	269,420	78,281	72,335
36 To U.S. addressees (domicile)	416,358	344,332	266,696	77,636	72,026
37 To non-U.S. addressees (domicile)	3,678	3,369	2,723	645	309
38 Acceptances of other banks ¹⁰	1,946	1,366	1,218	147	581
39 Of U.S. banks	758	553	482	71	205
40 Of foreign banks	452	355	334	22	97
41 Loans to individuals for household, family, and other personal expenditures (includes purchased paper)	266,229	215,473	175,345	40,128	50,756
42 Loans to foreign governments and official institutions	3,252	3,102	2,111	991	151
43 Obligations (other than securities) of states and political subdivisions in the United States	51,498	43,113	32,333	10,780	8,385
44 Taxable	1,653	1,150	1,003	147	503
45 Tax-exempt	49,844	41,963	31,330	10,633	7,881
46 Other loans	71,366	65,473	44,116	21,357	5,893
47 Loans for purchasing and carrying securities	21,350	19,483	11,613	7,870	1,868
48 All other loans	50,015	45,990	32,503	13,487	4,025
49 Lease financing receivables	23,922	21,457	17,130	4,328	2,465
50 Customers' liability on acceptances outstanding	27,752	26,844	19,286	7,558	908
51 Net due from own foreign offices, Edge and agreement subsidiaries, and IBFs	35,070	31,570	23,482	8,087	3,501
52 Remaining assets	117,015	99,560	68,310	31,250	17,455

