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The Establishment and Evolution of the Federal Reserve Board: 1913–23

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When, on December 23, 1913, Woodrow Wilson signed the act establishing the Federal Reserve System, he felt grateful, he said, for having had a part in "completing a work . . . of lasting benefit to the business of the country." The nation had been without an organization performing central banking functions since the charter of the Second Bank of the United States had expired in 1836. Financial stresses caused by the Civil War and a series of devastating liquidity crises and bank failures, especially the Panic of 1907, had focused public awareness on the need for banking and monetary reform. The Congress passed the Aldrich–Vreeland Act of 1908, which provided for the issuance of currency in an emergency. The act also created the bipartisan National Monetary Commission, headed by Senator Nelson Aldrich, to study banking and currency reform and to develop some recommendations. After making a detailed study of banking in Europe and North America, the commission in 1912 published its findings in 38 massive volumes. Aldrich formalized the commission's recommendations in a bill, generally known as the Aldrich Plan, calling for one central bank and 15 branches.

Although members of the Congress agreed on the need for reform and on its general goals, they differed strongly on its shape. The Aldrich Plan stirred up a deep-seated distrust of the centralization of power and of the banking establishment. Alternative plans, which attempted different balances between public and private interests and between central and regional control, were proposed. The members finally overcame their partisan differences and adopted the plan forged by President Wilson, Congressman Carter Glass, and Senator Robert Owen, which became the Federal Reserve Act—an act "to furnish an elastic currency, to afford means of rediscounting commercial paper, to establish a more effective supervision of banking in the United States, and for other purposes."

While the process of investigation, discussion, and compromise leading to the act had ended with President Wilson's signature, another long process was beginning: that of organizing and establishing in practice the central banking system of the United States and of developing new policies and tools to meet the changing needs and circumstances of the economy. At the time of the signing, Paul Warburg, one of the members of the first Board, said prophetically that "the Federal Reserve Act as passed should not be considered as a finality, and . . . actual experience in its operation would prove the need of important modifications or amplifications."[1]

The process of modifying and amplifying the act over the next 10 years was far from smooth. H. Parker Willis, the first Secretary of the Board, in a rhetorical flourish implied that it could even be considered a war: "[The struggle that produced the Federal Reserve Act] is not merely a chapter in financial history; it is also an account of the first battle in a campaign for safe and scientific banking that has only just opened."[2] Willis's metaphor was apt. During its first decade, the System struggled to gain acceptance while facing the stresses caused by World War I and its aftermath.

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1. Paul M. Warburg, *The Federal Reserve System: Its Origin and Growth*, vol. 1 (Macmillan, 1930), p. 141.
2. Henry Parker Willis, *The Federal Reserve System: Legislation, Organization and Operation* (Ronald Press, 1923), pp. 20–21.

The System was to consist of the Federal Reserve Board in Washington; Federal Reserve Banks, each in its own district and known by the name of the city in which it was located; and member banks, that is, all national banks and those state-chartered banks willing and qualified to join. Initially, all the parts of the interdependent System struggled for acceptance. While separating those parts is often difficult, this article focuses on the struggles of the Board, which was to be, according to President Wilson, the "capstone" of the new Federal Reserve System. During its formative years, the Board had its own problems of establishing its authority, of recognizing the possibilities of its tools, and of developing its role as a policymaker. By the end of 1923, 10 years after the passage of the act, the Board was beginning to resemble the influential policymaking body it is today.

PROVISIONS OF THE FEDERAL RESERVE ACT

The Federal Reserve Board was established by Section 10 of the Federal Reserve Act. This section carefully spelled out the organizational aspects of the Board, which was to consist of "seven members, including the Secretary of the Treasury and the Comptroller of the Currency, who shall be members ex officio [that is, by virtue of their offices], and five members appointed by the President of the United States, by and with the advice and consent of the Senate."

Making the members presidential appointees was an attempt by the framers of the act, and of President Wilson in particular, to keep the System under a centralized public authority so as to balance the power of private "money interests." The earlier Warburg and Glass plans, while giving the government some voice, had given the banks that were members of the system (by subscription to stock in the regional banks) representation on the Board; and the Aldrich plan had even given the banks essential control (for a comparison of the features of the various proposals, see the box on pages 230 and 231.). But President Wilson, believing that interested, private parties should not sit on a board of control, stated:

> [T]he power to direct this system of credits is put into the hands of a public board of disinterested officers of the Government itself who can make no money out of anything they do in connection with it. No group of bankers anywhere can get control; no one part of the country can concentrate the advantages and conveniences of the system upon itself for its own selfish advantage.[3]

Through presidential appointment of the members of the Board, the framers of the act hoped to avoid a system that had even the appearance of a monopolistic institution likely to fall victim to partisan politics as had the First and Second Banks of the United States.

Section 10 further stipulated that no more than one of the five appointive members was to be selected from any one Federal Reserve District and that the President should have "due regard to a fair representation of the different commercial, industrial and geographical divisions of the country." At least two Board members were to be "persons experienced in banking or finance."

These provisions for membership of the Board were intended to limit the degree to which the Board was subject to partisan pressures and to help ensure that it would not be dominated by any one interest group or region. In particular, a majority of the framers wanted to avoid giving substantial control to New York financial interests. The requirement that two members be knowledgeable in banking and finance was intended to ensure that the System would be governed by sound and "scientific" principles in addressing the commercial and financial needs of the nation.

While the President was to select the members of the Board and to designate one as Governor and another as Vice Governor, no direct line of communication was set up between the Board and the President. The salaries and operating expenses of the Board were to be paid from the earnings of the Reserve Banks rather than from congressional appropriations, but the Board was to make a full report of System operations to the Congress annually.

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3. Letter, Woodrow Wilson, to Oscar Wilder Underwood, October 17, 1914, in Arthur S. Link (ed.), *The Papers of Woodrow Wilson*, vol. 31 (Princeton University Press, 1979), p. 172.

These arrangements were intended to help insulate the Board from pressures from the executive and the legislative branches.

In a further attempt to insulate the Board from partisan politics, Section 10 provided for 10-year terms for Board members. These terms were longer than those of any other executive appointees except for those of the federal judiciary, which were lifetime appointments, and that of the Comptroller General, which was for 15 years. The first appointed members were to serve varied terms of 2, 4, 6, 8, and 10 years, so that future appointments would be staggered and any future President would be unlikely to appoint a majority of the Board.

Powers and Duties of the Board

While the organizational aspects appeared in one section, the powers and duties of the Board were spread throughout the act. Section 11 gave the Board the functions of examining the "accounts, books, and affairs" of the Reserve Banks and of the member banks; of permitting or requiring a Reserve Bank to rediscount the discounted paper of other Reserve Banks and to fix the rate for such rediscounting;[4] of regulating the amount of gold reserves held against Federal Reserve notes; of supervising and regulating the issue and retirement of these notes; of changing the number and designation of Federal Reserve cities; and of carrying out various supervisory and regulatory functions concerning the Reserve Banks. But other powers and duties of the Board appeared in sections dealing with additional organizational and functional elements of the System. For example, the Board's power to designate three of the nine directors of each Reserve Bank appeared in Section 4; its duty to determine or define the character of the paper eligible for discounting fell under Section 13; and its power regarding rates of discount fell under Section 14, "Open-Market Operations."

Besides being spread throughout the act, the Board's functions were in some cases presented vaguely and indirectly, almost as an afterthought. For example, each Reserve Bank's power to establish rates of discount was "subject to review and determination of the Federal Reserve Board." What "determination" meant was not clear, and so the line between the Reserve Banks' power and the Board's power in fixing discount rates was left ill-defined. In other instances, provisions in one part of the act seemed to contradict or overlap provisions in other parts. Thus, Section 11(a) authorized the Board to "examine at its discretion the accounts, books, and affairs of each Federal Reserve bank and of each member bank," and Section 21 empowered the Comptroller of the Currency to "appoint examiners who shall examine every member bank at least twice in each calendar year and oftener if considered necessary" and later referred to the examinations "made and conducted" by the Comptroller of the Currency.

There were two reasons for such lack of precision. First, the act was a political compromise between different conceptions of what the Federal Reserve System as a whole, and the Board as part of that System, was to do and was not to do and what kind of checks and balances were needed. Having a public body oversee a system of privately owned commercial banks raised questions not only about lines of authority but also about what the Board's function was and how the Board was to fulfill it. The attempt to satisfy different interests led at times to vagueness and even to contradiction. Second, the type of system that was set up by the act was new and untried. Thus, even some provisions that were less vague, such as the number and the qualifications of persons to be on the Board and the ability of the Board to alter Reserve Districts and cities, were later reinterpreted and amended as circumstances required.

Some Unsettled Issues

The issues regarding the Board that the act left unsettled can be grouped into three categories: (1) the Board's relation to the government, primarily the Department of the Treasury; (2) the Board's relation to the rest of the Federal Reserve System; and (3) the Board's specific role or mission within those frameworks. During the first decade of the Board's existence, the need for its independence from the Treasury became

4. The term "rediscount" is no longer in use.

Major twentieth-century plans for a governing body for the central banking system

Plan, bill, or act		Governing body				
Name	Date	Name	Number of members	Term of office (years)	Composition	Function
Warburg Plan	November 1907; revised April 1908	Board of Managers	42	1, or until their successors qualify	Secretary of Treasury; Comptroller of the Currency; U.S. Treasurer; 6 members of Congress; 20 chairmen of branches; 12 others voted by stockholding member banks; a salaried board governor	Issue notes based on commercial bills and gold; fix the discount rate and rediscount short-term commercial paper; maintain central cash reserve; establish branches; manage and supervise activities of 20 regional bank associations
Fowler Plan	February 1908	Court of Finance	17	Serve until age 72, unless majority of Court extends appointment	6 members from Atlantic coast; 6 from Mississippi region; 4 from Pacific coast; all experienced in business and banking; one at-large appointee to preside over court; all appointed by the President	Issue notes based on secured bank assets; consider appeals from member banks not satisfied with rulings from regional associations; manage central gold reserve
Aldrich Plan	January 1911	Reserve Association Board	45	3	Secretaries of Treasury, Commerce, Labor, and Agriculture; Comptroller of the Currency; 14 members elected by boards of branches; 12 representing stockholding interests; 12 representing agriculture, commerce, and industry; governor and deputy governor	Act as fiscal agent for government; determine discount rate for short-term commercial paper, bills of exchange, and so on; engage in open market purchases
Owen Bill	May 1913	Board of Governors of the National Currency	7	Serve at the pleasure of the President	Secretaries of Treasury and Agriculture; Comptroller of the Currency; 4 governors appointed by President: 1 knowledgeable in commerce, 1 in manufacturing, 1 in transportation, and 1 in banking and credit	Exercise general supervision over reserve banks and examine accounts of national and reserve banks; act as fiscal agent for government; adjust boundaries and districts of reserve banks if necessary; supervise issuance of national currency; suspend for no more than 30 days reserve requirements specified in bill; approve reserve bank accounts in foreign countries; oversee foreign exchange operations

