VOLUME 79 □ NUMBER 6 □ JUNE 1993

FEDERAL RESERVE BULLETIN

BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM, WASHINGTON, D.C.

The *Federal Reserve Bulletin* is issued monthly under the direction of the staff publications committee. This committee is responsible for opinions expressed except in official statements and signed articles. It is assisted by the Economic Editing Section headed by S. Ellen Dykes, the Graphics Center under the direction of Peter G. Thomas, and Publications Services supervised by Linda C. Kyles.

Table of Contents

Reserve Requirements: History, Current Practice, and Potential Reform

Joshua N. Feinman, of the Board's Division of Monetary Affairs, prepared this article. Jana Deschler and Christoph Hinkelmann provided research assistance.

Laws requiring banks and other depository institutions to hold a certain fraction of their deposits in reserve, in very safe, secure assets, have been a part of our nation's banking history for many years. The rationale for these requirements has changed over time, however, as the country's financial system has evolved and as knowledge about how reserve requirements affect this system has grown. Before the establishment of the Federal Reserve System, reserve requirements were thought to help ensure the liquidity of bank notes and deposits, particularly during times of financial strains. As bank runs and financial panics continued periodically to plague the banking system despite the presence of reserve requirements, it became apparent that these requirements really had limited usefulness as a guarantor of liquidity. Since the creation of the Federal Reserve System as a lender of last resort, capable of meeting the liquidity needs of the entire banking system, the notion of and need for reserve requirements as a source of liquidity has all but vanished. Instead, reserve requirements have evolved into a supplemental tool of monetary policy, a tool that reinforces the effects of open market operations and discount policy on overall monetary and credit conditions and thereby helps the Federal Reserve to achieve its objectives.

While useful as an auxiliary policy tool, reserve requirements also have important implications for the efficacy of the Federal Reserve's primary tool, open market operations. In the early 1980s, for example, when open market operations were geared toward fostering fairly precise, short-run control of narrowly defined money (M1), reserve requirements were designed to help facilitate this control by establishing a relatively stable, contemporaneous link between reserves and M1 deposits. Although the Federal Reserve is no longer pursuing this type of short-run control of money, reserve requirements still play an important role in the conduct of open market operations, which are now aimed at influencing general monetary and credit conditions by varying the cost and availability of reserves to the banking system. By helping to ensure a stable, predictable *demand* for reserves, reserve requirements better enable the Federal Reserve to achieve desired reserve market conditions by controlling the *supply* of reserves; in so doing, they help prevent potentially disruptive fluctuations in the money market.

Reserve requirements are not costless, however. On the contrary, requiring depositories to hold a certain fraction of their deposits in reserve, either as cash in their vaults or as non-interest-bearing balances at the Federal Reserve, imposes a cost on the private sector equal to the amount of forgone interest on these reserves—or at least on the fraction of these reserves that banks hold only because of legal requirements and not because of the needs of their customers. The higher the level of reserve requirements, the greater the costs imposed on the private sector; at the same time, however, higher reserve requirements may smooth the implementation of monetary policy and damp volatility in the reserves market.

The Federal Reserve could resolve this policy dilemma by paying interest on required reserves, or at least on the part of these reserves that banks would not hold were it not for legal requirements. Paying an explicit, market-based rate of return on these funds would effectively eliminate much of the costs of reserve requirements without jeopardizing the stable demand for reserves that is needed for open market operations and for the smooth functioning of the reserves market.

The Federal Reserve Board has long supported legislation that would explicitly allow interest to be paid on the balances that depositories are required to hold in reserve—though not on the cash they hold in their vaults, which is assumed to be held primarily to meet customer needs—but to no avail.[1] Opposition has typically centered on the adverse implications such a move would have for Treasury revenue. If the Federal Reserve paid interest on required balances, its net earnings would decline, and because it turns the vast majority of its earnings over to the Treasury, the Treasury's revenues would decline as well. On the other hand, eliminating the costs of reserve requirements would remove one government-mandated impediment to deposit-taking and lending through the banking system. Recently, the costs of depository intermediation have risen sharply because of higher deposit insurance premiums, stiffer capital requirements, more stringent standards for interbank lending, and other regulatory burdens. Much of these increased costs have likely been passed on to the customers of depositories in the forms of higher loan rates and lower deposit rates; paying interest on reserves would be one way of countering some of these government-mandated increases in costs.

BASIC CONCEPTS AND CURRENT RULES OF RESERVE REQUIREMENTS

Under current regulations, all depository institutions—commercial banks, savings banks, thrift institutions, and credit unions—are required to maintain reserves against transaction deposits, which include demand deposits, negotiable order of withdrawal accounts, and other highly liquid funds.[2] Reserves against these deposits can take the form either of currency on hand (vault cash) or balances at the Federal Reserve. The Federal Reserve may vary the percentage of transaction deposits that must be kept in reserve, but only within fairly narrow limits prescribed by law; requirements may also be imposed on certain types of nontransaction accounts, though again only within specified limits.[3] At present, the required reserve ratio on nontransaction accounts is zero, while the requirement on transaction deposits is 10 percent, which is near the legal minimum.

Most depositories are able to satisfy their entire reserve requirement with vault cash, which they hold primarily to meet the liquidity needs of their customers and would likely hold even in the absence of reserve requirements. For these institutions, reserve requirements are essentially costless. About 3,000 depositories, however, have vault cash holdings that are insufficient to satisfy their entire reserve requirement. To meet their requirements, these institutions must also maintain deposits, called required reserve balances, at the Federal Reserve.

Reserve Requirements as a Tax

Some uncertainty exists as to whether the Federal Reserve Act permits interest to be paid on reserves. In fact, the Federal Reserve has never actually paid

1. See, for example, "Statement by Arthur F. Burns, Chairman, Board of Governors of the Federal Reserve System, before the Subcommittee on Financial Institutions of the Committee on Banking, Housing, and Urban Affairs, U.S. Senate, June 20, 1977," *Federal Reserve Bulletin*, vol. 63 (July 1977), pp. 636–43; "Statement by J. Charles Partee, member, Board of Governors, before the Subcommittee on Financial Institutions Supervision, Regulation and Insurance of the Committee on Banking, Finance and Urban Affairs, U.S. House of Representative, October 27, 1983," *Federal Reserve Bulletin*, vol. 69 (November 1983), pp. 840–52; and "Statement by Alan Greenspan, Chairman, Board of Governors of the Federal Reserve System, before the Subcommittee on Domestic Monetary Policy of the Committee on Banking, Finance and Urban Affairs, U.S. House of Representatives, February 19, 1992," Government Printing Office, Serial No. 102-98 (1992) pp. 42–43. The Federal Reserve has also requested the lifting of the prohibition on the payment of interest on demand deposits. See, in particular, the statement by J. Charles Partee, October 27, 1983.

2. For a formal definition of depository institutions and transaction accounts, see Federal Reserve Regulation D (Reserve Requirements of Depository Institutions), sections 204.1 and 204.2.

3. At present, required reserve ratios may be set between 8 percent and 14 percent on transaction accounts in excess of $46.8 million, and between 0 and 9 percent on nonpersonal savings deposits, nonpersonal time deposits with original maturities of eighteen months or longer, and net Eurocurrency liabilities. Transaction deposits of less than $46.8 million, in the so-called low reserve tranche, are reservable at 3 percent, while the first $3.8 million of transaction deposits at each depository are exempt from reserve requirements altogether. The Federal Reserve cannot alter the cutoffs for the low reserve tranche or the exemption, which are adjusted each year according to a formula provided by law.

interest on required reserve balances.[4] Requiring depositories to hold idle, non-interest-bearing balances is essentially like taxing these institutions in an amount equal to the interest they could have earned on these balances in the absence of reserve requirements. This forgone interest, or reserve "tax," directly affects only the depository system and its customers, and not other parts of the financial system. Hence, it creates an artificial incentive for depositors and borrowers to bypass the depository system, and in so doing it may redirect credit flows in ways that impair the efficiency of resource allocation. In particular, by distorting the relative price of transaction accounts at depositories, the reserve tax may induce a smaller level of transaction services than what would be ideal for the functioning of the economy. The reserve tax also creates an incentive for depositories to expend resources trying to minimize required reserves by fashioning new financial products aimed solely at delivering transactions services without creating reservable liabilities.

As is true for most taxes, determining precisely who bears the burden of the reserve tax is difficult. That determination depends in a complicated way on the degree of competitive pressure in the markets for deposits and loans and the associated sensitivities of borrowers, lenders, and depositories to changes in prices and interest rates. One thing is certain, however: Depositories and their shareholders do not bear all of the costs but rather pass at least some of them on to their customers in the forms of lower deposit rates and higher loan rates. In compensating-balance arrangements, for example, in which customers maintain non-interest-bearing deposits as compensation for bank services, the customers typically "pay" the reserve tax by holding additional balances. Similarly, to the extent that some borrowers, such as small and medium-sized businesses, have few alternatives outside of the depository system, these borrowers may ultimately bear some of the burden of the reserve tax in the form of higher costs of credit.

Current Estimates of the Reserve Tax

Table 1 presents estimates of the current dollar magnitude of the reserve tax. In the fourth quarter of 1992, the required reserve balances of all depositories totaled $23½ billion. Because many of the financial transactions in our economy flow through these reserve accounts, even in the absence of reserve requirements depositories would likely hold some balances at the Federal Reserve as a buffer against the normal uncertainties surrounding payment flows. Thus, $23½ billion should be considered an upper bound on the amount of balances truly idled by reserve requirements in the fourth quarter of 1992. Even if banks had invested all of these funds, moreover, the gains would probably not have been large because short-term interest rates are currently at relatively low levels. Using a federal funds rate of 3 percent as a proxy for the potential earnings rate on idle balances, the lost interest income due to reserve requirements totals only about $700 million, at an annual rate, based on $23½ billion of balances. About $600 million of this would have accrued to commercial banks and their customers; even in the unlikely event that banks were able to retain all of this increased revenue, it would have boosted their pretax return on assets for 1992 by only about 2 basis points compared with an actual pretax rate of return on assets of a little more than 130 basis points.

On an after-tax basis, the earnings would be even smaller because depositories and their customers would have to pay extra taxes on this additional income. Regardless of the precise figure, however,

1. Burden of reserve requirements, 1992:Q4
Billions of dollars

Type of institution	Required reserve balances	Forgone interest
All depositories	**23.5**	**.7**
Commercial banks	21.1	.6
Thrift institutions	2.4	.1

1. Forgone interest is annualized, based on a federal funds rate of 3 percent.

4. The Federal Reserve Board has, however, at least in the past, taken the position that it has the discretion to pay interest on reserves, though individual members of the Congress opposed such payments at the time of the enactment of the Federal Reserve Act in 1913 and again as recently as 1978. For details on a Federal Reserve proposal to pay interest on required reserve balances in 1978, see *Federal Reserve Bulletin*, vol. 64 (July 1978), pp. 605–10. For congressional reaction to this proposal, see, "Monetary Control and the Membership Problem," *Hearings before the Committee on Banking, Finance and Urban Affairs on H.R. 13476, H.R. 13477, H.R. 12706, and H.R. 14072*, 95 Cong. 2 Sess. U.S. House of Representatives (GPO, 1978), p. 781.

if the Federal Reserve paid interest on all required reserve balances, the private sector would enjoy a net increase in after-tax income, whereas the Treasury would see its net revenues reduced. Of course, if interest rates were higher, the burden of reserve requirements and the private-sector cost savings and government revenue losses stemming from paying interest on required reserve balances would be commensurately larger than the amounts shown in table 1. The distortions to resource allocation would be more pronounced as well. Indeed, the burden of reserve requirements has, at times, been considerably larger than it is now, as a result of both higher interest rates and higher reserve requirements.

Because reserve requirements are a tax on the private sector that may distort the optimal allocation of resources in the financial sector, the question arises as to why these requirements were imposed in the first place. The next section traces the historical evolution of reserve requirements and their rationales to see how our current system developed. Subsequently, several options for reforming the current system to eliminate the reserve tax without jeopardizing the effective conduct of monetary policy are analyzed.

HISTORICAL REVIEW OF RESERVE REQUIREMENTS AND THEIR RATIONALES

Reserve requirements have played a part in our nation's financial system from the earliest days—long before the creation of a national currency or a central bank.

Early State Laws and Practices

The first commercial banks in this country were chartered by the states and were not required to keep reserves either against deposits, which were little used at the time, or against their own, more ubiquitous, bank notes. In the absence of a national currency, bank notes were commonly used as a medium of exchange, though high transaction costs of redeeming the notes and limited information about the underlying solvency of the issuer generally confined the use of any individual bank's notes to a small geographic area. To facilitate the more widespread use of their notes, banks in New York and New England entered into voluntary redemption arrangements as early as 1820. Under these arrangements, one bank agreed to redeem another bank's notes at par, provided that the issuing bank maintained a sufficient deposit of specie (gold or its equivalent) on account with the redeeming bank as backing for the notes. In essence, these deposits represented the first required reserves. The primary purpose of these reserves was to increase the liquidity of bank notes by ensuring their convertibility into specie. Although in subsequent years some states began to require banks to maintain reserves against their notes, and a few even began to require reserves against deposits, most states still had no legal reserve requirements when the Civil War broke out in 1861.

The National Bank Era

Reserve requirements were first established at the national level in 1863 with the passage of the National Bank Act. This act provided banks an opportunity to organize under a national charter and created a network of institutions whose notes could circulate more easily throughout the country. In exchange for this charter, banks had to hold a 25 percent reserve against both notes and deposits—a much higher requirement than that faced by most state banks. Although banks in "redemption" cities—designated in the act as cities where notes were likely to accumulate for redemption—had to hold reserves entirely in the form of "lawful" money (specie or greenbacks), banks outside these cities could maintain 60 percent of their reserves in interest-bearing balances at banks in redemption cities.

Reserve requirements were seen as necessary for ensuring the liquidity of national bank notes and thereby reinforcing their acceptability as a medium of exchange throughout the country. Concentrating reserves in areas where demands for liquidity were likely to be most acute was thought to be the surest means of promoting the widespread use and acceptance of national bank notes. At the same time, allowing banks outside redemption cities to earn interest on a portion of their reserves made the burden of reserve requirements less onerous for banks that faced more limited demands for liquidity.

The federal government had a keen interest in seeing the use of national bank notes flourish because, in addition to reserve requirements, national bank notes were also required to be backed by holdings of government bonds, which were needed to finance the Civil War. To make the issuance of national bank notes less costly, reserve requirements against these notes were lowered for banks outside redemption cities from 25 percent to 15 percent in 1864, and banks in redemption cities outside New York City were allowed to meet half of their requirements with interest-bearing balances at a bank in New York. Still dissatisfied with the rate of growth of national bank notes, the Congress imposed a tax on state bank notes in 1865, effectively guaranteeing the primacy of national bank notes as a medium of exchange. Indeed, in subsequent years, these notes began to circulate widely throughout the country and were rarely redeemed. With their convertibility no longer in question, reserve requirements against national bank notes were lifted in 1873. Requirements remained in place on deposits, however, which were just emerging as an accepted means of payment. As time wore on, the role of deposits expanded, and they eventually supplanted bank notes as the preferred medium of exchange for many transactions, with their convertibility supposedly reinforced by reserve requirements.

A series of bank runs and financial panics in the late nineteenth and early twentieth centuries made it patently clear that reserve requirements could not really guarantee the convertibility of deposits for the entire banking system. In fact, reserve requirements were really no help at all in providing liquidity during a panic because a given dollar of reserves could not be used simultaneously to meet a customer's demand for cash and to satisfy reserve requirements. What was lacking from the national banking system or, for that matter, from any fractional reserve system—one with reserve requirements of less than 100 percent—was a mechanism for accommodating temporary variations in the public's demand for liquidity by adjusting the quantity of reserves available to the entire banking system. Absent such a mechanism, systemic panics and crises stemming from fluctuating liquidity needs were all too common. Though an individual bank might be able to meet a temporary surge in the demand for cash with little attendant adverse effect on the economy, the banking system as a whole could not without selling securities or calling in loans, thereby squeezing credit supplies, driving up interest rates, and precipitating a general financial crisis.

Creation of the Federal Reserve System

The Federal Reserve Act of 1913 created a system of Reserve Banks that could act as lenders of last resort by accommodating the temporary liquidity needs of the banking system and thereby alleviating the periodic financial disruptions that plagued the national bank era. By discounting eligible assets of member banks, Federal Reserve Banks provided a ready, accessible source of liquidity that had been missing from the national banking system.

Although the creation of the Federal Reserve System seemingly eliminated any remaining liquidity rationale for reserve requirements, banks that were members of the System were still required to hold reserves, though requirements were lower than those previously in effect for most national banks. In the original Federal Reserve Act, banks had to hold in reserve different percentages of their demand deposits—deposits that could be withdrawn on demand—depending on whether they were classified as central reserve city banks (18 percent), reserve city banks (15 percent), or country banks (12 percent).[5] In addition, all member banks faced a 5 percent requirement on time deposits.[6] Member banks outside central reserve cities were not allowed, however, to meet part of their requirements with interest-bearing balances at a bank in a central reserve city. Starting in 1917, moreover, member banks could no longer use vault cash to satisfy reserve requirements: They had to

5. Originally, the rationale for these distinctions among cities was a carryover from the designation of redemption cities in the national bank era. In 1913, banks in New York, Chicago, and St. Louis were classified as central reserve city banks, and banks in about fifty other cities were designated as reserve city banks. In 1922, St. Louis was reclassified as a reserve city, and in 1962 the central reserve city designation was eliminated altogether. Over the years, the number of reserve cities changed somewhat as some cities were added and others deleted by the Federal Reserve Board.

6. For details on the history of changes in reserve requirements since the inception of the Federal Reserve, see the appendix.

meet their requirements entirely with non-interest-bearing balances at a Federal Reserve Bank.

On net, therefore, the effective burden of reserve requirements in terms of forgone interest was somewhat higher for member banks than for non-member banks, particularly for those outside central reserve cities. To help offset this increased burden, in 1917 reserve requirements on demand deposits were pared further, to 13 percent, 10 percent, and 7 percent respectively for the three types of member banks, and requirements on time deposits were reduced from 5 percent to 3 percent for all members. These reductions, coupled with the benefits of access to Federal Reserve credit at the discount window and free Federal Reserve services—such as check clearing and currency distribution—were considered sufficient encouragement for banks to become members of the System, despite the higher reserve requirement burden that such membership often entailed. In later years, however, the burden of reserve requirements would become more acute, making membership less desirable for many institutions.

Reserve Requirements as a Means of Influencing Credit Conditions

In the 1920s and 1930s, the Federal Reserve gradually began to expand its original, reactive role as lender of last resort and guarantor of the liquidity of the banking system and adopted a more proactive posture in attempting to influence the nation's credit conditions. As the emphasis of monetary policy evolved, so too did the rationale for reserve requirements. In fact, by 1931, the Federal Reserve had officially abandoned the view that reserves were a necessary or useful source of liquidity for deposits, arguing instead that reserve requirements provided a means for influencing the expansion of bank credit.[7] Specifically, the Federal Reserve believed that requiring banks to hold reserves against the additional deposits needed to fund each increment of new loans could help restrain an overly rapid expansion of credit.

In practice, however, reserve requirements were of little help in containing the rapid credit growth that occurred in the late 1920s. During this period, the primary tool used by the Federal Reserve to influence credit conditions was the discount rate. Because this rate was generally kept below market rates and only marginal administrative pressure was used to dissuade banks from availing themselves of the discount window, banks had an incentive to borrow the reserves they needed to finance their rapidly expanding assets from the Federal Reserve, and they responded vigorously to this incentive. Throughout much of the 1920s, discount window borrowings were more than half of total Federal Reserve assets. With the Federal Reserve effectively accommodating much of the increased credit expansion, reserve requirements placed no significant constraint on lending. In addition, the Federal Reserve had no authority to raise reserve requirements even if it had wanted to make them a more binding constraint on credit expansion.

During the Great Depression, as market interest rates plunged and loan demand all but dried up, reserve requirements were obviously not needed to curtail credit growth. In fact, through much of this period, banks held large quantities of reserves in excess of their reserve requirements, suggesting that reserve requirements were not in any way constraining credit expansion. The Federal Reserve was concerned that these large excess reserves could eventually be used to support an overly rapid buildup of deposits and loans that could ultimately prove inflationary. Therefore, it excercised its newly acquired powers under the Banking Act of 1935 and doubled the required reserve ratios on both demand and time deposits, thereby effectively absorbing much of extant excess reserves.[8] By 1938, however, as evidence mounted that the nascent economic recovery was imperiled, the Federal Reserve moved to trim reserve requirements on both demand and time deposits, hoping to free up additional funds for lending.

7. See "Member Bank Reserves—Report of the Committee on Bank Reserves of the Federal Reserve System," in Board of Governors of the Federal Reserve System, *19th Annual Report*, 1932 (Board of Governors, 1933), pp. 260–85.

8. The Thomas Amendment of 1933 first granted authority to the Federal Reserve Board to raise reserve requirements, subject to presidential approval, provided that a national emergency was declared. The Banking Act of 1935 eliminated the need for presidential approval or the declaration of an emergency, though it also precluded the Board from reducing requirements below the levels then in force or from more than doubling those requirements.

In the years surrounding World War II, monetary policy considerations became subordinate to financing the government debt. During this period, the Federal Reserve abandoned an active monetary policy role and chose as its highest priority to accommodate the government's financing needs by buying Treasury securities at low interest rates.

Postwar Issues: Membership Attrition and Monetary Control

In 1951, the Federal Reserve resumed an active, independent monetary policy. In subsequent years, reserve requirements were adjusted numerous times, usually to reinforce or supplement the effects of open market operations and discount policy on overall monetary and credit conditions. In the short run, however, reserve requirements placed little constraint on the expansion of deposits because the Federal Reserve largely accommodated any such expansion through open market operations. Over time, though, if the Federal Reserve sought to reduce the availability of money and credit by providing reserves less generously through open market operations, it could and often did augment its actions by raising reserve requirements.

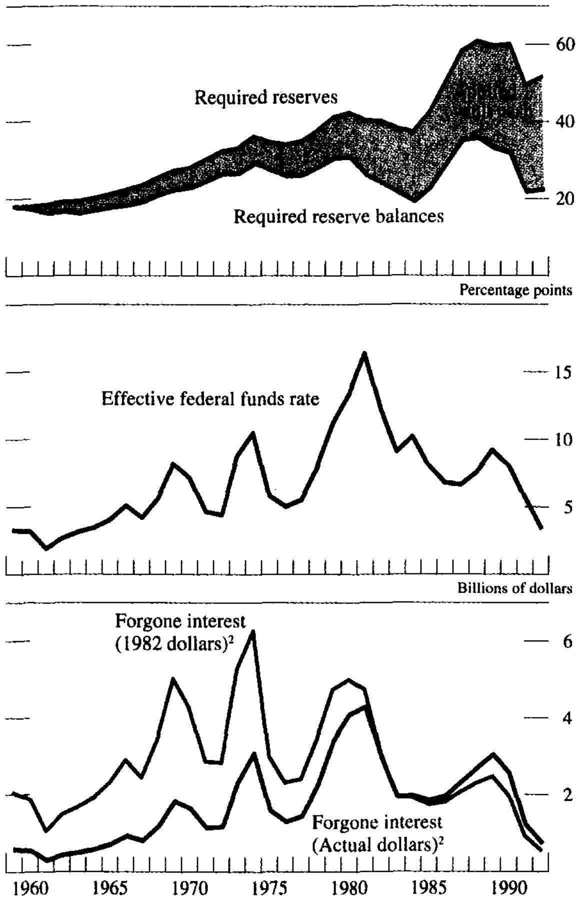
The use of reserve requirements as a supplemental tool of monetary policy was particularly prevalent in the 1960s and 1970s, as the Federal Reserve sought to influence the expansion of money and credit in part by manipulating bank funding costs. As financial innovation spawned new sources of bank funding, the Federal Reserve began to adapt reserve requirements to these new financial products and often changed requirements on the specific bank liabilities that were most frequently used as marginal sources of funding. As banks began to rely more heavily on the issuance of large-denomination time deposits (CDs) to fund their asset acquisitions in the 1960s, for example, the Federal Reserve began periodically to alter reserve requirements on these instruments, thereby affecting their cost of issuance and, thus, the supply of credit through banks. It sometimes supplemented its actions by placing a *marginal* reserve requirement on large time deposits—that is, an additional requirement applied only to each new increment of these deposits.

Reserve requirements were also imposed on other, newly emerging liabilities that were the functional equivalents of deposits. For example, as banks started to rely more on Eurodollar borrowings as a funding source in the late 1960s, partly in an effort to circumvent existing reserve requirements, the Federal Reserve imposed marginal requirements on these liabilities and adjusted these requirements periodically throughout the 1970s. The imposition of reserve requirements on these and other managed liabilities was especially useful in the late 1970s, as the Federal Reserve aggressively sought to curb the expansion of money and credit and thereby ease price pressures.

Throughout this period, reserve requirements also had important implications for membership in the Federal Reserve System. Since membership was optional for state-chartered banks, some of these institutions began to leave the System in the 1950s to take advantage of the lower reserve requirements imposed by most state regulatory authorities, some of whom also allowed banks to meet part of their requirements with interest-earning assets. The Federal Reserve feared that if enough banks left the System, changes in the cost and availability of reserves to the remaining member banks might have a diminished effect on overall monetary and credit conditions, thus undermining the efficacy of monetary policy.

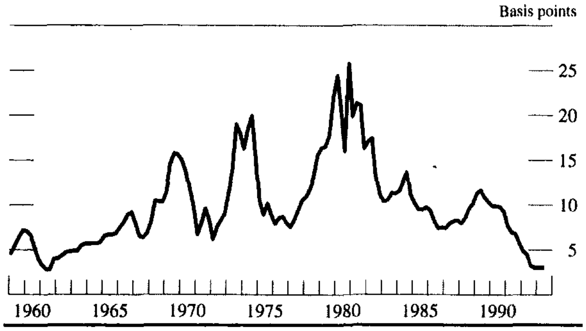
Change in vault cash accounting. To reduce the burden of reserve requirements and stem the erosion of membership in the System, legislation was enacted allowing banks to resume using vault cash to satisfy their reserve requirements. This change, which was phased in beginning December 1959, provided the greatest relief to small banks, which tended to hold relatively large quantities of vault cash to meet their customers' liquidity needs. Permitting this vault cash to be used to meet reserve requirements reduced the amount of non-interest-bearing balances these banks had to hold at the Federal Reserve. Because smaller banks were most apt to leave the System, it was hoped that this reform would help stanch membership attrition. Although larger banks tended to benefit less from this rule change, they were less likely to leave the System because they often reaped the greatest benefits from free Federal Reserve services, par-

1. Burden of reserve requirements, 1959–92[1]



1. Data are annual averages.
2. Forgone interest is defined as required reserve balances multiplied by the federal funds rate.

2. Marginal reserve tax on transaction deposits, 1959–93:Q1[1]



1. The marginal reserve tax is the quarterly average effective federal funds rate times the highest reserve requirement on transaction deposits during the quarter.

ticularly those related to the clearing of financial transactions.

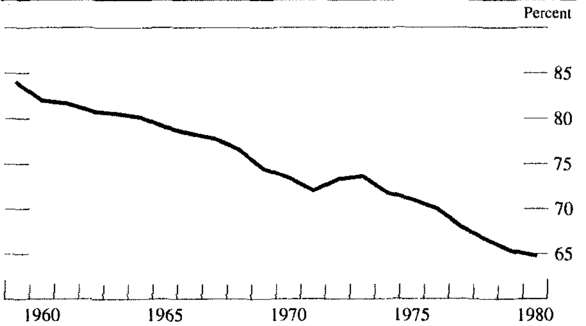
The change in vault cash accounting did in fact reduce the level of required reserve balances somewhat in the early 1960s (top panel of chart 1). This decline, coupled with a drop in short-term interest rates (middle panel of chart 1), helped lighten the burden of reserve requirements in terms of the interest forgone on required reserve balances (bottom panel of chart 1).

Proposals to change the structure of reserve requirements. This relief proved temporary, however. As interest rates climbed in the late 1960s and into the 1970s, the burden of reserve requirements became more onerous; with higher interest rates, banks were being forced to forgo more earnings by holding non-interest-bearing required reserve balances. Indeed, the marginal tax rate on transaction (demand) deposits—the reserve tax on an additional dollar of these deposits, as measured by the reserve requirement times the rate of interest forgone—rose through much of this period as well (chart 2). As a result, more banks began to leave the Federal Reserve System, taking with them an ever-increasing share of the deposits in the banking system. By the early 1970s, for example, the share of transaction deposits held by member banks had fallen below 75 percent from nearly 85 percent in the late 1950s (chart 3). In response, the Federal Reserve began to argue for additional legislation aimed at stemming the corrosive effects of the decline in membership on monetary control. Either all depository institutions should be subject to reserve requirements established by the Federal Reserve, thereby rendering the membership issue irrelevant, the System argued, or interest should be paid on required reserve balances, thereby removing banks' primary motive for leaving the System.[9]

Opposition to both proposals proved strong, however, with nonmember banks leading the crusade against universal reserve requirements and

9. Each Annual Report of the Board of Governors of the Federal Reserve System between the years 1964 and 1979 argued for the adoption of legislation aimed at reforming the structure of reserve requirements to combat the problem of membership attrition.

3. Member bank transaction deposits as a share of total transaction deposits, 1959–80[1]



1. Transaction deposits are defined as net demand deposits plus NOW accounts. Data are expressed as annual averages.

with both the legislative and executive branches of the federal government opposed to interest on reserves out of concern about Treasury revenues. In fact, a 1963 presidential commission cautioned against any significant cuts in reserve requirements to avoid a sharp drop in Treasury revenue.[10] Most academics, by contrast, usually supported retaining and even increasing reserve requirements to tighten the link between reserves and money, while paying interest on reserves to eliminate the distortional effects of the reserve tax.[11]

Lagged reserve requirements. Thwarted in its attempts to promote substantive change in the structure of reserve requirements, the Federal Reserve took several smaller, unilateral steps aimed at stemming membership attrition. In 1968, a system of lagged reserve requirements (LRR) was implemented in which a bank's required reserves were computed based on its deposit levels from two weeks earlier. Previously, the computation period for deposits had been essentially contemporaneous with the maintenance period for reserves. By switching to LRR, the Federal Reserve hoped to make it less difficult and costly for banks to calculate their reserve requirements and to manage their reserve positions. One problem with LRR was that it weakened the direct, contemporaneous link between reserves and money, thus making it harder, in principle, to manipulate reserves to control money, at least in the short run. This problem was not considered a serious one, however, because Federal Reserve procedures at that time were not directed at tight, short-run control of money through a reserves operating target.

Graduated reserve requirements. In the late 1960s, the Federal Reserve also began to move away from a system of reserve requirements based on geographic distinctions, as embodied in the reserve city bank and country bank designations. By 1972, the old system was eliminated altogether, and a new system with a progressive, graduated reserve requirement schedule was implemented. Under the new system, reserve requirements increased with the level of each bank's deposits, independent of its location. Although the specifics were somewhat complicated (see the appendix for details), the upshot of the change was to reduce reserve requirements for smaller banks, which were still most likely to leave the System. At the same time, however, the move to a system with many reserve requirements based on different deposit levels further weakened the link between the aggregate level of reserves and the total amount of deposits in the banking system. Again, however, because the Federal Reserve was not trying to maintain control of deposits through a reserves-targeting procedure, this effect was not a major concern.

Continued decline of membership. Despite the efforts of the Federal Reserve, the decline of membership in the System continued unabated, with the proportion of transaction deposits at member banks falling below 65 percent of total transaction deposits by the late 1970s (chart 3), in part because rising interest rates were enlarging the reserve tax (charts 1 and 2). In response, the Federal Reserve began to argue more vociferously for changes in the structure of reserve requirements to prevent membership attrition from further undermining the efficacy of monetary policy.[12] In 1978, it even went

10. *Report of the Committee on Financial Institutions to the President of the United States*, Walter W. Heller, Chairman (GPO, 1963).

11. See, for example, Milton Friedman, *A Program for Monetary Stability* (Fordham University Press, 1959), pp. 65–76; Thomas Mayer, "Interest Payments on Required Reserve Balances," *Journal of Finance*, vol. 21 (March 1966), pp. 116–18; and George S. Tolley, "Providing for Growth of the Money Supply," *Journal of Political Economy*, vol. 65 (December 1957), pp. 477–85.

12. See "Statement by G. William Miller, Chairman, Board of Governors of the Federal Reserve System, before the Committee

so far as to propose a unilateral plan to pay interest on reserves, which elicited strenuous congressional opposition.[13]

The relative decline in the deposit base at member banks became particularly worrisome after October 1979, when the Federal Reserve adopted a reserves-based operating procedure designed to maintain close, short-run control of M1. The success of this procedure depended in part on how tight the link was between reserves at member banks and the level of M1 deposits in the entire banking system—a link that was being weakened by the continued decline in membership as well as by some of the steps the Federal Reserve had taken to try to reverse this decline, including switching to LRR and instituting graduated reserve requirements.

The Monetary Control Act and M1 Targeting

After years of debate, the Congress finally adopted legislation to reform reserve requirement rules in order to end the problem of membership attrition and facilitate control of M1. The Monetary Control Act of 1980 (MCA) mandated universal reserve requirements to be set by the Federal Reserve for all depository institutions, regardless of their membership status. The act also vastly simplified the graduated reserve requirement schedule, further tightening the link between reserves and money. Although the key focus was on transaction (M1) deposits, all of which were made subject to reserve requirements, certain types of nontransaction deposits also became subject to requirements, which effectively broadened the reserve base and required more depositories to hold reserve balances. In this way, the Federal Reserve's ability to influence aggregate deposit levels by manipulating the quantity of reserves was improved. The MCA also granted the Federal Reserve authority to impose a supplemental reserve requirement of up to 4 percent on transaction accounts. Finally, as a result of MCA, the number of depositories required to report their deposits to the Federal Reserve increased markedly, thus improving the accuracy and timeliness of data necessary for monetary control.

To ease the burden of reserve requirements, the MCA initially set the basic reserve requirement on transaction deposits at 12 percent—below the 16¼ percent maximum that had been in effect for member banks—and prohibited the Federal Reserve from raising this requirement above 14 percent. It also set a 3 percent reserve requirement on the first $25 million of deposits at each institution—the so-called low reserve tranche—as a special concession to smaller depositories.

In 1982, the Garn–St Germain Act went even further by exempting from reserve requirements altogether the first $2 million of deposits. The law mandated annual adjustments to the cutoffs for the exemption and the low reserve tranche based on aggregate growth in reservable liabilities and transaction deposits respectively. To help smooth the transition for nonmember banks and thrift institutions, a multiyear phase-in period was put in place, and the Federal Reserve was also prohibited from putting reserve requirements on personal time and savings deposits, which were particularly important sources of funds for these institutions. Finally, all institutions with reservable deposits, not just member banks, now had access to the discount window as well as to Federal Reserve services, including check clearing, funds transfers, and the like, though these services were no longer to be provided free of charge.

The MCA did not specifically prohibit or authorize the payment of interest on required reserves, although it mandated the payment of interest on supplemental reserves should the Federal Reserve ever impose them. The legislative history of the MCA indicates that the Congress was concerned about the possible adverse effects of the act on Treasury revenues, so much so that the MCA even prohibits the Federal Reserve from lowering the reserve requirement to less than 8 percent on transaction deposits. The legislative history also indicates that the Congress was concerned that payment of interest on reserves would give the Federal

on Banking, Finance and Urban Affairs, U.S. House of Representatives, July 27, 1978," *Federal Reserve Bulletin*, vol. 64 (August 1978), pp. 636–42; and "Statement by Paul A. Volcker, Chairman, Board of Governors of the Federal Reserve System, before the Committee on Banking, Housing, and Urban Affairs, U.S. Senate, February 4, 1980," *Federal Reserve Bulletin*, vol. 66 (February 1980), pp. 643–48.

13. For details on the Federal Reserve's proposal, see *Federal Reserve Bulletin*, vol. 64 (July 1978), pp. 605–10. For congressional reaction, see "Monetary Control and the Membership Problem." *Hearings*.

Reserve, in its role as a provider of financial services, an unfair competitive advantage over depository institutions, which are prohibited from paying interest on demand deposits. Appreciative of this concern and aware of the distortions created by the prohibition of interest payments on demand deposits, the Federal Reserve advocated removal of this prohibition in conjunction with the payment of interest on reserves.[14] Neither proposal was adopted, however. Thus, the reserve tax on depositories and their customers remained.

In 1982, the Federal Reserve took another step to improve its short-run control of M1 by deciding to switch to a contemporaneous reserve requirement (CRR) scheme. By making the period in which banks are required to maintain their reserves against transaction deposits virtually contemporaneous with the period in which deposit levels are computed for the purpose of determining reserve requirements, this move tightened the real-time link between reserves and M1.[15] In so doing, it remedied a weakness in the short-run monetary control mechanism of the existing, reserves-based operating procedure.

Reserve Requirements since the Abandonment of M1 Targeting

Ironically, by the time CRR was instituted in 1984, the Federal Reserve had shifted its focus away from short-run control of M1 via a reserves-based operating procedure, preferring instead to influence monetary and credit conditions by adjusting the cost and availability of reserves to depositories. It also shifted its focus more toward M2, as this aggregate was seen as more closely linked to the ultimate objectives of monetary policy than M1, which had become overly sensitive to interest rates after the authorization of nationwide NOW accounts and the general deregulation of deposit rates. Thus, the basic structure of reserve requirements, which had been meticulously designed to facilitate the control of M1 through a reserves-oriented targeting procedure, had seemingly become an anachronism.

In fact, however, reserve requirements continued to play an important role in the conduct of monetary policy, in part by providing a stable, predictable demand for aggregate reserves. Absent reserve requirements, banks would still hold some balances at the Federal Reserve to meet their clearing needs. Given the size and volatility of the financial transactions that clear through these reserve accounts, depositories need to maintain a cushion of balances in these accounts to provide some protection against uncertain debits that can potentially leave their accounts overdrawn at the end of the day and subject to stiff penalties.[16] The exact amount of balances that banks wish to hold for clearing purposes may vary considerably from day to day, however, and cannot be forecast with much precision by the Federal Reserve. By making reserve requirements the binding constraint on banks' demand for reserves—that is, by keeping required reserve balances above the uncertain level needed for clearing purposes—the Federal Reserve can more accurately determine the banking system's demand for reserves. In this way, it can more readily achieve any desired degree of pressure on bank reserve positions and associated reserve market conditions simply by manipulating the maintenance-period-average supply of reserves.

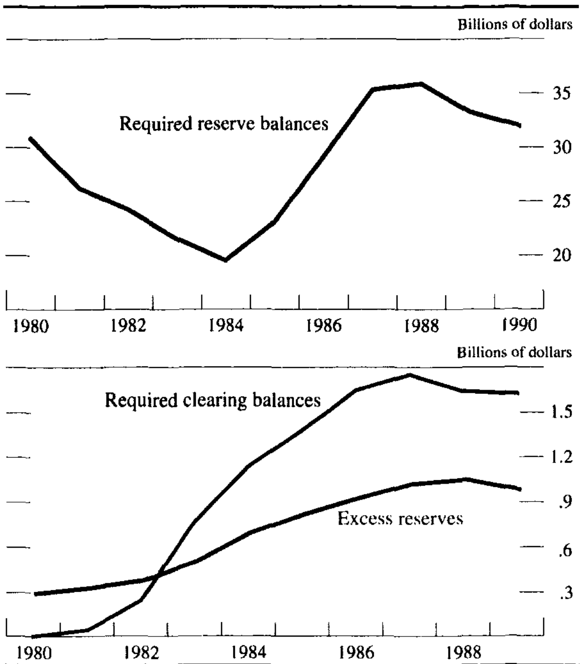
By requiring banks to hold an average amount of reserves over a two-week maintenance period rather than a specific amount on each day, current regulations allow considerable flexibility in daily reserve management. Banks can use this flexibility to arbitrage anticipated, intraperiod variations in the cost of reserves (the federal funds rate), by substituting reserves on one day of the period when they are expected to be less costly for reserves on another day when they are expected to be more costly. This sort of intraperiod arbitrage serves to reduce day-to-day fluctuations in the cost of reserves. The lower the level of required reserve balances, however, the less leeway a bank has for manipulating the intraperiod profile of its reserve

14. See statement by J. Charles Partee, October 27, 1983.

15. Actually, banks were required to hold an average amount of reserves over a two-week maintenance period ending every other Wednesday, based on average deposit levels in a two-week computation period that ends on a Monday two days before the end of the maintenance period.

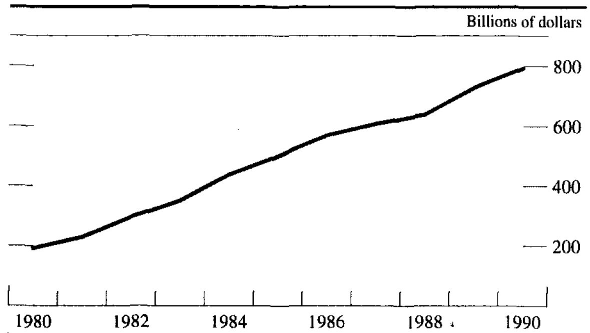
16. At present, the penalty rate on overnight overdrafts is the higher of 200 basis points above the federal funds rate on the day, or 10 percent. In addition, banks have to offset overdrafts later in the period to meet their reserve requirements.

4. Reserve and clearing balances, 1980–89



Data are annual averages.

5. Volume of funds transactions clearing through reserve accounts, 1980–90



Observations are annual averages of daily data.

position without jeopardizing its overnight overdraft protection; hence, the bank will be less able to arbitrage day-to-day variations in the federal funds rate.

Banks that find their required reserve balances insufficient to meet their clearing needs—that is, to provide them with adequate overdraft protection—are able, under the provisions of MCA, to open clearing balances. Banks can contract with the Federal Reserve to hold an average amount of these balances in their reserve accounts over the two-week reserve maintenance period. If they fail to hold the amount required under the contract, they are penalized, much as would be the case if they failed to hold sufficient balances to meet their reserve requirements. Unlike required reserve balances, however, which do not earn interest, banks receive earnings credits on the amount of clearing balances they are required to hold under their contractual agreement. They can, in turn, use these earnings credits to defray the costs of Federal Reserve priced services. Thus, from a bank's perspective, opening a clearing balance is a virtually costless way to boost the average balance it is required to hold in its reserve account over the maintenance period and hence to provide extra insurance against overdrafts and added flexibility to reserve management.

Not surprisingly, in the years immediately after passage of MCA, as required reserve balances fell as a result of the phased reductions in reserve requirements for member banks (top panel of chart 4), many of these institutions opened clearing balances to help replenish their diminished protection against overdrafts. Indeed, by 1986, the banking system as a whole had contracted to hold roughly $1¾ billion of clearing balances (bottom panel of chart 4). To a lesser extent, other banks, particularly those using small amounts of priced services from the Federal Reserve and those new to managing reserve accounts, increased their holdings of excess reserves to help meet their clearing needs. These changes, coupled with a rebound in required reserve balances, provided banks with more of a cushion to handle a sharp increase in the volume of funds transactions clearing through their reserve accounts (chart 5).

RECENT CUTS IN RESERVE REQUIREMENTS

In the decade after passage of the MCA in 1980, the Federal Reserve left reserve requirements essentially unchanged. More recently, however, it has taken two steps to reduce these requirements. In December 1990, the required reserve ratio on nontransaction accounts—nonpersonal time and savings deposits and net Eurocurrency liabilities—was pared from 3 percent to zero, and in April

1992, the 12 percent requirement on transaction deposits was trimmed to 10 percent.

Rationale

These actions were motivated in part by developments in credit markets, where evidence had emerged suggesting that some lenders had adopted a more cautious approach to extending credit. This caution was exerting a restraining effect on the cost and availability of credit to some types of borrowers. By reducing depository funding costs and thus providing depositories with easier access to capital markets, the cuts in reserve requirements were designed to put banks in a better position to extend credit. In particular, the cut in the requirement on nonpersonal time deposits was aimed directly at spurring bank lending because these accounts are often used as a marginal funding source. Of course, it was recognized that some, if not all, of the benefits stemming from the reserve requirement cuts would likely be passed on, over time, to borrowers and lenders.[17]

The cuts in reserve requirements were also motivated by the Federal Reserve's recognition that much of the early-1980s rationale for reserve requirements had evaporated with the abandonment of a reserves-oriented operating procedure geared to short-run control of M1. At the same time, it realized that reserve requirements still played a vital role in policy implementation. Indeed, it chose not to make even deeper cuts in requirements for fear that required balances would fall to levels insufficient to satisfy the normal clearing needs of the banking system.

Effects of Reserve Requirement Cuts on the Size of the Reserve Tax

The elimination of the 3 percent reserve requirement on nontransaction accounts at the end of 1990 reduced the level of required reserve balances roughly $11½ billion, or about one-third (table 2).

2. Effect of recent cuts in reserve requirements

Effective date of cut	Reduction in required reserve balances (billions of dollars)	Federal funds rate (percent)	Reduction in interest forgone (millions of dollars)
December 1990	11½	7.0	800
April 1992	8½	4.0	350

Using the 7 percent federal funds rate that prevailed at the time as a proxy for the interest that could have been earned on these balances, the cut in reserve requirements translated into an increase of about $800 million in the annual, pretax earnings of depositories and their customers.

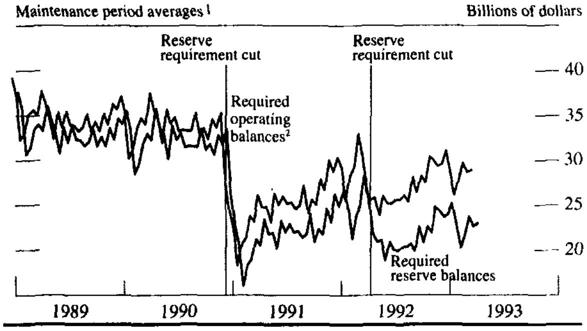
As a result of this cut in reserve requirements, about 2,500 depositories whose vault cash had formerly been insufficient to meet their reserve requirements were no longer bound to hold balances at the Federal Reserve. For these institutions, therefore, the reduction in the nontransaction requirement essentially eliminated the reserve tax. Trimming the required reserve ratio on transaction accounts in April 1992 relieved several hundred additional institutions from having to hold balances at the Federal Reserve. Overall, this second cut in reserve requirements reduced the required reserve balances of the entire banking system about $8½ billion, resulting in annual pretax savings of roughly $350 million for the private sector, given the 4 percent federal funds rate that prevailed at the time.

Effects on Bank Reserve Management and Open Market Operations

In the immediate aftermath of the December 1990 cut in reserve requirements, the level of required operating balances—the sum of required reserve balances and the amount of clearing balances required to be held under contractual arrangements between depositories and the Federal Reserve—plunged (chart 6). By early February 1991, these balances reached a trough of about $18¼ billion—barely more than half their level in the period preceding the cut in requirements and nearly 40 percent below their seasonal low in early February 1990. Required operating balances typically reach a low point at this time of the year because

17. For details on the rationales for the recent cuts in reserve requirements, see *Federal Reserve Bulletin*, vol. 77 (February 1991), pp. 95–96; and *Federal Reserve Bulletin*, vol. 78 (April 1992), pp. 272–73.

6. Reserve balances, 1989–March 31, 1993

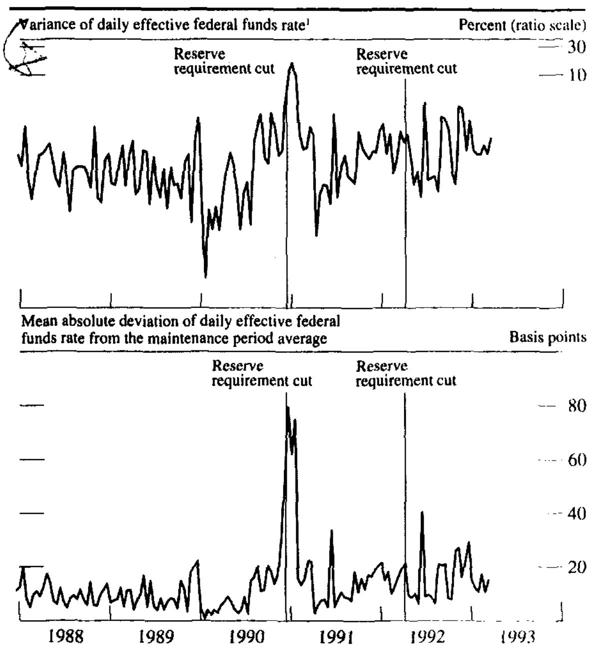


1. Reserve maintenance periods run for two weeks, so that there are twenty-six periods each year. In this chart and in charts 7, 8, and 9, there are twenty-six observations for each full year.

2. Required operating balances are required reserve balances plus required clearing balances.

required reserves fall from their end-of-year peak. Also, owing to regulations stipulating that depositories apply their vault cash holdings from two maintenance periods earlier in meeting their current reserve requirements, the enlarged holdings of vault cash from year-end do not become available for use in meeting reserve requirements until late January and early February.

7. Reserve market volatility, 1988–March 31, 1993



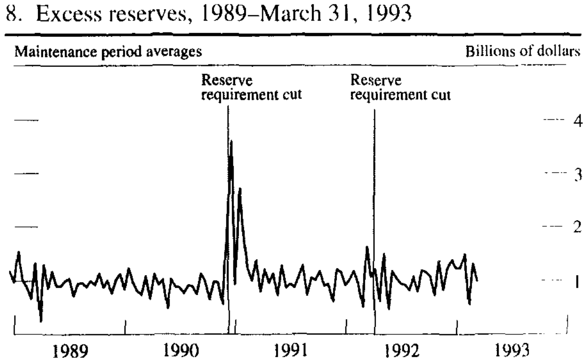
1. Computed around the maintenance period average.

With required operating balances falling below the levels needed by many depositories for daily clearing purposes, the marginal dollar of reserve demand often stemmed from clearing needs on the day, rather than from a reserve requirement averaged over two weeks. As a result, banks had less scope for manipulating their reserve positions from one day to the next and, consequently, for arbitraging anticipated intraperiod variations in the cost of reserves. Not surprisingly, a variety of measures of federal funds rate volatility posted significant increases (chart 7). At the same time, many depositories held levels of excess reserves that greatly exceeded those seen in comparable periods of recent years in order to restock their depleted overdraft protection (chart 8). Because the extent to which banks wanted to boost their holdings of excess reserves was unknown to the Federal Reserve, it became more difficult to estimate the demand for reserves and, thus, to conduct open market operations.

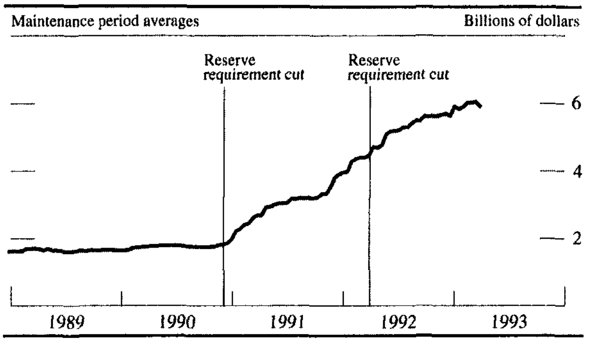
Transition to a More Orderly Reserve Market

Over the next few months, reserve market conditions returned to normal, with both excess reserves and the volatility of the funds rate falling back more or less to levels seen before the cut in reserve requirements. Although the reasons for the more stable reserve market climate varied, the rapid rebuilding of required operating balances was probably the most important. The higher level of balances provided banks with more adequate overdraft protection and greater flexibility in managing their reserve positions, thus reducing the need for excess

8. Excess reserves, 1989–March 31, 1993



9. Required clearing balances, 1989–March 31, 1993



balances and providing additional leeway for arbitrage in the funds market.

The pronounced rebound in required operating balances over the remainder of 1991 owed in part to a surge in required reserves stemming from rapid growth in transaction deposits. Furthermore, deliberate efforts by depositories to hold additional balances also played a role in the faster-than-usual increase in required operating balances. For example, banks used clearing balances much more after the cut in reserve requirements (chart 9). Evidence also suggests that some banks sought to economize on their vault cash holdings to boost their required reserve balances. In addition, depositories may have learned to manage their reserve accounts more efficiently, making use of improved, real-time information on the status of their reserve balances throughout the day to lower the cushion they needed to hold as insurance against uncertain debits that can result in overdrafts.

The Cut in the Transaction Requirement

With the reserve market functioning reasonably well again, the Federal Reserve believed that it could safely lower reserve requirements once more. As it turned out, the cut in the transaction requirement in April 1992 was relatively uneventful. Although required operating balances initially dropped sharply, the decline was not nearly as precipitous as that seen in early 1991; not only was this cut smaller in terms of its effect on required reserve balances, it also came at a time of the year when these balances tend to be high because of the buildup of transaction deposits in anticipation of the April 15 tax date. Moreover, required operating balances quickly made up all their lost ground, spurred by continued rapid growth in required reserves and another surge in the use of clearing balances. Indeed, these balances now total about $6 billion, or more than three times their level before the first cut in reserve requirements; they now make up nearly 20 percent of required operating balances versus about 5 percent in late 1990.

The Federal Reserve also made several changes in reserve accounting rules to help banks better manage their accounts in a world of lower requirements and to aid the implementation of monetary policy. First, to smooth the seasonal pattern in required operating balances, the Federal Reserve reduced the lag on the application of vault cash for use in meeting reserve requirements from two maintenance periods to one, effective in the period beginning November 12, 1992. By more closely synchronizing the movements in required reserves and applied vault cash, this change was designed to temper seasonal declines in required operating balances, particularly the most severe decline, which occurs in late January and early February. To give depositories greater flexibility in managing their reserve positions from one period to the next, the Federal Reserve also doubled the carryover privilege, which enables banks to carry forward into the next maintenance period small reserve surpluses and deficiencies.[18]

These changes, coupled with the rebound in required operating balances, helped prevent the cut in the transaction requirement from having adverse effects on the functioning of the reserve market or on the conduct of open market operations. In fact, most measures of the volatility of the federal funds rate are up only marginally relative to their levels before December 1990, and aggregate excess reserves are running only a shade higher than before the cuts in reserve requirements. Some evidence suggests, however, that banks do have a bit less flexibility in managing their reserve positions from day to day; in particular, some systematic patterns in the behavior of the federal funds rate within reserve maintenance periods have intensified, suggesting that banks may not have as much

18. Since September 1992, depositories have been able to carry forward one maintenance period the greater of 4 percent of required reserve plus clearing balances, or $50,000; the carryover allowance had previously been the greater of 2 percent, or $25,000.

scope to arbitrage in the funds market as they once did.[19]

Concerned that additional declines in required operating balances would complicate reserve management and the conduct of open market operations, the Federal Reserve has not made further cuts in reserve requirements. Nevertheless, owing to the cuts it did make as well as to declines in short-term interest rates, the reserve tax has been falling sharply in recent years (chart 1). Consequently, the marginal tax rate on transaction deposits has dipped to its lowest level in thirty years (chart 2). Even so, this tax still represents a burden on the private sector, and one that could rise significantly if interest rates were to increase. Cognizant of the actual and prospective burden of the reserve tax, depositories continue to work to fashion financial products aimed largely at exploiting loopholes in reserve regulations.

POTENTIAL REFORMS TO THE CURRENT SYSTEM

Several suggestions have been put forth over the years for reforming the system of reserve requirements. In this section, I review some of these proposals, drawing heavily on the lessons learned from the recent cuts in reserve requirements as well as from the experiences of other countries that have lowered reserve requirements in recent years.

Eliminate Reserve Requirements

Although this proposal would clearly eliminate the reserve tax, recent experience suggests that it would also engender a significant increase in volatility in the reserves market and seriously complicate the conduct of open market operations. Moreover, absent reserve requirements, the Federal Reserve would be unable to reinstitute an effective, reserves-oriented targeting procedure to control money growth if it ever deemed this action appropriate.

Recent Trends in Other Countries

Several other countries have significantly reduced, and in some cases essentially eliminated, reserve requirements in recent years. In the United Kingdom and Switzerland, for example, reserve requirements no longer effectively constrain bank behavior. In these countries, most banks find that their required reserves fall short of their daily clearing needs, so that at the margin the latter essentially determine their demand for reserves. More recently, Canada has also begun to phase out reserve requirements, and by 1994, their requirements will be completely eliminated.

These countries have taken different steps, based on their own unique institutional structures, to facilitate bank reserve management and the conduct of open market operations in a world of nonbinding reserve requirements. The Bank of England (BOE), for example, has adopted a more flexible operating procedure, often intervening in the money markets several times a day to fine tune the cost and availability of reserves to meet ever-changing clearing needs. In addition, banks in the United Kingdom are usually willing to borrow from the BOE late in the day to meet their clearing needs. Banks in the United States, by contrast, have become increasingly reluctant in recent years to avail themselves of Federal Reserve discount window credit, in part out of concerns that doing so might be interpreted by market participants as a sign of financial weakness. Even so, the volatility of overnight interest rates in the United Kingdom has tended, on average, to be somewhat higher than that in the United States, where reserve requirements are still binding for many institutions.

The Swiss National Bank (SNB) has adopted a different approach than the BOE. Although it now places somewhat greater emphasis on smoothing short-term interest rates than it did in the past, it has been much less accommodative in offsetting temporary fluctuations in clearing needs than has the BOE. As a result, Switzerland has experienced greater volatility in overnight rates than the United Kingdom, and Swiss banks have chosen to hold substantial excess reserves, in part because over-

19. Specifically, the federal funds rate has tended to be lower on Fridays, when reserves count three times in the calculation of a bank's period-average position; depositories are apparently more reluctant to build up their reserve balances on these days for fear that they will be unable to work them off later in the period without jeopardizing their overdraft protection. On settlement days, by contrast, the funds rate has tended to be higher, as banks move more aggressively to meet their reserve requirements. The persistence of systematic, intraperiod patterns in the funds rate suggests that arbitrage opportunities are not being fully exploited.

night overdrafts are prohibited. At the same time, however, the ability of Swiss banks to access SNB credit at their own discretion, albeit at a penalty rate, has likely served to temper reserve market volatility somewhat.

Although the jury is still out on the full ramifications of Canada's elimination of reserve requirements, which is in the process of being phased in, the Bank of Canada (BOC) feels that its financial system is amenable to functioning smoothly in the absence of reserve requirements. Specifically, Canada's system is highly concentrated, with a handful of large depositories controlling the lion's share of financial assets and handling the vast majority of financial transactions. These "direct clearers" will be required to clear all transactions through reserve accounts at the BOC, and although they will have no reserve requirements, they will be penalized if their reserve accounts are overdrawn. Thus, a demand for reserve liabilities at the central bank will be preserved, thereby enabling the BOC to implement monetary policy by manipulating the supply of reserves relative to this demand. Because the number of direct clearers is so small, moreover, the BOC can readily gauge the demand for clearing balances simply by keeping in close contact with the relevant banks. Finally, the BOC is also able to adjust the supply of reserves late in the day by moving government deposits between accounts in commercial banks and accounts at the BOC, thereby helping to mitigate volatility in the reserves market.

Other central banks, such as the Bundesbank and the Bank of Japan (BOJ), which operate in financial environments more akin to those found in the United States, have not eliminated reserve requirements. Echoing arguments made by the Federal Reserve, both the Bundesbank and the BOJ believe that reserve requirements are essential for providing the stable, predictable demand for reserves that is needed for the conduct of open market operations and the prevention of undesirable money market volatility. Thus, although the Bundesbank has pared reserve requirements in recent years, these requirements are still binding for most German banks.

Overall, based on the recent experience in the United States and the experiences of other countries, it seems clear that the Federal Reserve would have to alter its other tools of monetary policy dramatically if it eliminated reserve requirements. In particular, to preserve its ability to conduct open market operations, it would have to ensure that depositories still had a demand for reserve liabilities at the Federal Reserve. To this end, it would likely have to require at least some depositories to clear their financial transactions through the Federal Reserve and to continue to subject them to penalties for overnight overdrafts. At the same time, it would probably also have to do something to make depositories less reluctant to use the discount window as a safety valve to defuse reserve market pressures. Even so, volatility in the money market is likely to rise significantly, and the Federal Reserve's ability to achieve desired reserve market conditions might be undermined as a result of the difficulty in gauging the banking system's demand for reserves.

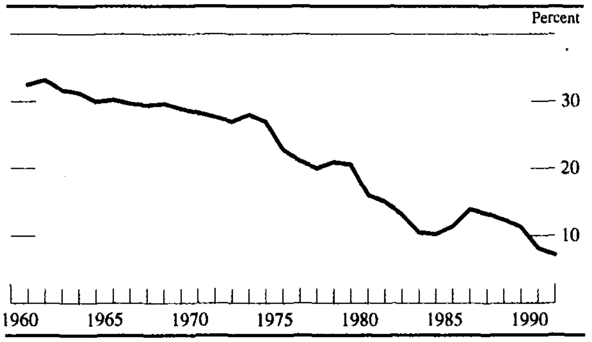
Pay Interest on Required Reserve Balances—the Preferred Solution

Paying interest on reserves is a preferable alternative to eliminating reserve requirements. Specifically, if the Federal Reserve paid a market-based rate of interest on required reserve balances, the reserve tax would essentially be eliminated, as would the distortional effects of this tax on resource allocation. Households and businesses would not face an artificially imposed incentive to redirect credit flows away from depositories. Furthermore, depositories would no longer have an incentive to devote resources to new methods of reserve avoidance. If required reserve balances earned interest, moreover, the Federal Reserve could even raise reserve requirements if it wanted to provide banks with greater flexibility in managing their reserve positions, reduce volatility in the money markets, and simplify the conduct of open market operations, without having to worry about imposing a tax on the private sector.[20]

---

20. An alternative proposal would have the Federal Reserve raise reserve requirements and pay interest only on the increased balances depositories were required to hold. Though this plan would not reduce Treasury revenue, it would also not do anything to reduce the deleterious effects of the current reserve tax. For details on this proposal, see Spence Hilton, Melissa Gerdts, and Roxann Robinson, "Paying Interest on Reserves," in Federal Reserve Bank of New York, *Reduced Reserve Requirements: Alternatives for the Conduct of Monetary Policy and Reserve Management* (New York: FRBNY, 1993).

10. Required reserve balances as a percentage of total Federal Reserve liabilities, year-end, 1960–91



In the past, proposals to pay interest on required reserve balances have encountered resistance largely because they would reduce the earnings remitted by the Federal Reserve to the Treasury. Required reserve balances have been declining as a share of total Federal Reserve liabilities for years, however, and now make up only about 7 percent of the total (chart 10). As a result of this decline, which owes to reductions in reserve requirements as well as to relatively rapid growth of currency in circulation, the payment of interest on required reserve balances would now engender a relatively smaller reduction in the amount of Federal Reserve earnings remitted to the Treasury than ever before.

In addition, it had often been argued in the past that the reserve tax on the depository system and its customers was more than offset by the government-backed deposit insurance program, which provided a subsidized, implicit government guarantee that conferred an advantage on depositories in their competition with other financial intermediaries. More recently, however, the price of this government guarantee has risen substantially. Not only have deposit insurance premiums been raised sharply, but capital requirements for depositories have been increased, more stringent standards for interbank lending have been imposed, and certain restrictions on deposit pricing have resurfaced. Taken together, these changes have served to increase the costs of intermediation through the depository system. Partly as a result of these increased costs, the share of new credit flows intermediated through the depository system has fallen dramatically in recent years. Although many of the credits formerly booked by banks and thrift institutions have been picked up by other intermediaries or have been channeled directly through the capital markets, with little attendant effect on the cost or availability of credit to most borrowers, some credits that are less easily substitutable, such as loans to small and medium-sized businesses, may have been curtailed, at least partly as a result of the increases in depository intermediation costs. Thus, it may be these borrowers who ultimately pay much of the price of the higher, government-mandated costs on depositories. Paying interest on required reserve balances would be one way of offsetting some of these higher costs.

APPENDIX: SUMMARY OF RESERVE REQUIREMENTS SINCE 1913

The tables in this appendix summarize changes in required reserve ratios since the inception of the Federal Reserve System in 1913.

Three major structures of reserve requirements have been used since 1913. The first two, which preceded passage of the Monetary Control Act of 1980, applied reserve requirements only to banks that were members of the Federal Reserve System. The first structure was based on geographic distinctions among member banks (table A.1). From 1913 to 1962, reserve requirements of member banks varied depending on whether the bank was located in a central reserve city, a reserve city, or elsewhere. In 1962, the authority of the Federal Reserve to classify or reclassify cities as central reserve cities was terminated.

In 1966, the Federal Reserve moved toward the next structure, involving graduated reserve requirements based on the level of deposits at each bank. Each deposit interval shown in table A.2 represents that part of the deposits of each bank that was subject to the reserve requirement shown. For example, in July 1966, the first $5 million of time deposits at banks was subject to a 4 percent requirement; each additional dollar of time deposits was reservable at 5 percent. By 1972, a full-fledged graduated reserve requirement schedule was put in place, without regard to reserve city or country bank designations (table A.3).

Another change in reserve regulations involved the definition of "net" demand deposits (tables A.1 and A.2). In 1935, net demand deposits were defined as total demand deposits minus cash items in the process of collection and demand balances

A.1. Reserve requirements based on geographic distinctions among member banks, 1913–66
Percent of deposits

Effective date	Net demand deposits			Time deposits (all classes of banks)
	Central reserve city banks	Reserve city banks	Country banks	
1913—December 23	18	15	12	5
1917—June 21	13	10	7	3
1936—August 16	19.5	15	10.5	4.5
1937—March 1	22.75	17.5	12.25	5.25
May 1	26	20	14	6
1938—April 16	22.75	17.5	12	5
1941—November 1	26	20	14	6
1942—August 20	24	↑	↑	↑
September 14	22			
October 3	20			
1948—February 27	22			
June 11	24	↓	↓	↓
September 24, 16	26	22	16	7.5
1949—May 5, 1	24	21	15	7
June 30, July 1	↑	20	14	6
August 1	↓	20	13	6
August 11, 16	23.5	19.5	12	5
August 18	23	19	↑	↑
August 25	22.5	18.5		
September 1	22	18	↓	↓
1951—January 11, 16	23	19	13	6
January 25, February 1	24	20	14	↑
1953—July 9, 1	22	19	13	↓
1954—June 24, 16	21	19	13	5
July 29, August 1	20	18	12	↑
1958—February 27, March 1	19.5	17.5	11.5	
March 20, April 1	19	17	11	
April 17	18.5	17	↑	
April 24	18	16.5		
1960—September 1	17.5	↑	↓	
November 24	17.5		12	
December 1	16.5		↑	
1962—July 28	↑			↓
October 25, November 1	↓	↓	↓	4

In this table and in table A.2, when two dates appear on the same line, the first applies to the change at central reserve city banks and the second applies to the change at country banks.

The appendix continues on page 588.

due from other depositories. In 1969, reserves also began to be required against net balances due from domestic offices to their foreign branches.

From June 21, 1973, through December 11, 1974, under the structure of graduated reserve requirements, member banks were subject to varying marginal reserve requirements against increases in the following: (1) time deposits of $100,000 or more; (2) funds obtained through issuance by any affiliate of the bank of obligations subject to reserve requirements on time deposits; and (3) funds from sales of finance bills (table A.3). The requirements applied only to balances above a specified base: They were not applicable to banks having aggregate obligations of these types of less than $10 million.

Beginning November 2, 1978, a supplementary reserve requirement of 2 percent was added to the existing requirements on time deposits in excess of $100,000 and for certain other liabilities. This supplementary requirement was eliminated with the maintenance period beginning July 24, 1980. Also, effective with the reserve computation period beginning November 16, 1978, domestic deposits of Edge corporations were subject to the same reserve requirements as member banks.

A.2. Reserve requirements based on geographic distinctions among member banks and on the level of deposits, 1966–72

Percent of deposits

Effective date	Net demand deposits				Time deposits (all classes of banks)		
	Reserve city banks (deposit intervals in millions of dollars)		Country banks (deposit intervals in millions of dollars)		Savings	Other time (deposit intervals in millions of dollars)	
	0–5	More than 5	0–5	More than 5		0–5	More than 5
1966—July 14, 21	16.5	16.5	12	12	4	4	5
September 8, 11					4	4	6
1967—March 2					3.5	3.5	
March 16					3	3	
1968—January 11, 18		17		12.5			
1969—April 17	17	17.5	12.5	13			
1970—October 1	17	17.5	12.5	13			5

A.3. A graduated reserve requirement schedule for member banks, 1972–80

Percent of deposits

Effective date	Net demand deposits (deposit intervals in millions of dollars)					Time and savings deposits						
						Savings	Time (deposit intervals in millions of dollars)					
							0–5, by maturity			More than 5, by maturity		
	0–2	2–10	10–100	100–400	More than 400		30–179 days	180 days to 4 years	4 years or more	30–179 days	180 days to 4 years	4 years or more
1972—November 9	8	10	12	16.5	17.5	3	3	3	3	5	5	5
November 16		10	12	13	17.5							
1973—July 19		10.5	12.5	13.5	18							
1974—December 12		10.5	12.5	13.5	17.5					6	3	3
1975—February 13	7.5	10	12	13	16.5							3
October 30									1			1
1976—January 8								2.5			2.5	
December 30	7	9.5	11.75	12.75	16.25			2.5			2.5	

A.4. Reserve requirements since passage of the Monetary Control Act of 1980
Percent

Effective date	Net transaction accounts	Nontransaction accounts
1980—November 13	12	3
1990—December 26	12	0
1992—April 2	10	0

Effective with the maintenance period beginning October 25, 1979, a marginal reserve requirement of 8 percent was added to managed liabilities in excess of a base amount. These liabilities included large time deposits, Eurodollar borrowings, repurchase agreements against U.S. government and agency securities, and federal funds borrowings from nonmember institutions. This marginal requirement was raised to 10 percent on April 3, 1980, lowered to 5 percent on June 12, 1980, and then eliminated altogether on July 24, 1980.

Since passage of the Monetary Control Act in November 1980, after an initial phase-in period, all depository institutions have been subject to reserve requirements. Required reserve ratios are the same for all depository institutions under the current system and apply to transaction accounts and nontransaction accounts (table A.4). 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. The reserve requirements on transaction accounts shown in table A.4 apply only to those accounts that exceed the exemption and the low reserve tranche, the cutoffs for which adjust each year according to a formula provided by law. In 1993, for example, the first $3.8 million of transaction accounts at each depository is exempt from reserve requirements and the next $46.8 million is reservable at 3 percent. Only deposits in excess of this low reserve tranche are reservable at 10 percent. For the purposes of reserve requirements, nontransaction accounts include nonpersonal time and savings deposits that are not transaction accounts and in which the beneficial interest is held by a depositor that is not a natural person, as well as net borrowings by banks in the United States from banks outside the country.

SELECTED BIBLIOGRAPHY

Bank of Canada. "The Implementation of Monetary Policy in a System with Zero Reserve Requirements," Discussion Paper 3. (September 1991).

Bernanke, Ben, and Frederic Miskin. "Central Bank Behavior and the Strategy of Monetary Policy: Observations from Six Industrial Countries." Working Paper 4082, Cambridge, Mass.: National Bureau of Economic Research, 1992.

Board of Governors of the Federal Reserve System. "The History of Reserve Requirements in the United States," *Federal Reserve Bulletin*, vol. 25 (November 1938), pp. 953–72.

Federal Reserve Bank of New York. "Reduced Reserve Requirements: Alternatives for the Conduct of Monetary Policy and Reserve Management," *Staff Study* (April 1993).

Goodfriend, Marvin, and Monica Hargraves. "A Historical Assessment of the Rationales and Functions of Reserve Requirements," Federal Reserve Bank of Richmond, *Economic Review*, vol. 69 (March/April 1983), pp. 3–21.

Horrigan, Brian R. "Are Reserve Requirements Relevant for Economic Stabilization?" *Journal of Monetary Economics*, vol. 21 (January 1988), pp. 97–105.

Kasman, Bruce. "A Comparison of Monetary Policy Operating Procedures in Six Industrial Countries," Federal Reserve Bank of New York, *Quarterly Review*, vol. 17 (Summer 1992), pp. 5–24.

Meulendyke, Ann-Marie. "Reserve Requirements and the Discount Window in Recent Decades," Federal Reserve Bank of New York, *Quarterly Review*, vol. 17 (Autumn 1992), pp. 25–43.

Stevens, E.J. "Is there any Rationale for Reserve Requirements?" Federal Reserve Bank of Cleveland, *Economic Review*, vol. 27 (Quarter 3 1991), pp. 2–17.

Weiner, Stuart E. "Payment of Interest on Reserves," Federal Reserve Bank of Kansas City, *Economic Review*, vol. 68 (January 1983), pp. 16–31.

________. "The Changing Role of Reserve Requirements in Monetary Policy," Federal Reserve Bank of Kansas City, *Economic Review*, vol. 77 (Fourth Quarter 1992), pp. 45–63. □

Industrial Production, Capacity, and Capacity Utilization since 1987

Richard D. Raddock, of the Board's Division of Research and Statistics, prepared this article.

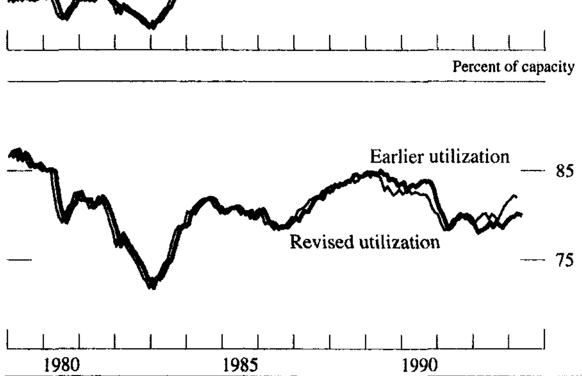
The Federal Reserve recently revised its index of industrial production and the related measures of capacity and utilization. Compared with the previous index, the revised index shows that manufacturing grew more slowly from 1987 until the onset of recession late in 1990 and then recovered more rapidly, albeit unevenly. According to the revised numbers, from 1987 to 1992 the annual rate of growth in industrial production averaged 1.3 percent, 0.4 percentage point less than was formerly shown. From the first quarter of 1992 through the first quarter of 1993, revised industrial output rose at an annual rate of 4.4 percent to a new high. Preliminary estimates show that industrial production changed little in March and April 1993.

The revised production and capacity indexes still cover manufacturing, mining, and electric and gas utilities and are still expressed as percentages of output in 1987. They have, however, incorporated new monthly and annual data—particularly output estimates derived from the Annual Survey of Manufactures of the U.S. Bureau of the Census and capacity utilization results from the Survey of Plant Capacity, also of the Census Bureau. The incorporation of the new data has progressively lowered the level of the revised industrial production index relative to that of the previous one until 1990. Whereas the previous index showed output peaking in September 1990 at 110.6 percent of the level of output in 1987, the revised index shows output reaching a high of 107.1 in April 1989 and then retreating a little until October 1989 (chart 1, top panel). The subsequent rebound recouped nearly all of the loss by the following summer. Then, as did the previous index, the revised index shows a cyclical contraction ensuing. From September 1990 to the following March, production dropped 4 percent to a low of 102.5, compared with the previous index of 105 percent. By February 1993, industrial output had reached 109.9 percent of its 1987 average—a new high, but 2.1 percentage points below the unrevised level.

The Federal Reserve's index of industrial capacity was also revised downward. According to the revision, the annual growth in capacity from 1987 to 1992 averaged only 1.7 percent, down from the previous estimate of 2.3 percent. The rate of capacity growth has trended lower for many years; it tends to be especially slow during and immediately after recessionary periods, when plant closings increase and capital spending drops.

As revised, capacity utilization, the ratio of output to capacity, was about the same for most of 1987–91 as it had been before the revision. It peaked at 84.8 percent in March 1989 and fell to a cyclical low of 78.3 percent two years later.

1. Revised and earlier industrial output, capacity, and utilization



1. Historical data for output, capacity, and capacity utilization for total industry, 1986–92[1]

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual avg.
	Output (percent of 1987 output)																
1986	96.1	95.5	94.6	94.8	94.7	94.3	94.8	94.9	95.0	95.6	96.3	96.8	95.4	94.6	94.9	96.2	95.3
1987	96.5	97.9	98.2	98.8	99.4	100.3	100.6	100.9	100.7	102.1	102.2	102.8	97.5	99.5	100.8	102.3	100.0
1988	103.2	103.4	103.4	104.3	104.0	104.0	104.6	105.2	104.7	105.0	105.6	106.3	103.3	104.1	104.8	105.6	104.4
1989	106.6	106.2	107.1	107.1	106.7	106.4	105.3	105.8	105.4	105.0	105.4	106.1	106.6	106.7	105.5	105.5	106.0
1990	105.5	106.1	106.4	105.7	106.5	106.7	106.5	106.8	106.8	106.3	105.0	104.5	106.0	106.3	106.7	105.3	106.0
1991	104.4	103.2	102.5	102.6	103.3	104.4	104.5	104.6	105.3	105.1	105.0	104.7	103.3	103.4	104.8	104.9	104.1
1992	104.5	105.3	105.6	106.3	106.7	106.0	106.8	106.6	106.2	107.5	108.4	108.9	105.1	106.3	106.5	108.3	106.5
	Capacity (percent of 1987 output)																
1986	119.2	119.4	119.6	119.8	120.0	120.2	120.4	120.6	120.8	121.0	121.2	121.4	119.4	120.0	120.6	121.2	120.3
1987	121.6	121.8	122.0	122.2	122.4	122.6	122.8	123.0	123.2	123.4	123.6	123.8	121.8	122.4	123.0	123.6	122.7
1988	124.0	124.1	124.3	124.4	124.6	124.7	124.9	125.0	125.2	125.3	125.5	125.6	124.1	124.6	125.0	125.5	124.8
1989	125.8	126.0	126.2	126.4	126.6	126.8	127.0	127.2	127.4	127.6	127.8	128.0	126.0	126.6	127.2	127.8	126.9
1990	128.2	128.4	128.6	128.8	129.0	129.2	129.4	129.6	129.8	129.9	130.1	130.3	128.4	129.0	129.6	130.1	129.3
1991	130.5	130.7	130.8	131.0	131.2	131.4	131.5	131.7	131.9	132.0	132.2	132.4	130.7	131.2	131.7	132.2	131.4
1992	132.5	132.7	132.9	133.1	133.2	133.4	133.6	133.7	133.9	134.1	134.2	134.4	132.7	133.2	133.7	134.2	133.5
	Utilization (percent of capacity)																
1986	80.6	79.9	79.1	79.1	78.9	78.4	78.7	78.7	78.7	79.1	79.4	79.8	79.9	78.8	78.7	79.4	79.2
1987	79.3	80.3	80.5	80.8	81.2	81.8	81.9	82.0	81.8	82.7	82.7	83.1	80.1	81.3	81.9	82.8	81.5
1988	83.2	83.3	83.2	83.8	83.5	83.4	83.8	84.2	83.6	83.8	84.2	84.6	83.2	83.6	83.9	84.2	83.7
1989	84.8	84.3	84.8	84.7	84.3	83.9	82.9	83.2	82.7	82.3	82.4	82.8	84.6	84.3	82.9	82.5	83.6
1990	82.3	82.6	82.8	82.1	82.5	82.6	82.3	82.4	82.3	81.8	80.7	80.2	82.6	82.4	82.4	80.9	82.1
1991	80.0	78.9	78.3	78.3	78.8	79.5	79.5	79.4	79.9	79.6	79.4	79.1	79.1	78.8	79.6	79.4	79.2
1992	78.8	79.3	79.5	79.9	80.1	79.5	80.0	79.7	79.3	80.2	80.8	81.0	79.2	79.8	79.7	80.7	79.8

1. Seasonally adjusted.

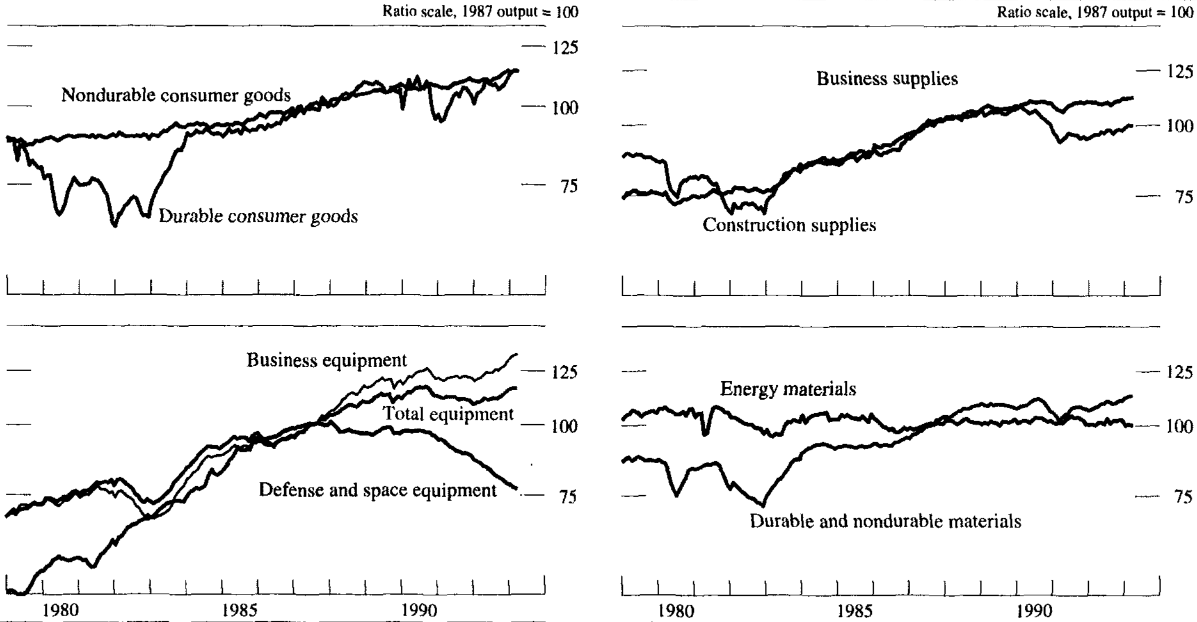
Neither the high nor the low reached the extreme values of the two preceding business cycles. During 1992, utilization rose with production and reached 81.4 percent in the first quarter of 1993, 0.5 percentage point below its 1967–92 average. However, the more rapid recovery of revised production from the trough and the slower growth of revised capacity led to an upward revision of utilization in 1992 and early 1993. For total industrial production, capacity, and capacity utilization for the period of the revision, see table 1.

Developments by Market Groups

Pronounced cyclical contractions and recoveries have been most evident in the output of construction supplies and consumer durable goods, particularly automotive products (chart 2). From its high in early 1989 to the trough in early 1991, output of consumer durable goods fell about 20 percent. After an uneven recovery, it regained its previous high in early 1993. Because of the peaking of building activity in 1986, production of construction supplies began to decline before the general cyclical peak, (table 2). Today, despite the lowest interest rates in nearly a quarter century, the recovery in output of construction supplies continues to be constrained—at least in part—by the high vacancy rates of rental housing and commercial buildings. In contrast to these strong cyclical patterns, the output of nondurable consumer goods, business supplies, and energy materials has fluctuated relatively little in recent years.

The production of total equipment grew about 3 percent a year on average from early 1987 to early 1993, even though output of business vehicles and heavy machinery fell sharply in the recession and production of defense equipment has been cut considerably since 1990. The recently ended boom in commercial aircraft and the strong gains in output of computers, communications equipment, and medical instruments boosted the business equipment group in the 1987–92 period. From

2. Industrial output by market groups



early 1992 through early 1993, output of business equipment soared at an annual rate of more than 12 percent (8 percent, if office and computing equipment is excluded).

The production of industrial materials used to manufacture durable and nondurable goods, which in the past was more cyclical than that of other industrial products, has, in recent years, roughly paralleled the movements of final products (consumer goods and equipment) production.[1] This parallel movement may reflect the tighter management of stocks of materials that reduced overbuilding and the need for cutting stocks. Swings in net imports of some materials may have counterbalanced some of the swings in domestic demand.

Developments by Sector

Although industries within manufacturing, mining, and utilities face similar cyclical forces, they are also influenced by other factors, such as technology and resource availability, that may be specific to an industry. As a result, short movements and trends in output, capacity, and utilization differ widely among industries.

Manufacturing

For analytical purposes, the large and diverse manufacturing sector—85 percent of total industrial production—is divided into two broad categories: primary-processing industries, which produce mainly materials and construction supplies, and advanced-processing industries, which produce mainly finished consumer or capital goods.