4.21 Continued

Item	Total	Members			Non-members
		Total	National	State	
53 Total liabilities and equity capital	2,099,900	1,705,750	1,334,944	370,807	394,149
54 Total liabilities ⁷	1,957,994	1,592,985	1,247,168	345,817	365,009
55 Total deposits	1,524,813	1,204,077	962,658	241,419	320,737
56 Individuals, partnerships, and corporations	1,365,724	1,073,427	864,366	209,061	292,298
57 U.S. government	6,037	5,137	4,251	886	900
58 States and political subdivisions in the United States	75,593	57,379	47,932	9,447	18,213
59 Commercial banks in the United States	43,509	39,487	28,950	10,537	4,022
60 Other depository institutions in the United States	7,739	5,870	4,133	1,738	1,868
61 Banks in foreign countries	8,121	7,596	3,953	3,643	525
62 Foreign governments and official institutions	1,997	1,725	796	930	272
63 Certified and official checks	16,096	13,459	8,282	5,177	2,638
64 Total transaction accounts	502,787	411,987	318,563	93,424	90,800
65 Individuals, partnerships, and corporations	421,925	339,717	268,574	71,143	82,208
66 U.S. government	4,727	4,055	3,259	796	672
67 States and political subdivisions in the United States	16,742	13,590	11,050	2,540	3,152
68 Commercial banks in the United States	29,482	28,144	20,032	8,113	1,338
69 Other depository institutions in the United States	5,374	4,818	3,220	1,597	557
70 Banks in foreign countries	7,410	7,214	3,724	3,490	196
71 Foreign governments and official institutions	1,029	989	422	567	40
72 Certified and official checks	16,096	13,459	8,282	5,177	2,638
73 Demand deposits (included in total transaction accounts)	371,500	311,449	234,303	77,146	60,051
74 Individuals, partnerships, and corporations	296,332	243,475	187,805	55,670	52,857
75 U.S. government	4,696	4,028	3,236	792	668
76 States and political subdivisions in the United States	11,091	9,329	7,584	1,745	1,762
77 Commercial banks in the United States	29,480	28,143	20,031	8,113	1,337
78 Other depository institutions in the United States	5,369	4,816	3,219	1,597	553
79 Banks in foreign countries	7,404	7,207	3,720	3,488	196
80 Foreign governments and official institutions	1,028	988	421	567	40
81 Certified and official checks	16,096	13,459	8,282	5,177	2,638
82 Total nontransaction accounts	1,022,026	792,090	644,095	147,995	229,936
83 Individuals, partnerships, and corporations	943,800	733,710	595,792	137,918	210,090
84 U.S. government	1,310	1,081	992	90	228
85 States and political subdivisions in the United States	58,851	43,789	36,882	6,907	15,061
86 Commercial banks in the United States	14,026	11,342	8,918	2,424	2,684
87 U.S. branches and agencies of foreign banks	1,690	1,049	998	50	642
88 Other commercial banks in the United States	12,336	10,294	7,920	2,374	2,042
89 Other depository institutions in the United States	2,364	1,053	912	140	1,311
90 Banks in foreign countries	711	382	229	153	329
91 Foreign branches of other U.S. banks	8	6	4	1	2
92 Other banks in foreign countries	703	376	224	152	327
93 Foreign governments and official institutions	968	737	374	363	232
94 Federal funds purchased and securities sold under agreements to repurchase	230,241	206,736	158,744	47,993	23,504
95 Demand notes issued to the U.S. Treasury	26,583	24,457	19,542	4,915	2,125
96 Other borrowed money	61,322	52,548	38,142	14,405	8,774
97 Banks liability on acceptances executed and outstanding	28,603	27,696	20,100	7,596	908
98 Notes and debentures subordinated to deposits	2,019	1,230	1,102	128	789
99 Net due to own foreign offices, Edge and agreement subsidiaries, and IBFs	18,017	16,630	9,840	6,790	1,387
100 Remaining liabilities	84,413	76,242	46,880	29,362	8,172
101 Total equity capital ⁸	141,905	112,765	87,776	24,989	29,140
MEMO					
102 Holdings of commercial paper included in total loans, gross	1,231	959	812	147	272
103 Total individual retirement accounts (IRA) and Keogh plan accounts	65,120	50,393	41,629	8,764	14,727
104 Total brokered deposits	29,109	24,163	20,333	3,830	4,946
105 Total brokered retail deposits	7,490	5,944	5,042	902	1,546
106 Issued in denominations of \$100,000 or less	3,406	2,297	2,151	146	1,109
107 Issued in denominations greater than \$100,000 and participated out by the broker in shares of \$100,000 or less	4,083	3,647	2,891	755	437
Savings deposits					
108 Money market deposit accounts (MMDAs)	296,287	234,149	190,245	43,905	62,137
109 Other savings accounts	140,379	108,282	84,864	23,418	32,097
110 Total time deposits of less than \$100,000	314,858	235,275	198,539	36,736	79,583
111 Time certificates of deposit of \$100,000 or more	239,410	186,911	151,974	34,937	52,499
112 Open-account time deposits of \$100,000 or more	31,093	27,472	18,474	8,998	3,620
113 All NOW accounts (including Super NOW accounts)	124,189	95,020	79,128	15,892	29,168
114 Total time and savings deposits	1,153,314	892,628	728,355	164,273	260,686
Quarterly averages					
115 Total loans	1,288,658	1,042,931	836,654	206,277	245,727
116 Obligations (other than securities) of states and political subdivisions in the United States	52,036	43,692	32,327	11,365	8,344
117 Transaction accounts (NOW accounts, ATS accounts, and telephone preauthorized transfer accounts)	133,359	102,676	84,523	18,152	30,684
Nontransaction accounts					
118 Money market deposit accounts (MMDAs)	298,930	236,422	192,167	44,254	62,508
119 Other savings deposits	141,535	109,357	86,228	23,128	32,179
120 Time certificates of deposit of \$100,000 or more	236,033	184,211	150,177	34,034	51,821
121 All other time deposits	341,260	259,078	213,634	45,444	82,182
122 Number of banks	2,596	1,505	1,272	233	1,091

Footnotes appear at the end of table 4.22

4.22 DOMESTIC OFFICES, Insured Commercial Bank Assets and Liabilities^{1,2,3}
Consolidated Report of Condition, September 30, 1987