Glass Bill	June 1913	Federal Reserve Board	7	8	Secretaries of Treasury and Agriculture; Comptroller of the Currency; 4 board members appointed by the President, at least 1 experienced in banking	Examine accounts of reserve banks; require or permit reserve banks to discount paper of any other reserve bank; establish mandatory weekly discount rates upon each class of paper; suspend for no more than 30 days reserve requirements specified in bill; supervise and regulate the issuance of notes to reserve banks; prescribe rules for reserve banks to engage in open market operations
Vanderlip Plan	November 1913	Governing Board	7	14; staggered expiration	7 members appointed by the President; nonpartisan, government board	Approve rediscounting; oversee clearinghouse operations; issue bank notes
Federal Reserve Act (Glass–Owen Bill)	December 1913	Federal Reserve Board	7	10	Secretary of Treasury; Comptroller of the Currency; 5 members appointed by the President with due regard to commercial, industrial, and geographical representation, with at least 2 members experienced in banking and finance	Supervise and regulate the issuance and retirement of Federal Reserve notes; reclassify Reserve Districts and add Reserve Banks if appropriate; supervise the activities and audit accounts of Reserve Banks; select 3 directors, including chairman, of each Reserve Bank board; require or permit Reserve Banks to rediscount paper of other Reserve Banks; approve discount rates set by Reserve Banks; issue regulations regarding Reserve Bank open market operations
Federal Reserve Act amended	June 1922	Federal Reserve Board	8	10	Secretary of Treasury; Comptroller of the Currency; 6 appointive members; added agricultural representative and eliminated requirement for 2 members to be experienced in banking or finance	Same as above
Federal Reserve Act amended (Banking Act of 1935)	August 1935	Board of Governors of the Federal Reserve System	7	14	7 members appointed by the President, representing financial, agricultural, industrial, and commercial interests, and geographical divisions of the country; removed Secretary of Treasury and Comptroller of the Currency from Board	Exercise authority over national monetary and credit policies and, as part of the Federal Open Market Committee, help set open market policy

clearer; its struggle for power with the regional Reserve Banks, particularly the New York Bank, intensified; and its sense of its own mission and how to carry it out strengthened and solidified.

The Board's Relation to the Treasury. Because the Board was a public body charged with overseeing the nation's financial institutions, those who drafted the act believed that the Board clearly had to have a close relation with the Treasury. That close relation, however, raised the issue of the System's independence from the Treasury, which soon became manifest in three conflicts involving the Board: (1) about the respective responsibilities of the Treasury officials who sat on the Board and of the members appointed by the President; (2) about the Board's financial accountability; and (3) about the division of powers between the Treasury and the Board.

The Secretary of the Treasury and the Comptroller of the Currency (a Treasury Department official) sat on the Board and voted as part of the duties of their respective offices. Thus, the Treasury had a substantial influence on the decisions of the Board. The Secretary of the Treasury was designated by the act as the Chairman of the Board, but the responsibilities of this position were not spelled out. The appointed member designated by the President as Governor was the "active executive officer," but his duties, too, were left unclear. Later, Secretary of the Treasury William McAdoo interpreted "active executive officer" to mean "manager and administrator." But the heavy influence of the Treasury and the lack of a clear definition of roles put some strain on the relations among the Board members.

The act gave the Board the power to levy an assessment on the Reserve Banks to pay its expenses, including the salaries of members and staff, and thus made the Board independent of the congressional appropriations process, though it required the Board to make a yearly report to the Congress. The Treasury, however, claimed the right to audit the Board's books as the Board's funds were initially construed to be public moneys. As early as December 19, 1914, the U.S. Attorney General ruled on this issue, saying that while the moneys the Board had were public and thus were subject to audit by an agent of the Treasury, the Board was an independent board or government body separate from the Treasury. Despite the ruling, the debate continued for a long time. (The issue of financial independence was settled with the Banking Act of 1933, which stated that the Board's funds were not to be construed as public moneys. But the lingering issue of accountability was not settled until the Federal Banking Agency Audit Act of 1978, which authorized the General Accounting Office to audit the Board.)

The division of powers between the Board and the Treasury also was cloudy. Some of the functions that the act gave to the Board overlapped those of the Treasury, as in the examination of member banks. Also, the Comptroller of the Currency chartered national banks, all of which were required to be members of the System, so the question arose as to who had regulatory power over them. (This confusion over supervisory and regulatory jurisdiction has been settled over the years through informal agreements among the System, the Comptroller, and the Federal Deposit Insurance Corporation. Generally, the System has authority over state member banks and bank holding companies; the Comptroller has authority over nationally chartered banks; and the FDIC oversees state nonmember banks.)

The issue of the Board's, and the System's, independence from the Treasury caused conflicts between the two agencies and among the Board members themselves. (It was defused in part by the Banking Act of 1935, which removed the Secretary of the Treasury and the Comptroller of the Currency from the Board and placed responsibility for monetary policy solely in the hands of the Board and the newly established Federal Open Market Committee.)

The Board's Relation to the Reserve Banks. As established by the act, the Board had an ambiguous position vis-à-vis the Reserve Banks. The Board was a central public body having supervisory and regulatory powers over private commercial banks that were members of the System. To help ensure that commercial bankers' concerns would be heard, the act established the Federal Advisory Council, consisting of one representative from each Reserve District elected by the member banks of that District, who acted as the banks' representatives to the Board. The council was, however, empowered only to receive and provide information and to make recommendations. The Board had its representative at each of the Reserve Banks: one of the three Class C directors it appointed was designated the Federal Reserve Agent. The delineation of powers between the Agent and the Governor (now called the President) of the Reserve Bank was at first unclear. By the end of the first decade, however, the Governors had emerged as the principal leaders of their respective Reserve Banks.

But the Board was more than the government regulatory agency that President Wilson characterized as analogous to the Interstate Commerce Commission. It also had managerial duties and served to direct, coordinate, and guide the System's activities. In his 1914 opinion on the status of the Board, Attorney General T.W. Gregory stated that the Board was "not merely supervisory, but . . . a distinctly administrative board with extensive powers." These powers, however, had to be defined.

According to the act, the Board and the Reserve Banks would exercise jointly the functions of issuing and retiring Federal Reserve notes. But the act assumed that cooperation and coordination between the Board and the Reserve Banks, as well as among the Reserve Banks, would be automatic.[5] One example of the problems arising from this assumption regarded the discount rate, which each Reserve Bank was empowered to set for its own district. Was the rate to be uniform or to vary across the country, and was it to depend on the type of paper that was being discounted? If the rates were to vary geographically, might not money accumulate in one Reserve District while draining away from another, a situation that the act was intended to prevent? Who would then decide when the rate was to change, and what principles were to govern this decision?

Each Reserve Bank could engage in open market operations "at home and abroad" for its own earnings. Who would regulate the competition for funds that might arise among the Reserve Banks? How would the others fare against the New York Bank, the one that was the largest and most influential and likely to do the most business? How were policies regarding the discount rate and those regarding open market operations, which could work against one another, to be coordinated?

In international operations, who would speak for the System, and what body would take the initiative? After the passage of the act and even before the selection of the first Board, J.P. Morgan, Jr., and other bankers and businessmen told the Reserve Bank Organization Committee, a committee established by the act to designate the Federal Reserve cities and districts, that one Reserve Bank, probably in New York, should be of "commanding importance," especially with a view to its recognition by the central banks of Europe.[6] Secretary of the Treasury William McAdoo and Secretary of Agriculture David Houston, both on the committee, put forward the contrary view that the activities of all 12 Reserve Banks should be coordinated through the Board and that the Board should be the entity to which the foreign authorities looked. In practice, however, the New York Reserve Bank became the principal representative in international affairs during the early years of the System. This situation arose because of the superior knowledge and experience in international finance and the close contacts with foreign bankers of that Bank's governor, Benjamin Strong.

The Board's Mission. Much rhetoric surrounded the establishment of the Board. President Wilson called it the "Supreme Court of Finance," and William McAdoo saw it as a "bulwark against financial disaster."[7] But the rhetoric did not fit the reality of the Board's job as outlined in the act.

5. Milton Friedman and Anna J. Schwartz, *A Monetary History of the United States, 1867–1960* (Princeton University Press, 1963), p. 190.

6. "Commanding Bank Most Needed Here," *New York Times*, January 7, 1914.

7. "New Reserve Board Sworn into Office," *New York Times*, August 11, 1914.

The Board's role and its means for filling it were not well defined because the framers of the act were concerned about limiting the Board's powers and because the System's role in the economy and the tools of monetary control had not been tested and thus were not well understood. Was the Board to be the partly automatic regulator of an organization that was generally passive except when an emergency required it to accommodate commerce and business? Or was the Board to be the central policymaker in a System that actively participated in regulating the economy through managing the availability of money and credit? The discussion in the Congress just before the passage of the act was indicative of the concerns that the legislators had about the powers of an activist central bank. Said Congressman Rufus Hardy of Texas: "A central bank, so much desired by Wall Street . . . [would have] powers for evil which the Board does not have. . . . The Board could not loan, earn, own, or borrow one dollar. It could not finance an enterprise. It could not finance a candidate or a campaign."[8] What the Board could or should do was not so clear.

In its *First Annual Report,* published less than six months after it was sworn in, the Board rejected a passive role for the Reserve Banks and, by extension, for itself: The System's "duty" was "not to await emergencies but, by anticipation, to do what it can to prevent them."[9] But because the Board was unsure of its mandate for setting policy as well as of the tools at its disposal and also because it immediately faced an extraordinary situation—World War I—it could not act according to this principle.

The muddiness in the division of powers between the Board and the Reserve Banks and between the Board and the Treasury, as well as in the conception of the Board's mission, led to floundering and conflict in the early years of the System. How powers were to be divided and duties performed had to be worked out by trial and error in an ever-changing economic milieu. In its first 10 years, the Board began to establish itself within the System and in relation to the Treasury Department and to learn what tools it had and how to use them in setting and carrying out policy. Under pressure of circumstances, the Board, and the rest of the System, evolved in ways not foreseen by the framers of the act.