Primary-Processing Industries

Among these industries, the output of lumber, stone, clay and glass, and primary and fabricated metals industries declined relatively severely in 1990–91; output in each case remains below earlier highs (table 3). From a high in January 1989, the output index for primary processing dropped 10 percent to the trough. Although recovery has been substantial since then and output of textiles, paper, and industrial chemicals reached new highs

1. The total products grouping includes consumer goods, equipment, and construction and business supplies.

2. Revised rates of growth in industrial production, by major market group, 1987–92

Series	1988	1989	1990	1991	1992	1987–92
	Average annual rate of growth (percent)					
Total index	**4.4**	**1.5**	**.0**	**–1.8**	**2.3**	**1.3**
Products	4.1	1.5	–.1	–2.3	2.4	1.1
Final products	4.8	1.9	.1	–1.5	2.8	1.6
Consumer goods	2.9	1.1	–.5	–.6	2.3	1.0
Durable consumer goods	4.6	1.9	–4.1	–6.9	7.7	.5
Automotive products	6.4	1.6	–6.9	–10.9	10.7	–.1
Home goods	3.0	2.1	–1.5	–3.6	5.3	1.0
Nondurable consumer goods	2.4	.8	.5	1.2	.9	1.2
Equipment	7.6	3.1	1.1	–2.8	3.5	2.4
Business equipment	10.7	4.4	1.2	–1.1	6.5	4.3
Industrial	10.3	3.6	–1.2	–5.9	2.1	1.6
Information processing	11.3	2.5	3.5	2.1	11.7	6.1
Transit	12.8	12.5	1.2	4.1	2.5	6.5
Other	7.2	2.5	–.5	–7.6	3.6	.9
Defense and space	–.3	.4	–1.2	–7.2	–6.3	–3.0
Intermediate products	1.8	.2	–.8	–4.6	1.1	–.5
Construction supplies	1.5	–1.0	–2.4	–7.5	3.4	–1.3
Business supplies	2.0	1.0	.1	–2.7	–.3	.0
Materials	5.0	1.6	.1	–1.2	2.3	1.5
Durable goods materials	6.8	1.6	–.7	–2.3	3.5	1.7
Nondurable goods materials	4.4	2.6	.8	–.8	3.6	2.1
Energy materials	2.2	.8	1.1	.4	–1.1	.7
	Difference between revised and earlier growth rates (percentage points)					
Total index	**–1.0**	**–1.1**	**–1.0**	**.2**	**.8**	**–.4**
Products	–1.2	–1.6	–1.5	–.5	1.0	–.7
Final products	–.8	–1.4	–1.5	–.3	1.4	–.5
Consumer goods	–1.1	–1.5	–1.1	–.8	–.4	–1.0
Durable consumer goods	–.3	–1.0	–2.6	–3.2	2.2	–1.0
Automotive products	.5	.6	–2.6	–6.6	1.7	–1.4
Home goods	–1.1	–2.4	–2.1	–.3	2.3	–.7
Nondurable consumer goods	–1.3	–1.8	–.7	.0	–1.1	–1.0
Equipment	.0	–1.3	–1.7	.0	3.8	.1
Business equipment	–1.1	–2.1	–2.1	.2	4.0	–.2
Industrial	.5	.0	–2.5	.4	7.4	1.2
Information processing	–1.3	–5.6	–1.0	–1.3	4.4	–1.0
Transit	–1.6	4.3	–3.7	6.5	–.9	.9
Other	–3.1	–3.1	–2.2	–3.5	3.2	–1.8
Defense and space	1.7	1.0	–1.0	–.8	2.6	.7
Intermediate products	–2.6	–2.1	–1.6	–.6	–.1	–1.4
Construction supplies	–2.9	–2.6	–1.6	1.2	2.0	–.7
Business supplies	–2.4	–1.8	–1.8	–1.9	–1.3	–1.8
Materials	–.6	–.1	–.3	.9	.5	.1
Durable goods materials	–2.2	–.8	–.9	1.9	.9	–.2
Nondurable goods materials	1.4	.4	.1	–.7	.0	.2
Energy materials	.4	1.2	.4	.2	–.1	.4

in 1992, growth in output in primary processing industries averaged only ¾ percent per year from 1987 to 1992. By early 1993, output had approximately recovered its peak (chart 3).

So far in the nineties, capacity growth has slowed to an annual rate of only about 1 percent; the rate of capacity utilization in primary processing, which had peaked at 88 percent in early 1989, recovered from its recessionary dive to a moderate rate of 84 percent in early 1993.

Capacity in some of these basic industries has remained flat. The annual capability for raw steel has stayed near 114 million tons, as older mills have closed and new minimills have been built. Aluminum mills have wrung some additional output of ingots from old potlines, but no new potlines have been constructed. Cement clinker capacity has contracted, and output and capacity in logging camps and lumber mills have been constrained by environmental regulation that reduced logging on

3. Revised rates of growth in industrial production, by major industry group, 1987–92

Series	Average annual rate of growth (percent)					
	1988	1989	1990	1991	1992	1987–92
Total index	**4.4**	**1.5**	**.0**	**-1.8**	**2.3**	**1.3**
Manufacturing	4.7	1.6	-.3	-2.2	3.1	1.3
Primary processing	3.9	.9	-.6	-3.7	3.7	.8
Advanced processing	5.1	2.0	-.2	-1.6	3.6	1.8
Durable manufacturing	6.6	1.8	-1.0	-3.3	4.1	1.6
Lumber and products	.1	-.8	-2.3	-6.8	6.4	-.7
Furniture and fixtures	.3	1.3	-1.4	-6.0	5.2	-.2
Stone, clay, and glass	2.6	.0	-2.1	-7.7	3.7	-.8
Primary metals	8.7	-1.3	-.7	-7.6	2.7	.2
Iron and steel	12.7	-1.3	.2	-9.8	4.1	.9
Raw steel	12.6	-3.6	1.0	-11.2	4.0	.2
Nonferrous	3.1	-1.4	-2.2	-4.2	.7	-.8
Fabricated metal products	4.2	-1.3	-3.2	-4.6	1.8	-.7
Industrial and commercial machinery and computer equipment	13.0	3.8	.2	-3.3	9.8	4.5
Excluding computer and office equipment	10.3	3.8	-2.2	-6.3	3.5	1.6
Computer and office equipment	20.3	3.7	6.3	3.5	22.6	11.0
Electrical machinery	8.5	2.2	.4	1.3	6.2	3.7
Transportation equipment	5.2	4.3	-2.4	-4.8	.8	.5
Motor vehicles and parts	5.7	1.2	-5.6	-6.6	11.2	1.0
Autos and light trucks	4.6	3.3	-6.9	-8.8	10.6	.3
Aerospace and miscellaneous	4.7	7.1	.4	-3.3	-7.6	.1
Instruments	3.6	1.0	.3	.4	-1.1	.8
Miscellaneous manufactures	6.8	.4	-.3	-1.8	4.5	1.9
Nondurable manufacturing	2.3	1.3	.6	-.8	1.8	1.0
Foods	1.5	1.0	1.2	1.5	.6	1.2
Tobacco products	1.8	-1.1	.1	-4.4	3.0	-.2
Textile mill products	-1.4	1.7	-3.2	-.2	8.1	.9
Apparel products	-1.9	-3.2	-3.0	-.3	.5	-1.6
Paper and products	3.1	1.8	.6	.6	1.9	1.6
Printing and publishing	.9	.2	-.3	-4.0	-1.9	-1.0
Chemical and products	6.0	3.1	2.3	-.4	3.3	2.8
Petroleum products	1.9	.4	1.0	-1.7	.4	.4
Rubber and plastics products	2.6	3.4	1.1	-2.5	5.0	1.9
Leather and products	-.2	-.2	-3.6	-8.5	5.3	-1.5
Mining	1.3	-1.3	2.0	-1.5	-2.8	-.5
Metal mining	20.3	16.8	9.0	2.4	3.2	10.1
Coal	3.1	3.7	4.9	-2.5	-3.6	1.1
Oil and gas extraction	-.3	-3.7	.8	-.9	-3.5	-1.5
Stone and earth minerals	2.3	-1.3	1.4	-8.1	-.3	-1.3
Utilities	5.0	3.5	1.1	2.1	-.2	2.3
Electric	4.7	3.4	2.4	1.8	-1.1	2.2
Gas	6.2	3.9	-3.3	3.0	3.1	2.5

millions of acres of federal timberland in the Pacific Northwest (chart 4).

Advanced-Processing Industries

These industries, which account for 70 percent of manufacturing, have grown faster than the rest of industrial production. In early 1992, they regained their peak level; and in the first quarter of 1993, output was 12 percent higher than it was in 1987—up more than 2 percent per year. Even so, utilization remains moderate, as capacity has expanded with output (chart 5). The performance of individual industries in this sector has been quite disparate in terms of cyclical volatility and growth.

Motor vehicles. Led by gains in the demand for trucks, the motor vehicle industry began to recover in 1992 from three years of declining output and sales. In 1991, U.S. output of vehicles, which from 1985 to 1988 had averaged about 11 million units, fell below 9 million units, the lowest level since 1982. Although large, this contraction was not as

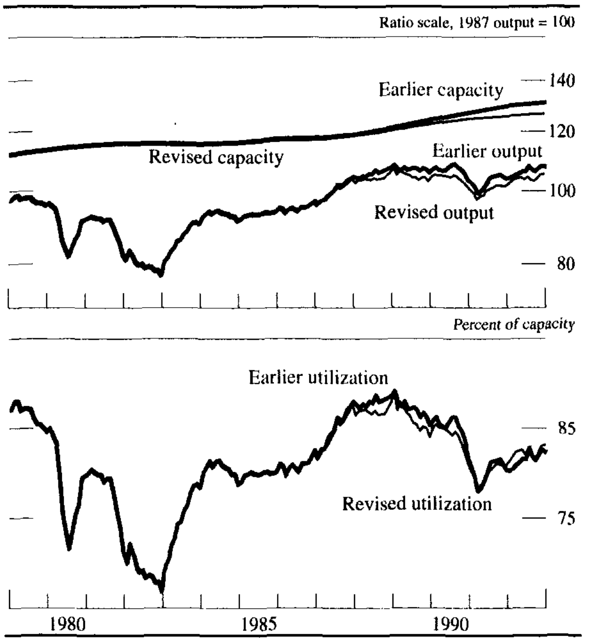
3. Revised rates of growth in industrial production, by major industry group, 1987–92—Continued

Series	Difference between revised and earlier growth rates (percentage points)					
	1988	1989	1990	1991	1992	1987–92
Total index	**–1.0**	**–1.1**	**–1.0**	**.2**	**.8**	**–.4**
Manufacturing	–1.1	–1.3	–1.3	.1	1.0	–.5
Primary processing	–1.2	–.3	–.5	.0	.4	–.3
Advanced processing	–1.1	–1.6	–1.6	.0	2.1	–.4
Durable manufacturing	–1.0	–1.3	–1.6	.8	2.8	–.1
Lumber and products	–4.5	.7	–.9	.5	1.7	–.5
Furniture and fixtures	–3.3	–.3	–2.0	.4	4.1	–.3
Stone, clay, and glass	–3.8	–1.5	.1	2.4	2.3	–.1
Primary metals	–1.6	–.3	.1	.6	–.9	–.4
Iron and steel	–1.1	2.6	–.4	1.0	–2.1	.1
Raw steel	.0	.0	.0	.0	.0	.0
Nonferrous	–2.3	–4.8	.3	.2	.7	–1.1
Fabricated metal products	–2.0	–2.2	–2.0	.6	.4	–1.0
Industrial and commercial machinery and computer equipment	–.8	–3.2	–3.7	–.9	6.7	–.4
Excluding computer and office equipment	–.6	–.4	–3.6	–.7	6.4	.2
Computer and office equipment	–.8	–9.6	–2.9	–.3	8.9	–1.1
Electrical machinery	2.0	–.6	–1.3	2.5	4.6	1.4
Transportation equipment	.2	2.2	–.8	1.7	2.2	1.1
Motor vehicles and parts	.2	1.8	2.1	.0	2.1	1.2
Autos and light trucks	–.3	3.2	1.1	–1.3	–1.5	.2
Aerospace and miscellaneous	.2	2.5	–3.2	3.1	1.9	.9
Instruments	–6.5	–4.8	–.1	–.8	–1.0	–2.6
Miscellaneous manufactures	–.4	–6.8	–4.7	–1.3	4.4	–1.8
Nondurable manufacturing	–1.3	–1.4	–.7	–.9	–1.2	–1.1
Foods	–1.3	–1.6	–.8	.6	–.8	–.8
Tobacco products	.4	.6	1.1	–5.5	–2.6	–1.2
Textile mill products	–1.2	–.4	–2.2	.1	2.6	–.3
Apparel products	–4.1	–5.2	2.2	2.4	–1.1	–1.1
Paper and products	.2	1.5	–1.5	.8	.0	.2
Printing and publishing	–2.7	–4.6	–3.4	–4.3	–2.8	–3.6
Chemical and products	.6	.2	.6	–.9	–2.3	–.4
Petroleum products	–1.5	–2.2	–1.0	–1.1	–.6	–1.3
Rubber and plastics products	–3.3	.6	–.1	–2.3	–1.5	–1.3
Leather and products	.2	–4.3	–.1	3.4	8.5	1.6
Mining	–.5	.0	–.1	.0	–.5	–.2
Metal mining	–2.4	1.6	.7	4.3	–2.0	.5
Coal	–1.9	3.0	–2.2	1.0	–.2	.0
Oil and gas extraction	.3	.2	.8	–1.2	–.8	–.1
Stone and earth minerals	–4.5	–7.9	–3.5	1.4	1.9	–2.4
Utilities	.6	1.0	.3	.9	.4	.6
Electric	.1	.0	–.1	.0	.0	.0
Gas	2.3	4.7	2.3	4.4	1.4	3.0

great as the contractions between 1973 and 1975 and between 1978 and 1982, partly because this cycle had neither a curtailment in gasoline supplies nor so extreme a peak in output. The drop in production of motor vehicles and related parts and materials from its high in January 1989 to the trough accounted for about a third of the decline in manufacturing.

Widely publicized plant closings by Chrysler, Ford, and General Motors accompanied the downtrend in the production of automobiles. The Big Three's auto assembly capacity in the United States fell from more than 9½ million units in 1986–87 to less than 6½ million units in the 1993 model year. In contrast, reflecting the rising share of trucks in overall vehicle sales, U.S. capacity to assemble light trucks increased about a million units to 5¼ million units over the same period. Domestic producers shifted existing plants from autos to light trucks, built new truck plants, and increased hours of plant operation. Japanese auto producers continued to increase assembly capacity in the United States; "transplant" assembly capacity (mainly for autos) increased from about 1 million units in 1986–87 to more than 2 million units currently. Altogether, U.S. assembly capacity for motor vehi-

3. Revised and earlier output, capacity, and utilization in primary-processing industries



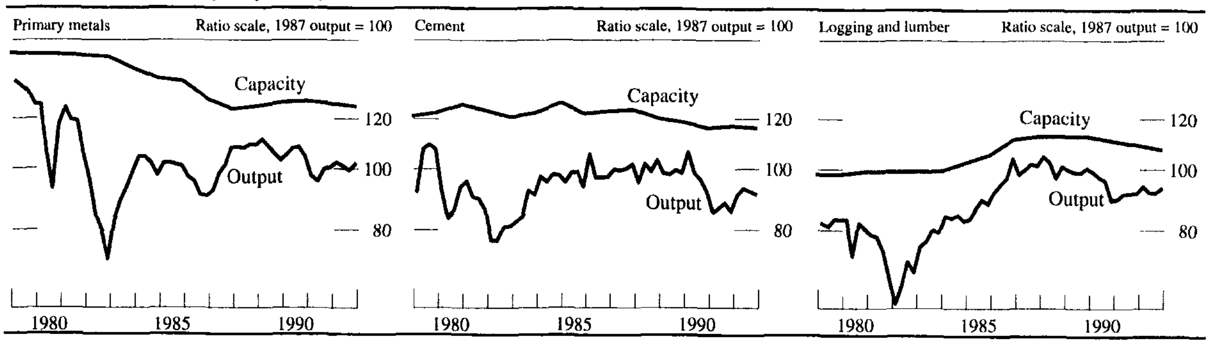
cles has declined about a million units since 1986–87 to about 13⅓ million units. With the increases in assembly capacity in Canada and Mexico, however, total North American assembly capacity has increased and has been more than ample to meet demand.

The revised output and capacity indexes, shown in the middle panel of chart 6, are based largely on the unit counts mentioned above (left panel); the indexes also incorporate an upward adjustment of about 3 percent per year resulting from gains in the quality of vehicles—antilock brakes, airbags, more efficient engines, more amenities, and so on. The utilization rates for autos and trucks parallel the physical output data and indicate that the rate of capacity utilization, which had dropped from more than 80 percent in the mid-1980s to less than 60 percent at the trough, recovered to about 80 percent early in 1993. The utilization of light truck assembly capacity was much higher than that for automobiles; the capacity utilization rate for medium and heavy trucks also recovered strongly with output.

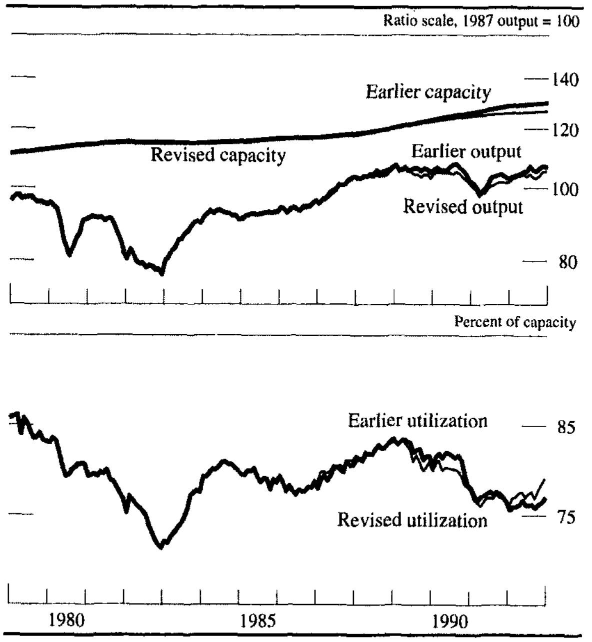
Aerospace and miscellaneous transportation equipment. Output of transportation equipment aside from motor vehicles dropped 16 percent from the end of 1990 to early 1993, to its lowest level in seven years. Further curtailments in production seem inevitable. Output of aircraft and parts, boats and naval ships, and guided missiles is declining. (The only real strength is in heavyweight motorcycles and mountain bicycles, along with casino boats, ferries, and other smaller craft.) Sharp cutbacks in defense outlays have been the major drag; but the production of commercial transport aircraft, which doubled from 1987 to 1991, is also now falling.

The boom in output of civil transport aircraft peaked in late 1991, although orders had already begun to decline. The boom was fueled by growing demand for air travel. Airlines were hit, however, by decreased air travel in 1991 in response to the Persian Gulf War and recession, by excess capacity, and by substantial price competition in 1992. New orders fell from more than 1,000 units in 1989 to an annual average of 243 units in 1991–92, and backlogs dropped as many airlines cancelled orders or delayed delivery past 1996 in response to record financial losses in 1991 and 1992. Deliveries

4. Output and capacity in primary metals, cement, and lumber



5. Revised and earlier output, capacity, and utilization in advanced-processing industries



peaked at about 160 planes a quarter in the first half of 1992 but dropped to 110 in the first quarter of 1993. Airframe makers announced further production cuts for 1993 and 1994; much of the current backlog is not scheduled to be delivered until the last half of the decade. Shipments of complete military aircraft have fallen from about 1,200 units in 1987 to about 600 units in 1992 and 1993.

With the sharp cuts in production, employment and capacity utilization in the aerospace and miscellaneous transportation industries have dropped substantially. The utilization rate fell from 88 percent at its peak in the second quarter of 1989 to 70 percent in early 1993.

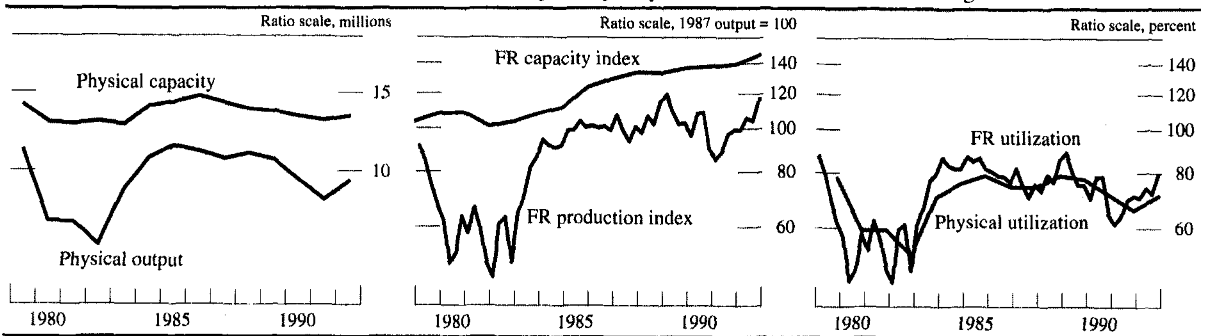
Machinery and instruments. The diverse industries that produce machinery, instruments, and parts include fast growers like computers, semiconductors, communications equipment, and medical instruments along with others that produced less at their recent peaks than they had in the early 1980s.

The output of industrial and commercial machinery and computer equipment grew 4.5 percent per year from 1987 to 1992;[2] but the pace was less than half that if office and computing machines are excluded. Because of the phenomenal increase in computers' performance per dollar, the index for real production of computer and office equipment has doubled since 1987. Much of the output gain was registered during 1992 when the U.S. computer industry emerged from a prolonged downturn. In 1991, shipments in current dollars were about 8 percent below their peak in 1988 and only a few percentage points higher than they were in 1987; employment in the computer and office equipment industry dropped 100,000 from its peak in 1984 to 416,600 in 1991.

Excluding computers, output of nonelectrical machinery, which dropped about a tenth from peak to trough, recovered strongly in 1992 but remained below its 1989 high. Makers of engines and of farm and construction machinery produced substantially less in 1992 than in 1980. In 1992, a rebound in residential construction, increased public construction, and the end of a strike at a major producer boosted sales of construction machinery. Nevertheless, because of weakness in commercial construction of office and apartment buildings and the low

2. Standard Industrial Classification (SIC) 35, formerly called Nonelectrical Machinery.

6. Physical counts and Federal Reserve measures of output, capacity, and utilization for autos and light trucks



level of industrial plant expansion, the level of output of construction and mining equipment remains near the weak 1987 level, far below earlier peaks. Although recovering somewhat late in 1992, output of farm equipment also remains below earlier peaks. Fewer farmers, declines in net farm income and the real purchasing power of farm equity, productivity gains, and conservation tillage (which requires fewer trips and reduces wear on the tractor) have reduced the sales of farm equipment.

The production of electrical machinery, which had flattened in 1989–90, advanced sharply from the trough to new highs. Bolstered by gains in semiconductors and communications equipment, output increased at a 3¾-percent annual rate from 1987 to 1992. With a double-digit gain in 1992, the production index for semiconductors and related components has risen more than 50 percent since 1987, whereas prices of semiconductors have drifted down. This strong growth is related to the increasing use of semiconductors and related devices in computers, communications equipment, and various recovering industries such as motor vehicles.

The output of communications equipment, which eased a bit in the recession, rose sharply in 1992 to a level more than 25 percent higher than that in 1987. One source of the strength is the robust growth of the cellular radiotelephone system and of fiber optics. During 1992, cellular service became available in each U.S. market block, and the number of new cellular subscribers increased more than 200,000 per month to about 10 million by the end of the year. Net exports of radio and television communications equipment have risen substantially in recent years.

Other components of electrical machinery exhibited less robust growth. The output of appliances and television sets and of electric motors and generators and related parts dropped sharply in the recession and exhibited moderate growth through 1992. In the first quarter of 1993, output of appliances and television sets rose to 121 percent of 1987 output. However, the output of lighting and wiring products, storage batteries, and transformers and switchgear was lower at the end of 1992 than it was in 1987.

In contrast to the cyclical fluctuations of motor vehicles, some machinery, and miscellaneous manufactures, the output of instruments has been relatively flat since 1988. The medical instrument business has been the only strong sector; the output of guidance and navigation equipment has fallen substantially with the decline in defense spending. The rate of capacity utilization for the overall instruments industry is low.

As in the case of instruments, the industrial production index for manufactured nondurable goods has in recent years exhibited a muted cycle and a slow rate of growth. Among advanced processors, the output of foods grew only about 1¼ percent per year from 1987 through 1992—about half as fast as in the preceding five years. Changing tastes and lifestyles and reduced family size have shifted production from beef, liquor, whole milk, and large cakes and pies to poultry, beer, skim milk, frozen yogurt, and frozen convenience foods. The production of tobacco products has been trendless for a decade. In contrast, the output of finished chemicals grew more rapidly; this growth was led by drugs and medicines, which advanced a third from 1987 to early 1993.

The industrial production indexes for printing and publishing, paints, apparel, and leather goods, however, were lower in early 1993 than in 1987. A continued uptrend in imports of apparel and leather goods contributed to that decline. The output of printed products was reduced in the early 1990s partly because of a decline in advertising revenues during the recession, which also restrained demand for business publications and forms. A drop-off in corporate takeover activity led to less financial printing. Declines in tax revenues cut school and library budgets for educational materials. Newspaper industry receipts in 1992 declined for the fifth year as newspapers' share of total media advertising and the circulation of daily newspapers shrank further.

Mining

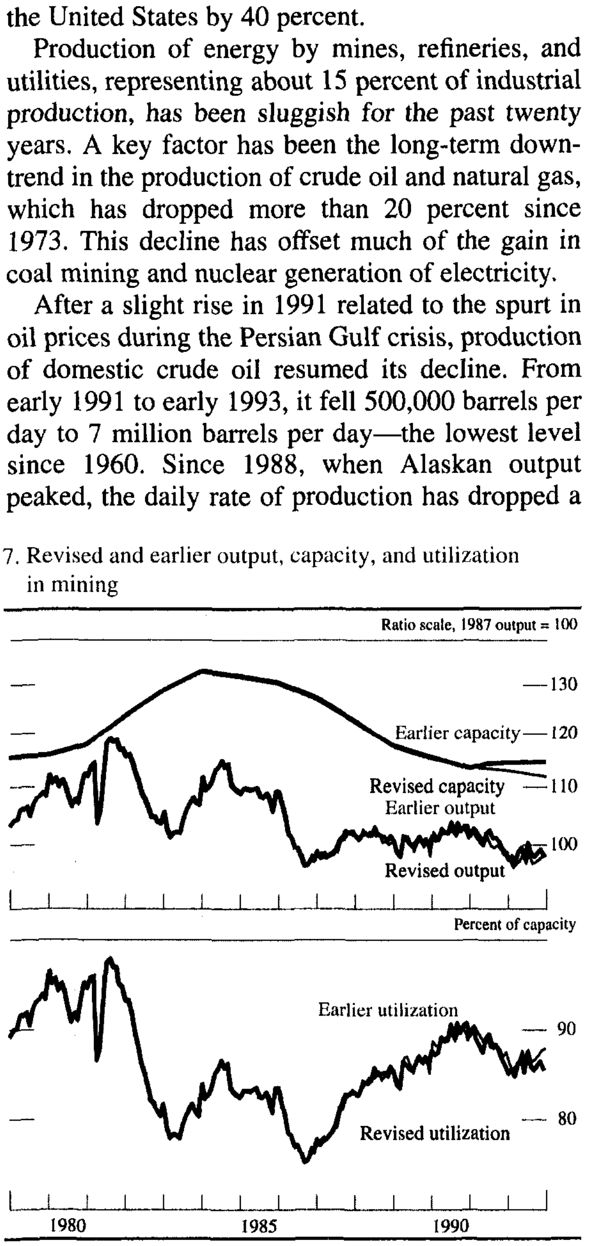
From 1987 to mid-1991, mining production, as a whole, changed relatively little, but afterward it declined a few percentage points. The easing was due partly to weak demand for coal, stone, and earth minerals but mainly to the renewed decline in crude oil production and the low rate of oil and gas well drilling that developed as the price of oil retreated after the defeat of Iraq. The estimated index of mining capacity declined as well. Capacity utilization edged down in 1992 and stayed within the 85–90 percent range of recent years (chart 7).

Mining of metal ores increased sharply from the depressed levels of the mid-1980s. New technology and new mines contributed to the doubling of production of gold and zinc ores since 1987; upgraded domestic facilities and disruptions in foreign supplies helped raise output of copper ore in the United States by 40 percent.

Production of energy by mines, refineries, and utilities, representing about 15 percent of industrial production, has been sluggish for the past twenty years. A key factor has been the long-term downtrend in the production of crude oil and natural gas, which has dropped more than 20 percent since 1973. This decline has offset much of the gain in coal mining and nuclear generation of electricity.

After a slight rise in 1991 related to the spurt in oil prices during the Persian Gulf crisis, production of domestic crude oil resumed its decline. From early 1991 to early 1993, it fell 500,000 barrels per day to 7 million barrels per day—the lowest level since 1960. Since 1988, when Alaskan output peaked, the daily rate of production has dropped a

7. Revised and earlier output, capacity, and utilization in mining



million barrels. For more than twenty years, output in the lower forty-eight states has been trending down—dropping from 9.4 million barrels per day in 1970 to 5.4 million in 1992. With the aging of oil fields, oil well productivity has fallen to about 12 barrels per day per well from about 13.5 barrels in 1987–88 and more than 18 barrels in the early 1970s.

Moderate prices of crude oil and environmental restrictions in some areas have depressed drilling activity in the United States. Drilling for oil and gas in terms of either footage or well completions has fallen to less than a third of its peak level in the early 1980s. The number of active or available rotary drilling rigs has also been shrinking.

In contrast to that of crude oil, the output of natural gas, which also declined through 1986, has recovered; and, despite some weather-related weakness since the recession, coal has trended up. The gains in coal mining have been primarily west of the Mississippi.

Refinery production, which had recovered from its lows in the early 1980s, has been basically flat since 1988. Total refinery production of motor gasoline had fallen to 6.3 million barrels in 1982–83 because of the high price of oil and recovered to 6.8 million barrels in 1986–87, when the price of oil fell. From 1988 to 1992, it stayed at 7 million barrels per day, about the same as in the late 1970s. Distillate fuel oil has equalled nearly 3 million barrels per day in the past few years, below the rate in the late 1970s but up from that in the mid-1980s.

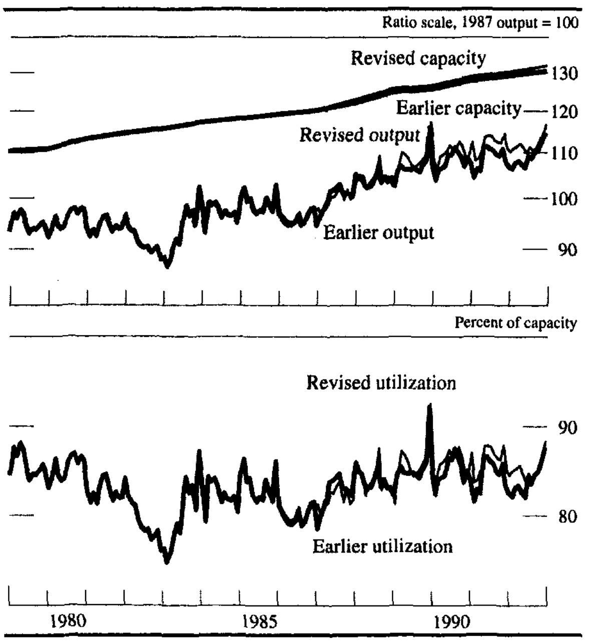
In 1992, refinery capacity shrank. More stringent requirements mandated by the Clean Air Act Amendments of 1990 for summer gasoline vapor pressure and oxygenated gasoline, as well as the upcoming reduction in allowable sulfur content of diesel fuels, necessitated the upgrading of existing refineries. Several idle marginal refineries permanently closed. The Department of Energy reports that, at the start of 1993, operable crude distillation capacity dropped to 15.1 million barrels per day, down about 500,000 barrels per day from its average level during 1985–92. Input to crude oil distillation units rose so that utilization increased from 86 percent in 1991 to 88 percent in 1992. This rate is moderate for refining; it is well above the low rates of the early 1980s, when the high price of oil cut demand, but below the rates in the decade before the Arab oil embargo.

Utilities

From 1986 to 1989, production by electric and gas utilities increased 13 percent; it was spurred by relatively low energy prices and a temporary surplus of deliverable natural gas that caused a rebound in consumption, particularly industrial consumption, of natural gas from its 1986 low. The growth in sales by electric and gas utilities slowed in 1990–92 because of episodes of mild weather and economic weakness. Cool weather caused the generation of electricity to decline in the summer of 1992, but stronger industrial demand for power and a return of more normal weather boosted utility sales in late 1992 and early 1993 (chart 8).

The growth of capacity at utilities in the past few years has kept up with the slow growth of output so that the rate of capacity utilization has changed little. However, the utilization rate is projected to rise. According to the North American Electric Reliability Council, the nation's utilities intend to increase generating capacity at an annual rate of about 1⅓ percent between 1992 and 2001, compared with a projected annual growth in summer peak demand of 1⅘ percent. The more rapid rise in demand is expected to reduce the margin of excess capacity a few percentage points.

8. Revised and earlier output, capacity, and utilization in utilities



SIZE OF THE REVISION

The downward revision in industrial production was centered in manufacturing, especially in nondurable goods industries other than textiles, paper, and leather goods. The growth of nondurables from 1987 through 1992 was cut in half, to 1 percent per year (table 3). Especially large downward revisions were made to printing and publishing and to paving and roofing materials (part of petroleum products); output in these industries as well as in apparel and leather products was lower in 1992 than it had been in 1987. The output indexes show foods, tobacco products, apparel, and rubber and plastics products growing more slowly than they were previously shown to grow.

In durable manufacturing, several downward revisions, especially to fabricated metal products, instruments, and miscellaneous manufactures, were largely offset by upward revisions to electrical machinery and transportation equipment. For durable manufacturing, the greater rebound from the trough shown by the revised index offset the lower levels in 1989 to 1991, so that by the end of 1992 the revised index exceeded the earlier figures.

For mining, particularly for coal, oil, and gas, the overall 1987–92 revision in output was small. For most series, monthly physical output figures, supplied by the Bureau of Mines or the Department of Energy, were adjusted to more complete annual data from the same sources. This process typically affected specific year-to-year movements rather than the overall 1987–92 rate of growth. In the case of stone and earth minerals, however, monthly output was estimated largely on the basis of kilowatt hours purchased by that industry. These estimates were revised substantially downward to match the annual physical product figures provided by the Bureau of Mines.

The output index for utilities was revised upward because of a correction to the measurement of gas transmission (the output of electric utilities was revised only slightly). Previously the sales of gas by major pipeline companies were used to measure monthly transmissions. However, most interstate pipeline companies have become open-access transporters and, since 1987, have increasingly transported gas owned by others. As a result, sales of gas owned by pipelines fell far below transmissions. In this revision, pipeline sales were replaced by cubic feet of natural gas delivered to consumers. Whereas before the revision a slight decline was shown, the new series shows that gas transmission has not been falling; from 1987 to 1992, output of gas utilities including transmission grew at an annual rate of 2.5 percent.

REVISIONS TO CAPACITY

The growth of industrial capacity from the end of 1986 to the end of 1992 averaged 1.7 percent per year, 0.6 percentage point lower than the rate shown before the revisions (table 4). In manufacturing, large downward revisions to output and capacity indexes are evident in printing and publishing, instruments, and miscellaneous manufactures. As explained below, the downward revisions in capacity growth reflect not only new data on capacity and utilization but also the downward revisions in the industrial production indexes.

The revised capacity indexes are derived from (1) the survey by the U.S. Bureau of the Census of utilization rates in manufacturing establishments for the fourth quarter of years through 1990, (2) output and capacity data in physical units from various sources through 1992, and (3) estimates of capital stock derived through the perpetual inventory method from investment spending by industry.[3] Investment spending comes from the Annual Survey of Manufactures (ASM) through 1991 and from the Census Bureau's quarterly survey of plant and equipment expenditures after 1991.

The Federal Reserve indexes of sustainable annual capacity are designed specifically to accompany the indexes of production and are also expressed as percentages of production in 1987. A basic step in estimating annual levels of the capacity index is dividing an industrial production (*IP*) index by a utilization rate provided by an outside survey (U_s), that is, implied capacity = IP/U_s. Thus, if in 1987, IP = 100, and U_s = 80 percent, then implied capacity = 100/0.8 = 125. For the most part, utilization rates from surveys are revised only slightly, if at all. Thus, the Federal Reserve capacity indexes are typically revised with industrial production indexes, and the Federal Reserve rates of utilization change relatively little on average in a revision (table 5). The sharper increase in 1992 in the revised industrial production indexes, however, has raised utilization above its unrevised level in the fourth quarter of 1992.

This revision was conducted at the end of a very sluggish period. Given the lack of direct capacity measures, the capacity indexes are often inferred indirectly. Making such inferences when output growth has been particularly slow and utilization rates are relatively low has the danger of yielding underestimates of capacity and its growth. Yet, an alternative measure of capacity utilization reported by the National Association of Purchasing Management, Inc., currently shows higher rates of utilization in manufacturing and, implicitly, a lower index of capacity.

TECHNICAL ASPECTS OF THE REVISION

In some respects, the revised production indexes look much the same as before. Most noticeably, the 1987 weight and comparison base has been maintained, and the structure of the major market and industry groups has remained basically the same. However, the updating of monthly data and the introduction of comprehensive annual data from the ASM have significantly affected the level and the movement of the indexes.

Many smaller changes were also made in the revision. The structure was modified to conform to the 1987 Standard Industrial Classification (SIC). Some sources of data were lost, and so some series based on those sources were dropped or combined with other series. However, the introduction of new series increased the number of individual series to 255. Monthly indicators for other series also changed. For example, some series that had been based on an industry's monthly purchases of electricity (kilowatt hours) became based on monthly

3. A methodology of the capacity and utilization measures is found in Richard D. Raddock, "Recent Developments in Industrial Capacity and Utilization," *Federal Reserve Bulletin*, vol. 76 (June 1990), pp. 411–35, especially pp. 424ff. One of the key sources is the U.S. Bureau of the Census: "Survey of Plant Capacity," Current Industrial Report MQ-C1, for various years. This survey provides utilization rates, not capacity estimates, for manufacturing establishments at the four-digit SIC level.

4. Compound annual rates of growth in end-of-year capacity, by major industry group, 1966–92

Percent

Item	1966–92	1966–74	1974–82	1982–86	1986–92	Difference between revised and earlier rates for 1986–92
Total industry	**2.8**	**3.9**	**2.9**	**2.4**	**1.7**	**–.6**
Manufacturing	3.2	4.1	3.3	3.2	2.1	–.7
Primary processing	2.1	4.2	1.6	.4	1.3	–.5
Advanced processing	3.8	4.1	4.2	4.5	2.4	–.7
Durable	3.5	3.8	3.8	4.0	2.2	–.4
Lumber and products	1.7	3.1	.8	2.4	.5	–2.0
Furniture and fixtures	3.1	4.9	2.6	2.1	2.0	–.4
Stone, clay, and glass products	1.3	2.5	1.4	.6	.1	–.7
Primary metals	–.1	1.8	.2	–3.8	–.5	–.2
Iron and steel	–.9	.7	–.1	–5.9	–.7	.1
Raw steel	–1.1	.2	.0	–6.0	–1.0	–.3
Nonferrous	1.3	3.8	.7	–.3	–.1	–.6
Primary copper	–.4	1.2	–.7	–3.6	.0	–2.0
Primary aluminum	1.4	5.6	1.5	–5.6	.8	.2
Fabricated metal products	1.6	3.2	1.7	.1	.4	–.6
Industrial and commercial machinery and computer equipment	6.4	4.7	8.8	9.3	3.4	–.5
Electrical machinery	5.2	6.4	5.4	4.8	3.7	.1
Transportation equipment	2.7	3.0	2.0	3.5	2.7	.6
Motor vehicles and parts	3.2	4.6	1.8	2.5	3.7	2.1
Autos and light trucks[1]	...	...	...	5.7	1.8	.1
Aerospace and miscellaneous	2.1	1.3	2.1	4.2	1.8	–.8
Instruments	5.4	7.8	5.6	4.9	2.4	–2.7
Miscellaneous	2.1	4.9	.9	.0	1.6	–.7
Nondurable	2.9	4.5	2.5	2.1	1.9	–1.1
Foods	2.5	3.0	3.0	2.2	1.4	–1.1
Textile mill products	2.0	4.7	.8	.3	1.1	–.5
Apparel products	1.3	2.6	1.0	1.7	–.2	–2.0
Paper and products	2.7	4.1	1.9	2.2	2.4	.1
Pulp and paper	2.4	3.3	1.5	2.1	2.7	–.1
Printing and publishing	3.2	3.1	3.4	4.5	2.1	–3.1
Chemicals and products	3.9	7.1	2.9	1.1	3.0	–.3
Plastics materials	7.0	13.4	5.0	2.3	4.6	–3.2
Synthetic fibers	4.4	9.9	2.8	–.7	3.2	2.4
Petroleum products	1.6	4.5	1.8	–1.2	–.4	–.8
Rubber and plastics products	5.5	9.2	3.6	5.6	3.2	–.7
Leather and products	–3.2	–1.2	–3.8	–5.6	–3.1	–.4
Mining	.0	–.3	2.2	–.2	–2.2	–.4
Metal mining	1.4	.5	1.0	–2.0	5.5	–1.0
Coal	2.6	2.4	3.6	2.0	1.8	–.4
Oil and gas extraction	–.6	–1.2	2.5	–.3	–3.9	.0
Oil and gas well drilling	.7	–.8	17.4	–5.1	–12.8	–.3
Stone and earth minerals	.9	2.7	.2	–.1	.2	–3.3
Utilities	3.1	6.3	2.1	1.0	1.5	.2
Electric	4.2	8.2	3.3	1.8	2.0	.2
Gas	.3	2.6	–1.0	–1.5	.2	.0

1. Series began in 1977.

production-worker hours. Seasonal factors were recalculated.[4]

Typically, either monthly output or monthly input data are used to estimate individual production indexes. Monthly output or shipments in physical units from many private or government sources are the basis for 123 series that represent 36 percent of the total index. Input data constitute 74 production-worker-hour series (34 percent of

4. A table "Industry structure and series composition of industrial production: classification, value added weight, and description of series" is available with a diskette of historical data of industrial production, capacity, and capacity utilization from Publication Services, Board of Governors of the Federal Reserve System, Washington, DC 20551. A typed structure table may be obtained from the Industrial Output Section, Division of Research and Statistics.

5. Revised and earlier capacity utilization rates, by major industry group, 1987–92[1]

Percent of capacity, seasonally adjusted

Item	Revised				Earlier			
	1987–92 average	1988–89 high	1990–91 low	1992:Q4	1987–92 average	1988–89 high	1990–91 low	1992:Q4
Total industry	**81.7**	**84.8**	**78.3**	**80.7**	**81.8**	**85.0**	**78.4**	**79.3**
Manufacturing	81.0	85.1	76.6	79.6	81.3	85.1	77.2	78.2
Primary processing	84.1	89.1	77.9	82.7	84.4	89.0	77.9	82.2
Advanced processing	79.8	83.3	76.1	78.3	80.0	83.6	76.6	76.6
Durable	78.7	83.9	73.8	77.7	79.3	84.0	74.8	75.6
Lumber and products	86.7	93.3	76.8	87.6	83.1	91.2	72.9	80.1
Furniture and fixtures	80.9	86.8	71.7	79.8	82.8	88.3	74.5	76.0
Stone, clay, and glass products	79.0	83.7	71.0	77.7	79.3	86.4	70.8	74.6
Primary metals	82.5	92.9	74.3	81.2	82.9	91.6	73.6	82.5
Iron and steel	81.5	95.7	72.3	80.8	80.8	92.0	68.7	82.2
Raw steel	81.8	92.7	71.2	81.2	80.7	94.1	67.1	78.6
Nonferrous	83.9	88.9	75.9	81.8	86.3	95.0	81.1	83.0
Primary copper	79.4	85.9	73.6	87.1	81.9	97.9	68.8	89.6
Primary aluminum	95.8	100.4	97.3	97.8	97.2	103.5	97.7	99.3
Fabricated metal products	77.2	82.0	71.7	75.1	79.5	85.1	73.9	76.9
Industrial and commercial machinery and computer equipment	77.9	83.7	73.0	81.7	78.3	83.5	74.7	78.5
Electrical machinery	80.4	84.9	76.8	81.2	79.2	83.1	75.1	74.9
Transportation equipment	76.6	84.2	70.1	72.0	77.2	84.6	70.1	70.1
Motor vehicles and parts	72.3	84.5	57.9	72.1	75.0	85.5	58.1	75.3
Autos and light trucks	73.4	89.6	53.6	74.9	71.2	83.6	47.4	73.8
Aerospace and miscellaneous	81.0	88.3	78.1	72.0	79.2	86.2	72.3	65.5
Instruments	77.9	81.2	75.1	73.2	78.4	83.9	74.8	71.1
Miscellaneous	77.0	80.1	72.9	77.3	81.4	85.5	80.4	80.2
Nondurable	84.1	86.8	80.4	82.1	84.0	86.7	80.3	81.9
Foods	81.7	83.3	80.8	81.1	81.0	83.0	79.7	79.4
Textile mill products	87.8	92.1	78.7	90.1	88.1	91.2	80.2	89.1
Apparel products	80.2	84.2	74.6	78.6	79.3	84.2	71.5	73.9
Paper and products	91.1	94.9	86.0	88.4	91.4	95.8	86.5	88.8
Pulp and paper	93.7	98.1	90.2	91.0	93.3	97.7	87.2	91.8
Printing and publishing	85.2	92.3	78.4	77.2	85.6	90.4	81.2	78.3
Chemicals and products	82.2	85.9	78.5	81.4	81.8	86.8	77.9	81.7
Plastics materials	89.5	97.0	75.5	82.8	90.7	98.9	79.0	82.0
Synthetic fibers	89.8	99.7	77.3	86.8	86.3	94.5	72.5	83.0
Petroleum products	86.0	88.5	84.2	89.7	87.3	90.3	86.2	90.7
Rubber and plastics products	85.2	90.5	78.5	82.3	86.5	90.4	79.0	85.0
Leather and products	79.9	83.8	75.4	85.4	79.4	88.4	71.4	75.1
Mining	85.8	87.0	86.8	87.4	85.7	87.2	86.2	86.2
Metal mining	81.4	87.5	79.5	87.3	78.0	87.2	73.6	79.1
Coal	86.7	91.4	83.1	81.6	86.7	94.4	81.6	80.2
Oil and gas extraction	86.3	86.9	87.8	90.0	86.5	86.6	86.2	90.6
Oil and gas well drilling	54.0	60.7	54.0	65.0	53.5	58.8	51.2	62.0
Stone and earth minerals	83.9	90.0	77.6	79.5	85.2	94.3	76.1	73.5
Utilities	85.0	92.6	83.4	87.1	84.3	92.3	81.6	86.2
Electric	88.2	94.8	87.4	89.0	89.1	96.2	87.0	91.1
Gas	74.6	85.5	68.3	80.7	69.4	80.3	62.3	70.2

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

the total index) and 40 kilowatt-hour series (27 percent). Each of these types of monthly data has been updated or revised.

Quarterly production data in physical units have been introduced to maintain the representation of physical measures even though the Census Bureau and other sources have discontinued the monthly publication of some of these data. The quarterly production data are the basis for sixteen series that represent 2 percent of the total industrial production index. A cubic spline generally is used to interpolate monthly values from the quarterly figures.

Revised Federal Reserve indexes of electric power use by industry from 1986 were published in February 1993 and are incorporated in the new industrial production indexes for monthly components based on the use of electricity. The Federal

Reserve Banks conduct a voluntary monthly survey of electric utilities, which report sales to industries classified by SIC codes; the respondents also include some industrial cogenerators. The revision reflects conversion of the power series since January 1987 to the 1987 SIC and the incorporation of more comprehensive annual and monthly source data, where available. New power series include indexes for converted paper products (SIC 267) and plastics products (SIC 308) and exclude indexes for SIC 264, 266, and 307, which no longer exist in the 1987 SIC.

The U.S. Bureau of Labor Statistics (BLS) revises its monthly survey data to new levels based on the number of employees covered by unemployment insurance in March. The last available benchmark was for March 1991. In the estimation of the Federal Reserve production indexes, the monthly worker hours (whether or not benchmarked by BLS) are further adjusted to annual production levels derived largely from the ASM.

Estimates of real output derived from the ASM for 1988 through 1991 determine most of the revised annual indexes of production in manufacturing; the Census of Manufactures, a more complete count of the universe, provides indexes for 1982 and 1987 and will do so for 1992. Historically, the ASM figures tend to show less growth than do those from the census. Also, the introduction of a new panel of respondents in 1989 apparently caused an understatement of growth in that year. Consequently, the estimates of output derived from the ASM were adjusted upward by ½ percent in 1988 and about 1½ percent in the years from 1989 to 1991. As shown by table 6, the Federal Reserve's index of manufacturing output has been revised downward to levels close to the adjusted levels derived from the ASM.[5]

Some of the individual production indexes are benchmarked to annual data that are expressed in physical volumes, such as tons of steel or gallons of gasoline, rather than to deflated output figures derived from the ASM. This alternative form of data accounts for some slight difference between the Federal Reserve and ASM-based indexes of output.

Cyclical movements in productivity are used in estimating those monthly indexes based on production-worker hours or kilowatt hours of electricity used by industrial plants. Through 1991, the movements in output per hour can be inferred by adjusting the monthly hours data to more comprehensive annual output measures, such as those developed from the ASM figures. Given the lack of such annual output data since 1991, the cyclical rebound in productivity since then must be estimated from other information such as (1) the movements of output–input ratios in previous cyclical recoveries and (2) the productivity changes shown in series based on monthly output data in physical units. Other indicators of current production, such as manufacturers' shipments and inventories in constant dollars, are used to corroborate the current trends in output–input ratios.

Because the revised industrial production indexes follow the 1987 SIC, a number of changes—including splits or recombinations of series—occurred. One change involved the shift of some military equipment from SIC 36, Electrical Machinery, into SIC 38, Instruments; this shift lowered the growth of this relatively small industry group more noticeably than it raised the growth of the larger electrical machinery group.[6]

6. Manufacturing output
Index, 1987 average = 100

Year	Federal Reserve		Annual Survey of Manufactures	
	Earlier	Revised	Unadjusted	Adjusted
1988	105.8	104.7	104.5	104.9
1989	108.9	106.4	104.8	106.4
1990	109.9	106.1	104.9	106.1
1991	107.5	103.7	102.1	103.7
1992	109.7	106.9	n.a.	n.a.

5. Gross output at the four-digit SIC industry level equals value added plus the cost of materials. The current dollar figures from the ASM are deflated, for the most part, by the BLS's producer price indexes. The main exception is the hedonic price index used to deflate computers. The deflated four-digit industry output figures are indexed on a 1987 base, weighted with proportions based on value added in 1987 reported in the Census of Manufactures, and aggregated. This is essentially the same method of aggregation used to combine the Federal Reserve's indexes of production.

6. More specifically, search, detection, navigation, and guidance systems and equipment, part of old SIC 3662, were transferred to part of new SIC 3812; hydrological, hydrographic, meteorological, and geophysical equipment, (also part of old SIC 3662) to part of SIC 3829, Measuring and Controlling Devices, not elsewhere classified; and X-ray apparatus and tubes (old SIC 3693) to SIC 3844,5.

The separate series on government-owned and -operated army, air force, and navy ordnance facilities and navy shipyards were eliminated because the ASM and the Census of Manufactures provide no annual data for benchmarking the available employment data.

In calculating new seasonal adjustment factors, the staff applied the X-11ARIMA program of Statistics Canada to data through October 1992. Seasonal factors were forecast twelve months ahead to October 1993. In cases in which cyclical movements appeared to distort seasonal factors, some original values were replaced with maximum likelihood estimates of more typical values before running the X-11ARIMA program. A prior adjustment for Easter, which may fall in March or April, was also made for some physical product or kilowatt-hour series. The Easter adjustment factor was later combined with the factor computed by the X-11 to get the final seasonal factor. For production-worker hours, some prior adjustment may have been required when holidays, specifically Easter and Labor Day, occurred during the pay period containing the survey week for the BLS employment survey. □

Availability of Output, Capacity, and Utilization Estimates

Current estimates of output, capacity, and utilization are published first in the Federal Reserve statistical release G.17(419), "Industrial Production and Capacity Utilization," and then in the statistical tables of the *Federal Reserve Bulletin*. All data shown in the release will be available on the day of issue through the Department of Commerce's online Economic Bulletin Board (202–377–3870).

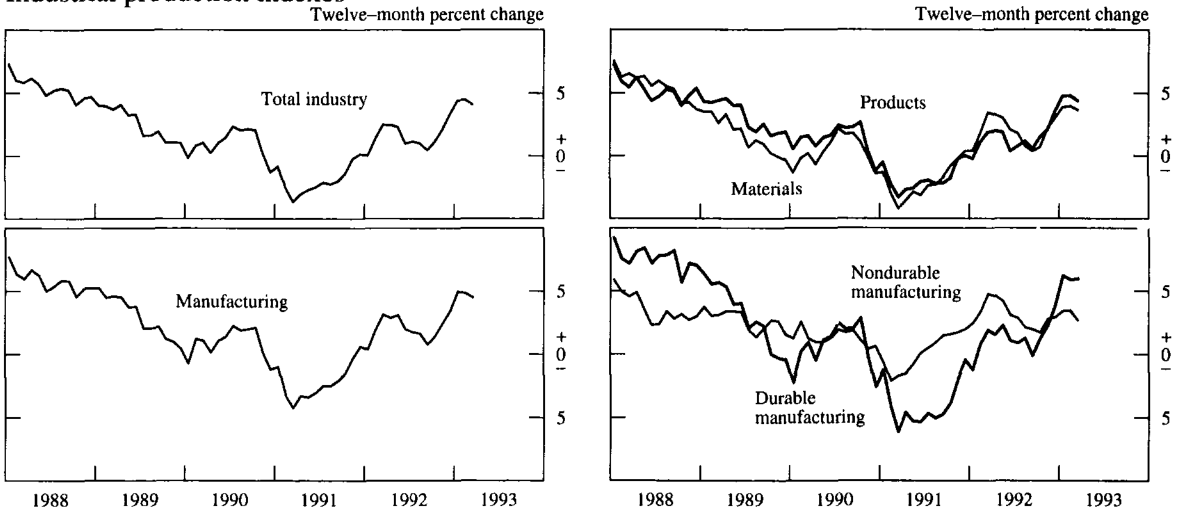
Diskettes containing either historical data (through 1985) or revised data (from 1986 to those most recently published in the G.17 statistical release) are available from Publications Services, Board of Governors of the Federal Reserve System, Washington, DC 20551 (202–452–3245). Estimates for total industry and manufacturing, January 1981 to the latest available month in 1993, are shown in tables 5A and 5B of the G.17 statistical release. Hard copy of the revised estimates of series shown in the G.17 release is available upon written request to Industrial Output Section, Mail Stop 82, Division of Research and Statistics, Federal Reserve Board, Washington, DC 20551. A table "Industry structure and series composition of industrial production: classification, value added weight, and description of series" is also available upon written request to the Industrial Output Section. A similar table is available for the capacity indexes.

Industrial Production and Capacity Utilization for March 1993

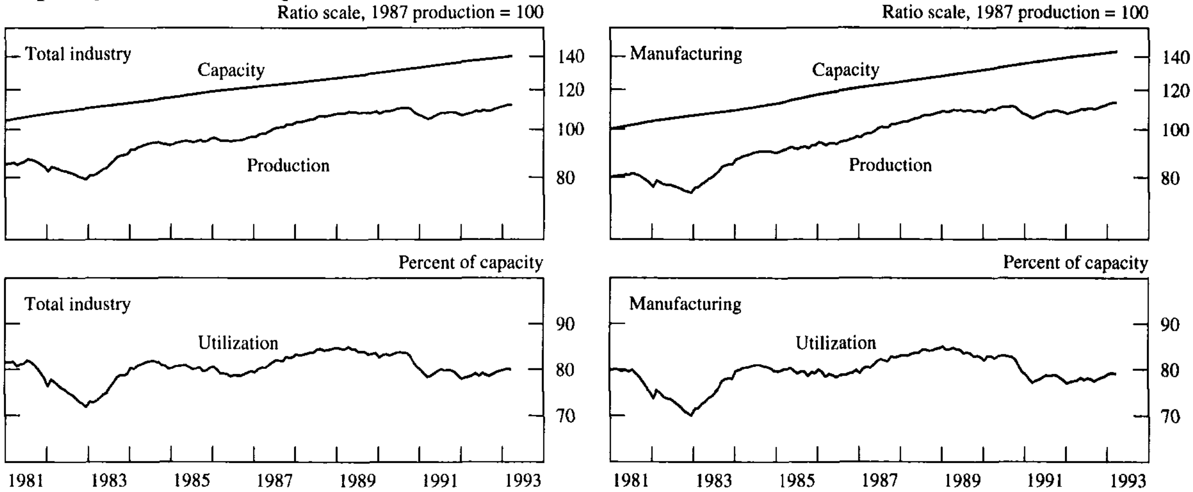
The revised data described in the previous article were released for publication on May 14. What follows is the summary of the earlier, unrevised indexes released on April 15.

Industrial production was unchanged in March, after having shown strong gains since October. In part, the slowdown reflects the loss of output after the severe mid-March storm along the East Coast;

Industrial production indexes



Capacity and industrial production



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

Industrial production and capacity utilization[1]

Category	Industrial production, index, 1987 = 100								
	1992	1993			Percentage change				
					1992[2]	1993[2]			Mar. 1992 to Mar. 1993
	Dec.r	Jan.r	Feb.r	Mar.p	Dec.r	Jan.r	Feb.r	Mar.p	
Total	**110.0**	**111.4**	**112.0**	**112.0**	**.5**	**.3**	**.6**	**.0**	**4.1**
Previous estimate	110.8	111.3	111.8	. . .	.4	.5	.4	. . .	. . .
Major market groups									
Products, total[3]	112.3	112.7	113.3	113.3	.9	.3	.5	.0	4.4
Consumer goods	113.4	113.4	114.2	114.0	.7	.0	.7	–.1	4.3
Business equipment	130.2	131.8	133.0	133.4	1.9	1.3	.8	.4	9.8
Construction supplies	98.4	99.5	100.7	100.5	–.5	1.2	1.1	–.2	3.9
Materials	109.0	109.3	110.0	110.0	.0	.3	.6	.0	3.7
Major industry groups									
Manufacturing	111.8	112.8	113.3	113.4	.5	.8	.5	.1	4.5
Durable	111.2	112.4	113.3	113.4	.9	1.1	.7	.1	6.0
Nondurable	112.7	113.2	113.4	113.3	.0	.4	.1	.0	2.7
Mining	98.5	98.0	95.1	94.0	–.9	–.5	–3.0	–1.2	–3.6
Utilities	114.2	110.1	114.6	115.6	1.7	–3.6	4.1	.8	7.3

Category	Capacity utilization, percent								MEMO Capacity, percentage change, Mar. 1992 to Mar. 1993
	Average, 1967–92	Low, 1982	High, 1988–89	1992		1993			
				Mar.	Dec.r	Jan.r	Feb.r	Mar.p	
Total	**82.0**	**71.8**	**85.0**	**78.4**	**79.6**	**79.8**	**80.1**	**79.9**	**2.1**
Manufacturing	81.3	70.0	85.1	77.5	78.5	79.0	79.2	79.1	2.4
Advanced processing	80.8	71.4	83.6	76.1	77.0	77.4	77.5	77.3	2.9
Primary processing	82.3	66.8	89.0	80.8	82.2	83.0	83.5	83.5	1.0
Mining	87.4	80.6	87.2	84.9	85.8	85.4	82.8	81.8	.1
Utilities	86.6	76.2	92.3	83.1	87.5	84.3	87.7	88.3	.9

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

available evidence suggests that these losses were only partly made up by month-end. The industries most affected by the storm include textiles, steel, furniture, tobacco, and coal mining, although the exact magnitudes of these effects are tentative. Overall, the output of consumer goods, intermediate products, and materials were little changed in March; the production of business equipment increased 0.4 percent after an average gain of more than 1 percent a month since October. At 112.0 percent of its 1987 average, total industrial production was 4.1 percent above its year-ago level. Total industrial capacity utilization declined 0.2 percentage point, to 79.9 percent.

Within consumer goods industries, declines in the production of motor vehicles and gasoline were mostly offset by gains in the output of appliances and residential utilities. The deceleration in business equipment reflected a small decline in the production of industrial equipment, which had grown more than 0.5 percent a month since October, and a slight easing in the pace of production of information-processing equipment, which had grown at a rapid pace since December. Cutbacks in the output of defense and space equipment continue to weaken the industrial sector: During the past few months, production has fallen an average of more than ½ percent a month. Production of construction supplies slipped back slightly after increasing more than 1 percent in each of the preceding two months. An increase in the output of nondurable materials was offset by a decline in energy materials. Much of the increase in nondurables reflected a pickup in paper production.

Manufacturing output edged up 0.1 percent as production of durables moved up slightly. Most of the impetus within durables came from the machinery industries, while production in most other industries either rose only slightly or declined. The largest decline was in transportation equipment, where aircraft manufacturing continued to contract; the output of motor vehicles and parts also decreased for a second straight month. Within nondurables, paper production increased notably, but the output of petroleum, textile, and tobacco products dropped. Capacity utilization in manufacturing edged down 0.1 percentage point, to 79.1 percent.

Mining output declined, as continued weakness in oil and gas well drilling augmented the cutback in coal mining. The output of utilities picked up a little with the persistence of relatively cool temperatures. □

Statement to the Congress

Statement by John P. LaWare, Member, Board of Governors of the Federal Reserve System, before the Subcommittee on Economic Growth and Credit Formation of the Committee on Banking, Finance and Urban Affairs, U.S. House of Representatives, April 2, 1993

I appreciate the subcommittee's invitation to discuss some of the factors influencing recent national and regional trends in bank lending as well as changes in the composition of banks' balance sheets. Traditionally, commercial banks have been central in financing economic activity. In recent years, their relative importance has diminished somewhat, as other financial intermediaries and direct market sources of funds have tended to substitute for bank credit. Nevertheless, commercial banks remain the major source of short- and intermediate-term business credit—and the dominant source of small business financing—and thus continue to have a key function in the financial system. The recent weakness in the growth of bank loans has raised the issue of how well banks have been playing their intermediation role and what their future contributions are likely to be. In view of the importance of these and related issues, I would like to commend the committee for holding these hearings.

The weakness of bank lending to businesses over the past couple of years is in some part a continuation of the trend toward a smaller banking role to which I just alluded. A much more important factor, however, has been a considerable falloff in the demand for bank credit. This decline in demand has been mainly associated with a sharp reversal of some of the balance sheet trends that developed during the 1980s. These efforts to strengthen balance sheets have had a pronounced effect on the demand for bank credit from both the household and, especially, the business sectors. A related need by banks to repair their own balance sheets has led to a tightening of banks' lending standards and terms even as demands for their loans were dropping. The resulting pattern of weak lending has been apparent across much of the United States, but the timing and severity of the slowdown have varied somewhat by region. In the remainder of my remarks, I will expand on this brief summary of recent developments.

As the data that the banking agencies have assembled for the subcommittee indicate, the pace of expansion of the assets and deposits of depository institutions has been quite slow or negative in the past few years after a considerable advance in the 1980s. The growth of loans, particularly business loans, has been sluggish, although banks and other depositories have acquired large volumes of U.S. government and agency securities.

The pattern of bank lending and the condition of banks have not been uniform across the United States and have mirrored the unevenness of economic developments. Perhaps the New England area provides the best-known regional aspect to the credit crunch. The boom in the 1980s was unusually strong in this region, particularly with respect to real estate, and the fall in the 1990s was commensurately sharp. The experience in New England points up the interconnections between the real and financial economies: As the New England economy softened and real estate prices stopped rising and began to fall, the quality of bank portfolios deteriorated rapidly, causing current and prospective declines in bank capital and generating a need to constrain lending. Of course, as the economy contracted, loan demand also fell. But the drop in loans on the books of New England banks doubtless was sharper than would have been the case had these banks felt better capitalized. As banks were intent on quickly improving capital ratios and reducing their exposure to further loss, some creditworthy borrowers appear to have been denied credit. Such problems have surfaced in other parts of the United States as well.

The regional breakdown of the banking data indicates that commercial and industrial loans have declined in the past few years in all parts of the United States but particularly in the West, Southwest, and Northeast. These areas, of course, have had pronounced economic difficulties that likely developed independently of banking conditions. In every region, construction loans also have contracted substantially. Other loan categories show more variation, however. For example, residential real estate loans expanded in the central, midwestern, and southwestern regions but contracted in the Northeast and the West in the 1990–92 period. Even commercial real estate credit exhibited strength in some areas, such as the central and midwestern regions but declined in the Southwest and on the coasts. Total lending has been weakest in the Northeast, followed by the Southwest and the West.

There are several reasons for weak loan growth. I will begin with the most important reasons: Households and businesses have opted to reverse the patterns of spending, investing, and borrowing that dominated the 1980s. As you are well aware, that decade was one in which households, businesses, and, of course, the federal government very substantially increased their use of debt. Households rapidly added to their mortgage and other loan liabilities. Businesses simultaneously acquired a very heavy debt burden. Their borrowing was in considerable part related to an unprecedented substitution of debt for equity, much of it associated with mergers, takeovers, or defenses against takeovers. During the decade ending in 1989, household debt rose at an average annual rate of about 11 percent, and growth of business debt over this period averaged only a bit less, 10 percent. The debt growth of these sectors exceeded the 8 percent average rate of expansion of nominal gross domestic product (GDP) over this period. This extraordinary exercise in leveraging by the business and household sectors was financed in no small part by banks. For example, business and consumer loans at banks both expanded at average annual rates of about 8 percent in the 1980s; for bank mortgage holdings, annual growth averaged 12 percent.

When some of the assumptions upon which these trends were based—especially that inflation rates would continue unabated—proved incorrect, pressures to reverse the debt buildup and leveraging of the 1980s began to emerge. In particular, a collapse in commercial real estate undermined the assumption that this market provided a good investment vehicle for borrowers and sound collateral for lenders. When the economy began to exhibit recessionary behavior, businesses and households alike initiated efforts to reduce their debt burdens and strengthen their balance sheets.

These efforts have focused not only on reducing debt levels but also on substituting equity for debt, extending maturities to enhance liquidity, and refinancing existing debt to lower interest costs. Therefore, the decline in debt owed by the business sector has been particularly focused on shorter-term instruments, including bank loans. In part, these loans have been paid down with the proceeds of equity issuance. After seven years of contraction, net funds raised in equity markets by nonfinancial firms turned around in 1991, and firms have been issuing new equity at record rates in recent quarters. Bank loans also have been paid down with funds raised in bond markets. In addition, a great deal of bond issuance has been directed toward refinancing existing high-cost bonds at lower interest rates. This process has greatly reduced the debt-service burdens on the corporate sector and has left business balance sheets considerably strengthened.

It is fair to say, then, that much of the recent weakness in commercial and industrial loans is the result of vigorous efforts by businesses to improve the health of their balance sheets. At the same time, outlays to finance inventories and capital have been less than the volume of internal funds for nonfinancial corporations in the aggregate, further limiting firms' demands for bank or other credit.

Some of the recent weakness in commercial and industrial lending by banks appears to be a continuation of a longer-term downtrend in the relative importance of this type of business credit. Reasons for this slippage include increased competition from other sources of business credit, such as finance companies and the commercial paper market. The key role played by depressed demand in explaining the recent contraction in commercial and industrial loans is pointed up by the simultaneous marked weakness or outright declines in these competing sources of short-term credit to businesses.

The weakness in bank loans to the household sector also appears to be mainly a demand side phenomenon. The sluggishness in housing prices and construction activity, for example, has likely depressed demand for mortgage credit, although the decline in home prices was nowhere near as severe as for commercial real estate. Perhaps more important, employment uncertainties that accompanied the economic downturn and the rather slow recovery caused households to take a more cautious approach to the use of debt. As a result, consumer credit outstanding contracted in 1991 and was little changed last year. In part, the anemic performance of consumer credit owed to paydowns using the proceeds of mortgages refinanced at rates that are well below consumer loan rates, particularly on an after-tax basis. In addition, weak consumer credit has been associated with the use of household financial assets, including bank deposits now yielding only 2 percent to 3 percent to pay down, or to limit, the growth of, loans.

As with businesses, these efforts, although depressing bank lending and the level of consumer debt, have contributed to a marked strengthening of household balance sheets. The use of deposits and other monetary assets to constrain household debt growth, incidentally, has contributed to the very weak performance of the broader measures of the money supply over the past two years. Thus, rather than being indicative of a restrictive monetary policy or a lack of adequate funding for the economy, slow money growth rather is the obverse of the rechanneling of credit flows out of banks and into capital markets—in large part via rapidly expanding bond and equity mutual funds.

These portfolio adjustments of households and businesses have been motivated largely, as I have suggested, by efforts to restore balance sheets that had gotten out of line in the 1980s. But the timing and pace of these restructuring activities have been related importantly to the very favorable trends we have seen in the equity and bond markets, trends that seem to have accelerated in the past few months. These developments, particularly the dramatic declines in longer-term interest rates, in turn, appear to owe heavily to the markets' perception that, at last, the federal government too is prepared to take meaningful steps toward putting its own financial house in order.

Although sluggish loan growth at banks appears attributable largely to weak demand, it is clear that banks' appetite for loans has slackened over the past few years. The reason is that banks, too, found themselves in need of balance sheet restoration after the 1980s. This need was a result of the same realities their household and business customers were facing: The excessive loan liabilities of these latter groups had become the deteriorating loan assets of banks. The impact of these asset-quality problems on bank lending policies was intensified by increases in minimum acceptable capital ratios required both by regulators and by market forces.

Our periodic surveys of bank lending officers confirm that a distinct shift toward tighter standards for approving loan applications as well as stiffer lending terms began several years ago. Greater stringency was most notable with respect to commercial real estate lending, but it was quite marked as well for business lending. The tighter terms have included lower ceilings on the size of credit lines offered, increases in the cost of these lines, and additional collateral requirements. Also, the relative cost of bank loans, as measured by the unusually wide spread between the prime rate and banks' cost of funds, is high.

Although banks apparently ceased tightening in 1991, there has been little evidence of easing. In and of themselves, tighter lending standards and wider lending spreads in a time of an economic recession are not unusual. But the economy has been expanding now for two years, and the extended bout of stringency stands in some contrast to this pattern of economic growth. Besides suggesting the extent of needed balance sheet restructuring by banks, this prolonged period of adjustment may also reflect the increased costs of financial intermediation resulting from recent banking legislation.

With demand for their loans weak, banks have bid for deposits unenthusiastically. Nevertheless, deposit inflows have exceeded banks' funding needs, and, partly to accommodate their deposit customers, banks have purchased securities in volume. This phenomenon is one in which this subcommittee has expressed an interest. Historically speaking, the ratio of security holdings to loans at banks is not at a particularly high level. Indeed, it was much higher in the period from the end of World War II to the early 1960s. Nor is the increase in the ratio over the past few years surprising because it typically rises in periods of economic weakness. Nevertheless, some observers have blamed the recent shift from lending to acquisitions of government securities on the Basle risk-based capital standards.

As you know, banks must maintain minimum levels of two separate measures of capital: the ratio of equity capital to assets, a standard and traditional measure of leverage, and more recently, the ratios of two measures of capital to risk-adjusted assets. The latter requirements are the capital standards associated with the Basle Accord. They formally recognize what has long been known and understood—if not always acted upon—by bankers as well as their supervisors, namely that the amount of capital backing banks' assets ought to be related to the riskiness of those assets.

At first glance, the Basle Accord would appear to have had an important causative role in recent changes in banks' portfolio composition away from loans and toward securities. This interpretation would seem to follow from the observation that, in the period leading up to the full implementation of these standards in December 1992, banks acquired substantial amounts of U.S. Treasury and agency securities, which have low or zero weights in computing risk-based capital ratios and registered corresponding declines in the portfolio shares of full-risk-weight loans. Because the purpose of the risk-based capital requirements was to better align risks with capital, it would be surprising if their introduction did not have some impact on banks' portfolio composition. For the preponderance of banks, however, considerable evidence suggests that the recent trend toward increased securities holdings much more reflects lackluster loan demand as described above than efforts to boost risk-based capital ratios.

First, during this period most banks already met capital standards and thus were under no regulatory pressure to realign their portfolio. In addition, precisely the better capitalized banks in recent years have been acquiring the bulk of liquid Treasury and agency securities. This pattern, in turn, seems to reflect that it has been the banks with high risk-based capital ratios that also have had relatively high leverage ratios and have been most able to grow and accommodate deposit inflows. In an environment of depressed loan demand, deposit inflows were deployed to available assets, largely securities. A similar portfolio pattern of weak loan growth and strong security acquisitions has developed at credit unions—institutions not subject to the Basle Accord. As loan demand revives, the high levels of securities holdings at banks and other depository institutions likely will be drawn down as they were in numerous other cyclical upturns.

Another important factor has been the development of the market for mortgage-backed securities, especially collateralized mortgage obligations (CMOs). The CMO market makes available mortgage-backed instruments that are more attractive to banks than standard mortgage pass-through securities because the effective maturities of some CMO tranches better match those of banks' deposit liabilities and thus serve to limit interest rate risk. Indeed, most of the growth in mortgage-related securities since 1990 has been in the form of CMOs, and acquisitions of government-backed or guaranteed mortgage-related securities have accounted for 45 percent of all purchases of U.S. government and agency securities over this period. In part, acquisitions of mortgage securities can be viewed as substituting for state and local bonds, which have run off since late 1986, when the tax-advantaged status of most of these instruments to banks was ended. Of course, bank purchases of mortgage-backed securities provide credit to mortgage markets just as do acquisitions of mortgages themselves.

Even though the Basle Accord does not seem to explain the recent trend toward securities acquisition as currently structured, it does not adequately address the issue of interest rate risk that is potentially raised in banks' holdings of securities. Our examiners do, of course, take interest rate risk into account when evaluating banks. To provide further guidance in this area to banks and examiners and to respond to requirements of the Federal Deposit Insurance Corporation Improvement Act of 1991 (FDICIA), the Board has developed a proposal for measuring interest rate risk in the context of the Basle Accord and earlier this week approved its publication for public comment.

The steps that banks have taken in recent years to rebuild their balance sheets have been considerable and may well augur an increase in the availability of bank credit. Banks are very liquid, and lending rates relative to funding costs appear quite favorable, although banks must now cover expenses associated with recent legislation that were not present earlier. Reflecting wider lending margins and banks' efforts of recent years to control costs, bank profits last year reached record levels. Capital markets, meanwhile, have improved markedly, and banks took full advantage of these conditions by issuing a record volume of capital last year. As a result of the strong growth of capital, the share of loans in the banking system at well-capitalized banks by the end of last year climbed past 85 percent, and less than 1 percent was at less than adequately capitalized banks. Bank asset quality also has improved, as delinquency rates, while still high, have headed down.

These developments suggest that banks have completed much of the adjustment necessary to attain comfortable balance sheets. Banks seem to be ready to lend when demand picks up. Indeed, there have been some tentative signs in recent months of a pickup in bank lending and a slowing in their acquisitions of securities. As funding conditions in capital markets have generally remained very favorable, business firms have continued to raise substantial volumes of funds there, and loan growth at larger banks has remained very weak. At smaller banks as a group, however, loan runoffs have ceased, and some growth has developed.

The administration's initiatives on credit availability recently announced by the Federal Reserve and the other banking agencies should provide some help in stimulating loan growth, particularly for smaller borrowers. The already announced policy that would create for stronger banks a basket of loans to small and medium-sized businesses and farms for which documentation would not be reviewed by the examiner should help quite a lot. I also anticipate policy proposals that would reduce the burden of real estate appraisal requirements for most credit to smaller borrowers to be announced shortly. These changes will be within the FDICIA framework and are designed not to affect adversely the safety and soundness of banks and thrift institutions but are expected to reduce costs and lags in the small- and medium-sized business loan market. Other steps under consideration that would lower the cost and burden of the examination process are—as announced in mid-March—under active review by the banking agencies.

To sum up, the past few years have been a difficult time for our economy and our financial institutions. During this period, the consequences of the excesses of the past decade have become apparent, along with the need to make fundamental adjustments. These adjustments have left their imprint on financial flows, particularly in the form of a slower pace of overall credit growth and, especially, restrained balance sheet expansion by depository institutions. Although this process has been trying, we are likely to emerge from it with leaner and more efficient banking institutions that are able to resume a central role in financing a growing economy. □

Announcements

PUBLICATION OF DOCUMENTS ON MARKET RISK AND BANK CAPITAL BY THE BASLE COMMITTEE ON BANKING SUPERVISION

The Federal Reserve Board made available on April 30, 1993, for public comment several documents on market risk and bank capital developed by the Basle Committee on Banking Supervision under the auspices of the Bank for International Settlements. The public comment period extends through year-end 1993.

These consultative papers, which deal with supervisory treatment of netting arrangements, market risk, and interest rate risk, provide an overview of the work to date of the Basle Committee. While the matters addressed are in their preliminary stages and describe the current status of efforts that are of an ongoing nature, these efforts have potential implications for the evaluation of the capital adequacy of internationally active banks.

The Board released an overview, prepared by the Basle Committee, that summarizes each paper. Copies of the committee's papers can be obtained from Publications Services, Board of Governors of the Federal Reserve System, Washington, DC 20551. Comments should be sent to William Wiles, Secretary, at the same address.

Any concrete proposals for modifying the U.S. risk-based capital guidelines that eventually grow out of these preliminary consultative papers would be issued for comment before they are adopted for U.S. banking organizations.

ISSUANCE OF FINAL RULE AMENDING RISK-BASED CAPITAL GUIDELINES FOR STATE MEMBER BANKS AND BANK HOLDING COMPANIES

The Federal Reserve Board issued on April 20, 1993, a final rule amending the risk-based capital guidelines for state member banks and bank holding companies to lower from 100 percent to 50 percent the risk weight on loans to finance the construction of one- to four-family residences that have been presold.

The final rule amends the Board's Regulation H (Membership of State Banking Institutions in the Federal Reserve System) and Regulation Y (Bank Holding Companies and Change in Bank Control). It is effective April 26, 1993, and implements section 618(a) of the Resolution Trust Corporation Refinancing, Restructuring, and Improvement Act of 1991 (RTCRRIA).

REVISIONS TO THE STAFF COMMENTARY TO REGULATION Z

The Federal Reserve Board published on April 1, 1993, revisions to its staff commentary to Regulation Z (Truth in Lending). The rules are effective immediately, but compliance is optional until October 1, 1993.

The revisions address the interplay between the Truth in Lending rules on demand features and other federal rules dealing with credit extended to executive officers of depository institutions and provide more flexibility in complying with disclosure requirements. The revisions also offer creditors alternative methods of disclosing security interests in rescindable transactions.

REVISIONS TO THE LIST OF MARGINABLE OTC STOCKS AND TO THE LIST OF FOREIGN MARGIN STOCKS

The Federal Reserve Board published on April 23, 1993, a revised List of Marginable OTC Stocks that are subject to its margin regulations. Also published was the List of Foreign Margin Stocks for foreign equity securities that are subject to Regulation T (Credit by Brokers and Dealers). The lists are effective May 10, 1993, and supersede the previous lists that were effective February 8, 1993.

The Foreign List specifies those foreign equity securities that are eligible for margin treatment at broker–dealers. There are no additions, deletions, or changes to the Foreign List, which contains 302 foreign equity securities.

The changes that have been made to the OTC List, which now contains 3,259 stocks, are as follows:

• One hundred sixty-nine stocks have been included for the first time, 139 under National Market System (NMS) designation.
• Thirty-two stocks previously on the list have been removed for substantially failing to meet the requirements for continued listing.
• Thirty-eight stocks have been removed for reasons such as listing on a national securities exchange or involvement in an acquisition.

The OTC List is published by the Board for the information of lenders and the general public. It includes all over-the-counter securities designated by the Board pursuant to its established criteria as well as all OTC stocks designated as NMS securities for which transaction reports are required to be made pursuant to an effective transaction reporting plan. Additional OTC securities may be designated as NMS securities in the interim between the Board's quarterly publications and will be immediately marginable. The next publication of the Board's list is scheduled for August 1993.

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

RELEASE OF QUARTERLY TABLE OF FACTORS FOR SECTION 20 COMPANIES

The Federal Reserve Board released on April 12, 1993, its quarterly table of factors to adjust interest income to be used by section 20 companies that adopt the Board's alternative index revenue test to measure compliance with the 10 percent limit on bank-ineligible securities activities. The table of factors is available from Publications Services, Board of Governors of the Federal Reserve System, Washington, DC 20551. □

Legal Developments

FINAL RULE—AMENDMENTS TO REGULATIONS G, T, U AND X

The Board of Governors is amending 12 C.F.R. Parts 207, 220, 221 and 224, its Regulations G, T, U and X (Securities Credit Transactions; List of Marginable OTC Stocks; List of Foreign Margin Stocks). The List of Marginable OTC Stocks (OTC List) is composed of stocks traded over-the-counter (OTC) in the United States that have been determined by the Board of Governors of the Federal Reserve System to be subject to the margin requirements under certain Federal Reserve regulations. The List of Foreign Margin Stocks (Foreign List) is composed of foreign equity securities that have met the Board's eligibility criteria under Regulation T. The OTC List and the Foreign List are published four times a year by the Board. This document sets forth additions to or deletions from the previous Foreign List. Both Lists were last published on February 1, 1993, and effective on February 10, 1993.

Effective May 10, 1993, accordingly, pursuant to the authority of sections 7 and 23 of the Securities Exchange Act of 1934, as amended (15 U.S.C.78g and 78w), and in accordance with 12 C.F.R. 207.2(k) and 207.6 (Regulation G), 12 C.F.R. 220.2(u) and 220.17 (Regulation T), and 12 C.F.R. 221.2(j) and 221.7 (Regulation U), there is set forth below a listing of deletions from and additions to the OTC List.