Millions of dollars

Item	Total	Members			Non-members
		Total	National	State	
1 Total assets⁶	2,506,519	1,876,616	1,474,812	401,805	629,903
2 Cash and balances due from depository institutions	202,590	156,250	121,201	35,050	46,340
3 Currency and coin	24,402	18,498	15,250	3,248	5,904
4 Noninterest-bearing balances due from commercial banks	32,478	19,112	15,483	3,629	13,366
5 Other	145,710	118,640	90,467	28,173	27,070
6 Total securities, loans, and lease financing receivables (net of unearned income)	2,144,771	1,587,952	1,261,027	326,926	556,818
7 Total securities, book value	469,347	316,383	249,575	66,808	152,963
8 U.S. Treasury securities and U.S. government agency and corporation obligations	301,945	198,812	160,436	38,376	103,132
9 Securities issued by states and political subdivisions in the United States	121,837	86,671	64,642	22,029	35,166
10 Taxable	1,731	965	804	162	766
11 Tax-exempt	120,106	85,706	63,838	21,868	34,400
12 Other securities	45,566	30,900	24,497	6,403	14,665
13 All holdings of private certificates of participation in pools of residential mortgages	7,232	5,521	3,441	2,080	1,711
14 All other	38,333	25,379	21,056	4,323	12,954
15 Federal funds sold and securities purchased under agreements to resell	130,131	101,338	74,615	26,723	28,793
16 Total loans and lease financing receivables, gross	1,558,135	1,179,140	943,674	235,466	378,995
17 Less: Unearned income on loans	12,842	8,909	6,837	2,072	3,933
18 Total loans and leases (net of unearned income)	1,545,293	1,170,231	936,837	233,394	375,062
<i>Total loans, gross, by category</i>					
19 Loans secured by real estate	552,156	388,962	328,925	60,037	163,194
20 Construction and land development	116,830	92,421	75,731	16,689	24,409
21 Farmland	14,118	6,647	5,620	1,028	7,471
22 1-4 family residential properties	245,205	166,958	141,802	25,157	78,247
23 Multifamily (5 or more) residential properties	16,783	12,342	10,696	1,646	4,441
24 Nonfarm nonresidential properties	159,220	110,593	95,076	15,517	48,627
25 Loans to depository institutions	36,846	32,641	23,835	8,806	4,205
26 Loans to finance agricultural production and other loans to farmers	30,641	16,253	13,744	2,509	14,388
27 Commercial and industrial loans	467,615	368,706	286,476	82,230	98,909
28 Acceptances of other banks	2,996	1,869	1,646	223	1,127
29 Loans to individuals for household, family, and other personal expenditures (includes purchased paper)	312,302	235,319	191,522	43,797	76,983
30 Obligations (other than securities) of states and political subdivisions in the United States	54,014	44,112	33,170	10,942	9,902
31 Nonrated industrial development obligations	1,798	1,210	1,050	160	587
32 Other obligations (excluding securities)	52,216	42,901	32,120	10,782	9,315
33 All other loans	77,057	69,604	47,052	22,553	7,453
34 Lease financing receivables	24,509	21,675	17,304	4,371	2,834
35 Customers' liability on acceptances outstanding	27,777	26,854	19,294	7,561	923
36 Net due from own foreign offices, Edge and agreement subsidiaries, and IBFs	35,070	31,570	23,482	8,087	3,501
37 Remaining assets	131,381	105,559	73,291	32,269	25,822
38 Total liabilities and equity capital	2,506,519	1,876,616	1,474,812	401,805	629,903
39 Total liabilities⁷	2,328,971	1,749,086	1,375,118	373,968	579,885
40 Total deposits	1,886,084	1,355,751	1,087,193	268,558	530,333
41 Individuals, partnerships, and corporations	1,695,721	1,212,351	978,489	233,862	483,369
42 U.S. government	6,870	5,482	4,546	937	1,388
43 States and political subdivisions in the United States	100,567	66,925	55,772	11,153	33,642
44 Commercial banks in the United States	45,330	40,628	29,818	10,810	4,702
45 Other depository institutions in the United States	8,892	6,440	4,608	1,832	2,451
46 Certified and official checks	18,561	14,587	9,199	5,388	3,973
47 All other	10,147	9,339	4,765	4,574	808
48 Total transaction accounts	599,996	452,989	352,412	100,577	147,007
49 Individuals, partnerships, and corporations	508,644	376,297	298,849	77,448	132,347
50 U.S. government	5,361	4,325	3,490	835	1,036
51 States and political subdivisions in the United States	23,193	16,011	13,059	2,952	7,182
52 Commercial banks in the United States	30,029	28,564	20,297	8,267	1,465
53 Other depository institutions in the United States	5,758	4,995	3,369	1,626	763
54 Certified and official checks	18,561	14,587	9,199	5,388	3,973
55 All other	8,449	8,209	4,151	4,059	240
56 Demand deposits (included in total transaction accounts)	424,890	334,564	253,296	81,269	90,326
57 Individuals, partnerships, and corporations	343,315	263,691	204,480	59,211	79,624
58 U.S. government	5,314	4,292	3,462	830	1,022
59 States and political subdivisions in the United States	13,485	10,237	8,345	1,892	3,248
60 Commercial banks in the United States	30,026	28,563	20,296	8,267	1,463
61 Other depository institutions in the United States	5,745	4,990	3,364	1,626	755
62 Certified and official checks	18,561	14,587	9,199	5,388	3,973
63 All other	8,442	8,202	4,145	4,056	240
64 Total nontransaction accounts	1,286,088	902,762	734,781	167,982	383,326
65 Individuals, partnerships, and corporations	1,187,077	836,055	679,641	156,414	351,023
66 U.S. government	1,509	1,158	1,056	102	352
67 States and political subdivisions in the United States	77,374	50,915	42,713	8,201	26,460
68 Commercial banks in the United States	15,300	12,064	9,521	2,543	3,236
69 Other depository institutions in the United States	3,134	1,446	1,240	206	1,688
70 All other	1,697	1,130	614	516	567