THE FIRST BOARD

The first Federal Reserve Board was sworn into office on August 10, 1914, after a selection process that was long and difficult for several reasons. First, President Wilson had to wait for the Reserve Bank Organization Committee to select Federal Reserve cities and draw District lines because the act specified that not more than one appointive member could come from any one Reserve District.

Second, Wilson was aware of a widespread belief that the success of the Reserve System depended on his selections. Like the First and Second Banks of the United States, the Reserve Banks had been assigned a 20-year charter, and Wilson wanted the System to last. (In the McFadden Act of 1927, the Congress showed its agreement with Wilson's position by extending the Reserve Banks' charter indefinitely.) While the composition of the Board had been addressed in the act, demands persisted from various quarters that Board members have certain credentials. Some interests, for example, urged that a member of a labor union, a farmer, and a former U.S. President be placed on the Board. Wilson had to consider these requests and weigh their importance.

Third, the confirmation process took time. Two of Wilson's original choices—Richard Olney, a lawyer from Boston and a former Secretary of State, and Harry A. Wheeler, a Chicago businessman and a former president of the U.S. Chamber of Commerce—declined their appointments. A third choice, David D. Jones, a Chicagoan who was a close friend of the President, encountered strong opposition because he had been a director of International Harvester, a trust that in 1914 was under indictment for illegal restraint of trade. Jones was ultimately rejected by the Senate. A fourth choice, Paul M. Warburg, a partner in the Wall Street investment firm of Kuhn, Loeb & Company, met with suspicion

8. *Congressional Record*, September 13, 1913, p. 4865.
9. Board of Governors of the Federal Reserve System, *First Annual Report, 1914* (1915), p. 17.

because of his ties to the New York "money interests" and because of his backing of the Aldrich Plan and his original opposition to the Federal Reserve Act. After testifying before the Senate Banking Committee, Warburg, who had protested at being the only nominee besides Jones requested to appear, was finally confirmed.

Besides Warburg, the appointive members of the first Board were Frederic A. Delano, president of the Monon Railway, from Chicago; Charles S. Hamlin, a lawyer from Boston and a former Assistant Secretary of the Treasury; William P.G. Harding, president of the First National Bank of Birmingham, Alabama; and Adolph C. Miller, a noted economist and former professor at the University of California, who was at that time an Assistant Secretary of the Department of the Interior. President Wilson designated Hamlin as Governor and Delano as Vice Governor. These appointments, particularly those of Warburg and Harding, who were exceedingly knowledgeable about banking, were welcome to the business and banking communities. *The Commercial and Financial Chronicle* noted at the time that "the sentiment of the financial community as a whole on learning of the president's nominations for the Federal Reserve Board has been one of profound relief."[10]

Once appointed, the Board members were not directly responsible to the President, who had no formal channel of communication to the Board and no legal power over Board policies.[11] But in practice, the presence of the Secretary of the Treasury and the Comptroller of the Currency on the Board gave the Executive Branch considerable weight; and the differing interests were expressed in quite a bit of friction between the "Treasury" faction, which included Hamlin as well as the ex officio members, and the "non-Treasury" faction, which included Delano, Warburg, and Miller. In 1916, when Hamlin was reappointed to the Board for a 10-year term, some members of the Board objected to his continuing as Governor because his close connection to the Treasury threatened the Board's independence and because they wanted a rotation of the governorship. So President Wilson appointed Harding as Governor and Warburg as Vice Governor.

EARLY TASKS AND ISSUES: 1914–17

The first task of the Board was to complete the establishment of the System begun by the Reserve Bank Organization Committee. The Board had a great deal of work to do before November 16, 1914, the date Secretary of the Treasury McAdoo had set for the opening of the Reserve Banks. The Board members selected three Class C directors for each of the 12 Reserve Banks (the Class A and Class B directors were elected by the member banks in each Reserve District); drafted uniform bylaws for the Reserve Banks; dealt with staffing and housing the Reserve Banks; oversaw the design and printing of the new Federal Reserve notes; supervised the transfer of gold reserves to the Reserve Banks from the subtreasuries; set guidelines for the types of paper that were eligible for discounting by the Reserve Banks; and worked out a mechanism for discounting.

On October 20, 1914, soon after announcing the appointment of the Class C directors, the Board called a meeting in Washington of the directors and other officers of the Reserve Banks to deal with practical items that required uniformity and cooperation among the Reserve Banks, such as a check-clearing and -collection system and a method of accounting. Some of the executive officers (or "Governors," as they then were called), especially Benjamin Strong of the New York Bank and Alfred L. Aiken of the Boston Bank, recognized the need to continue such meetings and helped to establish a conference of Governors that met several times a year to discuss common concerns and objectives. The "Governors Conference" began to take on a life of its own, to issue resolutions on System policies, and to criticize rulings and orders from the Board. In January 1916, the Board decided to check the authority of the Governors Conference by refusing to approve its expenses for a secretary and for travel not undertaken at the behest

10. In Gerald T. Dunne, "The Federal Reserve: The First Foundations," *Business Horizons* (Winter 1966), p. 56.
11. Donald F. Kettl, *Leadership at the Fed* (Yale University Press, 1986), p. 4.

of the Board. The Board also insisted that any meetings of the group take place in Washington at a time designated by the Board. Some Governors complained that the Board was exceeding its mandated authority; but the Board prevailed and, through this early internal contest, began to define and exert its authority within the System.

Some of the tasks of setting up the System, complex in themselves, were made even more difficult because of opposition from various quarters. The establishment of a universal par check-clearance system, for example, was opposed by many member banks, particularly those in small towns, that did not want their "exchange charges," or processing fees, abolished since these were a means of earning income. (This issue actually went into litigation, and the case was not settled until a 1923 Supreme Court decision affirmed the right of a Reserve Bank to collect checks within its District for other Reserve Banks, for member banks, and for affiliated nonmember banks without paying an exchange charge.)

In a further effort to strengthen the System and to unify U.S. banking, the Board issued regulations fixing the conditions under which state banks could join the System (under the terms of the act, national banks were required to become members within a year or forfeit their federal charters). But the state banks, finding those conditions less satisfactory than the ones under which they currently operated, did not rush to join.

At the same time, the Board was developing its own staff and operations. To support its work, the Board hired a staff of 45 from 1,250 applicants, dealing with considerable pressure from various sources for particular appointments; established three divisions—the Correspondence Division, the Division of Reports and Statistics, and the Division of Audit and Examination—and a legal department under the charge of a general counsel; and appointed two administrative officers, the secretary (H. Parker Willis) and the assistant secretary (Sherman P. Allen). In accordance with the act, Treasury Secretary McAdoo provided office space in the Treasury Building for the Board and its staff. This arrangement was disturbing to some of the Board members, who suggested moving the Board's operations to Chicago to mitigate what seemed at times to be overwhelming Treasury influence.

In May 1915, the Board created the FEDERAL RESERVE BULLETIN as a monthly publication to "afford a general statement concerning business conditions and events in the Federal reserve system that will be of interest to all member banks." The provision of statistical and other information on a consistent basis for all Reserve Districts was another move toward coordination and unity.

Soon after the Board took office, it was asked to review the decisions of the Reserve Bank Organization Committee regarding the designation of Federal Reserve cities and the drawing of District lines. Pittsburgh and Baltimore had requested designation as Federal Reserve cities in place of Cleveland and Richmond respectively. Some areas, such as Fairfield County, Connecticut, had applied to be transferred from one Reserve District to another. A few members of the Board believed that the System would be more efficient with fewer Districts. Since the capital of some of the Reserve Banks was close to the statutory minimum of $4 million and since transferring territory among Districts could in some cases reduce capital below the limit, the Attorney General was asked for an opinion about the Board's power to readjust the Reserve Districts. On November 22, 1915, the Attorney General said that the Board could not reduce the number of Reserve Districts or Reserve Banks below 12, and on April 14, 1916, he indicated that the Board could not change the location of any Reserve Bank but that it could adjust the boundary lines of the Districts.

Policy Questions

According to the act, one of the main functions of the System was to "furnish an elastic currency," that is, a currency that would respond to the regional, seasonal, and cyclical needs of the U.S. economy as well as its emergency needs. The discounting of "eligible" paper would be the primary policy tool with which to achieve this elasticity. Each Reserve Bank was to set its own discount rate, subject to "review and determination" by the Board. The act assumed the coordination of discount policy to be automatic, relying on the gold standard and the "real bills" doctrine. That doctrine held that if credit were issued only on the basis of short-term, self-liquidating paper associated with goods in commercial transactions, money and credit would expand and contract with the volume of goods produced. However, the Board quickly saw the necessity for developing a Systemwide discount policy so that all the Reserve Bank discount rates, even if differing among the Districts, would at least bear a consistent relation to one another. In an effort to standardize Reserve Bank practices, the Board defined the different classes of paper that were eligible for discount and decided on a schedule of graduated rates based on the maturity and character of the paper discounted.

Carrying out such tasks and deciding on such sensitive issues would have been difficult enough in peacetime; but even as the Board was being sworn in and the System was being organized, war erupted in Europe. In the time of uncertainty as to whether the United States would enter the war, the Board adhered to a policy of strengthening the System for preparedness in case of the declaration of war. It attempted to maintain the liquid character of the Reserve Banks' assets, to concentrate and conserve the gold supply within the System, and to discourage excessive expansion of credit. In May 1915, the Board established the Gold Settlement Fund, with each Reserve Bank depositing with the Treasury $1 million in gold or gold certificates. With the Board acting as a clearinghouse, the fund eliminated the need for shipments of gold in adjusting balances among Reserve Banks. In September 1916, the Federal Reserve Act was amended to permit member banks to carry all required reserves as balances with the Reserve Banks. In June 1917, the act was amended again in accordance with Board recommendations to make membership in the System more attractive to state banks and trust companies, to modify reserve requirements to increase the gold holdings of the Reserve Banks, and to make gold more available as a basis for elastic note issue. Also, the Reserve Banks began to issue Federal Reserve notes against not only gold but a combination of gold and commercial paper. Whereas earlier the centralization of the gold supply had been seen as a way of discouraging excessive expansion of money and credit, now it was seen as a way of encouraging needed expansion. As a result of these changes, the Federal Reserve note was becoming, rather than an occasional emergency currency, the most important constituent of the U.S. "circulating medium."