Deletions from the List of Marginable OTC Stocks

Stocks Removed for Failing Continued Listing Requirements

Alpha 1 Biomedicals, Inc.: Class B, warrants (expire 06–30–95)
American Steel and Wire Corporation: $.20 par common
ARIX Corporation: $.01 par common

B.M.J. Financial Corporation: Rights (expire 03–15–93)

Calendar Capital, Inc.: $.01 par common
Cherokee Inc.: $.01 par common
Circle Fine Art Corporation: $.10 par common
Cortech, Inc.: Rights (expire 05–24–94)
Crest Industries, Inc.: $.01 par common

Everex Systems, Inc.: $.001 par common

First Federal Savings Bank (Puerto Rico): $1.00 par common
First Seismic Corporation: $.01 par common

Green Isle Environmental Services, Inc.: $.18-¾ par common

Hunter Environmental Services Inc.: $.10 par common

Imagine Films Entertainment, Inc.: Warrants (expire 07–30–93)

Jefferson National Bank (New York): $1.00 par common

Main Street & Main Inc.: Warrants (expire 09–04–96)
Millfeld Trading Co., Inc.: Class A; Warrants (expire 09–04–96)

NDE Environmental Corporation: $.001 par common
NESB Corporation: $.01 par common

Old Stone Corporation: $1.00 par common; Series B, 12% preferred

Pacific International Services Corp.: No par common
Pentair Inc.: $1.50 par cumulative convertible preferred

Ramtron Holdings Limited: American Depositary Receipts
Receptech Corporation: $.01 par common

Sage Analytics International Inc.: $.001 par common
Southern Educators Life Insurance Co.: $.50 par common

Tele-Communications Inc.: Series A; $1.00 par 12-⅞% cumulative compounding redeemable preferred

USBancorp Inc.: Series A; $2.125 par convertible preferred

Washington Mutual Savings Bank: $1.00 par preferred stock

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

Advo, Inc.: $.01 par common
Alden Press Company: $.01 par common
Allmerica Property & Casualty Companies, Inc.: $1.00 par capital
Applied Biosystems Inc.: No par common
Armstrong Pharmaceuticals, Inc.: $.08 par common

Clinical Homecare Ltd.: $.01 par common
Colonial Companies, Inc.: Class B, non-voting; $1.00 par common

DFSoutheastern, Inc.: $1.00 par common
Diversco, Inc.: $.01 par common
Dominion Bankshares Corporation: $5.00 par common

Elm Financial Services, Inc.: $.01 par common

Fedfirst Bancshares, Inc.: $.01 par common
First Chattanooga Financial Corp.: $1.00 par common
First Federal Savings & Loan Association of Fort Meyers: $.01 par common
First Federal Savings Bank (Utah): $1.00 par comon
Flagler Bank Corporation: Class A; $.10 par common
Fremont General Corporation: $1.00 par common

Genesis Health Ventures: $.02 par common
Glamis Gold Ltd.: No par common

Harmonia Bancorp Inc.: $.01 par common
Health Images, Inc.: $.01 par common
Heekin Can, Inc.: $.01 par common

Imagine Films Entertainment, Inc.: $.01 par common
Inforum, Inc.: $.01 par common
Integra Financial Corporation: $5.00 par common

KCS Energy, Inc.: $.01 par common

Lincoln Financial Corporation: No par common, $10.00 stated value

Mercantile Bancorporation, Inc.: $5.00 par common
Montclair Bancorp, Inc.: $.01 par common

National Savings Bank of Albany: $1.00 par common
New York Bancorp, Inc.: $.01 par common

Piccadilly Cafeterias, Inc.: No par common
Pioneer Savings Bank (Washington): $1.00 par common
Puget Sound Bancorp: $5.00 par common

Security Financial Holding Co.: $.01 par common
South Carolina Federal Corp. $1.00 par common

United American Healthcare Corp.: No par common

Valley National Corporation: $2.50 par common

Additions to the List of Marginable OTC Stocks

Airsensors, Inc.: $.001 par common; Warrants (expire 03-10-96)
Alamo Group, Inc.: $.10 par common
Alltrista Corporation: No par common
Amcor Limited: American Depositary Receipts
American Federal Bank, FSB (South Carolina): $1.00 par common
Amtrol Inc.: $.01 par common
Applied Signal Technology, Inc.: No par common
Argosy Gaming Company: $.01 par common
Arkansas Best Corporation: Series A; $.01 par cumulative convertible exchangeable preferred
Aseco Corporation: $.01 par common
Autoimmune Inc.: $.01 par common
Avecor Cardiovascular Inc.: $.01 par common
Avid Technology, Inc.: $.01 par common

Bancfirst Corporation (Oklahoma): $1.00 par common
Bancinsurance Corporation: No par common
BHC Financial, Inc.: $.001 par common
Biosurface Technology, Inc.: $.01 par common
BKC Semiconductor Incorporated: No par common
Boca Research, Inc.: $.01 par common
Brock Candy Company: Class A; $.01 par common
Brookstone, Inc.: $.001 par common
Bruno's, Inc.: Convertible debentures (due 09-01-2009)

Campo Electronics Appliances & Computers Inc.: $.10 par common
Cannon Express, Inc. Class B, non-voting, $.01 par common
Cascade Savings Bank, FSB (Washington): $1.00 par common
Casino America, Inc.: $.01 par common
Casino Data Systems: No par common
Catalytica, Inc.: $.001 par common
CB Bancshares, Inc. (Hawaii): $1.00 par common
Cell Genesys, Inc.: $.001 par common
Champion Industries, Inc.: $1.00 par common
Chesapeake Energy Corporation: $.01 par common
Chico's Fax, Inc.: $.01 par common
Cocensys, Inc.: $.001 par common
Commerce Bank (Virginia): $.01 par common

Community Bancorp, Inc. (New York): 7.25% Series B; cumulative convertible preferred
Community Health Computing Corporation: $.001 par common
Computer Outsourcing Services, Inc.: $.01 par common
Comverse Technology, Inc.: $.01 par common
Coral Gables Fedcorp, Inc.: $.01 par common
Cree Research, Inc.: $.01 par common
Cryolife, Inc.: $.01 par common
Cyberonics, Inc.: $.01 par common

Davidson & Associates, Inc.: $10.00 par common
DF&R Restaurants, Inc.: $.01 par common

Education Alternatives, Inc.: $.01 par common
Energy Biosystems Corporation: $.01 par common
Envirotest Systems, Inc.: Class A; $.01 par common
Equicredit Corporation: $.01 par common
Ethical Holdings Limited: American Depositary Receipts
Excel Technology, Inc.: Series 1; $.001 par redeemable convertible preferred; Warrants (expire 09–30–97)

Fastcomm Communications Corporation: $.01 par common
Fed One Savings Bank, F.S.B. (West Virginia): $.10 par common
Financial Institutions Insurance Group, Ltd.: $1.00 par common
First Family Bank, FSB (Florida): $1.00 par common
First Federal Savings Bank of Brunswick, Georgia: $1.00 par common
First Shenango Bancorp, Inc. (Pennsylvania): $.10 par common
First Southern Bancorp, Inc. (North Carolina): No par common
Fossil, Inc.: $.01 par common
Framingham Savings Bank (Massachusetts): Warrants (expire 01–31–96)
Funco, Inc.: $.01 par common

General Nutrition Companies, Inc.: $.01 par common
Gilat Satellite Networks Ltd.: Ordinary shares (NIS .01)
Global Industries, Ltd.: $.01 par common
Global Spill Management, Inc.: $.001 par common
Gupta Corporation: $.01 par common
Gymboree Corporation, The: $.001 par common

Hahn Automotive Warehouse, Inc.: $.01 par common
Hamilton Bancorp, Inc. (New York): $.01 par common
Hollywood Park, Inc.: Depositary shares

IEC Electronics Corp.: $.01 par common
Inco Homes Corporation: $.01 par common
Incomnet Inc.: No par common
Independence Federal Savings Bank (Washington, D.C.): $.01 par common
Independent Entertainment Group, Inc.: $.0001 par common
Intel Corporation: Warrants (expire 03–07–98)
Intelligent Surgical Lasers, Inc.: No par common
Intervisual Books, Inc.: No par common
Intuit Inc.: $.01 par common

Jackpot Enterprises, Inc.: Warrants (expire 01–31–96)
Jackson County Federal Bank, A Federal Savings Bank (Oregon): Series A; $5.00 non-cumulative convertible preferred
Jefferson Savings Bancorp, Inc. (Missouri): $.01 par common
JMAR Industries, Inc.: $.01 par common; Warrants (expire 02–17–98)

Kenfil Inc.: $.01 par common
Kinder-Care Learning Centers, Inc.: $.01 par common; Warrants (expire 04–01–97)

L.S.B. Bancshares, Inc. of South Carolina: $2.50 par common
Landstar System, Inc.: $.01 par common
Leasing Solutions, Inc.: No par common
Liberty Technologies, Inc.: $.01 par common
Lomak Petroleum, Inc.: $.01 par common
Lukens Medical Corporation: $.01 par common

Magal Security Systems, Ltd.: Ordinary shares
Marcum Natural Gas Services, Inc.: $.01 par common
Marion Capital Holdings, Inc.: No par common
Mason-Dixon Bancshares, Inc.: $10.00 par common
Mathsoft, Inc.: $.01 par common
McGaw, Inc.: $.001 par common
Medical Resources, Inc.: $.01 par common
Microchip Technology, Inc.: $.001 par common
Molecular Dynamics, Inc.: $.01 par common
Molten Metal Technology, Inc.: $.01 par common
Mothers Work, Inc.: $.01 par common

Nathan's Famous, Inc.: $.01 par common
National Convenience Stores Incorporated: $.01 par common
NFO Research, Inc.: $.01 par common
Norand Corporation: $.01 par common
Northrim Bank (Alaska): $1.00 par common
NSA International, Inc.: $.05 par common
Nubco, Inc.: No par common

Orchard Supply Hardware Stores Corporation: $.01 par common
Orthologic Corporation: $.005 par common

Pacific Sunwear of California, Inc.: $.01 par common
Parallan Computer, Inc.: No par common
Patrick Petroleum Company: Series B; $1.00 par convertible preferred
Penn Central Bancorp, Inc. (Pennsylvania): $1.25 par common
Pennsylvania Gas and Water: Depositary preferred shares
Peoples Bancorp, Inc. (Ohio): $1.00 par common
Perceptron, Inc.: $.01 par common
Petersburg Long Distance Inc.: No par common
Philip Environmental Inc.: No par common
Physician Corporation of America: $.01 par common
Physicians Health Services, Inc.: Class A, $.01 par common
Pikeville National Corporation: $5.00 par common
PMR Corporation: $.01 par common
Powersoft Corporation: $.00167 par common
Preferred Health Care Ltd.: $.01 par common
Proxima Corporation: $.001 par common

Quantum Corporation: 6-3/8% convertible subordinated debentures due 2002

Recovery Engineering, Inc.: $.01 par common
Regent Bancshares Corp. (Pennsylvania): Series A, $.10 par convertible preferred
Resound Corporation: $.01 par common
Rocky Shoes & Boots, Inc.: No par common
Roosevelt Financial Group, Inc.: 6-½% non-cumulative convertible preferred
Rouse Company, The: Series A, convertible preferred stock
RPM, Inc.: Liquid yield option notes due 2012

S3 Incorporated: $.001 par common
Sage Alerting Systems, Inc.: $.01 par common
Savoy Pictures Entertainment, Inc.: $.01 par common
Shaman Pharmaceuticals, Inc.: $.01 par common
Shared Technologies, Inc.: $.001 par common
Shoe Carnival, Inc.: $.01 par common
Southern Energy Homes, Inc.: $.0001 par common
Specialty Paperboard, Inc.: $.001 par common
Standard Management Corporation: No par common
Staples, Inc.: 5% convertible subordinated debentures
Stephan Company, The: $.01 par common
Sumitomo Bank of California, The: Depositary shares
Sun Bancorp, Inc. (Pennsylvania): $2.50 par common
Sunrise Bancorp, Inc. (New York): $.10 par common
Superconductor Technologies, Inc.: $10.00 par common
Suprema Specialties, Inc.: $.01 par common

Tecnomatix Technologies, Ltd.: Ordinary shares (NIS .01 par value)
Tencor Instruments: No par common
Tide West Oil Company: $.01 par common
Tricord Systems, Inc.: $.01 par common

U.S. Can Corporation: $.01 par common
Union Bankshares, Ltd. (Colorado): $.001 par common
Universal Electronics, Inc.: $.01 par common

Vical Incorporated: $.01 par common
Virginia First Savings Bank, F.S.B.: $1.00 par common

Wall Data Incorporated: No par common
Washington Homes, Inc.: $.01 par common
Watson Pharmaceuticals, Inc.: $.0033 par common
WCT Communications, Inc.: No par common
Wordstar International Corporation: Warrants (expire 03-26-96)

Final Rule—Amendment to Regulations H and Y

The Board of Governors is amending 12 C.F.R. Parts 208 and 225, its Regulations H and Y (Capital and Capital Adequacy Guidelines). The Board is amending the risk-based capital guidelines for bank holding companies and state member banks to lower from 100 percent to 50 percent the risk weight assigned to certain loans to builders to finance the construction of presold residential (one- to four-family) properties. This final rule implements section 618(a) of the Resolution Trust Corporation Refinancing, Restructuring, and Improvement Act of 1991.

Effective April 26, 1993, 12 C.F.R. Parts 208 and 225 are amended as follows:

Part 208—Membership of State Banking Institutions in the Federal Reserve System

1. The authority citation for part 208 is revised to read as follows:

Authority: Sections 9, 11(a), 11(c), 19, 21, 25, and 25(a) of the Federal Reserve Act, as amended (12 U.S.C. 321–338, 248(a), 248(c), 461, 481–486, 601, and 611, respectively); sections 4 and 13(j) of the Federal Deposit Insurance Act, as amended (12 U.S.C. 1814 and 1823(j), respectively); sections 7(a) of the International Banking Act of 1978 (12 U.S.C. 3105); sections 907–

910 of the International Lending Supervision Act of 1983 (12 U.S.C. 3906-3909); sections 2, 12(b), 12(g), 12(i), 15B(c)(5), 17, 17A, and 23 of the Securities Exchange Act of 1934 (15 U.S.C.78b, 78*l*(b), 78*l*(g), 78*l*(i), 78o-4(c)(5), 78q, 78q-1, and 78w, respectively); section 5155 of the Revised Statutes (12 U.S.C. 36) as amended by the McFadden Act of 1927; and sections 1101-1122 of the Financial Institutions Reform, Recover and Enforcement Act of 1989 (12 U.S.C. 3310 and 3331-3351); 12 U.S.C. 93a, 161, 1818, 3907, 3909, Sec. 618, Pub. L. 102–233, 105 Stat. 1761 (Resolution Trust Corporation Refinancing, Restructuring, and Improvement Act of 1991).

2. Appendix A to part 208 is amended by revising footnote 35 to read as follows:

APPENDIX A TO PART 208—[AMENDED]

* * * * *

III. Procedures for Computing Weighted-Risk Assets and Off-Balance-Sheet Items

* * * * *

C. Risk Weights

* * * * *

3. * * *[35]

Part 225—Bank Holding Companies and Change in Bank Control

1. The authority citation for part 225 is revised to read as follows:

Authority: 12 U.S.C. 1817(j)(13), 1818, 1831i, 1843(c)(8), 1844(b), 3106, 3108, 3907, 3909, 3310, and 3311-3351.

2. Appendix A to part 225 is amended by revising footnote 38 to read as follows:

APPENDIX A TO PART 225—[AMENDED]

* * * * *

III. Procedures for Computing Weighted-Risk Assets and Off-Balance-Sheet Items

* * * * *

C. Risk Weights

* * * * *

3. * * *[38]

FINAL RULE—AMENDMENT TO REGULATION O

The Board of Governors is amending 12 C.F.R. Part 215, its Regulation O (Loans to Executive Officers, Directors, and Principal Shareholders of Member Banks; Loans to Holding Companies and Affiliates), to implement recent amendments to section 22(h) of the Federal Reserve Act, contained in the Housing and Community Development Act of 1992. The final rule adopts three exceptions to the aggregate insider lending limit in Regulation O substantially as they were set forth in the Board's proposed rule. Additional exceptions suggested by commenters will be considered in future rulemaking.

Effective May 3, 1993, 12 C.F.R. Part 215 is amended as follows:

Part 215—Loans to Executive Officers, Directors, and Principal Shareholders of Member Banks

1. The authority citation for part 215 is revised to read as follows:

Authority: 12 U.S.C. 248(i), 375a, 375b(7), 1817 (k)(3) and 1972(2)(F)(vi), Pub. L. 102–550, 106 Stat. 3895 (1992).

35. Loans that qualify as loans secured by one- to four-family residential properties are listed in the instructions to the commercial bank call report. In addition, for risk-based capital purposes, loans secured by one- to four-family residential properties include loans to builders with substantial project equity for the construction of one- to four-family residences that have been presold under firm contracts to purchasers who have obtained firm commitments for permanent qualifying mortgage loans and have made substantial earnest money deposits.

38. Loans that qualify as loans secured by one- to four-family residential properties are listed in the instructions to the FR Y-9C Report. In addition, for risk-based capital purchases, loans secured by one- to four-family residential properties include loans to builders with substantial project equity for the construction of one- to four-family residences that have been presold under firm contracts to purchasers who have obtained firm commitments for permanent qualifying mortgage loans and have made substantial earnest money deposits.

Subpart A—Loans by Member Banks to Their Executive Officers, Directors, and Principal Shareholders

2. Section 215.4 is amended by adding a new paragraph (d)(3) to read as follows:

Section 215.4—General prohibitions.

* * * * *

(d) * * *

(3) *Exceptions.* The general limit specified in paragraph (d)(1) of this section does not apply to the following:

(i) Extensions of credit secured by a perfected security interest in bonds, notes, certificates of indebtedness, or Treasury bills of the United States or in other such obligations fully guaranteed as to principal and interest by the United States;

(ii) Extensions of credit to or secured by unconditional takeout commitments or guarantees of any department, agency, bureau, board, commission or establishment of the United States or any corporation wholly owned directly or indirectly by the United States; or

(iii) Extensions of credit secured by a perfected security interest in a segregated deposit account in the lending bank.

(iv) The exceptions in this paragraph (d)(3) apply only to the amount of such extensions of credit that are secured in the manner described herein.

FINAL RULE—AMENDMENT TO RULES REGARDING DELEGATION OF AUTHORITY

The Board of Governors is amending 12 C.F.R. Part 265, its Rules Regarding Delegation of Authority, in order to delegate to the Secretary of the Board, and to repeal with respect to the General Counsel of the Board acting with the concurrence of the Director of the Division of Banking Supervision and Regulation, the authority to approve certain transactions requiring the approval of the Board pursuant to section 5(d)(3) of the Federal Deposit Insurance Act (FDI Act). This amendment will align the Board's procedures for approving "Oakar" transactions with those procedures used to approve other types of applications involving a director interlock with a Federal Reserve Bank.

Effective May 3, 1993, 12 C.F.R. Part 265 is amended as follows:

Part 265—Rules Regarding Delegation of Authority

1. The authority citation for part 265 is revised to read as follows:

Authority: 12 U.S.C. 248(i) and (k).

2. Section 265.5 is amended by adding paragraph (c)(3) to read as follows:

Section 265.5—Functions delegated to Secretary of the Board.

* * * * *

(c) * * *

(3) *Application approval under section 5(d)(3) of the FDI Act.* To approve applications pursuant to section 5(d)(3) of the Federal Deposit Insurance Act (12 U.S.C. 1815(d)(3)), in those cases in which the appropriate Federal Reserve Bank concludes that, because of unusual considerations, or for other good cause, it should not take action.

3. In section 265.6, paragraph (c)(5) is removed.

ORDERS ISSUED UNDER BANK HOLDING COMPANY ACT

Orders Issued Under Section 3 of the Bank Holding Company Act

First Fidelity Bancorporation
Lawrenceville, New Jersey

Banco Santander, S.A.
Madrid, Spain

Order Approving the Acquisition of a Bank

First Fidelity Bancorporation, Lawrenceville, New Jersey ("First Fidelity"), a bank holding company within the meaning of the Bank Holding Company Act ("BHC Act"), has applied under section 3 of the BHC Act (12 U.S.C. § 1842) to acquire Northeast Bancorp, Inc., New Haven, Connecticut ("Northeast"), and thereby indirectly acquire Union Trust Company, Stamford, Connecticut ("Union Trust"), a state nonmember bank.[1] Banco Santander, S.A., Madrid, Spain

1. The proposal is structured as a merger of First Fidelity's wholly owned subsidiary, FFB Newco, Inc. ("Newco"), with and into Northeast pursuant to alternative plans of merger. The first plan, which would be implemented if the merger is approved by both classes

("Santander"), which controls First Fidelity within the meaning of the BHC Act,[2] also has applied under section 3 of the BHC Act to acquire Northeast and Union Trust.

Notice of the applications, affording interested persons an opportunity to submit comments, has been published (58 *Federal Register* 4171, 12,038 (1993)). 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 section 3(c) of the BHC Act.

First Fidelity, with total consolidated assets of approximately $31.5 billion, is the largest commercial banking organization in New Jersey, controlling 22.2 percent of commercial bank deposits in the state.[3] First Fidelity operates six subsidiary banks in New Jersey, Pennsylvania, and New York,[4] and engages through its subsidiaries in a broad range of banking and permissible nonbanking activities. Santander, with total consolidated assets of approximately $60.3 billion, is the fifth largest banking organization in Spain and the 95th largest banking organization in the world.[5] In the United States, Santander operates a branch in New York, New York, and an agency and an Edge corporation in Miami, Florida.[6] Northeast, with total consolidated assets of approximately $2.7 billion, is the third largest commercial banking organization in Connecticut, controlling 9.9 percent of commercial bank deposits in the state.

Douglas Amendment Analysis

Section 3(d) of the BHC Act, the Douglas Amendment, prohibits the Board from approving an application by a bank holding company to acquire, directly or indirectly, any voting shares of, or interest in, any bank located outside the state in which the operations of the bank holding company's bank subsidiaries are principally conducted ("home state"), unless the acquisition "is specifically authorized by the statute laws of the State in which such bank is located, by language to that effect and not merely by implication."[7] For purposes of the Douglas Amendment, First Fidelity's home state is New Jersey.[8]

In order to approve these applications, the Board must determine that, under Connecticut law, a Connecticut bank and bank holding company may be acquired by an out-of-state bank holding company. The statute laws of Connecticut expressly authorize the acquisition of a bank located in Connecticut by an out-of-state domestic bank holding company, if the second state authorizes the acquisition of a bank in that state by a Connecticut bank holding company on a reciprocal basis.[9] The interstate banking laws of New Jersey expressly authorize the acquisition of a bank on a reciprocal basis by a Connecticut bank

---

of Northeast's common stock, provides that all shares of Northeast would be converted into shares of First Fidelity common stock, and that the shares of Newco would be converted into shares of Northeast as the surviving corporation. The second plan of merger would be implemented if the transaction is approved by the holders of Northeast's voting common stock but not by the holders of its nonvoting common stock. Under the second plan, Northeast's nonvoting common stock would remain outstanding, Northeast's voting common stock would be converted into shares of First Fidelity common stock, and the shares of Newco would be converted into shares of Northeast stock. Newco has no assets or operations, and was formed for the purpose of consummating this transaction.

First Fidelity also seeks the Board's approval to acquire up to 24.9 percent of Northeast's voting common stock pursuant to the exercise of a conditional stock option granted by Northeast to First Fidelity. The option is exercisable if Northeast receives an acquisition proposal from a third party, and in certain other circumstances.

2. Santander currently holds approximately 16 percent of the outstanding voting shares of First Fidelity, and would hold approximately 19 percent of First Fidelity's voting shares upon consummation of this proposal. After consummation, Santander's ownership interest in First Fidelity could increase to approximately 24 percent upon exercise of all First Fidelity warrants held by Santander. Moreover, Santander representatives serve on the board of directors of First Fidelity, and Santander has proposed to provide certain management assistance to First Fidelity. *See Banco de Santander, S.A. de Credito*, 78 *Federal Reserve Bulletin* 72 (1992).

3. Asset data for First Fidelity and Northeast are as of December 31, 1992; state deposit and ranking data are as of September 30, 1992. First Fidelity also is the sixth largest commercial banking organization in Pennsylvania, controlling 6 percent of commercial bank deposits in the state, and the 45th largest commercial banking organization in New York, controlling less than 1 percent of commercial bank deposits in the state.

4. First Fidelity is in the process of merging all of its New Jersey banking operations into First Fidelity Bank, N.A., New Jersey, Newark, New Jersey, and all of its Pennsylvania banking operations into Fidelity Bank, N.A., Philadelphia, Pennsylvania. First Fidelity's sole New York bank subsidiary is First Fidelity Bank, N.A., New York, Bronx, New York.

5. Asset and ranking data for Santander are as of December 31, 1991, and employ exchange rates then in effect.

6. Santander also controls Banco de Santander-Puerto Rico, S.A., Hato Rey, Puerto Rico, and Santander National Bank, Bayamon, Puerto Rico, and owns a minority, noncontrolling interest in The Royal Bank of Scotland Group plc, Edinburgh, Scotland, a bank holding company within the meaning of the BHC Act. *See Banco de Santander, S.A. de Credito*, 78 *Federal Reserve Bulletin* 60 (1992).

7. 12 U.S.C. § 1842(d).

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

9. Under Connecticut's interstate banking statute, any out-of-state bank holding company may, with the approval of the Connecticut banking commissioner, acquire ownership or control of all or part of the voting stock of a Connecticut bank or bank holding company if the laws of the state in which the operations of the acquiring bank holding company's bank subsidiaries are principally conducted expressly authorize, under conditions no more restrictive than those imposed under Connecticut law, the acquisition by a Connecticut bank holding company of a bank or bank holding company having its principal place of business in that other state. Conn. Gen. Stat. Ann. § 36–553 (West Supp. 1992).

holding company.[10] The Banking Commissioner for the State of New Jersey has determined that Connecticut has reciprocal legislation in effect for purposes of New Jersey's interstate banking statute, and has advised First Fidelity that the New Jersey Department of Banking has no objection to the proposal. In applying the Douglas Amendment to Santander, the Board has considered, in addition to the New Jersey statute, the interstate banking laws of Rhode Island and New York,[11] which also provide for interstate banking on a reciprocal basis, and which contain provisions comparable to Connecticut's interstate banking law.[12]

After careful review of the relevant statutes, and in light of all the facts of record, the Board has concluded that the proposed acquisition of Northeast is specifically authorized by Connecticut's interstate banking statute, and that the Board's approval of this proposal is therefore not prohibited by the Douglas Amendment. Approval of the proposed transaction is conditioned, however, upon the receipt by First Fidelity and Santander of all required state regulatory approvals.

10. Under New Jersey law, an out-of-state bank holding company may acquire control of a bank located in New Jersey if the acquiring bank holding company is located in a reciprocal state (*i.e.*, a state which allows New Jersey bank holding companies to acquire banks or bank holding companies located in that state on terms and conditions substantially the same as those applicable to such an acquisition by banks and bank holding companies located in that state), and more than 50 percent of the total aggregate deposits controlled by the acquiring bank holding company's bank subsidiaries are held by bank subsidiaries located in reciprocal states. N.J. Stat. Ann. § 17:9A-371 (West Supp. 1992).

11. Santander is subject to the Douglas Amendment directly because it is a bank holding company within the meaning of the BHC Act, and indirectly because it is a foreign bank subject to the International Banking Act (12 U.S.C. § 3101 *et seq.*) ("IBA").

12. Under Rhode Island law, an out-of-state bank or bank holding company may acquire ownership or control of the voting stock of a Rhode Island bank or bank holding company if the laws of the state in which the acquiring bank is located, or the laws of the state in which the operations of the acquiring bank holding company's bank subsidiaries are principally conducted, expressly authorize, under conditions no more restrictive than those imposed under Rhode Island law, the acquisition by a Rhode Island bank or bank holding company of a bank located in that other state, or of a bank holding company the operations of whose bank subsidiaries are principally conducted in that other state. R.I. Gen. Laws § 19-30-2 (1989).

Under New York law, an out-of-state bank holding company may acquire control of a bank located in New York if the New York Superintendent of Banking determines that the statute laws of the state in which the operations of the out-of-state bank holding company's banking subsidiaries are principally conducted specifically authorize the acquisition of control of a bank in that state by a bank holding company the operations of whose banking subsidiaries are principally conducted in New York, and that the conditions or restrictions applicable to an interstate acquisition would apply with equal effect to an in-state acquisition. N.Y. Banking Law § 142-b (McKinney 1990). In connection with the processing of these applications, the Federal Reserve Bank of New York has been advised by the New York Banking Department that Connecticut's interstate banking law is non-discriminatory and reciprocal with New York's interstate banking law, and that New York law would not prevent a bank holding company, the operations of whose banking subsidiaries are principally conducted in Connecticut, from acquiring control of a bank having its principal office in New York.

Supervisory Considerations

Under section 3 of the BHC Act, as amended by the Foreign Bank Supervision Enhancement Act of 1991,[13] the Board may not approve an application involving a foreign bank unless the bank is "subject to comprehensive supervision or regulation on a consolidated basis by the appropriate authorities in the bank's home country."[14] The Board recently determined, in an application under the International Banking Act (12 U.S.C. § 3101 *et seq.*) ("IBA"), that another Spanish credit institution, Banco de Sabadell, S.A., Sabadell, Spain ("Banco de Sabadell"), was subject to comprehensive consolidated supervision by its home country authorities.[15] Santander has represented to the Board that it is subject to the same regulatory scheme applicable to Banco de Sabadell, and has furnished additional information regarding the authorities' ability to supervise and regulate the activities of Santander on a worldwide, consolidated basis. The Board has reviewed this information, as well as the information previously received as it may apply to Santander. Based on all the facts of record, which include the information described above, the Board has concluded that Santander is subject to comprehensive supervision and regulation on a consolidated basis by its home country supervisor.

In addition, Santander has committed that, to the extent not prohibited by applicable law, it will make available to the Board such information on the operations of Santander and any of its affiliates that the Board deems necessary to determine and enforce compliance with the BHC Act, the IBA, and other applicable federal law. Santander also has committed to cooperate with the Board to obtain any waivers or exemptions that may be necessary in order to enable Santander to make any such information available to the Board. In light of these commitments and other facts of record,[16] the Board has concluded that

13. Pub. L. No. 102-242, § 201 *et seq.* 105 Stat. 2286 (1991).

14. 12 U.S.C. § 1842(c)(3)(B). As provided in Regulation Y, the Board determines whether a foreign bank is subject to consolidated home country supervision under the standards set forth in Regulation K. 12 C.F.R. 225.13(b)(4). Regulation K provides that a foreign bank may be considered subject to consolidated supervision if the Board determines that the bank is supervised or regulated in such a manner that its home country supervisor receives sufficient information on the worldwide operations of the foreign bank, including the relationship of the bank to its affiliates, to assess the foreign bank's overall financial condition and compliance with law and regulation. 12 C.F.R. 211.24(c)(1)(ii).

15. *See Banco de Sabadell, S.A.*, 79 *Federal Reserve Bulletin* 366 (1993).

16. In this regard, the Board notes that it previously has reviewed relevant provisions of Spanish confidentiality, secrecy, and other laws. *See Banco de Sabadell, S.A.*, 79 *Federal Reserve Bulletin* 366 (1993).

Santander has provided adequate assurances of access to any appropriate information the Board may request.

Competitive, Banking, and Convenience and Needs Considerations

Santander and Northeast compete directly in the Metropolitan New York-New Jersey banking market.[17] Upon consummation of this proposal, Santander would remain the fifth largest commercial banking or thrift organization in the market, controlling less than 5.5 percent of the total deposits in depository institutions in the market.[18] After considering the number of competitors remaining in this market, the relatively small increase in concentration as measured by the Herfindahl–Hirschman Index ("HHI"),[19] and other facts of record, the Board has concluded that consummation of this proposal would not have a significantly adverse effect on competition in the Metropolitan New York-New Jersey banking market or any other relevant banking market.

Considerations relating to the financial and managerial resources and future prospects of First Fidelity, Santander, Northeast, and their respective subsidiaries, as well as convenience and needs considerations and other supervisory factors the Board is required to consider under section 3 of the BHC Act, also are consistent with approval of these applications.[20]

17. The Metropolitan New York-New Jersey banking market is approximated by New York City; Nassau, Orange, Putnam, Rockland, Suffolk, Sullivan, and Westchester 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. Under the revised Department of Justice Merger Guidelines, 49 *Federal Register* 26,823 (1984), this market is considered unconcentrated.

18. For purposes of this analysis, deposits held by bank subsidiaries of First Fidelity are considered to be controlled by Santander. The Board previously has indicated that thrift institutions have become, or have the potential to become, major competitors of commercial banks. *See Midwest Financial Group*, 75 *Federal Reserve Bulletin* 386 (1989); *National City Corporation*, 70 *Federal Reserve Bulletin* 743 (1984). Thus, for purposes of this analysis, deposits of thrift institutions are included at 50 percent.

19. Upon consummation of this proposal, the HHI in the Metropolitan New York-New Jersey banking market would increase by 5 points to 560.

20. The Board notes that Santander's capital is in excess of the minimum levels that would be required by the Basle Accord, and is considered equivalent to the capital that would be required of a United States bank holding company.

The Board also has considered the records of performance under the Community Reinvestment Act (12 U.S.C. § 2901 *et seq.*) ("CRA") of the United States banks, branches, and agencies controlled by Santander. Although the Board has identified certain weaknesses in the CRA record of one of Santander's bank subsidiaries, these deficiencies are being addressed by Santander with the primary Federal regulator for this institution, the Office of the Comptroller of the Currency, and, in light of all the facts of record, do not reflect so adversely upon the convenience and needs considerations as to warrant denial of these applications.

Based on the foregoing and other facts of record, the Board has determined that the applications should be, and hereby are, approved. The Board's approval is specifically conditioned upon compliance with all of the commitments made by First Fidelity and Santander in connection with these applications and with the conditions referred to in this Order. For purposes of this action, the commitments and conditions relied on in reaching this decision shall be deemed to be conditions imposed in writing by the Board and, as such, may be enforced in proceedings under applicable law.

The transactions approved in this Order 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 Federal Reserve Bank of Philadelphia or the Federal Reserve Bank of New York, acting pursuant to delegated authority.

By order of the Board of Governors, effective April 2, 1993.

Voting for this action: Chairman Greenspan and Governors Mullins, Angell, Kelley, LaWare, Lindsey, and Phillips.

BARBARA R. LOWREY
Associate Secretary of the Board

Intervest Bancshares Corporation New York, New York

Order Approving Formation of a Bank Holding Company

Intervest Bancshares Corporation, New York, New York ("Intervest"), has applied under section 3(a)(1) of the Bank Holding Company Act, 12 U.S.C. § 1842(a)(1) ("BHC Act"), to become a bank holding company by acquiring at least 69.6 percent of the voting shares of Countryside Bankers, Clearwater, Florida ("Bank").

Notice of the application, affording interested persons an opportunity to submit comments, has been published (58 *Federal Register* 11,056 (1993)). 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 BHC Act.

Intervest is a non-operating company formed for the purpose of acquiring Bank. Bank is the 149th largest commercial banking organization in Florida, controlling deposits of approximately $23.2 million, representing less than 1 percent of total deposits in commercial banks in the state.[1]

Intervest and Bank do not compete directly in any banking market. Accordingly, based on all the facts of record in this case, consummation of this proposal would not have a significantly adverse effect on competition or the concentration of banking resources in any relevant banking market. The financial and managerial resources[2] and future prospects of Intervest and Bank, and other supervisory factors that the Board is required to consider under section 3 of the BHC Act are also consistent with approval of this proposal. In this regard, the Board notes that Intervest will provide substantial additional capital to Bank as a result of this proposal.

The Board has also considered factors relating to the convenience and needs of the communities to be served. The Board notes that Bank will be under new ownership as a result of this proposal and that Intervest will initiate a number of steps to improve substantially the performance of Bank under the Community Reinvestment Act, 12 U.S.C. § 2901 *et seq.* ("CRA"). These measures will address specific deficiencies identified in previous examinations of Bank's CRA performance record.[3] In general, the Statement of the Federal Financial Supervisory Agencies Regarding the Community Reinvestment Act indicates that commitments for future corrective actions offered in the applications process will not be sufficient to overcome a seriously deficient CRA record.[4] In this case, however, the inadequate CRA record does not reflect the actions of the proposed new owners, and they have committed to take steps to correct deficiencies in the CRA performance in a timely fashion. Intervest's progress will be monitored by the Federal Reserve Bank of Atlanta and reviewed by the Board in future applications to establish a depository facility.

1. State data are as of June 30, 1992.

2. The Board has carefully reviewed comments from two individuals maintaining that Intervest's principals lack banking experience and familiarity with Bank's community. Intervest has responded that it plans to retain existing management of Bank, which has a substantial knowledge of the local community. In addition, the record indicates that Intervest's principals will be actively involved in ascertaining local credit needs. The Board expects that Bank will at all times be staffed with competent and experienced management, and notes that, for the next two years, Intervest and Bank will be subject to the requirements contained in section 914 of the Financial Institutions Reform, Recovery, and Enforcement Act of 1989, which provide that notice must be given to the appropriate federal banking agency prior to the addition or replacement of any senior executive officers of Intervest or Bank. Based on all the facts of record, the Board concludes that these comments do not warrant denial of Intervest's application.

3. These examinations were conducted by the Federal Reserve Bank of Atlanta as of May 1992 and March 1993.

4. *See* 54 *Federal Register* 13,742 (1989).

In light of all the facts of record, including the CRA measures to be initiated, the Board believes that considerations relating to the convenience and needs of the community to be served are consistent with approval. The Board expects Intervest to implement corrective measures regarding Bank's CRA performance, and the Board's decision is specifically conditioned upon compliance with the CRA commitments and plans submitted by Intervest.

Based on the foregoing and other facts of record, the Board has determined that the application should be, and hereby is, approved. The Board's approval of this transaction is specifically conditioned upon compliance with all of commitments made by Intervest in connection with this application, including commitments and initiatives relating to Bank's CRA performance. For purposes of this action, the commitments and conditions relied upon by the Board in reaching its decision are both commitments imposed in writing by the Board in connection with its findings and decision, and, as such, may be enforced in proceedings under applicable law.

The 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 Federal Reserve Bank of Atlanta, pursuant to delegated authority.

By order of the Board of Governors, effective April 26, 1993.

Voting for this action: Chairman Greenspan and Governors Angell, Kelley, LaWare, and Phillips. Absent and not voting: Governors Mullins and Lindsey.

JENNIFER J. JOHNSON
Associate Secretary of the Board

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

Mellon Bank Corporation
Pittsburgh, Pennsylvania

Order Approving Acquisition of a Bank Holding Company, Formation of a Bank Holding Company, and Application to Engage in Nonbanking Activities

Mellon Bank Corporation, Pittsburgh, Pennsylvania ("Mellon"), a bank holding company within the meaning of the Bank Holding Company Act ("BHC Act"), has applied under section 3(a)(3) of the BHC Act (12 U.S.C. § 1842(a)(3)) to acquire Boston Group Holdings, Inc., New York, New York ("BGH"), and thereby to acquire indirectly The Boston Company, Boston, Massachusetts ("TBC"), a subsidiary of BGH, and Boston Safe Deposit & Trust Company, Boston, Massachusetts ("BSD&T"), a subsidiary of TBC.[1]

Mellon also has applied under section 4(c)(8) of the BHC Act and section 225.23 of the Board's Regulation Y (12 C.F.R. 225.23) to acquire The Boston Company Advisors, Inc. ("TBC Advisors"), a subsidiary of BGH and TBC, and to engage through TBC Advisors in providing administrative and certain other services to mutual funds. This is an activity the Board has not previously considered under section 4(c)(8) of the BHC Act. In addition, Mellon has applied under section 4(c)(8) to acquire the other nonbanking subsidiaries of BGH listed in Appendix B to this Order and thereby engage in making and servicing loans; providing trust services; and providing investment advisory services pursuant to sections 225.25(b)(1), (b)(3), and (b)(4) of the Board's Regulation Y (12 C.F.R. 225.25(b)(1), (b)(3), and (b)(4)).

Mellon also has given notice pursuant to section 4(c)(13) of the BHC Act and section 211.5(c) of the Board's Regulation K (12 C.F.R. 211.5(c)) of its intent to acquire indirect control of Boston Safe Deposit and Trust Company (U.K.) Limited, London, England; Premier Unit Trust Administration Limited, London, England; and The Boston Company Advisors (Bermuda) Ltd., Hamilton, Bermuda. These companies engage in activities that are permissible under section 211.5(d) of Regulation K (12 C.F.R. 211.5(d)).

Notice of the applications, affording interested persons an opportunity to submit comments, has been published (57 *Federal Register* 62,346 (1992)). 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 BHC Act.

Mellon, with total consolidated assets of $31.5 billion, operates subsidiary banks in Pennsylvania, Delaware, and Maryland.[2] BGH has total consolidated assets of $8.7 billion and engages in providing institutional trust and custody services, institutional investment management services, and private banking services.

Douglas Amendment

Section 3(d) of the BHC Act, the Douglas Amendment, prohibits the Board from approving an application by a bank holding company to acquire any bank located outside of the bank holding company's home state, unless such acquisition is "specifically authorized by the statute laws of the State in which such bank is located, by language to that effect and not merely by implication."[3] For purposes of the Douglas Amendment, Mellon's home state is Pennsylvania. The Massachusetts Banking Code expressly authorizes the acquisition of a Massachusetts bank by an out-of-state bank holding company if the laws of the state in which the subsidiary banks of the out-of-state bank holding company principally conduct business allow Massachusetts banking organizations to acquire banks in that state.[4] The statute laws of Pennsylvania expressly authorize the acquisition of a banking institution or bank holding company located in Pennsylvania by a bank holding company located in another state, if that other state authorizes the acquisition of a financial institution on a reciprocal basis by a Pennsylvania bank holding company.[5] Based on all the facts of record, the Board concludes that approval of this proposal is not prohibited by the Douglas Amendment.[6]

Financial, Managerial, and Other Supervisory Factors

The Board also concludes that the financial and managerial resources and future prospects of Mellon and BGH and their respective subsidiaries, and the other supervisory factors that the Board must consider under section 3 of the BHC Act, are consistent with approval. The competitive factors under section 3 are also consistent with approval.

Convenience and Needs Factors

The Board has received comments from organizations supporting approval of these applications based on Mellon's record of performance under the Community

1. BSD&T became a bank for purposes of the BHC Act upon enactment of the Competitive Equality in Banking Act of 1987 ("CEBA"), but its ownership by BGH and TBC was grandfathered under section 101(c) of CEBA. Upon consummation of this transaction, TBC and BGH will become subject to the provisions of the BHC Act, and each has applied under section 3(a)(1) of the BHC Act to become a bank holding company. Mellon would purchase BGH from Shearson Lehman Brothers ("Shearson"), a subsidiary of American Express. As part of this transaction, Shearson will also acquire stock and warrants to acquire stock of Mellon.

2. Asset and state banking data are as of December 31, 1992, and June 30, 1992, respectively.

3. 12 U.S.C. § 1842(d).

4. Mass. Gen. Laws Ann. ch. 167A, § 2. The Massachusetts statute also conditions entry on the requirement that the out-of-state bank holding company not hold more than 15 percent of the total deposits, exclusive of foreign deposits, held by all state and federally chartered banks in the commonwealth and Massachusetts branches of banks existing by authority of a foreign country. Upon consummation of this transaction, Mellon would hold approximately 7.4 percent of the banking deposits in Massachusetts.

5. Pa. Stat. Ann. tit. 7, § 116 (Purdon 1992).

6. Approval of this proposal is conditioned upon Mellon's receiving all required state regulatory approvals.

Reinvestment Act (12 U.S.C. § 2901 *et seq.*) ("CRA"), and from an individual ("Protestant") criticizing the CRA performance of Mellon and accusing Mellon of discriminating against residents of low-income areas of North Philadelphia in the provision of banking services, including housing-related loans.

The Board has carefully reviewed the CRA performance records of Mellon and TBC and their subsidiary banks, as well as all comments received regarding these applications, including Mellon's response to those comments, and all of the other relevant facts of record in light of the CRA, the Board's regulations, and the Statement of the Federal Financial Supervisory Agencies Regarding the Community Reinvestment Act ("Agency CRA Statement").[7] The Board notes that all of Mellon's subsidiary banks have been examined for CRA performance and have received "outstanding" or "satisfactory" ratings during their most recent CRA examinations. In particular, Mellon's lead subsidiary bank, Mellon Bank, N.A., Pittsburgh, Pennsylvania ("Mellon Bank"), received a "satisfactory" rating for CRA performance from the Office of the Comptroller of the Currency ("OCC") in July 1991. The Board further notes that this CRA examination of Mellon Bank found no evidence of practices intended to discourage applications for credit and no evidence of the types of illegal discrimination alleged by Protestant.[8] On the basis of all of the facts of record, including information provided by the Protestant, the OCC, and the other commenters supporting Mellon's CRA performance, the Board concludes that the convenience and needs considerations, including the CRA performance records of all bank subsidiaries, are consistent with approval of these applications.

Nonbanking Activities Serving as Administrator to Mutual Funds

One of the nonbanking companies Mellon will indirectly acquire, TBC Advisors, engages in a variety of activities with mutual funds that have not been previously approved by the Board. TBC Advisors currently provides a number of administrative and advisory services to 84 different open-end investment companies ("mutual funds") and 14 different closed-end investment companies in the United States.[9] Over 95 percent of TBC Advisors's business represents the provision of administrative services to funds that are advised by other unaffiliated companies. Mellon proposes to continue to provide these services through TBC Advisors.

The administrative services provided to mutual funds and closed-end funds by TBC Advisors include computing the fund's net asset value and performance data, coordinating communications and activities between the investment advisor and the other service providers, accounting and recordkeeping, disbursing payments for fund expenses, providing office space for the funds, and preparing and filing tax and regulatory reports for the funds. In connection with these administrative services, TBC Advisors often provides employees that become officers or directors of the funds. TBC Advisors also provides investment advisory services in combination with administrative services to a small group of funds.[10]

I. Glass–Steagall Act

The administrative services that Mellon proposes to provide through TBC Advisors and its affiliates raise a number of issues under the Glass–Steagall Act. Under the Glass–Steagall Act, a company that owns a member bank may not control "through stock ownership or in any other manner" a company that engages principally in distributing, underwriting or issuing securities.[11]

In 1972, the Board issued an interpretive rule that explained the Board's view that the provisions of the Glass-Steagall Act govern the relationship between mutual funds and companies that own member banks because mutual funds engage continuously in issuing and redeeming securities.[12] The Board found that the Glass-Steagall Act prohibited affiliates of banks from sponsoring, organizing, or controlling mutual funds[13] or distributing their shares.

7. 54 *Federal Register* 13,742 (1989).

8. Protestant also criticizes Mellon's failure to provide a specific loan to Protestant that was intended by Protestant to be part of a program to create housing and jobs in black and Hispanic low- and moderate-income sections of Philadelphia. Protestant has raised many of these claims in a lawsuit filed in federal court. The district court for the Eastern District of Pennsylvania sustained Mellon's motion to dismiss Protestant's lawsuit, and Protestant has appealed the court's decision. The Board believes that the courts will afford an adequate remedy to Protestant if one is warranted.

9. All of these investment companies are registered under the Investment Company Act of 1940 (15 U.S.C. § 80a-1 *et seq.*).

10. In addition, BSD&T often serves as custodian to a mutual fund and might serve as custodian in cases where TBC Advisors is the mutual fund's administrator or advisor. A complete list of the proposed administrative services is attached as Appendix A.

11. 12 U.S.C. §§ 221a, 377.

12. 12 C.F.R. 225.125.

13. The Board found, on the other hand, that the prohibitions of the Glass–Steagall Act did not apply to closed-end funds as long as the closed-end fund was not engaged frequently in the issuance, sale or distribution of securities. On this basis, the Board has by regulation authorized bank holding companies to sponsor, organize, and manage closed-end funds. 12 C.F.R. 225.25(b)(4)(ii). A closed-end fund that is controlled by a bank holding company must conform its activities and investments to the requirements of section 4 of the BHC Act. Mellon has committed that if it sponsors, organizes, or controls any closed-end fund Mellon will limit any such fund's investments to less than 5 percent of the voting shares of any issuer.

The Board also found, however, that the Glass–Steagall Act does not prohibit all relationships between a bank holding company and a mutual fund. In particular, the Board determined that it was permissible under the BHC Act and the Glass–Steagall Act for bank holding companies to provide investment advice to mutual funds. In addition, the Board found that the Glass–Steagall Act did not prohibit bank holding companies from providing certain other services to mutual funds, such as acting as custodian, transfer agent, or registrar. The Board imposed a number of restrictions on the relationship between bank holding companies and mutual funds in order to avoid conflicts of interest and to address potential safety and soundness concerns.[14]

Thus, banks and affiliates of banks may currently perform four of the six major services needed by a mutual fund: they may serve as investment advisor, transfer agent, custodian, and registrar. They may not act as distributor to the fund. This application raises the question whether it is consistent with the Glass–Steagall Act for an affiliate of a member bank to act as administrator to a mutual fund.

Permissibility of Proposed Activities

Mellon has recognized that certain of the current activities of TBC Advisors and its affiliates are prohibited by the Glass–Steagall Act, and has taken steps to discontinue these activities. For example, Mellon proposes to terminate the role of TBC Advisors as a sponsor of new mutual funds. In addition, Mellon will not acquire the subsidiaries of TBC that engage in the distribution of mutual fund shares.[15] At this time, Mellon does not propose to provide administrative services to mutual funds that are marketed and sold primarily to customers of BSD&T or any of Mellon's other subsidiary banks.

The Board believes that Mellon's proposal to provide the administrative services described in Appendix A to mutual funds is permissible under the Glass–Steagall Act. A mutual fund administrator provides services that are primarily ministerial or clerical in nature, and does not have policy-making authority or control over the mutual fund.[16] The policy-making functions rest with the board of directors of the fund, which is responsible for the selection and review of the major contractors to the fund, including the investment advisor, and under certain circumstances, the administrator. The Investment Company Act of 1940 (the "1940 Act") requires that these contracts be reviewed at least annually by the board of directors of the mutual fund, and that these contracts be terminable by the board of directors on no more than 60 days written notice.[17] In addition, the 1940 Act requires that at least 40 percent of the board of directors of a mutual fund be comprised of disinterested individuals who are not affiliated with the investment advisor, with any person that the SEC has determined to have a material business or professional relationship with the fund, with any employee or officer of the fund, with any registered broker or dealer, or with any other interested or affiliated person.[18] These unaffiliated board members must approve the fund's contracts with its investment advisor, underwriter, and often its administrator. Mellon has committed that, following its acquisition, TBC Advisors will provide administrative services only to mutual funds whose boards of directors consist of a majority of disinterested persons.

14. The Board's rule includes restrictions that prevent a bank holding company or any of its subsidiaries from:

(1) Acting as investment advisor to an investment company that has a name similar to the holding company or any of its subsidiary banks,

(2) Purchasing for its own account shares of any investment company for which the holding company serves as investment advisor,

(3) Purchasing in its sole discretion in a fiduciary capacity shares of an investment company advised by the holding company,

(4) Extending credit to an investment company advised by the holding company,

(5) Accepting shares of an investment company advised by the holding company as collateral for a loan used to purchase shares of the investment company.

In addition, the rule requires that, in cases in which a customer purchases or sells securities of the fund through the holding company or is advised by the holding company to purchase shares of the fund, the customer be informed in writing of the involvement of the holding company with the fund, and be informed that the shares of the fund are not federally insured, and are not guaranteed by, or obligations of, a bank.

15. Mellon will not be involved in the distribution of the shares of any mutual fund. Mellon has represented to the Board that following the acquisition of BGH by Mellon, neither TBC Advisors nor any of its affiliates would be obligated by any agreement to engage in any sales activities with regard to any mutual fund's shares, and would not into enter any distribution agreement with any mutual fund unless permitted to do so by a change in current law. TBC Advisors will not engage in the development of marketing plans except to give advice to the distributor regarding regulatory compliance. Mellon has also represented to the Board that TBC Advisors will not engage in advertising activities with respect to the funds and will not be involved in the preparation of a fund's sales literature, except to review such sales literature for the sole purpose of ensuring compliance with all pertinent regulatory requirements. Employees of TBC Advisors would present information about the operations of a fund at meetings or seminars for brokers of a fund, but sales activities, if any, at such events would be conducted solely by the fund's distributer.

16. The administrator is usually compensated according to a formula that is dependent on the amount of assets in the fund, rather than on a negotiated fee basis. This formula for compensation would not appear to create the subtle hazards at which the Glass–Steagall Act was aimed that are associated with having a salesman's stake in the fund. The administrator is not involved in the promotion or sale of the fund's shares, and is charged with completing largely ministerial duties that do not require or involve contact with the public in a promotional or sales role.

17. 15 U.S.C. § 80a-15.

18. 15 U.S.C. §§ 80a-2, 80a-10.

Mellon also proposes, in situations in which Mellon subsidiaries serve as administrator to a mutual fund, to permit one representative of the administrator to serve as a director of the fund. Mellon contends that an interlocking director would facilitate its provision of administrative services to the fund.[19] A director interlock provides the fund with an individual who is knowledgeable in the operation of the fund and can directly advise the board of directors on administration.

Mellon proposes to have a director interlock only in situations in which a company unaffiliated with Mellon serves as the investment advisor to the mutual fund. This unaffiliated investment advisor would be an independent and countervailing source of information to the fund's board of directors. Moreover, Mellon has represented that, where TBC Advisors serves as the administrator to a mutual fund, this interlocking director would be deemed to be an interested person and would be excluded from actions that must be taken by the disinterested board members, such as approval of the investment advisory contract and of the administrator's contract. As discussed above, Mellon has also committed that it will only serve as administrator to mutual funds for which a majority of the board of directors are disinterested individuals. Thus, there are a number of counterbalancing parties and significant limits on the participation of the administrator's representative on the fund's board of directors. Under these circumstances, the Board believes that Mellon would not control a mutual fund if one employee of TBC Advisors or an affiliate[20] also serves as a director of a mutual fund to which TBC Advisors provides administrative services.[21]

Mellon also proposes in a small number of cases to provide mutual funds with a combination of administrative, investment advisory, and other services.[22] The Board notes that the OCC has expressly permitted national banks that serve as investment advisor to mutual funds also to provide some administrative services to those mutual funds, such as maintaining records on shareholder accounts, posting and reinvesting dividends in accordance with customer instructions, preparing periodic statements of account, and transferring and receiving money by wire.[23] In addition, a number of national banks are already providing these and other services as "sub-administrator" to mutual funds that are advised by the bank or an affiliate.[24]

As explained above, the Board has already determined that bank holding companies may serve as the investment advisor to mutual funds, and, therefore, that a bank holding company that serves as investment advisor to a mutual fund does not control the fund for purposes of the Glass–Steagall Act. In the Board's opinion, permitting a bank holding company that serves as the investment advisor to a mutual fund also to provide the essentially ministerial or supporting functions as administrator to that fund would not significantly increase the ability of the bank holding company to control the mutual fund. TBC Advisors would not, by virtue of becoming administrator to a fund that it or an affiliate advises, become involved in policy-making functions of these funds to a greater extent than when TBC Advisors provides solely investment advisory services.

The Board believes that control of the fund would continue to rest with the board of directors of the fund, which would be independent of TBC Advisors.[25] In

19. Mellon also proposes that employees of TBC Advisors be permitted to serve as junior officers (*i.e.*, in positions no higher than treasurer, secretary of the board, or vice president) or employees of mutual funds administered by TBC Advisors. The duties of these lower level officers include preparing agendas and minutes of board meetings, drafting routine correspondence, signing regulatory filings, and supervising and reviewing accounting and recordkeeping for the fund. These individuals have no policy-making authority, though they may have authority to make routine operational decisions, such as authorizing the purchase of supplies and the employment of clerical staff. This proposal would not change the ministerial nature of Mellon's role as administrator provided that these employees are not responsible for, or involved in making recommendations regarding, policy-making functions.

20. This director could not serve as an officer, director, or employee of Mellon, Mellon Bank, or any subsidiary bank or bank holding company of Mellon.

21. In a small number of cases, TBC Advisors currently owns shares in certain mutual funds that it administers. Mellon has proposed to retain its ownership interest in funds that it currently administers, but, within two years, to reduce that ownership interest to below 5 percent of each fund's shares. Mellon proposes to discontinue the practice of providing seed capital to new mutual funds that it hopes to administer, although Mellon has requested that it be permitted to purchase up to 5 percent of any fund to which it provides only administrative services. The Board believes that Mellon's proposal to purchase up to 5 percent of any fund to which it provides administrative services (but not investment advisory services) would not significantly increase Mellon's ability to exercise control over the fund for purposes of the Glass–Steagall Act. However, the Board conditions its determination on the requirement that Mellon's ownership of the fund not be used in any way in marketing or selling the shares of the fund.

22. This proposal does not involve providing both administrative and investment advisory services to so-called proprietary mutual funds that are sold primarily to customers of subsidiary banks of Mellon.

23. *See, e.g.*, Letter dated January 14, 1985, from Legal Advisory Services Division, Office of the Comptroller of the Currency. *See also* Letter dated January 13, 1993, from Director for Bank Supervision and Analysis, Western District Office, Office of the Comptroller of the Currency (proposal by a national bank to invest in a partnership that provides investment advisory and a wide range of administrative services to mutual funds).

24. These activities appear to involve primarily recordkeeping and accounting activities, participation in the preparation of documents needed to comply with regulatory requirements, preparation of documents in connection with shareholder meetings or board of directors meetings, and the provision of clerical support.

25. When administrative services are provided together with advisory services, Mellon represents that directors who are not considered interested persons of the investment advisor must also review and

this regard, Mellon has committed that it will not have any director or officer interlocks with mutual funds to which Mellon provides both advisory and administrative services.[26] Moreover, as noted above, Mellon would provide administrative services only to mutual funds in which at least a majority of the board of directors are comprised of disinterested individuals.

In providing this combination of services, Mellon and TBC Advisors would also be subject to the restrictions set forth in the Board's interpretive rule on investment advisory activities (12 C.F.R. 225.125).[27] The Board's rule requires any bank holding company that acts as agent in the purchase or sale of shares of an investment company advised by a holding company affiliate, or that recommends the purchase or sale of such shares to any customer, to disclose to the customer in writing the role of the bank holding company and its affiliates with the investment company. In addition, the bank holding company must disclose in writing that the shares of the investment company are not federally insured, are not deposits, and are not obligations of, or guaranteed by, any bank.

The interpretive rule also provides that an investment company advised by a bank holding company not have a name that is similar to, or a variation of, the name of any bank holding company or any of its subsidiary banks.[28] In addition, the Board's rule prohibits a bank holding company from owning shares of any mutual fund that it advises, from purchasing in a fiduciary capacity in its sole discretion shares of these mutual funds, and from lending to any such fund or accepting shares of such funds as collateral for any loan for the purpose of acquiring shares of the fund. Mellon must conform the activities of TBC Advisors and its affiliates with mutual funds to the Board's rule within two years of the date of this Order.

On this basis, and subject to the commitments made by Mellon and compliance with the Board's interpretive rule, the Board believes that Mellon's proposal to provide both investment advisory and administrative services to mutual funds is not prohibited by the Glass-Steagall Act.

II. Bank Holding Company Act

The Board has previously determined by regulation that a bank holding company may act as investment advisor to a mutual fund.[29] However, the Board has not determined whether acting as the administrator for a mutual fund meets the requirements of section 4(c)(8) of the BHC Act. Under section 4(c)(8) of the BHC Act, a nonbanking activity is permissible if it is closely related to banking and a proper incident thereto.

Under Board and court precedent, an activity is closely related to banking for purposes of section 4(c)(8) if banks generally:

(1) Conduct the proposed activity;

(2) Provide services that are operationally or functionally so similar to the proposed activity as to equip them particularly well to provide the proposed services; or

(3) Provide services that are so integrally related to the proposed service as to require their provision in a specialized form.[30]

The proposed administrative services consist of, among other things, maintaining the financial and corporate records of a mutual fund; computing the net asset value, dividends, and performance data regarding the fund; providing information about the fund to the fund's board of directors, outside auditors, and distributor; coordinating the activities of the fund's other service providers; preparing regulatory filings such as tax returns and SEC registration statements; and reviewing the activities of other service providers for regulatory compliance.[31]

A number of national banks currently provide some types of administrative services to mutual funds.[32] Banks also provide similar recordkeeping and accounting functions in connection with products such as individual retirement accounts. National bank trust departments also perform administrative services for collective investment funds, trust accounts, and employee benefit plans that are operationally and functionally similar to those that a mutual fund requires.[33]

approve the administrator's contract. The directors of an investment company may also terminate these contracts on 60 days notice.

26. Mellon has proposed in these situations to provide a limited number of employees who may serve as non-officer employees of the mutual fund. These employees will help in administration of the funds. These employees will not have any policy-making or decision-making authority, and will be supervised by independent officers and the board of directors. The Board believes that these limited employee interlocks, under the conditions described in this Order, would not permit Mellon to control the fund.

27. These and certain other provisions of the Board's rule also apply to Mellon's proposed involvement with closed-end investment companies that it proposes to advise.

28. 12 C.F.R. 225.125(f).

29. 12 C.F.R. 225.25(b)(4).

30. *See National Courier Association v. Board of Governors*, 516 F.2d 1229, 1237 (D.C. Cir. 1975). The Board may also consider any other factor than an applicant may advance to demonstrate a reasonable or close connection or relationship to banking. 49 *Federal Register* 794, 806 (1984); *Securities Industry Ass'n v. Board of Governors*, 468 U.S. 207, 210-11 n.5 (1984).

31. *See* Appendix A for a complete list of administrative services.

32. *See* Letter dated January 13, 1993, from Director for Bank Supervision and Analysis, Western District Office, Office of the Comptroller of the Currency.

33. *See* 12 C.F.R. Part 9.

The Board also has permitted bank holding companies to provide certain individual services provided by a mutual fund administrator, including financial data processing services (such as calculation of investment values and tax consulting services).[34]

For these reasons the Board finds that Mellon's engaging in the proposed activities is closely related to banking, and, therefore, a permissible activity for bank holding companies to provide under section 4(c)(8) of the BHC Act.[35] As discussed above, the provision of administrative services within certain parameters is not likely to result in the types of subtle hazards at which the Glass–Steagall Act is aimed or any other adverse effects. For the same reasons, the Board finds that the public benefits of engaging in the proposed administrative activities outweigh the likely adverse effects and, therefore, that the activities are a proper incident to banking for purposes of section 4(c)(8) of the BHC Act.

Based on all the facts of record, including all of the commitments and representations made by Mellon in this case, and subject to all of the terms and conditions set forth in this Order, the Board has determined that the applications should be, and hereby are, approved.[36] The Board's determination is subject to all of the conditions set forth in the Board's Regulation Y, including those in sections 225.4(d) and 225.23(b), and to the Board's authority to require modification or termination of the activities of a bank holding company or any of its subsidiaries as the Board finds necessary to assure compliance with, and to prevent evasion of, the provisions of the BHC Act and the Board's regulations and orders issued thereunder. The Board's decision is specifically conditioned on compliance with all of the commitments and representations made in these applications, including the commitments and conditions discussed in this Order. The commitments, representations, and conditions relied on in reaching this decision shall be deemed to be conditions imposed in writing by the Board in connection with its findings and decision and may be enforced in proceedings under applicable law.

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

By order of the Board of Governors, effective April 21, 1993.

Voting for this action: Chairman Greenspan and Governors Kelley, Lindsey, and Phillips. Voting for this action subject to conditions: Governors Angell and LaWare. Absent and not voting: Governor Mullins.

JENNIFER J. JOHNSON
Associate Secretary of the Board

Appendix A

List of Administrative Services

(1) Maintaining and preserving the records of the fund, including financial and corporate records;
(2) Computing net asset value, dividends, performance data and financial information regarding the fund;
(3) Furnishing statistical and research data;
(4) Preparing and filing with the SEC and state securities regulators registration statements, notices, reports and other material required to be filed under applicable laws;
(5) Preparing reports and other informational materials regarding the fund including proxies and other shareholder communications and reviewing prospectuses;
(6) Providing legal and regulatory advice to the fund in connection with its other administrative functions;
(7) Providing office facilities and clerical support for the fund;
(8) Developing and implementing procedures for monitoring compliance with regulatory requirements and compliance with the fund's investment objectives, policies, and restrictions as established by the fund's board;
(9) Providing routine fund accounting services and liaison with outside auditors;
(10) Preparing and filing tax returns;
(11) Reviewing and arranging for payment of fund expenses;
(12) Providing communication and coordination services with regard to the fund's investment advisor, transfer agent, custodian, distributor and other service

34. 12 C.F.R. 225.25(b)(7) and (b)(21).

35. In determining whether an activity is a proper incident to banking, the Board must consider whether the activity "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 does not indicate that the proposal would result in adverse effects such as undue concentration of resources, decreased or unfair competition, conflicts of interest, or unsound banking practices. In addition, the proposed activity should benefit from the operational support that Mellon is able to provide which will create greater convenience for TBC's mutual fund clients.

36. The Board has also considered Mellon's proposal to acquire Boston Safe Deposit and Trust Company (U.K.) Limited, Premier Unit Trust Administration Limited, and The Boston Company Advisors (Bermuda) Ltd., the foreign subsidiaries of TBC. After consideration of all the factors specified in Regulation K and based on all of the facts of record, the Board has determined that disapproval of these proposed investments is not warranted.

organizations that render recordkeeping or shareholder communication services;
(13) Reviewing and providing advice to the distributor, the fund and investment advisor regarding sales literature and marketing plans to assure regulatory compliance;
(14) Providing information to the distributor's personnel concerning fund performance and administration;
(15) Participation in seminars, meetings, and conferences designed to present information to brokers and investment companies, but not in connection with the sale of shares of the funds to the public, concerning the operations of the funds, including administrative services provided by Mellon to the funds;
(16) Assisting existing funds in the development of additional portfolios; and
(17) Providing reports to the fund's board with regard to its activities.

Appendix B

Nonbanking Companies to be Acquired

(1) The Boston Finance Company, Boston, Massachusetts, which would engage in making and servicing loans pursuant to section 225.25(b)(1) of the Board's Regulation Y;
(2) Boston Safe Deposit and Trust Company of California, Los Angeles, California; and
(3) Boston Safe Deposit and Trust Company of New York, New York, New York, which would provide trust services pursuant to section 225.25(b)(3) of the Board's Regulation Y;
(4) The Boston Company Institutional Investors, Inc., Boston, Massachusetts;
(5) The Boston Company of Southern California, Los Angeles, California;
(6) Boston Hambro Corp., New York, New York;
(7) The Boston Company Financial Strategies Group, Inc., Boston, Massachusetts;
(8) The Boston Company Financial Strategies, Inc., Boston Massachusetts;
(9) The Boston Company Income Securities Advisors, Inc., Boston, Massachusetts; and
(10) The Boston Company Energy Advisors, Inc., Boston, Massachusetts; which would provide investment advisory services pursuant to section 225.25(b)(4) of the Board's Regulation Y;
(11) The Boston Company Real Estate Counsel Inc., Boston, Massachusetts, which would provide trust services and investment advisory services pursuant to sections 225.25(b)(3) and (4) of the Board's Regulaion Y.

Concurring Statement of Governors Angell and LaWare

We concur in the Board's decision that the administrative services that Applicant proposes to provide to mutual funds in this case are permissible under the Glass–Steagall Act and the Bank Holding Company Act. Banks have been providing investment advisory services and at least some administrative services to mutual funds for some time.

However, we believe that an administrator to a mutual fund should not be permitted to have representation on the board of directors of any mutual fund that it administers. We are concerned that this representation would permit the administrator to have direct input into, and participation in, the policy-making decisions of the board of directors, and creates the potential for exercise of control over the fund. We have similar concerns regarding Applicant's proposal to own shares of mutual funds that it administers.

Accordingly, while we agree with the majority that the proposal to provide administrative services to mutual funds either alone or in combination with investment advisory services, is consistent with the Glass–Steagall Act, we would condition approval of this application on a requirement that the Applicant not have any director interlocks with, or own any shares of, any mutual fund for which Applicant is the administrator.

April 21, 1993

Orders Issued Under Federal Reserve Act

Texas State Bank
McAllen, Texas

Order Approving the Establishment of a Branch

Texas State Bank, McAllen, Texas ("Bank"), a state member bank, has applied pursuant to section 9 of the Federal Reserve Act (12 U.S.C. § 321 *et seq.*) to establish a branch office at 900 East Jackson Avenue, McAllen, Texas.

Notice of the application, affording interested persons an opportunity to submit comments, has been published. 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 9 of the Federal Reserve Act.

Bank is a subsidiary of Texas Regional Bancshares, Inc., McAllen, Texas ("Texas Regional"). Bank, with approximately $375.1 million in deposits, has three offices located throughout McAllen, Texas.[1] This proposal would increase to five the number of offices that Bank would operate in Hidalgo County, Texas.

In considering an application by a state member bank to establish an additional branch, the Board is required to consider the convenience and needs of the community to be served and to take into account the institution's record of performance under the Community Reinvestment Act ("CRA").[2] The CRA requires the federal financial supervisory agencies to encourage financial institutions to help meet the credit needs of the local communities in which they operate consistent with the safe and sound operation of such institutions. To accomplish this end, the CRA requires the appropriate federal supervisory authority to "assess 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 operations of such institution," and to take that record into account in its evaluation of applications for deposit facilities.

In connection with this application, the Board has received comments in support of the proposal from an individual and the Lower Rio Grande Valley District Office of the Small Business Administration ("SBA District Office"). In particular, the SBA District Office noted Bank's expanded participation with the SBA to increase aid to the small business community. The Board also has received comments from an individual ("Protestant") alleging that the proposed branch would not be located in a low- and moderate-income area and that Bank is not meeting the credit needs of the Hispanic community in McAllen, Texas.[3]

The Board has carefully reviewed the CRA performance record of Bank, as well as the comments received, and all the other relevant facts of record, in light of the Statement of the Federal Financial Supervisory Agencies regarding the Community Reinvestment Act ("Agency CRA Statement").[4] The Board also notes that Protestant raised similar allegations relating to Bank's record of performance under the CRA in connection with the Board's approval last year of the applications by Texas Regional and Bank to acquire certain banking institutions.[5] Protestant's allegations were reviewed extensively at that time.

Record of Performance Under the CRA

A. CRA Performance Examination

The Agency CRA Statement provides that a CRA examination is an important, and often controlling, factor in the consideration of an institution's CRA record and that these reports will be given great weight in the application process.[6] Bank received an overall "satisfactory" rating in the examination of its CRA performance conducted by the Federal Reserve Bank of Dallas ("Reserve Bank") as of July 22, 1991 (the "1991 Examination"). In addition, the Reserve Bank recently completed another examination of Bank's CRA performance and has preliminarily concluded that Bank's record of performance remains "satisfactory" (the "1993 Examination").

B. Aspects of CRA Performance

Policies and Programs. The Board previously concluded in the Texas Regional Order that Bank has in place the types of programs designed to assist the bank in meeting the credit needs of its entire community, including low- and moderate-income neighborhoods. For example, Bank has appointed a senior official as its CRA officer. In addition, the CRA program in place at Bank includes a compliance committee that meets every two months. The records of this committee indicate that it actively monitors Bank's consumer compliance and CRA program.

Ascertainment and Marketing. The 1993 Examination found that Bank is adequately assessing the needs of its local community. Since the 1991 Examination, Bank has been involved with more than 180 community and civic organizations in order to ascertain the needs of its community. Bank also uses radio, television, and newspaper advertisements, and its loan-to-deposit ratio reflects a demand for its products. In addition, Bank has placed brochures printed in both Spanish and English in the lobbies of each of its offices as of year-end 1992. The brochure solicits comments about credit needs, services and deposit needs. In the Texas Regional Order, the Board noted that Bank could improve the documentation of its ascertainment and marketing efforts, and the 1993 Examination found that Bank had increased its marketing efforts in 1992.

1. Deposit data are as of December 31, 1992.

2. *See e.g., First American Bank-Ann Arbor*, 78 *Federal Reserve Bulletin* 450 (1992); *see also* 12 U.S.C. §§ 321, 2902(3)(c), 2903(2); 12 C.F.R. 208.5.

3. Protestant also states that more Hispanics should be employed or serve in decision making positions at Bank and in the community in general. Although the Board fully supports programs designed to promote equal opportunity in every aspect of a bank's personnel policies and practices in the employment, development, advancement, and treatment of employees, the Board believes that the alleged deficiencies in Bank's general personnel and employment practices are beyond the scope of the factors that the Board may properly consider under the CRA or the convenience and needs factor.

4. 54 *Federal Register* 13,742 (1989).

5. *Texas Regional Bancshares, Inc.*, 78 *Federal Reserve Bulletin* 289 (1992) (the "Texas Regional Order").

6. 54 *Federal Register* at 13,745.

Community Development and Lending Activities. In the Texas Regional Order, the Board also found that Bank actively participates in projects that support community development activities. In this regard, the chairman of Bank's board of directors serves as the president of McAllen Affordable Homes ("MAH"), a corporation that provides funds for the development of subdivisions for first time home buyers with low- to moderate-incomes. Financing is provided at favorable interest rates and is funded by Community Development Building Grants, City of McAllen funds, and loans from local banks including Bank. Moreover, Bank's executive vice president in charge of lending serves as president of Ronco Enterprises, Inc., a corporation that engages in real estate development of low-income, single family housing, provides counseling to individuals on how to qualify for a mortgage, and provides assistance in avoiding default. Bank also has purchased loans from the Harlingen Community Development Corporation that were made to borrowers in low- and moderate- income areas. In addition, Bank expanded the terms of its unsecured lending program from 18 to 24 months because of demand for such loans. There is no minimum loan amount, and Bank has reduced certain qualifying ratios for the loans. Bank also has been involved with the Weslaco Development Committee, which provides assistance in increasing business development and employment opportunities.

With respect to small business lending, Bank continues to participate in government-guaranteed lending programs, such as those of the Small Business Administration ("SBA"). Since the 1991 Examination, Bank has become a certified SBA lender, and is the only certified SBA lender in the community. Since July 1991, SBA loans have increased from $783,000 to approximately $5 million. This year, Bank also conducted a Small Business Development Workshop with the SBA and other community organizations that was attended by a number of small business owners.[7]

Location of Branch. Bank's proposed branch will be located in the southern area of McAllen on a major thoroughfare that is near four low- and moderate-income census tracts and will offer a full range of banking services. This area is newly developed and employs more than 3,000 residents, the majority of whom are minorities. Bank selected this location after its ascertainment efforts revealed a need for a branch, and community contacts that the Reserve Bank questioned indicated that this area was not adequately served by financial institutions.

C. HMDA Data and Lending Practices

The Board has reviewed the 1992 data reported by Bank under the Home Mortgage Disclosure Act ("HMDA").[8] These data indicate some disparities in lending to minorities, including Hispanics, and in certain low- and moderate-income tracts in McAllen.

The Board is concerned when the record of an institution indicates disparities in lending to minority applicants and believes that all banks are obligated to ensure that their lending practices are based on criteria that ensure not only safe and sound lending, but also ensure equal access to credit by creditworthy applicants regardless of race. The Board recognizes, however, that HMDA data alone provide only a limited measure of any given institution's lending in the communities that the institution serves. The Board also recognizes that HMDA data have limitations that make the data an inadequate basis, absent other information, for conclusively determining whether an institution has engaged in illegal discrimination on the basis of race or ethnicity in making lending decisions.

The Board notes that the 1993 Examination found no evidence of illegal discrimination or other illegal credit practices at Bank. In this regard, denied applications reviewed by examiners revealed borrowers who lacked sufficient income to qualify for the loan amount requested, had poor credit histories, or had high debt-to-income ratios. In addition, examiners noted efforts by Bank to qualify marginal borrowers for loans. Examiners also reviewed real estate records in connection with Bank's housing-related lending activities in certain low- and moderate-income areas. These records demonstrated that there had been no houses listed for sale in these low- and moderate-income areas in the past year, and that large portions of these low- and moderate-income census tracts do not contain housing that would be available for resale.[9]

7. Bank has received two new loan requests as a result of the workshop. Since the 1991 Examination, Bank also has committed $25,000 to the University of Texas-Pan American and $25,000 to the Texas State Technical College to establish scholarship funds to be managed at the discretion of the schools.

8. The HMDA requires banks to report certain information regarding loan applications, approvals, and denials to the various banking agencies and the public. This information includes data on the race, gender, and income of individual loan applicants, as well as the location of the property securing the potential loan, and a description of the application.

9. The 1993 Examination found that Bank needs to improve its use of data relating to the geographic distribution of Bank's loans. Bank has recently completed an overall consolidation of its data processing operations required by the acquisitions approved in the Texas Regional Order. In this regard, the Board expects Bank to continue its efforts to identify the geographic distribution of its applications and denials, to analyze this data, and to implement appropriate steps, if necessary, to assist in meeting the credit needs of its entire community.

D. Conclusion Regarding Convenience and Needs Factor

The Board has carefully considered the entire record, including the comments filed in this case, in reviewing the convenience and needs factor under the CRA. Based on a review of the entire record of performance, including information provided by the Protestant and by Bank, the Board believes that the efforts of Bank to help meet the credit needs of all segments of the communities served by Bank, including low- and moderate-income neighborhoods, and all other convenience and needs considerations are consistent with approval.

On the basis of all the facts of record, including the Board's determinations in the Texas Regional Order, the Board concludes that the convenience and needs considerations, including the CRA performance record of Bank, are consistent with approval of this application.

Other Factors

The Board also has reviewed the other factors it is required to consider in applications for establishing and operating branches under the Federal Reserve Act.[10] Based on all the facts of record, the Board believes that the financial condition of Bank, the general character of its management, and the proposed exercise of corporate powers are consistent with approval and the purposes of section 9 of the Federal Reserve Act.

Based on the foregoing and all of the facts of record, the Board has determined that this application should be, and hereby is, approved. The Board's approval is specifically conditioned upon compliance by Bank with all the commitments made in connection with this application. For purposes of this action, the commitments and conditions relied on by the Board in reaching this decision are both conditions imposed in writing by the Board in connection with its findings and decision, and as such may be enforced in proceedings under applicable law.

This branch shall be in operation no later than one year after the effective date of this Order, unless such period is extended for good cause by the Board or the Federal Reserve Bank of Dallas, acting pursuant to delegated authority.

By order of the Board of Governors, effective April 19, 1993.

10. *See* 12 U.S.C. § 322; 12 C.F.R. 208.5.

Voting for this action: Chairman Greenspan and Governors Angell, Kelley, LaWare, Lindsey, and Phillips. Absent and not voting: Vice Chairman Mullins.

JENNIFER J. JOHNSON
Associate Secretary of the Board

Orders Issued Under International Banking Act

Coutts & Co., AG
Zurich, Switzerland

Order Approving Establishment of a Branch

Coutts & Co., AG, Zurich, Switzerland ("Bank"), a foreign bank within the meaning of the International Banking Act ("IBA"), has applied under section 7(d) of the IBA to establish a state-licensed branch in New York, New York. 12 U.S.C. § 3105(d). A foreign bank must obtain the approval of the Board to establish a branch, agency, commercial lending company, or representative office in the United States under the Foreign Bank Supervision Enhancement Act of 1991 ("FBSEA"), which amended the IBA.

Notice of the application, affording interested persons an opportunity to submit comments, has been published in a newspaper of general circulation in New York, New York (*New York Times*, April 2, 1992). The time for filing comments has expired and no public comments were received.

Bank is incorporated and licensed to act as a bank under Swiss law. Founded in 1930, Bank engages in private banking activities and also provides corporate lending, foreign exchange, money market, and securities services. Bank, with assets of $2.8 billion as of December 31, 1992, is one of the 50 largest banking and finance companies operating in Switzerland in terms of assets. Bank is a wholly owned subsidiary of National Westminster Bank, PLC, London, England ("NatWest").

Bank operates two branches in Switzerland and representative offices in Japan, Singapore, Uruguay, and New York. Bank also owns six subsidiaries. Four of these subsidiaries are incorporated in Switzerland and engage in financial, fiduciary, or portfolio management activities. One subsidiary is incorporated in the Cayman Islands, and acts as the representative office of Bank in Hong Kong. An additional subsidiary is a bank chartered in the Bahamas to take deposits.

The purpose of the proposed branch is to offer private banking services in the United States. The proposed branch will assume the existing private banking business of Bank's affiliate, National Westminster Bank USA, New York, New York.[1] Bank has received approvals related to the establishment of the proposed branch from the relevant home country supervisors, the New York State Banking Department, and the Federal Deposit Insurance Corporation.

Bank does not engage in nonbanking activities in the United States and will be a qualifying foreign banking organization within the meaning of Regulation K after establishing the proposed branch. 12 C.F.R. 211.23(b). NatWest, Bank's ultimate parent, is a foreign bank within the meaning of the IBA and Regulation K. 12 U.S.C. § 3101(7); 12 C.F.R. 211.21(m). NatWest is the second largest banking group in the United Kingdom in terms of assets, which were $238.4 billion as of June 30, 1992.

NatWest conducts a wide range of international operations. The U.S. operations of NatWest consist of two U.S. bank subsidiaries, an Edge corporation, three branches, two agencies, and nonbanking subsidiaries. Coutts & Co. Group, London, England ("Coutts Group"), is the holding company for the companies of the NatWest organization that provide private banking services. Coutts Group provides these services through Coutts & Co., London, England ("Coutts UK"), and through Coutts & Co. International Holding, AG, Zurich, Switzerland ("Coutts International"). Coutts International is the immediate parent of both Bank and Coutts & Co. Trust (Holdings) Ltd., Nassau, Bahamas ("Coutts Trust"), a holding company for the trust operations of Coutts Group.

In order to approve an application by a foreign bank to establish a branch in the United States, the IBA and Regulation K require the Board to determine that the foreign bank applicant engages directly in the business of banking outside the United States, and has furnished to the Board the information it needs to assess adequately the application. The Board must also determine that each of the foreign bank applicant and any foreign bank parent is subject to comprehensive supervision or regulation on a consolidated basis by its home country supervisors. 12 U.S.C. § 3105(d)(2); 12 C.F.R. 211.24(c)(1). The IBA and Regulation K also permit the Board to consider additional standards. 12 U.S.C. § 3105(d)(3)-(4); 12 C.F.R. 211.24(c)(2).

Bank engages directly in the business of banking outside of the United States through its banking operations in Switzerland. Bank also has provided the Board with the information necessary to assess the application through submissions that address the relevant issues.

1. In assuming these accounts, the proposed branch will neither acquire nor accept domestic retail deposits that require deposit insurance. 12 U.S.C. § 3104(c).

Regulation K provides that a foreign bank will be considered to be subject to comprehensive supervision or regulation on a consolidated basis if the Board determines that the bank is supervised and regulated in such a manner that its home country supervisors receive sufficient information on the foreign bank's worldwide operations, including the relationship of foreign bank to any affiliate, to assess the overall financial condition of the foreign bank and its compliance with law and regulation.[2] 12 C.F.R. 211.24(c)(1). In making its determinations under this standard for each of NatWest and Bank, the Board considered the following information.

Supervision of NatWest by U.K. Authorities

The Bank of England is the home country supervisor of NatWest and has broad statutory powers to supervise and take enforcement action against an authorized institution, such as NatWest. The Bank of England supervises NatWest and its affiliates through a series of measures designed to ensure that NatWest complies on an ongoing basis with the conditions for obtaining authorization and operates in a prudent fashion. The conditions for granting authorization require review of, among other things, assets and financial resources and requirements, and maintenance of adequate accounting records and internal controls. The Bank of England may revoke or condition an institution's authorization if it falls out of compliance with these conditions.

In conducting its supervision, the Bank of England relies primarily on the solicitation and analysis of regular reports prepared by independent accountants and the authorized institution, discussions with an institution's management and accountants, and consultation with other supervisory authorities. The Bank of England receives reports from so-called Reporting Accountants who have statutory duties with respect to the information they submit to the Bank of England.

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

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

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

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

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

(v) Evaluate prudential standards, such as capital adequacy and risk asset exposure, on a worldwide basis.

These are indicia of comprehensive, consolidated supervision. No single factor is essential and other elements may inform the Board's determination.

The Bank of England also consults with other regulatory authorities that directly oversee particular portions of an authorized institution's operations.

The Bank of England applies and enforces detailed provisions regarding the content of reports and the duties of persons reporting the information. Under the Banking Act 1987, penalties may be imposed on individuals who either fail to comply with an instruction of the Bank of England to disclose information or reports ordered under statutory standards, or who knowingly or recklessly provide the Bank of England with false or misleading information.[3]

The Bank of England ensures that NatWest has procedures for monitoring and controlling its worldwide activities through the requirement that NatWest maintain systems for accounting, record-keeping, and internal controls. An authorized institution, such as NatWest, is required by the Bank of England to create and maintain systems of accounting, records, and internal controls that permit preparation of required reports, provide accurate information to directors and management, and permit an authorized institution to maintain consolidated information for each subsidiary. The Bank of England evaluates the adequacy of systems that NatWest maintains through a mandatory annual report that is prepared by its Reporting Accountants.

NatWest monitors its operating subsidiaries, including Bank, by requiring annual, on-site audits of each subsidiary by its independent accountants. The independent accountants prepare letters regarding these audits that highlight any deficiencies found in the audit of each company's accounts, including weaknesses in internal controls, and present the letters to NatWest's internal audit and accounting departments, and to NatWest's Group Chief Financial Officer. The Bank of England is notified of persistent or serious deficiencies.

The Bank of England regularly obtains information on the condition of NatWest, its overseas offices, and subsidiaries through frequent discussions with NatWest and its accountants, including its Reporting Accountants, and through periodic financial and audit reports. The Bank of England meets regularly with NatWest and its accountants, including its Reporting Accountants, to review the consolidated financial condition of NatWest, including review of the audited, consolidated accounts of NatWest and its subsidiaries and the auditing process used to prepare such accounts.[4]

NatWest and its accountants must also submit to the Bank of England periodic reports on the financial condition of the organization,[5] as well as annual, independently audited financial reports for each of its principal subsidiaries, which include Bank, Coutts UK, and Coutts Trust.

The Bank of England obtains information on the dealings and relationship between NatWest and its subsidiaries through required reports of aggregate large exposures and other affiliate transactions. It also restricts lending to affiliates by requiring such loans to provide market terms and serve a clear commercial purpose.

The Bank of England evaluates prudential standards for NatWest on a worldwide basis. The Bank of England has implemented the risk-based capital standards of the Basle Accord, with variations that conform to applicable European Community directives. NatWest must submit capital adequacy figures on an aggregate and consolidated basis. The Bank of England also ensures that NatWest maintains sufficient liquidity, and applies limitations on credit risks and concentrations. NatWest conforms to these requirements through internal controls and policies that apply throughout its organization.

Supervision of Bank by Swiss Authorities

The Swiss Federal Banking Commission ("Banking Commission") is responsible for the supervision of Swiss banks and investment trusts and, as such, is the home country supervisor of Bank.[6] The powers of the Banking Commission include licensing banks, issuing directives to address violations by or irregularities involving banks, requiring information from a bank or its auditor regarding supervisory matters, and revoking bank licenses.[7]

The Banking Commission exercises indirect oversight over Swiss banks through independent auditors known as Recognized Auditors that act on behalf of

3. The independent accountants are subject to additional review and disclosure requirements through their licensing authorities.

4. The Bank of England requires NatWest to consolidate any majority-owned or controlled subsidiary that engages in credit or financial activities.

5. The Bank of England requires an authorized institution, such as NatWest, to submit unconsolidated reports monthly and quarterly, and consolidated reports bi-annually. NatWest must discuss any accounting differences in other jurisdictions that substantially affect the consolidated reports with the Bank of England.