4.22 Continued

Item	Total	Members			Non-members
		Total	National	State	
71 Federal funds purchased and securities sold under agreements to repurchase	233,484	208,398	160,001	48,397	25,087
72 Demand notes issued to the U.S. Treasury	27,346	24,816	19,827	4,988	2,530
73 Other borrowed money	62,310	53,143	38,522	14,620	9,167
74 Banks liability on acceptances executed and outstanding	28,628	27,706	20,107	7,599	923
75 Notes and debentures subordinated to deposits	2,389	1,304	1,168	136	1,085
76 Net due to own foreign offices, Edge and agreement subsidiaries, and IBFs	18,017	16,630	9,840	6,790	1,387
77 Remaining liabilities	88,730	77,969	48,300	29,669	10,761
78 Total equity capital⁹	177,548	127,530	99,694	27,836	50,017
MEMO					
79 Assets held in trading accounts ¹⁰	19,779	19,467	11,723	7,743	313
80 U.S. Treasury securities	9,735	9,704	4,801	4,903	32
81 U.S. government agency corporation obligations	4,285	4,284	3,030	1,254	1
82 Securities issued by states and political subdivisions in the United States	2,440	2,426	1,710	715	14
83 Other bonds, notes and debentures	182	181	96	85	1
84 Certificates of deposit	385	381	345	36	4
85 Commercial paper	46	46	46	0	0
86 Bankers acceptances	1,371	1,363	880	483	8
87 Other	874	863	608	255	11
88 Total individual retirement accounts (IRA) and Keogh plan accounts	81,068	56,811	46,938	9,873	24,257
89 Total brokered deposits	29,736	24,454	20,556	3,898	5,282
90 Total brokered retail deposits	7,949	6,136	5,184	952	1,813
91 Issued in denominations of \$100,000 or less	3,797	2,462	2,277	184	1,336
92 Issued in denominations greater than \$100,000 and participated out by the broker in shares of \$100,000 or less	4,151	3,674	2,907	768	477
Savings deposits					
93 Money market deposit accounts (MMDAs)	352,226	258,832	210,510	48,322	93,394
94 Other savings deposits	175,275	122,941	96,612	26,330	52,333
95 Total time deposits of less than \$100,000	444,308	286,414	240,267	46,147	157,894
96 Time certificates of deposit of \$100,000 or more	281,573	206,516	168,454	38,061	75,057
97 Open-account time deposits of \$100,000 or more	32,707	28,059	18,937	9,121	4,648
98 All NOW accounts (including Super NOW)	166,081	112,308	93,500	18,808	53,773
99 Total time and savings deposits	1,461,194	1,021,187	833,898	187,289	440,007
Quarterly averages					
100 Total loans	1,500,401	1,132,484	909,558	222,926	367,917
101 Transaction accounts (NOW accounts, ATS accounts, and telephone and preauthorized transfer accounts)	176,910	120,427	99,248	21,179	56,483
Nontransaction accounts					
102 Money market deposit accounts (MMDAs)	355,384	261,300	212,613	48,687	94,084
103 Other savings deposits	176,169	123,918	97,896	26,021	52,251
104 Time certificates of deposit of \$100,000 or more	277,643	203,595	166,540	37,055	74,048
105 All other time deposits	471,741	310,498	255,643	54,856	161,243
106 Number of banks	13,687	5,747	4,649	1,098	7,940

1. Effective Mar. 31, 1984, the report of condition was substantially revised for commercial banks. Some of the changes are as follows: (1) Previously, banks with international banking facilities (IBFs) that had no other foreign offices were considered domestic reporters. Beginning with the Mar. 31, 1984 call report these banks are considered foreign and domestic reporters and must file the foreign and domestic report of condition; (2) banks with assets greater than \$1 billion have additional items reported; (3) the domestic office detail for banks with foreign offices has been reduced considerably; and (4) banks with assets under \$25 million have been excused from reporting certain detail items.