Emergency Measures

While the declaration of war in Europe in the summer of 1914 served to moderate opposition to the System, it diverted attention from longer-term issues to emergency measures. Although the United States was not yet directly involved in the war, the country's economic and financial systems were from the first affected by the European conflict. Fortunately, the Congress had extended the Aldrich–Vreeland Act of 1908 until June 30, 1915, which helped to prevent a panic by providing for the issuance of notes through national currency associations. This extension enabled the Board to respond to other emergency conditions caused by the war.

At first, the war curtailed ocean transportation and disrupted international trade, creating strains in commodities markets and hardships for U.S. farmers, particularly those growing cotton. The cotton crop in 1914 had been the largest on record, and the collapse of the cotton export market (which took about 60 percent of the cotton farmers' output) and the closing of the cotton exchanges in the United States and England brought pressures from the Congress on the Board to help support the price of cotton and to provide credit assistance to cotton farmers. In January 1915, the Board approved a plan for a Cotton Loan Fund subscribed to by commercial banks to supply long-term loans to farmers.

When hostilities started in Europe, the United States was a debtor nation. Its outstanding obligations to Europe, primarily to England, were large, and a substantial volume of securities payable in Europe were about to mature. To prevent a drain of gold that could endanger the U.S. banking system and to facilitate gold payments between countries, the Board and the Treasury helped set up in September 1914 a $100 million Gold Exchange Fund from which international payments could be made. Although only a small portion of the fund was used before it was terminated in March 1915, the existence of the fund did help to prevent panic, restore confidence in the economy, and provide an interim solution to the gold exchange problem until the Reserve Banks were fully operational.

As the war in Europe continued, the financial and monetary situation of the United States changed. Many financial centers in Europe experienced difficulties, and several stock exchanges closed. London gave way to New York as the major world credit market, and large foreign credits were negotiated in the United States. Exports, particularly those of war-related goods, increased dramatically, and gold poured into the country. From August 1914 to April 1917, the gold stock of the United States almost doubled, to $2.85 billion.

THE BOARD DURING WORLD WAR I: 1917–18

When the United States declared war on Germany on April 6, 1917, the Board and the Reserve Banks found themselves involved in new duties and subjected to new pressures. Just before the declaration of war, Secretary of the Treasury McAdoo charged the System, which in 1915 had been made a receiver and distributor of government funds, with a new fiscal-agency function: that of issuing and redeeming short-term Treasury certificates to prepare for the floating of the $2 billion Liberty Loan of 1917. The Board objected both to the amount of the borrowing and to the low rate of interest for the first certificates, which were for $50 million at 2 percent. In response, McAdoo threatened to invoke the Overman Act, which would have allowed him to take over the System's funds to gain immediate control of all U.S. banking reserves in the emergency. The Board withdrew its objections. During the war, the System assisted the Treasury in floating four Liberty Bond issues; by October 1918, $17 billion in bonds had been floated. Because of this heavy borrowing, the federal government debt expanded from roughly $1 billion in June 1916 to $21 billion in December 1918.

Discount Policy

In its discount policy, the Board faced conflicting objectives: (1) facilitating the war-financing, emergency operations of the Treasury, which meant keeping discount rates low, to allow the financing of the government debt at low rates, and (2) preventing the overexpansion of credit to protect business and commerce, which meant raising interest rates and using "moral suasion" to encourage a "policy of common sense practical economy" (that is, appealing to commercial interests to borrow and the banks to lend only for legitimate business needs and not for speculative purposes).[12] Most often, the Board sought to facilitate the Treasury's financing. Thus, the Board urged the Reserve Banks to establish preferential discount rates on loans to member banks secured by government obligations as compared with discounts of commercial paper. By 1918, the Board looked toward the time when "the war obligations of the Government have been digested, and the invested assets of the Federal Reserve Banks have been restored to a commercial basis, [so that] rates can be established with reference to the commercial requirements of the country."[13]

Strengthening the System

During the war, the Board continued its efforts to strengthen the System. After the 1915–16 influx, the movement of gold into the United States virtually ceased as European countries went off the gold standard. The Board attempted to conserve the U.S. gold supply by limiting exports of gold to neutral countries. It also attempted to make membership in the System more attractive to state banks. President Wilson supported these efforts, saying that membership in the System was a "solemn obligation," and many banks took heed. During the System's first year of operation, 17 state banks joined; by June 1919, spurred by appeals to patriotism and concerned about possible war emergencies, 1,042 state banks had joined, bringing the total number of

12. *Fourth Annual Report, 1917* (1918), p. 9.
13. *Fifth Annual Report, 1918* (1919), p. 87.

System members, including the 7,780 national banks, to 8,822. Responding to the growing complexity of the economic and financial system, the Board in 1918 added the Division of Analysis and Research to its staff with headquarters in Washington and a working office in New York.

The System as a whole gained strength and prestige because it was able to facilitate the mobilization of funds for the war effort and to help bring the country through the collapse of the European financial and commodity markets. The Board itself, however, felt that it was losing control not only to the Treasury but also to the New York Reserve Bank, which operated under the forceful and able leadership of Benjamin Strong. After the first Liberty Loan, the Treasury began to bypass the Board and to deal directly with the Reserve Banks, particularly the New York Reserve Bank. In 1917, in an effort to define its authority, the Board discontinued the regular meetings of the Federal Reserve Agents and those of the Governors of the Reserve Banks. It also took the stand that "in all vital matters of general policy calling for prompt and decisive action concentration of responsibility without division of authority is indispensable."[14] But the Board was still hampered in its attempt to assume leadership by its location in Washington with no immediate access to financial markets, with only a limited research staff, and within too easy reach of the Treasury's influence.

Aftermath of World War I: 1918–23

As a result of the war, the United States became a creditor nation. At first, domestic production surged with the increases in exports and U.S. government expenditures, both of which remained high for some time after the Armistice was signed on November 11, 1918. With the increase in reserves resulting from the inflow of gold and from the use of Treasury bonds as collateral for advances to member banks, credit expanded. The expansion of credit and a surge in demand for consumer goods, which had been pent up during the war years, contributed to postwar inflation. During 1919, speculation and consumption increased while production began to drop off and, with the lifting of the gold embargo, gold began to flow out. In its *Annual Report* for 1920, the Board described the postwar economy in strong language: the year was "characterized by an unprecedented orgy of extravagance, a mania for speculation, overextended business in nearly all lines and in every section of the country, and general demoralization of the agencies of production and distribution."[15]

The Discount Rate and Controversy

As early as December 1918, members of the Board were stressing the connection between low discount rates and excessive expansion of credit and inflation. However, the Board, led by Governor Harding, believed that its duty was to cooperate with the Treasury, which wanted to float a Victory Loan in 1919. In April 1919, the Board discussed at length suggestions by several Reserve Banks to raise the discount rate but decided to keep the rate low to discourage competition with the buying of Victory bonds and to assist the Treasury in keeping the government's interest payments low. It did, however, express concern over the unhealthful tendencies in the process and discussed acting after the close of the Victory Loan campaign. During that campaign, the Board attempted to use moral suasion by issuing warnings to member banks to restrict credit except for essential purposes.

By 1920, the wholesale price index was more than twice its 1914 level, and the Board and the Reserve Banks saw clearly that, despite the Treasury's opposition, something had to be done to contain inflation and speculation. In January, with approval from the Board, the discount rate was raised from 4¾ percent to 6 percent. Member bank borrowing from the Reserve Banks still continued to mount: it went from $1.8 billion in June 1919 to $2.5 billion in May 1920. In May, the Board approved another increase—to 7 percent—initiated by the New York Reserve Bank and three other Reserve Banks, which went into effect in June.

14. *Fourth Annual Report, 1917* (1918), p. 29.

15. *Seventh Annual Report, 1920* (1921), p. 1.

These increases in the discount rate contributed to a brief but severe recession in business activity and to a collapse in prices in 1920–21. There was a precipitous liquidation of discount credits at the Reserve Banks, accompanied by a large-scale contraction of money in circulation. The agricultural sector was particularly affected: farmers who had incurred large mortgage and capital obligations on the basis of high wartime prices found the carrying costs beyond their means when prices dropped. Farm mortgages at many small banks became uncollectable, and in 1921 more than 500 banks failed.

Although the price collapse was international in scope, the System received much of the blame for the situation. Many of the buyers of the Liberty bonds at low interest rates discovered that bond prices fall when market rates rise and were resentful that the System had imposed capital losses on them so soon after they had bought the bonds. Charges were made in the Congress against the System, the Board, and even Governor Harding personally. Some members of the Congress claimed that the System was acting for its own benefit and not for the economy and that the System had discriminated against certain sectors, especially agriculture. Some asserted that the situation showed the misuse of funds by the Board and that some Board members acted for their own gain. Even Comptroller of the Currency John Skelton Williams, who sat on the Board, charged that the Board and the Reserve Banks had conspired to drive up rates to create deflation for the profit of bankers.

In an effort to resolve the controversy, the Board requested a congressional investigation. The Joint Congressional Commission of Agricultural Inquiry started hearings in August 1921 and submitted a report to the Congress in January 1922. The commission concluded that the Federal Reserve System had erred in not acting sooner to raise interest rates. It also established that the charges of discrimination against agriculture or of personal gain had no basis. Most important for the evolution of the Board and the System, the commission noted that the System was in a difficult position vis-à-vis the Treasury, and it emphasized that the Federal Reserve should answer, not to the Treasury, but to the Congress. Thus, the commission, as had the Attorney General earlier, underscored the principle of the Board's independence from the Treasury.

Changes in the Board

After the war, the membership of the Board, which had remained intact for nearly four years, underwent repeated changes. One seat changed four times in five years: Delano had resigned in 1918 to serve in the U.S. Army overseas, and in 1919 Henry A. Moehlenpah filled his place, to be followed in 1920 by David C. Wills, in 1921 by John R. Mitchell, and in 1923 by George R. James. From 1918 to 1921, the Vice Governorship had three occupants—Paul Warburg, Albert Strauss, and Edmund Platt—and the office of Secretary of the Treasury and Chairman of the Board had four—William McAdoo, Carter Glass, David Houston, and Andrew W. Mellon.

In 1922, as a result of the congressional investigation, an amendment to Section 10 of the act provided for an additional member of the Board to represent agricultural interests. In 1923, Milo D. Campbell of Michigan was appointed to that new position. But he died suddenly after having served on the Board only eight days, and Edward H. Cunningham of Iowa replaced him.