6. The Banking Commission is responsible for the direct oversight of Bank. The Bank of England, as the supervisor of NatWest and its subsidiaries, consults with the Banking Commission regarding supervision of Bank.

7. The Banking Commission may license an entity as a bank if the entity:

(1) Conducts clearly defined activities with separate bodies for management, direction, supervision, and control of significant activities;

(2) Holds minimum, fully-paid capital;

(3) Employs bank management and administration with good reputations that ensure proper bank operations; and

(4) Employs a majority of Swiss residents as managers.

the Commission under detailed statutory provisions.[8] Each Swiss bank must appoint a Recognized Auditor, and must notify the Banking Commission of an intent to change its auditor. The Recognized Auditors may take action within a bank as deemed necessary or as instructed by the Banking Commission, and must inform the Commission of supervisory matters.

The Banking Commission ensures that Bank has adequate procedures for monitoring and controlling its worldwide activities through statutory and regulatory standards for operations that each Swiss bank must meet. Among these standards are requirements for adequate internal controls, oversight, administration, and financial resources. The Banking Commission reviews compliance with these limitations on operations and with internal control requirements through an annual audit performed by the Recognized Auditor. The Banking Commission may take supervisory actions that include requiring divestiture of a subsidiary in response to supervisory concerns.

Bank has adopted internal control procedures that permit it, and NatWest, to monitor Bank's operations and those of its subsidiaries. Bank also performs annual internal audits of each of its branches that review all business activities and operations, as well as compliance with internal policy and applicable laws. Bank monitors and controls its subsidiaries through annual audits of its operating subsidiaries by its Recognized Auditor. The results of these audits are communicated to the management of both Bank and NatWest.

The Banking Commission obtains information on the condition of Bank, its foreign offices, and subsidiaries by requiring submission of periodic, consolidated financial reports and through the mandatory annual report by the Recognized Auditor. Generally, Swiss banks must consolidate for accounting purposes all foreign offices on a line-by-line basis, and must include any majority-owned banking, finance, or real estate subsidiary on a pro-rata or proportional accounting basis.

The Banking Law requires Bank to submit annual and semi-annual balance sheets and income statements to the Banking Commission. The Banking Commission also receives information regarding capital adequacy, country risk exposure, and foreign exchange exposures from Bank annually. Information on risks (such as interest rate risk) and inter-company transactions is received through large loan reports that must be submitted both when such loans occur and annually. The Banking Commission evaluates prudential standards with respect to capital adequacy that effectively follow the risk-based capital standards of the Basle Accord.

The Swiss Banking Law and Implementing Ordinance prescribe the content of the mandatory annual report of Bank by its Recognized Auditor. Under these laws, the Recognized Auditor must review and report on the financial condition of a bank, including sufficiency and valuation of assets and capital, as well as other topics. The report must express an opinion regarding compliance with the conditions for licensure, accounting accuracy, risks, adjustments, undisclosed reserves, treatment of classified assets, fiduciary operations, exposures to single borrowers, insider lending, capital, liquidity, reserve allocation, foreign assets, internal controls and organization, and compliance with monetary controls.

The Swiss Banking Law contains penalties to ensure correct reporting to the Banking Commission. Recognized Auditors face penalties for gross violations of duties in auditing, for reporting misleading information or omitting essential information from the audit report, and for failing to request pertinent information or to report to the Banking Commission.

Based on all the facts of record, which include the information described above, the Board concludes that each of Bank and NatWest is subject to comprehensive supervision and regulation on a consolidated basis by its respective home country supervisor.

Additional Standards

In considering this application, the Board has also taken into account the additional standards set forth in section 7 of the IBA. 12 U.S.C. § 3105(d)(3)-(4). As noted above, Bank has received the consent of its home country supervisor to establish the proposed branch. In addition, subject to certain conditions, the Bank of England and the Banking Commission may share information on Bank's operations with other supervisors, including the Board.

As noted, Bank must comply with the Swiss capital standards that effectively follow the Basle Accord. Bank's capital exceeds these minimum standards and is equivalent to capital that would be required of a U.S. banking organization. Managerial and other financial resources of Bank are also considered consistent with approval and Bank appears to have the experience and capacity to support this additional office. Bank has established controls and procedures for its U.S. offices to ensure compliance with U.S. law. Under the IBA, the proposed state-licensed branch may not engage in any type of activity that is

8. The Banking Commission must formally grant recognition to Recognized Auditors under statutory standards that are designed to ensure the independence and competence of the auditors and the accuracy of the auditing process.

not permissible for a federally-licensed branch without the Board's approval.

Finally, NatWest and Bank each have committed to make available to the Board such information on the operations of Bank and any affiliate of Bank that the Board deems necessary to determine and enforce compliance with the IBA, the Bank Holding Company Act of 1956, as amended, and other applicable Federal law, to the extent not prohibited by law or regulation. The Board has reviewed the restrictions on disclosure in relevant jurisdictions in which NatWest or Bank operate and has communicated with certain government authorities concerning access to information. The Board notes that NatWest, Bank, and certain of their affiliates may not provide information without the consent of third parties. In this regard, each of NatWest and Bank also has committed to cooperate with the Board to obtain any approvals or consents that may be needed to gain access to information that may be requested by the Board. In light of these commitments and other facts of record, and subject to the condition described below, the Board concludes that Bank has provided adequate assurances of access to any necessary information the Board may request.

On the basis of all the facts of record, and subject to the commitments made by NatWest and Bank, as well as the terms and conditions set forth in this Order, the Board has determined that Bank's application to establish a branch should be, and hereby is, approved. If any restrictions on access to information on the operations or activities of Bank and any of its affiliates subsequently interfere with the Board's ability to determine the safety and soundness of Bank's U.S. operations or the compliance by Bank or its affiliates with applicable Federal statutes, the Board may require termination of any of Bank's direct or indirect activities in the United States. Approval of this application is also specifically conditioned on compliance by each of NatWest and Bank with the commitments made in connection with this application, and with the conditions contained in this Order.[9] The commitments and conditions referred to above are conditions imposed in writing by the Board in connection with its decision, and may be enforced in proceedings under 12 U.S.C. § 1818 or 12 U.S.C. § 1847 against NatWest, or Bank, including its offices and its affiliates.

By order of the Board of Governors, effective April 20, 1993.

9. The Board's authority to approve the establishment of the proposed branch parallels the continuing authority of the State of New York to license offices of a foreign bank. The Board's approval of this application does not supplant the authority of the State of New York, and its agent, the New York State Banking Department, to license the proposed branch of Bank in accordance with any terms or conditions that the New York State Banking Department may impose.

Voting for this action: Chairman Greenspan and Governors Angell, Kelley, LaWare, Lindsey, and Phillips. Absent and not voting: Governor Mullins.

JENNIFER J. JOHNSON
Associate Secretary of the Board

ACTIONS TAKEN UNDER THE FEDERAL DEPOSIT INSURANCE CORPORATION IMPROVEMENT ACT

By the Board

Mid Am, Inc.
Bowling Green, Ohio

Order Approving Merger of a Savings Association With a Commercial Bank

Mid Am, Inc., Bowling Green, Ohio ("Mid Am"), has applied for the Board's approval to permit its subsidiary, American Community Bank, N.A., Lima, Ohio ("Bank"), to merge with Colonial Federal Savings Bank, Bellefontaine, Ohio ("Colonial"), pursuant to section 5(d)(3) of the Federal Deposit Insurance Act (12 U.S.C. § 1815(d)(3) ("FDI Act")), as amended by the Federal Deposit Insurance Corporation Improvement Act of 1991 (Pub. L. No. 102–242, § 501, 105 Stat. 2236, 2388-2392 (1991)). Section 5(d)(3) of the FDI Act requires the Board to follow the procedures and consider the factors set forth in the Bank Merger Act (12 U.S.C. § 1828(c)). 12 U.S.C. § 1815(d)(3)(E).[1]

Notice of the application, affording interested persons an opportunity to submit comments, has been given in accordance with the Bank Merger Act and the Board's Rules of Procedure (12 C.F.R. 262.3(b)). In addition, reports on the competitive effects of the merger were requested from the United States Attorney General, the Office of the Comptroller of the Currency, the Federal Deposit Insurance Corporation, and the Office of Thrift Supervision. 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 the Bank Merger Act and section 5(d)(3) of the FDI Act.

Mid Am is the eleventh largest commercial banking organization in Ohio, controlling deposits of $1 billion, representing approximately 1.2 percent of total deposits in commercial banking organizations in the state. Colonial is the 84th largest thrift organization in Ohio,

1. These factors include considerations relating to competition, the financial and managerial resources and future prospects of the existing and proposed institutions, and the convenience and needs of the communities to be served. 12 U.S.C. § 1828(c).

controlling deposits of $71.9 million, representing less than 1 percent of total deposits in thrift institutions in the state. Upon consummation of the proposed transaction, Mid Am would remain the eleventh largest commercial banking organization in Ohio, controlling deposits of $1.1 billion, representing approximately 1.2 percent of total deposits in commercial banking organizations in the state.

Mid Am and Colonial compete directly in the Logan County, Ohio, banking market.[2] In that market, Mid Am is the largest of twelve commercial banking or thrift organizations (together, "depository institutions"), controlling deposits of $84.8 million, representing approximately 23.5 percent of total deposits in depository institutions in the market ("market deposits").[3] Colonial is the third largest depository institution in the market, controlling deposits of $37.2 million, representing approximately 10.3 percent of market deposits.[4] Upon consummation of this proposal, Mid Am would control $159.2 million in deposits, representing approximately 40 percent of market deposits. The Herfindahl–Hirschman Index ("HHI") for this market would increase by 811 points to 2204.[5]

In order to mitigate the adverse competitive effects that would otherwise result from consummation of this proposal, Mid Am has committed to divest one branch of Bank, with deposits of approximately $15.4 million, located in the Logan County banking market to an out-of-market banking organization.[6] Following this divestiture, Mid Am would remain the largest depository institution in the market, controlling deposits of $143.8 million, representing approximately 36.1 percent of market deposits. The HHI would increase by 532 points to 1925.

The record in this case indicates that the effects that consummation of this proposal would have on competition in the Logan County banking market are mitigated by certain characteristics of this market. Following the consummation of the proposed divestiture, nine commercial banking organizations, including three of the five largest commercial banking organizations in Ohio, and three thrift institutions would operate in the Logan County banking market. The Logan County banking market also has a number of features that make it attractive for entry, including population growth, deposit growth, and the level of per capita income in the market.[7] Additionally, Ohio's nationwide reciprocal interstate banking law and its intrastate branching law permit a potentially large number of financial institutions to enter this market with relative ease. In this regard, one commercial banking organization entered the market on a de novo basis in 1990 and subsequently opened a second *de novo* branch in the market.

In light of the number and size of competitors remaining in the Logan County banking market, the market's attractiveness to entry, the number of potential entrants into the market, and other facts of record in this case, the Board concludes that consummation of this proposal would not have a significantly adverse effect on competition or the concentration of banking resources in the Logan County banking market or any other relevant banking market.

The Board also concludes that the financial and managerial resources and future prospects of Mid Am and Bank, and considerations relating to the convenience and needs of the communities to be served, are also consistent with approval of this application. Moreover, the record in this case shows that:

(1) The transaction will not result in the transfer of any federally insured depository institution's federal deposit insurance from one federal deposit insurance fund to the other;

(2) Mid Am and Bank currently meet, and upon consummation of the proposed transaction will continue to meet, all applicable capital standards; and

2. The Logan County banking market consists of Logan County, Ohio.

3. State deposit data are as of September 30, 1992. Market deposit data are as of June 30, 1992.

4. Market share data before consummation are based on calculations in which the deposits of thrift institutions are included at 50 percent. The Board previously has indicated that thrift institutions have become, or have the potential to become, major competitors of commercial banks. *See Midwest Financial Group*, 75 *Federal Reserve Bulletin* 386 (1989); *National City Corporation*, 70 *Federal Reserve Bulletin* 743 (1984). Because the deposits of Colonial would be transferred to a commercial bank under Mid Am's proposal, those deposits are included at 100 percent in the calculation of the *pro forma* market share. *See First Banks, Inc.*, 76 *Federal Reserve Bulletin* 669, 670 n.9 (1990); *Norwest Corporation*, 78 *Federal Reserve Bulletin* 452 (1992).

5. 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 above 1800 is considered to be highly concentrated. The Justice 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 more than 200 points. The Justice Department has stated that the higher than normal HHI thresholds for screening bank mergers for anticompetitive effects implicitly recognize the competitive effect of limited-purpose lenders and other non-depository financial entities.

6. Mid Am has committed to execute a binding sales agreement, acceptable to the Board, to effect this divestiture prior to the consummation of the acquisition of Colonial. In the event that the divestiture is not consummated within 180 days of the proposal, Mid Am has signed a trust agreement that provides for the transfer of the assets and liabilities to be divested to an independent trustee who will sell them promptly.

7. Logan County's population increase between 1987 and 1990 (4.4 percent), deposit growth between 1988 and 1991 (21.6 percent), and per capita income ($15,346), all exceed the average for non-MSA counties in Ohio.

(3) Because Bank is in Ohio and is merging with a savings institution located in Ohio, the proposed transaction would comply with the Douglas Amendment if Colonial were a state bank that Mid Am was applying to acquire directly. *See* 12 U.S.C. § 1815(d)(3).

Based on the foregoing and all of the facts of record, the Board has determined that this application should be, and hereby is, approved. This approval is subject to Bank obtaining the required approval of the appropriate Federal banking agency for the proposed merger under the Bank Merger Act. The Board's approval of this application also is conditioned upon Mid Am's compliance with the commitments made in connection with this application, including the divestiture commitments discussed in this Order. For purposes of this action, the commitments and conditions relied on in reaching this decision are both conditions imposed in writing by the Board and, as such, may be enforced in proceedings under applicable law. This approval is limited to the proposal presented to the Board by Mid Am, and may not be construed as applying to any other transaction.

This transaction may not be consummated before the thirtieth calendar day after the effective date of this Order, or later than three months after the effective date of this Order, unless such period is extended by the Board or the Federal Reserve Bank of Cleveland, acting pursuant to delegated authority. In connection with this provision, advice of the fact of consummation should be given in writing to the Reserve Bank.

By order of the Board of Governors, effective April 19, 1993.

Voting for this action: Chairman Greenspan and Governors Angell, Kelley, LaWare, Lindsey, and Phillips. Absent and not voting: Governor Mullins.

JENNIFER J. JOHNSON
Associate Secretary of the Board

ACTIONS TAKEN UNDER THE FEDERAL DEPOSIT INSURANCE CORPORATION IMPROVEMENT ACT OF 1991

By the Director of the Division of Banking Supervision and Regulation and the General Counsel of the Board

Copies are available upon request to the Freedom of Information Office, Office of the Secretary, Board of Governors of the Federal Reserve System, Washington, D.C. 20551.

Bank Holding Company	Acquired Thrift	Surviving Bank(s)	Approval Date
First Citizens BancShares, Inc., Raleigh, North Carolina	Caldwell Savings Bank, Inc., SSB, Lenoir, North Carolina	First-Citizens Bank & Trust Company, Raleigh, North Carolina	March 30, 1993
Pickens County Bancshares, Inc., Carrollton, Alabama	Secor Bank, F.S.B., Birmingham, Alabama	West Alabama Bank and Trust, Carrollton, Alabama	March 31, 1993

APPLICATIONS APPROVED UNDER BANK HOLDING COMPANY ACT

By the Secretary of the Board

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

Section 3

Applicant(s)	Bank(s)	Effective Date
FirstBank Holding Company of Colorado, Lakewood, Colorado FirstBank Holding Company of Colorado Employee Stock Ownership Plan, Lakewood, Colorado	FirstBank of Fort Collins, Fort Collins, Colorado	April 2, 1993
First Security Corporation, Salt Lake City, Utah	Desert Southwest Community Bancorp, Las Vegas, Nevada	April 22, 1993

Section 4

Applicant(s)	Bank(s)	Effective Date
Panhandle Bancshares, Inc., Panhandle, Texas	to engage *de novo* in providing management consulting services to nonaffiliated depository institutions and tax planning and preparation services	April 9, 1993

Applications Approved Under Bank Holding Company Act

By Federal Reserve Banks

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

Section 3

Applicant(s)	Bank(s)	Reserve Bank	Effective Date
AMBANC Corp., Vincennes, Indiana	Farmers' State Bank of Palestine, Palestine, Illinois	St. Louis	April 7, 1993
BOK Financial Corporation, Tulsa, Oklahoma	Sand Springs Bancshares, Inc., Sand Springs, Oklahoma Brookside Bancshares, Inc., Tulsa, Oklahoma	Kansas City	April 2, 1993

Section 3—Continued

Applicant(s)	Bank(s)	Reserve Bank	Effective Date
Bourbonnais Bancorp, Inc., Bourbonnais, Illinois	Presidential Holding Company, Bourbonnais, Illinois	Chicago	April 8, 1993
Cashton Bancshares, Inc., Cashton, Wisconsin	Bank of Cashton, Cashton, Wisconsin	Chicago	March 30, 1993
CNB Bancshares, Inc., Evansville, Indiana	South Central Illinois Bancorp, Inc., Effingham, Illinois	St. Louis	March 22, 1993
Community First Bankshares, Inc., Fargo, North Dakota	F&M Bank Holding Company, Cooperstown, North Dakota	Minneapolis	April 23, 1993
Community First Bankshares, Inc., Fargo, North Dakota	Lincoln Banking Company, Ltd., Steamboat Springs, Colorado	Minneapolis	April 23, 1993
Crested Butte State Bank Holding Company, Crested Butte, Colorado	Crested Butte State Bank, Crested Butte, Colorado	Kansas City	March 26, 1993
Davis BanCorporation, Inc., Davis, Oklahoma	First Davis Bancorporation, Inc., Davis, Oklahoma	Kansas City	April 16, 1993
Dimeco, Inc., Honesdale, Pennsylvania	The Dime Bank, Honesdale, Pennsylvania	Philadelphia	April 1, 1993
Farmers State Bancshares of Andrew County, Inc., Savannah, Missouri	Farmers State Bank of Rosendale, Savannah, Missouri	Kansas City	March 26, 1993
First Breckinridge Bancshares, Inc., Irvington, Kentucky	Bank of Clarkson, Clarkson, Kentucky	St. Louis	March 29, 1993
First Linden Bancshares, Inc., Linden, Alabama	First Bank of Linden, Linden, Alabama	Atlanta	March 26, 1993
First National of Nebraska, Inc., Omaha, Nebraska	First National Bank of Kansas, Overland Park, Kansas	Kansas City	April 2, 1993
First Neighborhood Bancshares, Inc., Toledo, Illinois	Newman Bancshares, Inc., Newman, Illinois	Chicago	April 16, 1993
FirstPerryton Bancorp, Inc., Perryton, Texas	Texas Commerce Bank - Amarillo, Amarillo, Texas	Dallas	April 20, 1993
First State Bancshares, Inc., Scottsbluff, Nebraska	Security First Savings & Loan Association, Cheyenne, Wyoming	Kansas City	April 22, 1993
FNBR Holding Corporation, Meeker, Colorado	First National Bank of the Rockies, Meeker, Colorado	Kansas City	March 31, 1993

Section 3—Continued

Applicant(s)	Bank(s)	Reserve Bank	Effective Date
Fourth Financial Corporation, Wichita, Kansas	Nichols Hills Bancorporation, Inc., Oklahoma City, Oklahoma	Kansas City	April 2, 1993
Illinois State Bancorp, Inc., Wheaton, Illinois	Presidential Holding Company, Bourbonnais, Illinois	Chicago	April 8, 1993
International Brotherhood of Boilermakers, Iron Ship Builders, Blacksmiths, Forgers & Helpers, Kansas City, Kansas	Brotherhood Bancshares, Inc., Kansas City, Kansas	Kansas City	April 16, 1993
LeRoy C. Darby, Inc., Monona, Iowa	Keystone Bancshares, Inc., Elkader, Iowa	Chicago	April 16, 1993
Lincoln Trail Bancshares, Inc., Taylorville, Illinois	Palmer State Bank, Taylorville, Illinois	Chicago	March 26, 1993
Midlothian State Bank Employee Stock Ownership Trust, Midlothian, Illinois	Midlothian State Bank, Midlothian, Illinois	Chicago	April 14, 1993
Oliver Bancorporation, Inc., Center, North Dakota	Security State Bank of New Salem, New Salem, North Dakota	Minneapolis	March 26, 1993

Section 4

Applicant(s)	Nonbanking Activity/Company	Reserve Bank	Effective Date
The Bank of Tokyo, Ltd., Tokyo, Japan	BOT Financial Corporation, Boston, Massachusetts	San Francisco	April 22, 1993
Central Bancshares, Inc., Cambridge, Nebraska	C.R. Druse Insurance, Cambridge, Nebraska	Kansas City	March 31, 1993
The Merchants Holding Company, Winona, Minnesota	Mortgage Options of La Crosse, Inc., La Crosse, Wisconsin	Minneapolis	April 15, 1993

Applications Approved Under Bank Merger Act

By Federal Reserve Banks

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

Applicant(s)	Bank(s)	Reserve Bank	Effective Date
Bank of Woodward, Woodward, Oklahoma	Cimarron Bank, Waukomis, Oklahoma	Kansas City	April 9, 1993
Commonwealth Bank, Williamsport, Pennsylvania	Valley Community Bank, Kingston, Pennsylvania	Philadelphia	April 20, 1993

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.

Amann v. Prudential Home Mortgage Co., et al., No. 93–10320 WD (D. Massachusetts, filed February 12, 1993). Action for fraud and breach of contract arising out of a home mortgage.

Adams v. Greenspan, No. 93–0167 (D. D.C., filed January 27, 1993). Action by former employee under the Civil Rights Act of 1964 and the Rehabilitation Act of 1973 concerning termination of employment.

Sisti v. Board of Governors, No. 93–0033 (D.D.C., filed January 6, 1993). Challenge to Board staff interpretation with respect to margin accounts. On April 9, 1993, the Board filed a motion to dismiss.

U.S. Check v. Board of Governors, No. 92–2892 (D.D.C., filed December 30, 1992). Challenge to partial denial of request for information under the Freedom of Information Act.

CBC, Inc. v. Board of Governors, No. 92–9572 (10th Cir., filed December 2, 1992). Petition for review of civil money penalty assessment against a bank holding company and three of its officers and directors for failure to comply with reporting requirements. The Board's brief was filed on March 19, 1993.

DLG Financial Corporation v. Board of Governors, No. 392 Civ. 2086-G (N.D. Texas, filed October 9, 1992). Action to enjoin the Board and the Federal Reserve Bank of Dallas from taking certain enforcement actions, and seeking money damages on a variety of tort and contract theories. On October 9, 1992, the court denied plaintiffs' motion for a temporary restraining order. On March 30, 1993, the court granted the Board's motion to dismiss as to it, and also dismissed certain claims against the Reserve Bank.

Zemel v. Board of Governors, No. 92–1056 (D. District of Columbia, filed May 4, 1992). Age Discrimination in Employment Act case. The parties' cross-motions for summary judgment are pending.

State of Idaho, Department of Finance v. Board of Governors, No. 92-70107 (9th Cir., filed February 24, 1992). Petition for review of Board order returning without action a bank holding company application to relocate its subsidiary bank from Washington to Idaho. The Board's brief was filed on June 29, 1992. Oral argument was held October 6, 1992.

In re Subpoena Served on the Board of Governors, Nos. 91–5427, 91–5428 (D.C. Cir., filed December 27, 1991). Appeal of order of district court, dated December 3, 1991, requiring the Board and the Office of the Comptroller of the Currency to produce confidential examination material to a private litigant. On June 26, 1992, the court of appeals affirmed the district court order in part, but held that the bank examination privilege was not waived by the agencies' provision of examination materials to the examined institution, and remanded for further consideration of the privilege issue. On August 6, 1992, the district court ordered the matter held in abeyance pending settlement of the underlying action.

Board of Governors v. Kemal Shoaib, No. CV 91–5152 (C.D. California, filed September 24, 1991). Action to freeze assets of individual pending administrative adjudication of civil money penalty assessment by the Board. On October 15, 1991, the court issued a preliminary injunction restraining the transfer or disposition of the individual's assets.

Board of Governors v. Ghaith R. Pharaon, No. 91-CIV-6250 (S.D. New York, filed September 17, 1991). Action to freeze assets of individual pending administrative adjudication of civil money penalty assessment by the Board. On September 17, 1991, the court issued an order temporarily restraining the transfer or disposition of the individual's assets.

Final Enforcement Orders Issued by the Board of Governors

First Pacific Bancorp, Inc.
Beverly Hills, California

The Federal Reserve Board announced on April 2, 1993, the issuance of Orders of Assessment of a Civil Money Penalty against First Pacific Bancorp, Inc., Beverly Hills, California, and Jose M. Anotado, an institution-affiliated party of First Pacific Bancorp, Inc.

Pacific Inland Bancorp
Anaheim, California

The Federal Reserve Board announced on April 16, 1993, the issuance of a Cease and Desist Order against Pacific Inland Bancorp, Anaheim, California, and its subsidiary bank, the Pacific Inland Bank, Anaheim, California.

Silicon Valley Bancshares, Inc.
Santa Clara, California

The Federal Reserve Board announced on April 16, 1993, the issuance of a Consent Order against Silicon Valley Bancshares, Inc., Santa Clara, California, and its subsidiary bank, the Silicon Valley Bank, Santa Clara, California, pursuant to 12 U.S.C. 1818(b).

Written Agreements Approved by Federal Reserve Banks

Arrow Financial Corporation
Glens Falls, New York

The Federal Reserve Board announced on April 5, 1993, the execution of an Amendment to the Written Agreement, dated July 22, 1992, involving the Federal Reserve Bank of New York, Arrow Financial Corporation, Glens Falls, New York, and Arrow Vermont Corporation, Rutland, Vermont.

Citizens First Bancorp, Inc.
Glen Rock, New Jersey

The Federal Reserve Board announced on April 5, 1993, the execution of an Amendment to the Written Agreement, dated December 18, 1990, between the Federal Reserve Bank of New York and Citizens First Bancorp, Inc., Glen Rock, New Jersey.

Perry County Bancorp, Inc.
Du Quoin, Illinois

The Federal Reserve Board announced on April 26, 1993, the execution of Written Agreements involving the Federal Reserve Bank of St. Louis and Perry County Bancorp, Inc., Du Quoin, Illinois, a bank holding company, and its subsidiary bank, the Du Quoin State Bank, Du Quoin, Illinois.

Financial and Business Statistics

CONTENTS

Domestic Financial Statistics—Continued

REAL ESTATE

CONSUMER INSTALLMENT CREDIT

FLOW OF FUNDS

Domestic Nonfinancial Statistics

SELECTED MEASURES

International Statistics

SUMMARY STATISTICS

REPORTED BY BANKS IN THE UNITED STATES

REPORTED BY NONBANKING BUSINESS ENTERPRISES IN THE UNITED STATES

SECURITIES HOLDINGS AND TRANSACTIONS

INTEREST AND EXCHANGE RATES

Guide to Tabular Presentation

SYMBOLS AND ABBREVIATIONS

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

GENERAL INFORMATION

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

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

"U.S. government securities" may include guaranteed issues of U.S. government agencies (the flow of funds figures also include not fully guaranteed issues) as well as direct obligations of the Treasury. "State and local government" also includes municipalities, special districts, and other political subdivisions.

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

Percent annual rate of change, seasonally adjusted[1]

Monetary and credit aggregate	1992			1993	1992[r]		1993		
	Q2	Q3	Q4[r]	Q1	Nov.	Dec.	Jan.[r]	Feb.	Mar.
Reserves of depository institutions[2]									
1 Total	14.8[r]	9.3	25.8	9.3	22.2	12.0	6.9	5.6	5.4
2 Required	15.3[r]	9.9	25.3	8.7	23.4	9.6	4.7	9.3	3.0
3 Nonborrowed	14.6[r]	8.4	27.1	9.5	23.2	11.6	6.0	8.3	4.4
4 Monetary base[3]	7.8	10.5	12.6	9.1	10.4	10.2	8.3	8.5	8.9
Concepts of money, liquid assets, and debt[4]									
5 M1	10.6	11.7	16.8	6.5	15.7	8.8	7.7	−.5	2.4
6 M2	.3[r]	.8	2.7	−2.1	2.3	−.3	−3.5	−4.4	−.8
7 M3	−.6[r]	.1	−.2	−4.0	−.4	−3.4	−7.5	−2.3	−1.5
8 L	1.3[r]	1.1	1.9	n.a.	3.2	−.9	−5.2	−1.1	n.a.
9 Debt	5.7[r]	4.9[r]	4.4	n.a.	5.7	6.2	3.2	4.4	n.a.
Nontransaction components									
10 In M2[5]	−3.4[r]	−3.2	−2.8	−5.5	−3.2	−4.1	−8.1	−6.2	−2.2
11 In M3 only[6]	−4.9	−3.6	−14.4	−13.7	−13.9	−19.2	−28.3	9.2	−4.7
Time and savings deposits									
Commercial banks									
12 Savings, including MMDAs	12.6	10.9	12.9	1.7	10.3	5.7	−3.2	2.7	−2.5
13 Small time[7]	−13.4	−17.4	−17.1	−7.5	−18.5	−11.5	−9.9	3.1	−2.9
14 Large time[8,9]	−13.3	−18.6	−18.4	−17.3	−16.2	−10.7	−26.9	−10.6	−18.8
Thrift institutions									
15 Savings, including MMDAs	18.1	9.2	8.7	.0	9.9	5.6	1.1	−10.0	−4.5
16 Small time[7]	−29.8	−18.6	−21.7	−19.2	−21.3	−21.7	−16.5	−24.1	−12.6
17 Large time[8,9]	−31.9	−14.9	−11.3	−17.3	−29.1	−21.0	−3.6	−28.6	−18.3
Money market mutual funds									
18 General purpose and broker-dealer	−6.6[r]	−7.4[r]	−4.2	−10.1	−9.0	−4.9	−9.5	−21.2	−1.8
19 Institution-only	23.9	32.9	−19.4	−14.3	−9.7	−39.6	−27.3	25.5	−8.3
Debt components[4]									
20 Federal	14.4	10.7[r]	6.0	n.a.	10.5	16.3	2.9	5.3	n.a.
21 Nonfederal	2.8[r]	2.9[r]	3.8	n.a.	4.0	2.7	3.4	4.0	n.a.

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

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

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

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

M1: (1) currency outside the 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 (OCDs), consisting of negotiable order of withdrawal (NOW) and automatic transfer service (ATS) accounts at depository institutions, credit union share draft accounts, and demand deposits at thrift institutions. Seasonally adjusted M1 is computed by summing currency, travelers checks, demand deposits, and OCDs, each seasonally adjusted separately.

M2: M1 plus (1) overnight (and continuing-contract) repurchase agreements (RPs) issued by all depository institutions and overnight Eurodollars issued to U.S. residents by foreign branches of U.S. banks worldwide, (2) savings (including MMDAs) and small time deposits (time deposits—including retail repurchase agreements (RPs)—in amounts of less than $100,000), and (3) balances in both taxable and tax-exempt general-purpose and broker–dealer money market funds. Excludes individual retirement accounts (IRAs) 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. Seasonally adjusted M2 is computed by adjusting its non-M1 component as a whole and then adding this result to seasonally adjusted M1.

M3: M2 plus (1) large time deposits and term RP liabilities (in amounts of $100,000 or more) issued by all depository institutions, (2) 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 (3) balances in both taxable and tax-exempt, institution-only money market funds. Excludes amounts held by depository institutions, the U.S. government, money market funds, and foreign banks and official institutions. Also excluded is the estimated amount of overnight RPs and Eurodollars held by institution-only money market funds. Seasonally adjusted M3 is computed by adjusting its non-M2 component as a whole and then adding this result to seasonally adjusted M2.

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 fund holdings of these assets. Seasonally adjusted L is computed by summing U.S. savings bonds, short-term Treasury securities, commercial paper, and bankers acceptances, each seasonally adjusted separately, and then adding this result to M3.

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. Data are derived from the Federal Reserve Board's flow of funds accounts. Data on debt of domestic nonfinancial sectors are monthly averages, derived by averaging adjacent month-end levels. Growth rates for debt reflect adjustments for discontinuities over time in the levels of debt presented in other tables.

5. Sum of (1) overnight RPs and Eurodollars, (2) money market fund balances (general purpose and broker–dealer), (3) MMDAs, and (4) savings and small time deposits.

6. Sum of (1) large time deposits, (2) term RPs, (3) term Eurodollars of U.S. residents, and (4) money market fund balances (institution-only), less (5) a consolidation adjustment that represents the estimated amount of overnight RPs and Eurodollars held by institution-only money market funds. This sum is seasonally adjusted as a whole.

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

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

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

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

Millions of dollars

Factor	Average of daily figures			Average of daily figures for week ending on date indicated						
	1993			1993						
	Jan.	Feb.	Mar.	Feb. 17	Feb. 24	Mar. 3	Mar. 10	Mar. 17	Mar. 24	Mar. 31
SUPPLYING RESERVE FUNDS										
1 Reserve Bank credit outstanding	336,822[r]	334,937	337,717	334,964	333,563	337,914	336,092	337,877	336,699	339,624
U.S. government securities[2]										
2 Bought outright—System account	297,541	297,289	298,823	297,127	298,136	297,420	297,661	298,672	300,087	299,897
3 Held under repurchase agreements	2,582	1,358	1,984	1,008	0	4,178	2,327	1,628	0	2,213
Federal agency obligations										
4 Bought outright	5,379	5,271	5,173	5,260	5,260	5,225	5,216	5,165	5,165	5,123
5 Held under repurchase agreements	189	73	112	64	0	252	202	37	0	164
6 Acceptances	0	0	0	0	0	0	0	0	0	0
Loans to depository institutions										
7 Adjustment credit	182	22	69	14	24	48	6	137	13	120
8 Seasonal credit	10	18	26	19	22	18	19	25	31	32
9 Extended credit	1	0	0	0	0	0	0	0	0	0
10 Float	1,025[r]	763	1,188	1,110	997	974	718	2,237	777	1,018
11 Other Federal Reserve assets	29,913	30,143	30,342	30,362	29,123	29,799	29,944	29,977	30,626	31,057
12 Gold stock	11,055	11,055	11,055	11,055	11,055	11,055	11,055	11,055	11,055	11,054
13 Special drawing rights certificate account	8,018	8,018	8,018	8,018	8,018	8,018	8,018	8,018	8,018	8,018
14 Treasury currency outstanding	21,470[r]	21,510	21,560	21,509	21,518	21,528	21,542	21,556	21,570	21,584
ABSORBING RESERVE FUNDS										
15 Currency in circulation	330,334[r]	329,470	331,650	330,480	330,217	329,941	331,101	331,893	332,044	332,174
16 Treasury cash holdings	505	467	509	464	463	470	512	512	512	512
Deposits, other than reserve balances, with Federal Reserve Banks										
17 Treasury	7,693	6,018	5,472	4,791	4,967	6,017	5,395	5,563	5,026	5,243
18 Foreign	215	243	290	240	237	254	202	375	238	370
19 Service-related balances and adjustments	6,426[r]	6,289	6,501	6,170	6,180	6,413	6,535	6,304	6,296	6,905
20 Other	285	302	347	305	306	327	344	344	334	362
21 Other Federal Reserve liabilities and capital	8,523	9,006	9,091	8,925	8,928	9,130	9,113	9,093	9,064	9,069
22 Reserve balances with Federal Reserve Banks[3]	23,386[r]	23,724	24,490	24,171	22,856	25,964	23,506	24,423	23,828	25,644

Factor	End-of-month figures			Wednesday figures						
	Jan.	Feb.	Mar.	Feb. 17	Feb. 24	Mar. 3	Mar. 10	Mar. 17	Mar. 24	Mar. 31
SUPPLYING RESERVE FUNDS										
1 Reserve Bank credit outstanding	333,077[r]	337,550	343,479	336,621	335,258	339,027	333,188	333,908	337,988	343,479
U.S. government securities[2]										
2 Bought outright—System account	296,977	298,835	298,461	297,025	299,778	296,079	297,810	297,015	299,440	298,461
3 Held under repurchase agreements	0	2,655	6,756	2,831	0	7,130	300	50	0	6,756
Federal agency obligations										
4 Bought outright	5,310	5,225	5,123	5,260	5,260	5,225	5,165	5,165	5,165	5,123
5 Held under repurchase agreements	0	275	567	150	0	145	107	0	0	567
6 Acceptances	0	0	0	0	0	0	0	0	0	0
Loans to depository institutions										
7 Adjustment credit	21	40	720	17	27	43	8	894	16	720
8 Seasonal credit	10	17	32	22	22	18	21	29	28	32
9 Extended credit	4	0	0	0	0	0	0	0	0	0
10 Float	226[r]	663	380	1,887	930	385	−14	771	2,568	380
11 Other Federal Reserve assets	30,529	29,841	31,439	29,430	29,241	30,003	29,793	29,985	30,771	31,439
12 Gold stock	11,055	11,055	11,054	11,055	11,055	11,055	11,055	11,055	11,055	11,054
13 Special drawing rights certificate account	8,018	8,018	8,018	8,018	8,018	8,018	8,018	8,018	8,018	8,018
14 Treasury currency outstanding	21,490[r]	21,528	21,584	21,509	21,518	21,528	21,542	21,556	21,570	21,584
ABSORBING RESERVE FUNDS										
15 Currency in circulation	326,573[r]	329,621	332,829	330,984	329,924	330,496	331,657	332,121	332,032	332,829
16 Treasury cash holdings	508	463	515	463	463	512	512	512	512	515
Deposits, other than reserve balances, with Federal Reserve Banks										
17 Treasury	9,572	5,350	6,752	4,869	4,973	7,640	5,242	6,930	5,216	6,752
18 Foreign	244	296	318	256	232	224	230	707	288	318
19 Service-related balances and adjustments	6,004[r]	6,413	6,905	6,170	6,180	6,413	6,535	6,304	6,296	6,905
20 Other	282	302	314	324	282	351	347	352	327	314
21 Other Federal Reserve liabilities and capital	9,141	9,180	8,844	8,773	8,817	8,982	8,863	8,922	8,953	8,844
22 Reserve balances with Federal Reserve Banks[3]	21,315[r]	26,526	27,660	25,365	24,978	25,010	20,418	18,687	25,007	27,660

1. For amounts of cash held as reserves, see table 1.12.
2. Includes securities loaned—fully guaranteed by U.S. government securities pledged with Federal Reserve Banks—and excludes any securities sold and scheduled to be bought back under matched sale–purchase transactions.
3. Excludes required clearing balances and adjustments to compensate for float.

1.12 RESERVES AND BORROWINGS Depository Institutions[1]

Millions of dollars

Reserve classification	1990	1991	1992	1992				1993		
	Dec.	Dec.	Dec.	Sept.	Oct.	Nov.	Dec.	Jan.[r]	Feb.	Mar.
	Prorated monthly averages of biweekly averages									
1 Reserve balances with Reserve Banks[2]	30,237	26,659	25,368	22,627	23,626	25,462	25,368	23,636	23,515	24,384
2 Total vault cash[3]	31,789[r]	32,510	34,535	32,342	32,987	32,457	34,535	35,991	33,914	33,293
3 Applied vault cash[4]	28,884	28,872	31,172	28,894	29,510	29,205	31,172	32,368	30,368	29,913
4 Surplus vault cash[5]	2,905[r]	3,638	3,364	3,448	3,477	3,252	3,364	3,623	3,546	3,380
5 Total reserves[6]	59,120	55,532	56,540	51,521	53,136	54,666	56,540	56,004	53,882	54,297
6 Required reserves	57,456	54,553	55,385	50,527	52,062	53,624	55,385	54,744	52,778	53,084
7 Excess reserve balances at Reserve Banks[7]	1,664	979	1,155	994	1,074	1,043	1,155	1,260	1,104	1,214
8 Total borrowings at Reserve Banks[8]	326	192	124	287	143	104	124	165	45	91
9 Seasonal borrowings	76	38	18	193	114	40	18	11	18	26
10 Extended credit[9]	23	1	1	0	0	0	1	1	0	0
	Biweekly averages of daily figures for weeks ending									
	1992			1993						
	Nov. 25	Dec. 9	Dec. 23	Jan. 6	Jan. 20	Feb. 3[r]	Feb. 17	Mar. 3	Mar. 17	Mar. 31
1 Reserve balances with Reserve Banks[2]	25,730	24,548	25,209	26,569	24,057	21,500	23,301	24,335	24,029	24,750
2 Total vault cash[3]	32,398	34,315	34,770	34,374	36,388[r]	36,368	34,764	32,163	34,487	32,343
3 Applied vault cash[4]	29,117	30,918	31,373	31,105	32,829	32,470	31,069	28,902	30,944	29,099
4 Surplus vault cash[5]	3,281	3,397	3,397	3,269	3,559[r]	3,898	3,695	3,261	3,543	3,244
5 Total reserves[6]	54,846	55,466	56,582	57,674	56,886	53,970	54,370	53,237	54,973	53,849
6 Required reserves	53,485	54,625	55,357	56,289	55,657	52,740	52,875	52,666	53,683	52,574
7 Excess reserve balances at Reserve Banks[7]	1,361	841	1,225	1,385	1,229	1,230	1,495	571	1,290	1,275
8 Total borrowings at Reserve Banks[8]	138	95	60	269	202	64	33	56	93	98
9 Seasonal borrowings	37	22	19	12	11	11	18	20	22	32
10 Extended credit[9]	0	0	2	0	1	3	0	0	0	0

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

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

Millions of dollars, averages of daily figures

Source and maturity	1992, week ending Monday	1993, week ending Monday							
	Dec. 28	Jan. 4	Jan. 11	Jan. 18	Jan. 25	Feb. 1	Feb. 8	Feb. 15	Feb. 22
Federal funds purchased, repurchase agreements, and other selected borrowings									
From commercial banks in the United States									
1 For one day or under continuing contract	71,828	74,152	75,358	71,974	66,898	69,127	71,676	70,934	69,724
2 For all other maturities	13,825	14,797	13,384	13,895	13,456	14,029	13,669	14,049	13,622
From other depository institutions, foreign banks and official institutions, and U.S. government agencies									
3 For one day or under continuing contract	20,597	19,060	20,531	20,277	19,888	17,824	17,465	17,264	20,090
4 For all other maturities	18,783	16,955	17,419	17,441	17,469	17,841	18,837	21,448	21,375
Repurchase agreements on U.S. government and federal agency securities									
Brokers and nonbank dealers in securities									
5 For one day or under continuing contract	10,237	9,686	11,117	8,554	10,218	10,857	9,270	10,038	13,355
6 For all other maturities	18,341[r]	18,588	18,592	18,933	18,994	19,447	20,935	22,955	21,937
All other customers									
7 For one day or under continuing contract	22,808	23,596	23,582	23,673	24,379	24,283	23,927	22,917	24,806
8 For all other maturities	14,151	13,605	13,567	13,755	13,344	13,866	12,655	13,304	13,440
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	37,991	41,340	37,458	37,316	37,614	41,221	39,000	39,517	38,715
10 To all other specified customers[2]	18,270	20,812	18,322	22,669	19,362	18,469	21,417	21,233	18,716

1. Banks with assets of $4 billion or more as of Dec. 31, 1988.
Data in this table also appear in the Board's H.5 (507) weekly statistical release. For ordering address, see inside front cover.

2. Brokers and nonbank dealers in securities, other depository institutions, foreign banks and official institutions, and U.S. government agencies.

1.14 FEDERAL RESERVE BANK INTEREST RATES

Percent per year

Current and previous levels

Federal Reserve Bank	Adjustment credit[1]			Seasonal credit[2]			Extended credit[3]		
	On 4/30/93	Effective date	Previous rate	On 4/30/93	Effective date	Previous rate	On 4/30/93	Effective date	Previous rate
Boston	3	7/2/92	3.5	3.00	4/29/93	3.05	3.50	4/29/93	3.55
New York		7/2/92			4/29/93			4/29/93	
Philadelphia		7/2/92			4/29/93			4/29/93	
Cleveland		7/6/92			4/29/93			4/29/93	
Richmond		7/2/92			4/29/93			4/29/93	
Atlanta		7/2/92			4/29/93			4/29/93	
Chicago		7/2/92			4/29/93			4/29/93	
St. Louis		7/7/92			4/29/93			4/29/93	
Minneapolis		7/2/92			4/29/93			4/29/93	
Kansas City		7/2/92			4/29/93			4/29/93	
Dallas		7/2/92			4/29/93			4/29/93	
San Francisco	3	7/2/92	3.5	3.00	4/29/93	3.05	3.50	4/29/93	3.55

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

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

Effective date	Range (or level)—All F.R. Banks	F.R. Bank of N.Y.
1981—May 5	13–14	14
8	14	14
Nov. 2	13–14	13
6	13	13
Dec. 4	12	12
1982—July 20	11.5–12	11.5
23	11.5	11.5
Aug. 2	11–11.5	11
3	11	11
16	10.5	10.5
27	10–10.5	10
30	10	10
Oct. 12	9.5–10	9.5
13	9.5	9.5
Nov. 22	9–9.5	9
26	9	9
Dec. 14	8.5–9	9
15	8.5–9	8.5
17	8.5	8.5
1984—Apr. 9	8.5–9	9
13	9	9
Nov. 21	8.5–9	8.5
26	8.5	8.5
Dec. 24	8	8
1985—May 20	7.5–8	7.5
24	7.5	7.5
1986—Mar. 7	7–7.5	7
10	7	7
Apr. 21	6.5–7	6.5
July 11	6	6

Effective date	Range (or level)—All F.R. Banks	F.R. Bank of N.Y.
1986—Aug. 21	5.5–6	5.5
22	5.5	5.5
1987—Sept. 4	5.5–6	6
11	6	6
1988—Aug. 9	6–6.5	6.5
11		
1989—Feb. 24	6.5–7	7
27	7	7
1990—Dec. 19	6.5	6.5
1991—Feb. 1	6–6.5	6
4	6	6
Apr. 30	5.5–6	5.5
May 2	5.5	5.5
Sept. 13	5–5.5	5
Sept. 17	5	5
Nov. 6	4.5–5	4.5
7	4.5	4.5
Dec. 20	3.5–4.5	3.5
24	3.5	3.5
1992—July 2	3–3.5	3
7	3	3
In effect Apr. 30, 1993	3	3

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

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

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

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

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

1.15 RESERVE REQUIREMENTS OF DEPOSITORY INSTITUTIONS[1]

Type of deposit[2]	Requirements	
	Percent of deposits	Effective date
Net transaction accounts[3]		
1 $0 million–$46.8 million	3	12/15/92
2 More than $46.8 million[4]	10	12/15/92
3 Nonpersonal time deposits[5]	0	12/27/90
4 Eurocurrency liabilities[6]	0	12/27/90

1. Required reserves must be held in the form of deposits with Federal Reserve Banks or vault cash. Nonmember institutions may maintain reserve balances with a Federal Reserve Bank indirectly on a pass-through basis with certain approved institutions. For previous reserve requirements, see earlier editions of the *Annual Report* or the *Federal Reserve Bulletin*. Under 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 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, 1992, the exemption was raised from $3.6 million to $3.8 million. The exemption applies in the following order: (1) net negotiable order of withdrawal (NOW) accounts (NOW accounts less allowable deductions); and (2) net other transaction accounts. The exemption applies only to accounts that would be subject to a 3 percent reserve requirement.

3. Include all deposits against 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, money market deposit accounts (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 may be checks, are not transaction accounts (such accounts are savings deposits).

The Monetary Control Act of 1980 requires that the amount of transaction accounts against which the 3 percent reserve requirement applies be modified annually by 80 percent of the percentage change in transaction accounts held by all depository institutions, determined as of June 30 each year. Effective Dec. 15, 1992, for institutions reporting quarterly, and Dec. 24, 1992, for institutions reporting weekly, the amount was increased from $42.2 million to $46.8 million.

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

5. For institutions that report weekly, the reserve requirement on nonpersonal time deposits with an original maturity of less than 1½ years was reduced from 3 percent to 1½ percent for the maintenance period that began Dec. 13, 1990, and to zero for the maintenance period that began Dec. 27, 1990. The reserve requirement on nonpersonal time deposits with an original maturity of 1½ years or more has been zero since Oct. 6, 1983.

For institutions that report quarterly, the reserve requirement on nonpersonal time deposits with an original maturity of less than 1½ years was reduced from 3 percent to zero on Jan. 17, 1991.

6. The reserve requirement on Eurocurrency liabilities was reduced from 3 percent to zero in the same manner and on the same dates as were the reserve requirement on nonpersonal time deposits with an original maturity of less than 1½ years (see note 4).

1.17 FEDERAL RESERVE OPEN MARKET TRANSACTIONS[1]

Millions of dollars

Type of transaction	1990	1991	1992	1992					1993	
				Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.
U.S. TREASURY SECURITIES										
Outright transactions (excluding matched transactions)										
Treasury bills										
1 Gross purchases	24,739	20,158	14,714	271	595	4,072	1,064	3,669	0	0
2 Gross sales	7,291	120	1,628	0	0	0	0	0	0	0
3 Exchanges	241,086	277,314	308,699	25,041	22,277	28,907	25,468	29,562	24,542	19,832
4 Redemptions	4,400	1,000	1,600	0	0	0	0	0	0	0
Others within one year										
5 Gross purchases	425	3,043	1,096	0	350	0	461	0	0	0
6 Gross sales	0	0	0	0	0	0	0	0	0	0
7 Maturity shifts	25,638	24,454	36,662	4,448	2,753	2,010	7,160	2,777	561	2,892
8 Exchanges	−27,424	−28,090	−30,543	−4,617	−1,905	−982	−4,615	−1,570	−1,202	−6,044
9 Redemptions	0	1,000	0	0	0	0	0	0	0	0
One to five years										
10 Gross purchases	250	6,583	13,118	400	3,500	200	4,172	200	0	0
11 Gross sales	200	0	0	0	0	0	0	0	0	0
12 Maturity shifts	−21,770	−21,211	−34,478	−4,036	−2,753	−1,762	−6,800	−2,777	−64	−2,617
13 Exchanges	25,410	24,594	25,811	3,567	1,905	884	3,415	1,570	882	4,564
Five to ten years										
14 Gross purchases	0	1,280	2,818	195	750	0	1,176	100	0	0
15 Gross sales	100	0	0	0	0	0	0	0	0	0
16 Maturity shifts	−2,186	−2,037	−1,915	−412	0	−248	−187	0	−497	−98
17 Exchanges	789	2,894	3,532	700	0	97	800	0	0	0
More than ten years										
18 Gross purchases	0	375	2,333	0	731	0	947	0	0	0
19 Gross sales	0	0	0	0	0	0	0	0	0	0
20 Maturity shifts	−1,681	−1,209	−269	0	0	0	−173	0	0	−177
21 Exchanges	1,226	600	1,200	350	0	0	400	0	0	480
All maturities										
22 Gross purchases	25,414	31,439	34,079	866	5,927	4,272	7,820	3,969	0	0
23 Gross sales	7,591	120	1,628	0	0	0	0	0	0	0
24 Redemptions	4,400	1,000	1,600	0	0	0	0	0	0	0
Matched transactions										
25 Gross sales	1,369,052	1,570,456	1,482,467	103,708	116,331	116,024	115,020	144,232	114,543	111,491
26 Gross purchases	1,363,434	1,571,534	1,480,140	101,410	115,579	114,917	117,020	142,578	116,510	113,349
Repurchase agreements[2]										
27 Gross purchases	219,632	310,084	378,374	39,484	68,697	18,698	42,373	48,904	34,768	28,544
28 Gross sales	202,551	311,752	386,257	31,868	59,628	35,383	39,117	44,697	42,231	25,889
29 Net change in U.S. government securities	24,886	29,729	20,642	6,184	14,244	−13,520	13,075	6,521	−5,497	4,513
FEDERAL AGENCY OBLIGATIONS										
Outright transactions										
30 Gross purchases	0	0	0	0	0	0	0	0	0	0
31 Gross sales	0	5	0	0	0	0	0	0	0	0
32 Redemptions	183	292	632	54	37	0	0	121	103	85
Repurchase agreements[2]										
33 Gross purchases	41,836	22,807	14,565	601	3,222	1,778	2,760	1,601	2,237	1,107
34 Gross sales	40,461	23,595	14,486	548	1,800	3,253	2,506	1,224	2,868	832
35 Net change in federal agency obligations	1,192	−1,085	−554	−1	1,385	−1,475	254	256	−734	190
36 Total net change in System Open Market Account	**26,078**	**28,644**	**20,089**	**6,183**	**15,629**	**−14,995**	**13,329**	**6,777**	**−6,231**	**4,703**

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

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

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

Millions of dollars

Account	Wednesday					End of month		
	1993					1993		
	Mar. 3	Mar. 10	Mar. 17	Mar. 24	Mar. 31	Jan. 31	Feb. 28	Mar. 31
	Consolidated condition statement							
ASSETS								
1 Gold certificate account	11,055	11,055	11,055	11,055	11,054	11,055	11,055	11,054
2 Special drawing rights certificate account	8,018	8,018	8,018	8,018	8,018	8,018	8,018	8,018
3 Coin	527	524	519	516	503	519	525	503
Loans								
4 To depository institutions	61	28	922	44	753	35	57	753
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	5,225	5,165	5,165	5,165	5,123	5,310	5,225	5,123
8 Held under repurchase agreements	145	107	0	0	567	0	275	567
9 **Total U.S. Treasury securities**	**303,209**	**298,110**	**297,065**	**299,440**	**305,217**	**296,977**	**301,490**	**305,217**
10 Bought outright[2]	296,079	297,810	297,015	299,440	298,461	296,977	298,835	298,461
11 Bills	142,862	144,593	143,799	143,083	142,104	143,761	145,618	142,104
12 Notes	117,955	117,955	117,955	120,211	120,211	118,179	117,955	120,211
13 Bonds	35,261	35,261	35,261	36,146	36,146	35,037	35,261	36,146
14 Held under repurchase agreements	7,130	300	50	0	6,756	0	2,655	6,756
15 **Total loans and securities**	**308,639**	**303,410**	**303,152**	**304,649**	**311,660**	**302,321**	**307,046**	**311,660**
16 Items in process of collection	6,914	5,020	6,129	7,148	5,338	4,565	4,937	5,338
17 Bank premises	1,027	1,027	1,029	1,030	1,031	1,026	1,026	1,031
Other assets								
18 Denominated in foreign currencies[3]	22,276	22,301	22,326	22,384	22,328	21,980	22,263	22,328
19 All other[4]	6,708	6,497	6,636	7,361	8,092	7,572	6,577	8,092
20 **Total assets**	**365,165**	**357,852**	**358,864**	**362,161**	**368,024**	**357,057**	**361,446**	**368,024**
LIABILITIES								
21 Federal Reserve notes	310,007	311,151	311,596	311,490	312,263	306,110	309,080	312,263
22 **Total deposits**	**40,460**	**33,190**	**33,577**	**37,113**	**41,917**	**37,632**	**39,034**	**41,917**
23 Depository institutions	32,246	27,373	25,587	31,282	34,533	27,533	33,085	34,533
24 U.S. Treasury—General account	7,640	5,242	6,930	5,216	6,752	9,572	5,350	6,752
25 Foreign—Official accounts	224	230	707	288	318	244	296	318
26 Other	351	347	352	327	314	282	302	314
27 Deferred credit items	5,716	4,648	4,769	4,605	5,001	4,174	4,152	5,001
28 Other liabilities and accrued dividends[5]	2,290	2,254	2,303	2,268	2,251	2,288	2,323	2,251
29 **Total liabilities**	**358,473**	**351,243**	**352,245**	**355,476**	**361,430**	**350,204**	**354,589**	**361,430**
CAPITAL ACCOUNTS								
30 Capital paid in	3,118	3,155	3,159	3,179	3,187	3,074	3,116	3,187
31 Surplus	3,054	3,054	3,054	3,054	3,054	2,974	3,054	3,054
32 Other capital accounts	520	400	406	452	353	806	687	353
33 **Total liabilities and capital accounts**	**365,165**	**357,852**	**358,864**	**362,161**	**368,024**	**357,057**	**361,446**	**368,024**
MEMO								
34 Marketable U.S. Treasury securities held in custody for foreign and international accounts	303,372	304,117	301,803	302,617	304,825	297,501	306,378	304,825
	Federal Reserve note statement							
35 Federal Reserve notes outstanding (issued to Bank)	371,135	372,175	372,940	373,719	373,886	366,486	370,756	373,886
36 LESS: Held by Federal Reserve Bank	61,128	61,024	61,344	62,230	61,624	60,376	61,676	61,624
37 Federal Reserve notes, net	310,007	311,151	311,596	311,490	312,263	306,110	309,080	312,263
Collateral held against notes, net:								
38 Gold certificate account	11,055	11,055	11,055	11,055	11,054	11,055	11,055	11,054
39 Special drawing rights certificate account	8,018	8,018	8,018	8,018	8,018	8,018	8,018	8,018
40 Other eligible assets	0	0	0	0	0	0	0	0
41 U.S. Treasury and agency securities	290,934	292,078	292,524	292,417	293,190	287,037	290,007	293,190
42 **Total collateral**	**310,007**	**311,151**	**311,596**	**311,490**	**312,263**	**306,110**	**309,080**	**312,263**

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

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

Millions of dollars

Type and maturity grouping	Wednesday					End of month		
	1993					1993		
	Mar. 3	Mar. 10	Mar. 17	Mar. 24	Mar. 31	Jan. 31	Feb. 28	Mar. 31
1 **Total loans**	**61**	**28**	**922**	**44**	**753**	**35**	**57**	**753**
2 Within fifteen days	54	15	920	42	741	33	54	741
3 Sixteen days to ninety days	7	13	3	2	12	1	3	12
4 Ninety-one days to one year	0	0	0	0	0	0	0	0
5 **Total acceptances**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
6 Within fifteen days	0	0	0	0	0	0	0	0
7 Sixteen days to ninety days	0	0	0	0	0	0	0	0
8 Ninety-one days to one year	0	0	0	0	0	0	0	0
9 **Total U.S. Treasury securities**	**303,209**	**298,110**	**297,065**	**299,440**	**305,217**	**296,977**	**301,490**	**305,217**
10 Within fifteen days[2]	19,048	12,941	11,416	13,740	17,889	9,160	13,331	17,889
11 Sixteen days to ninety days	68,921	73,270	70,650	67,760	67,037	74,289	72,699	67,037
12 Ninety-one days to one year	96,752	93,411	96,511	96,590	99,880	98,311	97,433	99,880
13 One year to five years	70,753	70,753	70,753	72,194	71,255	68,686	70,291	71,255
14 Five years to ten years	19,628	19,628	19,628	20,344	20,344	18,726	19,628	20,344
15 More than ten years	28,108	28,108	28,108	28,813	28,813	27,805	28,108	28,813
16 **Total federal agency obligations**	**5,370**	**5,272**	**5,165**	**5,164**	**5,690**	**5,310**	**5,500**	**5,690**
17 Within fifteen days[2]	255	148	271	271	855	183	723	855
18 Sixteen days to ninety days	789	748	543	543	507	840	513	507
19 Ninety-one days to one year	1,094	1,094	1,069	1,069	1,057	1,023	1,022	1,057
20 One year to five years	2,379	2,379	2,429	2,429	2,419	2,426	2,389	2,419
21 Five years to ten years	711	761	711	711	711	696	711	711
22 More than ten years	142	142	142	142	142	142	142	142

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

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

Billions of dollars, averages of daily figures

Item	1989 Dec.	1990 Dec.	1991 Dec.	1992 Dec.[r]	1992[r] Aug.	1992[r] Sept.	1992[r] Oct.	1992[r] Nov.	1992[r] Dec.	1993 Jan.	1993 Feb.	1993 Mar.
	Seasonally adjusted											
ADJUSTED FOR CHANGES IN RESERVE REQUIREMENTS[2]												
1 Total reserves[3]	40.49[r]	41.77[r]	45.53[r]	54.35	50.34	51.27	52.84	53.82	54.35	54.67[r]	54.92	55.17
2 Nonborrowed reserves[4]	40.23[r]	41.44[r]	45.34[r]	54.23	50.09	50.99	52.69	53.71	54.23	54.50[r]	54.88	55.08
3 Nonborrowed reserves plus extended credit[5]	40.25[r]	41.46[r]	45.34[r]	54.23	50.09	50.99	52.69	53.71	54.23	54.50[r]	54.88	55.08
4 Required reserves	39.57[r]	40.10[r]	44.56[r]	53.20	49.41	50.28	51.76	52.77	53.20	53.41[r]	53.82	53.95
5 Monetary base[6]	267.73[r]	293.19[r]	317.17[r]	350.80	336.84	341.59	344.85	347.83	350.80	353.22[r]	355.74	358.38
	Not seasonally adjusted											
6 Total reserves[7]	41.77	43.07	46.98	56.06	49.78	51.07	52.62	54.08	56.06	55.97	53.81	54.18
7 Nonborrowed reserves	41.51	42.74	46.78	55.93	49.53	50.78	52.47	53.97	55.93	55.80	53.77	54.09
8 Nonborrowed reserves plus extended credit[5]	41.53	42.77	46.78	55.93	49.53	50.78	52.47	53.97	55.93	55.80	53.77	54.09
9 Required reserves[8]	40.85	41.40	46.00	54.90	48.84	50.08	51.54	53.04	54.90	54.71	52.71	52.97
10 Monetary base[9]	271.18	296.68	321.07	354.55	336.57	340.08	343.63	347.89	354.55	354.41[r]	353.18	356.00
NOT ADJUSTED FOR CHANGES IN RESERVE REQUIREMENTS[10]												
11 Total reserves[11]	62.81	59.12	55.53	56.54	50.16	51.52	53.14	54.67	56.54	56.00	53.88	54.30
12 Nonborrowed reserves	62.54	58.80	55.34	56.42	49.91	51.23	52.99	54.56	56.42	55.84	53.84	54.21
13 Nonborrowed reserves plus extended credit[5]	62.56	58.82	55.34	56.42	49.91	51.23	52.99	54.56	56.42	55.84	53.84	54.21
14 Required reserves	61.89	57.46	54.55	55.39	49.23	50.53	52.06	53.62	55.39	54.74[r]	52.78	53.08
15 Monetary base[12]	292.55	313.70	333.61	360.90	342.49	346.21	349.81	354.25	360.90	360.88[r]	359.56	362.59
16 Excess reserves[13]	.92	1.66	.98	1.16	.94	.99	1.07	1.04	1.16	1.26	1.10	1.21
17 Borrowings from the Federal Reserve	.27	.33	.19	.12	.25	.29	.14	.10	.12	.17	.05	.09

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Billions of dollars, averages of daily figures

Item	1989 Dec.[r]	1990 Dec.[r]	1991 Dec.	1992 Dec.[r]	1992 Dec.[r]	1993 Jan.[r]	1993 Feb.	1993 Mar.
	Seasonally adjusted							
Measures[2]								
1 M1	794.6	827.2	899.3	1,026.6	1,026.6	1,033.2	1,032.8	1,034.9
2 M2	3,233.3	3,345.5	3,445.8	3,497.0	3,497.0	3,486.9	3,474.0	3,471.7
3 M3	4,056.1	4,116.7	4,168.1	4,166.5	4,166.5	4,140.6	4,132.7	4,127.7
4 L	4,886.1	4,965.2	4,982.2	5,051.4	5,051.4	5,029.4	5,024.8	n.a.
5 Debt	10,076.7	10,751.3	11,192.7[r]	11,768.2	11,768.2	11,800.0	11,843.0	n.a.
M1 components								
6 Currency[3]	222.7	246.7	267.2	292.3	292.3	294.8	296.9	299.0
7 Travelers checks[4]	6.9	7.8	7.8	8.1	8.1	8.0	8.0	8.0
8 Demand deposits[5]	279.8	278.2	290.5	340.9	340.9	341.9	341.9	341.9
9 Other checkable deposits[6]	285.3	294.5	333.8	385.2	385.2	388.5	386.1	386.0
Nontransaction components								
10 In M2[7]	2,438.7	2,518.3	2,546.6	2,470.4	2,470.4	2,453.8	2,441.2	2,436.7
11 In M3[8]	822.8	771.2	722.3	669.5	669.5	653.7	658.7	656.1
Commercial banks								
12 Savings deposits, including MMDAs	541.4	582.2	666.2	756.1	756.1	754.1	755.8	754.2
13 Small time deposits[9]	534.9	610.3	601.5	507.0	507.0	502.8	504.1	502.9
14 Large time deposits[10, 11]	387.7	368.7	341.3	290.2	290.2	283.7	281.2	276.8
Thrift institutions								
15 Savings deposits, including MMDAs	349.6	338.6	376.3	429.9	429.9	430.3	426.7	425.1
16 Small time deposits[9]	617.8	562.0	463.2	363.2	363.2	358.2	351.0	347.3
17 Large time deposits[10]	161.1	120.9	83.4	67.3	67.3	67.1	65.5	64.5
Money market mutual funds								
18 General purpose and broker–dealer	317.4	350.5	363.9	342.3	342.3	339.6	333.6	333.1
19 Institution-only	108.8	135.9	182.1	202.3	202.3	197.7	201.9	200.5
Debt components								
20 Federal debt	2,249.5	2,493.4	2,764.8	3,068.8	3,068.8	3,076.3	3,090.0	n.a.
21 Nonfederal debt	7,827.2	8,257.9	8,428.0[r]	8,699.4	8,699.4	8,723.7	8,753.0	n.a.
	Not seasonally adjusted							
Measures[2]								
22 M1	811.5	843.7	916.4	1,045.7	1,045.7	1,040.1	1,022.0	1,030.4
23 M2	3,245.1	3,357.0	3,457.9	3,511.2	3,511.2	3,492.7	3,468.0	3,478.5
24 M3	4,066.4	4,126.3	4,178.1	4,178.5	4,178.5	4,143.2	4,130.1	4,137.7
25 L	4,906.0	4,986.5	5,004.2	5,076.3	5,076.3	5,046.3	5,025.1	n.a.
26 Debt	10,063.6	10,739.9	11,182.8[r]	11,760.6	11,760.6	11,787.2	11,811.8	n.a.
M1 components								
27 Currency[3]	225.3	249.5	269.9	295.0	295.0	293.6	295.3	297.9
28 Travelers checks[4]	6.5	7.4	7.4	7.8	7.8	7.8	7.7	7.8
29 Demand deposits[5]	291.5	289.9	302.9	355.3	355.3	346.2	334.3	336.3
30 Other checkable deposits[6]	288.1	296.9	336.3	387.7	387.7	392.6	384.6	388.5
Nontransaction components								
31 In M2[7]	2,433.6	2,513.2	2,541.5	2,465.4	2,465.4	2,452.6	2,446.0	2,448.1
32 In M3[8]	821.4	769.3	720.1	667.3	667.3	650.5	662.1	659.2
Commercial banks								
33 Savings deposits, including MMDAs	543.0	580.1	663.3	752.3	752.3	749.5	753.1	757.7
34 Small time deposits[9]	533.8	610.5	602.0	507.8	507.8	504.6	504.8	502.3
35 Large time deposits[10, 11]	386.9	367.7	340.1	289.1	289.1	281.7	280.8	277.7
Thrift institutions								
36 Savings deposits, including MMDAs	347.4	337.3	374.7	427.8	427.8	427.7	425.2	427.1
37 Small time deposits[9]	616.2	562.1	463.6	363.8	363.8	359.4	351.4	346.9
38 Large time deposits[10]	162.0	120.6	83.1	67.1	67.1	66.6	65.4	64.7
Money market mutual funds								
39 General purpose and broker–dealer	315.7	348.4	361.5	340.0	340.0	339.2	339.8	342.2
40 Institution-only	109.1	136.2	182.4	202.4	202.4	202.3	210.3	203.2
Repurchase agreements and eurodollars								
41 Overnight	77.5	74.7	76.3	73.9	73.9	72.3	71.6	71.9
42 Term	178.4	158.3	130.1	126.2	126.2	123.0	127.6	133.5
Debt components								
43 Federal debt	2,247.5	2,491.3	2,765.0	3,069.8	3,069.8	3,076.2	3,087.3	n.a.
44 Nonfederal debt	7,816.2	8,248.5	8,417.9[r]	8,690.8	8,690.8	8,711.1	8,724.4	n.a.

For notes see following page.

NOTES TO TABLE 1.21

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

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

M1: (1) currency outside the 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 (OCDs), consisting of negotiable order of withdrawal (NOW) and automatic transfer service (ATS) accounts at depository institutions, credit union share draft accounts, and demand deposits at thrift institutions. Seasonally adjusted M1 is computed by summing currency, travelers checks, demand deposits, and OCDs, each seasonally adjusted separately.

M2: M1 plus (1) overnight (and continuing-contract) repurchase agreements (RPs) issued by all depository institutions and overnight Eurodollars issued to U.S. residents by foreign branches of U.S. banks worldwide, (2) savings (including MMDAs) and small time deposits (time deposits—including retail RPs—in amounts of less than $100,000), and (3) balances in both taxable and tax-exempt general purpose and broker–dealer money market funds. Excludes individual retirement accounts (IRAs) 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. Seasonally adjusted M2 is computed by adjusting its non-M1 component as a whole and then adding this result to seasonally adjusted M1.

M3: M2 plus (1) large time deposits and term RP liabilities (in amounts of $100,000 or more) issued by all depository institutions, (2) 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 (3) balances in both taxable and tax-exempt, institution-only money market funds. Excludes amounts held by depository institutions, the U.S. government, money market funds, and foreign banks and official institutions. Also excluded is the estimated amount of overnight RPs and Eurodollars held by institution-only money market funds. Seasonally adjusted M3 is computed by adjusting its non-M2 component as a whole and then adding this result to seasonally adjusted M2.

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 fund holdings of these assets. Seasonally adjusted L is computed by summing U.S. savings bonds, short-term Treasury securities, commercial paper, and bankers acceptances, each seasonally adjusted separately, and then adding this result to M3.

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. Data are derived from the Federal Reserve Board's flow of funds accounts. Debt data are based on monthly averages. This sum is seasonally adjusted as a whole.

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

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

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

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

7. Sum of (1) overnight RPs and overnight Eurodollars, (2) money market fund balances (general purpose and broker–dealer), (3) MMDAs, and (4) savings and small time deposits.

8. Sum of (1) large time deposits, (2) term RPs, (3) term Eurodollars of U.S. residents, and (4) 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 funds.

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

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

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

1.22 BANK DEBITS AND DEPOSIT TURNOVER[1]

Debits are in billions of dollars; turnover is ratio of debits to deposits; monthly data are at annual rates

Bank group, or type of customer	1990[2]	1991[2]	1992[2]	1992 Aug.	1992 Sept.	1992 Oct.[r]	1992 Nov.[r]	1992 Dec.	1993 Jan.
DEBITS TO	Seasonally adjusted								
Demand deposits[3]									
1 All insured banks	277,157.5	277,758.0	315,806.1	306,923.0	346,658.3	326,893.0	322,187.1	331,038.8	300,484.5
2 Major New York City banks	131,699.1	137,352.3	165,572.7	157,221.1	184,740.9	176,372.6	173,393.4	176,089.1	159,069.5
3 Other banks	145,458.4	140,405.7	150,233.5	149,702.0	161,917.4	150,520.4	148,793.7	154,949.8	141,415.0
4 Other checkable deposits[4]	3,349.0	3,645.5	3,788.1	3,763.9	3,942.1	3,700.5	3,610.0	3,683.9	3,311.3
5 Savings deposits including MMDAs[5]	3,483.3	3,266.1	3,331.3	3,139.8	3,559.1	3,468.2	3,497.2	3,407.3	3,054.9
DEPOSIT TURNOVER									
Demand deposits[3]									
6 All insured banks	797.8	803.5	832.4	800.0	892.4	818.9	796.1	830.5	748.1
7 Major New York City banks	3,819.8	4,270.8	4,797.9	4,550.9	5,254.5	4,855.5	4,624.0	4,693.3	4,151.2
8 Other banks	464.9	447.9	435.9	428.8	458.3	414.8	405.2	429.1	389.2
9 Other checkable deposits[4]	16.5	16.2	14.4	14.2	14.7	13.5	12.9	13.1	11.6
10 Savings deposits including MMDAs[5]	6.2	5.3	4.7	4.4	4.9	4.7	4.7	4.6	4.1
DEBITS TO	Not seasonally adjusted								
Demand deposits[3]									
11 All insured banks	277,290.5	277,715.4	315,808.2	315,724.4	334,831.5	335,289.0	308,015.6	340,982.1	304,640.9
12 Major New York City banks	131,784.7	137,307.2	165,595.0	162,973.3	178,998.2	182,584.2	167,578.4	179,987.6	159,075.0
13 Other banks	145,505.8	140,408.3	150,213.3	152,751.0	155,833.4	152,704.8	140,437.2	160,994.5	145,565.9
14 Other checkable deposits[4]	3,346.7	3,645.6	3,788.1	3,696.9	3,945.7	3,689.7	3,351.3	3,849.3	3,616.8
15 Savings deposits including MMDAs[5]	3,483.0	3,267.7	3,329.0	3,173.5	3,374.3	3,403.2	3,240.4	3,588.0	3,273.0
DEPOSIT TURNOVER									
Demand deposits[3]									
16 All insured banks	798.2	803.4	832.5	836.5	864.2	839.2	754.3	815.2	739.7
17 Major New York City banks	3,825.9	4,274.3	4,803.5	4,870.2	5,180.1	5,025.6	4,494.4	4,418.1	3,933.2
18 Other banks	465.0	447.9	436.0	444.1	441.6	420.5	378.5	426.5	392.0
19 Other checkable deposits[4]	16.4	16.2	14.4	14.1	14.9	13.7	12.1	13.5	12.5
20 Savings deposits including MMDAs[5]	6.2	5.3	4.7	4.4	4.6	4.6	4.4	4.8	4.4

1. Historical tables containing revised data for earlier periods can be obtained from the Banking and Money Market Statistics Section, Division of Monetary Affairs, Board of Governors of the Federal Reserve System, Washington, DC 20551.
Data in this table also appear on the Board's G.6 (406) monthly statistical release. For ordering 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 (NOWs) and accounts authorized for automatic transfer to demand deposits (ATSs).
5. Money market deposit accounts.

1.23 LOANS AND SECURITIES All Commercial Banks[1]

Billions of dollars, averages of Wednesday figures

Item	1992									1993		
	Apr.	May	June	July	Aug.	Sept.[r]	Oct.[r]	Nov.[r]	Dec.[r]	Jan.[r]	Feb.	Mar.
	Seasonally adjusted											
1 **Total loans and securities[1]**	**2,874.3**	**2,875.3**	**2,882.8**	**2,886.9**	**2,902.2**	**2,918.2**	**2,930.2**	**2,937.4**	**2,943.7**	**2,939.8**	**2,944.5**	**2,958.0**
2 U.S. government securities	590.8	600.2	610.7	619.2	632.6	640.8	648.7	653.4	659.8	659.9	670.5	685.1
3 Other securities	178.5	176.9	175.8	177.9	178.2	178.4	179.5	177.7	176.4	174.2	175.6	177.6
4 Total loans and leases[1]	2,104.9	2,098.2	2,096.2	2,089.8	2,091.4	2,099.0	2,101.9	2,106.2	2,107.5	2,105.6	2,098.4	2,095.3
5 Commercial and industrial	609.0	607.6	604.6	602.5	601.4	601.1	600.9	601.3	599.0	600.2	598.3	594.2
6 Bankers acceptances held[2]	6.5	6.7	6.3	6.5	6.5	6.3	7.4	7.6	7.1	6.9	8.2	8.4
7 Other commercial and industrial	602.6	600.9	598.4	596.0	594.9	594.8	593.5	593.7	591.9	593.2	590.1	585.8
8 U.S. addressees[3]	593.2	590.8	588.3	585.3	584.3	583.5	582.4	582.4	580.8	581.9	578.6	573.9
9 Non-U.S. addressees[3]	9.4	10.1	10.1	10.7	10.6	11.3	11.1	11.3	11.1	11.4	11.5	11.9
10 Real estate	881.8	883.3	881.8	881.5	883.1	887.1	892.3	893.9	893.9	890.4	888.6	888.9
11 Individual	360.8	359.2	359.0	358.6	357.4	357.1	356.1	355.7	355.7	358.2	360.2	360.7
12 Security	63.4	60.9	63.3	60.5	61.6	64.0	64.7	64.3	65.0	63.2	61.9	62.8
13 Nonbank financial institutions	43.2	43.3	42.4	41.5	42.0	44.1	44.2	45.1	44.1	45.5	45.3	45.0
14 Agricultural	34.3	34.3	34.6	34.9	35.3	35.2	35.1	35.1	34.8	34.4	34.3	34.2
15 State and political subdivisions	27.6	27.3	26.8	26.2	25.9	25.8	25.4	25.2	24.8	24.3	23.7	23.5
16 Foreign banks	6.7	7.0	7.5	7.7	7.2	7.9	7.3	7.0	7.0	6.9	7.7	7.3
17 Foreign official institutions	2.0	2.0	2.0	2.2	2.3	2.5	2.4	2.8	2.9	2.9	3.1	3.0
18 Lease-financing receivables	31.1	30.9	31.0	30.8	30.8	31.0	30.7	30.6	30.6	30.0	29.9	29.9
19 All other loans	45.1	42.4	43.3	43.2	44.3	43.1	42.8	45.3	49.9	49.7	n.a.	n.a.
	Not seasonally adjusted											
20 **Total loans and securities[1]**	**2,875.8**	**2,870.7**	**2,882.9**	**2,876.1**	**2,894.5**	**2,915.7**	**2,929.4**	**2,944.0**	**2,953.5**	**2,941.9**	**2,947.4**	**2,961.8**
21 *U.S. government securities*	*592.6*	*599.4*	*608.9*	*615.3*	*631.3*	*638.9*	*646.5*	*656.1*	*658.5*	*660.3*	*674.1*	*690.9*
22 Other securities	178.0	176.5	175.4	176.8	178.1	178.1	179.8	178.8	176.6	174.8	175.8	177.3
23 Total loans and leases[1]	2,105.2	2,094.8	2,098.7	2,084.0	2,085.0	2,098.7	2,103.0	2,109.1	2,118.4	2,106.7	2,097.5	2,093.7
24 Commercial and industrial	612.1	609.4	606.5	601.5	597.6	597.5	598.5	601.5	602.0	598.6	597.5	597.4
25 Bankers acceptances held[2]	6.3	6.6	6.2	6.3	6.3	6.2	7.2	7.8	7.4	7.1	8.5	8.5
26 Other commercial and industrial	605.8	602.7	600.3	595.2	591.4	591.3	591.3	593.7	594.6	591.5	588.9	588.9
27 U.S. addressees[3]	596.3	592.7	589.5	584.2	580.5	580.2	580.5	583.0	583.6	580.2	577.4	577.2
28 Non-U.S. addressees[3]	9.5	10.0	10.8	11.0	10.8	11.1	10.8	10.7	11.0	11.3	11.6	11.8
29 Real estate	880.7	883.4	882.0	881.6	883.7	887.9	893.0	895.4	895.2	890.2	886.8	886.3
30 Individual	358.1	357.4	357.2	356.4	356.9	358.7	356.5	356.5	360.1	362.3	360.2	358.2
31 Security	66.9	58.4	63.5	58.0	59.4	62.5	64.2	63.6	65.7	64.7	64.9	64.8
32 Nonbank financial institutions	42.6	42.8	42.9	41.3	41.8	43.6	43.8	45.4	46.1	45.7	45.2	44.6
33 Agricultural	33.5	34.0	35.1	35.8	36.5	36.6	36.0	35.1	34.6	33.6	33.0	32.9
34 State and political subdivisions	27.6	27.3	26.8	26.1	25.9	25.9	25.5	25.2	24.8	24.1	23.6	23.5
35 Foreign banks	6.4	6.8	7.3	7.8	7.0	8.0	7.6	7.3	7.4	6.9	7.5	7.0
36 Foreign official institutions	2.0	2.0	2.0	2.2	2.3	2.5	2.4	2.8	2.9	2.9	3.1	3.0
37 Lease-financing receivables	31.2	30.9	31.0	30.6	30.6	30.8	30.6	30.5	30.5	30.3	30.2	30.1
38 All other loans	44.1	42.5	44.4	42.6	43.2	44.5	44.6	45.7	49.1	47.5	n.a.	n.a.

1. Adjusted to exclude loans to commercial banks in the United States.
2. Includes nonfinancial commercial paper held.
3. United States includes the fifty states and the District of Columbia.

1.24 MAJOR NONDEPOSIT FUNDS OF COMMERCIAL BANKS[1]

Billions of dollars, monthly averages

Source of funds	1992									1993		
	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
	Seasonally adjusted											
1 Total nondeposit funds[2]	291.9	292.4	295.9	297.0	302.4	309.4[r]	304.9[r]	309.1[r]	312.9	312.9[r]	312.3	323.9
2 Net balances due to related foreign offices[3]	50.9	53.7	61.2	61.7	61.4	64.0	63.8[r]	67.9[r]	71.1	74.1[r]	73.3	80.0
3 Borrowings from other than commercial banks in United States[4]	241.0	238.7	234.7	235.3	241.1	245.4[r]	241.1	241.2	241.8[r]	238.8	239.0	243.9
4 Domestically chartered banks	154.6	151.8	147.6	147.2	151.5	153.4	154.5	153.7	154.3	155.1	156.1	161.1
5 Foreign-related banks	86.5	86.9	87.2	88.1	89.6	92.1[r]	86.6	87.5	87.4	83.7	82.9	82.8
	Not seasonally adjusted											
6 Total nondeposit funds[2]	288.4	297.1	295.2	291.5	297.5	304.0[r]	307.2[r]	314.3[r]	312.7	311.8	316.6	328.8
7 Net balances due to related foreign offices[3]	47.9	55.9	59.2	58.4	57.6	61.6	65.0[r]	69.6[r]	75.2	76.7	75.1	80.7
8 Domestically chartered banks	−4.6	−4.5	−6.3	−7.0	−9.3	−11.0	−13.4[r]	−12.6[r]	−15.1	−15.9	−10.6	−7.0
9 Foreign-related banks	52.6	60.4	65.6	65.4	66.9	72.6	78.3[r]	82.1[r]	90.3	92.6	85.7	87.8
10 Borrowings from other than commercial banks in United States[4]	240.5	241.2	236.0	233.1	239.9	242.3[r]	242.3	244.8	237.5	235.1	241.5	248.0
11 Domestically chartered banks	152.7	153.3	147.4	144.1	150.4	152.2	155.7	158.1	153.4	152.1	157.8	164.0
12 Federal funds and security RP borrowings[5]	149.2	149.4	143.3	139.9	146.5	148.4	152.1	154.0	149.4	148.4	154.5	n.a.
13 Other[6]	3.4	3.9	4.1	4.2	3.9	3.8	3.6	4.1	4.0	3.6	3.2	n.a.
14 Foreign-related banks[6]	87.8	87.9	88.6	89.0	89.5	90.1[r]	86.6	86.6	84.1	83.0	83.7	84.0
MEMO												
Gross large time deposits[7]												
15 Seasonally adjusted	401.5	397.5	393.3	387.7	385.8	383.2	375.7	371.3	366.6	359.9[r]	358.4	355.7
16 Not seasonally adjusted	400.5	399.4	394.9	387.4	387.1	383.6	374.9	371.1	365.5	358.0[r]	358.0	356.6
U.S. Treasury demand balances at commercial banks[8]												
17 Seasonally adjusted	20.8	19.2	24.7	23.1	28.0	24.1	21.5	20.7	20.4	25.6	23.6	18.8
18 Not seasonally adjusted	17.7	21.0	25.2	19.6	22.4	28.6	21.9	16.5	19.5	33.1[r]	29.5	17.3

1. Commercial banks are nationally and state-chartered banks in the fifty states and the District of Columbia, 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 in this table also appear in the Board's G.10 (411) release. For ordering address, see inside front cover.
2. Includes federal funds, repurchase agreements (RPs), and other borrowing from nonbanks and net balances due to related foreign offices.
3. Reflects net positions of U.S. chartered banks, Edge Act corporations, and U.S. branches and agencies of foreign banks with related foreign offices plus net positions with own International Banking Facilities (IBFs).
4. Borrowings through any instrument, such as a promissory note or due bill, given for the purpose of borrowing money for the banking business. This includes borrowings from Federal Reserve Banks and from foreign banks, term federal funds, loan RPs, and sales of participations in pooled loans.
5. Figures are based on averages of daily data reported weekly by approximately 120 large banks and quarterly or annual data reported by other banks.
6. Figures are partly averages of daily data and partly averages of Wednesday data.
7. Time deposits in denominations of $100,000 or more. Estimated averages of daily data.
8. U.S. Treasury demand deposits and Treasury tax and loan notes at commercial banks. Averages of daily data.