2. The "n.a." for some of the items is used to indicate the lesser detail available from banks without foreign offices, the inapplicability of certain items to banks that have only domestic offices and/or the absence of detail on a fully consolidated basis for banks with foreign offices.

3. All transactions between domestic and foreign offices of a bank are reported in "net due from" and "net due to." All other lines represent transactions with parties other than the domestic and foreign offices of each bank. Since these intraoffice transactions are nullified by consolidation, total assets and total liabilities for the entire bank may not equal the sum of assets and liabilities respectively of the domestic and foreign offices.

4. Foreign offices include branches in foreign countries, Puerto Rico, and in U.S. territories and possessions; subsidiaries in foreign countries; all offices of Edge act and agreement corporations wherever located and IBFs.

5. The "over 100" column refers to those respondents whose assets, as of June 30 of the previous calendar year, were equal to or exceeded \$100 million. (These respondents file the FFIEC 032 or FFIEC 033 call report.) The "under 100" column refers to those respondents whose assets, as of June 30 of the previous calendar year, were less than \$100 million. (These respondents filed the FFIEC 034 call report.)

6. Since the domestic portion of allowances for loan and lease losses and allocated transfer risk reserve are not reported for banks with foreign offices, the components of total assets (domestic) will not add to the actual total (domestic).

7. Since the foreign portion of demand notes issued to the U.S. Treasury is not reported for banks with foreign offices, the components of total liabilities (foreign) will not add to the actual total (foreign).

8. The definition of "all other" varies by report form and therefore by column in this table. See the instructions for more detail.

9. Equity capital is not allocated between the domestic and foreign offices of banks with foreign offices.

10. Components of assets held in trading accounts are only reported for banks with total assets of \$1 billion or more; therefore the components will not add to the totals for this item.