Governor Harding's term expired in 1922, and Daniel R. Crissinger, who had been Comptroller of the Currency, was appointed to fill the vacancy in 1923. In that year, too, Henry M. Dawes assumed the office of Comptroller and membership on the Board. By the end of the first decade, only two of the original members—Charles S. Hamlin and Adolph C. Miller, both of whom had been reappointed—were still serving (they served until 1936).

By the end of the war, the Treasury could no longer house the staff of the Board, which now numbered 345. While the Board members, the Secretary, the General Counsel, and the Gold Settlement Division still had offices in the Treasury building, the Division of Reports and Statistics and the Division of Operations and Examinations were in two other Washington locations and the Division of Analysis and Research was in New York. Coordination was at best difficult.

Thus, the Board began planning for its own quarters, which would not be completed until 1937.

The Board and the Reserve Banks

During the postwar period, power in policymaking began to shift from New York to Washington, a process that continued for some years. In May 1922, the Division of Analysis and Research moved from New York to Washington, and in September of that year Walter W. Stewart replaced H. Parker Willis as director of that division. In 1923, the division was combined with the Office of Statistician and renamed the Division of Research and Statistics under the directorship of Stewart.

After the wartime hiatus in their meetings, the Governors of the Reserve Banks, led by Benjamin Strong, again sought the right to consult as a body. In May 1922, the Governors Conference met in Washington with the Board's approval (that group meets today as the Conference of Presidents). At that meeting, the Reserve Bank Governors set up the Committee of Governors on Centralized Execution of Purchases and Sales of Government Securities by Federal Reserve Banks. As originally conceived, this Governors Committee was to coordinate the Reserve Banks' purchases and sales of government securities; however, it soon began to influence policy and, as with the Conference of Governors before the war, it came into conflict with the Board. In March 1923, while Strong was in Colorado recuperating from an episode of tuberculosis, the Board asserted its jurisdiction over Reserve Bank open market operations, disbanded the Governors Committee as it was then composed, and reappointed the same officials to a new committee that would operate under the aegis of the Board. Despite disagreements about the right of the Board to act in such a manner, the Open Market Investment Committee, as it was called, had its first meeting on April 13, 1923. The Board's action brought open market operations under its direction for the first time and reduced the autonomy of the individual Reserve Banks in carrying them out. It also signaled a major change in policy.

Changes in Policy

The breakdown of the gold standard in several countries during the war and the issuance of government securities to finance the war effort of the United States heralded the beginning of the end of the gold standard and the real bills doctrine as a guide to policy. There was a growing recognition among System officials that the securities transactions had affected bank reserves and thus economic conditions. Also, the large amount of speculation during 1919–20 had showed that regulations, even with the most precise definition of eligibility, could not control the ultimate use of Federal Reserve credit.

These changes in the Board's thinking on policy are indicated in the *Tenth Annual Report*. First of all, the Board and the System shifted from the sole reliance on changes in discount rates to the inclusion of open market operations in carrying out general credit policy. Thus, the Board stated the principle that Reserve Bank purchases and sales of government securities should be made with reference to prevailing credit conditions and for the accommodation of commerce and business, not just to provide earnings to the individual Reserve Banks or to facilitate Treasury financing operations. This statement put open market operations under the same guiding principle as that prescribed by the act for the discount rate. Second, the Board indicated that the need for coordination and uniformity in pursuing open market operations was the basis for its actions in setting up the Open Market Investment Committee. It also affirmed the need for uniformity in setting discount rates. Third, in recognition that it could not prevent speculation by defining the kinds of paper that were eligible for discounting, the Board asserted the principle that the quantity of paper discounted was as important as the quality in guarding against the overexpansion of credit.

In these statements, the Board demonstrated its growing ability to analyze and adapt to new uses the tools it had and its growing recognition of itself, not merely as a regulator, but as a policymaking body. The questions of the centralization of power within the System, of independence from the Treasury, and of the mission of the Board were not settled, but the process was under way.

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Understanding the Behavior of M2 and V2

This article was prepared by David H. Small and Richard D. Porter of the Board's Division of Monetary Affairs. Michael V. Vaccaro provided research assistance.

As part of its responsibility of reporting to the U.S. Congress, the Federal Reserve System establishes ranges for the growth of various monetary aggregates over the coming year. These ranges are set so as to foster the ultimate objectives of the Federal Reserve, mainly stable economic growth and stable prices. The relations between these aggregates and income and prices, therefore, bear both upon the appropriate width of the target range set for each aggregate and upon the proper response of policy should one of them deviate from its range.

This article focuses on the properties of the M2 aggregate and of its velocity, V2, the ratio of gross national product to M2. The time frame is the intermediate run—the one- to two-year intervals that are associated with monetary targeting and over which V2 has fluctuated by substantial amounts. The article shows that much of the intermediate-run variability in this velocity measure can be explained by changes in the opportunity cost of holding M2 balances, defined as a market interest rate less the average rate paid on M2 deposits. Those changes, in turn, depend upon the rate-setting behavior of depository institutions: the more quickly and the more fully deposit rates adjust to changes in market rates, the more stable will be the opportunity cost of M2 and, therefore, the more stable will be V2 itself. Empirically, the average rate on M2 deposits tends to respond sluggishly to changes in market rates, so that opportunity costs vary significantly over the intermediate run but vary far less in the long run as deposit rates adjust.

Given the history of market rates, these two relations—between V2 and M2's opportunity cost and between the opportunity cost and market rates—account for much of the past variability of V2. Nonetheless, predictions about the relationship of movements in M2 and in gross national product still embody much uncertainty. While the forecasts from models of M2 demand and deposit rates developed by the staff of the Federal Reserve Board are reasonably accurate, the interval since the deregulation of deposits in M2 has not been long enough for confidence to have been built in specific estimates of these relationships. Moreover, even if the links among market rates, deposit rates, GNP, and M2 demand were stable and fully understood, uncertainty about shocks elsewhere in the economy, and about the interest rate changes needed to offset them, would still neccesitate judgment in setting the appropriate path for M2.

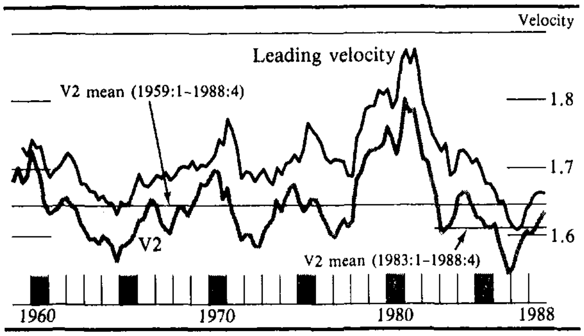
To shed light on these issues, this article first reviews the recent behavior of V2 and its determinants. It then examines the Board's formal model of M2 demand, which explicitly traces the relations between M2 on the one hand and income, prices, interest rates, and its other determinants on the other; and it reports simulations of that model to quantify the importance of the relationships governing the determination of M2 demand and deposit rates and of the uncertainty surrounding them. An appendix provides a brief exposition of the model.

HISTORICAL BEHAVIOR OF V2, OPPORTUNITY COSTS, AND DEPOSIT RATES

The velocity of M2, V2, has fluctuated about a generally flat trend over the last three decades (chart 1).[1] However, some evidence suggests

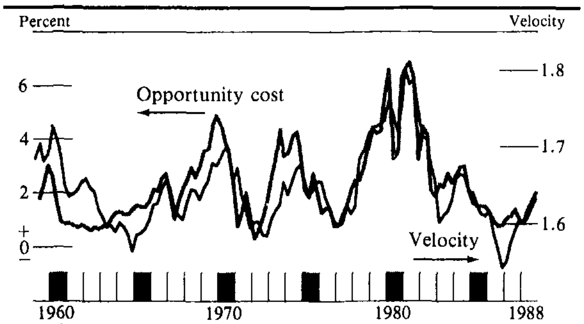
1. This observation refers to "contemporaneous velocity"—that is, the current level of GNP divided by the current level of M2. An alternative measure of the link between M2 and the gross national product is "leading velocity," in which current GNP is divided by a past level of M2. Using previous values of M2 allows for lags between changes in M2 and their effect on GNP and thereby potentially provides a more stable

1. V2 and leading velocity



that the introduction of money market deposit accounts at the end of 1982 had a once-and-for-all depressing effect on the average level of V2. With their transaction features and attractive offering rates, MMDAs apparently drew in funds that previously had been held outside M2 and thereby lowered V2.

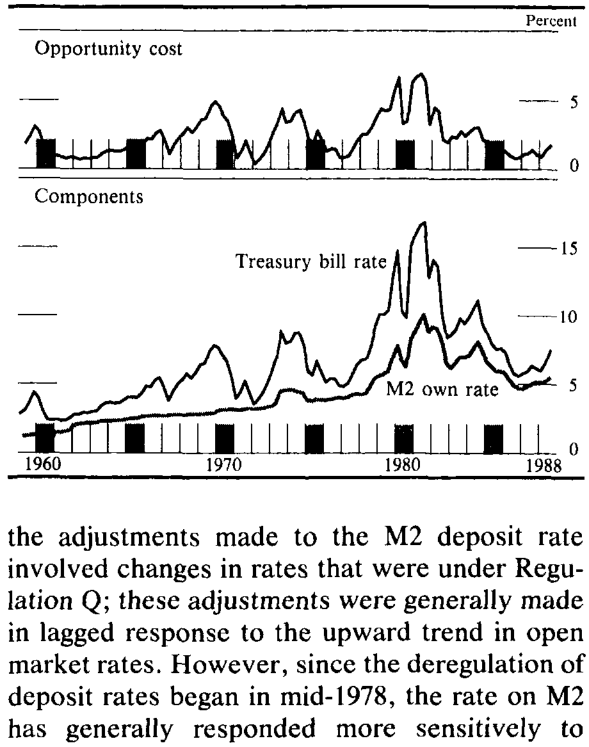
2. Velocity and the opportunity cost of M2



Changes in M2's opportunity cost appear to be the main factor causing V2 to deviate from its trend (see chart 2).[2] The relation between V2 and the opportunity cost of M2 seems reasonably stable, even after the extraordinary initial growth of MMDAs.[3] Indeed, the simple correlation between V2 and M2's opportunity cost is 0.78 over the period from 1959:2 to 1988:4.