1.25 ASSETS AND LIABILITIES OF COMMERCIAL BANKS[1] Wednesday figures

Millions of dollars

Account	1993								
	Feb. 3	Feb. 10	Feb. 17	Feb. 24	Mar. 3	Mar. 10	Mar. 17	Mar. 24	Mar. 31
ALL COMMERCIAL BANKING INSTITUTIONS[2]									
Assets									
1 Loans and securities	3,118,497	3,101,583	3,107,865	3,085,402	3,132,722	3,120,772	3,131,520	3,101,833	3,125,370
2 Investment securities	809,779	807,871	808,337	813,306	820,520	824,462	828,667	830,804	835,164
3 U.S. government securities	648,632	646,996	646,885	651,254	657,933	661,035	666,417	667,899	672,074
4 Other	161,147	160,875	161,452	162,052	162,587	163,428	162,250	162,905	163,089
5 Trading account assets	38,214	37,268	40,623	37,014	39,280	39,929	41,232	37,743	37,326
6 U.S. government securities	24,484	23,426	25,915	22,989	24,254	25,886	26,785	23,408	22,823
7 Other securities	2,359	2,747	2,617	2,217	2,109	2,199	2,284	2,427	2,768
8 Other trading account assets	11,372	11,095	12,091	11,808	12,917	11,843	12,162	11,908	11,735
9 Total loans	2,270,504	2,256,444	2,258,906	2,235,082	2,272,922	2,256,381	2,261,622	2,233,286	2,252,880
10 Interbank loans	165,927	157,585	162,766	145,781	169,158	162,802	160,438	145,064	166,903
11 Loans excluding interbank	2,104,577	2,098,860	2,096,139	2,089,302	2,103,764	2,093,579	2,101,184	2,088,223	2,085,977
12 Commercial and industrial	601,125	596,882	597,554	595,478	599,000	596,470	599,488	596,290	596,765
13 Real estate	887,582	888,769	886,139	884,179	887,717	888,194	885,691	884,738	885,256
14 Revolving home equity	73,081	73,066	73,064	73,060	73,516	73,472	73,473	73,473	73,602
15 Other	814,501	815,703	813,074	811,119	814,201	814,722	812,218	811,265	811,654
16 *Individual*	*361,281*	*360,843*	*360,069*	*359,614*	*358,413*	*357,595*	*358,081*	*357,791*	*358,951*
17 All other	254,588	252,367	252,378	250,031	258,635	251,320	257,925	249,404	245,005
18 Total cash assets	210,622	195,806	227,314	199,105	210,519	195,068	199,599	197,328	211,971
19 Balances with Federal Reserve Banks	32,591	23,825	28,745	27,888	28,655	24,017	21,818	27,982	30,455
20 Cash in vault	29,340	30,913	32,630	32,474	29,708	30,973	30,940	31,483	31,609
21 Demand balances at U.S. depository institutions	29,694	27,810	33,517	28,746	30,533	28,282	29,443	28,633	28,244
22 Cash items	78,029	71,524	91,596	69,239	81,013	70,767	75,241	68,500	81,731
23 Other cash assets	40,366	41,307	40,232	40,292	40,032	40,452	41,580	40,730	39,933
24 Other assets	289,163	287,081	282,083	281,425	290,299	287,240	280,677	283,052	284,530
25 Total assets	**3,618,283**	**3,584,470**	**3,617,262**	**3,565,933**	**3,633,540**	**3,603,079**	**3,611,796**	**3,582,213**	**3,621,871**
Liabilities									
26 Total deposits	2,490,711	2,478,784	2,503,772	2,462,605	2,503,169	2,482,906	2,482,159	2,462,845	2,491,606
27 Transaction accounts	745,285	731,402	758,882	718,645	754,761	734,576	739,186	725,248	757,356
28 Demand, U.S. government	4,190	3,092	3,482	3,645	3,388	2,967	2,884	3,252	3,882
29 Demand, depository institutions	39,279	36,591	45,159	36,419	38,867	35,623	38,026	36,618	35,411
30 Other demand and all checkable deposits	701,816	691,719	710,240	678,581	712,506	695,987	698,276	685,378	718,064
31 Savings deposits (excluding checkable)	745,372	749,492	750,326	746,203	750,723	754,157	752,182	749,917	751,509
32 Small time deposits	636,553	634,889	633,433	633,159	636,033	635,233	633,494	631,915	631,077
33 Time deposits over $100,000	363,500	363,001	361,131	364,598	361,652	358,940	357,297	355,764	351,664
34 Borrowings	512,214	494,457	504,864	487,072	505,450	495,543	507,327	492,766	496,115
35 Treasury tax and loan notes	36,822	31,599	21,749	16,048	5,636	8,032	21,073	15,814	14,856
36 Other	475,392	462,858	483,115	471,024	499,814	487,511	486,254	476,952	481,259
37 Other liabilities	340,395	335,259	332,448	338,454	345,622	344,869	342,690	347,348	352,502
38 Total liabilities	**3,343,320**	**3,308,500**	**3,341,083**	**3,288,130**	**3,354,241**	**3,323,317**	**3,332,176**	**3,302,959**	**3,340,223**
39 Residual (assets less liabilities)[3]	274,963	275,970	276,180	277,802	279,298	279,762	279,620	279,254	281,648

Footnotes appear on the following page.

1.25 ASSETS AND LIABILITIES OF COMMERCIAL BANKS[1] Wednesday figures—Continued

Millions of dollars

Account	1993								
	Feb. 3	Feb. 10	Feb. 17	Feb. 24	Mar. 3	Mar. 10	Mar. 17	Mar. 24	Mar. 31
DOMESTICALLY CHARTERED COMMERCIAL BANKS[4]									
Assets									
40 Loans and securities	2,760,488	2,745,746	2,751,436	2,733,909	2,770,088	2,760,187	2,769,015	2,745,135	2,762,833
41 Investment securities	743,685	743,335	741,316	745,544	751,900	754,262	756,955	760,059	762,295
42 U.S. government securities	604,437	604,389	601,850	605,669	611,858	613,870	617,447	619,836	621,494
43 Other	139,248	138,946	139,466	139,875	140,042	140,392	139,508	140,224	140,801
44 Trading account assets	38,214	37,268	40,623	37,014	39,280	39,929	41,232	37,743	37,326
45 U.S. government securities	24,484	23,426	25,915	22,989	24,254	25,886	26,785	23,408	22,823
46 Other securities	2,359	2,747	2,617	2,217	2,109	2,199	2,284	2,427	2,768
47 Other trading account assets	11,372	11,095	12,091	11,808	12,917	11,843	12,162	11,908	11,735
48 Total loans	1,978,590	1,965,143	1,969,497	1,951,351	1,978,908	1,965,996	1,970,829	1,947,333	1,963,212
49 Interbank loans	144,615	134,598	139,173	126,340	143,398	135,272	137,059	123,833	136,765
50 Loans excluding interbank	1,833,975	1,830,545	1,830,324	1,825,011	1,835,511	1,830,725	1,833,769	1,823,500	1,826,446
51 Commercial and industrial	437,982	435,871	436,827	436,084	438,750	437,510	438,952	436,722	439,124
52 Real estate	835,517	836,707	834,275	832,704	836,523	837,252	834,378	833,614	835,440
53 Revolving home equity	73,081	73,066	73,064	73,060	73,516	73,472	73,473	73,473	73,602
54 Other	762,436	763,641	761,210	759,644	763,007	763,780	760,905	760,141	761,838
55 Individual	361,281	360,843	360,069	359,614	358,413	357,595	358,081	357,791	358,951
56 All other	199,194	197,124	199,153	196,610	201,825	198,369	202,358	195,373	192,932
57 Total cash assets	184,063	168,451	201,564	172,647	182,687	168,152	171,611	169,815	182,901
58 Balances with Federal Reserve Banks	31,768	23,330	27,962	27,409	27,784	23,516	20,885	27,474	29,232
59 Cash in vault	29,307	30,880	32,592	32,440	29,675	30,940	30,907	31,449	31,576
60 Demand balances at U.S. depository institutions	28,074	26,277	31,865	27,094	29,007	26,800	27,928	27,045	26,606
61 Cash items	76,086	68,711	89,311	66,781	78,875	68,466	73,073	66,095	78,439
62 Other cash assets	18,226	18,827	19,240	18,457	16,769	17,854	18,241	17,753	17,048
63 Other assets	177,133	177,954	175,277	171,332	175,935	173,380	171,004	171,465	181,496
64 **Total assets**	**3,121,685**	**3,092,151**	**3,128,276**	**3,077,888**	**3,128,711**	**3,101,718**	**3,111,629**	**3,086,415**	**3,127,230**
Liabilities									
65 Total deposits	2,333,422	2,321,559	2,349,717	2,303,891	2,346,905	2,329,044	2,329,157	2,309,667	2,334,274
66 Transaction accounts	734,352	720,103	749,024	708,348	744,186	724,536	728,806	715,134	745,441
67 Demand, U.S. government	4,190	3,091	3,481	3,645	3,387	2,967	2,884	3,251	3,881
68 Demand, depository institutions	36,780	34,115	42,856	34,091	36,365	33,288	35,467	34,361	32,925
69 Other demand and all checkable deposits	693,382	682,896	702,687	670,612	704,434	688,281	690,455	677,522	708,635
70 Savings deposits (excluding checkable)	740,868	744,965	745,783	741,596	746,140	749,571	747,786	745,474	746,990
71 Small time deposits	634,106	632,446	631,003	630,742	633,617	632,847	631,144	629,574	628,735
72 Time deposits over $100,000	224,097	224,046	223,907	223,205	222,963	222,091	221,421	219,485	213,108
73 Borrowings	385,627	367,429	376,339	366,667	369,026	358,299	370,290	365,526	368,998
74 Treasury tax and loan notes	36,822	31,599	21,749	16,048	5,636	8,032	21,073	15,814	14,856
75 Other	348,805	335,830	354,590	350,619	363,390	350,267	349,217	349,712	354,142
76 Other liabilities	131,282	130,800	129,649	133,135	137,089	138,222	136,169	135,576	145,919
77 **Total liabilities**	**2,850,331**	**2,819,789**	**2,855,705**	**2,803,694**	**2,853,021**	**2,825,565**	**2,835,617**	**2,810,769**	**2,849,191**
78 Residual (assets less liabilities)[3]	271,354	272,362	272,571	274,194	275,690	276,154	276,012	275,646	278,040

1. Excludes assets and liabilities of International Banking Facilities.
2. Includes insured domestically chartered commercial banks, agencies and branches of foreign banks, Edge Act and Agreement corporations, and New York State foreign investment corporations. Data are estimates for the last Wednesday of the month based on a sample of weekly reporting foreign-related and domestic institutions and quarter-end condition reports.
3. This balancing item is not intended as a measure of equity capital for use in capital adequacy analysis.
4. Includes all member banks and insured nonmember banks. Loans and securities data are estimates for the last Wednesday of the month based on a sample of weekly reporting banks and quarter-end condition reports.

1.26 ASSETS AND LIABILITIES OF LARGE WEEKLY REPORTING COMMERCIAL BANKS

Millions of dollars, Wednesday figures

Account	1993								
	Feb. 3	Feb. 10	Feb. 17	Feb. 24	Mar. 3	Mar. 10	Mar. 17	Mar. 24	Mar. 31
ASSETS									
1 Cash and balances due from depository institutions	108,828	97,411	120,597	100,834	105,080	96,357	98,967	98,936	105,648
2 U.S. Treasury and government securities	276,421	274,967	277,181	275,657	281,664	282,581	285,962	284,736	283,362
3 Trading account	21,617	20,504	23,109	20,506	21,932	23,026	23,132	20,521	19,020
4 Investment account	254,804	254,463	254,071	255,151	259,732	259,555	262,830	264,215	264,341
5 Mortgage-backed securities[1]	78,639	78,659	78,840	80,662	81,194	81,341	83,447	83,813	83,943
All others, by maturity									
6 One year or less	36,566	36,852	36,698	37,071	37,827	37,240	38,213	38,894	41,253
7 One year through five years	76,343	75,166	75,459	75,092	77,354	76,150	76,659	77,052	73,914
8 More than five years	63,257	63,786	63,074	62,326	63,358	64,824	64,511	64,456	65,232
9 Other securities	55,707	55,862	56,042	55,908	56,199	56,647	55,944	56,575	57,052
10 Trading account	2,207	2,357	2,009	1,767	1,777	1,860	1,913	2,069	2,276
11 Investment account	53,500	53,505	54,032	54,141	54,423	54,787	54,031	54,506	54,776
12 State and political subdivisions, by maturity	20,226	20,262	20,135	20,124	19,986	20,009	19,986	19,995	20,016
13 One year or less	3,299	3,327	3,250	3,406	3,381	3,378	3,361	3,363	3,392
14 More than one year	16,927	16,935	16,884	16,718	16,604	16,631	16,625	16,632	16,624
15 Other bonds, corporate stocks, and securities	33,274	33,243	33,898	34,016	34,437	34,778	34,045	34,511	34,760
16 Other trading account assets	11,109	10,845	11,839	11,557	12,655	11,586	11,910	11,656	11,472
17 Federal funds sold[2]	89,607	78,600	83,946	75,422	89,680	80,916	85,559	75,957	81,787
18 To commercial banks in the United States	61,923	51,875	57,113	48,697	60,491	52,051	56,247	47,358	58,603
19 To nonbank brokers and dealers	22,634	22,732	22,637	23,229	24,797	24,169	24,877	24,460	19,473
20 To others[3]	5,050	3,993	4,196	3,496	4,391	4,696	4,435	4,138	3,711
21 Other loans and leases, gross	982,808	980,124	981,936	974,476	981,342	976,948	979,640	970,600	975,430
22 Commercial and industrial	278,905	276,887	278,157	276,670	279,114	277,978	278,504	275,852	277,468
23 Bankers acceptances and commercial paper	2,422	3,031	3,030	2,781	2,924	2,952	3,141	2,670	2,705
24 All other	276,483	273,856	275,128	273,889	276,190	275,025	275,363	273,182	274,763
25 U.S. addressees	274,702	272,083	273,379	272,145	274,571	273,396	273,786	271,632	273,196
26 Non-U.S. addressees	1,781	1,772	1,749	1,745	1,619	1,630	1,577	1,550	1,567
27 Real estate loans	398,560	399,407	397,427	394,603	397,443	398,035	395,172	394,163	394,963
28 Revolving, home equity	43,236	43,215	43,199	43,107	43,465	43,410	43,438	43,400	43,473
29 All other	355,325	356,192	354,227	351,496	353,978	354,625	351,734	350,763	351,490
30 To individuals for personal expenditures	185,024	184,631	184,390	183,845	183,753	183,288	183,576	183,351	183,938
31 To financial institutions	35,440	34,712	35,886	33,361	34,826	33,269	34,054	33,325	33,772
32 Commercial banks in the United States	13,314	12,899	13,438	12,522	12,481	12,431	12,860	12,822	12,553
33 Banks in foreign countries	1,970	2,151	2,999	2,377	3,306	2,233	2,636	2,461	2,107
34 Nonbank financial institutions	20,156	19,662	19,449	18,462	19,040	18,606	18,557	18,041	19,112
35 For purchasing and carrying securities	15,363	16,023	15,199	17,160	16,066	15,784	18,135	15,741	15,634
36 To finance agricultural production	5,524	5,485	5,513	5,522	5,502	5,500	5,568	5,504	5,531
37 To states and political subdivisions	14,303	14,299	14,229	14,258	14,221	14,186	14,177	14,145	14,035
38 To foreign governments and official institutions	1,508	1,394	1,556	1,486	1,712	1,555	1,463	1,403	1,406
39 All other loans[4]	23,912	22,867	24,934	22,939	24,047	22,821	24,475	22,801	24,211
40 Lease-financing receivables	24,269	24,418	24,645	24,632	24,658	24,532	24,516	24,315	24,473
41 LESS: Unearned income	2,247	2,245	2,271	2,253	2,203	2,213	2,201	2,189	2,154
42 Loan and lease reserve[5]	36,758	36,866	36,780	36,756	37,119	37,038	37,012	36,886	36,289
43 Other loans and leases, net	943,803	941,012	942,885	935,466	942,021	937,697	940,427	931,525	936,987
44 Other assets	163,006	164,630	160,047	158,596	160,954	159,212	157,300	157,935	164,628
45 **Total assets**	**1,648,482**	**1,623,327**	**1,652,536**	**1,613,441**	**1,648,253**	**1,624,997**	**1,636,069**	**1,617,320**	**1,640,934**

Footnotes appear on the following page.

1.26 ASSETS AND LIABILITIES OF LARGE WEEKLY REPORTING COMMERCIAL BANKS—Continued

Millions of dollars, Wednesday figures

Account	1993								
	Feb. 3	Feb. 10	Feb. 17	Feb. 24	Mar. 3	Mar. 10	Mar. 17	Mar. 24	Mar. 31
LIABILITIES									
46 Deposits	1,108,340	1,103,346	1,124,498	1,091,103	1,115,967	1,102,419	1,105,643	1,091,549	1,102,516
47 Demand deposits	261,092	256,903	278,322	252,959	266,306	255,039	261,756	254,274	268,492
48 Individuals, partnerships, and corporations	209,951	206,151	221,986	204,906	216,753	209,670	212,914	205,350	221,484
49 Other holders	51,141	50,752	56,335	48,053	49,553	45,369	48,841	48,923	47,008
50 States and political subdivisions	9,728	8,859	9,363	8,936	8,847	8,576	8,759	8,805	8,899
51 U.S. government	2,824	1,945	2,073	2,388	2,094	1,835	1,694	2,138	2,346
52 Depository institutions in the United States	22,325	20,839	26,678	21,349	22,182	20,511	21,394	20,727	20,469
53 Banks in foreign countries	5,377	5,555	6,832	5,243	5,811	4,742	5,715	6,014	5,117
54 Foreign governments and official institutions	564	618	524	664	556	858	739	810	712
55 Certified and officers' checks	10,322	12,936	10,866	9,473	10,062	8,847	10,540	10,429	9,466
56 Transaction balances other than demand deposits[4]	119,209	116,551	116,588	114,646	121,220	118,168	117,506	116,245	119,189
57 Nontransaction balances	728,038	729,891	729,588	723,499	728,441	729,212	726,381	721,031	714,834
58 Individuals, partnerships, and corporations	702,726	703,725	703,387	697,665	702,566	703,585	701,163	695,980	692,326
59 Other holders	25,312	26,166	26,201	25,833	25,875	25,627	25,218	25,051	22,508
60 States and political subdivisions	20,827	21,440	21,502	21,422	21,415	21,067	20,694	20,475	20,127
61 U.S. government	2,070	2,152	2,129	2,051	2,040	2,026	2,026	2,082	487
62 Depository institutions in the United States	2,086	2,243	2,241	2,030	2,088	2,203	2,158	2,152	1,558
63 Foreign governments, official institutions, and banks	329	332	328	330	332	332	340	342	336
64 Liabilities for borrowed money[5]	298,280	277,765	285,886	277,617	283,744	272,951	282,539	278,614	280,917
65 Borrowings from Federal Reserve Banks	65	0	0	0	35	0	860	0	707
66 Treasury tax and loan notes	31,935	27,029	18,102	12,932	4,476	6,461	17,791	12,658	11,624
67 Other liabilities for borrowed money[6]	266,280	250,735	267,784	264,685	279,232	266,490	263,888	265,956	268,586
68 Other liabilities (including subordinated notes and debentures)	100,977	100,426	99,531	102,576	105,888	106,760	104,926	103,508	112,434
69 **Total liabilities**	**1,507,596**	**1,481,536**	**1,509,914**	**1,471,295**	**1,505,599**	**1,482,130**	**1,493,109**	**1,473,671**	**1,495,867**
70 Residual (total assets less total liabilities)[7]	140,886	141,791	142,623	142,145	142,654	142,867	142,961	143,649	145,067
MEMO									
71 Total loans and leases, gross, adjusted, plus securities[8]	1,340,416	1,335,624	1,340,392	1,331,801	1,348,568	1,344,197	1,349,907	1,339,343	1,337,946
72 Time deposits in amounts of $100,000 or more	115,165	114,902	114,874	113,962	113,729	112,598	111,983	110,167	104,124
73 Loans sold outright to affiliates[9]	916	922	910	909	898	897	896	893	869
74 Commercial and industrial	452	452	452	452	453	452	451	449	447
75 Other	464	470	458	458	446	445	445	444	422
76 Foreign branch credit extended to U.S. residents[10]	24,324	23,892	23,807	23,756	23,407	23,846	23,850	23,150	23,225
77 Net due to related institutions abroad	−12,273	−14,758	−13,611	−10,277	−8,870	−10,560	−8,945	−10,070	−12,388

1. Includes certificates of participation, issued or guaranteed by agencies of the U.S. government, in pools of residential mortgages.
2. Includes securities purchased under agreements to resell.
3. Includes allocated transfer risk reserve.
4. Includes negotiable order of withdrawal accounts (NOWs), automatic transfer service (ATS), and telephone and preauthorized transfers of savings deposits.
5. Includes borrowings only from other than directly related institutions.
6. Includes federal funds purchased and securities sold under agreements to repurchase.
7. This balancing item is not intended as a measure of equity capital for use in capital-adequacy analysis.
8. Excludes loans to and federal funds transactions with commercial banks in the United States.
9. Affiliates include 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.
10. Credit extended by foreign branches of domestically chartered weekly reporting banks to nonbank U.S. residents. Consists mainly of commercial and industrial loans, but includes an unknown amount of credit extended to other than nonfinancial businesses.

NOTE. Data that formerly appeared in table 1.28, Assets and Liabilities of Large Weekly Reporting Commercial Banks in New York City, can be obtained from the Board's H.4.2 (504) weekly statistical release. For ordering address, see inside front cover.

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

Millions of dollars, Wednesday figures

Account	1993								
	Feb. 3	Feb. 10	Feb. 17	Feb. 24	Mar. 3	Mar. 10	Mar. 17	Mar. 24	Mar. 31
1 Cash and balances due from depository institutions	17,543	18,122	17,055	17,493	18,488	17,941	18,588	18,277	19,477
2 U.S. Treasury and government agency securities	27,157	26,206	27,803	28,054	28,414	29,245	30,199	29,671	31,416
3 Other securities	8,246	8,259	8,307	8,355	8,516	8,755	8,590	8,577	8,478
4 Federal funds sold[1]	23,360	22,514	20,171	18,346	22,841	22,931	23,720	21,931	23,044
5 To commercial banks in the United States	4,706	5,264	5,394	3,784	5,960	7,213	5,316	4,678	8,710
6 To others[2]	18,654	17,250	14,777	14,562	16,881	15,718	18,404	17,252	14,334
7 Other loans and leases, gross	163,546	163,684	164,649	163,256	165,205	162,364	162,457	161,115	160,810
8 Commercial and industrial	98,916	97,754	97,747	96,589	97,212	96,968	97,337	96,841	96,272
9 Bankers acceptances and commercial paper	2,571	2,546	2,776	2,768	2,676	2,697	2,580	2,644	2,699
10 All other	96,345	95,207	94,971	93,821	94,536	94,271	94,758	94,198	93,572
11 U.S. addressees	93,254	92,162	91,663	90,517	91,112	90,900	91,363	90,776	90,282
12 Non-U.S. addressees	3,090	3,046	3,307	3,304	3,424	3,371	3,394	3,421	3,291
13 Loans secured by real estate	33,758	33,801	33,778	33,415	33,297	33,307	33,356	33,272	32,604
14 To financial institutions	23,980	25,493	26,449	26,446	27,285	25,707	26,074	25,313	25,135
15 Commercial banks in the United States	5,357	5,582	5,814	5,608	6,311	5,582	5,771	5,396	4,956
16 Banks in foreign countries	1,919	2,004	2,014	1,999	2,195	1,819	1,784	1,666	1,866
17 Nonbank financial institutions	16,704	17,907	18,621	18,840	18,780	18,306	18,520	18,251	18,313
18 For purchasing and carrying securities	4,201	3,902	4,069	4,371	4,906	3,903	3,299	2,585	3,794
19 To foreign governments and official institutions	333	407	412	395	398	396	386	370	368
20 All other	2,358	2,327	2,194	2,040	2,107	2,082	2,004	2,734	2,637
21 Other assets (claims on nonrelated parties)	31,916	31,916	31,117	31,714	32,209	32,090	30,910	30,741	33,934
22 **Total assets**[3]	**307,487**	**304,749**	**302,616**	**302,014**	**312,754**	**310,535**	**309,771**	**306,975**	**306,235**
23 Deposits or credit balances due to other than directly related institutions	102,342	101,909	100,295	103,096	101,333	99,966	99,680	99,825	102,792
24 Demand deposits[4]	4,365	4,551	3,765	3,998	4,148	3,859	4,061	3,911	4,933
25 Individuals, partnerships, and corporations	2,653	2,868	2,878	2,952	3,144	2,962	3,060	3,219	3,413
26 Other	1,712	1,683	887	1,046	1,004	897	1,001	693	1,519
27 Nontransaction accounts	97,977	97,357	96,530	99,098	97,185	96,107	95,619	95,914	97,859
28 Individuals, partnerships, and corporations	69,466	68,244	66,900	69,106	67,619	67,240	66,701	66,456	67,958
29 Other	28,511	29,113	29,630	29,992	29,566	28,866	28,918	29,458	29,901
30 Borrowings from other than directly related institutions	87,797	88,234	88,470	83,919	94,763	94,459	94,217	88,359	86,619
31 Federal funds purchased[5]	47,476	45,592	45,320	41,104	47,578	44,887	47,768	43,257	45,148
32 From commercial banks in the United States	14,970	11,836	14,851	10,863	14,652	14,994	16,264	11,999	18,625
33 From others	32,506	33,757	30,469	30,242	32,926	29,893	31,504	31,259	26,523
34 Other liabilities for borrowed money	40,321	42,641	43,150	42,815	47,185	49,573	46,450	45,101	41,471
35 To commercial banks in the United States	8,733	9,331	9,459	8,544	9,154	9,981	10,194	9,619	9,317
36 To others	31,588	33,310	33,691	34,271	38,030	39,591	36,256	35,483	32,154
37 Other liabilities to nonrelated parties	31,127	31,938	30,994	31,276	31,245	32,486	30,136	30,320	32,462
38 **Total liabilities**[6]	**307,487**	**304,749**	**302,616**	**302,014**	**312,754**	**310,535**	**309,771**	**306,975**	**306,235**
MEMO									
39 Total loans (gross) and securities, adjusted[7]	212,246	209,817	209,722	208,619	212,705	210,498	213,879	211,219	210,082
40 Net due to related institutions abroad	50,502	48,620	49,342	48,926	48,332	46,414	50,431	51,807	55,286

1. Includes securities purchased under agreements to resell.
2. Includes transactions with nonbank brokers and dealers in securities.
3. Includes net due from related institutions abroad for U.S. branches and agencies of foreign banks having a net "due from" position.
4. Includes other transaction deposits.
5. Includes securities sold under agreements to repurchase.
6. Includes net to related institutions abroad for U.S. branches and agencies of foreign banks having a net "due to" position.
7. Excludes loans to and federal funds transactions with commercial banks in the United States.

1.32 COMMERCIAL PAPER AND BANKERS DOLLAR ACCEPTANCES OUTSTANDING

Millions of dollars, end of period

Item	Year ending December					1992				1993	
	1988	1989	1990	1991	1992	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.
	Commercial paper (seasonally adjusted unless noted otherwise)										
1 **All issuers**	**458,464**	**525,831**	**562,656[r]**	**531,724[r]**	**549,433[r]**	**550,727[r]**	**557,915[r]**	**558,414[r]**	**549,433[r]**	**542,438**	**529,400**
Financial companies[1]											
Dealer-placed paper[2]											
2 Total	159,777	183,622	214,706[r]	213,823[r]	228,260[r]	234,242[r]	231,751[r]	230,966[r]	228,260[r]	215,126	203,716
3 Bank-related (not seasonally adjusted)[3]	1,248	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Directly placed paper[4]											
4 Total	194,931	210,930	200,036[r]	183,379[r]	172,813[r]	178,184[r]	181,388[r]	179,279[r]	172,813[r]	181,264	177,370
5 Bank-related (not seasonally adjusted)[3]	43,155	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
6 Nonfinancial companies[5]	103,756	131,279	147,914[r]	134,522[r]	148,360[r]	138,301[r]	144,776[r]	148,169[r]	148,360[r]	146,048	148,314
	Bankers dollar acceptances (not seasonally adjusted)[6]										
7 **Total**	**66,631**	**62,972**	**54,771**	**43,770**	**38,194**	**37,814**	**37,599**	**37,651**	**38,194**	**35,995[r]**	**35,212**
Holder											
8 Accepting banks	9,086	9,433	9,017	11,017	10,555	10,436	10,236	10,301	10,555	9,115[r]	9,869
9 Own bills	8,022	8,510	7,930	9,347	9,097	9,073	8,764	9,156	9,097	7,922[r]	8,352
10 Bills bought from other banks	1,064	924	1,087	1,670	1,458	1,363	1,472	1,145	1,458	1,193	1,516
Federal Reserve Banks[7]											
11 Foreign correspondents	1,493	1,066	918	1,739	1,276	1,803	1,204	1,289	1,276	1,317	1,169
12 Others	56,052	52,473	44,836	31,014	26,364	25,575	26,159	26,061	26,364	25,563[r]	24,175
Basis											
13 Imports into United States	14,984	15,651	13,095	12,843	12,209	12,227	12,116	12,133	12,209	11,146	11,120
14 Exports from United States	14,410	13,683	12,703	10,351	8,096	8,051	7,849	7,673	8,096	7,740[r]	7,547
15 All other	37,237	33,638	28,973	20,577	17,890	17,536	17,633	17,846	17,890	17,109	16,545

1. Institutions engaged primarily in commercial, savings, and mortgage banking; sales, personal, and mortgage financing; factoring, finance leasing, and other business lending; insurance underwriting; and other investment activities.
2. Includes all financial-company paper sold by dealers in the open market.
3. Bank-related series were discontinued in January 1989.
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. Data on bankers acceptances are gathered from approximately 100 institutions. The reporting group is revised every January.
7. In 1977 the Federal Reserve discontinued operations in bankers acceptances for its own account.

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

Percent per year

Date of change	Rate	Period	Average rate	Period	Average rate	Period	Average rate
1990— Jan. 1	10.50	1990	10.01	1991— Jan.	9.52	1992— Jan.	6.50
8	10.00	1991	8.46	Feb.	9.05	Feb.	6.50
		1992	6.25	Mar.	9.00	Mar.	6.50
1991— Jan. 2	9.50			Apr.	9.00	Apr.	6.50
Feb. 4	9.00	1990— Jan.	10.11	May	8.50	May	6.50
May 1	8.50	Feb.	10.00	June	8.50	June	6.50
Sept. 13	8.00	Mar.	10.00	July	8.50	July	6.02
Nov. 6	7.50	Apr.	10.00	Aug.	8.50	Aug.	6.00
Dec. 23	6.50	May	10.00	Sept.	8.20	Sept.	6.00
		June	10.00	Oct.	8.00	Oct.	6.00
1992— July 2	6.00	July	10.00	Nov.	7.58	Nov.	6.00
		Aug.	10.00	Dec.	7.21	Dec.	6.00
		Sept.	10.00				
		Oct.	10.00			1993— Jan.	6.00
		Nov.	10.00			Feb.	6.00
		Dec.	10.00			Mar.	6.00
						Apr.	6.00

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

1.35 INTEREST RATES Money and Capital Markets

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

Item	1990	1991	1992	1992	1993			1993, week ending				
				Dec.	Jan.	Feb.	Mar.	Feb. 26	Mar. 5	Mar. 12	Mar. 19	Mar. 26
MONEY MARKET INSTRUMENTS												
1 Federal funds[1,2,3]	8.10	5.69	3.52	2.92	3.02	3.03	3.07	2.91	3.24	3.02	3.04	2.93
2 *Discount window borrowing*[2,4]	6.98	5.45	3.25	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Commercial paper[3,5,6]												
3 1-month	8.15	5.89	3.71	3.71	3.21	3.14	3.15	3.11	3.13	3.15	3.16	3.14
4 3-month	8.06	5.87	3.75	3.67	3.25	3.18	3.17	3.15	3.15	3.18	3.18	3.16
5 6-month	7.95	5.85	3.80	3.70	3.35	3.27	3.24	3.23	3.23	3.26	3.24	3.21
Finance paper, directly placed[3,5,7]												
6 1-month	8.00	5.73	3.62	3.68	3.25	3.18	3.15	3.17	3.20	3.18	3.16	3.09
7 3-month	7.87	5.71	3.65	3.58	3.32	3.27	3.17	3.26	3.24	3.21	3.17	3.09
8 6-month	7.53	5.60	3.63	3.52	3.29	3.21	3.14	3.20	3.17	3.17	3.16	3.08
Bankers acceptances[3,5,8]												
9 3-month	7.93	5.70	3.62	3.44	3.14	3.06	3.07	3.05	3.06	3.08	3.08	3.07
10 6-month	7.80	5.67	3.67	3.47	3.23	3.15	3.14	3.10	3.11	3.15	3.15	3.13
Certificates of deposit, secondary market[3,9]												
11 1-month	8.15	5.82	3.64	3.57	3.14	3.08	3.10	3.06	3.10	3.09	3.10	3.10
12 3-month	8.15	5.83	3.68	3.48	3.19	3.12	3.11	3.10	3.11	3.12	3.11	3.11
13 6-month	8.17	5.91	3.76	3.55	3.33	3.22	3.20	3.18	3.19	3.21	3.21	3.19
14 Eurodollar deposits, 3-month[3,10]	8.16	5.86	3.70	3.50	3.22	3.12	3.11	3.08	3.08	3.13	3.13	3.13
U.S. Treasury bills												
Secondary market[3,5]												
15 3-month	7.50	5.38	3.43	3.22	3.00	2.93	2.95	2.95	2.95	2.98	2.97	2.92
16 6-month	7.46	5.44	3.54	3.36	3.14	3.07	3.05	3.04	3.04	3.09	3.08	3.03
17 1-year	7.35	5.52	3.71	3.55	3.35	3.25	3.20	3.17	3.17	3.26	3.22	3.16
Auction average[3,5,11]												
18 3-month	7.51	5.42	3.45	3.25	3.06	2.95	2.97	2.96	2.97	2.98	3.00	2.94
19 6-month	7.47	5.49	3.57	3.39	3.17	3.08	3.08	3.06	3.05	3.09	3.12	3.05
20 1-year	7.36	5.54	3.75	3.57	3.52	3.32	3.09	n.a.	n.a.	3.09	n.a.	n.a.
U.S. TREASURY NOTES AND BONDS												
Constant maturities[12]												
21 1-year	7.89	5.86	3.89	3.71	3.50	3.39	3.33	3.31	3.30	3.39	3.36	3.30
22 2-year	8.16	6.49	4.77	4.67	4.39	4.10	3.95	3.95	3.85	4.03	3.99	3.93
23 3-year	8.26	6.82	5.30	5.21	4.93	4.58	4.40	4.38	4.28	4.47	4.46	4.39
24 5-year	8.37	7.37	6.19	6.08	5.83	5.43	5.19	5.21	5.09	5.24	5.23	5.20
25 7-year	8.52	7.68	6.63	6.46	6.26	5.87	5.66	5.64	5.54	5.65	5.73	5.67
26 10-year	8.55	7.86	7.01	6.77	6.60	6.26	5.98	6.02	5.90	5.96	6.03	5.98
27 30-year	8.61	8.14	7.67	7.44	7.34	7.09	6.82	6.89	6.79	6.76	6.85	6.83
Composite												
28 More than 10 years (long-term)	8.74	8.16	7.52	7.30	7.17	6.89	6.65	6.70	6.58	6.59	6.69	6.67
STATE AND LOCAL NOTES AND BONDS												
Moody's series[13]												
29 Aaa	6.96	6.56	6.09	5.91	5.91	5.61	5.42	5.47	5.29	5.18	5.64	5.57
30 Baa	7.29	6.99	6.48	6.27	6.28	5.98	5.81	5.84	5.66	5.58	6.05	5.95
31 *Bond Buyer* series[14]	7.27	6.92	6.44	6.22	6.16	5.87	5.64	5.60	5.47	5.58	5.71	5.78
CORPORATE BONDS												
32 Seasoned issues, all industries[15]	9.77	9.23	8.55	8.35	8.24	8.01	7.83	7.88	7.81	7.80	7.85	7.83
Rating group												
33 Aaa	9.32	8.77	8.14	7.98	7.91	7.71	7.58	7.61	7.56	7.54	7.61	7.59
34 Aa	9.56	9.05	8.46	8.24	8.11	7.90	7.72	7.77	7.70	7.70	7.74	7.72
35 A	9.82	9.30	8.62	8.37	8.26	8.03	7.86	7.90	7.84	7.83	7.88	7.87
36 Baa	10.36	9.80	8.98	8.81	8.67	8.39	8.15	8.22	8.12	8.11	8.16	8.15
37 A-rated, recently offered utility bonds[16]	10.01	9.32	8.52	8.27	8.13	7.80	7.61	7.63	7.47	7.62	7.58	7.73
MEMO												
Dividend–price ratio[17]												
38 Preferred stocks	8.96	8.17	7.46	7.45	7.25	7.37	6.70	7.29	6.82	6.66	6.73	6.63
39 Common stocks	3.61	3.25	2.99	2.90	2.88	2.81	2.76	2.82	2.77	2.73	2.78	2.78

1. The daily effective federal funds rate is a weighted average of rates on trades through New York brokers.
2. Weekly figures are averages of seven calendar days ending on Wednesday of the current week; monthly figures include each calendar day in the month.
3. Annualized using a 360-day year or bank interest.
4. Rate for the Federal Reserve Bank of New York.
5. Quoted on a discount basis.
6. An average of offering rates on commercial paper placed by several leading dealers for firms whose bond rating is AA or the equivalent.
7. An average of offering rates on paper directly placed by finance companies.
8. Representative closing yields for acceptances of the highest-rated money center banks.
9. An average of dealer offering rates on nationally traded certificates of deposit.
10. Bid rates for Eurodollar deposits at 11 a.m. London time. Data are for indication purposes only.
11. Auction date for daily data; weekly and monthly averages computed on an issue-date basis.
12. Yields on actively traded issues adjusted to constant maturities. Source: U.S. Treasury.
13. General obligations based on Thursday figures; Moody's Investors Service.
14. General obligations only, with twenty years to maturity, issued by twenty state and local governmental units of mixed quality. Based on figures for Thursday.
15. Daily figures from Moody's Investors Service. Based on yields to maturity on selected long-term bonds.
16. Compilation of the Federal Reserve. This series is an estimate of the yield on recently offered, A-rated utility bonds with a thirty-year maturity and five years of call protection. Weekly data are based on Friday quotations.
17. 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 ordering address, see inside front cover.

1.36 STOCK MARKET Selected Statistics

Indicator	1990	1991	1992	1992 July	1992 Aug.	1992 Sept.	1992 Oct.	1992 Nov.	1992 Dec.	1993 Jan.	1993 Feb.	1993 Mar.
	Prices and trading volume (averages of daily figures)											
Common stock prices (indexes)												
1 New York Stock Exchange (Dec. 31, 1965 = 50)	183.66	206.35	229.00	228.17	230.07	230.13	226.97	232.84	239.47	239.75r	243.41	248.12
2 Industrial	226.06	258.16	284.26	281.90	284.44	285.76	279.70	287.80	290.77	292.11	294.40	298.75
3 Transportation	158.80	173.97	201.02	198.36	191.31	191.61	192.30	204.63	212.35	221.00	226.96	229.42
4 Utility	90.72	92.64	99.48	101.18	103.41	102.26	101.62	101.13	103.85	105.52	109.45	112.53
5 Finance	133.21	150.84	179.29	180.96	180.47	178.27	181.36	189.27	196.87	203.38	209.93	217.01
6 Standard & Poor's Corporation (1941–43 = 10)[1]	335.01	376.20	415.75	415.05	417.93	418.48	412.50	422.84	435.64	435.40r	441.76	450.15
7 American Stock Exchange (Aug. 31, 1973 = 50)[2]	338.32	360.32	391.28	384.07	385.80	382.67	371.27	387.75	392.69	402.75r	409.39	418.56
Volume of trading (thousands of shares)												
8 New York Stock Exchange	156,359	179,411	202,558	194,138	174,003	191,774	204,787	208,221	222,736	266,011	288,540	251,170
9 American Stock Exchange	13,155	12,486	14,171	10,722	11,875	11,198	11,966	14,925	16,523	17,184	18,154	16,150
	Customer financing (millions of dollars, end-of-period balances)											
10 Margin credit at broker-dealers[3]	**28,210**	**36,660**	**43,990**	**39,640**	**39,940**	**41,250**	**41,590**	**43,630**	**43,990**	**44,020**	**44,290**	**45,160**
Free credit balances at brokers[4]												
11 Margin accounts[5]	8,050	8,290	8,970	7,920	8,060	8,060	8,355	8,500	8,970	8,980	9,790	9,650
12 Cash accounts	19,285	19,255	22,510	18,775	18,305	19,650	18,700	19,310	22,510	20,360	22,190	21,450

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

Indicator	Mar. 11, 1968	June 8, 1968	May 6, 1970	Dec. 6, 1971	Nov. 24, 1972	Jan. 3, 1974
13 Margin stocks	70	80	65	55	65	50
14 Convertible bonds	50	60	50	50	50	50
15 Short sales	70	80	65	55	65	50

1. Effective July 1976, includes a new financial group, banks and insurance companies. With this change the index includes 400 industrial stocks (formerly 425), 20 transportation (formerly 15 rail), 40 public utility (formerly 60), and 40 financial.
2. On July 5, 1983, the American Stock Exchange rebased its index, effectively cutting previous readings in half.
3. Since July 1983, under the revised Regulation T, margin credit at broker-dealers has included credit extended against stocks, convertible bonds, stocks acquired through the exercise of subscription rights, corporate bonds, and government securities. Separate reporting of data for margin stocks, convertible bonds, and subscription issues was discontinued in April 1984.
4. Free credit balances are amounts in accounts with no unfulfilled commitments to brokers and are subject to withdrawal by customers on demand.
5. New series since June 1984.
6. These requirements, stated in regulations adopted by the Board of Governors pursuant to the Securities Exchange Act of 1934, limit the amount of credit that can be used to purchase and carry "margin securities" (as defined in the regulations) when such credit is collateralized by securities. Margin requirements on securities 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.

Effective June 8, 1988, margins were set to be the price of the option plus 20 percent of the market value of the stock underlying the option (or 15 percent in the case of stock-index options).

1.37 SELECTED FINANCIAL INSTITUTIONS Selected Assets and Liabilities

Millions of dollars, end of period

Account	1990	1991	1992 Apr.	1992 May	1992 June	1992 July	1992 Aug.	1992 Sept.	1992 Oct.	1992 Nov.	1992 Dec.	1993 Jan.
	SAIF-insured institutions											
1 **Assets**	**1,084,821**	**919,979**	**872,026**	**870,334**	**861,517**	**856,390**	**856,165**	**847,235**	**846,730**	**840,605**		
2 *Mortgages*	633,385	551,322	524,954	521,911	516,654	512,264	512,077	508,815	502,863	496,974		
3 Mortgage-backed securities	155,228	129,461	124,763	124,225	123,282	122,385	120,438	119,715	120,715	120,292		
4 Contra-assets to mortgage assets[1]	16,897	12,307	10,959	11,120	11,282	11,044	11,164	11,073	11,207	10,509		
5 Commercial loans	24,125	17,139	15,075	14,607	14,020	13,929	13,525	13,419	13,630	13,180		
6 Consumer loans	48,753	41,775	37,999	37,868	37,403	37,230	37,123	36,732	35,938	36,019		
7 Contra-assets to nonmortgage loans[1]	1,939	1,239	980	949	944	910	932	982	931	845	n.a.	n.a.
8 Cash and investment securities	146,644	120,077	116,462	120,763	119,539	120,220	124,140	120,684	126,719	127,893		
9 Other[2]	95,522	73,751	64,711	63,030	62,844	62,317	60,958	59,925	59,002	57,600		
10 **Liabilities and net worth**	**1,084,821**	**919,979**	**872,026**	**870,334**	**861,517**	**856,390**	**856,165**	**847,235**	**846,730**	**840,605**		
11 Deposits	835,496	731,937	689,777	688,199	682,535	676,141	672,354	667,027	660,906	654,047		
12 Borrowed money	197,353	121,923	111,262	110,126	108,943	109,036	110,109	110,022	114,123	114,354		
13 FHLBB	100,391	65,842	62,268	61,439	62,760	62,359	62,225	64,105	63,065	64,742		
14 Other	96,962	56,081	48,994	48,687	46,183	46,677	47,884	45,917	51,058	49,612		
15 Other	21,332	17,560	18,883	19,626	17,740	18,570	20,523	18,017	19,853	20,406		
16 Net worth	30,640	48,559	52,103	52,383	52,299	52,642	53,178	52,169	51,846	51,798		

1. Contra-assets are credit-balance accounts that must be subtracted from the corresponding gross asset categories to yield net asset levels. Contra-assets to mortgage assets, mortgage loans, contracts, and pass-through securities—include loans in process, unearned discounts and deferred loan fees, valuation allowances for mortgages "held for sale," and specific reserves and other valuation allowances. Contra-assets to nonmortgage loans include loans in process, unearned discounts and deferred loan fees, and specific reserves and valuation allowances.
2. Includes holding of stock in Federal Home Loan Bank and finance leases plus interest.

NOTE. Components do not sum to totals because of rounding. Data for credit unions and life insurance companies have been deleted from this table. Starting in the December 1991 issue, data for life insurance companies are shown in a special table of quarterly data.

SOURCE. Office of Thrift Supevision (OTS), insured by the Savings Association Insurance Fund (SAIF) and regulated by the OTS.

1.38 FEDERAL FISCAL AND FINANCING OPERATIONS

Millions of dollars

Type of account or operation	Fiscal year 1990	Fiscal year 1991	Fiscal year 1992[r]	Calendar year 1992 Oct.	Calendar year 1992 Nov.	Calendar year 1992 Dec.	Calendar year 1993 Jan.	Calendar year 1993 Feb.	Calendar year 1993 Mar.
U.S. budget[1]									
1 Receipts, total	1,031,308	1,054,265	1,090,499	76,832	74,633	113,690[r]	112,718[r]	66,136[r]	83,453
2 On-budget	749,654	760,382	788,073	55,056	51,219	89,594[r]	90,129	41,036[r]	57,259
3 Off-budget	281,654	293,883	302,426	21,776	23,414	24,096	22,589	25,100	26,194
4 Outlays, total	1,251,766	1,323,757	1,380,482	125,627[r]	107,361[r]	152,636[r]	82,903[r]	113,730[r]	128,029
5 On-budget	1,026,701	1,082,072	1,128,143	103,786[r]	83,442[r]	116,575[r]	84,928[r]	89,274[r]	103,793
6 Off-budget	225,064	241,685	252,339	21,841	23,919	36,061	−2,025	24,456	24,237
7 Surplus or deficit (−), total	−220,458	−269,492	−289,983	−48,795[r]	−32,728[r]	−38,946[r]	29,815[r]	−47,594	−46,577
8 On-budget	−277,047	−321,690	−340,070	−48,730[r]	−32,223[r]	−26,981[r]	5,201[r]	−48,238[r]	−46,534
9 Off-budget	56,590	52,198	50,087	−65	−505	−11,965	24,614	644	1,957
Source of financing (total)									
10 Borrowing from the public	220,101	276,802	310,918	−1,552	61,969	21,078	−8,355	30,689	37,727
11 Operating cash (decrease, or increase (−))	818	−1,329	−17,305	39,420	−7,346	−3,175	−16,436	27,227	−2,452
12 Other[2]	−461	−5,981	−3,630	10,927[r]	−21,895[r]	21,043[r]	−5,024[r]	−10,322	9,302
MEMO									
13 Treasury operating balance (level, end of period)	40,155	41,484	58,789	19,369	26,715	29,890	46,326	19,099	21,551
14 Federal Reserve Banks	7,638	7,928	24,586	4,413	6,985	7,492	9,572	5,350	6,752
15 Tax and loan accounts	32,517	33,556	34,203	14,956	19,729	22,399	36,754	13,749	14,799

1. In accordance with the Balanced Budget and Emergency Deficit Control Act of 1985, all former off-budget entries are now presented on-budget. Federal Financing Bank (FFB) activities are now shown as separate accounts under the agencies that use the FFB to finance their programs. The act also moved two social security trust funds (federal old-age survivors insurance and federal disability insurance) off budget. The Postal Service is included as an off-budget item in the *Monthly Treasury Statement* beginning in 1990.
2. Includes special drawing rights (SDRs); reserve position on the U.S. quota in the International Monetary Fund (IMF); loans to the IMF; other cash and monetary assets; accrued interest payable to the public; allocations of SDRs; deposit funds; miscellaneous liability (including checks outstanding) and asset accounts; seigniorage; increment on gold; net gain or loss for U.S. currency valuation adjustment; net gain or loss for IMF loan-valuation adjustment; and profit on sale of gold.

SOURCES. *Monthly Treasury Statement of Receipts and Outlays of the U.S. Government* (MTS) and the *Budget of the U.S. Government*.

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

Millions of dollars

Source or type	Fiscal year 1991	Fiscal year 1992	Calendar year 1991 H1	1991 H2	1992 H1[r]	1992 H2	1993 Jan.	1993 Feb.	1993 Mar.
RECEIPTS									
1 **All sources**	**1,054,265**	**1,090,499[r]**	**540,504**	**519,180[r]**	**560,341**	**540,501[r]**	**112,718[r]**	**66,136**	**83,453**
2 Individual income taxes, net	467,827	476,122[r]	232,389	234,939[r]	236,719	246,961	73,704	23,947	27,935
3 Withheld	404,152	408,352	193,440	210,552	198,868	215,591	36,255	33,652	40,006
4 Presidential Election Campaign Fund	32	30	31	1	20	10	0	4	6
5 Nonwithheld	142,693	149,342	109,405	33,296	110,997	39,371	38,452	967	5,253
6 Refunds	79,050	81,691[r]	70,487	8,910[r]	73,165	8,011	1,003	10,677	17,330
Corporation income taxes									
7 Gross receipts	113,599	117,951	58,903	54,016	61,682	58,022	3,969	2,510	14,644
8 Refunds	15,513	17,680	7,904	8,649	9,403	7,219	758	1,719	1,920
9 Social insurance taxes and contributions, net	396,011	413,689	214,303	186,839	224,570	192,599	29,416	34,251	33,652
10 Employment taxes and contributions[2]	370,526	385,491	199,727	175,802	208,110	180,758	28,209	31,623	32,980
11 Self-employment taxes and contributions[3]	25,457	24,421	22,150	3,306	20,433	3,988	−3,032	1,487	873
12 Unemployment insurance	20,922	23,410	12,296	8,721	14,070	9,397	844	2,259	240
13 Other net receipts[4]	4,563	4,788	2,279	2,317	2,389	2,445	363	369	432
14 Excise taxes	42,430	45,570	20,703	24,429	22,389	23,456	3,307	3,342	4,514
15 Customs deposits	15,921	17,359	7,488	8,694	8,146	9,497	1,310	1,347	1,598
16 Estate and gift taxes	11,138	11,143	5,631	5,507	5,701	5,733	888	822	977
17 Miscellaneous receipts[5]	22,852	26,507[r]	8,991	13,405[r]	10,686	11,467[r]	881[r]	1,637	2,051
OUTLAYS									
18 **All types**	**1,323,757**	**1,380,482[r]**	**632,153**	**694,362[r]**	**704,279**	**723,201[r]**	**82,903[r]**	**113,730**	**128,029**
19 National defense	272,514	298,361	122,089	147,669	147,064	155,501	19,683	22,903	25,511
20 International affairs	16,167	16,106	7,592	7,691	8,537	9,911	1,161	1,253	1,181
21 General science, space, and technology	15,946	16,409	7,496	8,472	7,952	8,521	1,395	1,325	1,103
22 Energy	2,511	4,509	1,235	1,698	1,442	3,109	15	399	560
23 Natural resources and environment	18,708	20,017	8,324	11,130	8,607	11,617	1,372	1,282	1,549
24 Agriculture	14,864	14,997	7,684	7,418	7,526	8,881	1,206	1,145	4,244
25 Commerce and housing credit	75,639	9,753[r]	17,992	36,534	15,610	−7,843	−1,832	−3,532	−1,368
26 Transportation	31,531	33,759[r]	14,748	17,093	15,676	18,477	2,363	2,093	3,383
27 Community and regional development	7,432	7,923[r]	3,552	3,783	3,902	4,540	650	690	760
28 Education, training, employment, and social services	41,479	45,248	21,234	21,114	23,225	20,922	4,360	4,068	4,607
29 Health	71,183	89,570	35,608	41,459	44,034	47,223	7,828	8,053	8,379
30 Social security and medicare	373,495	406,569[r]	190,247	193,098	205,500	232,109	10,376	35,005	37,235
31 Income security	171,618	197,867[r]	88,778	87,693[r]	104,951	98,693[r]	16,135[r]	21,259	21,056
32 Veterans benefits and services	31,344	34,133	14,326	17,425	15,596	18,561	1,641	2,649	4,090
33 Administration of justice	12,295	14,450	6,187	6,574	7,434	7,283	1,222	1,060	1,270
34 General government	11,358	12,939	5,212	6,794	5,050	8,138	133	994	1,040
35 Net interest[6]	195,012	199,429	98,556	99,149	100,401	98,549	17,858	15,893	16,415
36 Undistributed offsetting receipts[7]	−39,356	−39,280	−18,702	−20,436	−18,228	−20,914	−2,660	−2,809	−2,987

1. Functional details do not sum to total outlays for calendar year data because revisions to monthly totals have not been distributed among functions. Fiscal year total for 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. Includes interest received by trust funds.
7. Consists of rents and royalties for 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 1994*.

1.40 FEDERAL DEBT SUBJECT TO STATUTORY LIMITATION

Billions of dollars, end of month

Item	1991				1992				1993
	Mar. 31	June 30	Sept. 30	Dec. 31	Mar. 31	June 30	Sept. 30	Dec. 31	Mar. 31
1 **Federal debt outstanding**	**3,492**	**3,563**	**3,683**	**3,820**	**3,897**	**4,001**	**4,083**	**4,196**	n.a.[r]
2 Public debt securities	3,465	3,538	3,665	3,802	3,881	3,985	4,065	4,177	4,231[r]
3 Held by public	2,598	2,643	2,746	2,833	2,918	2,977	3,048	3,129	n.a.[r]
4 Held by agencies	867	895	920	969	964	1,008	1,016	1,048	n.a.[r]
5 Agency securities	27	25	18	19	16	16	18	19	n.a.[r]
6 Held by public	26	25	18	19	16	16	18	19	n.a.[r]
7 Held by agencies	0	0	0	0	0	0	0	0	n.a.[r]
8 ***Debt subject to statutory limit***	**3,377**	**3,450**	**3,569**	**3,707**	**3,784**	**3,891**	**3,973**	**4,086**	**4,140[r]**
9 Public debt securities	3,377	3,450	3,569	3,706	3,783	3,890	3,972	4,085	4,139[r]
10 Other debt[1]	0	0	0	0	0	0	0	0	0[r]
MEMO									
11 Statutory debt limit	4,145	4,145	4,145	4,145	4,145	4,145	4,145	4,145	4,145[r]

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

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

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

Billions of dollars, end of period

Type and holder	1989	1990	1991	1992	1992			1993
					Q2	Q3	Q4	Q1
1 **Total gross public debt**	**2,953.0**	**3,364.8**	**3,801.7**	**4,177.0**	**3,984.7**	**4,064.6**	**4,177.0**	**4,230.6**
By type								
2 Interest-bearing	2,931.8	3,362.0	3,798.9	4,173.9	3,981.8	4,061.8	4,173.9	4,227.6
3 Marketable	1,945.4	2,195.8	2,471.6	2,754.1	2,605.1	2,677.5	2,754.1	2,807.1
4 Bills	430.6	527.4	590.4	657.7	618.2	634.3	657.7	659.9
5 Notes	1,151.5	1,265.2	1,430.8	1,608.9	1,517.6	1,566.4	1,608.9	1,652.1
6 Bonds	348.2	388.2	435.5	472.5	454.3	461.8	472.5	480.2
7 Nonmarketable[1]	986.4	1,166.2	1,327.2	1,419.8	1,376.7	1,384.3	1,419.8	1,420.5
8 State and local government series	163.3	160.8	159.7	153.5	161.9	157.6	153.5	151.6
9 Foreign issues[2]	6.8	43.5	41.9	37.4	38.7	37.0	37.4	37.0
10 Government	6.8	43.5	41.9	37.4	38.7	37.0	37.4	37.0
11 Public	.0	.0	.0	.0	.0	.0	.0	.0
12 Savings bonds and notes	115.7	124.1	135.9	155.0	143.2	148.3	155.0	161.4
13 Government account series[3]	695.6	813.8	959.2	1,043.5	1,002.5	1,011.0	1,043.5	1,040.0
14 Non-interest-bearing	21.2	2.8	2.8	3.1	2.9	2.8	3.1	3.0
By holder[4]								
15 U.S. Treasury and other federal agencies and trust funds	707.8	828.3	968.7	1,047.8	1,007.9	1,016.3	1,047.8	
16 Federal Reserve Banks	228.4	259.8	281.8	302.5	276.9	296.4	302.5	
17 Private investors	2,015.8	2,288.3	2,563.2	2,839.9	2,712.4	2,765.5	2,839.9	
18 Commercial banks	164.9	171.5	233.4	292.0	267.3[r]	286.7[r]	292.0	
19 Money market funds	14.9	45.4	80.0	80.6	79.4	79.8[r]	80.6	
20 Insurance companies	125.1	142.0	168.7	183.0	180.8[r]	181.6[r]	183.0	n.a.
21 Other companies	93.4	108.9	150.8	192.5	175.0	180.8	192.5	
22 State and local treasuries	487.5	490.4	520.3	532.0	528.5	530.0	532.0	
Individuals								
23 Savings bonds	117.7	126.2	138.1	157.3	145.4	150.3	157.3	
24 Other securities	98.7	107.6	125.8	131.9	129.7	130.9	131.9	
25 Foreign and international[5]	392.9	421.7	455.0	512.5	492.9	499.0	512.5	
26 Other miscellaneous investors[6]	520.7	674.5	691.1	758.1	713.5[r]	726.3[r]	758.1	

1. Includes (not shown separately) securities issued to the Rural Electrification Administration, depository bonds, retirement plan bonds, and individual retirement bonds.
2. Nonmarketable series denominated in dollars, and series denominated in foreign currency held by foreigners.
3. Held almost entirely by U.S. Treasury and other federal agencies and trust funds.
4. Data for Federal Reserve Banks and U.S. government agencies and trust funds are actual holdings; data for other groups are Treasury estimates.
5. Consists of investments of foreign balances and international accounts in the United States.
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. U.S. Treasury Department, data by type of security, *Monthly Statement of the Public Debt of the United States;* data by holder, the *Treasury Bulletin*.

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

Millions of dollars, daily averages

Item	1992	1993		1993, week ending								
	Dec.	Jan.	Feb.	Feb. 3	Feb. 10	Feb. 17	Feb. 24	Mar. 3	Mar. 10	Mar. 17	Mar. 24	Mar. 31
IMMEDIATE TRANSACTIONS[2]												
By type of security												
U.S. Treasury securities												
1 Bills	42,358	48,056	44,513	42,512	46,358	43,801	45,439	42,368	60,426	37,544	39,583	36,322
Coupon securities, by maturity												
2 Less than 3.5 years	36,143	47,717	56,575	50,106	58,885	55,363	63,656	45,826	55,509	43,753	47,550	43,291
3 3.5 to 7.5 years	28,723	46,216	48,292	46,365	44,155	42,127	60,642	46,067	53,711	43,393	40,783	42,606
4 7.5 to 15 years	13,054	19,149	28,505	21,061	30,741	27,176	33,253	25,537	30,411	24,281	19,568	17,455
5 15 years or more	11,093	16,239	21,480	16,349	18,095	26,574	25,249	15,485	23,961	19,067	14,606	13,979
Federal agency securities												
Debt, by maturity												
6 Less than 3.5 years	5,635	6,170[r]	6,719	7,082	7,228	6,727	6,213	6,151	4,902	5,281	6,042	6,718
7 3.5 to 7.5 years	551[r]	824[r]	881	877	955	715	880	1,123	854	706	887	503
8 7.5 years or more	827	1,169[r]	1,194	1,046	1,350	1,157	1,186	1,138	1,070	1,022	1,171	1,228
Mortgage-backed												
9 Pass-throughs	14,208	20,000	22,544	15,083	29,594	24,142	20,093	18,247	22,852	14,743	9,641	9,461
10 All others[3]	3,122	3,751[r]	4,505	4,909	3,406	3,413	5,772	6,206	3,641	3,391	3,517	4,369
By type of counterparty												
Primary dealers and brokers												
11 U.S. Treasury securities	80,472	109,246	123,551	108,449	124,847	119,783	141,507	107,496	137,942	106,929	99,558	97,963
Federal agency securities												
12 Debt	1,275[r]	1,779[r]	1,970	2,051	2,052	1,957	1,787	2,133	1,711	1,550	1,776	1,832
13 Mortgage-backed	7,917	10,454[r]	11,755	8,613	15,762	12,384	10,043	9,153	10,936	7,283	5,164	5,108
Customers												
14 U.S. Treasury securities	50,898	68,131	75,815	67,945	73,387	75,258	86,733	67,787	86,077	61,111	62,531	55,689
Federal agency securities												
15 Debt	5,737[r]	6,384[r]	6,825	6,954	7,481	6,642	6,493	6,278	5,116	5,458	6,324	6,616
16 Mortgage-backed	9,413	13,296	15,295	11,379	17,238	15,172	15,821	15,299	15,558	10,851	7,995	8,722
FUTURES AND FORWARD TRANSACTIONS[4]												
By type of deliverable security												
U.S. Treasury securities												
17 Bills	2,464	2,584	2,670	3,106	2,280	1,800	3,029	4,271	3,630	1,192	1,693	1,067
Coupon securities, by maturity												
18 Less than 3.5 years	1,637	2,155	2,622	2,104	2,560	2,420	3,230	2,542	3,156	2,058	2,269	1,791
19 3.5 to 7.5 years	1,179	1,486	1,885	1,675	1,396	1,562	2,624	2,382	3,240	1,913	1,841	2,096
20 7.5 to 15 years	2,336	2,668	3,845	3,114	3,985	3,900	3,803	4,557	5,315	2,719	2,578	2,937
21 15 years or more	6,427	9,140	11,748	8,940	10,777	13,241	13,161	11,121	17,788	11,479	8,436	7,764
Federal agency securities												
Debt, by maturity												
22 Less than 3.5 years	97	45	72	53	63	73	108	28	79	21	243	63
23 3.5 to 7.5 years	48	114	129	216	196	46	46	248	40	73	100	105
24 7.5 years or more	18	78[r]	44	16	92	45	19	25	17	39	38	39
Mortgage-backed												
25 Pass-throughs	11,895	16,656	17,476	14,680	20,912	18,287	13,656	20,604	27,008	26,029	18,238	18,189
26 Others[3]	829	1,274[r]	1,478	789	987	2,127	1,734	1,480	1,095	1,802	1,893	1,089
OPTIONS TRANSACTIONS[5]												
By type of underlying security												
U.S. Treasury, coupon securities, by maturity												
27 Less than 3.5 years	1,401	1,537	1,692	1,077	1,300	2,218	2,025	1,450	2,564	1,538	1,271	1,400
28 3.5 to 7.5 years	378	782	443	538	318	339	712	197	418	408	534	503
29 7.5 to 15 years	341	573	679	385	586	431	1,020	1,118	710	620	745	413
30 15 years or more	820	1,233	1,286	775	1,217	1,236	1,881	865	1,231	1,150	835	737
Federal agency, mortgage-backed securities												
31 Pass-throughs	338	563	563	448	472	580	781	371	709	610	479	675

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 are based on the number of trading days in the period. Immediate, forward, and futures transactions are reported at principal value, which does not include accrued interest; options transactions are reported at the face value of the underlying securities.

Dealers report cumulative transactions for each week ending Wednesday.

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

3. Includes such securities as collateralized mortgage obligations (CMOs), real estate mortgage investment conduits (REMICs), interest-only securities (IOs), and principal-only securities (POs).

4. Futures transactions are standardized agreements arranged on an exchange. Forward transactions are agreements made in the over-the-counter market that specify delayed delivery. All futures transactions are included regardless of time to delivery. Forward contracts for U.S. Treasury securities and federal agency debt securities are included when the time to delivery is more than five business days. Forward contracts for mortgage-backed agency securities are included when the time to delivery is more than thirty days.

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

NOTE. In tables 1.42 and 1.43, "n.a." indicates that data are not published because of insufficient activity.

Data for several types of options transactions—U.S. Treasury securities, bills; federal agency securities, debt; and mortgage-backed securities, other than pass-throughs—are no longer available because activity is insufficient.

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

Millions of dollars

Item	1992	1993		1993, week ending								
	Dec.	Jan.	Feb.	Feb. 3	Feb. 10	Feb. 17	Feb. 24	Mar. 3	Mar. 10	Mar. 17	Mar. 24
	Positions[2]										
NET IMMEDIATE POSITIONS[3]											
By type of security											
U.S. Treasury securities											
1 Bills	15,994	6,278	4,883	1	3,812	6,383	4,898	7,769	6,217	6,902	14,322
Coupon securities, by maturity											
2 Less than 3.5 years	25	−4,518	800	−1,172	1,001	−3,186	3,014	5,028	1,793	−3,334	2,800
3 3.5 to 7.5 years	−7,221	−7,905	−10,824	−7,477	−11,500	−14,471	−9,228	−8,561	−12,575	−15,080	−15,846
4 7.5 to 15 years	−10,158	−13,562	−9,682	−12,296	−7,470	−9,376	−10,188	−11,245	−8,861	−9,285	−11,208
5 15 years or more	7,071	7,040	7,126	6,194	6,230	8,957	6,671	6,988	9,114	9,691	10,149
Federal agency securities											
Debt, by maturity											
6 Less than 3.5 years	4,297[r]	5,267[r]	6,674	8,112	7,881	7,125	4,245	6,943	6,310	8,741	5,604
7 3.5 to 7.5 years	3,282	2,617[r]	2,708	2,188	2,545	2,169	3,239	3,397	3,303	3,411	3,372
8 7.5 years or more	3,331	3,802[r]	3,811	3,750	3,440	3,424	4,188	4,524	4,772	4,801	5,240
Mortgage-backed											
9 Pass-throughs	24,575	35,214	34,699	32,976	40,227	35,792	32,868	27,607	42,168	37,448	32,746
10 All others[4]	24,932	24,531	24,540	23,742	23,289	24,701	24,068	27,871	23,639	24,782	24,828
Other money market instruments											
11 Certificates of deposit	2,743	2,907	3,571	3,623	3,035	3,463	3,913	4,063	3,127	2,652	2,987
12 Commercial paper	7,368	6,947	6,911	8,109	7,338	7,348	5,428	7,097	6,426	6,261	5,883
13 Bankers acceptances	758	672	990	814	811	1,222	919	1,151	1,002	1,096	1,247
FUTURES AND FORWARD POSITIONS[5]											
By type of deliverable security											
U.S. Treasury securities											
14 Bills	−1,820	−4,355	−5,805	−4,422	−4,800	−5,672	−7,199	−6,392	−4,055	−4,647	−5,860
Coupon securities, by maturity											
15 Less than 3.5 years	612	1,488	839	1,495	1,558	1,455	133	−757	−181	166	−394
16 3.5 to 7.5 years	609	2,352	2,513	844	2,467	3,008	3,031	2,075	4,703	3,729	4,474
17 7.5 to 15 years	2,138	3,002	1,851	2,811	1,747	1,428	2,084	1,645	1,056	2,453	3,616
18 15 years or more	−7,258	−6,174	−3,781	−5,142	−3,844	−5,207	−2,241	−2,849	−4,024	−7,131	−4,895
Federal agency securities											
Debt, by maturity											
19 Less than 3.5 years	−123	−37	−50	−1	38	46	−300	29	0	−295	−303
20 3.5 to 7.5 years	−115	−11	−12	−108	2	29	−35	1	−23	−77	−24
21 7.5 years or more	−16	20[r]	22	−55	117	−24	19	−3	64	170	−43
Mortgage-backed											
22 Pass-throughs	−1,280	−12,104	−14,374	−11,557	−20,522	−14,965	−11,743	−9,299	−20,252	−17,652	−12,455
23 All others[4]	366	1,450	3,326	1,908	2,810	4,003	5,198	832	1,094	4,034	5,787
24 Certificates of deposit	−71,895	−66,597	−117,589	−70,026	−99,094	−112,864	−143,753	−148,110	−141,247	−155,743	−167,837
	Financing[6]										
Reverse repurchase agreements											
25 Overnight and continuing	208,601[r]	230,130[r]	230,919	232,519	219,987	247,572	223,160	233,287	246,770	238,647	226,850
26 Term	332,250[r]	345,749[r]	364,102	373,888	398,647	339,373	363,266	341,048	371,688	391,491	384,258
Repurchase agreements											
27 Overnight and continuing	357,327[r]	387,080[r]	404,809	398,496	393,011	415,205	402,444	416,133	419,689	422,128	395,822
28 Term	326,266[r]	328,425[r]	351,505	352,277	382,749	335,085	352,857	322,617	355,986	380,850	382,400
Securities borrowed											
29 Overnight and continuing	99,894[r]	102,138[r]	113,700	108,787	108,642	112,995	118,472	119,119	117,135	117,945	116,661
30 Term	46,975[r]	52,406[r]	52,467	52,082	56,900	52,575	53,055	43,779	42,739	40,464	40,793
Securities loaned											
31 Overnight and continuing	3,999[r]	3,724[r]	3,898	3,654	3,312	4,105	4,066	4,450	3,473	3,810	3,123
32 Term	601[r]	351	467	560	226	221	580	1,053	277	358	871
Collateralized loans											
33 Overnight and continuing	16,800	16,882	0	0	0	0	0	0	0	0	0
MEMO: Matched book[7]											
Reverse repurchase agreements											
34 Overnight and continuing	157,104[r]	166,917[r]	162,596	169,239	154,952	171,838	156,983	164,638	167,598	164,012	154,575
35 Term	289,665[r]	304,402[r]	318,706	326,022	349,876	294,472	319,422	299,829	324,918	337,456	335,227
Repurchase agreements											
36 Overnight and continuing	191,950[r]	218,405[r]	222,893	226,737	224,321	222,536	219,324	224,383	226,875	221,903	210,643
37 Term	243,216[r]	254,159[r]	271,090	278,965	300,353	256,312	268,533	244,311	275,087	295,198	294,732

1. Data for positions and financing are obtained from reports submitted to the Federal Reserve Bank of New York by the U.S. government securities dealers on its published list of primary dealers. Weekly figures are close-of-business Wednesday data; monthly figures are averages of weekly data.
2. Securities positions are reported at market value.
3. Net immediate positions include securities purchased or sold (other than mortgage-backed agency securities) that have been delivered or are scheduled to be delivered in five business days or less and "when-issued" securities that settle on the issue date of offering. Net immediate positions of mortgage-backed agency securities include securities purchased or sold that have been delivered or are scheduled to be delivered in thirty days or less.
4. Includes such securities as collateralized mortgage obligations (CMOs), real estate mortgage investment conduits (REMICs), interest-only securities (IOs), and principal-only securities (POs).
5. Futures positions reflect standardized agreements arranged on an exchange. Forward positions reflect agreements made in the over-the-counter market that specify delayed delivery. All futures positions are included regardless of time to delivery. Forward contracts for U.S. Treasury securities and federal agency debt securities are included when the time to delivery is more than five business days. Forward contracts for mortgage-backed agency securities are included when the time to delivery is more than thirty days.
6. Overnight financing refers to agreements made on one business day that mature on the next business day; continuing contracts are agreements that remain in effect for more than one business day but have no specific maturity and can be terminated without advance notice by either party; term agreements have a fixed maturity of more than one business day.
7. Matched-book data reflect financial intermediation activity in which the borrowing and lending transactions are matched. Matched-book data are included in the financing breakdowns given above. The reverse repurchase and repurchase numbers are not always equal because of the "matching" of securities of different values or different types of collateralization.

NOTE. Data for futures and forward commercial paper and bankers acceptances and for term financing of collateralized loans are no longer available because of insufficient activity.

1.44 FEDERAL AND FEDERALLY SPONSORED CREDIT AGENCIES Debt Outstanding

Millions of dollars, end of period

Agency	1988	1989	1990	1991	1992				1993
					Sept.	Oct.	Nov.	Dec.	Jan.
1 **Federal and federally sponsored agencies**	**381,498**	**411,805**	**434,668**	**442,772**	**475,606**	**479,978**	**481,050**	**483,970**	**0**
2 Federal agencies	35,668	35,664	42,159	41,035	41,319	41,470	42,081	41,829	41,641
3 Defense Department[1]	8	7	7	7	7	7	7	7	7
4 Export-Import Bank[2,3]	11,033	10,985	11,376	9,809	7,698	7,698	7,698	7,208	7,208
5 Federal Housing Administration[4]	150	328	393	397	301	309	344	374	231
6 Government National Mortgage Association certificates of participation[5]	0	0	0	0	0	0	0	0	0
7 Postal Service[6]	6,142	6,445	6,948	8,421	10,123	10,123	10,660	10,660	10,660
8 Tennessee Valley Authority	18,335	17,899	23,435	22,401	23,190	23,333	23,372	23,580	23,535
9 United States Railway Association[6]	0	0	0	0	0	0	0	0	0
10 Federally sponsored agencies[7]	345,832	375,428	392,509	401,737	434,287	438,508	438,969	442,141	0
11 Federal Home Loan Banks	135,836	136,108	117,895	107,543	110,830	112,436	114,364	114,733	113,253
12 Federal Home Loan Mortgage Corporation	22,797	26,148	30,941	30,262	36,750	34,108	30,914	29,631	34,479
13 Federal National Mortgage Association	105,459	116,064	123,403	133,937	155,232	159,764	161,308	166,300	165,958
14 Farm Credit Banks[8]	53,127	54,864	53,590	52,199	52,734	52,510	52,728	51,910	52,264
15 Student Loan Marketing Association[9]	22,073	28,705	34,194	38,319	38,830	39,766	39,737	39,650	39,812
16 Financing Corporation[10]	5,850	8,170	8,170	8,170	8,170	8,170	8,170	8,170	8,170
17 Farm Credit Financial Assistance Corporation[11]	690	847	1,261	1,261	1,261	1,261	1,261	1,261	1,261
18 Resolution Funding Corporation[12]	0	4,522	23,055	29,996	29,996	29,996	29,996	29,996	29,996
MEMO									
19 **Federal Financing Bank debt**[13]	**142,850**	**134,873**	**179,083**	**185,576**	**164,422**	**159,899**	**156,579**	**154,994**	**151,059**
Lending to federal and federally sponsored agencies									
20 Export-Import Bank[3]	11,027	10,979	11,370	9,803	7,692	7,692	7,692	7,202	7,202
21 Postal Service[6]	5,892	6,195	6,698	8,201	9,903	9,903	10,440	10,440	10,440
22 Student Loan Marketing Association	4,910	4,880	4,850	4,820	4,820	4,790	4,790	4,790	4,790
23 Tennessee Valley Authority	16,955	16,519	14,055	10,725	7,175	7,175	6,975	6,975	6,825
24 United States Railway Association[6]	0	0	0	0	0	0	0	0	0
Other lending[14]									
25 Farmers Home Administration	58,496	53,311	52,324	48,534	42,979	42,979	42,979	42,979	42,979
26 Rural Electrification Administration	19,246	19,265	18,890	18,562	18,143	18,172	18,172	18,172	18,037
27 Other	26,324	23,724	70,896	84,931	73,710	69,188	65,531	64,436	60,786

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

1.45 NEW SECURITY ISSUES Tax-Exempt State and Local Governments

Millions of dollars

Type of issue or issuer, or use	1990	1991	1992	1992 Aug.	1992 Sept.	1992 Oct.	1992 Nov.	1992 Dec.	1993 Jan.	1993 Feb.	1993 Mar.
1 **All issues, new and refunding**[1]	**120,339**	**154,402**	**215,191**	**19,774**	**18,698**	**21,092**	**14,133**	**19,577**	**17,981**[r]	**17,793**	**27,471**
By type of issue											
2 General obligation	39,610	55,100	78,611	7,005	7,461	7,733	5,203	6,024	4,840[r]	6,963	8,254
3 Revenue	81,295	99,302	136,580	12,769	11,237	13,359	8,930	13,553	13,141[r]	10,830	19,217
By type of issuer											
4 State	15,149	24,939	25,295	2,933	1,710	2,742	1,688	2,339	1,339	3,485	2,139
5 Special district or statutory authority[2]	72,661	80,614	127,618	11,203	11,054	13,113	8,197	11,159	12,556	n.a.	n.a.
6 Municipality, county, or township	32,510	48,849	60,210	5,638	5,934	5,237	4,248	6,079	3,994	4,654	6,977
7 **Issues for new capital**	**103,235**	**116,953**	**120,272**	**11,993**	**10,496**	**13,760**	**8,028**	**8,010**	**5,875**	**4,636**	**9,716**
By use of proceeds											
8 Education	17,042	21,121	22,071	1,737	1,237	2,083	1,800	1,658	1,033[r]	1,264	1,482
9 Transportation	11,650	13,395	17,334	2,130	1,977	1,364	531	831	829[r]	131	2,111
10 Utilities and conservation	11,739	21,039	20,058	2,604	2,265	3,340	960	1,258	894[r]	423	538
11 Social welfare	23,099	25,648	21,796	767	1,869	2,365	1,070	1,121	777	618	1,556
12 Industrial aid	6,117	8,376	5,424	503	1,176	367	581	339	337	69	765
13 Other purposes	34,607	30,275	33,589	4,252	1,972	4,241	3,086	2,803	2,005	2,131	3,264

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

SOURCES. Securities Data Company beginning January 1993. *Investment Dealer's Digest* for earlier data.

1.46 NEW SECURITY ISSUES U.S. Corporations

Millions of dollars

Type of issue, offering, or issuer	1990	1991	1992	1992 July	1992 Aug.	1992 Sept.	1992 Oct.	1992 Nov.	1992 Dec.	1993 Jan.	1993 Feb.
1 **All issues**[1]	**340,049**	**465,483**	n.a.	**46,235**	**37,091**	**42,849**	**39,280**[r]	**35,525**[r]	**39,424**	**50,793**	**59,403**
2 **Bonds**[2]	**299,884**	**390,018**	**404,992**	**39,758**	**31,815**	**37,539**	**32,314**[r]	**31,026**[r]	**33,375**	**45,559**	**49,343**
By type of offering											
3 Public, domestic	188,848	287,125	377,453	37,833	28,561	36,185	30,249	28,774[r]	31,835	41,675	47,165
4 Private placement, domestic[3]	86,982	74,930	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5 Sold abroad	23,054	27,962	27,539	1,924	3,254	1,355	2,066[r]	2,252[r]	1,540	3,884	2,178
By industry group											
6 Manufacturing	51,779	86,628	69,538	5,509	4,720	5,974	7,975	3,467	4,232	9,393	8,080
7 Commercial and miscellaneous	40,733	36,666	30,049	3,488	2,159	2,374	2,813	2,396[r]	2,176	3,074	2,268
8 Transportation	12,776	13,598	6,497	766	393	677	290	0	611	316	248
9 Public utility	17,621	23,945	44,643	6,902	4,509	5,230	3,700	1,289	2,867	4,282	5,624
10 Communication	6,687	9,431	13,073	2,081	1,053	1,191	427	374	516	3,019	2,890
11 Real estate and financial	170,288	219,750	241,192	21,011	18,982	22,093	17,110[r]	23,499[r]	22,973	25,475	30,234
12 **Stocks**[2]	**40,165**	**75,467**	n.a.	**6,477**	**5,276**	**5,310**	**6,966**	**4,499**	**6,049**	**5,234**	**10,060**
By type of offering											
13 Public preferred	n.a.	17,408	21,332	2,413	1,148	1,233	2,901	1,540	1,608	1,112	1,898
14 Common	n.a.	47,860	57,099	4,064	4,129	4,077	4,065	2,958	4,441	4,122	8,161
15 Private placement[3]	16,736	10,109	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
By industry group											
16 Manufacturing	5,649	24,154	n.a.	857	713	307	1,779	288	1,468	722	2,616
17 Commercial and miscellaneous	10,171	19,418	n.a.	1,599	1,315	602	940	1,366	2,226	1,688	2,021
18 Transportation	369	2,439	n.a.	n.a.	n.a.	59	53	304	118	65	64
19 Public utility	416	3,474	n.a.	564	921	595	359	150	92	310	350
20 Communication	3,822	475	n.a.	n.a.	n.a.	1,051	99	22	126	0	0
21 Real estate and financial	19,738	25,507	n.a.	3,457	2,327	2,695	3,735	2,369	2,019	2,438	5,009

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

SOURCES. IDD Information Services, Inc., the Board of Governors of the Federal Reserve System, and, before 1989, the U.S. Securities and Exchange Commission.

1.47 OPEN-END INVESTMENT COMPANIES Net Sales and Assets

Millions of dollars

Item[1]	1991[r]	1992	1992						1993	
			July	Aug.	Sept.	Oct.	Nov.	Dec.[r]	Jan.	Feb.
1 **Sales of own shares[2]**	**463,645**	**647,055**	**54,915**	**50,627**	**50,039**	**52,214**	**52,019**	**70,618**	**71,607**	**60,716**
2 Redemptions of own shares	342,547	447,140	34,384	35,223	37,862	37,134	34,126	51,993	46,545	39,686
3 Net sales[3]	121,098	199,915	20,703	15,404	12,177	15,080	17,893	18,625	25,062	21,030
4 **Assets[4]**	**808,582**	**1,056,310**	**951,806**	**957,145**	**978,507**	**983,151**	**1,019,618**	**1,056,310**	**1,082,653**	**1,116,652**
5 Cash[5]	60,292	73,999	72,732	77,245	76,498	75,808	80,247	73,999	76,764	80,321
6 Other	748,290	982,311	879,074	879,900	902,009	907,343	939,371	982,311	1,005,889	1,036,331

1. Data on sales and redemptions exclude money market mutual funds but include limited-maturity municipal bond funds. Data on assets exclude both money market mutual funds and limited-maturity municipal bond funds.
2. Includes reinvestment of dividends. Excludes reinvestment of capital gains distributions.
3. Excludes sales and redemptions resulting from transfers of shares into or out of money market mutual funds within the same fund family.
4. Market value at end of period, less current liabilities.
5. Includes all U.S. Treasury securities and other short-term debt securities.

SOURCE. Investment Company Institute. Data based on reports of membership, which comprises substantially all open-end investment companies registered with the Securities and Exchange Commission. Data reflect underwritings of new companies.

1.48 CORPORATE PROFITS AND THEIR DISTRIBUTION

Billions of dollars; quarterly data at seasonally adjusted annual rates

Account	1990	1991	1992	1991				1992			
				Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4[r]
1 Profits with inventory valuation and capital consumption adjustment	361.7	346.3	394.5	349.6	347.3	341.2	347.1	384.0	388.4	374.1	428.5
2 Profits before taxes	355.4	334.7	372.3	337.6	332.3	336.7	332.3	366.1	376.8	354.1	389.4
3 Profits tax liability	136.7	124.0	140.5	121.3	122.9	127.0	125.0	136.4	144.1	131.8	148.5
4 Profits after taxes	218.7	210.7	231.8	216.3	209.4	209.6	207.4	229.7	232.7	222.2	241.0
5 Dividends	149.3	146.5	149.3[r]	150.6	146.2	145.1	143.9	143.6	146.6	151.1	155.9[r]
6 Undistributed profits	69.4	64.2	82.5	65.7	63.2	64.5	63.4	86.2	86.1	71.1	85.0
7 Inventory valuation	-14.2	3.1	-7.4[r]	6.7	9.9	-4.8	.7	-5.4	-15.5	-9.7	1.0
8 Capital consumption adjustment	20.5	8.4	29.5[r]	5.3	5.1	9.3	14.1	23.3	27.0	29.7	38.1

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

1.50 NONFARM BUSINESS EXPENDITURES on New Plant and Equipment

Billions of dollars; quarterly data at seasonally adjusted annual rates

Industry	1991	1992	1993[1]	1991		1992				1993	
				Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2[1]
1 **Total nonfarm business**	**528.39**	**546.08**	**582.31**	**526.59**	**529.87**	**535.72**	**540.91**	**547.53**	**560.16**	**571.41**	**578.15**
Manufacturing											
2 Durable goods industries	77.64	73.41	77.11	74.94	76.40	74.19	74.26	71.84	73.34	80.68	77.62
3 Nondurable goods industries	105.17	100.50	106.24	102.55	102.66	99.79	97.52	100.39	104.28	103.01	103.48
Nonmanufacturing											
4 Mining	10.02	8.90	9.32	10.09	9.99	8.87	9.18	9.09	8.44	9.52	9.49
Transportation											
5 Railroad	5.95	6.77	7.36	6.32	5.44	6.65	6.50	6.87	7.08	6.26	7.71
6 Air	10.17	8.97	7.10	9.61	10.41	8.86	9.75	10.13	7.13	7.36	9.10
7 Other	6.54	7.04	8.60	6.63	6.45	6.37	7.27	7.69	6.84	8.07	7.51
Public utilities											
8 Electric	43.76	48.05	53.32	43.27	44.75	46.06	48.45	47.73	49.95	52.61	53.05
9 Gas and other	22.82	23.91	24.08	23.25	22.67	22.75	24.19	23.92	24.78	23.46	24.22
10 Commercial and other[2]	246.32	268.54	289.18	249.94	251.11	262.17	263.80	269.86	278.32	280.44	285.98

1. Figures are amounts anticipated by business.
2. "Other" consists of construction, wholesale and retail trade, finance and insurance, personal and business services, and communication.