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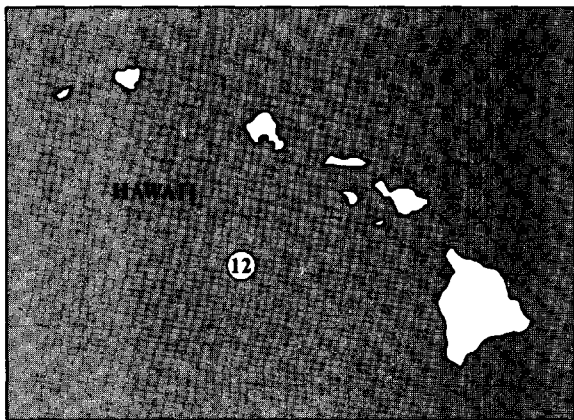
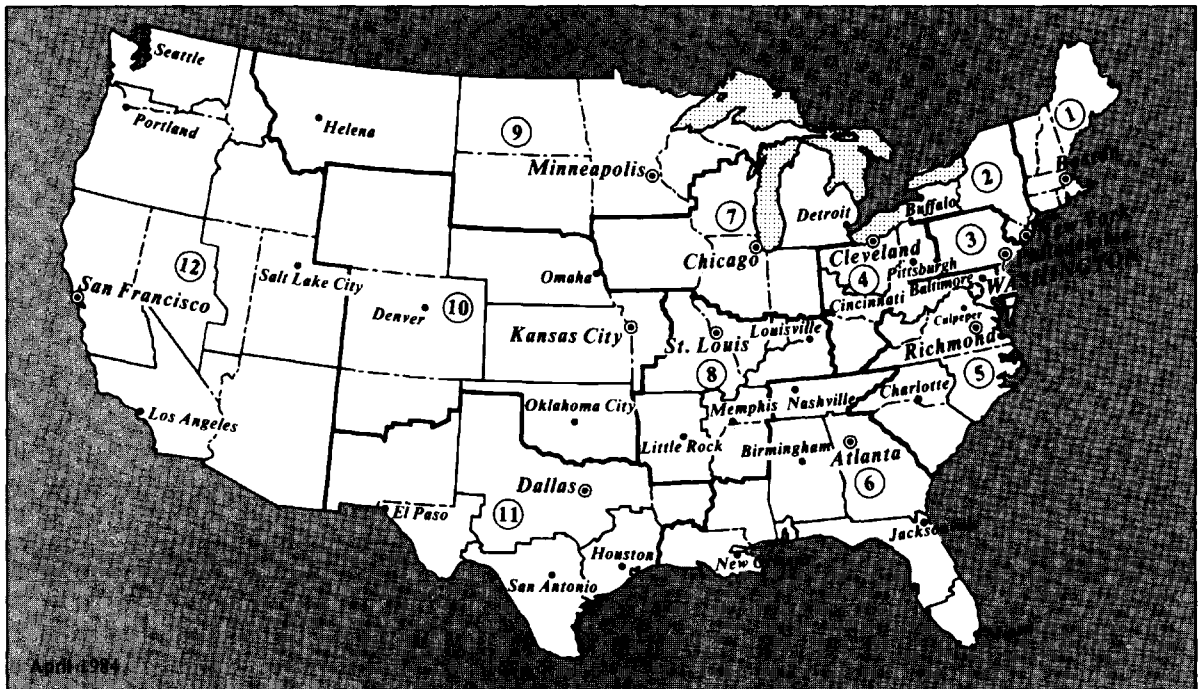
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FEDERAL RESERVE BANK, branch, or facility	Zip	Chairman Deputy Chairman	President First Vice President	Vice President in charge of branch
BOSTON*	02106	George N. Hatsopoulos Richard N. Cooper	Frank E. Morris Robert W. Eisenmenger	
NEW YORK*	10045	John R. Opel To be announced	E. Gerald Corrigan Thomas M. Timlen	
Buffalo	14240	Mary Ann Lambertsen		John T. Keane
PHILADELPHIA	19105	Nevius M. Curtis Peter A. Benoliel	Edward G. Boehne William H. Stone, Jr.	
CLEVELAND*	44101	Charles W. Parry John R. Miller	W. Lee Hoskins William H. Hendricks	
Cincinnati	45201	Owen B. Butler		Charles A. Cerino ¹
Pittsburgh	15230	James E. Haas		Harold J. Swart ¹
RICHMOND*	23219	Robert A. Georgine Hanne Merriman	Robert P. Black Jimmie R. Monhollon	
Baltimore	21203	Thomas R. Shelton		Robert D. McTeer, Jr. ¹
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The Federal Reserve System

Boundaries of Federal Reserve Districts and Their Branch Territories



LEGEND

— Boundaries of Federal Reserve Districts

— Boundaries of Federal Reserve Branch Territories

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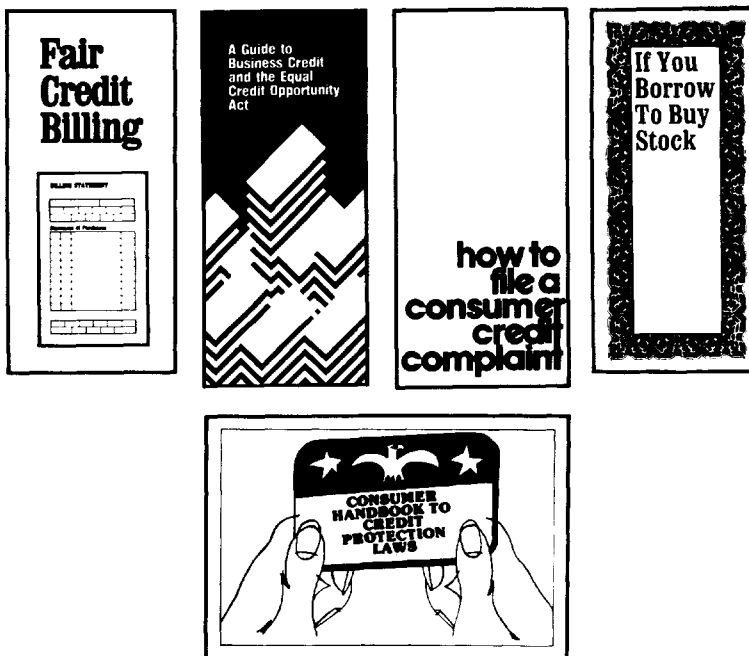
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