The opportunity cost of M2, in turn, moves less than market interest rates because the average rate on M2 deposits—the M2 own rate—is adjusted in the wake of changes in the Treasury bill rate; obviously, greater adjustment tends to stabilize opportunity costs more.[4] From 1959:2 to 1988:4, the standard deviation of the Treasury bill rate was 3.23 percentage points while that of the opportunity cost of M2 was only 1.53 percentage points. In the 1960s and 1970s, most of

3. Opportunity cost of M2 and its components



the adjustments made to the M2 deposit rate involved changes in rates that were under Regulation Q; these adjustments were generally made in lagged response to the upward trend in open market rates. However, since the deregulation of deposit rates began in mid-1978, the rate on M2 has generally responded more sensitively to changes in market rates. As a result, the M2

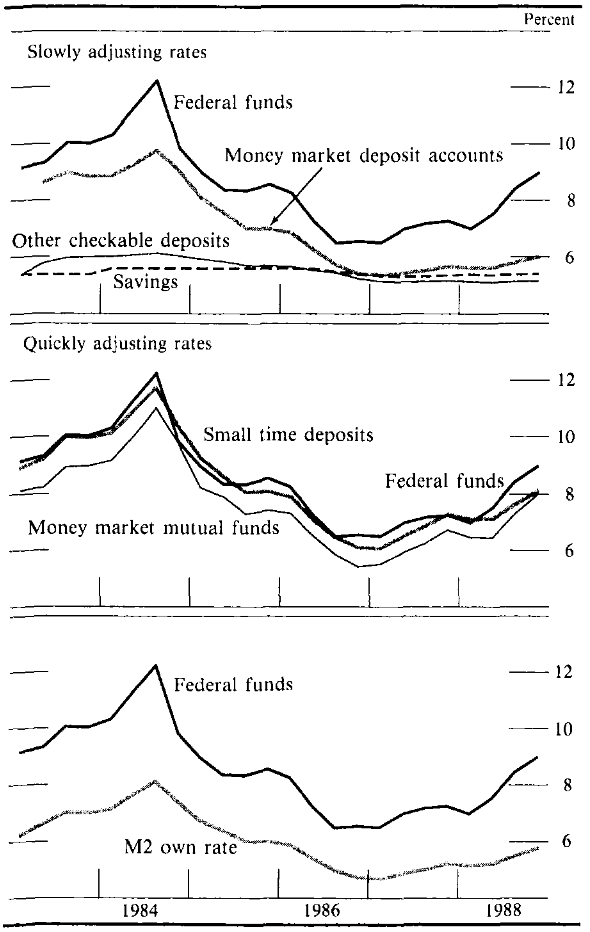
measure of velocity. The use of leading rather than contemporaneous velocity appears to smooth some of the variations in V2, but it does not affect the major swings in velocity, including those of recent years (see chart 1). The mean level of contemporaneous velocity is lower than that of leading velocity because, for any given period, the latter uses a smaller number—that is, an earlier value of M2—in the denominator. Here, M2 is lagged two quarters. Hereafter, the concept of velocity used throughout this article is the contemporaneous measure.

2. The opportunity cost of M2 is the three-month Treasury bill rate less the average rate paid on M2 deposits. These rates and all other rates used in this article are effective annual yields.

3. In view of the relatively attractive rates paid on MMDAs, the introduction of these accounts may have decreased the long-run equilibrium opportunity cost of M2 balances, increasing the demand for this aggregate and lowering its velocity. After their introduction in December 1982, MMDAs (not seasonally adjusted) promptly grew to 13 percent of M2 (seasonally adjusted) on average during 1983:1.

4. The M2 own rate is defined as the deposit-weighted average of the observed rates paid on M2 deposits; each type of deposit is weighted by the value of its ratio to M2, lagged one quarter. Currency and demand deposits are assumed to earn no explicit interest.

4. The federal funds rate and M2 deposit rates



opportunity cost has been considerably more stable since 1983 than it was during the late 1960s and most of the 1970s, even though the variability of market rates was roughly the same in the two periods (see chart 3). The standard deviation of the M2 opportunity cost over the four years ending in 1988:4 was 48 basis points, the lowest value for any four-year interval in two decades.

Chart 4 shows the recent historical relations between the individual M2 deposit rates and the federal funds rate, which serves as a proxy for short-term open market rates. The first panel relates the funds rate to the more slowly adjusting M2 deposit rates—the rates on other checkable deposits, savings deposits, and MMDAs; the second panel shows the relation with the more quickly adjusting rates on small time deposits and on money market mutual funds; and the last shows the M2 own rate. Much of the recent responsiveness of the M2 own rate to changes in market rates, and therefore much of the increase in the stability of the M2 opportunity cost, stems from the closeness with which the rates on small time deposits and on money market mutual funds have followed short-term open market rates. When short-term market rates have risen, that closeness has promoted the stability of V2 in two ways: first, by permitting those instruments to retain deposits; and, second, by making them attractive to funds in other components of M2 that might otherwise have left the aggregate altogether.

Modeling M2 Demand and Deposit Rates

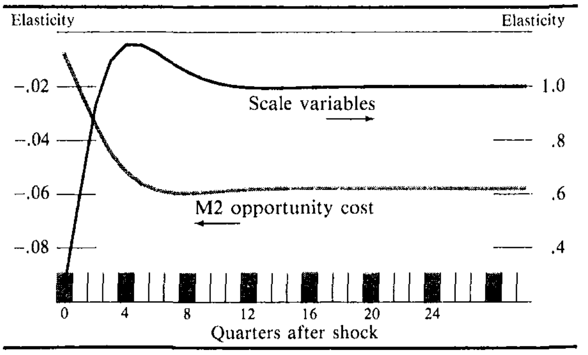
To explore the implications of these relationships for setting the target range for M2 and for dealing with deviations from that range, the Federal Reserve staff has developed an econometric model of the relationship of M2 to GNP and to market interest rates. The model has two components: the demand for M2 by the public and the rate-setting behavior of depository institutions.[5]

The relation between V2 and the opportunity cost of holding M2 balances, which is exhibited in chart 2, forms the basis of the staff econometric model of the demand for M2. In the model, the ratio of M2 demand to GNP (that is, the reciprocal of V2) is affected primarily by the opportunity cost of M2.[6] The model also specifies the short-run dynamics by which M2 demand, and hence V2, adjusts toward its long-run level; these adjustments include, among other things, current and lagged responses to changes in nominal GNP, personal consumption expendi-

5. For a full discussion of this and other models, see George R. Moore, Richard D. Porter, and David H. Small, "Modeling the Disaggregated Demands for M2 and M1 in the 1980s: The U.S. Experience," in Board of Governors of the Federal Reserve System, *Financial Sectors in Open Economies: Empirical Analysis and Policy Issues* (the Board, forthcoming, 1989).

6. The long-run demand for M2 also includes a time trend and a dummy variable to account for the introduction of MMDAs. These variables are only marginally significant and drop out altogether when the sample period starts in 1960:1 rather than in 1964:1, for example.

5. Response of M2 to increases of 1 percent in the scale variables and in the opportunity cost of M2



tures, and the M2 opportunity cost, and to previous changes in M2 itself.

The estimated behavioral responses of M2 demand to increases in the scale variables, nominal GNP and personal consumption expenditures, and in the M2 opportunity cost unfold fairly smoothly and nearly monotonically over time, although they exhibit some overshooting of their long-run values (see chart 5).[7] As estimated, the demand for M2 takes slightly less than a year to respond fully to shocks to GNP, but needs about a year and a half to respond fully to shocks to opportunity costs. The long-run elasticity with respect to changes in opportunity costs is estimated to be −0.057; that is, a 1 percent increase in opportunity costs induces a 0.057 percent decrease in the level of M2.

The response of M2 demand to a change in market rates is more complex because the lagged adjustments of offering rates result in changes in opportunity costs long after the initial movement in market rates. The staff model links deposit rates to the federal funds rate. After allowing for costs of servicing accounts, deposit rates are assumed to adjust one for one with the funds rate in the long run.[8] The speed of this adjustment varies significantly across the different types of M2 deposits; the rates on the more liquid accounts adjust more slowly, as chart 4 makes evident. In addition, as tests conducted with the staff model indicate, apart from rates on small time deposits, offering rates adjust downward faster than they adjust upward.

6. Response of M2 own rate and opportunity cost to increases and decreases in the federal funds rate

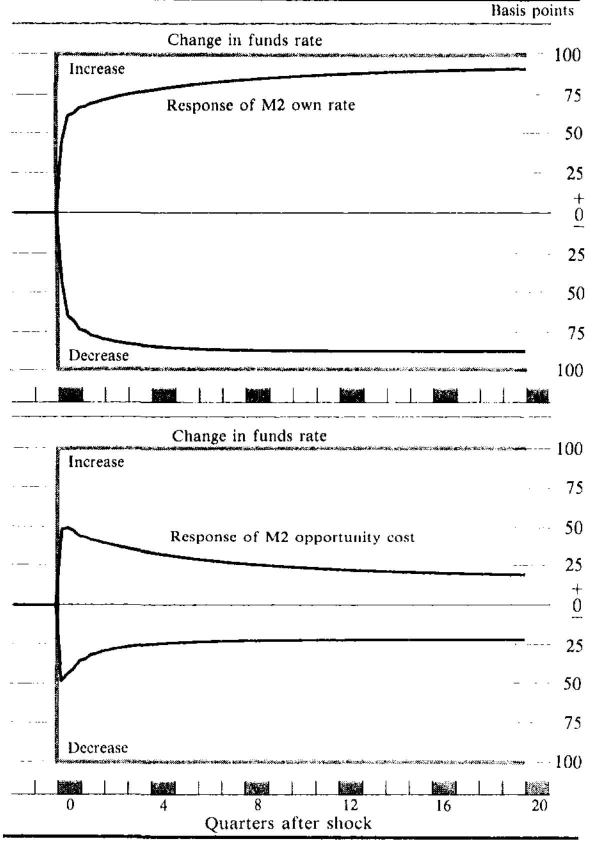


Chart 6 shows the estimated responses of the M2 own rate and the M2 opportunity cost to changes of plus and minus 100 basis points in the federal funds rate. During the first quarter following the rise in the funds rate, the Treasury bill rate is estimated to increase about 90 basis

7. In computing the scale variable elasticity, the two scale variables entering the M2 demand model are changed in tandem by the same percentage amounts.