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

1.51 DOMESTIC FINANCE COMPANIES Assets and Liabilities[1]

Billions of dollars, end of period; not seasonally adjusted

Account	1990	1991	1992	1991 Q2	1991 Q3	1991 Q4	1992 Q1	1992 Q2	1992 Q3	1992 Q4
Assets										
1 Accounts receivable, gross[2]	492.9	480.3	482.1	488.5	484.7	480.3	475.7	476.8[r]	475.8	482.1
2 Consumer	133.9	121.9	117.1	127.5	125.3	121.9	118.4	116.7	116.6	117.1
3 Business	293.5	292.6	296.5	295.2	293.2	292.6	291.6	293.7[r]	291.1	296.5
4 Real estate	65.5	65.8	68.4	65.7	66.2	65.8	65.8	66.4	68.1	68.4
5 Less: Reserves for unearned income	57.6	55.1	50.8	58.0	57.6	55.1	53.6	51.2	50.8	50.8
6 Reserves for losses	9.6	12.9	15.8	11.1	13.1	12.9	13.0	12.3	12.0	15.8
7 Accounts receivable, net	425.7	412.3	415.5	419.3	414.1	412.3	409.1	413.3[r]	412.9	415.5
8 All other	113.9	149.0	150.6	122.8	136.4	149.0	145.5	139.4	146.5	150.6
9 **Total assets**	**539.6**	**561.2**	**566.1**	**542.1**	**550.5**	**561.2**	**554.6**	**552.7[r]**	**559.4**	**566.1**
Liabilities and Capital										
10 Bank loans	31.0	42.3	37.6	36.9	39.6	42.3	38.0	37.8	38.1	37.6
11 Commercial paper	165.3	159.5	156.4	156.1	156.8	159.5	154.4	147.7	153.2	156.4
Debt										
12 Other short-term	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
13 Long-term	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
14 Owed to parent	37.5	34.5	37.8	34.2	36.5	34.5	34.5	34.8	34.9	37.8
15 Not elsewhere classified	178.2	191.3	195.3	184.5	185.0	191.3	189.8	191.9	191.4	195.3
16 All other liabilities	63.9	69.0	71.2	67.1	68.8	69.0	72.0	73.4	73.7	71.2
17 Capital, surplus, and undivided profits	63.7	64.8	67.8	63.3	63.8	64.8	66.0	67.1	68.1	67.8
18 **Total liabilities and capital**	**539.6**	**561.2**	**566.1**	**542.1**	**550.5**	**561.2**	**554.6**	**552.7[r]**	**559.4**	**566.1**

1. Includes finance company subsidiaries of bank holding companies but not of retailers and banks. Data are amounts carried on the balance sheets of finance companies; securitized pools are not shown since they are not on the books.

2. Before deduction for unearned income and losses.

1.52 DOMESTIC FINANCE COMPANIES[1] Consumer, Real Estate, and Business Credit

Millions of dollars, amounts outstanding, end of period

Type of credit	1990	1991	1992[r]	1992 Sept.	1992 Oct.	1992 Nov.	1992 Dec.[r]	1993 Jan.	1993 Feb.
	Seasonally adjusted								
1 **Total**	**523,023**	**519,573**	**531,864**	**527,858**	**527,323**	**529,232**	**531,864**	**526,254**	**528,395**
2 Consumer	161,070	154,786	157,707	155,618	154,501	156,593	157,707	156,551	157,733
3 Real estate[2]	65,147	65,388	68,011	67,717	68,035	67,838	68,011	68,942	70,016
4 Business	296,807	299,400	306,146	304,523	304,787	304,801	306,146	300,761	300,646
	Not seasonally adjusted								
5 **Total**	**526,441**	**522,853**	**535,158**	**524,999**	**526,874**	**528,895**	**535,158**	**525,847**	**525,490**
6 Consumer	161,965	155,677	158,631	156,416	155,505	157,005	158,631	156,430	155,929
7 Motor vehicles	75,045	63,413	57,605	59,806	59,290	58,286	57,605	57,165	54,036
8 Other consumer[3]	58,818	58,488	59,522	56,808	57,013	58,128	59,522	58,844	58,651
9 Securitized motor vehicles[4]	19,837	23,166	29,775	28,204	27,823	28,964	29,775	28,894	32,860
10 Securitized other consumer[4]	8,265	10,610	11,729	11,598	11,379	11,626	11,729	11,527	10,383
11 Real estate[2]	65,509	65,764	68,410	68,064	68,477	68,016	68,410	68,889	69,216
12 Business	298,967	301,412	308,118	300,519	302,892	303,875	308,118	300,527	300,345
13 Motor vehicles	92,072	90,319	87,456	85,261	86,747	85,621	87,456	86,491	86,412
14 Retail[5]	26,401	22,507	19,303	20,407	20,763	19,708	19,303	19,124	17,881
15 Wholesale[6]	33,573	31,216	27,158	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
16 Leasing	32,098	36,596	38,191	39,506	39,536	39,020	38,191	38,640	38,472
17 Equipment	137,654	141,399	151,607	147,319	147,146	148,202	151,607	146,820	145,886
18 Retail	31,968	30,962	32,212	31,571	31,475	31,427	32,212	32,458	32,430
19 Wholesale[6]	11,101	9,671	8,669	8,994	8,928	8,824	8,669	8,582	8,318
20 Leasing	94,585	100,766	110,726	106,754	106,743	107,952	110,726	105,780	105,138
21 Other business[7]	63,774	60,887	57,464	58,493	58,898	59,269	57,464	55,760	55,962
22 Securitized business assets[4]	5,467	8,807	11,590	9,447	10,101	10,782	11,590	11,457	12,085
23 Retail	667	576	1,118	152	634	607	1,118	1,036	973
24 Wholesale	3,281	5,285	5,756	5,378	5,593	5,813	5,756	5,582	6,408
25 Leasing	1,519	2,946	4,716	3,917	3,874	4,362	4,716	4,839	4,704

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

2. Includes all loans secured by liens on any type of real estate, for example, first and junior mortgages and home equity loans.

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

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

5. Passenger car fleets and commercial land vehicles for which licenses are required.

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

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

1.53 MORTGAGE MARKETS Conventional Mortgages on New Homes

Millions of dollars except as noted

Item	1990	1991	1992	1992				1993		
				Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
	Terms and yields in primary and secondary markets									
PRIMARY MARKETS										
Terms[1]										
1 Purchase price (thousands of dollars)	153.2	155.0	158.1	146.0	159.2	165.4	154.0	158.6	159.7	156.2
2 Amount of loan (thousands of dollars)	112.4	114.0	118.1	109.3	119.7	117.3	117.7	119.5	114.5	121.5
3 Loan-price ratio (percent)	74.8	75.0	76.6	77.0	77.3	75.3	77.7	76.8	75.4	79.3
4 Maturity (years)	27.3	26.8	25.6	25.7	25.2	24.9	26.1	25.7	23.8	26.9
5 Fees and charges (percent of loan amount)[2]	1.93	1.71	1.60	1.52	1.42	1.54	1.31	1.49	1.43	1.50
6 Contract rate (percent per year)	9.68	9.02	7.98	7.68	7.65	7.81	7.65	7.57	7.52	7.22
Yield (percent per year)										
7 OTS series[3]	10.01	9.30	8.25	7.93	7.90	8.07	7.88	7.82	7.77	7.46
8 HUD series[4]	10.08	9.20	8.43	7.95	8.29	8.38	8.19	7.93	7.63	7.59
SECONDARY MARKETS										
Yield (percent per year)										
9 FHA mortgages (HUD series)[5]	10.17	9.25	8.46	8.06	8.29	8.54	8.12	8.04	7.55	7.57
10 GNMA securities[6]	9.51	8.59	7.77	7.31	7.53	7.90	7.57	7.39	7.02	6.79
	Activity in secondary markets									
FEDERAL NATIONAL MORTGAGE ASSOCIATION										
Mortgage holdings (end of period)										
11 Total	113,329	122,837	142,833	144,904	149,133	153,306	158,119	159,204	159,766	161,147
12 FHA/VA-insured	21,028	21,702	22,168	22,275	22,399	22,372	22,593	22,640	22,573	22,700
13 Conventional	92,302	101,135	120,664	122,629	126,734	130,934	135,526	136,564	137,193	138,447
Mortgage transactions (during period)										
14 Purchases	23,959	37,202	75,905	6,779	8,380	7,980	8,832	4,993	4,118	4,730
Mortgage commitments (during period)[7]										
15 Issued[8]	23,689	40,010	74,970	8,880	8,195	6,084	6,185	4,189	4,177	6,644
16 To sell[9]	5,270	7,608	10,493	148	0	237	1,811	1,159	221	0
FEDERAL HOME LOAN MORTGAGE CORPORATION										
Mortgage holdings (end of period)[9]										
17 Total	20,419	24,131	29,959	31,629	32,995	32,703	33,665	32,370	32,454	35,421
18 FHA/VA-insured	547	484	408	371	365	359	352	347	343	337
19 Conventional	19,871	23,283	29,552	31,259	32,630	32,343	33,313	32,023	32,112	35,084
Mortgage transactions (during period)										
20 Purchases	75,517	97,727	191,125	16,391	20,199	19,607	20,792	15,512	12,063	12,587
21 Sales	73,817	92,478	179,208	14,267	18,771	19,154	19,602	16,536	12,105	10,286
Mortgage commitments (during period)[10]										
22 Contracted	102,401	114,031	261,637	17,132	27,380	29,717	32,453	17,591	23,366	21,103

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

1.54 MORTGAGE DEBT OUTSTANDING[1]

Millions of dollars, end of period

Type of holder and property	1989	1990	1991	1991 Q4	1992 Q1	1992 Q2	1992 Q3	1992 Q4[p]
1 **All holders**	**3,570,906**	**3,795,210**	**3,915,871**	**3,915,871**	**3,938,198**	**3,976,483**	**4,012,983**	**4,057,012**
By type of property								
2 One- to four-family residences	2,424,258	2,635,428	2,764,447	2,764,447	2,790,734	2,838,732	2,890,842	2,942,958
3 Multifamily residences	307,672	311,113	310,427	310,427	310,499	306,038	305,379	302,211
4 Commercial	754,952	764,953	758,063	758,063	754,290	748,496	733,083	728,404
5 Farm	84,025	83,716	82,934	82,934	82,674	83,218	83,679	83,439
By type of holder								
6 Major financial institutions	1,931,537	1,914,315	1,846,910	1,846,910	1,825,983	1,803,488	1,793,505	1,771,502
7 Commercial banks[2]	767,069	844,826	876,284	876,284	880,377	884,598	891,484	893,793
8 One- to four-family	389,632	455,931	486,572	486,572	492,910	496,518	506,658	511,306
9 Multifamily	38,876	37,015	37,424	37,424	37,710	38,314	38,985	38,013
10 Commercial	321,906	334,648	333,852	333,852	330,837	330,229	325,934	324,596
11 Farm	16,656	17,231	18,436	18,436	18,919	19,538	19,906	19,878
12 Savings institutions[3]	910,254	801,628	705,367	705,367	682,338	659,624	648,178	627,531
13 One- to four-family	669,220	600,154	538,358	538,358	524,536	508,545	501,604	489,217
14 Multifamily	106,014	91,806	79,881	79,881	77,166	74,788	73,723	69,788
15 Commercial	134,370	109,168	86,741	86,741	80,278	75,947	72,517	68,202
16 Farm	650	500	388	388	358	345	334	324
17 Life insurance companies	254,214	267,861	265,258	265,258	263,269	259,266	253,843	250,178
18 One- to four-family	12,231	13,005	11,547	11,547	11,214	10,676	10,451	10,110
19 Multifamily	26,907	28,979	29,562	29,562	29,693	29,425	28,804	28,558
20 Commercial	205,472	215,121	214,105	214,105	212,865	210,139	205,709	202,989
21 Farm	9,604	10,756	10,044	10,044	9,497	9,026	8,878	8,522
22 Federal and related agencies	197,778	239,003	266,156	266,156	278,396	278,131	277,485	286,428
23 Government National Mortgage Association	23	20	19	19	19	23	27	31
24 One- to four-family	23	20	19	19	19	23	27	31
25 Multifamily	0	0	0	0	0	0	0	0
26 Farmers Home Administration[4]	41,176	41,439	41,713	41,713	41,791	41,628	41,671	41,695
27 One- to four-family	18,422	18,527	18,496	18,496	18,488	17,718	17,292	16,912
28 Multifamily	9,054	9,640	10,141	10,141	10,270	10,356	10,468	10,575
29 Commercial	4,443	4,690	4,905	4,905	4,961	4,998	5,072	5,158
30 Farm	9,257	8,582	8,171	8,171	8,072	8,557	8,839	9,050
31 Federal Housing and Veterans' Administrations	6,087	8,801	10,733	10,733	11,332	11,480	11,768	12,581
32 One- to four-family	2,875	3,593	4,036	4,036	4,254	4,403	4,531	5,153
33 Multifamily	3,212	5,208	6,697	6,697	7,078	7,077	7,236	7,428
34 Resolution Trust Corporation	0	32,600	45,822	45,822	49,345	44,624	37,099	32,045
35 One- to four-family	0	15,800	14,535	14,535	15,458	15,032	12,614	9,658
36 Multifamily	0	8,064	15,018	15,018	16,266	13,316	11,130	11,038
37 Commercial	0	8,736	16,269	16,269	17,621	16,276	13,356	11,350
38 Farm	0	0	0	0	0	0	0	0
39 Federal National Mortgage Association	99,001	104,870	112,283	112,283	118,238	122,979	126,476	137,584
40 One- to four-family	90,575	94,323	100,387	100,387	105,869	110,223	113,407	124,016
41 Multifamily	8,426	10,547	11,896	11,896	12,369	12,756	13,069	13,568
42 Federal Land Banks	29,640	29,416	28,777	28,777	28,776	28,775	28,815	28,827
43 One- to four-family	1,210	1,838	1,693	1,693	1,693	1,693	1,695	1,696
44 Farm	28,430	27,577	27,084	27,084	27,083	27,082	27,119	27,131
45 Federal Home Loan Mortgage Corporation	21,851	21,857	26,809	26,809	28,895	28,621	31,629	33,665
46 One- to four-family	18,248	19,185	24,125	24,125	26,182	26,001	29,039	31,032
47 Multifamily	3,603	2,672	2,684	2,684	2,713	2,620	2,591	2,633
48 Mortgage pools or trusts[5]	951,740	1,116,452	1,270,862	1,270,862	1,288,823	1,341,338	1,385,460	1,425,546
49 Government National Mortgage Association	368,367	403,613	425,295	425,295	421,977	422,922	422,255	419,516
50 One- to four-family	358,142	391,505	415,767	415,767	412,574	413,828	413,063	410,675
51 Multifamily	10,225	12,108	9,528	9,528	9,404	9,094	9,192	8,841
52 Federal Home Loan Mortgage Corporation	272,870	316,359	359,163	359,163	367,878	382,797	391,762	407,514
53 One- to four-family	266,060	308,369	351,906	351,906	360,887	376,177	385,400	401,525
54 Multifamily	6,810	7,990	7,257	7,257	6,991	6,620	6,362	5,989
55 Federal National Mortgage Association	228,232	299,833	371,984	371,984	389,853	413,226	429,935	444,979
56 One- to four-family	219,577	291,194	362,667	362,667	380,617	403,940	420,835	435,979
57 Multifamily	8,655	8,639	9,317	9,317	9,236	9,286	9,100	9,000
58 Farmers Home Administration[4]	80	66	47	47	43	43	41	38
59 One- to four-family	21	17	11	11	10	9	9	8
60 Multifamily	0	0	0	0	0	0	0	0
61 Commercial	26	24	19	19	18	18	18	17
62 Farm	33	26	17	17	16	15	14	13
63 Private mortgage conduits	82,191	96,581	114,373	114,373	109,071	122,350	141,468	153,499
64 One- to four-family	77,217	90,684	104,196	104,196	95,600	105,700	123,000	132,000
65 Multifamily	462	731	3,698	3,698	4,686	5,796	5,796	6,305
66 Commercial	4,512	5,166	6,479	6,479	8,784	10,855	12,673	15,194
67 Farm	0	0	0	0	0	0	0	0
68 Individuals and others[6]	489,851	525,440	531,943	531,943	544,996	553,526	556,532	573,535
69 One- to four-family	300,805	331,282	330,131	330,131	340,424	348,245	351,217	363,641
70 Multifamily	85,427	87,713	87,324	87,324	86,917	86,591	88,922	90,475
71 Commercial	84,224	87,400	95,693	95,693	98,925	100,035	97,805	100,898
72 Farm	19,395	19,045	18,795	18,795	18,730	18,656	18,588	18,522

1. Based on data from various institutional and governmental sources; figures for 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 loans held by bank trust departments.
3. Includes savings banks and savings and loan associations.
4. FmHA-guaranteed securities sold to the Federal Financing Bank were reallocated from FmHA mortgage pools to FmHA mortgage holdings in 1986:4 because of accounting changes by the Farmers Home Administration.
5. Outstanding principal balances of mortgage-backed securities insured or guaranteed by the agency indicated.
6. Other holders include mortgage companies, real estate investment trusts, state and local credit agencies, state and local retirement funds, noninsured pension funds, credit unions, and finance companies.

1.55 CONSUMER INSTALLMENT CREDIT[1]

Millions of dollars, amounts outstanding, end of period

Holder and type of credit	1990	1991	1992[r]	1992 Sept.	1992 Oct.	1992 Nov.	1992 Dec.[r]	1993 Jan.	1993 Feb.
	Seasonally adjusted								
1 **Total**	**735,338**	**727,799**	**726,653**	**722,104**	**722,372**	**723,448**	**726,653**	**727,647**	**728,815**
2 Automobile	284,993	263,003	260,097	257,384	256,846	257,740	260,097	259,720	260,763
3 Revolving	222,950	242,785	251,258	250,017	250,454	250,620	251,258	252,785	255,177
4 Other	227,395	222,012	215,298	214,703	215,071	215,088	215,298	215,143	212,876
	Not seasonally adjusted								
5 **Total**	**748,524**	**742,058**	**741,381**	**724,198**	**722,760**	**725,178**	**741,381**	**732,490**	**726,265**
By major holder									
6 Commercial banks	347,087	339,565	329,603	324,046	324,697	324,529	329,603	326,807	324,358
7 Finance companies	133,863	121,901	117,086	116,650	116,304	116,414	117,086	116,059	112,687
8 Credit unions	93,057	92,254	92,648	92,698	92,228	91,838	92,648	92,381	91,777
9 Retailers	44,822	44,030	44,952	38,778	39,299	39,539	44,952	42,585	40,671
10 Savings institutions	46,969	40,315	33,861	35,069	34,148	34,171	33,861	33,902	33,754
11 Gasoline companies	4,822	4,362	4,365	4,499	4,452	4,365	4,365	4,366	4,148
12 Pools of securitized assets[2]	77,904	99,631	118,866	112,458	111,632	114,322	118,866	116,390	118,870
By major type of credit[3]									
13 Automobile	285,050	263,108	260,227	260,395	259,055	258,539	260,227	258,473	258,833
14 Commercial banks	124,913	111,912	108,581	108,355	108,068	107,675	108,581	108,432	108,580
15 Finance companies	75,045	63,413	57,604	59,806	59,290	58,286	57,604	57,165	54,036
16 Pools of securitized assets[2]	24,428	28,057	33,593	31,971	31,757	32,672	33,593	32,388	35,930
17 Revolving	235,056	255,895	264,801	248,692	248,526	251,422	264,801	257,992	254,258
18 Commercial banks	133,385	137,968	132,921	127,234	127,257	128,164	132,921	129,056	127,252
19 Retailers	40,003	39,352	40,064	34,148	34,654	34,857	40,064	37,719	35,815
20 Gasoline companies	4,822	4,362	4,365	4,499	4,452	4,365	4,365	4,366	4,148
21 Pools of securitized assets[2]	44,335	60,139	72,695	68,252	67,699	69,415	72,695	71,927	72,024
22 Other	228,418	223,055	216,353	215,111	215,179	215,217	216,353	216,025	213,174
23 Commercial banks	88,789	89,685	88,101	88,457	89,372	88,690	88,101	89,319	88,526
24 Finance companies	58,818	58,488	59,482	56,844	57,014	58,128	59,482	58,894	58,651
25 Retailers	4,819	4,678	4,888	4,630	4,645	4,682	4,888	4,866	4,856
26 Pools of securitized assets[2]	9,141	11,435	12,578	12,235	12,176	12,235	12,578	12,075	10,916

1. The Board's series on amounts of credit covers 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.

Data in this table also appear in the Board's G.19 (421) monthly statistical release. For ordering address, see inside front cover.

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

3. Totals include estimates for certain holders for which only consumer credit totals are available.

1.56 TERMS OF CONSUMER INSTALLMENT CREDIT[1]

Percent per year except as noted

Item	1990	1991	1992	1992 Aug.	1992 Sept.	1992 Oct.	1992 Nov.	1992 Dec.	1993 Jan.	1993 Feb.
INTEREST RATES										
Commercial banks[2]										
1 48-month new car	11.78	11.14	9.29	9.15	n.a.	n.a.	8.60	n.a.	n.a.	8.57
2 24-month personal	15.46	15.18	14.04	13.94	n.a.	n.a.	13.55	n.a.	n.a.	13.57
3 120-month mobile home	14.02	13.70	12.67	12.57	n.a.	n.a.	12.36	n.a.	n.a.	12.38
4 Credit card	18.17	18.23	17.78	17.66	n.a.	n.a.	17.38	n.a.	n.a.	17.26
Auto finance companies										
5 New car	12.54	12.41	9.93	8.88	8.65	9.51	9.65	9.65	10.08	10.32
6 Used car	15.99	15.60	13.80[r]	13.49	13.44	13.37	13.37	13.66[r]	13.72	13.90
OTHER TERMS[3]										
Maturity (months)										
7 New car	54.6	55.1	54.0	53.6	53.3	54.1	54.1	53.6	53.9	54.3
8 Used car	46.0	47.2	47.9[r]	47.9	47.7	47.9	47.8	47.7[r]	49.2	49.0
Loan-to-value ratio										
9 New car	87	88	89	90	90	89	89	90	90	91
10 Used car	95	96	97	97	97	97	97	97	97	98
Amount financed (dollars)										
11 New car	12,071	12,494	13,584[r]	13,745	13,889	13,885	14,043	14,315[r]	13,975	13,849
12 Used car	8,289	8,884	9,119[r]	9,238	8,402	9,373	9,475	9,464[r]	9,472	9,457

1. Data in this table also appear in the Board's G.19 (421) monthly statistical release. For ordering address, see inside front cover.

2. Data are available for only the second month of each quarter.

3. At auto finance companies.

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

Billions of dollars; quarterly data at seasonally adjusted annual rates

Transaction category or sector	1988	1989	1990	1991	1992	1991			1992			
						Q2	Q3	Q4	Q1	Q2[r]	Q3[r]	Q4
	Nonfinancial sectors											
1 **Total net borrowing by domestic nonfinancial sectors**	**775.8**	**740.8**	**665.0**	**442.7[r]**	**587.4**	**534.4[r]**	**401.4[r]**	**371.1[r]**	**687.5[r]**	**583.0**	**476.0**	**603.2**
By sector and instrument												
2 U.S. government	155.1	146.4	246.9	278.2	304.0	276.7	288.4	320.4	368.9	351.9	193.4	301.7
3 Treasury securities	137.7	144.7	238.7	292.0	303.8	282.9	317.2	316.6	380.1	351.5	184.4	299.1
4 Agency issues and mortgages	17.4	1.6	8.2	−13.8	.2	−6.2	−28.8	3.8	−11.2	.4	9.0	2.7
5 Private	620.7	594.4	418.2	164.4[r]	283.5	257.7[r]	113.0[r]	50.7[r]	318.6[r]	231.1	282.6	301.5
By instrument												
6 Debt capital instruments	474.1	441.8	342.3	244.7[r]	280.4	321.0[r]	177.8[r]	175.4[r]	333.0[r]	267.1	253.7	267.9
7 Tax-exempt obligations	53.7	65.0	51.2	45.8	53.3	48.5	53.5	45.5	52.0	73.0	52.3	35.9
8 Corporate bonds	103.1	73.8	47.1	78.8	66.3	96.5	81.6[r]	60.2[r]	76.3	77.5	61.3	50.3
9 Mortgages	317.3	303.0	244.0	120.1[r]	160.8	175.9[r]	42.6[r]	69.7[r]	204.8[r]	116.6	140.1	181.7
10 Home mortgages	241.8	245.3	219.4	129.0[r]	198.5	147.3[r]	118.6[r]	93.0[r]	221.5[r]	155.5	202.8	214.2
11 Multifamily residential	16.7	16.4	3.7	−.9[r]	−8.3	12.7[r]	−31.0[r]	8.0[r]	.0[r]	−17.9	−2.7	−12.7
12 Commercial	60.8	42.7	21.0	−7.3[r]	−29.9	16.6[r]	−42.6[r]	−31.4[r]	−15.7[r]	−23.2	−61.8	−18.8
13 Farm	−2.1	−1.5	−.1	−.8	.5	−.6[r]	−2.4[r]	.0	−1.0[r]	2.2	1.8	−1.0
14 Other debt instruments	146.6	152.6	75.8	−80.2	3.0	−63.3	−64.8	−124.7	−14.4	−36.0	28.8	33.6
15 Consumer credit	50.1	41.7	17.5	−12.5	2.4	−7.8	−24.0	−8.0	3.1	−12.4	.4	18.8
16 Bank loans n.e.c.	41.0	40.2	4.4	−33.4	−16.8	−34.5	−18.2	−66.1	−26.9	−21.5	−3.2	−15.4
17 Open market paper	11.9	21.4	9.7	−18.4	9.8	−15.9	−36.3	−7.0	12.6	−3.4	1.7	28.4
18 Other	43.6	49.3	44.2	−15.8	7.5	−5.2	13.7	−43.6	−3.2	1.3	30.0	1.9
By borrowing sector												
19 State and local government	48.9	63.2	48.3	38.5	48.1	38.6	37.6	41.9	46.1	63.4	50.0	32.9
20 Household	318.6	305.6	254.2	144.9[r]	215.1	178.0[r]	132.3[r]	104.2[r]	229.0[r]	177.2	220.7	233.7
21 Nonfinancial business	253.1	225.6	115.6	−18.9[r]	20.2	41.1[r]	−56.9[r]	−95.4[r]	43.6[r]	−9.4	11.9	34.9
22 Farm	−7.5	1.6	2.5	.9	.9	2.2[r]	−.2[r]	−2.2	−1.6	6.6	1.0	−2.3
23 Nonfarm noncorporate	61.8	50.4	26.7	−23.6	−34.2	9.8	−65.9	−51.5	−20.7	−50.6	−40.3	−25.2
24 Corporate	198.8	173.6	86.4	3.7[r]	53.5	29.1[r]	9.2[r]	−41.7[r]	65.9[r]	34.7	51.1	62.4
25 Foreign net borrowing in United States	6.4	10.2	23.9	14.1	24.1	−63.2	15.6	41.0	9.9	55.2	30.6	.8
26 Bonds	6.9	4.9	21.4	14.9	18.5	10.6	15.5	22.3	4.9	21.9	22.3	25.1
27 Bank loans n.e.c.	−1.8	−.1	−2.9	3.1	1.6	−3.5	1.4	6.5	1.5	14.1	3.9	−13.2
28 Open market paper	8.7	13.1	12.3	6.4	5.2	−51.9	16.0	14.9	−7.8	27.7	12.8	−11.9
29 U.S. government loans	−7.5	−7.6	−6.9	−10.2	−1.2	−18.3	−17.2	−2.7	11.4	−8.5	−8.4	.7
30 **Total domestic plus foreign**	**782.2**	**750.9**	**688.9**	**456.8[r]**	**611.6**	**471.2[r]**	**417.0[r]**	**412.1[r]**	**697.4[r]**	**638.2**	**506.6**	**604.0**
	Financial sectors											
31 **Total net borrowing by financial sectors**	**211.4**	**220.1**	**187.1**	**131.5[r]**	**223.3**	**106.0[r]**	**143.8[r]**	**165.6[r]**	**159.5[r]**	**241.6**	**265.2**	**227.0**
By instrument												
32 U.S. government-related	119.8	151.0	167.4	150.0[r]	167.1	129.4[r]	156.0[r]	158.5[r]	137.4[r]	222.8	165.6	142.7
33 Sponsored-credit-agency securities	44.9	25.2	17.1	9.2	40.2	−29.7	20.6	32.6	11.5	48.3	67.7	33.5
34 Mortgage pool securities	74.9	125.8	150.3	140.9[r]	126.9	159.0[r]	135.5[r]	125.9[r]	125.9[r]	174.4	97.9	109.2
35 Loans from U.S. government	.0	.0	−.1	.0	.0	.0	.0	−.1	.0	.0	.0	.0
36 Private	91.7	69.1	19.7	−18.6[r]	56.2	−23.4	−12.3[r]	7.1[r]	22.1[r]	18.9	99.6	84.3
37 Corporate bonds	16.2	46.8	34.4	47.7[r]	50.0	72.4	29.5	47.5[r]	14.9[r]	25.5	59.8	99.9
38 Mortgages	.3	.0	.3	.6	.3	.9	.4[r]	.8[r]	.9	.1	.3	.1
39 Bank loans n.e.c.	.6	1.9	1.2	3.2	7.2	−2.9	10.2	4.5	8.2	3.9	5.4	11.1
40 Open market paper	54.8	31.3	8.6	−32.0	−2.1	−46.0	−16.7	−12.7	7.6	−16.3	12.8	−12.6
41 Loans from Federal Home Loan Banks	19.7	−11.0	−24.7	−38.0	.8	−47.7	−35.7	−33.0	−9.5	5.7	21.3	−14.2
By borrowing sector												
42 Sponsored credit agencies	44.9	25.2	17.0	9.1	40.2	−29.7	20.6	32.5	11.5	48.3	67.7	33.5
43 Mortgage pools	74.9	125.8	150.3	140.9[r]	126.9	159.0[r]	135.5[r]	125.9[r]	125.9[r]	174.4	97.9	109.2
44 Private	91.7	69.1	19.7	−18.6[r]	56.2	−23.4	−12.3[r]	7.1[r]	22.1[r]	18.9	99.6	84.3
45 Commercial banks	−3.0	−1.4	−1.1	−13.3	4.5	−11.7	−9.2	−14.1	7.2	.8	1.6	8.2
46 Bank affiliates	5.2	6.2	−27.7	−2.5	1.1	−3.5	−6.8	9.6	2.7	−8.2	10.5	−.4
47 Savings and loan associations	19.9	−14.1	−29.9	−39.5	−4.6	−48.7	−41.1	−25.1	−20.3	2.7	10.0	−10.6
48 Mutual savings banks	1.9	−1.4	−.5	−3.5	1.7	−1.7	−5.5	−8.7	4.3	.3	8.3	−6.2
49 Finance companies	31.5	59.7	35.6	4.5[r]	14.3	3.4	12.2	12.9[r]	1.0[r]	−20.9	28.9	48.0
50 Real estate investment trusts (REITs)	3.6	−1.9	−1.9	.0	1.8	.1	−.3[r]	.1[r]	4.6	.9	1.3	.5
51 Securitized credit obligation (SCO) issuers	32.5	22.0	45.2	35.6	37.4	38.7	38.5	32.3	22.5	43.2	39.1	44.8

1.57—Continued

Transaction category or sector	1988	1989	1990	1991	1992	1991			1992			
						Q2	Q3	Q4	Q1	Q2[r]	Q3[r]	Q4
	All sectors											
52 **Total net borrowing, all sectors**	**993.6**	**971.0**	**876.0**	**588.3[r]**	**834.9**	**577.2[r]**	**560.8[r]**	**577.7[r]**	**856.9[r]**	**879.8**	**771.8**	**831.0**
53 U.S. government securities	274.9	297.3	414.4	428.3[r]	471.1	406.1[r]	444.4[r]	479.0[r]	506.3[r]	574.7	359.0	444.4
54 State and local obligations	53.7	65.0	51.2	45.8	53.3	48.5	53.5	45.5	52.0	73.0	52.3	35.9
55 Corporate and foreign bonds	126.3	125.5	102.9	141.3[r]	134.9	179.5	126.7[r]	130.0[r]	96.0[r]	124.9	143.4	175.3
56 Mortgages	317.5	303.0	244.3	120.7[r]	161.1	176.9[r]	43.0[r]	70.5[r]	205.7[r]	116.7	140.3	181.8
57 Consumer credit	50.1	41.7	17.5	−12.5	2.4	−7.8	−24.0	−8.0	3.1	−12.4	.4	18.8
58 Bank loans n.e.c.	39.9	41.9	2.8	−27.1	−8.0	−40.9	−6.7	−55.1	−17.2	−3.5	6.1	−17.5
59 Open market paper	75.4	65.9	30.7	−44.0	12.9	−113.8	−37.0	−4.9	12.4	8.1	27.3	3.9
60 Other loans	55.8	30.6	12.4	−64.2	7.1	−71.2	−39.1	−79.3	−1.3	−1.6	43.0	−11.6
	External corporate equity funds raised in United States											
61 **Total net share issues**	**−118.4**	**−65.7**	**22.1**	**198.8**	**272.1**	**182.3**	**232.5[r]**	**268.2[r]**	**230.3[r]**	**291.7**	**288.6**	**277.7**
62 Mutual funds	6.1	38.5	67.9	150.5	206.4	125.6	182.5	195.9	148.4[r]	236.3	233.3	207.5
63 All other	−124.5	−104.2	−45.8	48.3	65.7	56.7	50.0[r]	72.3[r]	81.9	55.4	55.3	70.2
64 Nonfinancial corporations	−129.5	−124.2	−63.0	18.3	26.8	12.0	19.0	48.0	46.0	36.0	11.0	14.0
65 Financial corporations	4.1	2.7	9.8	−.1	7.4	8.1	−3.2[r]	1.4[r]	6.0	8.4	8.1	7.3
66 Foreign shares purchased in United States	.9	17.2	7.4	30.2	31.5	36.6	34.1	22.9	29.9	11.0	36.2	48.9

1. Data in this table also appear in the Board's Z.1 (780) quarterly statistical release, tables F.2 through F.5. For ordering address, see inside front cover.

1.58 SUMMARY OF FINANCIAL TRANSACTIONS[1]

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

Transaction category or sector	1988	1989	1990	1991	1992	1991			1992			
						Q2	Q3	Q4	Q1[r]	Q2[r]	Q3[r]	Q4
NET LENDING IN CREDIT MARKETS[2]												
1 **Total net lending in credit markets**	**993.6**	**971.0**	**876.0**	**588.3[r]**	**834.9**	**577.2[r]**	**560.8[r]**	**577.7[r]**	**856.9**	**879.8**	**771.8**	**831.0**
2 *Private domestic nonfinancial sectors*	226.2	209.6	203.8	10.5[r]	60.6	187.7[r]	−143.2[r]	−59.7[r]	206.5	120.6	−162.8	78.0
3 Households	198.9	179.5	172.3	−24.8[r]	65.8	171.3[r]	−185.8[r]	−105.9[r]	227.2	111.3	−160.3	84.9
4 Nonfarm noncorporate business	3.1	−.8	−1.4	−1.9	−2.1	−2.0	−1.6	−2.1	−1.9	−2.5	−1.9	−1.9
5 Nonfinancial corporate business	5.7	12.9	6.6	20.9	8.4	29.0	32.2	30.1	−2.7	8.4	15.4	12.5
6 State and local governments	18.6	17.9	26.2	16.3	−11.5	−10.6	12.1	18.2	−16.1	3.4	−15.9	−17.6
7 U.S. government	−10.6	−3.1	33.7	10.0	−12.4	24.8	−2.1	−17.9	13.9	−24.9	−26.8	−12.0
8 Foreign	96.3	74.1	58.4	42.6[r]	97.6	51.4	37.3	71.0	88.4	138.4	64.2	99.6
9 Financial sectors	681.8	690.4	580.2	525.1[r]	689.1	313.3[r]	668.7[r]	584.3[r]	548.0	645.6	897.2	665.5
10 Sponsored credit agencies	37.1	−.5	16.4	14.2	62.7	−25.2[r]	35.8[r]	18.6[r]	93.0	40.0	76.4	41.6
11 Mortgage pools	74.9	125.8	150.3	140.9[r]	126.9	159.0[r]	135.5[r]	125.9[r]	125.9	174.4	97.9	109.2
12 Monetary authority	10.5	−7.3	8.1	31.1	27.9	−4.0	48.1	22.3	33.2	9.8	10.8	57.8
13 Commercial banking	157.1	176.8	125.4	84.0	90.7	34.7	82.4	104.3	98.9	58.4	157.4	48.1
14 U.S. commercial banks	127.1	145.7	95.2	38.9	69.2	6.4	26.5	45.6	91.9	.5	132.0	52.4
15 Foreign banking offices	29.4	26.7	28.4	48.5	14.5	33.7	56.7	61.3	.6	58.6	6.5	−7.6
16 Bank affiliates	−.1	2.8	−2.8	−1.5	6.7	−2.6	2.4	−1.1	6.4	−.6	18.5	2.5
17 Banks in U.S. possession	.7	1.6	4.5	−1.9	.3	−2.8	−3.3	−1.5	.0	−.1	.4	.8
18 Private nonbank finance	402.2	395.7	279.9	255.0[r]	380.9	148.8[r]	367.0[r]	313.1[r]	197.0	362.9	554.7	408.8
19 Thrift institutions	119.0	−91.0	−151.9	−144.9	−63.8	−164.8	−176.8	−49.7	−113.3	−81.6	−41.9	−18.5
20 Savings and loan associations	87.4	−93.9	−143.9	−140.9	−77.0	−144.0	−156.3	−83.3	−137.9	−92.4	−38.5	−39.1
21 Mutual savings banks	15.3	−4.8	−16.5	−15.5	−2.8	−31.1	−30.8	11.5	7.6	−7.4	−13.0	1.5
22 Credit unions	16.3	7.7	8.5	11.5	16.0	10.2	10.3	22.2	17.0	18.3	9.6	19.0
23 Insurance	186.2	207.7	188.5	218.7[r]	184.9	216.3[r]	257.1[r]	156.5[r]	114.2	183.6	227.8	213.9
24 Life insurance companies	103.8	93.1	94.4	83.2	94.9	132.8	73.8	13.2	80.6	81.9	96.5	120.4
25 Other insurance companies	29.2	29.7	26.5	34.7	17.3	37.0	36.8	32.1	33.1	22.2	2.5	11.2
26 Private pension funds	18.1	36.2	16.6	63.9[r]	37.8	−2.5[r]	113.1[r]	94.2[r]	−28.7	49.5	90.5	39.7
27 State and local government retirement funds	35.1	48.7	51.0	37.0	35.0	49.0	33.4	17.0	29.2	30.0	38.2	42.6
28 Finance n.e.c.	96.9	278.9	243.3	181.3[r]	259.8	97.4	286.7[r]	206.3[r]	196.1	260.9	368.9	213.4
29 Finance companies	49.2	69.3	41.6	−23.1[r]	20.8	−14.5	−5.2	−54.1[r]	40.8	−23.0	14.2	51.2
30 Mutual funds	11.9	23.8	41.4	90.3	123.6	75.3	117.1	124.8	64.0	169.1	150.7	110.4
31 Money market funds	10.7	67.1	80.9	30.1	2.5	−68.9	1.1	53.8[r]	61.9	−20.9	−16.3	−14.7
32 Real estate investment trusts (REITs)	.9	.5	−.7	−.7	1.5	−.1	−.6[r]	−.9	−.7	2.6	−2.8	7.0
33 Brokers and dealers	−8.2	96.3	34.9	49.0	74.0	66.8	135.8	50.5	7.5	89.8	184.0	14.7
34 Securitized credit obligation (SCOs) issuers	32.5	22.0	45.2	35.6	37.4	38.7	38.5	32.3	22.5	43.2	39.1	44.8
RELATION OF LIABILITIES TO FINANCIAL ASSETS												
35 **Net flows through credit markets**	**993.6**	**971.0**	**876.0**	**588.3[r]**	**834.9**	**577.2[r]**	**560.8[r]**	**577.7[r]**	**856.9**	**879.8**	**771.8**	**831.0**
Other financial sources												
36 Official foreign exchange	4.0	24.8	2.0	−5.9	−3.5	−4.8	−15.5	−5.0	3.5	−6.5	−8.5	−2.4
37 Treasury currency and special drawing rights	.5	4.1	2.5	.0	−1.8	.4	.4	.5	.1	.3	.2	−7.7
38 Life insurance reserves	25.3	28.8	25.7	24.5[r]	32.0	31.4	19.4	19.2[r]	30.5	28.7	32.5	36.4
39 Pension fund reserves	193.6	221.4	186.8	267.7[r]	227.3	194.7[r]	342.2[r]	241.5[r]	129.0	178.6	305.3	296.2
40 Interbank claims	2.9	−16.5	34.2	−3.7[r]	46.4	−79.6[r]	99.9[r]	−32.5[r]	56.1	20.8	119.4	−10.7
41 Deposits at financial institutions	259.9	290.0	96.8	61.1	50.8	−75.4	27.3	47.8	74.7	−55.2	223.9	−40.3
42 Checkable deposits and currency	43.2	6.1	44.2	75.8	122.1	7.9	104.5	114.4	88.6	92.8	202.7	104.1
43 Small time and savings deposits	120.8	96.7	59.9	16.7	−62.8	−1.1	−42.4	13.0	−29.9	−89.3	−79.0	−52.9
44 Large time deposits	53.6	17.6	−66.7	−60.9	−79.1	−63.0	−78.1	−117.4	−78.8	−104.9	−54.8	−77.8
45 Money market fund shares	21.9	90.1	70.3	41.2[r]	8.3	−58.7	4.0	26.8	106.2	−38.3	−13.0	−21.7
46 Security repurchase agreements	23.5	78.3	−23.5	−16.4	71.8	43.1	36.3	16.0	15.5	136.9	128.7	6.1
47 Foreign deposits	−3.1	1.1	12.6	4.6	−9.5	−3.6	3.0	−5.0	−26.9	−52.5	39.3	2.0
48 Mutual fund shares	6.1	38.5	67.9	150.5	206.4	125.6	182.5	195.9	148.4	236.3	233.3	207.5
49 Corporate equities	−124.5	−104.2	−45.8	48.3	65.7	56.7	50.0[r]	72.3[r]	81.9	55.4	55.3	70.2
50 Security credit	3.0	15.6	3.5	51.4	11.1	20.1	82.4	120.7	−70.0	−4.3	76.4	42.5
51 Trade debt	89.2	60.0	44.1	10.4[r]	51.2	41.2[r]	47.6[r]	−7.3[r]	75.2	36.0	51.8	41.8
52 Taxes payable	5.3	2.0	−.5	−9.0[r]	4.7	−11.4[r]	13.1[r]	−3.2[r]	−2.3	10.7	7.1	3.4
53 Noncorporate proprietors' equity	−31.2	−32.5	−39.3	−.8[r]	−10.6	−33.6[r]	45.6[r]	5.2[r]	−19.0	11.6	−16.2	−18.9
54 Miscellaneous	222.3	269.9	120.5	140.1[r]	201.8	89.0[r]	38.7[r]	205.1[r]	194.7	275.8	214.8	121.9
55 **Total financial sources**	**1,650.2**	**1,772.7**	**1,374.3**	**1,323.0[r]**	**1,716.4**	**931.6[r]**	**1,494.5[r]**	**1,438.0[r]**	**1,559.8**	**1,668.1**	**2,066.9**	**1,571.0**
Floats not included in assets (−)												
56 U.S. government checking deposits	1.6	8.4	3.3	−13.1	.1	15.6	23.9	−73.1	4.4	−11.7	−5.3	13.0
57 Other checkable deposits	.8	−3.2	2.5	2.0	1.6	3.0	−2.1	−6.1	16.7	2.5	−13.9	1.1
58 Trade credit	−.9	.6	21.5	18.4[r]	−4.5	40.7[r]	27.2[r]	−3.7[r]	6.7	−29.1	24.3	−19.8
Liabilities not identified as assets (−)												
59 Treasury currency	−.1	−.2	.2	−.6	−.2	−.3	−.2	−.1	−.4	−.1	−.3	−.1
60 Interbank claims	−3.0	−4.4	1.6	26.2	−6.3	20.8	28.4	.2	13.4	−15.1	−2.6	−20.8
61 Security repurchase agreements	−29.8	23.9	−34.8	10.4	41.5	76.2	36.9	44.0	−41.1	104.2	76.4	26.6
62 Taxes payable	6.3	2.3	6.5	5.6[r]	9.8	2.0	23.4	11.4[r]	−11.3	25.7	23.0	1.8
63 Miscellaneous	4.4	−95.6	−13.8	−30.6[r]	−19.2	6.4[r]	−191.8[r]	182.3[r]	−71.0	−76.1	3.6	66.8
64 **Totals identified to sectors as assets**	**1,670.7**	**1,841.0**	**1,387.5**	**1,304.7[r]**	**1,693.6**	**767.1[r]**	**1,548.9[r]**	**1,283.1[r]**	**1,642.4**	**1,667.8**	**1,961.6**	**1,502.5**

1. Data in this table also appear in the Board's Z.1 (780) quarterly statistical release, tables F.6 and F.7. For ordering address, see inside front cover.

2. Excludes corporate equities and mutual fund shares.

1.59 SUMMARY OF CREDIT MARKET DEBT OUTSTANDING[1]

Billions of dollars, end of period

Transaction category or sector	1989	1990	1991	1992	1991			1992			
					Q2	Q3	Q4	Q1	Q2	Q3r	Q4
	Nonfinancial sectors										
1 **Total credit market debt owed by domestic nonfinancial sectors**	**10,087.1**	**10,760.8**	**11,200.9r**	**11,788.3**	**10,960.1r**	**11,081.3r**	**11,200.9r**	**11,331.8r**	**11,471.8r**	**11,615.3**	**11,788.3**
By lending sector and instrument											
2 U.S. government	2,251.2	2,498.1	2,776.4	3,080.3	2,591.9	2,687.2	2,776.4	2,859.7	2,923.3	2,998.9	3,080.3
3 Treasury securities	2,227.0	2,465.8	2,757.8	3,061.6	2,567.1	2,669.6	2,757.8	2,844.0	2,907.4	2,980.7	3,061.6
4 Agency issues and mortgages	24.2	32.4	18.6	18.8	24.8	17.6	18.6	15.8	15.9	18.1	18.8
5 Private	7,835.9	8,262.6	8,424.5r	8,708.0	8,368.2r	8,394.1r	8,424.5r	8,472.0r	8,548.5r	8,616.4	8,708.0
By instrument											
6 Debt capital instruments	5,577.9	5,936.0	6,180.6r	6,461.1	6,087.4r	6,137.2r	6,180.6r	6,252.0r	6,326.7r	6,395.4	6,461.1
7 Tax-exempt obligations	1,004.4	1,055.6	1,101.4	1,154.7	1,072.5	1,089.3	1,101.4	1,111.5	1,128.6	1,145.6	1,154.7
8 Corporate bonds	926.1	973.2	1,051.9r	1,118.3	1,016.5	1,036.9	1,051.9r	1,071.0	1,090.4	1,105.7	1,118.3
9 Mortgages	3,647.5	3,907.3	4,027.3r	4,188.1	3,998.5r	4,011.1r	4,027.3r	4,069.4r	4,107.7r	4,144.1	4,188.1
10 Home mortgages	2,515.1	2,760.0	2,889.0r	3,087.5	2,835.3r	2,866.9r	2,889.0r	2,935.3r	2,983.3r	3,035.4	3,087.5
11 Multifamily residential	304.4	305.8	304.9r	296.6	310.6r	302.9r	304.9r	304.9r	300.4r	299.7	296.6
12 Commercial	742.6	757.6	750.3r	720.4	768.8r	758.1r	750.3r	746.4r	740.6r	725.1	720.4
13 Farm	85.3	84.0	83.2	83.7	83.8	83.2r	83.2	82.9	83.5r	83.9	83.7
14 Other debt instruments	2,258.0	2,326.7	2,243.9	2,246.9	2,280.8	2,256.9	2,243.9	2,220.0	2,221.9r	2,221.0	2,246.9
15 Consumer credit	791.8	809.3	796.7	799.2	786.7	785.9	796.7	775.7	775.8	781.1	799.2
16 Bank loans n.e.c.	760.7	758.0	724.6	707.8	742.0	734.1	724.6	712.5	709.4	705.2	707.8
17 Open market paper	107.1	116.9	98.5	108.3	119.4	107.0	98.5	110.3	111.7	108.3	108.3
18 Other	598.4	642.6	624.1	631.6	632.6	629.8	624.1	621.6	624.9r	626.4	631.6
By borrowing sector											
19 State and local government	815.7	864.0	902.5	950.6	878.5	891.4	902.5	911.3	925.9	942.3	950.6
20 Household	3,508.2	3,780.6	3,925.5r	4,140.6	3,846.7r	3,886.0r	3,925.5r	3,950.6r	4,008.1r	4,068.6	4,140.6
21 Nonfinancial business	3,512.0	3,618.0	3,596.5r	3,616.7	3,643.0r	3,616.7r	3,596.5r	3,610.1r	3,614.5r	3,605.5	3,616.7
22 Farm	139.2	140.5	138.8	139.7	139.6	140.4	138.8	136.4r	140.1r	141.2	139.7
23 Nonfarm noncorporate	1,177.5	1,204.2	1,180.6	1,146.4	1,210.8	1,191.0	1,180.6	1,174.9	1,163.7r	1,150.6	1,146.4
24 Corporate	2,195.3	2,273.4	2,277.1r	2,330.6	2,292.7r	2,285.3r	2,277.1r	2,298.9r	2,310.7r	2,313.7	2,330.6
25 **Foreign credit market debt held in United States**	**254.8**	**278.6**	**292.7**	**307.6**	**277.6**	**282.2**	**292.7**	**282.4**	**298.4r**	**306.9**	**307.6**
26 Bonds	88.0	109.4	124.2	142.7	114.8	118.6	124.2	125.4	130.9r	136.5	142.7
27 Bank loans n.e.c.	21.4	18.5	21.6	23.2	19.7	20.0	21.6	22.0	25.5	26.5	23.2
28 Open market paper	63.0	75.3	81.8	77.7	74.0	78.0	81.8	70.5	77.5	80.7	77.7
29 U.S. government loans	82.4	75.4	65.2	64.0	69.1	65.6	65.2	64.4	64.5r	63.4	64.0
30 **Total credit market debt owed by nonfinancial sectors, domestic and foreign**	**10,341.9**	**11,039.4**	**11,493.6r**	**12,095.9**	**11,237.7r**	**11,363.5r**	**11,493.6r**	**11,614.1r**	**11,770.2r**	**11,922.2**	**12,095.9**
	Financial sectors										
31 **Total credit market debt owed by financial sectors**	**2,333.0**	**2,524.2**	**2,665.9r**	**2,890.1**	**2,578.2r**	**2,615.1r**	**2,665.9r**	**2,697.7r**	**2,756.6r**	**2,824.0**	**2,890.1**
By instrument											
32 U.S. government-related	1,249.3	1,418.4	1,574.3r	1,741.5	1,489.6r	1,531.1r	1,574.3r	1,603.8r	1,658.3r	1,702.0	1,741.5
33 Sponsored credit-agency securities	373.3	393.7	402.9	443.1	389.6	394.7	402.9	405.7	417.8	434.7	443.1
34 Mortgage pool securities	871.0	1,019.9	1,166.7r	1,293.5	1,095.2r	1,131.5r	1,166.7r	1,193.2r	1,235.6r	1,262.5	1,293.5
35 Loans from U.S. government	5.0	4.9	4.8	4.8	4.9	4.9	4.8	4.8	4.8	4.8	4.8
36 Private	1,083.7	1,105.8	1,091.6r	1,148.6	1,088.6	1,084.0r	1,091.6r	1,094.0	1,098.3	1,122.0	1,148.6
37 Corporate bonds	491.9	528.2	580.2r	621.8	562.2	569.5	580.2r	578.2	583.2	598.4	621.8
38 Mortgages	3.4	4.2	4.8	5.1	4.5	4.6r	4.8	5.0	5.0	5.1	5.1
39 Bank loans n.e.c.	37.5	38.6	41.8	49.0	37.0	39.0	41.8	41.6	43.7	44.5	49.0
40 Open market paper	409.1	417.7	385.7	392.8	390.1	387.0	385.7	392.9	389.5	393.9	392.8
41 Loans from Federal Home Loan Banks	141.8	117.1	79.1	79.9	94.7	83.9	79.1	76.3	76.9	80.2	79.9
By borrowing sector											
42 Sponsored credit agencies	378.3	398.5	407.7	447.9	394.4	399.5	407.7	410.5	422.6	439.5	447.9
43 Mortgage pools	871.0	1,019.9	1,166.7r	1,293.5	1,095.2r	1,131.5r	1,166.7r	1,193.2r	1,235.6r	1,262.5	1,293.5
44 Private financial sectors	1,083.7	1,105.8	1,091.6r	1,148.6	1,088.6	1,084.0r	1,091.6r	1,094.0	1,098.3	1,122.0	1,148.6
45 Commercial banks	77.4	76.3	63.0	67.4	65.9	64.6	63.0	60.8	61.7	63.3	67.4
46 Bank affiliates	142.5	114.8	112.3	113.4	113.3	110.6	112.3	115.0	112.7	114.4	113.4
47 Savings and loan associations	145.2	115.3	75.9	71.3	91.0	79.0	75.9	71.2	70.3	70.9	71.3
48 Mutual savings banks	17.2	16.7	13.2	14.9	16.6	15.2	13.2	13.5	14.3	16.2	14.9
49 Finance companies	504.2	539.8	547.9r	562.2	540.4	543.7	547.9r	547.1	541.8	549.4	562.2
50 Real estate investment trusts (REITs)	10.1	10.6	11.4	14.0	11.0	11.2r	11.4	12.7	13.2	13.7	14.0
51 Securitized credit obligation (SCO) issuers	187.1	232.3	268.0	305.4	250.3	259.9	268.0	273.6	284.4	294.2	305.4
	All sectors										
52 **Total credit market debt, domestic and foreign**	**12,674.9**	**13,563.6**	**14,159.6r**	**14,985.9**	**13,815.9r**	**13,978.7r**	**14,159.6r**	**14,311.9r**	**14,526.8r**	**14,746.2**	**14,985.9**
53 U.S. government securities	3,495.6	3,911.7	4,345.9r	4,817.0	4,076.6r	4,213.5r	4,345.9r	4,458.7r	4,576.8r	4,696.0	4,817.0
54 State and local obligations	1,004.4	1,055.6	1,101.4	1,154.7	1,072.5	1,089.3	1,101.4	1,111.5	1,128.6	1,145.6	1,154.7
55 Corporate and foreign bonds	1,506.0	1,610.7	1,756.4r	1,882.8	1,693.5	1,725.0	1,756.4r	1,774.6	1,804.5r	1,840.5	1,882.8
56 Mortgages	3,650.9	3,911.5	4,032.1r	4,193.3	4,003.0r	4,015.6r	4,032.1r	4,074.5r	4,112.7r	4,149.2	4,193.3
57 Consumer credit	791.8	809.3	796.7	799.2	786.7	785.9	796.7	775.7	775.8	781.1	799.2
58 Bank loans n.e.c.	819.6	815.1	788.0	780.0	798.7	793.2	788.0	776.1	778.7	776.1	780.0
59 Open market paper	579.2	609.9	565.9	578.8	583.6	572.0	565.9	573.7	578.7	582.9	578.8
60 Other loans	827.5	839.9	773.2	780.3	801.4	784.2	773.2	767.1	771.1r	774.8	780.3

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

1.60 SUMMARY OF FINANCIAL ASSETS AND LIABILITIES[1]

Billions of dollars except as noted, end of period

Transaction category or sector	1989	1990	1991	1992	1991			1992			
					Q2	Q3	Q4	Q1	Q2[r]	Q3[r]	Q4
CREDIT MARKET DEBT OUTSTANDING[2]											
1 **Total credit market assets**	**12,674.9**	**13,563.6**	**14,159.6[r]**	**14,985.9**	**13,815.9[r]**	**13,978.7[r]**	**14,159.6[r]**	**14,311.9[r]**	**14,526.8**	**14,746.2**	**14,985.9**
2 Private domestic nonfinancial sectors	2,440.5	2,644.2	2,531.9[r]	2,584.0	2,661.3[r]	2,653.8[r]	2,531.9[r]	2,546.1[r]	2,548.9	2,539.7	2,584.0
3 Households	1,710.1	1,882.3	1,734.7[r]	1,791.9	1,889.5[r]	1,881.0[r]	1,734.7[r]	1,766.5[r]	1,756.8	1,759.2	1,791.9
4 Nonfarm noncorporate business	56.4	55.0	53.1	51.1	53.3	52.9	53.1	51.9	51.3	50.8	51.1
5 Nonfinancial corporate business	180.3	186.9	207.9	216.3	189.7	189.9	207.9	196.2	207.5	202.1	216.3
6 State and local governments	493.7	519.9	536.2	524.7	528.8	530.0	536.2	531.4	533.3	527.6	524.7
7 U.S. government	205.1	238.7	246.2	233.7	252.9	252.0	246.2	250.2	245.3	238.1	233.7
8 Foreign	734.2	792.4	835.1[r]	932.8	807.9[r]	817.2[r]	835.1[r]	857.2[r]	891.8	907.9	932.8
9 Financial sectors	9,295.1	9,888.3	10,546.4[r]	11,235.5	10,093.8[r]	10,255.6[r]	10,546.4[r]	10,658.4[r]	10,840.9	11,060.5	11,235.5
10 Sponsored credit agencies	367.2	383.6	397.7	460.5	382.0[r]	389.3[r]	397.7	419.9	429.0	446.3	460.5
11 Mortgage pools	871.0	1,019.9	1,166.7[r]	1,293.5	1,095.2[r]	1,131.5[r]	1,166.7[r]	1,193.2[r]	1,235.6	1,262.5	1,293.5
12 Monetary authority	233.3	241.4	272.5	300.4	253.7	264.7	272.5	271.8	282.6	285.2	300.4
13 Commercial banking	2,643.9	2,769.3	2,853.3	2,944.0	2,796.6	2,817.8	2,853.3	2,860.6	2,882.9	2,922.9	2,944.0
14 U.S. commercial banks	2,368.4	2,463.6	2,502.5	2,571.7	2,480.0	2,488.7	2,502.5	2,514.0	2,521.9	2,556.7	2,571.7
15 Foreign banking offices	242.3	270.8	319.2	333.8	284.4	297.5	319.2	313.3	328.2	328.9	333.8
16 Bank affiliates	16.2	13.4	11.9	18.6	11.3	11.6	11.9	13.6	13.1	17.5	18.6
17 Banks in U.S. possession	17.1	21.6	19.7	20.0	20.9	20.0	19.7	19.7	19.7	19.8	20.0
18 Private nonbank finance	5,179.7	5,474.1	5,856.2[r]	6,237.1	5,566.4[r]	5,652.2[r]	5,856.2[r]	5,913.0[r]	6,010.7	6,143.6	6,237.1
19 Thrift institutions	1,484.9	1,335.5	1,190.6	1,126.8	1,248.4	1,205.1	1,190.6	1,161.8	1,143.0	1,133.2	1,126.8
20 Savings and loan associations	1,088.9	945.1	804.2	727.2	866.3	826.1	804.2	771.1	748.8	737.9	727.2
21 Mutual savings banks	241.1	227.1	211.5	208.7	216.4	208.7	211.5	213.4	211.6	208.3	208.7
22 Credit unions	154.9	163.4	174.9	190.9	165.7	170.2	174.9	177.2	182.6	187.0	190.9
23 Insurance	2,140.3	2,329.1	2,674.9[r]	2,859.8	2,443.9[r]	2,507.4[r]	2,674.9[r]	2,708.0[r]	2,756.2	2,812.2	2,859.8
24 Life insurance companies	1,013.1	1,116.5	1,199.6	1,294.5	1,183.7	1,201.4	1,199.6	1,224.3	1,247.1	1,270.3	1,294.5
25 Other insurance companies	317.5	344.0	378.7	396.0	361.4	370.7	378.7	387.0	392.5	393.1	396.0
26 Private pension funds	394.7	431.3	622.2[r]	660.0	437.1[r]	465.4[r]	622.2[r]	615.1[r]	627.4	650.1	660.0
27 State and local government retirement funds	414.9	437.4	474.3	509.3	461.7	470.1	474.3	481.6	489.1	498.7	509.3
28 Finance n.e.c.	1,554.5	1,809.4	1,990.7[r]	2,250.5	1,874.1[r]	1,939.7	1,990.7[r]	2,043.3[r]	2,111.5	2,198.2	2,250.5
29 Finance companies	617.1	658.7	635.6[r]	656.4	651.7	647.4	635.6[r]	641.0	641.6	642.5	656.4
30 Mutual funds	307.2	360.2	450.5	574.0	394.4	421.4	450.5	470.0[r]	513.3	548.7	574.0
31 Money market funds	291.8	372.7	402.7[r]	405.2	389.9	389.5	402.7[r]	423.1	413.5	408.8	405.2
32 Real estate investment trusts (REITs)	8.4	7.7	7.0	8.5	7.4[r]	7.2	7.0	6.8	7.5	6.8	8.5
33 Brokers and dealers	142.9	177.9	226.9	300.9	180.4	214.3	226.9	228.8	251.2	297.3	300.9
34 Securitized credit obligation (SCOs) issuers	187.1	232.3	268.0	305.4	250.3	259.9	268.0	273.6	284.4	294.2	305.4
RELATION OF LIABILITIES TO FINANCIAL ASSETS											
35 **Total credit market debt**	**12,674.9**	**13,563.6**	**14,159.6[r]**	**14,985.9**	**13,815.9[r]**	**13,978.7[r]**	**14,159.6[r]**	**14,311.9[r]**	**14,526.8**	**14,746.2**	**14,985.9**
Other liabilities											
36 Official foreign exchange	53.6	61.3	55.4	51.8	53.6	52.9	55.4	52.7	54.4	55.4	51.8
37 Treasury currency and special drawing rights certificates	23.8	26.3	26.3	24.5	26.1	26.2	26.3	26.3	26.4	26.5	24.5
38 Life insurance reserves	354.3	380.0	402.0	434.0	392.3	397.2	402.0	409.6[r]	416.8	424.9	434.0
39 Pension fund reserves	3,210.5	3,303.0	4,223.4[r]	4,585.8	3,550.9[r]	3,716.5[r]	4,223.4[r]	4,242.1[r]	4,294.2	4,429.1	4,585.8
40 Interbank claims	32.4	64.0	65.2[r]	111.4	35.9[r]	60.9[r]	65.2[r]	67.4[r]	70.7	101.8	111.4
41 Deposits at financial institutions	4,644.6	4,741.4	4,802.5	4,853.3	4,765.7	4,769.5	4,802.5	4,796.7[r]	4,790.9	4,843.1	4,853.3
42 Checkable deposits and currency	888.6	932.8	1,008.5	1,130.3	933.1	948.3	1,008.5	984.3[r]	1,032.3	1,071.6	1,130.3
43 Small time and savings deposits	2,265.4	2,325.3	2,342.0	2,279.3	2,351.5	2,339.7	2,342.0	2,340.9[r]	2,314.7	2,294.3	2,279.3
44 Large time deposits	615.4	548.7	487.9	409.0	532.6	517.1	487.9	469.7[r]	438.7	428.8	409.0
45 Money market fund shares	428.1	498.4	539.6	547.9	532.8	533.1	539.6	571.0	557.2	553.2	547.9
46 Security repurchase agreements	403.2	379.7	363.4	435.2	354.0	368.9	363.4	376.4	406.8	444.1	435.2
47 Foreign deposits	43.9	56.6	61.2	51.6	61.7	62.4	61.2	54.4[r]	41.3	51.1	51.6
48 Mutual fund shares	566.2	602.1	813.9[r]	1,056.5	683.7	744.2	813.9[r]	857.7[r]	935.5	977.4	1,056.5
49 Security credit	133.9	137.4	188.9	224.3	137.5	158.1	188.9	195.1	194.1	213.1	224.3
50 Trade debt	903.9	938.0	940.9[r]	992.1	909.4	935.3	940.9[r]	940.9[r]	945.3	974.6	992.1
51 Taxes payable	81.8	81.4	72.3[r]	77.1	65.8	71.9[r]	72.3[r]	74.2[r]	69.8	74.8	77.1
52 Miscellaneous	2,508.3	2,678.8	2,811.7[r]	2,921.0	2,699.2[r]	2,733.4[r]	2,811.7[r]	2,828.8[r]	2,875.3	2,915.2	2,921.0
53 **Total liabilities**	**25,188.3**	**26,577.2**	**28,562.1[r]**	**30,317.6**	**27,136.1[r]**	**27,644.8[r]**	**28,562.1[r]**	**28,803.3[r]**	**29,200.2**	**29,782.1**	**30,317.6**
Financial assets not included in liabilities (+)											
54 Gold and special drawing rights	21.0[r]	22.0[r]	22.3[r]	19.6	21.4[r]	21.8[r]	22.3[r]	22.0[r]	22.1	23.2	19.6
55 Corporate equities	3,819.7	3,506.6	4,630.0	5,127.7	4,104.7	4,338.5	4,630.0	4,739.7	4,678.1	4,860.5	5,127.7
56 Household equity in noncorporate business	2,524.9	2,449.4	2,367.8[r]	2,263.6	2,511.8[r]	2,495.2[r]	2,367.8[r]	2,373.5[r]	2,354.7	2,330.9	2,263.6
Floats not included in assets (−)											
57 U.S. government checking deposits	6.1	15.0	3.8	6.8	8.3	19.8	3.8	.9	1.4	4.0	6.8
58 Other checkable deposits	26.5	28.9	30.9	32.5	29.9	23.6	30.9	29.5[r]	32.6	23.3	32.5
59 Trade credit	−159.7	−148.0	−134.0[r]	−138.5	−157.7	−154.2	−134.0[r]	−135.2[r]	−154.7	−152.7	−138.5
Liabilities not identified as assets (−)											
60 Treasury currency	−4.3	−4.1	−4.8	−5.0	−4.7	−4.7	−4.8	−4.9	−4.9	−5.0	−5.0
61 Interbank claims	−31.0	−32.0	−4.2	−10.7	−9.9	−4.7	−4.2	−1.8	−4.0	−5.9	−10.7
62 Security repurchase agreements	11.5	−23.3	−12.9	27.1	−25.8	−10.6	−12.9	−10.1	11.6	36.5	27.1
63 Taxes payable	20.6	21.8	18.9[r]	28.9	11.8[r]	17.6[r]	18.9[r]	11.5[r]	18.0	24.4	28.9
64 Miscellaneous	−251.1[r]	−247.3[r]	−452.3[r]	−549.3	−242.3[r]	−300.8[r]	−452.3[r]	−443.0[r]	−455.7	−510.1	−549.3
65 **Totals identified to sectors as assets**	**31,935.2[r]**	**32,944.3[r]**	**36,136.8[r]**	**38,336.6**	**34,164.3[r]**	**34,914.2[r]**	**36,136.8[r]**	**36,491.8[r]**	**36,810.8**	**37,582.0**	**38,336.6**

1. Data in this table also appear in the Board's Z.1 (780) quarterly statistical release, tables L.6 through L.7. For ordering address, see inside front cover.

2. Excludes corporate equities and mutual fund shares.

2.10 NONFINANCIAL BUSINESS ACTIVITY Selected Measures

Monthly data seasonally adjusted, 1987=100 except as noted

Measure	1990	1991	1992	1992						1993		
				July	Aug.	Sept.	Oct.	Nov.[r]	Dec.[r]	Jan.[r]	Feb.	Mar.
1 **Industrial production**[1]	**109.2**	**107.1**	**108.7**	**109.4**	**109.1**	**108.9**	**109.7**	**110.4**	**111.0**	**111.4**	**112.0**	**112.0**
Market groupings												
2 Products, total	110.1	108.1	109.5	109.6	109.8	109.6	110.7	111.3	112.3	112.7	113.3	113.3
3 Final, total	110.9	109.6	111.1	111.0	111.5	111.2	112.4	113.1	114.2	114.6	115.2	115.2
4 Consumer goods	107.3	107.5	110.5[r]	110.4	110.8	110.7	111.9	112.6	113.4	113.4	114.2	114.0
5 Equipment	115.5	112.2	111.9	111.8	112.5	111.9	113.0	113.7	115.3	116.3	116.6	116.7
6 Intermediate	107.7	103.4	104.6	105.1	104.4	104.5	105.5	105.7	106.2	106.5	107.2	107.2
7 Materials	107.8	105.5	107.5[r]	109.0	108.1	107.9	108.2	109.0	109.0	109.3	110.0	110.0
Industry groupings												
8 Manufacturing	109.9	107.4	109.7	110.2	110.1	109.8	110.6	111.3	111.8	112.8	113.3	113.4
9 Capacity utilization, manufacturing (percent)[2]	82.3	78.2	77.8	78.1	77.9	77.5	77.9	78.3	78.5	79.0	79.2	79.1
10 Construction contracts[3]	95.3	89.7	92.8	89.0	90.0	89.0	104.0	92.0	90.0	100.0	95.0	n.a.
11 Nonagricultural employment, total[4]	107.4	106.0	106.1	106.3	106.2	106.2	106.2	106.3	106.4	106.5	106.9	106.9
12 Goods-producing, total	101.0	96.4	94.8	94.9	94.6	94.3	94.2	94.2	94.2	94.2	94.6	94.3
13 Manufacturing, total	100.5	97.0	95.6	95.9	95.4	95.2	94.9	95.0	94.9	95.1	95.2	95.2
14 Manufacturing, production worker	100.1	96.1	95.2	95.5	94.9	94.6	94.3	94.6	94.7	95.2	95.2	95.2
15 Service-producing	109.5	109.0	109.7	109.9	109.9	110.0	110.1	110.2	110.3	110.5	110.8	110.9
16 Personal income, total	122.7	127.0	133.0	132.8	133.0	133.6	135.3[r]	135.3	136.6	137.3	137.5	n.a.
17 Wages and salary disbursements	121.3	124.4	129.0	128.7	129.6	129.5	130.5	131.2	132.3	133.0	132.9	n.a.
18 Manufacturing	113.5	113.6	115.4	115.5	115.3	115.3	116.5	116.0	118.0	117.1	117.8	n.a.
19 Disposable personal income[5]	122.9	128.0	134.7	134.5	134.6	135.2	137.0[r]	136.8	138.2	138.7	139.0	n.a.
20 Retail sales[6]	120.2[r]	121.3[r]	127.1[r]	126.6[r]	127.3[r]	128.1[r]	130.7[r]	130.5	131.9	132.0	131.5	130.2
Prices[7]												
21 Consumer (1982–84=100)	130.7	136.2	140.3	140.5	140.9	141.3	141.8	142.0	141.9	142.6	143.1	143.6
22 Producer finished goods (1982=100)	119.2	121.7	123.2	123.7	123.6	123.3	124.4[r]	124.0	123.8	124.0	124.3	124.6

1. A major revision of the industrial production index and the capacity utilization rates was released in April 1990. See "Industrial Production: 1989 Developments and Historical Revision," *Federal Reserve Bulletin*, vol. 76 (April 1990), pp. 187–204.
2. Ratio of index of production to index of capacity. Based on data from the Federal Reserve, DRI McGraw-Hill, U.S. Department of Commerce, and other sources.
3. Index of dollar value of total construction contracts, including residential, nonresidential, and heavy engineering, from McGraw-Hill Information Systems Co., F.W. Dodge Division.
4. Based on data from U.S. Department of Labor, *Employment and Earnings*. Series covers employees only, excluding personnel in the armed forces.
5. Based on data from U.S. Department of Commerce, *Survey of Current Business*.
6. Based on data from U.S. Bureau of the Census, *Survey of Current Business*.
7. Based on data not seasonally adjusted. Seasonally adjusted data for changes in the price indexes can be obtained from the Bureau of Labor Statistics, U.S. Department of Labor, *Monthly Labor Review*.

NOTE. Basic data (not indexes) for series mentioned in notes 4, 5,and 6, and indexes for series mentioned in notes 3 and 7 can also be found in the *Survey of Current Business*.

Figures for industrial production for the latest month are preliminary, and many figures for the three months preceding the latest month have been revised. See "Recent Developments in Industrial Capacity and Utilization," *Federal Reserve Bulletin*, vol. 76 (June 1990), pp. 411–35.

2.11 LABOR FORCE, EMPLOYMENT, AND UNEMPLOYMENT

Thousands of persons; monthly data seasonally adjusted except as noted

Category	1990	1991	1992	1992 Aug.	1992 Sept.	1992 Oct.	1992 Nov.	1992 Dec.	1993 Jan.[r]	1993 Feb.	1993 Mar.
HOUSEHOLD SURVEY DATA											
1 **Noninstitutional population**[1]	**190,216**	**191,883**	**193,542**	**193,749**	**193,893**	**194,051**	**194,210**	**194,379**	**194,514**	**194,641**	**194,829**
2 Labor force (including Armed Forces)[1]	126,954	127,421	128,948	129,363	129,220	128,986	129,259	129,461	128,953	129,182	129,299
3 Civilian labor force	124,787	125,303	126,982	127,404	127,274	127,066	127,365	127,591	127,083	127,327	127,429
Employment											
4 Nonagricultural industries[2]	114,728	114,644	114,391	114,562	114,503	114,518	114,855	115,049	114,879	115,335	115,483
5 Agriculture	3,186	3,233	3,207	3,218	3,221	3,169	3,209	3,262	3,191	3,116	3,082
Unemployment											
6 Number	6,874	8,426	9,384	9,624	9,550	9,379	9,301	9,280	9,013	8,876	8,864
7 Rate (percent of civilian labor force)	5.5	6.7	7.4	7.6	7.5	7.4	7.3	7.3	7.1	7.0	7.0
8 Not in labor force	63,262	64,462	64,594	64,386	64,673	65,065	64,951	64,918	65,561	65,459	65,904
ESTABLISHMENT SURVEY DATA											
9 **Nonagricultural payroll employment**[3]	**109,782**	**108,310**	**108,434**	**108,485**	**108,497**	**108,571**	**108,646**	**108,752**[r]	**108,865**	**109,232**	**109,210**
10 Manufacturing	19,117	18,455	18,192	18,145	18,102	18,046	18,068	18,062[r]	18,092	18,112	18,103
11 Mining	710	691	635	626	620	623	622	619	616	604	607
12 Contract construction	5,133	4,685	4,594	4,591	4,574	4,601	4,590	4,582[r]	4,559	4,652	4,593
13 Transportation and public utilities	5,808	5,772	5,741	5,729	5,738	5,731	5,732	5,742[r]	5,763	5,765	5,772
14 Trade	25,877	25,328	25,120	25,070	25,079	25,115	25,092	25,132[r]	25,222	25,367	25,362
15 Finance	6,729	6,678	6,672	6,661	6,669	6,680	6,669	6,677	6,682	6,680	6,673
16 Service	28,130	28,323	28,903	28,981	29,065	29,152	29,188	29,253[r]	29,267	29,366	29,426
17 Government	18,304	18,380	18,578	18,682	18,650	18,623	18,685	18,685[r]	18,664	18,686	18,674

1. Persons sixteen years of age and older. Monthly figures are based on sample data collected during the calendar week that contains the twelfth day; annual data are averages of monthly figures. By definition, seasonality does not exist in population figures.
2. Includes self-employed, unpaid family, and domestic service workers.
3. Includes all full- and part-time employees who worked during, or received pay for, the pay period that includes the twelfth day of the month; excludes proprietors, self-employed persons, household and unpaid family workers, and members of the armed forces. Data are adjusted to the March 1984 benchmark, and only seasonally adjusted data are available at this time.

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

2.12 OUTPUT, CAPACITY, AND CAPACITY UTILIZATION[1]

Seasonally adjusted

Series	1992			1992				1992				1993
	Q2	Q3	Q4[r]	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4[r]	Q1
	Output (1987=100)				Capacity (percent of 1987 output)				Capacity utilization rate (percent)			
1 **Total industry**	**108.5**	**109.1**	**110.4**	**111.8**	**137.7**	**138.4**	**139.1**	**139.8**	**78.8**	**78.8**	**79.3**	**79.9**
2 Manufacturing	109.5	110.0	111.2	113.2	140.6	141.4	142.2	143.0	77.9	77.8	78.2	79.1
3 Primary processing	105.4	106.4	107.1	108.8	129.6	129.9	130.3	130.6	81.3	81.9	82.2	83.3
4 Advanced processing	111.4	111.7	113.2	115.2	145.6	146.7	147.7	148.8	76.5	76.2	76.6	77.4
5 Durable goods	108.4	108.8	110.3	113.0	144.4	145.2	146.0	146.8	75.0	74.9	75.6	77.0
6 Lumber and products	96.7	98.5	101.3	103.6	126.1	126.3	126.5	126.7	76.7	78.0	80.1	81.8
7 Primary metals	101.7	104.0	104.5	107.6	128.3	127.5	126.7	126.0	79.2	81.5	82.5	85.4
8 Iron and steel	101.6	104.6	106.7	110.0	132.7	131.2	129.8	128.5	76.6	79.7	82.2	85.6
9 Nonferrous	101.7	103.0	101.6	104.2	122.2	122.3	122.4	122.5	83.3	84.3	83.0	85.1
10 Nonelectrical machinery	125.7	128.8	132.5	140.1	165.9	167.4	168.9	170.6	75.8	76.9	78.5	82.2
11 Electrical machinery	111.8	112.6	113.7	116.4	149.1	150.4	151.6	152.9	75.0	74.9	74.9	76.1
12 Motor vehicles and parts	100.5	98.1	103.7	111.1	136.7	137.2	137.7	138.3	73.5	71.5	75.3	80.3
13 Aerospace and miscellaneous transportation equipment	96.8	94.9	93.1	89.9	140.9	141.5	142.1	142.7	68.7	67.1	65.5	63.0
14 Nondurable goods	110.9	111.6	112.4	113.3	135.6	136.5	137.4	138.2	81.7	81.8	81.9	82.0
15 Textile mill products	106.2	106.6	107.1	109.1	119.2	119.7	120.2	120.7	89.0	89.1	89.1	90.4
16 Paper and products	106.7	108.2	107.5	108.6	119.9	120.5	121.1	121.7	89.0	89.8	88.8	89.3
17 Chemicals and products	116.8	118.0	119.3	120.7	144.3	145.1	146.0	146.9	81.0	81.3	81.7	82.2
18 Plastics materials	129.7	132.4	126.3	148.7	150.5	152.2	154.0	83.7	86.2	87.0	82.0	85.3
19 Petroleum products	109.2	106.9	110.4	110.6	121.5	121.6	121.7	121.7	89.9	87.9	90.7	90.8
20 Mining	98.9	99.2	98.9	95.7	114.7	114.8	114.8	114.8	86.2	86.5	86.2	83.3
21 Utilities	107.4	109.4	112.4	113.4	129.8	130.1	130.4	130.7	82.7	84.1	86.2	86.8
22 Electric	110.3	113.2	115.5	116.2	126.0	126.4	126.8	127.1	87.6	89.5	91.1	91.4

Series	Previous cycle[2]		Latest cycle[3]		1992	1992					1993		
	High	Low	High	Low	Mar.	Aug.	Sept.	Oct.	Nov.	Dec.[r]	Jan.[r]	Feb.[r]	Mar.[p]
	Capacity utilization rate (percent)												
1 **Total industry**	**89.2**	**72.6**	**87.3**	**71.8**	**78.4**	**78.8**	**78.6**	**79.0**	**79.4**[r]	**79.6**	**79.8**	**80.1**	**79.9**
2 Manufacturing	88.9	70.8	87.3	70.0	77.5	77.9	77.5	77.9	78.3[r]	78.5	79.0	79.2	79.1
3 Primary processing	92.2	68.9	89.7	66.8	80.8	81.7	81.3	81.9	82.5[r]	82.2	83.0	83.5	83.5
4 Advanced processing	87.5	72.0	86.3	71.4	76.1	76.3	76.0	76.3	76.6	77.0	77.4	77.5	77.3
5 Durable goods	88.8	68.5	86.9	65.0	74.3	75.2	74.4	75.1	75.5[r]	76.0	76.7	77.2	77.1
6 Lumber and products	90.1	62.2	87.6	60.9	78.8	78.3	76.6	79.7	80.9[r]	79.6	82.5	81.7	81.1
7 Primary metals	100.6	66.2	102.4	46.8	78.7	81.8	80.1	82.0	83.1[r]	82.4	83.4	86.5	86.4
8 Iron and steel	105.8	66.6	110.4	38.3	76.7	79.5	78.8	81.6	82.6[r]	82.3	82.9	87.1	86.9
9 Nonferrous	92.9	61.3	90.5	62.2	81.8	85.2	82.2	82.7	83.8[r]	82.5	84.1	85.6	85.6
10 Nonelectrical machinery	96.4	74.5	92.1	64.9	74.5	77.3	76.9	77.4	78.0[r]	80.0	81.0	82.4	83.0
11 Electrical machinery	87.8	63.8	89.4	71.1	74.8	75.1	74.3	74.5	75.6[r]	74.8	75.4	76.4	76.7
12 Motor vehicles and parts	93.4	51.1	93.0	44.5	69.1	72.5	70.8	73.6	74.3[r]	77.9	81.4	80.2	79.4
13 Aerospace and miscellaneous transportation equipment	77.0	66.6	81.1	66.9	70.2	67.0	66.4	66.3	65.5[r]	64.8	64.1	62.9	62.0
14 Nondurable goods	87.9	71.8	87.0	76.9	81.7	81.6	81.7	81.7	82.0	81.9	82.1	82.0	81.8
15 Textile mill products	92.0	60.4	91.7	73.8	88.5	88.7	88.9	88.4	89.4[r]	89.5	91.3	90.4	89.6
16 Paper and products	96.9	69.0	94.2	82.0	88.5	88.2	90.0	87.8	88.9	89.6	89.1	88.6	90.0
17 Chemicals and products	87.9	69.9	85.1	70.1	79.9	81.1	81.4	81.4	82.1[r]	81.6	82.2	82.2	82.1
18 Plastics materials	102.0	50.6	90.9	63.4	85.0	86.0	85.1	82.8	84.1	79.1	85.2	85.3	85.4
19 Petroleum products	96.7	81.1	89.5	68.2	90.3	85.8	88.3	91.5	91.0	89.7	89.7	91.7	91.1
20 Mining	94.4	88.4	96.6	80.6	84.9	86.1	85.6	86.1	86.6[r]	85.8	85.4	82.8	81.8
21 Utilities	95.6	82.5	88.3	76.2	83.1	83.6	84.6	85.0	86.2[r]	87.5	84.3	87.7	88.3
22 Electric	99.0	82.7	88.3	78.7	88.1	89.2	89.9	89.8	91.0[r]	92.5	88.7	92.4	93.1

1. Data in this table also appear in the Board's G.17 (419) monthly statistical release. For ordering address, see inside front cover. For a detailed description of the series, see "Recent Developments in Industrial Capacity and Utilization," *Federal Reserve Bulletin*, vol. 76 (June 1990), pp. 411–35.