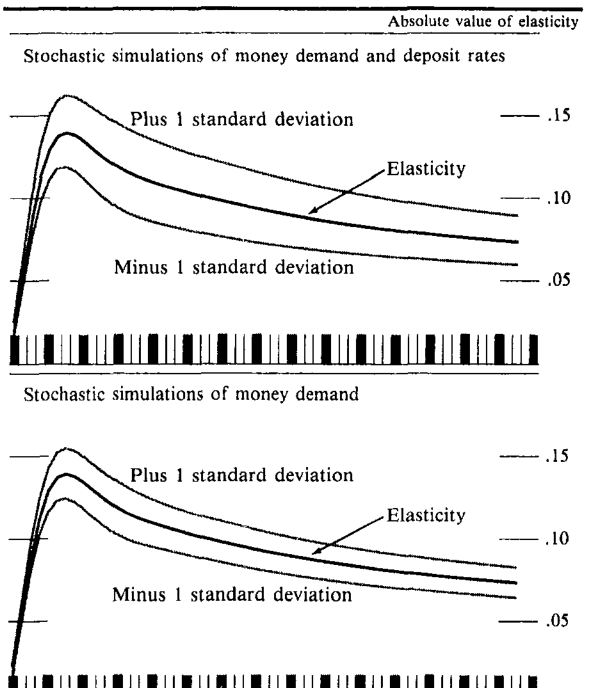
8. In "Modeling the Disaggregated Demands," Moore and his colleagues provide some evidence that this assumption is warranted.

An exception to the one-for-one adjustment is the rate on other checkable deposits, which is subject to a "reserve tax" on the margin. The reserve tax is assumed to be 12 percent, equaling the marginal reserve ratio for OCD balances in excess of the low-reserve tranche. For the other non-M1A deposit rates, the reserve tax should reflect the 3 percent marginal reserve ratio applicable to nonpersonal time and savings accounts at institutions with too little vault cash to avoid being bound by reserve requirements. But since this requirement is not applied to all nontransaction accounts, the average tax is generally considerably less than 3 percent. For simplicity, the model assumes it is zero.

points. But, because rates on small time deposits and on money market mutual funds respond relatively quickly, the average M2 offering rate moves up about 40 basis points (top panel), leaving a net increase in the opportunity cost of about 50 basis points (lower panel). After two quarters, the Treasury bill rate has completed its adjustment and the opportunity cost starts to decline as M2 deposit rates continue to adjust upward, albeit sluggishly.

Combining the model of M2 demand with that of deposit rate setting produces a model of the monetary sector in which M2 demand is tied to GNP and the federal funds rate. The response of M2 demand to a change in the funds rate follows a humped profile, as shown by the black lines in chart 7. The opportunity cost initially falls after a decrease in the funds rate (as in chart 6), working to increase M2 demand. However, as the deposit rates continue to decline, the opportunity cost begins to rise and the demand for M2 weakens, though remaining above its original value. As chart 7 shows, the short-run elasticity peaks seven quarters after the shock in the funds rate at −0.14, about twice the absolute value of the long-run elasticity of −0.073.[9]

7. Response of M2 with respect to an increase of 1 percent in the federal funds rate



STABILITY OF THE DEMAND FOR M2 AND ASSOCIATED TARGETING ISSUES

The usefulness of M2 as a guide to monetary policy depends not only on the strength of M2's relationships to income and interest rates, but also on the stability and predictability of those relationships. An impression of the stability of the equation for M2 demand can be gleaned from the forecasts of the annual growth rates of M2 shown in table 1. These forecasts are mainly within the model's estimation period—1964:1 to 1986:2; they represent dynamic simulations of the model, in which past values of GNP and the M2 opportunity cost are exogenous.[10]

As indicated by the correlation of 0.907 between the actual and forecasted growth rates, the model captures the swings in M2 growth reasonably well. The table also shows that changes in the M2 opportunity cost make the more significant contributions to short-run swings in M2 growth (column 4), while changes in GNP and personal consumption expenditures account for more of the slowly evolving changes in trend M2 growth (column 5).

The implied forecasts of V2 using the forecasted levels of M2 and historical values of GNP that are shown in chart 8 indicate the model's ability to track the relation between V2 and opportunity costs. However, the divergence of the actual and simulated values starting in 1987 is as pronounced as any in the estimation period and largely reflects the overprediction by 1.8 points of M2 growth in 1987 (see table 1). This

9. Strictly speaking, this elasticity depends both upon the level of interest rates at which it is evaluated and upon the associated magnitude of the change in interest rates. However, in experiments testing federal funds rates of 4 percent to 16 percent, the elasticity varied by only 0.002.

10. Whether to use dynamic or static simulations is an issue in models such as the staff's model of M2 demand, in which there are lagged dependent variables. Static simulations use historical values for the lagged dependent variables, while dynamic simulations use model forecasts of the variables.

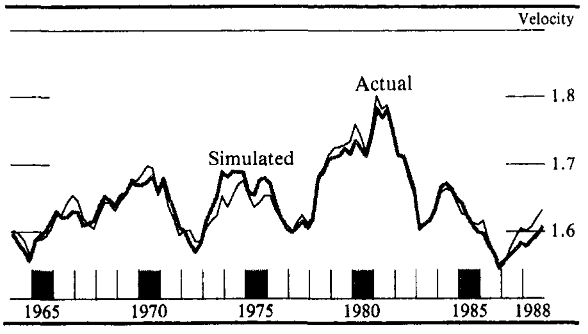
1. Forecasts of annual growth in M2, 1964–88

Percent change, fourth quarter to fourth quarter, except as noted

Year	Actual (1)	Forecast (2)	Forecast error (1–2) (percentage points) (3)	Contribution to forecasted M2 growth (percentage points)	
				Opportunity costs (4)	Scale variables (5)
1964	7.9	8.6	−.6	.0	5.8
1965	8.0	6.8	1.3	−.9	8.4
1966	4.8	7.1	−2.3	−2.3	9.5
1967	9.1	6.8	2.3	1.0	5.9
1968	7.8	8.1	−.3	−1.9	10.0
1969	4.4	5.2	−.8	−2.6	7.8
1970	6.1	5.4	.7	.0	5.6
1971	13.5	13.0	.5	5.6	7.9
1972	12.8	13.7	−.9	3.6	10.6
1973	7.2	4.8	2.4	−6.7	11.0
1974	5.9	7.4	−1.5	−2.6	9.9
1975	12.1	11.2	.9	2.8	8.7
1976	13.3	14.7	−1.4	3.8	11.5
1977	11.2	12.1	−.9	1.2	11.2
1978	8.0	7.9	.1	−4.7	12.2
1979	8.2	8.9	−.7	−3.7	12.4
1980	8.9	8.2	.7	−.7	8.9
1981	9.3	8.8	.4	−1.3	10.1
1982	9.1	8.7	.4	3.4	5.9
1983	12.1	12.2	−.1	2.4	6.4
1984	7.7	7.7	.0	−.6	9.4
1985	8.9	10.0	−1.1	2.3	8.2
1986	9.3	8.1	1.2	3.0	5.5
1987	4.2	6.0	−1.8	.3	5.9
1988	5.3	5.5	−.3	−1.7	7.3
Summary statistic					
Root mean squared error	. . .	. . .	1.2	. . .	. . .
Mean absolute error	. . .	. . .	1.0	. . .	. . .
Mean error (bias)	. . .	. . .	.0	. . .	. . .
Correlation of actual and forecasted annual growth	. . .	.907	. . .	. . .	. . .

forecast error is relatively large, and it is somewhat disturbing, coming as it does in the first full out-of-sample year. However, the forecast of M2 growth in 1988 was quite accurate; therefore, the simulated and actual velocities plotted in chart 8 parallel one another in 1988.

8. Actual and simulated velocity of M2



These results lend some credence to future forecasts of the M2 demand model, at least to forecasts over such annual intervals and conditional on actual values of income and opportunity costs; but they fail to incorporate any uncertainty associated with forecasting opportunity costs. This issue is addressed in forecasts of M2 growth based on endogenous deposit rates (table 2, column 2).[11] These forecasts start in 1984:1, about the earliest these deposit-rate equations are applicable.[12] For comparison, the forecasts

11. The deposit-rate models use the historical values of the rates on federal funds and on Treasury bills.

12. Rates on all deposit categories except passbook savings accounts were deregulated by this period. Rates on passbook accounts were deregulated in 1986:2, but they move so sluggishly in response to changes in market rates that using simulated rather than historical values would not substantially affect the forecasts.

2. Alternative forecasts of quarterly growth in M2, 1984:1–1988:4, based on forecasted and actual deposit rates

Year and quarter	Actual growth (1)	Forecasted deposit rates: Forecasted growth (2)	Forecasted deposit rates: Error (3)	Actual deposit rates: Forecasted growth (4)	Actual deposit rates: Error (5)
1984:1	7.5	6.9	.6	6.9	.6
2	7.3	7.3	−.1	7.3	−.1
3	6.3	7.1	−.8	7.1	−.8
4	8.9	8.2	.7	8.3	.7
1985:1	12.0	9.2	2.9	9.3	2.8
2	6.1	9.7	−3.6	9.8	−3.7
3	9.7	10.5	−.8	10.2	−.5
4	6.7	9.2	−2.5	8.6	−1.9
1986:1	5.5	8.0	−2.5	7.4	−1.9
2	9.9	7.8	2.1	7.1	2.8
3	11.0	9.3	1.7	9.0	2.1
4	9.6	8.5	1.0	8.2	1.4
1987:1	6.1	6.4	−.3	6.3	−.2
2	2.1	5.7	−3.5	5.8	−3.7
3	3.4	5.4	−2.0	5.8	−2.4
4	4.9	4.7	−.2	5.6	−.7
1988:1	6.2	5.4	.7	6.5	−.4
2	6.9	5.7	1.2	6.2	.7
3	3.8	5.5	−1.7	5.1	−1.4
4	3.8	4.5	−.7	3.8	.0
Summary statistic					
Root mean squared error	...	...	1.8	...	1.8
Mean absolute error	...	...	1.5	...	1.4
Mean error (bias)	...	...	−.4	...	−.3

in column 4 also start in 1984:1, but they take past opportunity costs as given.

Although the summary statistics in columns 3 and 5 suggest that the use of forecasted rather than historical deposit rates has no appreciable effect on the forecasts of M2 growth, behind these statistics there is a noticeable difference between the two sets of forecasts for the period from 1987:4 to 1988:2. Over this period, the simulated deposit rates result in M2 growth rates that are around 1 percentage point lower than those based on historical rates. In 1987 and early 1988, the actual M2 own rate rose more than the simulated rate (chart 9), producing higher M2 growth for the forecast using historical deposit rates.