2. Monthly high, 1973; monthly low, 1975.

3. Monthly highs, 1978 through 1980; monthly lows, 1982.

2.13 INDUSTRIAL PRODUCTION Indexes and Gross Value[1]

Monthly data seasonally adjusted

Group	1987 proportion	1992 avg.	1992 Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.[r]	Dec.[r]	1993 Jan.[r]	Feb.[r]	Mar.[p]
			Index (1987 = 100)												
MAJOR MARKETS															
1 **Total index**	**100.0**	**108.7**	**107.6**	**108.1**	**108.9**	**108.5**	**109.4**	**109.1**	**108.9**	**109.7**	**110.4**	**111.0**	**111.4**	**112.0**	**112.0**
2 Products	60.8	109.5	108.5	109.0	109.7	109.0	109.6	109.8	109.6	110.7	111.3	112.3	112.7	113.3	113.3
3 Final products	46.0	111.1	109.8	110.6	111.4	110.5	111.0	111.5	111.2	112.4	113.1	114.2	114.6	115.2	115.2
4 Consumer goods, total	26.0	110.5	109.3	110.1	110.8	109.6	110.4	110.8	110.7	111.9	112.6	113.4	113.4	114.2	114.0
5 Durable consumer goods	5.6	107.9	106.2	107.9	111.1	109.2	108.6	109.2	106.9	108.1	108.9	111.1	113.3	114.3	114.3
6 Automotive products	2.5	106.6	103.6	106.5	110.6	108.0	106.6	106.8	104.5	108.8	110.2	114.3	119.4	119.0	118.0
7 Autos and trucks	1.5	102.0	95.7	102.5	107.8	104.0	100.5	100.6	98.2	105.9	107.2	116.5	123.9	120.3	118.2
8 Autos, consumer	.9	90.0	81.9	93.1	98.6	97.6	92.3	87.2	88.1	88.5	89.4	97.7	102.3	101.8	100.5
9 Trucks, consumer	.6	122.1	118.8	118.3	123.3	114.8	114.3	123.1	115.1	135.1	137.1	148.1	160.3	151.4	147.9
10 Auto parts and allied goods	1.0	113.6	115.5	112.5	114.8	114.0	115.7	116.2	114.0	113.3	114.7	111.0	112.5	116.9	117.7
11 Other	3.1	108.9	108.3	109.1	111.5	110.2	110.3	111.1	108.9	107.6	107.8	108.6	108.6	110.6	111.4
12 Appliances, A/C, and TV	.8	104.7	103.5	103.4	107.4	106.2	102.3	110.6	108.5	103.8	103.8	104.0	102.6	108.7	113.1
13 Carpeting and furniture	.9	102.5	102.5	104.4	105.9	103.2	103.8	103.6	100.9	100.5	101.4	102.3	104.5	105.8	105.2
14 Miscellaneous home goods	1.4	115.3	114.7	115.2	117.3	116.9	118.8	116.1	114.2	114.3	114.1	115.2	114.5	114.7	114.4
15 Nondurable consumer goods	20.4	111.2	110.2	110.7	110.7	109.7	110.8	111.2	111.7	112.9	113.7	114.0	113.4	114.2	114.0
16 Foods and tobacco	9.1	108.5	107.8	107.6	107.7	107.2	108.6	110.1	108.9	109.8	110.1	109.9	109.9	110.6	110.1
17 Clothing	2.6	95.2	95.1	95.3	96.4	95.5	96.8	95.0	95.5	94.9	95.4	96.0	95.6	94.9	95.3
18 Chemical products	3.5	122.6	119.4	120.8	121.4	121.6	121.5	122.0	124.1	126.8	128.3	129.1	128.7	128.5	128.3
19 Paper products	2.5	124.2	124.6	125.1	124.3	121.7	121.9	121.8	124.2	124.1	126.1	126.0	125.6	125.8	125.9
20 Energy	2.7	108.1	107.0	108.9	107.2	104.8	107.4	106.2	108.1	111.5	112.2	114.0	110.1	114.7	114.6
21 Fuels	.7	104.7	103.7	105.1	104.0	104.4	105.3	99.0	103.5	110.3	108.0	105.7	106.1	109.5	106.7
22 Residential utilities	2.0	109.4	108.2	110.3	108.4	105.0	108.2	108.9	109.7	112.0	113.7	117.1	111.6	116.7	117.5
23 Equipment	20.0	111.9	110.4	111.3	112.3	111.6	111.8	112.5	111.9	113.0	113.7	115.3	116.3	116.6	116.7
24 Business equipment	13.9	124.5	121.5	123.0	124.5	124.1	124.4	125.9	125.4	126.8	127.8	130.2	131.8	133.0	133.4
25 Information processing and related	5.6	141.2	136.0	137.9	139.2	140.4	141.9	143.5	143.5	145.7	146.8	149.9	152.1	155.2	157.0
26 Office and computing	1.9	176.8	164.9	168.2	170.5	174.0	178.0	182.0	184.0	187.0	189.0	198.5	205.0	214.1	...
27 Industrial	4.0	102.3	101.3	101.7	103.4	102.9	103.4	102.7	101.6	102.0	103.1	104.5	105.1	105.5	105.4
28 Transit	2.5	131.2	128.9	131.7	133.3	131.8	128.7	132.6	130.4	133.0	134.1	136.7	140.2	138.0	136.3
29 Autos and trucks	1.2	101.2	95.0	101.3	105.6	101.7	98.1	101.3	99.1	105.2	107.7	114.4	121.4	119.8	118.1
30 Other	1.9	114.1	112.2	113.2	115.0	111.5	112.2	114.4	115.8	115.5	115.9	118.0	118.2	119.3	120.1
31 Defense and space equipment	5.4	82.9	85.6	84.7	84.2	83.6	82.7	81.8	81.1	80.5	79.7	78.9	78.4	77.5	77.1
32 Oil and gas well drilling	.6	78.3	76.2	79.2	79.2	74.6	78.6	75.0	74.4	80.2	85.2	88.5	84.7	76.6	72.2
33 Manufactured homes	.2	108.8	98.7	100.7	100.3	97.1	112.0	106.1	111.2	119.9	127.1	138.0	143.0	141.3	...
34 Intermediate products, total	14.7	104.6	104.4	103.9	104.4	104.4	105.1	104.4	104.5	105.5	105.7	106.2	106.5	107.2	107.2
35 Construction supplies	6.0	97.4	96.7	96.5	97.8	97.2	98.6	98.5	97.1	98.5	98.8	98.4	99.5	100.7	100.5
36 Business supplies	8.7	109.5	109.7	109.0	109.0	109.4	109.7	108.5	109.6	110.4	110.5	111.6	111.4	111.7	111.9
37 Materials	39.2	107.5	106.1	106.8	107.7	107.6	109.0	108.1	107.9	108.2	109.0	109.0	109.3	110.0	110.0
38 Durable goods materials	19.4	109.9	108.3	108.7	110.4	110.2	111.2	111.1	109.9	110.9	112.0	112.1	113.4	114.4	114.4
39 Durable consumer parts	4.2	101.0	97.9	99.3	102.5	102.9	101.8	103.9	102.3	103.5	103.8	104.0	104.8	105.2	105.0
40 Equipment parts	7.3	116.3	115.1	114.7	116.2	116.2	117.5	117.0	116.4	117.2	118.7	119.1	121.0	122.3	122.5
41 Other	7.9	108.8	107.5	108.1	109.2	108.7	110.2	109.5	108.1	109.1	110.2	109.9	111.0	112.1	111.8
42 Basic metal materials	2.8	108.3	106.3	106.3	108.3	107.7	111.5	110.9	108.1	108.5	111.3	108.8	109.6	111.5	111.2
43 Nondurable goods materials	9.0	109.7	108.9	109.4	109.7	110.4	111.7	110.3	110.5	109.7	110.6	110.2	111.6	111.7	112.5
44 Textile materials	1.2	102.6	102.0	103.2	102.9	102.3	103.9	102.9	103.9	103.3	103.8	102.7	104.7	104.4	103.4
45 Pulp and paper materials	1.9	109.8	107.8	109.2	107.8	110.8	111.8	108.9	112.7	109.6	111.0	113.2	110.3	111.1	114.4
46 Chemical materials	3.8	110.2	109.3	109.9	111.2	110.9	113.4	111.9	110.9	110.2	111.1	109.0	112.0	112.5	113.2
47 Other	2.1	112.5	112.7	112.2	112.4	113.4	112.8	112.6	111.5	112.6	112.9	114.1	115.6	114.9	114.6
48 Energy materials	10.9	101.2	100.1	101.3	101.3	100.6	102.9	100.9	102.0	102.0	102.4	102.3	100.1	100.6	100.3
49 Primary energy	7.2	100.3	98.2	99.8	99.7	99.6	102.3	101.4	101.8	102.1	102.3	101.9	99.9	98.7	97.9
50 Converted fuel materials	3.7	103.0	103.8	104.1	104.3	102.6	104.1	100.0	102.5	101.7	102.4	103.1	100.5	104.4	104.9
SPECIAL AGGREGATES															
51 Total excluding autos and trucks	97.3	108.9	107.9	108.3	109.0	108.6	109.6	109.3	109.2	109.8	110.5	110.9	111.0	111.8	111.8
52 Total excluding motor vehicles and parts	95.3	109.2	108.2	108.6	109.2	108.8	109.9	109.6	109.5	110.1	110.8	111.2	111.3	112.0	112.1
53 Total excluding office and computing machines	97.5	107.0	106.1	106.6	107.4	106.8	107.6	107.3	107.0	107.8	108.4	108.8	109.0	109.4	109.3
54 Consumer goods excluding autos and trucks	24.5	111.0	110.2	110.6	110.9	109.9	111.0	111.4	111.4	112.2	113.0	113.2	112.7	113.8	113.8
55 Consumer goods excluding energy	23.3	110.7	109.6	110.3	111.2	110.1	110.7	111.3	111.0	111.9	112.7	113.3	113.7	114.1	114.0
56 Business equipment excluding autos and trucks	12.7	126.8	124.1	125.2	126.4	126.3	127.0	128.3	127.9	128.9	129.7	131.7	132.9	134.2	134.9
57 Business equipment excluding office and computing equipment	12.0	116.1	114.5	115.7	117.1	116.1	115.8	116.8	115.9	117.0	117.9	119.1	120.0	119.9	119.7
58 Materials excluding energy	28.4	109.8	108.5	108.9	110.2	110.3	111.3	110.8	110.1	110.5	111.6	111.5	112.8	113.6	113.8

2.13—Continued

Group	SIC code[2]	1987 proportion	1992 avg.	1992 Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.[r]	Dec.[r]	1993 Jan.[r]	Feb.[r]	Mar.[p]
				Index (1987 = 100)												
MAJOR INDUSTRIES																
1 **Total index**	...	**100.0**	**108.7**	**107.6**	**108.1**	**108.9**	**108.5**	**109.4**	**109.1**	**108.9**	**109.7**	**110.4**	**111.0**	**111.4**	**112.0**	**112.0**
2 Manufacturing	...	84.4	109.7	108.5	109.0	109.9	109.6	110.2	110.1	109.8	110.6	111.3	111.8	112.8	113.3	113.4
3 Primary processing	...	26.7	105.7	104.5	105.0	105.6	105.6	107.3	106.2	105.7	106.6	107.4	107.2	108.3	109.0	109.1
4 Advanced processing	...	57.7	111.5	110.3	110.8	111.9	111.4	111.6	112.0	111.7	112.5	113.1	114.0	114.8	115.3	115.4
5 Durable goods	...	47.3	108.5	107.0	107.6	109.1	108.5	109.0	109.2	108.2	109.5	110.2	111.2	112.4	113.3	113.4
6 Lumber and products	24	2.0	98.6	99.2	97.2	97.4	95.4	99.8	98.9	96.7	100.8	102.3	100.7	104.4	103.5	102.8
7 Furniture and fixtures	25	1.4	100.2	98.6	101.1	103.3	100.3	101.0	101.7	100.5	99.6	99.5	100.5	101.4	103.4	103.3
8 Clay, glass, and stone products	32	2.5	96.2	95.0	95.6	96.7	96.6	97.1	96.4	96.1	97.7	97.8	98.3	98.2	99.0	99.2
9 Primary metals	33	3.3	103.0	101.4	100.9	102.0	102.1	105.6	104.3	102.0	104.2	105.3	104.2	105.2	109.0	108.6
10 Iron and steel	331,2	1.9	104.1	102.5	100.9	102.2	101.8	106.4	104.4	103.0	106.3	107.2	106.5	106.8	111.9	111.2
11 Raw steel	...	.1	101.2	98.8	99.9	98.5	101.5	105.3	101.9	99.8	101.7	101.5	100.4	106.6	106.9	...
12 Nonferrous	333–6,9	1.4	101.6	99.9	100.9	101.8	102.5	104.4	104.2	100.5	101.2	102.6	101.0	103.0	104.9	104.9
13 Fabricated metal products	34	5.4	101.8	100.0	100.6	102.2	102.2	102.6	102.5	101.3	102.9	103.4	104.5	105.2	105.2	105.2
14 Nonelectrical machinery	35	8.6	127.3	122.9	124.1	126.7	126.4	127.8	129.3	129.1	130.4	131.7	135.5	137.8	140.6	142.0
15 Office and computing machines	357	2.5	176.8	164.9	168.2	170.5	174.0	178.0	182.0	184.0	187.0	189.0	198.5	205.0	214.1	218.3
16 Electrical machinery	36	8.6	111.9	110.9	111.0	112.3	112.2	112.6	113.0	112.1	112.7	114.6	113.7	114.9	116.8	117.6
17 Transportation equipment	37	9.8	97.2	96.5	98.0	99.6	98.2	96.7	97.0	95.6	97.5	97.5	99.4	101.3	99.8	98.7
18 Motor vehicles and parts	371	4.7	98.7	94.2	98.5	102.7	100.4	97.7	99.4	97.2	101.2	102.4	107.4	112.5	111.0	109.9
19 Autos and light trucks	...	2.3	100.2	93.7	101.1	106.5	103.0	99.3	98.6	96.7	103.1	104.6	113.7	120.7	117.6	115.6
20 Aerospace and miscellaneous transportation equipment	372–6,9	5.1	96.0	98.6	97.4	96.8	96.3	95.7	94.9	94.1	94.1	93.0	92.2	91.3	89.7	88.6
21 Instruments	38	3.3	118.1	118.6	119.0	119.8	118.5	118.5	118.2	118.1	117.8	116.8	116.8	116.2	116.2	116.4
22 Miscellaneous	39	1.2	119.5	120.0	118.9	118.4	117.8	120.4	118.2	118.6	119.7	120.0	120.3	118.8	118.1	118.0
23 Nondurable goods	...	37.2	111.2	110.4	110.7	110.9	111.0	111.7	111.3	111.8	112.0	112.7	112.7	113.2	113.4	113.3
24 Foods	20	8.8	110.1	110.2	109.6	109.3	109.0	109.8	110.6	110.2	111.2	111.5	111.1	111.8	112.1	111.9
25 Tobacco products	21	1.0	105.3	101.3	101.0	102.5	103.6	106.6	115.9	110.5	107.6	107.7	108.1	108.7	108.5	106.3
26 Textile mill products	22	1.8	106.0	105.3	106.3	106.8	105.3	107.1	106.1	106.6	106.1	107.4	107.7	110.0	109.1	108.3
27 Apparel products	23	2.4	97.7	97.8	98.0	99.0	98.1	99.4	97.6	97.6	97.2	97.8	97.9	97.5	97.3	97.6
28 Paper and products	26	3.6	107.1	105.8	107.0	105.8	107.3	109.6	106.3	108.6	106.2	107.6	108.7	108.3	107.8	109.7
29 Printing and publishing	27	6.4	113.3	113.8	113.7	113.4	113.0	112.3	111.4	113.2	113.4	113.6	114.6	114.3	114.4	114.2
30 Chemicals and products	28	8.6	117.1	114.8	115.8	117.0	117.5	118.0	117.6	118.3	118.7	119.9	119.3	120.5	120.8	120.9
31 Petroleum products	29	1.3	108.6	109.7	110.3	108.5	108.9	109.1	104.3	107.4	111.3	110.7	109.1	109.2	111.7	110.9
32 Rubber and plastic products	30	3.0	117.2	115.4	116.5	117.1	117.3	118.5	119.0	117.3	118.3	119.3	119.3	119.7	120.5	120.1
33 Leather and products	31	.3	85.3	82.9	84.1	86.2	86.2	87.1	84.8	86.4	87.0	86.0	86.9	87.1	87.3	87.1
34 Mining	...	7.9	98.8	97.5	99.1	99.7	98.0	100.6	98.8	98.3	98.8	99.4	98.5	98.0	95.1	94.0
35 Metal	10	.3	158.0	155.8	154.2	166.4	154.0	163.7	165.6	158.6	155.7	167.1	159.7	156.9	157.8	157.8
36 Coal	11,12	1.2	105.5	103.0	104.0	107.6	98.6	112.0	107.5	103.7	103.9	106.8	106.7	110.1	103.4	99.2
37 Oil and gas extraction	13	5.7	93.2	91.9	94.2	93.4	93.9	94.0	92.4	93.0	93.9	93.4	92.6	91.3	88.8	88.1
38 Stone and earth minerals	14	.7	105.8	107.4	105.9	108.0	105.6	106.2	106.4	105.2	104.9	105.5	104.7	105.6	104.1	104.8
39 Utilities	...	7.6	108.6	107.7	108.2	107.3	106.7	109.3	108.8	110.2	110.7	112.4	114.2	110.1	114.6	115.6
40 Electric	491,3PT	6.0	111.6	110.7	111.0	110.2	109.7	113.0	112.7	113.8	113.7	115.3	117.4	112.6	117.4	118.5
41 Gas	492,3PT	1.6	97.6	96.7	97.7	96.6	95.3	95.4	94.1	97.0	99.6	101.3	102.4	100.5	104.1	104.9
SPECIAL AGGREGATES																
42 Manufacturing excluding motor vehicles and parts	...	79.8	110.3	109.3	109.6	110.3	110.1	110.9	110.7	110.5	111.1	111.8	112.1	112.8	113.4	113.6
43 Manufacturing excluding office and computing machines	...	82.0	107.6	106.8	107.2	108.1	107.6	108.2	108.0	107.6	108.3	109.0	109.2	110.0	110.3	110.2
		Gross value (billions of 1982 dollars, annual rates)														
MAJOR MARKETS																
44 **Products, total**	...	**1,734.8**	**1,932.5**	**1,902.8**	**1,918.7**	**1,935.5**	**1,920.1**	**1,936.2**	**1,935.9**	**1,937.0**	**1,969.8**	**1,981.4**	**2,001.9**	**2,024.1**	**2,041.6**	**2,040.3**
45 Final	...	1,350.9	1,529.8	1,501.5	1,518.2	1,532.1	1,519.1	1,530.4	1,532.8	1,534.6	1,563.8	1,572.2	1,593.5	1,612.8	1,627.8	1,625.2
46 Consumer goods	...	833.4	907.9	896.2	905.6	912.4	901.3	909.3	905.3	907.1	928.2	931.3	935.5	943.4	950.8	945.3
47 Equipment	...	517.5	621.9	605.3	612.7	619.7	617.8	621.0	627.5	627.5	635.6	640.9	658.0	669.5	677.0	679.9
48 Intermediate	...	384.0	402.7	401.2	400.5	403.4	401.1	405.8	403.1	402.4	406.0	409.1	408.5	411.3	413.8	415.1

1. Data in this table also appear in the Board's G.17 (419) monthly statistical release. For ordering address, see inside front cover.

A major revision of the industrial production index and the capacity utilization rates was released in April 1990. See "Industrial Production: 1989 Developments and Historical Revision," *Federal Reserve Bulletin*, vol. 76 (April 1990), pp. 187–204.

2. Standard industrial classification.

2.14 HOUSING AND CONSTRUCTION

Monthly figures at seasonally adjusted annual rates except as noted

Item	1990	1991	1992[r]	1992 May	June	July	Aug.	Sept.	Oct.[r]	Nov.[r]	Dec.[r]	1993 Jan.	Feb.
	Private residential real estate activity (thousands of units except as noted)												
NEW UNITS													
1 Permits authorized	1,111	949	1,097	1,054	1,032	1,080	1,076	1,125	1,139	1,126	1,201	1,180	1,138
2 One-family	794	754	913	879	872	879	877	913	959	955	1,044	997	955
3 Two-or-more-family	317	195	184	175	160	201	199	212	180	171	157	183	183
4 Started	1,193	1,014	1,200	1,197	1,141	1,106	1,229	1,218	1,226	1,226	1,286	1,171	1,189
5 One-family	895	840	1,030	1,019	994	961	1,038	1,045	1,079	1,089	1,133	1,051	1,040
6 Two-or-more-family	298	174	169	178	147	145	191	173	147	137	153	120	149
7 Under construction at end of period[1]	711	606	612	650[r]	641[r]	628	633	637[r]	645	641	644	646	644
8 One-family	449	434	473	483[r]	481[r]	474[r]	479[r]	485[r]	493	498	501	507	510
9 Two-or-more-family	262	173	140	167[r]	160	154[r]	154[r]	152	152	143	143	139	134
10 Completed	1,308	1,091	1,158	1,194[r]	1,181[r]	1,234[r]	1,133[r]	1,128[r]	1,137	1,229	1,227	1,130	1,264
11 One-family	966	838	964	1,002[r]	979[r]	1,026[r]	945[r]	942[r]	964	1,002	1,016	973	1,054
12 Two-or-more-family	342	253	194	192[r]	202	208[r]	188[r]	186[r]	173	227	211	157	210
13 Mobile homes shipped	188	171	210	194	194	210	202	217	228	244	266	267	262
Merchant builder activity in one-family units													
14 Number sold	535	507	609	552[r]	584[r]	622[r]	625[r]	672[r]	637	615	652	569	595
15 Number for sale at end of period[1]	321	284[r]	265	273[r]	273[r]	271	270[r]	267[r]	264	262	265	267	271
Price of units sold (thousands of dollars)[2]													
16 Median	122.3	120.0	121.2	113.0	124.5	118.0	123.5	119.5	125.0	128.9	125.0	118.0	126.7
17 Average	149.0	147.0	144.7	146.0	146.6	137.7	145.3	142.2	148.4	147.2	144.0	139.9	146.3
EXISTING UNITS (one-family)													
18 Number sold	3,211	3,219	3,520	3,450[r]	3,320[r]	3,380[r]	3,340[r]	3,380[r]	3,710	3,860	4,040	3,780	3,460
Price of units sold (thousands of dollars)[2]													
19 Median	95.2	99.7	103.6	103.1[r]	105.5[r]	102.8[r]	105.0[r]	103.5[r]	103.4	102.7	104.2	103.1	103.6
20 Average	118.3	127.4	130.8	131.0[r]	133.9[r]	132.2	132.4[r]	131.0	129.3	128.8	131.0	129.4	129.6
	Value of new construction (millions of dollars)[3]												
CONSTRUCTION													
21 **Total put in place**	**442,066**	**400,955**	**426,657**	**427,980**	**426,730**	**425,700**	**419,598**	**429,291**	**432,250**	**436,140**	**439,948**	**437,897**	**438,384**
22 Private	334,153	290,707	308,246	306,999	312,182	305,848	301,984	308,813	315,855	317,451	320,720	324,415	324,133
23 Residential	182,856	157,837	184,127	182,892	184,630	181,162	184,201	186,343	192,553	194,801	198,538	201,198	200,650
24 Nonresidential, total	151,297	132,870	124,119	124,107	127,552	124,686	117,783	122,470	123,302	122,650	122,182	123,217	123,483
25 Industrial buildings	23,849	22,281	20,173	21,008	20,285	20,594	17,862	19,019	18,646	19,083	18,721	18,661	18,567
26 Commercial buildings	62,866	48,482	40,417	39,643	43,310	39,988	37,010	39,333	40,195	40,379	38,326	39,331	39,173
27 Other buildings	21,591	20,797	21,514	21,993	21,991	22,228	21,518	22,068	21,545	21,542	21,370	20,952	22,646
28 Public utilities and other	42,991	41,310	42,015	41,463	41,966	41,876	41,393	42,050	42,916	41,646	43,765	44,273	43,097
29 Public	107,909	110,247	118,408	120,981	114,548	119,853	117,614	120,478	116,395	118,689	119,229	113,481	114,251
30 Military	2,664	1,837	2,484	2,668	2,503	2,372	2,438	3,172	2,438	2,612	2,483	2,482	2,424
31 Highway	31,154	29,918	32,759	32,633	31,496	32,682	33,451	34,651	32,056	34,636	31,237	29,694	30,770
32 Conservation and development	4,607	4,958	5,978	5,767	5,889	5,772	5,382	6,364	5,630	6,210	8,237	5,720	6,678
33 Other	69,484	73,534	77,187	79,913	74,660	79,027	76,343	76,291	76,271	75,231	77,272	75,585	74,379

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

SOURCE. 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 17,000 jurisdictions beginning in 1984.

2.15 CONSUMER AND PRODUCER PRICES

Percentage changes based on seasonally adjusted data except as noted

Item	Change from 12 months earlier		Change from 3 months earlier (annual rate)				Change from 1 month earlier					Index level, Mar. 1993[1]
	1992 Mar.	1993 Mar.	1992			1993	1992		1993[1]			
			June	Sept.	Dec.	Mar.	Nov.	Dec.	Jan.	Feb.	Mar.	
CONSUMER PRICES[2] (1982–84=100)												
1 **All items**	**3.2**	**3.1**	**2.6**	**2.6**	**3.2**	**4.0**	**.2**	**.1**	**.5**	**.3**	**.1**	**143.6**
2 Food	1.7	1.4	−1.2	3.2	1.4	2.6	.1	.3	.4	.1	.1	140.1
3 Energy items	−.8	3.6	8.6	1.2	1.9	3.1	.2	−.2	.5	−.4	.7	102.5
4 All items less food and energy	3.9	3.4	2.8	2.5	3.8	4.3	.3	.2	.5	.5	.1	151.4
5 Commodities	3.1	2.6	2.5	1.8	1.5	4.6	.1	−.1	.5	.5	.1	135.5
6 Services	4.2	3.7	3.1	2.9	4.7	4.4	.4	.3	.4	.4	.2	160.5
PRODUCER PRICES (1982=100)												
7 Finished goods	1.1	2.0	3.3	1.3	−.3	3.9	−.2[r]	.0[r]	.2	.4	.4	124.6
8 Consumer foods	−1.5	1.1	−.6	4.3	2.9	−1.9	−.6[r]	1.2[r]	−.9	−.1	.5	124.6
9 Consumer energy	−1.5	4.3	16.6	−3.5	−9.8	16.6	−1.3[r]	−2.3	.9	1.7	1.3	77.6
10 Other consumer goods	2.9	2.0	2.4	1.5	.9	3.2	.2	.1	.4	.3	.1	139.4
11 Capital equipment	2.1	1.6	.9	1.2	.3	3.8	.2[r]	.1[r]	.3	.5	.2	130.9
Intermediate materials												
12 Excluding foods and feeds	−.6	2.2	5.0	.7	−1.4	4.6	−.2[r]	.1[r]	.3	.5	.3	116.2
13 Excluding energy	−.2	1.8	1.7	1.3	−.3	4.3	.0[r]	.2	.3	.5	.2	123.8
Crude materials												
14 Foods	−2.5	.9	2.7	−4.8	4.3	1.9	−.9[r]	1.0	.3	.1	.1	108.2
15 Energy	−6.2	7.8	51.5	19.8	−20.2	−6.9	1.1[r]	−5.5[r]	.0	−2.5	.8	77.8
16 Other	−3.1	8.0	4.8	2.2	1.5	25.4	−.5[r]	2.1[r]	3.1	2.2	.4	138.4

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

SOURCE. Bureau of Labor Statistics.

2.16 GROSS DOMESTIC PRODUCT AND INCOME

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

Account	1990	1991	1992[r]	1991	1992			
				Q4	Q1	Q2	Q3	Q4[r]
GROSS DOMESTIC PRODUCT								
1 **Total**	**5,522.2**	**5,677.5**	**5,950.7**	**5,753.3**	**5,840.2**	**5,902.2**	**5,978.5**	**6,081.8**
By source								
2 Personal consumption expenditures	3,748.4	3,887.7	4,095.8	3,942.9	4,022.8	4,057.1	4,108.7	4,194.8
3 Durable goods	464.3	446.1	480.4	450.4	469.4	470.6	482.5	499.1
4 Nondurable goods	1,224.5	1,251.5	1,290.7	1,251.4	1,274.1	1,277.5	1,292.8	1,318.6
5 Services	2,059.7	2,190.1	2,324.7	2,241.1	2,279.3	2,309.0	2,333.3	2,377.1
6 Gross private domestic investment	799.5	721.1	770.4	736.1	722.4	773.2	781.6	804.3
7 Fixed investment	793.2	731.3	766.0	726.9	738.2	765.1	766.6	794.0
8 Nonresidential	577.6	541.1	548.2	528.7	531.0	550.3	549.6	562.1
9 Structures	201.1	180.1	168.4	169.7	170.1	170.3	166.1	167.0
10 Producers' durable equipment	376.5	360.9	379.9	358.9	360.8	380.0	383.5	395.1
11 Residential structures	215.6	190.3	217.7	198.2	207.2	214.8	217.0	231.9
12 Change in business inventories	6.3	−10.2	4.4	9.2	−15.8	8.1	15.0	10.3
13 Nonfarm	3.3	−10.3	2.2	14.5	−13.3	6.4	9.7	6.2
14 Net exports of goods and services	−68.9	−21.8	−30.4	−16.0	−8.1	−37.1	−36.0	−40.5
15 Exports	557.0	598.2	636.3	622.9	628.1	625.4	639.0	652.7
16 Imports	625.9	620.0	666.7	638.9	636.2	662.5	675.0	693.2
17 Government purchases of goods and services	1,043.2	1,090.5	1,114.9	1,090.3	1,103.1	1,109.1	1,124.2	1,123.3
18 Federal	426.4	447.3	449.1	440.8	445.0	444.8	455.2	451.6
19 State and local	616.8	643.2	665.8	649.5	658.0	664.3	669.0	671.7
By major type of product								
20 Final sales, total	5,515.9	5,687.7	5,946.3	5,744.2	5,855.9	5,894.1	5,963.5	6,071.5
21 Goods	2,160.1	2,192.8	2,260.3	2,188.4	2,233.6	2,233.2	2,258.4	2,316.1
22 Durable	920.6	907.6	943.9	905.7	923.6	932.3	943.8	975.8
23 Nondurable	1,239.5	1,285.1	1,316.4	1,282.7	1,310.0	1,300.8	1,314.6	1,340.3
24 Services	2,846.4	3,030.3	3,197.1	3,090.3	3,142.2	3,173.4	3,217.8	3,255.1
25 Structures	509.4	464.7	488.8	465.5	480.1	487.6	487.3	500.3
26 Change in business inventories	6.3	−10.2	4.4	9.2	−15.8	8.1	15.0	10.3
27 Durable goods	−.9	−19.3	−3.5	−8.1	−19.3	9.5	2.7	−6.9
28 Nondurable goods	7.2	9.0	7.9	17.3	3.5	−1.4	12.3	17.2
MEMO								
29 **Total GDP in 1987 dollars**	**4,877.5**	**4,821.0**	**4,922.6**	**4,838.5**	**4,873.7**	**4,892.4**	**4,933.7**	**4,990.8**
NATIONAL INCOME								
30 **Total**	**4,468.3**	**4,544.2**	**4,744.1**	**4,599.1**	**4,679.4**	**4,716.5**	**4,719.6**	**4,860.7**
31 Compensation of employees	3,291.2	3,390.8	3,525.2	3,433.8	3,476.3	3,506.3	3,534.3	3,583.7
32 Wages and salaries	2,742.9	2,812.2	2,916.6	2,845.0	2,877.6	2,901.3	2,923.5	2,963.9
33 Government and government enterprises	514.8	543.5	562.5	546.4	554.6	561.4	564.3	569.6
34 Other	2,228.0	2,268.7	2,354.1	2,298.6	2,323.0	2,339.9	2,359.1	2,394.3
35 Supplement to wages and salaries	548.4	578.7	608.6	588.7	598.7	605.0	610.8	619.8
36 Employer contributions for social insurance	277.4	290.4	302.9	293.7	299.4	301.5	302.9	307.6
37 Other labor income	271.0	288.3	305.7	295.0	299.2	303.6	307.9	312.2
38 Proprietors' income[1]	366.9	368.0	404.5	377.9	393.6	398.4	397.4	428.4
39 Business and professional[1]	325.2	332.2	364.9	340.0	353.6	359.9	365.9	380.4
40 Farm[1]	41.7	35.8	39.5	37.9	40.1	38.5	31.5	48.1
41 Rental income of persons[2]	−12.3	−10.4	4.7	−6.6	−4.5	3.3	6.4	13.6
42 Corporate profits[1]	361.7	346.3	394.5	347.1	384.0	388.4	374.1	431.3
43 Profits before tax[3]	355.4	334.7	372.3	332.3	366.1	376.8	354.1	392.2
44 Inventory valuation adjustment	−14.2	3.1	−7.4	.7	−5.4	−15.5	−9.7	1.0
45 Capital consumption adjustment	20.5	8.4	29.5	14.1	23.3	27.0	29.7	38.1
46 Net interest	460.7	449.5	415.2	446.9	430.0	420.0	407.3	403.6

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

2.17 PERSONAL INCOME AND SAVING

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

Account	1990	1991	1992[r]	1991	1992			
				Q4	Q1	Q2	Q3	Q4[r]
PERSONAL INCOME AND SAVING								
1 **Total personal income**	**4,664.2**	**4,828.3**	**5,058.1**	**4,907.2**	**4,980.5**	**5,028.9**	**5,062.0**	**5,160.9**
2 Wage and salary disbursements	2,742.8	2,812.2	2,918.1	2,845.0	2,877.6	2,901.3	2,923.5	2,969.9
3 Commodity-producing industries	745.6	737.4	743.2	741.5	736.8	743.1	742.4	750.6
4 Manufacturing	556.1	556.9	565.7	563.9	559.9	564.7	565.5	572.8
5 Distributive industries	634.6	647.4	666.8	652.9	660.9	662.9	667.7	675.8
6 Service industries	847.8	883.9	945.5	904.3	925.3	933.9	949.1	973.9
7 Government and government enterprises	514.8	543.6	562.5	546.4	554.6	561.4	564.3	569.6
8 Other labor income	271.0	288.3	305.7	295.0	299.2	303.6	307.9	312.2
9 Proprietors' income[1]	366.9	368.0	404.5	377.9	393.6	398.4	397.4	428.4
10 Business and professional[1]	325.2	332.2	364.9	340.0	353.6	359.9	365.9	380.4
11 Farm[1]	41.7	35.8	39.5	37.9	40.1	38.5	31.5	48.1
12 Rental income of persons[2]	−12.3	−10.4	4.7	−6.6	−4.5	3.3	6.4	13.6
13 Dividends	140.3	137.0	139.3	134.3	133.9	136.6	141.0	145.8
14 Personal interest income	694.5	700.6	670.2	703.3	684.8	675.2	663.2	657.8
15 Transfer payments	685.8	771.1	866.1	799.8	842.7	859.7	874.1	888.0
16 Old-age survivors, disability, and health insurance benefits	352.0	382.0	414.1	390.6	405.7	412.1	417.1	421.6
17 LESS: Personal contributions for social insurance	224.8	238.4	250.6	241.5	246.8	249.3	251.5	254.8
18 EQUALS: Personal income	4,664.2	4,828.3	5,058.1	4,907.2	4,980.5	5,028.9	5,062.0	5,160.9
19 LESS: Personal tax and nontax payments	621.3	618.7	627.3	622.3	619.6	617.1	628.8	643.6
20 EQUALS: Disposable personal income	4,042.9	4,209.6	4,430.8	4,284.9	4,360.9	4,411.8	4,433.2	4,517.3
21 LESS: Personal outlays	3,867.3	4,009.9	4,218.1	4,065.5	4,146.3	4,179.5	4,229.9	4,316.9
22 EQUALS: Personal saving	175.6	199.6	212.6	219.4	214.6	232.3	203.3	200.4
MEMO								
Per capita (1987 dollars)								
23 Gross domestic product	19,513.0	19,077.1	19,271.4	19,066.0	19,158.5	19,181.8	19,288.4	19,456.3
24 Personal consumption expenditures	13,043.6	12,824.1	12,973.9	12,802.6	12,930.2	12,893.3	12,973.3	13,098.4
25 Disposable personal income	14,068.0	13,886.0	14,035.0	13,913.0	14,017.0	14,021.0	13,998.0	14,105.0
26 Saving rate (percent)	4.3	4.7	4.8	5.1	4.9	5.3	4.6	4.4
GROSS SAVING								
27 **Gross saving**	**718.0**	**708.2**	**687.0**	**698.2**	**677.5**	**682.9**	**696.9**	**690.7**
28 Gross private saving	854.1	901.5	969.2	934.8	950.1	968.1	992.1	966.6
29 Personal saving	175.6	199.6	212.6	219.4	214.6	232.3	203.3	200.4
30 Undistributed corporate profits[1]	75.7	75.8	104.7	78.3	104.0	97.7	91.2	125.7
31 Corporate inventory valuation adjustment	−14.2	3.1	−7.4	.7	−5.4	−15.5	−9.7	1.0
Capital consumption allowances								
32 Corporate	368.3	383.0	394.8	386.3	386.1	391.2	407.2	394.7
33 Noncorporate	234.6	243.1	258.6	250.7	245.3	247.0	290.4	251.8
34 Government surplus, or deficit (−), national income and product accounts	−136.1	−193.3	−282.2	−236.6	−272.6	−285.2	−295.2	−276.0
35 Federal	−166.2	−210.4	−297.8	−258.7	−289.2	−302.9	−304.4	−294.6
36 State and local	30.1	17.1	15.5	22.0	16.6	17.7	9.2	18.6
37 **Gross investment**	**723.4**	**730.1**	**720.4**	**714.6**	**706.5**	**713.8**	**732.0**	**729.5**
38 Gross private domestic	799.5	721.1	770.4	736.1	722.4	773.2	781.6	804.3
39 Net foreign	−76.1	9.0	−49.9	−21.5	−16.0	−59.4	−49.6	−74.7
40 **Statistical discrepancy**	**5.4**	**21.9**	**33.4**	**16.4**	**29.0**	**30.9**	**35.1**	**38.9**

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

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

3.10 U.S. INTERNATIONAL TRANSACTIONS Summary

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

Item	1990	1991	1992	1991	1992			
				Q4	Q1	Q2	Q3[r]	Q4[p]
1 Balance on current account	−90,428	−3,682	−62,448	−7,218	−6,374[r]	−18,279[r]	−15,771	−22,020
2 Merchandise trade balance[2]	−108,853	−73,436	−96,275	−18,539	−17,663[r]	−25,004[r]	−27,634	−25,974
3 Merchandise exports	388,705	415,962	439,272	107,851	107,634[r]	107,148[r]	110,119	114,371
4 Merchandise imports	−497,558	−489,398	−535,547	−126,390	−125,297[r]	−132,152[r]	−137,753	−140,345
5 Military transactions, net	−7,818	−5,524	−2,503	−540	−624	−623	−579	−677
6 Other service transactions, net	39,873	50,821	57,628	13,676	14,450[r]	13,242[r]	16,315	13,625
7 Investment income, net	19,287	16,429	10,062	2,458	4,394[r]	1,851[r]	2,977	839
8 U.S. government grants	−17,597	24,487	−13,832	78	−2,620	−3,085	−2,521	−5,605
9 U.S. government pensions and other transfers	−2,945	−3,462	−3,736	−1,080	−830[r]	−1,119[r]	−941	−846
10 Private remittances and other transfers	−12,374	−12,996	−13,793	−3,271	−3,481[r]	−3,541[r]	−3,388	−3,382
11 Change in U.S. government assets other than official reserve assets, net (increase, −)	2,304	3,397	−959	−437	−38	−277	−301	−344
12 Change in U.S. official reserve assets (increase, −)	−2,158	5,763	3,901	1,225	−1,057	1,464	1,952	1,542
13 Gold	0	0	0	0	0	0	0	0
14 Special drawing rights (SDRs)	−192	−177	2,316	−23	−172	−168	−173	2,829
15 Reserve position in International Monetary Fund	731	−367	−2,692	17	111	1	−118	−2,685
16 Foreign currencies	−2,697	6,307	4,277	1,232	−996	1,631	2,243	1,398
17 Change in U.S. private assets abroad (increase, −)	−56,467	−71,379	−47,843	−44,947	−3,614[r]	−1,610[r]	−22,892	−19,726
18 Bank-reported claims[3]	7,469	−4,753	32,372	−23,219	15,859	10,943	−1,274	6,844
19 Nonbank-reported claims	−2,477	5,526	3,742	1,269	4,764	3,137	−4,159	. . .
20 U.S. purchases of foreign securities, net	−28,765	−45,017	−48,646	−11,305	−8,703	−8,221	−13,934	−17,788
21 U.S. direct investments abroad, net	−32,694	−27,135	−35,311	−11,692	−15,534[r]	−7,469[r]	−3,525	−8,782
22 Change in foreign official assets in United States (increase, +)	33,908	18,407	40,307	12,819	21,192	20,895	−7,269	5,489
23 U.S. Treasury securities	29,576	15,815	18,333	12,619	14,909	11,126	−323	−7,379
24 Other U.S. government obligations	667	1,301	4,025	1,075	540	1,699	912	874
25 Other U.S. government liabilities[4]	1,866	1,600	2,469	−344	96	598	929	846
26 Other U.S. liabilities reported by U.S. banks[3]	3,385	−1,668	16,168	−914	5,534	7,547	−7,787	10,874
27 Other foreign official assets[5]	−1,586	1,359	−688	383	113	−75	−1,000	274
28 Change in foreign private assets in United States (increase, +)	65,471	48,573	80,093	36,110	−2,577[r]	26,571[r]	29,246	26,854
29 U.S. bank-reported liabilities[3]	16,370	−13,678	14,667	23,465	−4,474	−551	22,905	−3,213
30 U.S. nonbank-reported liabilities	4,906	−405	4,413	725	1,942	1,141	1,330	. . .
31 Foreign private purchases of U.S. Treasury securities, net	−2,534	16,241	35,077	1,408	−828	10,286	4,870	20,749
32 Foreign purchases of other U.S. securities, net	1,592	34,918	29,884	4,832	4,551	10,333	2,693	12,307
33 Foreign direct investments in United States, net	45,137	11,498	−3,948	5,680	−3,768[r]	5,362[r]	−2,552	−2,989
34 Allocation of special drawing rights	0	0	0	0	0	0	0	0
35 Discrepancy	47,370	−1,078	−13,051	2,447	−7,532[r]	−28,764[r]	15,035	8,205
36 Due to seasonal adjustment	. . .	. . .	. . .	613	4,901[r]	1,296[r]	−6,640	439
37 Before seasonal adjustment	47,370	−1,078	−13,052	1,835	−12,433	−30,060	21,675	7,767
MEMO								
Changes in official assets								
38 U.S. official reserve assets (increase, −)	−2,158	5,763	3,901	1,225	−1,057	1,464	1,952	1,542
39 Foreign official assets in United States, excluding line 25 (increase, +)	32,042	16,807	37,838	13,163	21,096	20,297	−8,198	4,643
40 Change in Organization of Petroleum Exporting Countries official assets in United States (part of line 22)	1,707	−5,604	5,402	1,023	2,459	−2,125	3,062	2,006

1. Seasonal factors not calculated for lines 12–16, 18–20, 22–34, and 38–40.
2. Data are on an international accounts basis. The data differ from the Census basis data, shown in table 3.11, for reasons of coverage and timing. Military exports are excluded from merchandise trade data and are included in line 6.
3. Reporting banks include all types of depository institution as well as some brokers and dealers.
4. Associated primarily with military sales contracts and other transactions arranged with or through foreign official agencies.
5. Consists of investments in U.S. corporate stocks and in debt securities of private corporations and state and local governments.

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

3.11 U.S. FOREIGN TRADE[1]

Millions of dollars; monthly data seasonally adjusted

Item	1990	1991	1992	1992					1993	
				Aug.	Sept.	Oct.	Nov.	Dec.[r]	Jan.[r]	Feb.[p]
1 Exports of domestic and foreign merchandise, excluding grant-aid shipments	393,592	421,730	448,115	35,799	37,882	39,072	38,187	39,671	37,148	37,181
2 General imports including merchandise for immediate consumption plus entries into bonded warehouses	495,311	487,129	532,380	44,974	46,551	46,324	45,535	46,562	44,306	44,378
3 **Trade balance**	**−101,718**	**−65,399**	**−84,265**	**−9,174**	**−8,669**	**−7,252**	**−7,348**	**−6,891**	**−7,159**	**−7,197**

1. Government and nongovernment shipments of merchandise between foreign countries and the fifty states, including the District of Columbia, Puerto Rico, the U.S. Virgin Islands, and U.S. Foreign Trade Zones. Data exclude (1) shipments among the United States, Puerto Rico, the U.S. Virgin Islands, and other U.S. affiliated insular areas, (2) shipments to U.S. Armed Forces and diplomatic missions abroad for their own use, (3) U.S. goods returned to the United States by its Armed Forces, (4) personal and household effects of travelers, and (5) in-transit shipments. Data reflect the total arrival of merchandise from foreign countries that immediately entered consumption channels, warehouses, or U.S. Foreign Trade Zones (general imports). Import data are Customs value; export data are F.A.S. value. Beginning in 1990, data for U.S. exports to Canada are derived from import data compiled by Canada; similarly, in Canadian statistics, Canadian exports to the United States are derived from import data compiled by the United States. Since Jan. 1, 1987, merchandise trade data have been released forty-five days after the end of the month; the previous month is revised to reflect late documents.

Data in this table differ from figures for merchandise trade shown in the U.S. balance of payments accounts (table 3.10, lines 2 to 4) primarily for reasons of coverage. For both exports and imports a large part of the difference is the treatment of military sales and purchases. The military sales to foreigners (exports) and purchases from foreigners (imports) that are included in this table as merchandise trade are shifted, in the balance of payments accounts, from "merchandise trade" into the broader category "military transactions."

SOURCE. FT900, *U.S. Merchandise Trade,* (U.S. Department of Commerce, Bureau of the Census).

3.12 U.S. RESERVE ASSETS

Millions of dollars, end of period

Asset	1989	1990	1991	1992				1993		
				Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.[p]
1 **Total**	**74,609**	**83,316**	**77,719**	**78,527**	**74,207**	**72,231**	**71,323**	**71,962**	**72,847**	**74,378**
2 Gold stock, including Exchange Stabilization Fund[1]	11,059	11,058	11,057	11,059	11,060	11,059	11,056	11,055	11,055	11,054
3 Special drawing rights[2,3]	9,951	10,989	11,240	12,111	11,561	11,495	8,503	8,546	8,651	8,787
4 Reserve position in International Monetary Fund[2]	9,048	9,076	9,488	9,778	9,261	8,781	11,759	12,079	12,021	12,184
5 Foreign currencies[4]	44,551	52,193	45,934	45,579	42,325	40,896	40,005	40,282	41,120	42,353

1. Gold held "under earmark" at Federal Reserve Banks for foreign and international accounts is not included in the gold stock of the United States; see table 3.13, line 3. Gold stock is valued at $42.22 per fine troy ounce.
2. Special drawing rights (SDRs) are valued according to a technique adopted by the International Monetary Fund (IMF) in July 1974. Values are based on a weighted average of exchange rates for the currencies of member countries. From July 1974 through December 1980, 16 currencies were used; since January 1981, 5 currencies have been used. U.S. SDR holdings and reserve positions in the IMF also have been valued on this basis since July 1974.
3. Includes allocations of SDRs by the International Monetary Fund on Jan. 1 of the year indicated, as follows: 1970—$867 million; 1971—$717 million; 1972—$710 million; 1979—$1,139 million; 1980—$1,152 million; 1981—$1,093 million; plus net transactions in SDRs.
4. Valued at current market exchange rates.

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

Millions of dollars, end of period

Asset	1989	1990	1991	1992				1993		
				Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.[p]
1 Deposits	589	369	968	546	415	229	205	325	296	317
Held in custody										
2 U.S. Treasury securities[2]	224,911	278,499	281,107	306,971	311,538	308,959	314,481	324,356	329,183	326,486
3 Earmarked gold[3]	13,456	13,387	13,303	13,241	13,201	13,192	13,686	13,077	13,074	12,989

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 at face value in dollars or foreign currencies.
3. Held for foreign and international accounts and valued at $42.22 per fine troy ounce; not included in the gold stock of the United States.

3.14 FOREIGN BRANCHES OF U.S. BANKS Balance Sheet Data[1]

Millions of dollars, end of period

Account	1989	1990	1991	1992					1993	
				Aug.[r]	Sept.[r]	Oct.[r]	Nov.	Dec.[r]	Jan.	Feb.
ASSETS	All foreign countries									
1 **Total payable in any currency**	**545,366**	**556,925**	**548,901**	**544,887**	**545,388**	**554,253**	**566,721[r]**	**542,286**	**543,760**	**554,280**
2 Claims on United States	198,835	188,496	176,301	163,103	167,419	174,986	177,443[r]	166,798	169,278	169,765
3 Parent bank	157,092	148,837	137,509	128,267	134,119	138,940	141,542[r]	132,275	134,217	136,253
4 Other banks in United States	17,042	13,296	12,884	9,181	8,083	10,683	10,019[r]	9,703	9,571	9,249
5 Nonbanks	24,701	26,363	25,908	25,655	25,217	25,363	25,882	24,820	25,490	24,263
6 Claims on foreigners	300,575	312,449	303,934	321,707	320,111	319,139	328,592[r]	318,071	314,737	320,407
7 Other branches of parent bank	113,810	135,003	111,729	116,604	118,952	115,521	125,143	123,256	116,325	117,862
8 Banks	90,703	72,602	81,970	87,347	83,756	86,560	86,086[r]	82,190	81,811	84,439
9 Public borrowers	16,456	17,555	18,652	20,450	20,511	20,809	20,378	20,756	19,984	19,822
10 Nonbank foreigners	79,606	87,289	91,583	97,306	96,892	96,249	96,985	91,869	96,617	98,284
11 Other assets	45,956	55,980	68,666	60,077	57,858	60,128	60,686[r]	57,417	59,745	64,108
12 **Total payable in U.S. dollars**	**382,498**	**379,479**	**363,941**	**341,109**	**347,181**	**364,080**	**374,398[r]**	**365,800**	**353,564**	**361,251**
13 Claims on United States	191,184	180,174	169,662	157,469	161,463	169,290	171,938[r]	162,125	164,681	165,234
14 Parent bank	152,294	142,962	133,476	124,737	130,446	136,156	138,424[r]	129,329	131,553	133,733
15 Other banks in United States	16,386	12,513	12,025	8,876	7,476	9,360	9,291[r]	9,266	9,214	8,704
16 Nonbanks	22,504	24,699	24,161	23,856	23,541	23,774	24,223	23,530	23,914	22,797
17 Claims on foreigners	169,690	174,451	167,010	161,663	166,762	173,457	182,347[r]	183,555	171,041	177,265
18 Other branches of parent bank	82,949	95,298	78,114	70,689	72,348	76,098	83,902	83,117	77,606	80,220
19 Banks	48,396	36,440	41,635	40,350	42,274	45,436	45,931[r]	47,250	41,450	43,067
20 Public borrowers	10,961	12,298	13,685	13,686	13,990	13,966	13,995	14,313	13,883	13,710
21 Nonbank foreigners	27,384	30,415	33,576	36,938	38,150	37,957	38,519	38,875	38,102	40,268
22 Other assets	21,624	24,854	27,269	21,977	18,956	21,333	20,113[r]	20,120	17,842	18,752
	United Kingdom									
23 **Total payable in any currency**	**161,947**	**184,818**	**175,599**	**165,754**	**161,966**	**168,063**	**168,333**	**165,591**	**164,360**	**165,132**
24 Claims on United States	39,212	45,560	35,257	37,511	35,891	39,558	38,358	36,403	37,609	32,380
25 Parent bank	35,847	42,413	31,931	34,593	32,929	36,413	35,027	33,460	34,290	30,240
26 Other banks in United States	1,058	792	1,267	744	1,067	1,400	925	1,298	886	783
27 Nonbanks	2,307	2,355	2,059	2,174	1,895	1,745	2,406	1,645	2,433	1,357
28 Claims on foreigners	107,657	115,536	109,692	108,895	107,675	109,919	113,193	111,623	108,362	112,959
29 Other branches of parent bank	37,728	46,367	35,735	37,732	38,894	40,594	45,092	46,165	42,894	43,856
30 Banks	36,159	31,604	36,394	37,711	36,039	36,701	34,559	33,399	33,513	36,601
31 Public borrowers	3,293	3,860	3,306	3,046	3,371	3,692	3,370	3,329	3,059	2,542
32 Nonbank foreigners	30,477	33,705	34,257	30,406	29,371	28,932	30,172	28,730	28,896	29,960
33 Other assets	15,078	23,722	30,650	19,348	18,400	18,586	16,782	17,565	18,389	19,793
34 **Total payable in U.S. dollars**	**103,208**	**116,762**	**105,974**	**99,661**	**100,664**	**107,342**	**109,479**	**109,449**	**101,209**	**99,755**
35 Claims on United States	36,404	41,259	32,418	34,948	33,618	37,359	35,956	34,508	35,481	30,390
36 Parent bank	34,329	39,609	30,370	32,786	31,578	35,299	33,765	32,186	33,070	29,020
37 Other banks in United States	843	334	822	625	711	769	438	1,022	684	428
38 Nonbanks	1,232	1,316	1,226	1,537	1,329	1,291	1,753	1,300	1,727	942
39 Claims on foreigners	59,062	63,701	58,791	55,812	59,338	61,658	65,164	66,335	59,339	63,234
40 Other branches of parent bank	29,872	37,142	28,667	26,825	28,225	30,217	34,434	34,124	30,823	31,395
41 Banks	16,579	13,135	15,219	15,565	16,800	17,269	16,848	17,089	14,150	16,800
42 Public borrowers	2,371	3,143	2,853	2,353	2,604	2,515	2,501	2,349	2,154	1,883
43 Nonbank foreigners	10,240	10,281	12,052	11,069	11,709	11,657	11,381	12,773	12,212	13,156
44 Other assets	7,742	11,802	14,765	8,901	7,708	8,325	8,359	8,606	6,389	6,131
	Bahamas and Cayman Islands									
45 **Total payable in any currency**	**176,006**	**162,316**	**168,326**	**144,327**	**145,786**	**154,293**	**156,176[r]**	**147,422**	**144,894**	**151,175**
46 Claims on United States	124,205	112,989	115,244	94,659	96,911	102,726	104,245[r]	96,280	96,976	102,836
47 Parent bank	87,882	77,873	81,520	64,454	68,309	72,207	73,856[r]	66,608	67,219	73,825
48 Other banks in United States	15,071	11,869	10,907	8,060	6,562	8,199	8,282[r]	7,828	7,962	7,892
49 Nonbanks	21,252	23,247	22,817	22,145	22,040	22,320	22,107	21,844	21,795	21,119
50 Claims on foreigners	44,168	41,356	45,229	41,486	41,884	42,844	44,156[r]	44,509	41,185	40,821
51 Other branches of parent bank	11,309	13,416	11,098	8,596	7,753	7,287	8,238	7,293	7,041	7,311
52 Banks	22,611	16,310	20,174	17,570	18,412	19,840	20,122[r]	21,212	18,464	17,440
53 Public borrowers	5,217	5,807	7,161	7,152	7,128	7,146	7,209	7,786	7,564	7,422
54 Nonbank foreigners	5,031	5,823	6,796	8,168	8,591	8,571	8,587	8,218	8,116	8,648
55 Other assets	7,633	7,971	7,853	8,182	6,991	8,723	7,775[r]	6,633	6,733	7,518
56 **Total payable in U.S. dollars**	**170,780**	**158,390**	**163,771**	**138,584**	**140,104**	**149,304**	**151,436[r]**	**142,861**	**140,332**	**146,809**

1. Since June 1984, 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 FOREIGN BRANCHES OF U.S. BANKS Balance Sheet Data[1]—Continued

Account	1989	1990	1991	1992					1993	
				Aug.[r]	Sept.[r]	Oct.[r]	Nov.	Dec.[r]	Jan.	Feb.
LIABILITIES	All foreign countries									
57 **Total payable in any currency**	**545,366**	**556,925**	**548,901**	**544,887**	**545,388**	**554,253**	**566,721[r]**	**542,286**	**543,760**	**554,280**
58 Negotiable certificates of deposit (CDs)	23,500	18,060	16,284	14,246	12,389	12,056	12,342	10,032	12,320	11,872
59 To United States	197,239	189,412	198,121	179,476	185,380	188,979	188,004[r]	189,332	176,112	184,042
60 Parent bank	138,412	138,748	136,431	126,976	127,573	132,999	131,806[r]	134,227	122,512	124,010
61 Other banks in United States	11,704	7,463	13,260	10,971	12,408	12,281	13,392[r]	12,182	12,829	12,373
62 Nonbanks	47,123	43,201	48,430	41,529	45,399	43,699	42,806[r]	42,923	40,771	47,659
63 To foreigners	296,850	311,668	288,254	314,823	312,390	315,400	330,314	309,704	321,052	319,638
64 Other branches of parent bank	119,591	139,113	112,033	120,509	120,714	118,001	126,018	125,160	120,178	119,601
65 Banks	76,452	58,986	63,097	68,522	68,493	70,439	74,536	62,189	67,843	70,056
66 Official institutions	16,750	14,791	15,596	18,237	16,720	20,572	20,645	19,731	23,655	21,469
67 Nonbank foreigners	84,057	98,778	97,528	107,555	106,463	106,388	109,115	102,624	109,376	108,512
68 Other liabilities	27,777	37,785	46,242	36,342	35,229	37,818	36,061	33,218	34,276	38,728
69 **Total payable in U.S. dollars**	**396,613**	**383,522**	**370,561**	**346,223**	**346,581**	**364,969**	**372,320[r]**	**368,212**	**353,411**	**363,285**
70 Negotiable CDs	19,619	14,094	11,909	8,755	7,628	6,710	7,503	6,238	7,102	6,640
71 To United States	187,286	175,654	185,286	166,609	171,086	176,013	175,857[r]	178,562	164,595	172,110
72 Parent bank	132,563	130,510	129,669	119,521	119,714	125,491	124,658[r]	127,836	115,894	117,115
73 Other banks in United States	10,519	6,052	11,707	9,866	11,117	11,409	12,246[r]	11,512	11,710	11,418
74 Nonbanks	44,204	39,092	43,910	37,222	40,255	39,113	38,953[r]	39,214	36,991	43,577
75 To foreigners	176,460	179,002	158,993	157,482	155,266	165,960	175,293	171,676	169,077	170,756
76 Other branches of parent bank	87,636	98,128	76,601	74,060	73,208	77,197	82,957	83,700	79,144	79,594
77 Banks	30,537	20,251	24,156	22,973	22,822	25,210	28,404	26,118	23,281	25,571
78 Official institutions	9,873	7,921	10,304	10,713	9,939	12,097	12,342	12,430	14,094	14,034
79 Nonbank foreigners	48,414	52,702	47,932	49,736	49,297	51,456	51,590	49,428	52,558	51,557
80 Other liabilities	13,248	14,772	14,373	13,377	12,601	16,286	13,667	11,736	12,637	13,779
	United Kingdom									
81 **Total payable in any currency**	**161,947**	**184,818**	**175,599**	**165,754**	**161,966**	**168,063**	**168,333**	**165,591**	**164,360**	**165,132**
82 Negotiable CDs	20,056	14,256	11,333	8,083	7,266	6,064	5,636	4,517	5,774	5,597
83 To United States	36,036	39,928	37,720	35,527	35,885	35,399	34,532	39,174	33,028	33,092
84 Parent bank	29,726	31,806	29,834	27,695	27,528	27,427	26,471	31,100	25,098	24,250
85 Other banks in United States	1,256	1,505	1,438	1,632	1,670	1,341	1,689	1,065	1,742	1,633
86 Nonbanks	5,054	6,617	6,448	6,200	6,687	6,631	6,372	7,009	6,188	7,209
87 To foreigners	92,307	108,531	98,167	104,892	101,999	109,358	113,395	107,176	111,103	110,514
88 Other branches of parent bank	27,397	36,709	30,054	31,234	30,756	33,696	35,560	35,983	35,376	35,143
89 Banks	29,780	25,126	25,541	26,435	25,823	28,792	30,609	25,231	25,965	27,227
90 Official institutions	8,551	8,361	9,670	10,699	9,131	11,687	11,438	12,090	14,188	12,938
91 Nonbank foreigners	26,579	38,335	32,902	36,524	36,289	35,183	35,788	33,872	35,574	35,206
92 Other liabilities	13,548	22,103	28,379	17,252	16,816	17,242	14,770	14,724	14,455	15,929
93 **Total payable in U.S. dollars**	**108,178**	**116,094**	**108,755**	**98,698**	**95,652**	**104,521**	**105,699**	**108,170**	**100,731**	**101,342**
94 Negotiable CDs	18,143	12,710	10,076	5,890	5,689	4,213	4,494	3,894	4,770	4,444
95 To United States	33,056	34,697	33,003	30,357	30,330	31,266	30,204	35,417	28,619	28,874
96 Parent bank	28,812	29,955	28,260	25,873	25,700	26,021	25,160	29,957	23,766	23,097
97 Other banks in United States	1,065	1,156	1,177	1,088	992	866	906	709	1,063	1,097
98 Nonbanks	3,179	3,586	3,566	3,396	3,638	4,379	4,138	4,751	3,790	4,680
99 To foreigners	50,517	60,014	56,626	54,381	51,916	59,938	62,899	62,048	60,033	59,643
100 Other branches of parent bank	18,384	25,957	20,800	18,983	17,986	22,080	22,896	22,026	20,807	20,516
101 Banks	12,244	9,488	11,069	9,289	9,112	10,956	13,050	12,540	9,740	10,359
102 Official institutions	5,454	4,692	7,156	6,956	6,156	8,142	8,459	8,847	10,114	9,967
103 Nonbank foreigners	14,435	19,877	17,601	19,153	18,662	18,760	18,494	18,635	19,372	18,801
104 Other liabilities	6,462	8,673	9,050	8,070	7,717	9,104	8,102	6,811	7,309	8,381
	Bahamas and Cayman Islands									
105 **Total payable in any currency**	**176,006**	**162,316**	**168,326**	**144,327**	**145,786**	**154,293**	**156,176[r]**	**147,422**	**144,894**	**151,175**
106 Negotiable CDs	678	646	1,173	1,814	872	1,394	1,939	1,350	1,355	1,142
107 To United States	124,859	114,738	129,872	106,049	109,296	114,327	116,587[r]	111,749	108,037	110,616
108 Parent bank	75,188	74,941	79,394	64,190	63,057	69,537	71,269[r]	67,235	65,009	62,223
109 Other banks in United States	8,883	4,526	10,231	8,522	9,801	10,303	10,944[r]	10,445	10,265	10,059
110 Nonbanks	40,788	35,271	40,247	33,337	36,438	34,487	34,374[r]	34,069	32,763	38,334
111 To foreigners	47,382	44,444	35,200	34,883	34,060	34,896	35,411	32,556	33,766	37,690
112 Other branches of parent bank	23,414	24,715	17,388	17,315	16,071	15,441	16,287	15,169	15,411	18,056
113 Banks	8,823	5,588	5,662	6,244	6,788	6,988	7,574	6,422	6,350	7,967
114 Official institutions	1,097	622	572	935	984	1,058	932	805	932	1,036
115 Nonbank foreigners	14,048	13,519	11,578	10,389	10,217	11,409	10,618	10,160	11,073	10,631
116 Other liabilities	3,087	2,488	2,081	1,581	1,558	3,676	2,239	1,767	1,736	1,727
117 **Total payable in U.S. dollars**	**171,250**	**157,132**	**163,603**	**139,100**	**140,298**	**149,320**	**151,527[r]**	**143,150**	**140,734**	**146,875**

3.15 SELECTED U.S. LIABILITIES TO FOREIGN OFFICIAL INSTITUTIONS

Millions of dollars, end of period

Item	1990	1991	1992[r]					1993	
			Aug.	Sept.	Oct.	Nov.	Dec.	Jan.[r]	Feb.[p]
1 **Total**[1]	**344,529**	**360,530**	**407,154**	**393,687**	**405,465**	**394,845**	**398,672**	**411,816**	**412,534**
By type									
2 Liabilities reported by banks in the United States[2]	39,880	38,396	52,561	43,604	60,933	54,007	54,823	63,791	65,753
3 U.S. Treasury bills and certificates[3]	79,424	92,692	113,307	113,634	104,286	100,702	104,596	111,540	113,594
U.S. Treasury bonds and notes									
4 Marketable	202,487	203,677	213,407	208,924	211,875	211,272	210,553	207,588	203,224
5 Nonmarketable[4]	4,491	4,858	4,476	4,505	4,473	4,503	4,532	4,563	4,592
6 U.S. securities other than U.S. Treasury securities[5]	18,247	20,907	23,403	23,020	23,898	24,361	24,168	24,334	25,371
By area									
7 Western Europe[1]	167,191	168,365	196,511	186,364	194,551	184,207	188,693	196,239	198,958
8 Canada	8,671	7,460	9,990	7,027	8,111	6,381	7,920	8,411	7,886
9 Latin America and Caribbean	21,184	33,554	38,389	37,736	38,678	38,945	40,015	41,388	42,502
10 Asia	138,096	139,465	151,785	151,667	153,555	154,493	152,148	156,211	154,015
11 Africa	1,434	2,092	2,860	3,360	3,481	3,779	3,565	3,705	3,866
12 Other countries[6]	7,955	9,592	7,617	7,531	7,087	7,038	6,329	5,860	5,305

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; zero coupon bonds are included at current value.
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.

SOURCE. 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 and on the 1984 benchmark survey of foreign portfolio investment in the United States.

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

Millions of dollars, end of period

Item	1989	1990	1991	1992[r]			
				Mar.	June	Sept.	Dec.
1 Banks' liabilities	67,835	70,477	75,129	68,434	71,240	84,487	73,225
2 Banks' claims	65,127	66,796	73,195	60,424	58,262	72,003	62,740
3 Deposits	20,491	29,672	26,192	23,270	23,466	28,074	24,186
4 Other claims	44,636	37,124	47,003	37,154	34,796	43,929	38,554
5 Claims of banks' domestic customers[2]	3,507	6,309	3,398	2,962	4,375	3,987	4,432

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

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

Millions of dollars, end of period

	Item	1990	1991	1992[r]	1992[r]					1993	
					Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.[p]
	HOLDER AND TYPE OF LIABILITY										
1	**Total, all foreigners**	**759,634**	**756,066**	**809,886**	**769,519**	**795,856**	**793,298**	**799,590**	**809,886**	**801,355**	**813,245**
2	Banks' own liabilities	577,229	575,374	606,135	564,732	587,139	590,791	601,073	606,135	591,971	604,524
3	Demand deposits	21,723	20,321	21,815	21,678	22,479	21,302	21,935	21,815	21,118	22,325
4	Time deposits[2]	168,017	159,649	160,541	143,663	143,336	157,488	156,814	160,541	150,310	147,669
5	Other[3]	65,822	66,305	93,614	87,631	84,107	92,315	96,294	93,614	103,607	105,048
6	Own foreign offices[4]	321,667	329,099	330,165	311,760	337,217	319,686	326,030	330,165	316,936	329,482
7	Banks' custodial liabilities[5]	182,405	180,692	203,751	204,787	208,717	202,507	198,517	203,751	209,384	208,721
8	U.S. Treasury bills and certificates[6]	96,796	110,734	127,649	135,744	134,894	127,993	122,480	127,649	133,799	135,399
9	Other negotiable and readily transferable instruments[7]	17,578	18,664	21,982	18,541	19,349	20,043	21,755	21,982	22,969	20,735
10	Other	68,031	51,294	54,120	50,502	54,474	54,471	54,282	54,120	52,616	52,587
11	Nonmonetary international and regional organizations[8]	5,918	8,981	9,350	12,914	11,285	10,727	9,915	9,350	11,086	11,308
12	Banks' own liabilities	4,540	6,827	6,951	9,807	8,648	7,001	6,982	6,951	7,824	8,654
13	Demand deposits	36	43	46	21	24	73	58	46	39	47
14	Time deposits[2]	1,050	2,714	3,214	2,620	2,577	1,899	2,561	3,214	2,796	2,321
15	Other[3]	3,455	4,070	3,691	7,166	6,047	5,029	4,363	3,691	4,989	6,286
16	Banks' custodial liabilities[5]	1,378	2,154	2,399	3,107	2,637	3,726	2,933	2,399	3,262	2,654
17	U.S. Treasury bills and certificates[6]	364	1,730	1,908	2,654	1,991	3,085	2,371	1,908	2,774	2,348
18	Other negotiable and readily transferable instruments[7]	1,014	424	486	453	646	641	561	486	488	306
19	Other	0	0	5	0	0	0	1	5	0	0
20	Official institutions[9]	119,303	131,088	159,419	165,868	157,238	165,219	154,709	159,419	175,331	179,347
21	Banks' own liabilities	34,910	34,411	51,058	49,009	40,453	57,225	50,027	51,058	59,576	61,986
22	Demand deposits	1,924	2,626	1,274	1,676	1,761	1,723	1,492	1,274	1,396	1,763
23	Time deposits[2]	14,359	16,504	17,828	18,039	16,125	19,741	17,834	17,828	18,685	19,158
24	Other[3]	18,628	15,281	31,956	29,294	22,567	35,761	30,701	31,956	39,495	41,065
25	Banks' custodial liabilities[5]	84,393	96,677	108,361	116,859	116,785	107,994	104,682	108,361	115,755	117,361
26	U.S. Treasury bills and certificates[6]	79,424	92,692	104,596	113,307	113,634	104,286	100,702	104,596	111,540	113,594
27	Other negotiable and readily transferable instruments[7]	4,766	3,879	3,726	3,466	2,922	3,595	3,784	3,726	4,054	3,648
28	Other	203	106	39	86	229	113	196	39	161	119
29	Banks[10]	540,805	522,265	546,388	501,940	537,936	525,221	543,980	546,388	521,800	529,700
30	Banks' own liabilities	458,470	459,335	475,236	435,244	466,617	454,183	472,949	475,236	453,027	462,202
31	Unaffiliated foreign banks	136,802	130,236	145,071	123,484	129,400	134,497	146,919	145,071	136,091	132,720
32	Demand deposits	10,053	8,648	10,164	9,821	10,443	9,741	10,088	10,164	9,920	10,995
33	Time deposits[2]	88,541	82,857	90,413	72,820	74,075	85,729	87,690	90,413	80,562	78,228
34	Other[3]	38,208	38,731	44,494	40,843	44,882	39,027	49,141	44,494	45,609	43,497
35	Own foreign offices[4]	321,667	329,099	330,165	311,760	337,217	319,686	326,030	330,165	316,936	329,482
36	Banks' custodial liabilities[5]	82,335	62,930	71,152	66,696	71,319	71,038	71,031	71,152	68,773	67,498
37	U.S. Treasury bills and certificates[6]	10,669	7,471	11,087	10,429	10,905	10,481	10,444	11,087	9,685	9,296
38	Other negotiable and readily transferable instruments[7]	5,341	5,694	7,568	6,920	7,373	7,325	7,572	7,568	7,708	6,692
39	Other	66,325	49,765	52,497	49,347	53,041	53,232	53,015	52,497	51,380	51,510
40	Other foreigners	93,608	93,732	94,729	88,797	89,397	92,131	90,986	94,729	93,138	92,890
41	Banks' own liabilities	79,309	74,801	72,890	70,672	71,421	72,382	71,115	72,890	71,544	71,682
42	Demand deposits	9,711	9,004	10,331	10,160	10,251	9,765	10,297	10,331	9,763	9,520
43	Time deposits[2]	64,067	57,574	49,086	50,184	50,559	50,119	48,729	49,086	48,267	47,962
44	Other[3]	5,530	8,223	13,473	10,328	10,611	12,498	12,089	13,473	13,514	14,200
45	Banks' custodial liabilities[5]	14,299	18,931	21,839	18,125	17,976	19,749	19,871	21,839	21,594	21,208
46	U.S. Treasury bills and certificates[6]	6,339	8,841	10,058	9,354	8,364	10,141	8,963	10,058	9,800	10,161
47	Other negotiable and readily transferable instruments[7]	6,457	8,667	10,202	7,702	8,408	8,482	9,838	10,202	10,719	10,089
48	Other	1,503	1,423	1,579	1,069	1,204	1,126	1,070	1,579	1,075	958
	MEMO										
49	Negotiable time certificates of deposit in custody for foreigners	7,073	7,456	9,114	7,279	7,452	7,672	7,716	9,114	9,724	9,499

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

3.17—Continued

Item	1990	1991	1992[r]	1992 Aug.	Sept.	Oct.	Nov.	Dec.[r]	1993 Jan.	Feb.[p]
AREA										
1 **Total, all foreigners**	**759,634**	**756,066**	**809,886**	**769,519[r]**	**795,856[r]**	**793,298[r]**	**799,590[r]**	**809,886**	**801,355**	**813,245**
2 **Foreign countries**	**753,716**	**747,085**	**800,536**	**756,605[r]**	**784,571[r]**	**782,571[r]**	**789,675[r]**	**800,536**	**790,269**	**801,937**
3 Europe	254,452	249,097	308,391	289,957[r]	290,435[r]	306,547[r]	311,875[r]	308,391	303,695	304,126
4 Austria	1,229	1,193	1,613	1,427	1,456	1,584	1,358	1,613	1,158	1,937
5 Belgium and Luxembourg	12,382	13,337	20,572	18,455[r]	17,948[r]	21,183[r]	19,662[r]	20,572	21,255	19,624
6 Denmark	1,399	937	3,060	1,329	1,760	1,788	1,481	3,060	1,885	2,835
7 Finland	602	1,341	1,299	976	685	949	1,144	1,299	1,862	2,049
8 France	30,946	31,808	41,459	29,461[r]	32,158[r]	34,881[r]	39,968[r]	41,459	34,285	31,740
9 Germany	7,485	8,619	18,631	11,032	14,739	13,810	15,401	18,631	20,685	18,715
10 Greece	934	765	910	934	1,069	872	749	910	815	758
11 Italy	17,735	13,541	10,041	10,992	12,236	11,104	12,494	10,041	8,750	10,704
12 Netherlands	5,350	7,161	7,372	10,432[r]	10,407[r]	8,962[r]	8,411	7,372	8,731	11,778
13 Norway	2,357	1,866	3,319	1,341	1,851	1,577	2,014	3,319	3,550	2,521
14 Portugal	2,958	2,184	2,465	2,664	2,245	2,258	2,255	2,465	2,518	2,508
15 Spain	7,544	11,391	9,789	14,904	15,589	14,602	10,383	9,789	14,865	17,163
16 Sweden	1,837	2,222	2,986	4,162	3,194	5,312[r]	4,485	2,986	2,962	2,046
17 Switzerland	36,690	37,238	39,440	40,569	39,314	38,240[r]	40,791	39,440	41,555	39,490
18 Turkey	1,169	1,598	2,666	2,021	2,087	2,524	2,360	2,666	2,533	2,862
19 United Kingdom	109,555	100,292	112,434	111,569[r]	115,817[r]	114,705[r]	117,353[r]	112,434	106,700	105,885
20 Yugoslavia[11]	928	622	504	554	567	577	575	504	506	512
21 Others in Western Europe[12]	11,689	9,274	25,832	22,372[r]	12,867	27,228	26,691	25,832	25,926	28,170
22 Russia	119	241	577	525	499	450	601	577	436	447
23 Other Eastern Europe[13]	1,545	3,467	3,422	4,238	3,947	3,941	3,699	3,422	2,718	2,382
24 Canada	20,349	21,605	22,746	20,410	22,668	21,378	22,052	22,746	21,467	22,870
25 Latin America and Caribbean	332,997	345,529	315,990	311,047[r]	316,995[r]	310,015[r]	309,750[r]	315,990	313,071	319,446
26 Argentina	7,365	7,753	9,476	9,397	9,065	9,387	8,715	9,476	10,790	10,606
27 Bahamas	107,386	100,622	82,213	82,567[r]	77,633[r]	85,878[r]	86,310[r]	82,213	84,557	86,848
28 Bermuda	2,822	3,178	7,079	4,782	4,275	5,889	6,355[r]	7,079	6,319	6,473
29 Brazil	5,834	5,704	5,584	5,283	5,393	5,828	5,235	5,584	5,321	5,551
30 British West Indies	147,321	163,620	151,934	148,212[r]	159,838[r]	143,311[r]	143,084[r]	151,934	146,875	149,158
31 Chile	3,145	3,283	3,030	3,393	3,440	3,253	2,925	3,030	3,638	3,420
32 Colombia	4,492	4,661	4,579	4,711	4,792	4,767	4,677	4,579	4,438	4,417
33 Cuba	11	2	3	9	33	10	11	3	2	3
34 Ecuador	1,379	1,232	987	1,214	1,073	1,026	1,016	987	945	886
35 Guatemala	1,541	1,594	1,375	1,432	1,416	1,376	1,323	1,375	1,311	1,311
36 Jamaica	257	231	371	272	309	274	271	371	294	279
37 Mexico	16,650	19,957	19,432	20,046	19,650	19,216[r]	19,543	19,432	20,023	21,207
38 Netherlands Antilles	7,357	5,592	5,208	4,825	4,751	4,708	6,101	5,208	4,352	4,871
39 Panama	4,574	4,695	4,190	4,303[r]	4,596[r]	4,116[r]	3,976[r]	4,190	4,013	4,209
40 Peru	1,294	1,249	1,068	1,136[r]	1,152[r]	1,141[r]	1,047[r]	1,068	1,052	1,045
41 Uruguay	2,520	2,096	1,955	2,182	2,019	2,087	2,092	1,955	1,898	2,098
42 Venezuela	12,271	13,181	11,370	10,802	11,101	11,504	11,003	11,370	11,106	10,943
43 Other	6,779	6,879	6,136	6,481	6,459	6,244[r]	6,066[r]	6,136	6,137	6,121
44 Asia	136,844	120,462	143,359	125,248[r]	144,793[r]	134,385[r]	136,111[r]	143,359	141,524	144,656
China										
45 People's Republic of China	2,421	2,626	4,343	2,508	2,480	2,582	2,559[r]	4,343	4,103	4,442
46 Republic of China (Taiwan)	11,246	11,491	7,239	10,362	9,431[r]	8,616[r]	8,750[r]	7,239	7,940	7,641
47 Hong Kong	12,754	14,269	18,445	17,798[r]	18,682[r]	17,542[r]	16,322[r]	18,445	17,510	19,363
48 India	1,233	2,418	1,396	1,480	1,372	1,234	1,210[r]	1,396	1,323	1,377
49 Indonesia	1,238	1,463	1,480	958	1,507	1,260[r]	1,217[r]	1,480	1,392	1,462
50 Israel	2,767	2,015	3,775	2,620	2,613	2,208	3,691	3,775	3,389	3,394
51 Japan	67,076	47,069	58,332	45,693[r]	64,606[r]	56,101[r]	55,356[r]	58,332	56,007	58,935
52 Korea (South)	2,287	2,587	3,336	3,644	3,673[r]	3,529[r]	3,698[r]	3,336	3,415	3,459
53 Philippines	1,585	2,449	2,275	1,920	2,028	2,275	2,223[r]	2,275	2,350	2,746
54 Thailand	1,443	2,252	5,582	4,624	4,517	5,082	5,797	5,582	5,722	5,375
55 Middle Eastern oil-exporting countries[14]	15,829	15,752	21,446	18,938	19,977	19,040	20,266	21,446	19,877	20,498
56 Other	16,965	16,071	15,710	14,703	13,907	14,916[r]	15,022	15,710	18,496	15,964
57 Africa	4,630	4,825	5,881	5,314	5,592	5,843	6,062	5,881	5,913	6,364
58 Egypt	1,425	1,621	2,472	2,143	2,243	2,598	2,601	2,472	2,756	3,077
59 Morocco	104	79	76	93	100	98	93	76	88	92
60 South Africa	228	228	190	275	190	240	214	190	158	319
61 Zaire	53	31	19	24	14	24	23	19	25	17
62 Oil-exporting countries[15]	1,110	1,082	1,346	1,090	1,339	1,201	1,402	1,346	1,125	1,135
63 Other	1,710	1,784	1,778	1,689	1,706	1,682	1,729	1,778	1,761	1,724
64 Other	4,444	5,567	4,169	4,629	4,088	4,403	3,825	4,169	4,599	4,475
65 Australia	3,807	4,464	3,047	3,322	2,927	2,987	2,654	3,047	3,502	3,388
66 Other	637	1,103	1,122	1,307	1,161	1,416	1,171	1,122	1,097	1,087
67 Nonmonetary international and regional organizations	5,918	8,981	9,350	12,914[r]	11,285[r]	10,727[r]	9,915[r]	9,350	11,086	11,308
68 International[16]	4,390	6,485	7,434	9,701[r]	8,204[r]	7,689	6,764[r]	7,434	7,851	8,627
69 Latin American regional[17]	1,048	1,181	1,415	2,309[r]	2,274[r]	2,130[r]	2,248[r]	1,415	2,327	1,738
70 Other regional[18]	479	1,315	501	904	807	908	903	501	908	943

11. Beginning December 1992, excludes Bosnia, Croatia, and Slovenia.
12. Includes the Bank for International Settlements and Eastern European countries not listed in line 23. Beginning December 1992, includes, in addition, all former parts of the U.S.S.R. (except Russia), and Bosnia, Hercegovina, Croatia, and Slovenia.
13. Comprises Bulgaria, Czechoslovakia, Hungary, Poland, and Romania.
14. Comprises Bahrain, Iran, Iraq, Kuwait, Oman, Qatar, Saudi Arabia, and United Arab Emirates (Trucial States).
15. Comprises Algeria, Gabon, Libya, and Nigeria.
16. Principally the International Bank for Reconstruction and Development. Excludes "holdings of dollars" of the International Monetary Fund.
17. Principally the Inter-American Development Bank.
18. Asian, African, Middle Eastern, and European regional organizations, except the Bank for International Settlements, which is included in "Other Western Europe."

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

Millions of dollars, end of period

	Area and country	1990	1991	1992[r]	1992					1993	
					Aug.	Sept.[r]	Oct.[r]	Nov.[r]	Dec.[r]	Jan.[r]	Feb.[p]
1	**Total, all foreigners**	**511,543**	**514,339**	**495,675**	**480,163[r]**	**486,071**	**493,689**	**490,721**	**495,675**	**483,873**	**492,977**
2	**Foreign countries**	**506,750**	**508,056**	**490,593**	**475,774[r]**	**481,900**	**491,217**	**487,840**	**490,593**	**480,773**	**488,869**
3	Europe	113,093	114,310	124,085	119,248[r]	117,349	126,170	122,143	124,085	117,252	124,744
4	Austria	362	327	341	631[r]	367	414	463	341	366	535
5	Belgium and Luxembourg	5,473	6,158	6,404	6,353[r]	7,533	6,980	6,423	6,404	6,473	5,919
6	Denmark	497	686	707	906[r]	1,012	830	1,056	707	705	785
7	Finland	1,047	1,907	1,419	1,081	1,299	817	1,230	1,419	1,275	1,226
8	France	14,468	15,112	14,847	13,091[r]	15,084	16,111	15,718	14,847	14,012	14,760
9	Germany	3,343	3,371	4,229	4,728[r]	4,075	5,629	5,328	4,229	5,545	5,370
10	Greece	727	553	718	601[r]	589	583	598	718	669	668
11	Italy	6,052	8,242	9,048	9,874[r]	9,485	9,752	9,443	9,048	8,716	8,466
12	Netherlands	1,761	2,546	2,497	2,075	1,980	2,334	3,006	2,497	2,927	3,254
13	Norway	782	669	356	707	639	666	435	356	649	750
14	Portugal	292	344	325	387	383	327	330	325	390	494
15	Spain	2,668	1,881	2,772	2,590	3,304	4,642	3,481	2,772	2,596	4,158
16	Sweden	2,094	2,335	4,929	6,567	5,494	6,678	5,786	4,929	5,340	5,155
17	Switzerland	4,202	4,540	4,722	3,924[r]	3,102	3,688	3,591	4,722	4,493	4,971
18	Turkey	1,405	1,063	962	1,002	986	1,177	950	962	1,071	1,041
19	United Kingdom	65,151	60,395	63,934	58,878[r]	56,483	60,209	58,991	63,934	56,202	61,313
20	Yugoslavia[2]	1,142	825	569	678	674	668	661	569	571	567
21	Others in Western Europe[3]	597	789	1,706	1,351[r]	1,211	959	1,019	1,706	1,607	1,597
22	Russia	530	1,970	3,148	3,280	3,199	3,190	3,174	3,148	3,154	3,162
23	Other Eastern Europe[4]	499	597	452	544	450	516	460	452	491	553
24	Canada	16,091	15,113	14,185	15,156[r]	15,862	16,830	15,834	14,185	16,482	14,972
25	Latin America and Caribbean	231,506	246,137	213,780	217,721[r]	210,580	213,423	217,040	213,780	218,416	210,752
26	Argentina	6,967	5,869	4,882	4,784[r]	4,553	4,564	4,605	4,882	4,805	4,859
27	Bahamas	76,525	87,138	59,532	62,673[r]	58,588	64,853	65,139	59,532	62,831	63,863
28	Bermuda	4,056	2,270	5,934	6,302	3,567	2,798	6,035	5,934	6,797	2,851
29	Brazil	17,995	11,894	10,737	12,286	11,308	11,558	11,583	10,737	10,926	10,506
30	British West Indies	88,565	107,846	98,738	99,960[r]	99,580	96,906	96,325	98,738	100,926	94,906
31	Chile	3,271	2,805	3,397	3,203[r]	3,300	3,323	3,309	3,397	3,690	3,795
32	Colombia	2,587	2,425	2,750	2,322	2,475	2,595	2,698	2,750	2,753	2,819
33	Cuba	0	0	0	0	0	5	0	0	0	0
34	Ecuador	1,387	1,053	884	949	924	936	926	884	853	835
35	Guatemala	191	228	262	186[r]	235	275	255	262	240	257
36	Jamaica	238	158	167	150	160	147	162	167	170	164
37	Mexico	14,851	16,567	15,049	16,523[r]	17,234	16,621	16,495	15,049	15,225	15,988
38	Netherlands Antilles	7,998	1,207	1,379	966	1,045	1,080	1,529	1,379	1,736	1,938
39	Panama	1,471	1,560	4,474	2,025[r]	1,937	1,979	2,080	4,474	2,027	2,304
40	Peru	663	739	730	700[r]	724	713	723	730	735	708
41	Uruguay	786	599	936	799	921	882	877	936	895	844
42	Venezuela	2,571	2,516	2,525	2,583[r]	2,653	2,700	2,880	2,525	2,414	2,485
43	Other	1,384	1,263	1,404	1,310	1,376	1,488	1,419	1,404	1,393	1,630
44	Asia	138,722	125,262	131,248	116,701[r]	131,011	127,358	126,143	131,248	121,729	130,913
	China										
45	People's Republic of China	620	747	906	696	636	978	624	906	774	892
46	Republic of China (Taiwan)	1,952	2,087	2,046	1,983	2,054	1,848	1,653	2,046	1,683	1,585
47	Hong Kong	10,648	9,617	9,673	7,986[r]	10,057	9,095	9,287	9,673	9,145	10,283
48	India	655	441	529	528	499	500	539	529	532	550
49	Indonesia	933	952	1,189	1,108	1,089	1,112	1,135	1,189	1,323	1,291
50	Israel	774	860	820	920	800	826	937	820	877	809
51	Japan	90,699	84,807	78,609	71,689[r]	83,527	80,253	77,676	78,609	74,593	79,650
52	Korea (South)	5,766	6,048	6,170	6,201	6,247	6,113	6,288	6,170	6,062	6,753
53	Philippines	1,247	1,910	2,145	1,776[r]	2,144	2,181	2,034	2,145	1,871	1,842
54	Thailand	1,573	1,713	1,867	1,691	1,795	1,764	1,873	1,867	1,796	1,737
55	Middle Eastern oil-exporting countries[5]	10,749	8,284	18,559	14,783	14,613	15,488	16,858	18,559	17,083	17,775
56	Other	13,106	7,796	8,735	7,340	7,550	7,200	7,239	8,735	5,990	7,746
57	Africa	5,445	4,928	4,289	4,455	4,333	4,303	4,233	4,289	4,262	4,143
58	Egypt	380	294	194	243	256	229	214	194	171	291
59	Morocco	513	575	441	483	467	452	443	441	421	403
60	South Africa	1,525	1,235	1,041	1,066	1,055	1,036	1,063	1,041	1,069	1,030
61	Zaire	16	4	4	4	4	4	4	4	3	3
62	Oil-exporting countries[6]	1,486	1,298	1,004	1,130	1,067	1,056	1,029	1,004	1,067	1,104
63	Other	1,525	1,522	1,605	1,529	1,484	1,526	1,480	1,605	1,531	1,312
64	Other	1,892	2,306	3,006	2,493	2,765	3,133	2,447	3,006	2,632	3,345
65	Australia	1,413	1,665	2,263	1,463	1,765	1,951	1,601	2,263	1,896	2,552
66	Other	479	641	743	1,030	1,000	1,182	846	743	736	793
67	Nonmonetary international and regional organizations[7]	4,793	6,283	5,082	4,389	4,171	2,472	2,881	5,082	3,100	4,108

1. Reporting banks include all types of depository institutions, as well as some brokers and dealers.
2. Beginning December 1992, excludes Bosnia, Croatia, and Slovenia.
3. Includes the Bank for International Settlements and Eastern European countries not listed in line 23. Beginning December 1992, includes, in addition, all former parts of the U.S.S.R. (except Russia), and Bosnia, Hercegovina, Croatia, and Slovenia.
4. Comprises Bulgaria, Czechoslovakia, Hungary, Poland, and Romania.
5. Comprises Bahrain, Iran, Iraq, Kuwait, Oman, Qatar, Saudi Arabia, and United Arab Emirates (Trucial States).
6. Comprises Algeria, Gabon, Libya, and Nigeria.
7. Excludes the Bank for International Settlements, which is included in "Other Western Europe."

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

Millions of dollars, end of period

Claim	1990	1991	1992[r]	1992[r]					1993	
				Aug.	Sept.	Oct.	Nov.	Dec.	Jan.[r]	Feb.[p]
1 **Total**	**579,044**	**579,683**	**555,659**	...	**548,286**	...	...	**555,659**	...	...
2 Banks' claims	511,543	514,339	495,675	480,163	486,071	493,689	490,721	495,675	483,873	492,977
3 Foreign public borrowers	41,900	37,126	31,353	32,370	31,504	32,056	30,955	31,353	33,148	30,454
4 Own foreign offices[2]	304,315	318,800	299,677	288,020	298,287	298,056	290,974	299,677	290,862	303,726
5 Unaffiliated foreign banks	117,272	116,602	109,976	106,377	105,768	112,224	112,512	109,976	101,989	102,434
6 Deposits	65,253	69,018	61,172	56,290	54,315	60,856	61,999	61,172	53,629	51,020
7 Other	52,019	47,584	48,804	50,087	51,453	51,368	50,513	48,804	48,360	51,414
8 All other foreigners	48,056	41,811	54,669	53,396	50,512	51,353	56,280	54,669	57,874	56,363
9 Claims of banks' domestic customers[3]	67,501	65,344	59,984	...	62,215	...	...	59,984	...	...
10 Deposits	14,375	15,280	15,452	...	15,348	...	...	15,452	...	...
11 Negotiable and readily transferable instruments[4]	41,333	37,125	31,400	...	33,687	...	...	31,400	...	...
12 Outstanding collections and other claims	11,792	12,939	13,132	...	13,180	...	...	13,132	...	...
MEMO										
13 Customer liability on acceptances	13,628	8,974	8,682	...	8,540	...	...	8,682	...	...
14 Dollar deposits in banks abroad, reported by nonbanking business enterprises in the United States[5]	44,638	40,146[r]	33,562	33,932	34,692	34,522	33,708	33,562	36,087	n.a.

1. For banks' claims, data are monthly; for claims of banks' domestic customers, data are quarterly.
Reporting banks include all types of depository institution, as well as some brokers and dealers.
2. For U.S. banks, includes amounts due from own foreign branches and foreign subsidiaries consolidated in Consolidated Report of Condition filed with bank regulatory agencies. For agencies, branches, and majority-owned subsidiaries of foreign banks, consists principally of 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 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 *Federal Reserve Bulletin*, vol. 65 (July 1979), p. 550.

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

Millions of dollars, end of period

Maturity, by borrower and area	1989	1990	1991	1992			
				Mar.[r]	June[r]	Sept.[r]	Dec.[p]
1 **Total**	**238,123**	**206,903**	**195,302**	**194,450**	**196,768**	**187,398**	**195,682**
By borrower							
2 Maturity of one year or less[2]	178,346	165,985	162,573	161,566	162,433	155,254	164,131
3 Foreign public borrowers	23,916	19,305	21,050	20,253	20,528	17,863	17,867
4 All other foreigners	154,430	146,680	141,523	141,313	141,905	137,391	146,264
5 Maturity of more than one year[2]	59,776	40,918	32,729	32,884	34,335	32,144	31,551
6 Foreign public borrowers	36,014	22,269	15,859	16,182	15,145	13,295	13,206
7 All other foreigners	23,762	18,649	16,870	16,702	19,190	18,849	18,345
By area							
Maturity of one year or less[2]							
8 Europe	53,913	49,184	51,835	52,911	54,997	55,986	53,952
9 Canada	5,910	5,450	6,444	6,958	7,986	5,949	6,118
10 Latin America and Caribbean	53,003	49,782	43,597	48,536	49,094	45,241	50,325
11 Asia	57,755	53,258	51,059	43,645	41,409	40,824	45,862
12 Africa	3,225	3,040	2,549	2,470	2,127	2,183	1,810
13 All other[3]	4,541	5,272	7,089	7,046	6,820	5,071	6,064
Maturity of more than one year[2]							
14 Europe	4,121	3,859	3,878	4,315	6,752	6,625	5,360
15 Canada	2,353	3,290	3,595	3,289	3,158	3,227	3,290
16 Latin America and Caribbean	45,816	25,774	18,277	18,120	16,827	15,092	15,149
17 Asia	4,172	5,165	4,459	4,714	4,979	4,815	4,977
18 Africa	2,630	2,374	2,335	2,207	2,356	2,107	2,364
19 All other[3]	684	456	185	239	263	278	411

1. Reporting banks include all kinds of depository institutions besides commercial banks, as well as some brokers and dealers.
2. Maturity is time remaining to maturity.
3. Includes nonmonetary international and regional organizations.

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

Billions of dollars, end of period

Area or country	1988	1989	1990	1991				1992			
			Dec.	Mar.	June	Sept.	Dec.	Mar.	June	Sept.	Dec.[p]
1 **Total**	**346.3[r]**	**338.8**	**317.8**	**325.3**	**320.4**	**335.7**	**341.5**	**347.8[r]**	**357.5[r]**	**344.3[r]**	**345.1**
2 G-10 countries and Switzerland	152.7	152.9	132.1	129.9	129.8	134.0	137.2	130.6[r]	135.7[r]	137.2[r]	133.2
3 Belgium and Luxembourg	9.0	6.3	5.9	6.2	6.1	5.8	6.0	5.3	6.2	6.2	5.6
4 France	10.5	11.7	10.4	9.7	10.5	11.1	11.0	10.0	12.0[r]	15.5[r]	15.3
5 Germany	10.3	10.5	10.6	8.8	8.3	9.7	8.3	8.4	8.8[r]	10.9	9.3
6 Italy	6.8	7.4	5.0	4.0	3.6	4.5	5.6	5.4	8.0	6.4	6.5
7 Netherlands	2.7	3.1	3.0	3.3	3.3	3.0	4.7	4.3	3.3	3.7	2.8
8 Sweden	1.8	2.0	2.2	2.0	2.5	2.1	1.9	1.9[r]	1.9	2.2	2.3
9 Switzerland	5.4	7.1	4.4	3.7	3.3	3.9	3.4	3.2	4.6	5.2[r]	4.7
10 United Kingdom	66.2	67.2	60.8	62.3	59.5	64.9	68.5	64.8	65.8[r]	62.2[r]	61.3
11 Canada	5.0	5.4	5.9	6.8	8.2	5.8	5.8	6.6[r]	6.7	6.7	6.5
12 Japan	34.9	32.2	23.9	23.2	24.6	23.2	22.2	20.7	18.3	18.3	18.8
13 Other industrialized countries	21.3[r]	21.0[r]	22.9[r]	23.5[r]	21.3[r]	22.1[r]	22.8[r]	21.5[r]	25.5	25.1[r]	24.1
14 Austria	1.5	1.5	1.4	1.4	1.1	1.0	.6	.8	.8	.8[r]	1.2
15 Denmark	1.1	1.1	1.1	.9	1.2	.9	.9	.8	1.3	1.5	.9
16 Finland	1.1	1.0	.7	1.0	.8	.6	.7	.8	.8	1.0	.7
17 Greece	1.8	2.5	2.7	2.5	2.4	2.3	2.6	2.3	2.8	2.9[r]	3.0
18 Norway	1.8	1.4	1.6	1.5	1.5	1.4	1.4	1.5	1.7	1.6	1.2
19 Portugal	.4	.4	.6	.6	.6	.5	.6	.5	.5	.5	.4
20 Spain	6.2	7.1	8.3	9.0	7.1	8.3	8.3	7.7	10.1	9.8	9.0
21 Turkey	1.5	1.2	1.7	1.7	1.9	1.6	1.4	1.2	1.5	1.5	1.3
22 Other Western Europe	1.7[r]	1.0[r]	1.2[r]	1.2[r]	1.1[r]	1.3[r]	1.8[r]	1.5[r]	2.0[r]	1.5[r]	1.7
23 South Africa	2.4	2.0	1.8	1.8	1.8	1.6	1.9	1.8	1.7	1.7	1.7
24 Australia	1.8	1.6	1.8	1.9	2.0	2.4	2.7	2.3	2.3	2.3	2.9
25 OPEC[2]	16.6	17.1	12.8	17.1	14.0	15.6	14.6	15.8	16.2	15.9	16.1
26 Ecuador	1.7	1.3	1.0	.9	.9	.8	.7	.7	.7	.7	.6
27 Venezuela	7.9	7.0	5.0	5.1	5.3	5.6	5.4	5.4	5.3	5.4	5.2
28 Indonesia	1.7	2.0	2.7	2.8	2.6	2.8	2.8	3.0	3.0	3.0	3.0
29 Middle East countries	3.4	5.0	2.5	6.6	3.7	5.0	4.2	5.3	5.9	5.4	6.2
30 African countries	1.9	1.7	1.7	1.6	1.5	1.5	1.5	1.4	1.4	1.4	1.1
31 Non-OPEC developing countries	85.3	77.5	65.4	66.4	65.0	65.0	64.3	70.6	68.6[r]	73.4[r]	72.6
Latin America											
32 Argentina	9.0	6.3	5.0	4.7	4.6	4.5	4.8	5.0	5.1	6.2	6.6
33 Brazil	22.4	19.0	14.4	13.9	11.6	10.5	9.6	10.8	10.6	10.8	10.8
34 Chile	5.6	4.6	3.5	3.6	3.6	3.7	3.6	3.9	4.0	4.2	4.4
35 Colombia	2.1	1.8	1.8	1.7	1.6	1.6	1.7	1.6	1.6	1.7	1.8
36 Mexico	18.8	17.7	13.0	13.7	14.3	16.2	15.5	18.2	16.3[r]	17.1	16.0
37 Peru	.8	.6	.5	.5	.5	.4	.4	.4	.4	.4[r]	.5
38 Other	2.6	2.8	2.3	2.2	2.0	1.9	2.1	2.2	2.2	2.5	2.6
Asia											
China											
39 Peoples Republic of China	.3	.3	.2	.4	.6	.4	.3	.3	.3	.3	.7
40 Republic of China (Taiwan)	3.7	4.5	3.5	3.6	4.1	4.1	4.1	4.8	4.6	5.0	5.2
41 India	2.1	3.1	3.3	3.5	3.0	2.8	3.0	3.6	3.8	3.6	3.2
42 Israel	1.2	.7	.5	.5	.5	.5	.5	.4	.4	.4	.4
43 Korea (South)	6.1	5.9	6.2	6.8	6.9	6.5	6.8	6.9	6.9	7.4	6.6
44 Malaysia	1.6	1.7	1.9	2.0	2.1	2.3	2.3	2.5	2.7	3.0	3.0
45 Philippines	4.5	4.1	3.8	3.7	3.7	3.6	3.7	3.6	3.1[r]	3.6[r]	3.6
46 Thailand	1.1	1.3	1.5	1.6	1.7	1.9	1.7	1.7	1.9	2.2	2.2
47 Other Asia[3]	.9	1.0	1.7	2.1	2.3	2.3	2.4	2.7	3.0[r]	3.3	3.1
Africa											
48 Egypt	.4	.4	.4	.4	.4	.4	.4	.3	.5	.3	.2
49 Morocco	.9	.9	.8	.8	.7	.7	.7	.7	.7	.6	.6
50 Zaire	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
51 Other Africa[3]	1.1	1.0	1.0	.8	.8	.8	.7	.7	.6	.9	1.0
52 Eastern Europe	3.6	3.5	2.3	2.1	2.1	1.8	2.4	2.9	3.0	3.1	3.1
53 Russia	.7	.7	.2	.3	.4	.4	.9	1.4	1.7	1.8	1.9
54 Yugoslavia	1.8	1.6	1.2	1.0	1.0	.8	.9	.8	.7	.7	.6
55 Other	1.1	1.3	.9	.8	.7	.7	.7	.6	.6	.7	.6
56 Offshore banking centers	44.2	36.6	42.5	50.0	48.3	52.7	52.0	58.5	59.4[r]	52.3[r]	55.1
57 Bahamas	11.0	5.5	2.8	8.3	6.8	6.7	11.9	14.1[r]	12.3[r]	8.2[r]	5.7
58 Bermuda	.9	1.7	4.4	4.4	4.2	7.1	2.3	3.9	5.1	3.8	6.2
59 Cayman Islands and other British West Indies	12.9	9.0	11.5	14.1	14.9	13.8	15.8	17.4	18.1[r]	15.7[r]	19.9
60 Netherlands Antilles	1.0	2.3	7.9	1.1	1.4	3.9	1.2	1.0	.8	.7[r]	1.1
61 Panama[4]	2.5	1.4	1.4	1.5	1.3	1.3	1.3	1.3	1.7[r]	1.8[r]	1.7
62 Lebanon	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
63 Hong Kong	9.6	9.7	7.7	11.6	12.4	12.1	12.2	12.1[r]	14.9[r]	15.2	13.8
64 Singapore	6.1	7.0	6.6	8.9	7.2	7.7	7.1	8.5	6.4	6.8[r]	6.5
65 Other[5]	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
66 Miscellaneous and unallocated[6]	22.6	30.3	39.8	36.4	39.9	44.6	48.2	48.0	48.8[r]	36.9[r]	40.7

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).

Since June 1984, 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.

2. Organization of Petroleum Exporting Countries, shown individually; other members of OPEC (Algeria, Gabon, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, and United Arab Emirates); and Bahrain and Oman (not formally members of OPEC).

3. Excludes Liberia.

4. Includes Canal Zone beginning December 1979.

5. Foreign branch claims only.

6. Includes New Zealand, Liberia, and international and regional organizations.

3.22 LIABILITIES TO UNAFFILIATED FOREIGNERS Reported by Nonbanking Business Enterprises in the United States[1]

Millions of dollars, end of period

Type and area or country	1989	1990r	1991	1991		1992			
				Sept.	Dec.	Mar.	June	Sept.	Dec.p
1 **Total**	**38,764**	**46,043**	**43,156**	**43,218r**	**43,156r**	**44,098r**	**44,176r**	**45,166r**	**42,422**
2 Payable in dollars	33,973	40,786	37,764	38,482r	37,764r	38,640r	37,481r	36,574r	35,422
3 Payable in foreign currencies	4,791	5,257	5,392	4,736	5,392	5,458r	6,695	8,592r	7,000
By type									
4 Financial liabilities	17,879	21,066	21,893	21,652r	21,893r	22,255r	21,988r	23,406r	21,547
5 Payable in dollars	14,035	16,979	17,781	17,947r	17,781r	18,027r	16,744r	16,468r	15,676
6 Payable in foreign currencies	3,844	4,087	4,112	3,705	4,112	4,228	5,244	6,938r	5,871
7 Commercial liabilities	20,885	24,977	21,263	21,566	21,263	21,843r	22,188	21,760	20,875
8 Trade payables	8,070	10,683	8,310	8,313	8,310	8,926r	9,516	9,409r	8,838
9 Advance receipts and other liabilities	12,815	14,294	12,953	13,253	12,953	12,917	12,672	12,351r	12,037
10 Payable in dollars	19,938	23,807	19,983	20,535	19,983	20,613r	20,737	20,106	19,746
11 Payable in foreign currencies	947	1,170	1,280	1,031	1,280	1,230r	1,451	1,654	1,129
By area or country									
Financial liabilities									
12 Europe	11,660	10,978	11,905	12,311r	11,905r	12,449r	13,030r	14,070r	12,152
13 Belgium and Luxembourg	340	394	217	397	217	174	194	256	407
14 France	258	975	2,106	2,164	2,106	1,997	2,324	2,785r	1,608
15 Germany	464	621	682	682	682	666	836	941r	740
16 Netherlands	941	1,081	1,056	1,050	1,056	1,025	979	980r	606
17 Switzerland	541	545	408	497	408	355	490	627r	585
18 United Kingdom	8,818	6,357	6,429	6,589r	6,429r	7,338r	7,344r	7,680r	7,516
19 Canada	610	229	267	305	267	283	337	320	498
20 Latin America and Caribbean	1,357	4,153	4,325	3,883	4,325r	4,062r	3,323r	3,345r	3,480
21 Bahamas	157	371	537	314	537	396	343	220r	249
22 Bermuda	17	0	114	0	114	114	114	115	214
23 Brazil	0	0	6	6	6	8	10	18	19
24 British West Indies	724	3,160	3,065	2,961	3,065r	2,930r	2,182r	2,291r	2,307
25 Mexico	6	5	7	6	7	7	8	12	11
26 Venezuela	0	4	4	4	4	4	4	5	6
27 Asia	4,151	5,295	5,338	5,149r	5,338r	5,366r	5,209r	5,581r	5,384
28 Japan	3,299	4,065	4,102	4,000r	4,102r	4,107r	4,116r	4,548r	4,353
29 Middle East oil-exporting countries[2]	2	5	13	19	13	13	10	17	19
30 Africa	2	2	6	3	6	7	0	5	6
31 Oil-exporting countries[3]	0	0	4	2	4	6	0	0	0
32 All other[4]	100	409	52	1	52	88	89	85	27
Commercial liabilities									
33 Europe	9,071	10,310	7,808	8,084	7,808	7,501r	7,144	6,714r	6,624
34 Belgium and Luxembourg	175	275	248	225	248	256	240	173	285
35 France	877	1,218	830	992	830	678r	659	688r	660
36 Germany	1,392	1,270	944	911	944	880r	702	744	592
37 Netherlands	710	844	709	751	709	574	605	601	555
38 Switzerland	693	775	488	492	488	482	400	369	398
39 United Kingdom	2,620	2,792	2,310	2,217	2,310	2,445r	2,404	2,262r	2,225
40 Canada	1,124	1,261	990	1,011	990	1,095r	1,077	1,085	987
41 Latin America and Caribbean	1,224	1,672	1,352	1,512	1,352	1,701	1,803	1,518	1,520
42 Bahamas	41	12	3	14	3	13	8	3	6
43 Bermuda	308	538	310	450	310	493	409	338	292
44 Brazil	100	145	219	211	219	230	212	115	197
45 British West Indies	27	30	107	46	107	108	73	85	55
46 Mexico	323	475	304	291	304	375	475	322	444
47 Venezuela	164	130	94	102	94	168	279	147	127
48 Asia	7,550	9,483	9,330	8,855	9,330	9,890r	10,439	11,006r	10,643
49 Japan	2,914	3,651	3,720	3,363	3,720	3,549r	3,537	3,909r	3,990
50 Middle Eastern oil-exporting countries[2,5]	1,632	2,016	1,498	1,780	1,498	1,591	1,778	1,813	1,946
51 Africa	886	844	713	836	713	644	775	675	535
52 Oil-exporting countries[3]	339	422	327	357	327	253	389	337	291
53 Other[4]	1,030	1,406	1,070	1,268	1,070	1,012	950	762	566

1. For a description of the changes in the international statistics tables, see *Federal Reserve Bulletin*, vol. 65, (July 1979), p. 550.
2. Comprises Bahrain, Iran, Iraq, Kuwait, Oman, Qatar, Saudi Arabia, and United Arab Emirates (Trucial States).
3. Comprises Algeria, Gabon, Libya, and Nigeria.
4. Includes nonmonetary international and regional organizations.
5. Revisions include a reclassification of transactions, which also affects the totals for Asia and the grand totals.

3.23 CLAIMS ON UNAFFILIATED FOREIGNERS Reported by Nonbanking Business Enterprises in the United States[1]

Millions of dollars, end of period

Type, and area or country	1989	1990	1991	1991		1992			
				Sept.	Dec.	Mar.	June	Sept.	Dec.[p]
1 **Total**	**33,173**	**35,348**	**42,667**	**38,315**	**42,667[r]**	**42,199[r]**	**41,869[r]**	**38,659[r]**	**37,728**
2 Payable in dollars	30,773	32,760	40,098	35,952	40,098[r]	39,558[r]	38,899[r]	35,738[r]	35,164
3 Payable in foreign currencies	2,400	2,589	2,569	2,363	2,569[r]	2,641[r]	2,970[r]	2,921	2,564
By type									
4 Financial claims	19,297	19,874	25,463	22,536	25,463	25,328[r]	24,612[r]	21,367	20,482
5 Deposits	12,353	13,577	17,218	16,188	17,218	16,964	15,116	12,547	12,534
6 Payable in dollars	11,364	12,552	16,343	15,182	16,343	15,803	13,829	11,489	11,788
7 Payable in foreign currencies	989	1,025	875	1,006	875	1,161	1,287	1,058	746
8 Other financial claims	6,944	6,297	8,245	6,348	8,245	8,364[r]	9,496[r]	8,820	7,948
9 Payable in dollars	6,190	5,280	7,365	5,611	7,365	7,617[r]	8,771[r]	7,788	7,184
10 Payable in foreign currencies	754	1,017	880	737	880	747	725	1,032	764
11 Commercial claims	13,876	15,475	17,204	15,779	17,204[r]	16,871[r]	17,257[r]	17,292[r]	17,246
12 Trade receivables	12,253	13,657	14,479	13,429	14,479[r]	14,266[r]	14,756[r]	14,552[r]	14,888
13 Advance payments and other claims	1,624	1,817	2,725	2,350	2,725	2,605	2,501	2,740	2,358
14 Payable in dollars	13,219	14,927	16,390	15,159	16,390[r]	16,138[r]	16,299[r]	16,461[r]	16,192
15 Payable in foreign currencies	657	548	814	620	814[r]	733[r]	958[r]	831	1,054
By area or country									
Financial claims									
16 Europe	8,463	9,645	13,546	13,129	13,546	14,205[r]	13,200[r]	11,249	9,147
17 Belgium and Luxembourg	28	76	13	76	13	12	25	16	8
18 France	153	371	312	255	312	277	786	809	771
19 Germany	152	367	342	434	342	290	381	321	401
20 Netherlands	238	265	385	420	385	727	732	766	536
21 Switzerland	153	357	591	580	591	682	779	602	506
22 United Kingdom	7,496	7,971	11,251	10,997	11,251	11,631	8,768[r]	7,727	5,749
23 Canada	1,904	2,934	2,679	2,163	2,679	2,750[r]	2,529[r]	2,256	1,695
24 Latin America and Caribbean	8,020	6,201	7,932	6,289	7,932	7,070	7,260	6,523	8,278
25 Bahamas	1,890	1,090	758	652	758	415	523	1,099	625
26 Bermuda	7	3	8	19	8	12	12	65	40
27 Brazil	224	68	192	137	192	191	181	135	234
28 British West Indies	5,486	4,635	6,384	5,106	6,384	5,912	6,018	4,792	6,749
29 Mexico	94	177	321	176	321	318	343	222	270
30 Venezuela	20	25	40	32	40	34	32	26	29
31 Asia	590	860	957	614	957	961[r]	1,275[r]	995	836
32 Japan	213	523	385	277	385	380	712	481	684
33 Middle East oil-exporting countries[2]	8	8	5	3	5	3	4	4	3
34 Africa	140	37	57	61	57	60	57	66	74
35 Oil-exporting countries[3]	12	0	1	1	1	0	0	1	9
36 All other[4]	180	195	292	280	292	282[r]	291[r]	278	452
Commercial claims									
37 Europe	6,209	7,044	7,950	6,884	7,950	7,894	8,138[r]	7,792[r]	7,526
38 Belgium and Luxembourg	242	212	192	190	192	181	255	170	183
39 France	964	1,240	1,544	1,330	1,544	1,562	1,563	1,741[r]	1,394
40 Germany	696	807	943	858	943	936	908	885	883
41 Netherlands	479	555	643	641	643	646	666	588	541
42 Switzerland	313	301	295	258	295	328	399	294	294
43 United Kingdom	1,575	1,775	2,088	1,807	2,088	2,086	2,173	1,977	1,776
44 Canada	1,091	1,074	1,174	1,232	1,174	1,176	1,131	1,172	1,243
45 Latin America and Caribbean	2,184	2,375	2,591	2,494	2,591	2,572	2,672	3,141	2,844
46 Bahamas	58	14	11	8	11	11	9	7	18
47 Bermuda	323	246	263	255	263	272	291	245	237
48 Brazil	297	326	418	385	418	364	438	395	336
49 British West Indies	36	40	41	37	41	45	32	43	25
50 Mexico	508	661	829	741	829	892	847	968	822
51 Venezuela	147	192	202	196	202	206	251	302	316
52 Asia	3,570	4,127	4,573	4,282	4,573[r]	4,354[r]	4,463[r]	4,308[r]	4,648
53 Japan	1,199	1,460	1,878	1,808	1,878[r]	1,782[r]	1,786	1,793[r]	1,848
54 Middle Eastern oil-exporting countries[2]	518	460	621	496	621	635	609	512	653
55 Africa	429	488	418	431	418	418	422	430	536
56 Oil-exporting countries[3]	108	67	95	80	95	75	73	66	77
57 Other[4]	393	367	498	456	498[r]	457[r]	431[r]	449	449

1. For a description of the changes in the international statistics tables, see *Federal Reserve Bulletin*, vol. 65, (July 1979), 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

Transaction and area or country	1991	1992[r]	1993 Jan.–Feb.	1992 Aug.	1992 Sept.	1992 Oct.[r]	1992 Nov.[r]	1992 Dec.[r]	1993 Jan.[r]	1993 Feb.[p]
	U.S. corporate securities									
STOCKS										
1 Foreign purchases	211,207	221,350	48,208	13,174	13,884	18,820	17,885	22,725	19,170	29,038
2 Foreign sales	200,116	226,490	45,333	14,841	17,034	18,170	16,598	20,382	19,353	25,980
3 **Net purchases or sales (–)**	**11,091**	**–5,140**	**2,875**	**–1,667**	**–3,150**	**650**	**1,287**	**2,343**	**–183**	**3,058**
4 **Foreign countries**	**10,522**	**–5,173**	**2,790**	**–1,622**	**–3,059**	**653**	**1,284**	**2,319**	**–178**	**2,968**
5 Europe	53	–4,934	2,342	–1,089	–1,683	75	371	1,505	52	2,290
6 France	9	–1,331	198	–46	–234	–92	–50	–154	–25	223
7 Germany	–63	–64	188	–26	–112	–52	47	162	91	97
8 Netherlands	–227	–280	53	–54	–107	–24	–4	190	64	–11
9 Switzerland	–131	143	706	–150	–189	–124	–40	221	205	501
10 United Kingdom	–352	–3,294	804	–652	–869	362	361	705	–350	1,154
11 Canada	3,845	1,405	–284	–59	–278	–227	43	176	–341	57
12 Latin America and Caribbean	2,177	2,209	336	–24	–90	235	649	422	305	31
13 Middle East[1]	–134	–88	–157	–14	136	–57	–219	70	–92	–65
14 Other Asia	4,255	–3,944	470	–442	–1,064	767	373	122	–123	593
15 Japan	1,179	–3,598	–596	–301	–97	184	220	215	28	–624
16 Africa	153	10	31	–1	14	–21	–18	–7	4	27
17 Other countries	174	169	52	7	–94	–119	85	31	17	35
18 **Nonmonetary international and regional organizations**	**568**	**33**	**85**	**–45**	**–91**	**–3**	**3**	**24**	**–5**	**90**
BONDS[2]										
19 Foreign purchases	153,096	214,801	39,381	19,785	17,160	19,315	18,082	19,264	17,417	21,964
20 Foreign sales	125,637	175,310	34,146	16,620	14,452	15,224	16,317	15,513	15,439	18,707
21 **Net purchases or sales (–)**	**27,459**	**39,491**	**5,235**	**3,165**	**2,708**	**4,091**	**1,765**	**3,751**	**1,978**	**3,257**
22 **Foreign countries**	**27,590**	**38,375**	**5,457**	**3,150**	**2,573**	**4,045**	**1,600**	**3,206**	**2,074**	**3,383**
23 Europe	13,112	18,314	3,664	1,516	1,818	1,993	–492	1,996	1,302	2,362
24 France	847	1,221	412	–5	155	–4	–7	217	101	311
25 Germany	1,577	2,503	143	–13	387	–34	–113	857	91	52
26 Netherlands	482	531	–252	22	58	133	144	48	–119	–133
27 Switzerland	656	–513	69	–94	–51	–23	–260	105	122	–53
28 United Kingdom	8,931	13,229	3,067	1,447	1,319	1,568	–312	962	349	2,718
29 Canada	1,623	236	–292	–100	48	198	281	–38	–437	145
30 Latin America and Caribbean	2,672	8,833	901	878	548	842	540	513	419	482
31 Middle East[1]	1,787	3,166	548	284	–5	273	515	360	300	248
32 Other Asia	8,459	7,545	454	593	171	790	692	119	305	149
33 Japan	5,767	–450	251	–1,229	–590	467	266	9	190	61
34 Africa	52	354	195	1	–7	–50	–4	302	168	27
35 Other countries	–116	–73	–13	–22	0	–1	68	–46	17	–30
36 **Nonmonetary international and regional organizations**	**–131**	**1,116**	**–222**	**15**	**135**	**46**	**165**	**545**	**–96**	**–126**
	Foreign securities									
37 Stocks, net purchases or sales (–)[3]	–31,967	–32,186	–3,873	–2,950[r]	–2,892[r]	–4,260	–3,636	–4,368	–2,328	–1,545
38 Foreign purchases	120,598	149,987	27,764	9,779[r]	13,632[r]	12,477	11,672	12,781	12,722	15,042
39 Foreign sales[3]	152,565	182,173	31,637	12,729[r]	16,524[r]	16,737	15,308	17,149	15,050	16,587
40 Bonds, net purchases or sales (–)	–14,828	–18,470	–14,888	276[r]	–1,420[r]	–2,205	–791	–2,874	–5,099	–9,789
41 Foreign purchases	330,311	485,659	93,891	45,943[r]	46,140[r]	49,670	52,066	39,607	38,411	55,480
42 Foreign sales	345,139	504,129	108,779	45,667[r]	47,560[r]	51,875	52,857	42,481	43,510	65,269
43 **Net purchases or sales (–), of stocks and bonds**	**–46,795**	**–50,656**	**–18,761**	**–2,674[r]**	**–4,312[r]**	**–6,465**	**–4,427**	**–7,242**	**–7,427**	**–11,334**
44 **Foreign countries**	**–46,711**	**–53,992**	**–17,892**	**–2,761[r]**	**–4,333[r]**	**–6,492**	**–4,500**	**–7,196**	**–6,420**	**–11,472**
45 Europe	–34,452	–38,109	–13,413	–1,234[r]	–3,196[r]	–6,851	–5,001	–4,516	–6,468	–6,945
46 Canada	–7,004	–6,653	–5,146	207	–222[r]	–1,008	571	–1,167	–161	–4,985
47 Latin America and Caribbean	759	–1,830	190	–430	308	1,091	–1,671	512	195	–5
48 Asia	–7,350	–6,583	186	–1,376	–1,667	681	1,567	–1,670	–381	567
49 Africa	–9	–57	–4	11	–14	–2	42	–11	–7	3
50 Other countries	1,345	–760	295	61	458[r]	–403	–8	–344	402	–107
51 **Nonmonetary international and regional organizations**	**–84**	**3,336**	**–869**	**87**	**21**	**27**	**73**	**–46**	**–1,007**	**138**

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

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

3. In a July 1989 merger, the former stockholders of a U.S. company received $5,453 million in shares of the new combined U.K. company. This transaction is not reflected in the data.

3.25 MARKETABLE U.S. TREASURY BONDS AND NOTES Foreign Transactions

Millions of dollars

Country or area	1991	1992	1993	1992					1993	
			Jan.–Feb.	Aug.	Sept.	Oct.	Nov.	Dec.r	Jan.r	Feb.p
	Transactions, net purchases or sales (–) during period[1]									
1 **Estimated total**	**19,865**	**39,319r**	**–820**	**6,458**	**–5,995**	**3,546r**	**17,648r**	**8**	**454**	**–1,274**
2 Foreign countries	19,687	37,966r	–2,296	6,785	–6,204	4,351r	17,661r	–194	–129	–2,167
3 Europe	8,663	19,647r	–968	3,450	–4,655	4,671r	7,284r	3,163	–585	–383
4 Belgium and Luxembourg	523	1,985r	–14	80	–25	232	370	–28	–59	45
5 Germany	–4,725	2,076	–935	255	900	–8	–1,584	898	697	–1,632
6 Netherlands	–3,735	–2,923	–1,032	367	–239	–40	1,827	–804	–1,238	206
7 Sweden	–663	–804	204	–1,289	–843	202	668	–344	–54	258
8 Switzerland	1,007	481	–654	–87	292	769	1,334	213	–199	–455
9 United Kingdom	6,218	24,184r	2,207	3,681	16	4,068r	7,209r	2,833	2,025	182
10 Other Western Europe	10,024	–6,002r	–784	428	–4,761	–551	–2,758	395	–1,759	975
11 Eastern Europe	13	650r	40	15	5	–1	218	0	2	38
12 Canada	–3,019	562r	3,384	900	–4,281	458	–1,087	–99	3,302	82
13 Latin America and Caribbean	10,285	–3,223	–1,050	–1,563	–1,479	–1,915	7,270	–4,519	–1,495	445
14 Venezuela	10	539	4	60	31	155	27	11	–175	179
15 Other Latin America and Caribbean	4,179	–1,957	–4,965	–758	–2,537	–3,233	2,385	415	–3,309	–1,656
16 Netherlands Antilles	6,097	–1,805	3,911	–865	1,027	1,163	4,858	–4,945	1,989	1,922
17 Asia	3,367	23,526r	–2,168	4,112	4,004	1,416	4,000	1,188	–1,136	–1,032
18 Japan	–4,081	9,817r	61	1,887	2,448	–339	3,383	2,201	–743	804
19 Africa	689	1,103	–172	56	59	–37	119	0	–33	–139
20 Other	–298	–3,649	–1,322	–170	148	–242	75	73	–182	–1,140
21 Nonmonetary international and regional organizations	178	1,353	1,476	–327	209	–805	–13	202	583	893
22 *International*	–358	*1,018*	809	–133	–31	–903	–38	76	228	581
23 Latin American regional	–72	533	505	–75	201	219	–31	97	270	235
MEMO										
24 Foreign countries	19,687	37,966r	–2,296	6,785	–6,204	4,351r	17,661r	–194	–129	–2,167
25 Official institutions	1,190	6,876r	–7,329	697	–4,483	2,951	–603	–719	–2,965	–4,364
26 Other foreign[2]	18,496	31,090r	5,033	6,088	–1,721	1,400r	18,264r	525	2,836	2,197
Oil-exporting countries										
27 Middle East[2]	–6,822	4,323	–2,093	1,093	750	–271	407	511	–238	–1,855
28 Africa[3]	239	11	8	0	4	0	0	0	8	0

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

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

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

3.26 DISCOUNT RATES OF FOREIGN CENTRAL BANKS[1]

Percent per year

Country	Rate on Apr. 30, 1993		Country	Rate on Apr. 30, 1993		Country	Rate on Apr. 30, 1993	
	Percent	Month effective		Percent	Month effective		Percent	Month effective
Austria	6.75	Apr. 1993	Germany	7.25	Apr. 1993	Norway	7.75	Apr. 1993
Belgium	7.0	Mar. 1993	Italy	11.0	Apr. 1993	Switzerland	5.0	Mar. 1993
Canada	5.60	Apr. 1993	Japan	2.5	July 1992	United Kingdom	12.0	Sept. 1992
Denmark	10.5	Mar. 1993	Netherlands	6.75	Apr. 1993			
France[2]	8.25	Apr. 1993						

1. Rates shown are mainly those at which the central bank either discounts or makes advances against eligible commercial paper or government securities for 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 that the central bank transacts the largest proportion of its credit operations.

2. Since Feb. 1981, the rate has been that at which the Bank of France discounts Treasury bills for seven to ten days.

3.27 FOREIGN SHORT-TERM INTEREST RATES[1]

Averages of daily figures, percent per year

Type or country	1990	1991	1992	1992			1993			
				Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.
1 Eurodollars	8.16	5.86	3.70	3.30	3.67	3.50	3.22	3.12	3.11	3.10
2 United Kingdom	14.73	11.47	9.56	8.23	7.16	7.11	6.88	6.10	5.91	5.90
3 Canada	13.00	9.07	6.76	7.57	7.63	7.93	7.03	6.38	5.59	5.43
4 Germany	8.41	9.15	9.42	8.85	8.84	8.93	8.50	8.29	7.85	7.81
5 Switzerland	8.71	8.01	7.67	6.28	6.44	6.13	5.52	5.34	5.05	4.97
6 Netherlands	8.57	9.19	9.25	8.63	8.66	8.55	8.00	7.98	7.47	7.43
7 France	10.20	9.49	10.14	10.82	9.58	10.75	11.69	11.70	10.89	8.73
8 Italy	12.11	12.04	13.91	15.52	14.38	13.60	12.56	11.43	11.26	11.41
9 Belgium	9.70	9.30	9.31	8.70	8.64	8.65	8.19	8.75	8.27	7.94
10 Japan	7.75	7.33	4.39	3.85	3.77	3.76	3.70	3.27	3.26	3.22

1. Rates are for three-month interbank loans, with the following exceptions: Canada, finance company paper; Belgium, three-month Treasury bills; and Japan, CD rate.

3.28 FOREIGN EXCHANGE RATES[1]

Currency units per dollar except as noted

Country/currency unit	1990	1991	1992	1992		1993			
				Nov.	Dec.	Jan.	Feb.	Mar.	Apr.
1 Australia/dollar[2]	78.069	77.872	73.521	68.984	68.974	67.297	68.294	70.775	71.155
2 Austria/schilling	11.331	11.686	10.992	11.168	11.130	11.368	11.556	11.586	11.234
3 Belgium/franc	33.424	34.195	32.148	32.661	32.545	33.239	33.841	33.919	32.857
4 Canada/dollar	1.1668	1.1460	1.2085	1.2674	1.2725	1.2779	1.2602	1.2471	1.2621
5 China, P.R./yuan	4.7921	5.3337	5.5206	5.6134	5.8106	5.7796	5.7874	5.7455	5.7202
6 Denmark/krone	6.1899	6.4038	6.0372	6.1166	6.1206	6.2319	6.3019	6.3242	6.1339
7 Finland/markka	3.8300	4.0521	4.4865	5.0615	5.1444	5.4242	5.8534	5.9767	5.6190
8 France/franc	5.4467	5.6468	5.2935	5.3706	5.3974	5.4751	5.5594	5.5944	5.3984
9 Germany/deutsche mark	1.6166	1.6610	1.5618	1.5875	1.5822	1.6144	1.6414	1.6466	1.5964
10 Greece/drachma	158.59	182.63	190.81	206.48	209.48	215.97	220.60	223.57	217.90
11 Hong Kong/dollar	7.7899	7.7712	7.7402	7.7348	7.7416	7.7376	7.7335	7.7332	7.7306
12 India/rupee	17.492	22.712	28.156	28.474	28.979	29.043	30.042	31.939	31.610
13 Ireland/pound[2]	165.76	161.39	170.42	166.17	166.71	163.37	148.11	147.58	152.75
14 Italy/lira	1,198.27	1,241.28	1,232.17	1,364.45	1,412.38	1,491.07	1,550.43	1,591.35	1,536.14
15 Japan/yen	145.00	134.59	126.78	123.88	124.04	124.99	120.76	117.02	112.41
16 Malaysia/ringgit	2.7057	2.7503	2.5463	2.5227	2.5710	2.5985	2.6295	2.6051	2.5777
17 Netherlands/guilder	1.8215	1.8720	1.7587	1.7862	1.7788	1.8155	1.8473	1.8507	1.7942
18 New Zealand/dollar[2]	59.619	57.832	53.792	51.996	51.570	51.270	51.603	53.026	53.904
19 Norway/krone	6.2541	6.4912	6.2142	6.4714	6.6804	6.8721	6.9779	6.9989	6.7399
20 Portugal/escudo	142.70	144.77	135.07	141.71	142.05	145.36	149.89	152.17	148.25
21 Singapore/dollar	1.8134	1.7283	1.6294	1.6338	1.6397	1.6527	1.6463	1.6446	1.6228
22 South Africa/rand	2.5885	2.7633	2.8524	2.9959	3.0140	3.0713	3.1313	3.1790	3.1718
23 South Korea/won	710.64	736.73	784.58	787.09	791.75	794.87	799.25	796.42	798.61
24 Spain/peseta	101.96	104.01	102.38	113.83	112.95	114.62	117.51	117.71	115.64
25 Sri Lanka/rupee	40.078	41.200	44.013	44.404	45.046	46.307	46.351	47.069	47.712
26 Sweden/krona	5.9231	6.0521	5.8258	6.2528	6.8903	7.2536	7.5566	7.7362	7.4500
27 Switzerland/franc	1.3901	1.4356	1.4064	1.4291	1.4219	1.4774	1.5178	1.5206	1.4599
28 Taiwan/dollar	26.918	26.759	25.160	25.405	25.452	25.452	25.837	26.026	25.987
29 Thailand/baht	25.609	25.528	25.411	25.462	25.488	25.523	25.508	25.425	25.251
30 United Kingdom/pound[2]	178.41	176.74	176.63	152.68	155.10	153.25	143.95	146.17	154.47
MEMO									
31 United States/dollar[3]	89.09	89.84	86.61	90.04	90.50	92.36	93.82	93.65	90.62

1. Averages of certified noon buying rates in New York for cable transfers. Data in this table also appear in the Board's G.5 (405) monthly statistical release. For ordering address, see inside front cover.
2. Value in U.S. cents.
3. Index of weighted-average exchange value of U.S. dollar against the currencies of ten industrial countries. The weight for each of the ten countries is the 1972–76 average world trade of that country divided by the average world trade of all ten countries combined. Series revised as of August 1978 (see *Federal Reserve Bulletin*, vol. 64, August 1978, p. 700).

Guide to Statistical Releases and Special Tables

STATISTICAL RELEASES—List Published Semiannually, with Latest BULLETIN *Reference*

SPECIAL TABLES—Quarterly Data Published Irregularly, with Latest BULLETIN *Reference*

Index to Statistical Tables

References are to pages A3–A68 although the prefix "A" is omitted in this index

Federal Reserve Board of Governors and Official Staff

ALAN GREENSPAN, *Chairman*
DAVID W. MULLINS, JR., *Vice Chairman*

WAYNE D. ANGELL
EDWARD W. KELLEY, JR.

OFFICE OF BOARD MEMBERS

JOSEPH R. COYNE, *Assistant to the Board*
DONALD J. WINN, *Assistant to the Board*
THEODORE E. ALLISON, *Assistant to the Board for Federal Reserve System Affairs*
LYNN S. FOX, *Special Assistant to the Board*
WINTHROP P. HAMBLEY, *Special Assistant to the Board*
BOB STAHLY MOORE, *Special Assistant to the Board*
DIANE E. WERNEKE, *Special Assistant to the Board*

LEGAL DIVISION

J. VIRGIL MATTINGLY, JR., *General Counsel*
SCOTT G. ALVAREZ, *Associate General Counsel*
RICHARD M. ASHTON, *Associate General Counsel*
OLIVER IRELAND, *Associate General Counsel*
KATHLEEN M. O'DAY, *Associate General Counsel*
MARYELLEN A. BROWN, *Assistant to the General Counsel*

OFFICE OF THE SECRETARY

WILLIAM W. WILES, *Secretary*
JENNIFER J. JOHNSON, *Associate Secretary*
BARBARA R. LOWREY, *Associate Secretary*
ELLEN MALAND, *Assistant Secretary*

DIVISION OF BANKING SUPERVISION AND REGULATION

RICHARD SPILLENKOTHEN, *Director*
STEPHEN C. SCHEMERING, *Deputy Director*
DON E. KLINE, *Associate Director*
WILLIAM A. RYBACK, *Associate Director*
FREDERICK M. STRUBLE, *Associate Director*
HERBERT A. BIERN, *Deputy Associate Director*
ROGER T. COLE, *Deputy Associate Director*
JAMES I. GARNER, *Deputy Associate Director*
HOWARD A. AMER, *Assistant Director*
GERALD A. EDWARDS, JR., *Assistant Director*
JAMES D. GOETZINGER, *Assistant Director*
STEPHEN M. HOFFMAN, JR., *Assistant Director*
LAURA M. HOMER, *Assistant Director*
JAMES V. HOUPT, *Assistant Director*
JACK P. JENNINGS, *Assistant Director*
MICHAEL G. MARTINSON, *Assistant Director*
RHOGER H PUGH, *Assistant Director*
SIDNEY M. SUSSAN, *Assistant Director*
MOLLY S. WASSOM, *Assistant Director*

DIVISION OF INTERNATIONAL FINANCE

EDWIN M. TRUMAN, *Staff Director*
LARRY J. PROMISEL, *Senior Associate Director*
CHARLES J. SIEGMAN, *Senior Associate Director*
DALE W. HENDERSON, *Associate Director*
DAVID H. HOWARD, *Senior Adviser*
DONALD B. ADAMS, *Assistant Director*
PETER HOOPER III, *Assistant Director*
KAREN H. JOHNSON, *Assistant Director*
RALPH W. SMITH, JR., *Assistant Director*

DIVISION OF RESEARCH AND STATISTICS

MICHAEL J. PRELL, *Director*
EDWARD C. ETTIN, *Deputy Director*
WILLIAM R. JONES, *Associate Director*
THOMAS D. SIMPSON, *Associate Director*
LAWRENCE SLIFMAN, *Associate Director*
DAVID J. STOCKTON, *Associate Director*
MARTHA BETHEA, *Deputy Associate Director*
PETER A. TINSLEY, *Deputy Associate Director*
MYRON L. KWAST, *Assistant Director*
PATRICK M. PARKINSON, *Assistant Director*
MARTHA S. SCANLON, *Assistant Director*
JOYCE K. ZICKLER, *Assistant Director*
JOHN J. MINGO, *Adviser*
LEVON H. GARABEDIAN, *Assistant Director (Administration)*

DIVISION OF MONETARY AFFAIRS

DONALD L. KOHN, *Director*
DAVID E. LINDSEY, *Deputy Director*
BRIAN F. MADIGAN, *Associate Director*
RICHARD D. PORTER, *Deputy Associate Director*
DEBORAH DANKER, *Assistant Director*
NORMAND R.V. BERNARD, *Special Assistant to the Board*

DIVISION OF CONSUMER AND COMMUNITY AFFAIRS

GRIFFITH L. GARWOOD, *Director*
GLENN E. LONEY, *Associate Director*
DOLORES S. SMITH, *Associate Director*
MAUREEN P. ENGLISH, *Assistant Director*
IRENE SHAWN MCNULTY, *Assistant Director*

JOHN P. LAWARE
LAWRENCE B. LINDSEY

SUSAN M. PHILLIPS

OFFICE OF STAFF DIRECTOR FOR MANAGEMENT

S. DAVID FROST, *Staff Director*
WILLIAM SCHNEIDER, *Special Assignment: Project Director, National Information Center*
PORTIA W. THOMPSON, *Equal Employment Opportunity Programs Officer*

DIVISION OF HUMAN RESOURCES MANAGEMENT

DAVID L. SHANNON, *Director*
JOHN R. WEIS, *Associate Director*
ANTHONY V. DIGIOIA, *Assistant Director*
JOSEPH H. HAYES, JR., *Assistant Director*
FRED HOROWITZ, *Assistant Director*

OFFICE OF THE CONTROLLER

GEORGE E. LIVINGSTON, *Controller*
STEPHEN J. CLARK, *Assistant Controller (Programs and Budgets)*
DARRELL R. PAULEY, *Assistant Controller (Finance)*

DIVISION OF SUPPORT SERVICES

ROBERT E. FRAZIER, *Director*
GEORGE M. LOPEZ, *Assistant Director*
DAVID L. WILLIAMS, *Assistant Director*

DIVISION OF INFORMATION RESOURCES MANAGEMENT

STEPHEN R. MALPHRUS, *Director*
BRUCE M. BEARDSLEY, *Deputy Director*
MARIANNE M. EMERSON, *Assistant Director*
PO KYUNG KIM, *Assistant Director*
RAYMOND H. MASSEY, *Assistant Director*
EDWARD T. MULRENIN, *Assistant Director*
DAY W. RADEBAUGH, JR., *Assistant Director*
ELIZABETH B. RIGGS, *Assistant Director*
RICHARD C. STEVENS, *Assistant Director*

DIVISION OF RESERVE BANK OPERATIONS AND PAYMENT SYSTEMS

CLYDE H. FARNSWORTH, JR., *Director*
DAVID L. ROBINSON, *Deputy Director (Finance and Control)*
CHARLES W. BENNETT, *Assistant Director*
JACK DENNIS, JR., *Assistant Director*
EARL G. HAMILTON, *Assistant Director*
JEFFREY C. MARQUARDT, *Assistant Director*
JOHN H. PARRISH, *Assistant Director*
LOUISE L. ROSEMAN, *Assistant Director*
FLORENCE M. YOUNG, *Assistant Director*

OFFICE OF THE INSPECTOR GENERAL

BRENT L. BOWEN, *Inspector General*
DONALD L. ROBINSON, *Assistant Inspector General*
BARRY R. SNYDER, *Assistant Inspector General*

Federal Open Market Committee and Advisory Councils

FEDERAL OPEN MARKET COMMITTEE

MEMBERS

ALAN GREENSPAN, *Chairman*

E. GERALD CORRIGAN, *Vice Chairman*

WAYNE D. ANGELL
EDWARD G. BOEHNE
SILAS KEEHN
EDWARD W. KELLEY, JR.
JOHN P. LAWARE
LAWRENCE B. LINDSEY
ROBERT D. MCTEER, JR.
DAVID W. MULLINS, JR.
SUSAN M. PHILLIPS
GARY H. STERN

ALTERNATE MEMBERS

J. ALFRED BROADDUS, JR.
ROBERT P. FORRESTAL
JERRY L. JORDAN
JAMES H. OLTMAN
ROBERT T. PARRY

STAFF

DONALD L. KOHN, *Secretary and Economist*
NORMAND R.V. BERNARD, *Deputy Secretary*
JOSEPH R. COYNE, *Assistant Secretary*
GARY P. GILLUM, *Assistant Secretary*
J. VIRGIL MATTINGLY, JR., *General Counsel*
ERNEST T. PATRIKIS, *Deputy General Counsel*
MICHAEL J. PRELL, *Economist*
EDWIN M. TRUMAN, *Economist*
RICHARD G. DAVIS, *Associate Economist*
RICHARD W. LANG, *Associate Economist*
DAVID E. LINDSEY, *Associate Economist*
LARRY J. PROMISEL, *Associate Economist*
ARTHUR J. ROLNICK, *Associate Economist*
HARVEY ROSENBLUM, *Associate Economist*
KARL A. SCHELD, *Associate Economist*
CHARLES J. SIEGMAN, *Associate Economist*
THOMAS D. SIMPSON, *Associate Economist*
LAWRENCE SLIFMAN, *Associate Economist*

WILLIAM J. MCDONOUGH, *Manager of the System Open Market Account*
MARGARET L. GREENE, *Deputy Manager for Foreign Operations*
JOAN E. LOVETT, *Deputy Manager for Domestic Operations*

FEDERAL ADVISORY COUNCIL

E. B. ROBINSON, JR., *President*
JOHN B. MCCOY, *Vice President*

MARSHALL N. CARTER, First District
CHARLES S. SANFORD, JR., Second District
ANTHONY P. TERRACCIANO, Third District
JOHN B. MCCOY, Fourth District
EDWARD E. CRUTCHFIELD, JR., Fifth District
E.B. ROBINSON, JR., Sixth District
EUGENE A. MILLER, Seventh District
ANDREW B. CRAIG, III, Eighth District
JOHN F. GRUNDHOFER, Ninth District
DAVID A. RISMILLER, Tenth District
CHARLES R. HRDLICKA, Eleventh District
RICHARD M. ROSENBERG, Twelfth District

HERBERT V. PROCHNOW, *Secretary*
WILLIAM J. KORSVIK, *Associate Secretary*

CONSUMER ADVISORY COUNCIL

DENNY D. DUMLER, Denver, Colorado, *Chairman*
JEAN POGGE, Chicago, Illinois, *Vice Chairman*

BARRY A. ABBOTT, San Francisco, California
JOHN R. ADAMS, Philadelphia, Pennsylvania
JOHN A. BAKER, Atlanta, Georgia
VERONICA E. BARELA, Denver, Colorado
MULUGETTA BIRRU, Pittsburgh, Pennsylvania
DOUGLAS D. BLANKE, St. Paul, Minnesota
GENEVIEVE BROOKS, Bronx, New York
TOYE L. BROWN, Boston, Massachusetts
CATHY CLOUD, Washington, D.C.
MICHAEL D. EDWARDS, Yelm, Washington
MICHAEL FERRY, St. Louis, Missouri
NORMA L. FREIBERG, New Orleans, Louisiana
LORI GAY, Los Angeles, California
DONALD A. GLAS, Hutchinson, Minnesota
BONNIE GUITON, Charlottesville, Virginia
JOYCE HARRIS, Madison, Wisconsin
GARY S. HATTEM, New York, New York
JULIA E. HILER, Marietta, Georgia
RONALD HOMER, Boston, Massachusetts
THOMAS L. HOUSTON, Dallas, Texas
HENRY JARAMILLO, Belen, New Mexico
EDMUND MIERZWINSKI, Washington, D.C.
JOHN V. SKINNER, Irving, Texas
LOWELL N. SWANSON, Portland, Oregon
MICHAEL W. TIERNEY, Washington, D.C.
GRACE W. WEINSTEIN, Englewood, New Jersey
JAMES L. WEST, Tijeras, New Mexico
ROBERT O. ZDENEK, Washington, D.C.

THRIFT INSTITUTIONS ADVISORY COUNCIL

DANIEL C. ARNOLD, Houston, Texas, *President*
BEATRICE D'AGOSTINO, Somerville, New Jersey, *Vice President*

WILLIAM A. COOPER, Minneapolis, Minnesota
PAUL L. ECKERT, Davenport, Iowa
GEORGE R. GLIGOREA, Sheridan, Wyoming
THOMAS J. HUGHES, Merrifield, Virginia
KERRY KILLINGER, Seattle, Washington
CHARLES JOHN KOCH, Cleveland, Ohio
ROBERT MCCARTER, New Bedford, Massachusetts
NICHOLAS W. MITCHELL, JR., Winston-Salem, North Carolina
STEPHEN W. PROUGH, Irvine, California
THOMAS R. RICKETTS, Troy, Michigan

Federal Reserve Board Publications

For ordering assistance, write PUBLICATIONS SERVICES, MS-138, Board of Governors of the Federal Reserve System, Washington, DC 20551 or telephone (202) 452-3244 or FAX (202) 728-5886. *When a charge is indicated, payment should accompany request and be made payable to the Board of Governors of the Federal Reserve System. Payment from foreign residents should be drawn on a U.S. bank.*

THE FEDERAL RESERVE SYSTEM—PURPOSES AND FUNCTIONS. 1984. 120 pp.

ANNUAL REPORT.

ANNUAL REPORT: BUDGET REVIEW, 1991–92.

FEDERAL RESERVE BULLETIN. Monthly. $25.00 per year or $2.50 each in the United States, its possessions, Canada, and Mexico. Elsewhere, $35.00 per year or $3.00 each.

ANNUAL STATISTICAL DIGEST: period covered, release date, number of pages, and price.

1981	October 1982	239 pp.	$ 6.50
1982	December 1983	266 pp.	$ 7.50
1983	October 1984	264 pp.	$11.50
1984	October 1985	254 pp.	$12.50
1985	October 1986	231 pp.	$15.00
1986	November 1987	288 pp.	$15.00
1987	October 1988	272 pp.	$15.00
1988	November 1989	256 pp.	$25.00
1980–89	March 1991	712 pp.	$25.00
1990	November 1991	185 pp.	$25.00
1991	November 1992	215 pp.	$25.00

SELECTED INTEREST AND EXCHANGE RATES—WEEKLY SERIES OF CHARTS. Weekly. $30.00 per year or $.70 each in the United States, its possessions, Canada, and Mexico. Elsewhere, $35.00 per year or $.80 each.

THE FEDERAL RESERVE ACT and other statutory provisions affecting the Federal Reserve System, as amended through August 1990. 646 pp. $10.00.

REGULATIONS OF THE BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM.

ANNUAL PERCENTAGE RATE TABLES (Truth in Lending—Regulation Z) *Vol. I* (Regular Transactions). 1969. 100 pp. *Vol. II* (Irregular Transactions). 1969. 116 pp. Each volume $2.25; 10 or more of same volume to one address, $2.00 each.

Introduction to Flow of Funds. 1980. 68 pp. $1.50 each; 10 or more to one address, $1.25 each.

Federal Reserve Regulatory Service. Looseleaf; updated at least monthly. (Requests must be prepaid.)
- Consumer and Community Affairs Handbook. $75.00 per year.
- Monetary Policy and Reserve Requirements Handbook. $75.00 per year.
- Securities Credit Transactions Handbook. $75.00 per year.
- The Payment System Handbook. $75.00 per year.
- Federal Reserve Regulatory Service. 3 vols. (Contains all four Handbooks plus substantial additional material.) $200.00 per year.
- *Rates for subscribers outside the United States are as follows and include additional air mail costs:*
- Federal Reserve Regulatory Service, $250.00 per year.
- Each Handbook, $90.00 per year.

THE U.S. ECONOMY IN AN INTERDEPENDENT WORLD: A MULTICOUNTRY MODEL, May 1984. 590 pp. $14.50 each.

WELCOME TO THE FEDERAL RESERVE. March 1989. 14 pp.

INDUSTRIAL PRODUCTION—1986 EDITION. December 1986. 440 pp. $9.00 each.

FINANCIAL FUTURES AND OPTIONS IN THE U.S. ECONOMY. December 1986. 264 pp. $10.00 each.

FINANCIAL SECTORS IN OPEN ECONOMIES: EMPIRICAL ANALYSIS AND POLICY ISSUES. August 1990. 608 pp. $25.00 each.

CONSUMER EDUCATION PAMPHLETS

Short pamphlets suitable for classroom use. Multiple copies are available without charge.

Consumer Handbook on Adjustable Rate Mortgages
Consumer Handbook to Credit Protection Laws
A Guide to Business Credit for Women, Minorities, and Small Businesses
How to File A Consumer Credit Complaint
Series on the Structure of the Federal Reserve System
- The Board of Governors of the Federal Reserve System
- The Federal Open Market Committee
- Federal Reserve Bank Board of Directors
- Federal Reserve Banks
- Organization and Advisory Committees

A Consumer's Guide to Mortgage Lock-Ins
A Consumer's Guide to Mortgage Settlement Costs
A Consumer's Guide to Mortgage Refinancings
Home Mortgages: Understanding the Process and Your Right to Fair Lending
Making Deposits: When Will Your Money Be Available?
When Your Home is on the Line: What You Should Know About Home Equity Lines of Credit

STAFF STUDIES: Summaries Only Printed in the Bulletin

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

Staff Studies 1–145 are out of print.

146. THE ROLE OF THE PRIME RATE IN THE PRICING OF BUSINESS LOANS BY COMMERCIAL BANKS, 1977–84, by Thomas F. Brady. November 1985. 25 pp.
147. REVISIONS IN THE MONETARY SERVICES (DIVISIA) INDEXES OF THE MONETARY AGGREGATES, by Helen T. Farr and Deborah Johnson. December 1985. 42 pp.
148. THE MACROECONOMIC AND SECTORAL EFFECTS OF THE ECONOMIC RECOVERY TAX ACT: SOME SIMULATION RESULTS, by Flint Brayton and Peter B. Clark. December 1985. 17 pp.
149. THE OPERATING PERFORMANCE OF ACQUIRED FIRMS IN BANKING BEFORE AND AFTER ACQUISITION, by Stephen A. Rhoades. April 1986. 32 pp.
150. STATISTICAL COST ACCOUNTING MODELS IN BANKING: A REEXAMINATION AND AN APPLICATION, by John T. Rose and John D. Wolken. May 1986. 13 pp.
151. RESPONSES TO DEREGULATION: RETAIL DEPOSIT PRICING FROM 1983 THROUGH 1985, by Patrick I. Mahoney, Alice P. White, Paul F. O'Brien, and Mary M. McLaughlin. January 1987. 30 pp.
152. DETERMINANTS OF CORPORATE MERGER ACTIVITY: A REVIEW OF THE LITERATURE, by Mark J. Warshawsky. April 1987. 18 pp.
153. STOCK MARKET VOLATILITY, by Carolyn D. Davis and Alice P. White. September 1987. 14 pp.
154. THE EFFECTS ON CONSUMERS AND CREDITORS OF PROPOSED CEILINGS ON CREDIT CARD INTEREST RATES, by Glenn B. Canner and James T. Fergus. October 1987. 26 pp.
155. THE FUNDING OF PRIVATE PENSION PLANS, by Mark J. Warshawsky. November 1987. 25 pp.
156. INTERNATIONAL TRENDS FOR U.S. BANKS AND BANKING MARKETS, by James V. Houpt. May 1988. 47 pp.
157. M2 PER UNIT OF POTENTIAL GNP AS AN ANCHOR FOR THE PRICE LEVEL, by Jeffrey J. Hallman, Richard D. Porter, and David H. Small. April 1989. 28 pp.
158. THE ADEQUACY AND CONSISTENCY OF MARGIN REQUIREMENTS IN THE MARKETS FOR STOCKS AND DERIVATIVE PRODUCTS, by Mark J. Warshawsky with the assistance of Dietrich Earnhart. September 1989. 23 pp.
159. NEW DATA ON THE PERFORMANCE OF NONBANK SUBSIDIARIES OF BANK HOLDING COMPANIES, by Nellie Liang and Donald Savage. February 1990. 12 pp.
160. BANKING MARKETS AND THE USE OF FINANCIAL SERVICES BY SMALL AND MEDIUM-SIZED BUSINESSES, by Gregory E. Elliehausen and John D. Wolken. September 1990. 35 pp.
161. A REVIEW OF CORPORATE RESTRUCTURING ACTIVITY, 1980–90, by Margaret Hastings Pickering. May 1991. 21 pp.
162. EVIDENCE ON THE SIZE OF BANKING MARKETS FROM MORTGAGE LOAN RATES IN TWENTY CITIES, by Stephen A. Rhoades. February 1992. 11 pp.
163. CLEARANCE AND SETTLEMENT IN U.S. SECURITIES MARKETS, by Patrick Parkinson, Adam Gilbert, Emily Gollob, Lauren Hargraves, Richard Mead, Jeff Stehm, and Mary Ann Taylor. March 1992. 37 pp.

REPRINTS OF SELECTED Bulletin *ARTICLES*

Some Bulletin *articles are reprinted. The articles listed below are those for which reprints are available. Most of the articles reprinted do not exceed twelve pages.* Limit of ten copies

Recent Developments in the Bankers Acceptance Market. 1/86.
The Use of Cash and Transaction Accounts by American Families. 2/86.
Financial Characteristics of High-Income Families. 3/86.
Prices, Profit Margins, and Exchange Rates. 6/86.
Agricultural Banks under Stress. 7/86.
Foreign Lending by Banks: A Guide to International and U.S. Statistics. 10/86.
Recent Developments in Corporate Finance. 11/86.
Measuring the Foreign-Exchange Value of the Dollar. 6/87.
Changes in Consumer Installment Debt: Evidence from the 1983 and 1986 Surveys of Consumer Finances. 10/87.
Home Equity Lines of Credit. 6/88.
Mutual Recognition: Integration of the Financial Sector in the European Community. 9/89.
The Activities of Japanese Banks in the United Kingdom and in the United States, 1980–88. 2/90.
Industrial Production: 1989 Developments and Historical Revision. 4/90.
Recent Developments in Industrial Capacity and Utilization. 6/90.
Developments Affecting the Profitability of Commercial Banks. 7/90.
Recent Developments in Corporate Finance. 8/90.
U.S. Exchange Rate Policy: Bretton Woods to Present. 11/90.
The Transmission Channels of Monetary Policy: How Have They Changed? 12/90.
Changes in Family Finances from 1983 to 1989: Evidence from the Survey of Consumer Finances. 1/92.
U.S. International Transactions in 1991. 5/92.

Anticipated Schedule of Release Dates for Periodic Releases—Board of Governors of the Federal Reserve System[1] *(Payment must accompany requests)*

Weekly Releases	*Annual rate*	*Approximate release days*	*Date of period to which data refer*
☐ Aggregate Reserves of Depository Institutions and the Monetary Base. H.3 (502) [1.20]	$15.00	Thursday	Week ended previous Wednesday
☐ Actions of the Board: Applications and Reports Received. H.2 (501)	$35.00	Friday	Week ended previous Saturday
☐ Assets and Liabilities of Insured Domestically Chartered and Foreign Related Banking Institutions. H.8 (510) [1.25]	$15.00	Monday	Wednesday, 3 weeks earlier
☐ Factors Affecting Reserves of Depository Institutions and Condition Statement of Federal Reserve Banks. H.4.1 (503) [1.11]	$15.00	Thursday	Week ended previous Wednesday
☐ Foreign Exchange Rates. H.10 (512) [3.28]	$15.00	Monday	Week ended previous Friday
☐ Money Stock, Liquid Assets, and Debt Measures. H.6 (508) [1.21]	$35.00	Thursday	Week ended Monday of previous week
☐ Selected Borrowings in Immediately Available Funds of Large Commercial Banks. H.5 (507) [1.13]	$15.00	Wednesday	Week ended Thursday of previous week
☐ Selected Interest Rates. H.15 (519) [1.35]	$15.00	Monday	Week ended previous Saturday
☐ Weekly Consolidated Condition Report of Large Commercial Banks, and Domestic Subsidiaries. H.4.2 (504) [1.26, 1.30]	$15.00	Friday	Wednesday, 1 week earlier

Monthly Releases			
☐ Consumer Installment Credit. G.19 (421) [1.55, 1.56]	$ 5.00	5th working day of month	2nd month previous
☐ Debits and Deposit Turnover at Commercial Banks. G.6 (406) [1.22]	$ 5.00	12th of month	Previous month
☐ Finance Companies. G.20 (422) [1.51, 1.52]	$ 5.00	5th working day of month	2nd month previous
☐ Foreign Exchange Rates. G.5 (405) [3.28]	$ 5.00	1st of month	Previous month
☐ Industrial Production and Capacity Utilization. G.17 (419) [2.12, 2.13]	$15.00	Midmonth	Previous month
☐ Loans and Securities at all Commercial Banks. G.7 (407) [1.23]	$ 5.00	3rd week of month	Previous month
☐ Major Nondeposit Funds of Commercial Banks. G.10 (411) [1.24]	$ 5.00	3rd week of month	Previous month
☐ Research Library—Recent Acquisitions. G.15 (417)	Free of charge	1st of month	Previous month
☐ Selected Interest Rates. G.13 (415) [1.35]	$ 5.00	1st Tuesday of month	Previous month

1. Release dates are those anticipated or usually met. However, please note that for some releases there is normally a certain variability because of reporting or processing procedures. Moreover, for all series unusual circumstances may, from time to time, result in a release date being later than anticipated.

The respective *Bulletin* tables that report the data are designated in brackets.

Quarterly Releases	*Annual rate*	*Approximate release days*	*Date of period to which data refer*
☐ Agricultural Finance Databook. E.15 (125)	$ 5.00	End of March, June, September, and December	January, April, July, and October
☐ Country Exposure Lending Survey. E.16 (126)	$ 5.00	January, April, July, and October	Previous quarter
☐ Flow of Funds Accounts: Seasonally Adjusted and Unadjusted. Z.1 (780) [1.57, 1.58]	$25.00	23rd of February, May, August, and November	Previous quarter
☐ Flow of Funds Summary Statistics. Z.7 (788) [1.59, 1.60]	$ 5.00	15th of February, May, August, and November	Previous quarter
☐ Geographical Distribution of Assets and Liabilities of Major Foreign Branches of U.S. Banks. E.11 (121)	$ 5.00	15th of March, June, September, and December	Previous quarter
☐ Survey of Terms of Bank Lending to Business. E.2 (111) [4.23]	$ 5.00	Midmonth of March, June, September, and December	February, May, August, and November
☐ List of OTC Margin Stocks. E.7 (117)	Free of charge	January, April, July, and October	February, May, August, and November

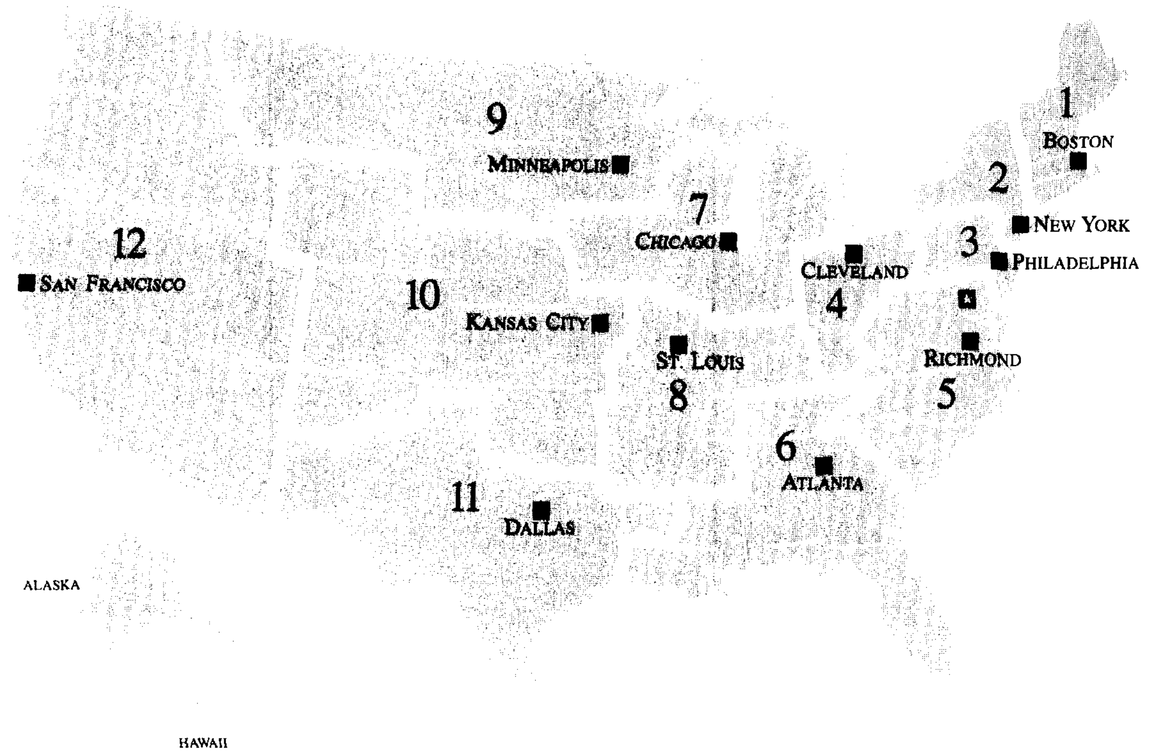
Semiannual Releases

☐ Balance Sheets for the U.S. Economy. C.9 (108)	$ 5.00	October and April	Previous year
☐ Report on the Terms of Credit Card Plans. E.5 (115)	$ 5.00	March and August	January and June

Annual Releases

☐ Aggregate Summaries of Annual Surveys of Securities Credit Extension. C.2 (101)	$ 5.00	February	End of previous June

Maps of the Federal Reserve System



LEGEND

Both pages

■ Federal Reserve Bank city

◘ Board of Governors of the Federal Reserve System, Washington, D.C.

Facing page

• Federal Reserve Branch city

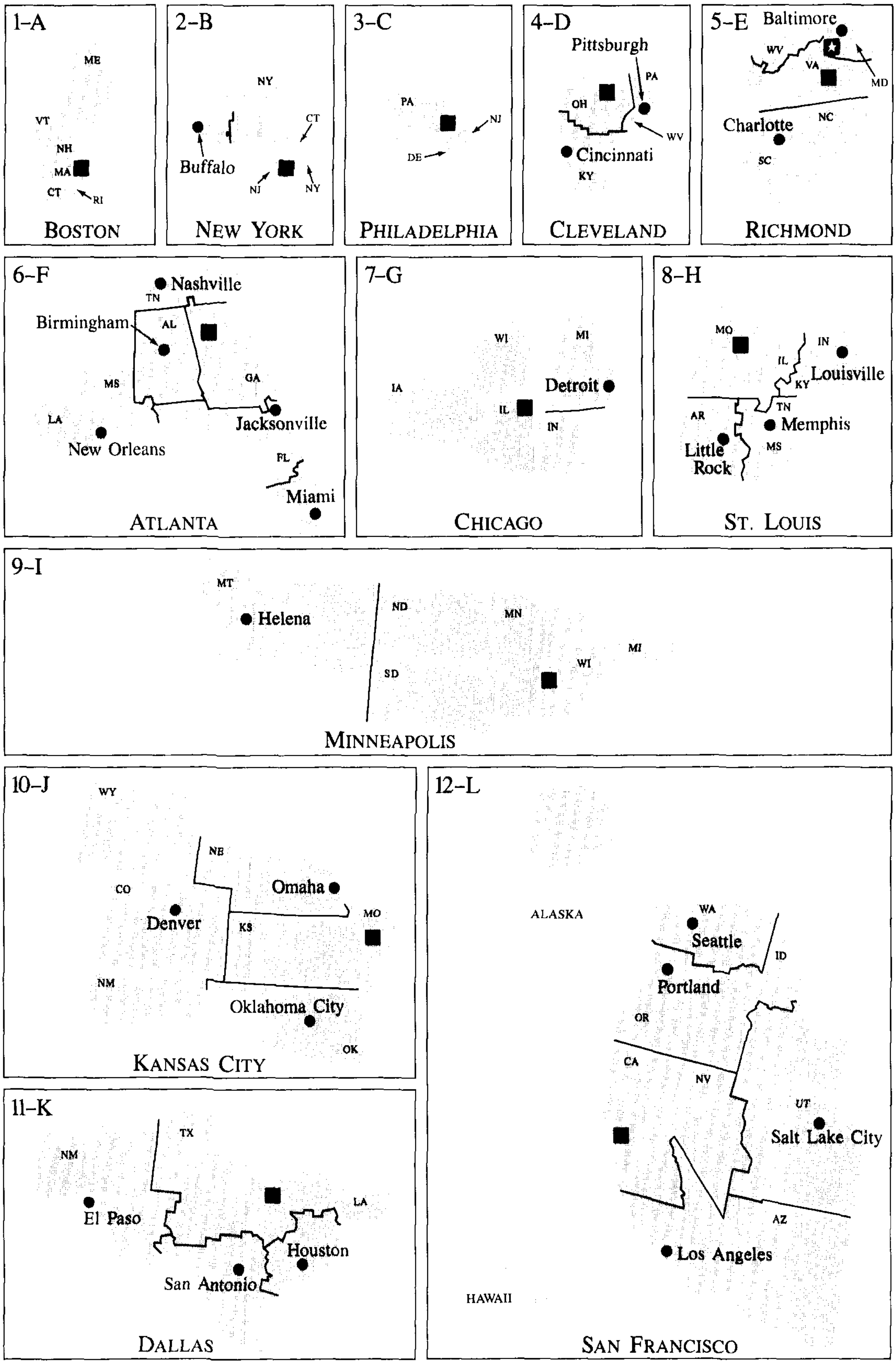
— Branch boundary

NOTE

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

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

The System serves commonwealths and territories as follows: the New York Bank serves the Commonwealth of Puerto Rico and the U.S. Virgin Islands; the San Francisco Bank serves American Samoa, Guam, and the Commonwealth of the Northern Mariana Islands. The Board of Governors revised the branch boundaries of the System most recently in December 1991.


1–A
ME
VT
NH
MA
CT
RI
BOSTON
2–B
NY
CT
Buffalo
NJ
NY
NEW YORK
3–C
PA
NJ
DE
PHILADELPHIA
4–D
Pittsburgh
PA
OH
WV
Cincinnati
KY
CLEVELAND
5–E
Baltimore
WV
VA
MD
Charlotte
NC
SC
RICHMOND
6–F
Nashville
TN
Birmingham
AL
MS
GA
LA
Jacksonville
New Orleans
FL
Miami
ATLANTA
7–G
WI
MI
IA
Detroit
IL
IN
CHICAGO
8–H
MO
IN
IL
KY
Louisville
AR
TN
Memphis
Little Rock
MS
ST. LOUIS
9–I
MT
Helena
ND
MN
MI
WI
SD
MINNEAPOLIS
10–J
WY
NE
CO
Omaha
Denver
MO
KS
NM
Oklahoma City
OK
KANSAS CITY
11–K
TX
NM
LA
El Paso
Houston
San Antonio
DALLAS
12–L
ALASKA
WA
Seattle
ID
Portland
OR
CA
NV
UT
Salt Lake City
AZ
Los Angeles
HAWAII
SAN FRANCISCO

Federal Reserve Banks, Branches, and Offices

FEDERAL RESERVE BANK branch, or *facility*	Zip	Chairman Deputy Chairman	President First Vice President	Vice President in charge of branch
BOSTON*	02106	Jerome H. Grossman Warren B. Rudman	Richard F. Syron Cathy E. Minehan	
NEW YORK*	10045	Ellen V. Futter Maurice R. Greenberg	E. Gerald Corrigan James H. Oltman	
Buffalo	14240	Joseph J. Castiglia		James O. Aston
PHILADELPHIA	19105	Jane G. Pepper James M. Mead	Edward G. Boehne William H. Stone, Jr.	
CLEVELAND*	44101	A. William Reynolds G. Watts Humphrey, Jr.	Jerry L. Jordan Sandra Pianalto	
Cincinnati	45201	Marvin Rosenberg		Charles A. Cerino[1]
Pittsburgh	15230	Robert P. Bozzone		Harold J. Swart[1]
RICHMOND*	23219	Anne Marie Whittemore Henry J. Faison	J. Alfred Broaddus, Jr. Jimmie R. Monhollon	
Baltimore	21203	Rebecca Hahn Windsor		Ronald B. Duncan[1]
Charlotte	28230	Anne M. Allen		Walter A. Varvel[1]
Culpeper Communications and Records Center	*22701*			John G. Stoides[1]
ATLANTA	30303	Edwin A. Huston Leo Benatar	Robert P. Forrestal Jack Guynn	Donald E. Nelson[1]
Birmingham	35283	Donald E. Boomershine		Fred R. Herr[1]
Jacksonville	32231	Joan D. Ruffier		James D. Hawkins[1]
Miami	33152	R. Kirk Landon		James T. Curry III
Nashville	37203	James R. Tuerff		Melvyn K. Purcell
New Orleans	70161	Lucimarian Roberts		Robert J. Musso
CHICAGO*	60690	Richard G. Cline Robert M. Healey	Silas Keehn William C. Conrad	
Detroit	48231	J. Michael Moore		Roby L. Sloan[1]
ST. LOUIS	63166	Robert H. Quenon Janet McAfee Weakley	Thomas C. Melzer James R. Bowen	
Little Rock	72203	Robert D. Nabholz, Jr.		Karl W. Ashman
Louisville	40232	John A. Williams		Howard Wells
Memphis	38101	Seymour B. Johnson		John P. Baumgartner
MINNEAPOLIS	55480	Delbert W. Johnson Gerald A. Rauenhorst	Gary H. Stern Colleen K. Strand	
Helena	59601	James E. Jenks		John D. Johnson
KANSAS CITY	64198	Burton A. Dole, Jr. Herman Cain	Thomas M. Hoenig Henry R. Czerwinski	
Denver	80217	Barbara B. Grogan		Kent M. Scott
Oklahoma City	73125	Ernest L. Holloway		David J. France
Omaha	68102	Sheila Griffin		Harold L. Shewmaker
DALLAS	75201	Leo E. Linbeck, Jr. Cece Smith	Robert D. McTeer, Jr. Tony J. Salvaggio	
El Paso	79999	W. Thomas Beard, III		Sammie C. Clay
Houston	77252	Judy Ley Allen		Robert Smith, III[1]
San Antonio	78295	Erich Wendl		Thomas H. Robertson
SAN FRANCISCO	94120	James A. Vohs Judith M. Runstad	Robert T. Parry Patrick K. Barron	
Los Angeles	90051	Donald G. Phelps		John F. Moore[1]
Portland	97208	William A. Hilliard		E. Ronald Liggett[1]
Salt Lake City	84125	Gary G. Michael		Andrea P. Wolcott
Seattle	98124	George F. Russell, Jr.		Gordon Werkema[1]

*Additional offices of these Banks are located at Lewiston, Maine 04240; Windsor Locks, Connecticut 06096; Cranford, New Jersey 07016; Jericho, New York 11753; Utica at Oriskany, New York 13424; Columbus, Ohio 43216; Columbia, South Carolina 29210; Charleston, West Virginia 25311; Des Moines, Iowa 50306; Indianapolis, Indiana 46204; and Milwaukee, Wisconsin 53202.

1. Senior Vice President.