9. Actual and simulated own rates for M2

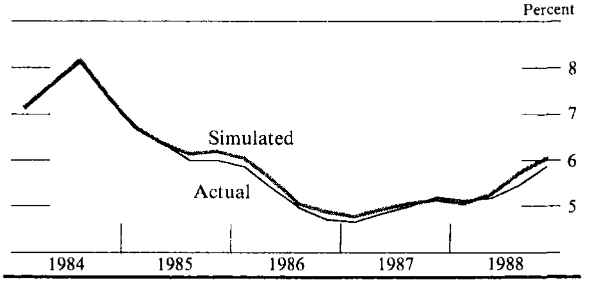


Table 2 also shows that the relatively accurate *annual* forecasts reported in table 1 mask relatively large *quarterly* errors that tend to offset one another over the course of a year. These annual and quarterly forecast results reflect all errors in the various aspects of the model: possibly omitted variables and other misspecifications of the model, as well as uncertainties about the estimated values of the coefficients and about the behavior of the additive residuals in the model. These last uncertainties are especially important in evaluating the M2 growth rates that are likely to be associated with alternative paths for GNP or interest rates.

Table 3 and chart 7 cast light on this issue. Table 3 displays confidence intervals for the elasticity of M2 with respect to the federal funds rate.[13] It provides estimated standard deviations

13. In principle, these confidence intervals can be computed directly from the model's underlying estimated coeffi-

3. Responses of M2 to changes in the federal funds rate

Quarters after change	Uncertainty in money-demand and rate models		Uncertainty in money-demand model only	
	Estimate	Standard deviation	Estimate	Standard deviation
	Elasticity of M2 with respect to the federal funds rate[1]			
0	−.020	.005	−.020	.004
1	−.054	.009	−.054	.006
2	−.087	.013	−.087	.008
3	−.113	.017	−.113	.011
4	−.129	.019	−.129	.013
5	−.138	.021	−.138	.015
6	−.140	.022	−.140	.015
7	−.138	.023	−.138	.015
8	−.134	.023	−.134	.016
9	−.130	.024	−.130	.016
10	−.126	.025	−.126	.016
11	−.122	.026	−.122	.016
12	−.118	.026	−.118	.016
24	−.098	.022	−.098	.012
36	−.086	.019	−.086	.011
48	−.078	.016	−.078	.010
60 (long run)	−.073	.015	−.073	.009
	Change in annualized quarterly growth rates of M2 after increase of 100 basis points in the federal funds rate (percentage points)			
0	−.86	.19	...	...
1	−1.37	.18	...	...
4	−.30	.15	...	...
8	.20	.11	...	...
12	.14	.05	...	...
24	.05	.02	...	...
36	.03	.01	...	...
48	.02	.01	...	...
60 (long run)	.01	.01	...	...

1. Evaluated for a 1 percent increase in the federal funds rate.

for the elasticity of M2 with respect to the funds rate, after allowing for uncertainties in coefficients and error terms in the equations for both M2 demand and the deposit rates; and chart 7 shows the confidence intervals around the estimated elasticity of M2 in terms of a band of one standard deviation about the estimated values. The elasticity follows the humped pattern discussed earlier, reaching its largest values after six quarters. The standard deviation around the elasticity peaks somewhat later, about twelve quarters after the shock, but then it too begins a steady decline. Table 3 also lists the implied estimated changes in quarterly M2 growth rates, and their standard deviations, following an increase of 100 basis points in the federal funds rate.

In light of the degree of uncertainty that table 3 and chart 7 reveal, the separate contributions of the equations for M2 demand and the deposit rates are especially interesting. When we allow for uncertainty only in the equation for M2 demand, the standard deviation of M2's elasticity with respect to the funds rate falls approximately 40 percent from its level when uncertainty is allowed for in the equations for both M2 demand and the deposit rates.

The remaining coefficient uncertainty involves the elasticity of M2 demand with respect to GNP. Here, our measures of uncertainty are necessarily biased downward because, in formulating the model, a long-run elasticity of unity was imposed

cients, after some distributional assumptions concerning the estimated coefficients have been made. In practice, direct computation is fairly difficult when the model is viewed as a dynamic system and because of the way we have estimated it. Thus, we have used a stochastic simulation technique to construct the confidence intervals, where random parameter values are drawn from multivariate normal distributions using the estimated variance–covariance matrixes of the parameters.

and thus no uncertainty arises in this regard. Nonetheless, the speed with which the model converges to this long-run elasticity is a function of freely estimated parameters, and the associated uncertainty can be computed. One standard deviation of the estimated elasticity is about one-sixth of the estimated value during the first few quarters following a change in GNP (see table 4). Over longer horizons, the standard deviation falls, reflecting the long-run constraint of a unitary elasticity and the implied convergence of the standard error to zero.

4. Elasticity of M2 with respect to scale variables[1]

Quarters after change	Estimate	Standard deviation
0	.272	.067
1	.607	.089
2	.933	.059
3	1.097	.035
4	1.155	.042
5	1.153	.054
6	1.124	.055
7	1.087	.047
8	1.054	.035
9	1.029	.024
10	1.012	.017
11	1.002	.016
12	.997	.015
24	1.000	.001
36	1.000	.000
48	1.000	.000
60 (long run)	1.000	.000

1. The scale variables are nominal GNP and personal consumption expenditures.

CONCLUSION

This article examines the empirical linkages among M2, nominal GNP, and the opportunity cost of M2 balances. M2 is apparently rather closely tied to nominal GNP in the long run, as indicated by the long-run stability of V2; but changes in market rates can have significant short-run effects on M2 and V2 through their effects on the opportunity cost of holding M2 balances. The equation for M2 that was used to characterize the behavior of that aggregate is rather standard in terms of variables used to explain M2—mainly, income and opportunity costs. But the resulting behavior that is imparted to M2 by the sluggish adjustment of deposit rates to changes in market rates is not always recognized.

This sluggish adjustment process for deposit rates produces swings in the opportunity cost for M2 deposits that initially widen when market rates increase but that gradually narrow as deposit rates adjust upward. M2 has, therefore, a greater response to changes in market rates in the short run than in the long run. However, the experience with deregulated rates for most M2 deposits is limited to the 1980s, and therefore the uncertainty concerning their behavior and effects on M2 is probably greater than is conveyed in the model presented here.

APPENDIX: MODEL OF M2 DEMAND

The staff model of M2 demand is an error-correction specification, composed of two parts. The first is a long-run equilibrium money demand function:

$$\text{(A.1)} \qquad m_t = \alpha + y_t + \beta s_t + \gamma T_t + e_t,$$

where m_t = log(M2), y_t = log(nominal GNP), s_t = log(Opp_t), *Opp* is the opportunity cost of M2, and T is an index for time.[14] The unitary coefficient on y_t assures that this is a velocity relationship, with the long-run elasticity with respect to nominal GNP equal to unity.

The second part of the model is a dynamic error-correction equation of the form

$$\text{(A.2)} \quad \Delta m_t = a + be_{t-1} + \sum_{i=1}^{u} c_i \Delta m_{t-i} + \sum_{i=0}^{v} d_i \Delta s_{t-i} + \sum_{i=0}^{w} f_i \Delta y_{t-i} + \epsilon_t,$$

where ϵ_t is a white-noise error term. Here e_{t-1} is derived from A.1; it is the lagged difference between the actual and long-run demand for M2, where the lags avoid problems of simultaneity.

The coefficient b on e_{t-1} in A.2 is negative and ensures that the short-run demand for M2 will converge to its long-run demand as expressed in equation A.1. The first-difference terms influence the short-run adjustment of M2 toward its long-run equilibrium. To guarantee that these terms are logically consistent with the convergence to and the stability of the long-run equilibrium, an

14. The logarithm of the opportunity cost cannot be used for all historical periods because at times the opportunity cost turns negative. In specifying the models, we have used logarithms for levels of opportunity cost greater than 50 basis points. Below this level, the logarithm is replaced by its first-order Taylor series expansion.

additional "convergence" restriction is imposed. This restriction is noted below.

Using A.1 to substitute for e_{t-1} in A.2 yields the following form of the model:

$$\text{(A.3)}\quad \Delta m_t = a - b\alpha - b\gamma T_{t-1} - b\beta s_{t-1} + b(m_{t-1} - y_{t-1}) + \sum_{i=1}^{u} c_i \Delta m_{t-i} + \sum_{i=0}^{v} d_i \Delta s_{t-i} + \sum_{i=0}^{w} f_i \Delta y_{t-i} + \epsilon_t.$$

The staff model takes this form, but in Δy we use personal consumption expenditures rather than GNP.[15] The estimated model for the sample period from 1964:1 to 1986:2 is shown below; the absolute values of the t statistics are shown in parentheses beneath the estimated coefficients.

$$\begin{aligned}
\Delta\log(M2)_t = {} & \underset{(6.05)}{-.074} - \underset{(2.49)}{.00008}\ \mathit{Time} \\
& + \underset{(2.15)}{.0045}\ \mathit{MMDA} \\
& - \underset{(6.78)}{.011}\ \mathit{Taylog}(\mathit{Opp}_{t-1}) \\
& \underset{(6.17)}{-.185}\ [\log(M2_{t-1}) - \log(\mathit{GNP}_{t-1})] \\
& + \underset{(3.92)}{.273}\ \Delta \log(\mathit{Consump}_t) \\
& + \underset{(2.33)}{.166}\ \Delta \log(\mathit{Consump}_{t-1}) \\
& + \underset{(1.67)}{.098}\ \Delta \log(\mathit{Consump}_{t-2}) \\
& - \underset{(5.50)}{.008}\ \Delta\ \mathit{Taylog}\ (\mathit{Opp}_t) \\
& - \underset{(3.29)}{.012}\Delta\ \mathit{C.\ Control} \\
& + \underset{(5.55)}{.026}\ \mathit{DUM83Q1} \\
& \underset{(1.08)}{-.006}\mathit{DUM83Q2} + \underset{(5.67)}{.462}\Delta\log(M2_{t-1}).
\end{aligned}$$

R^2 = .71; Durbin's h statistic = 1.26; standard error of the regression = .0043.

The short-run "convergence" restriction that is imposed on the coefficients is that the coefficients on the changes in consumption and on $\Delta\log\ (M2_{t-1})$ sum to one.

In this equation, the terms are defined as follows:

C. Control	Dummy variable for credit controls: 1 in 1980:2 and 0 otherwise.
Consump	Personal consumption expenditures.
DUM83Q1	Short-run dummy variable for the introduction of MMDAs; 1 in 1983:1 and 0 otherwise.
DUM83Q2	Short-run dummy variable for the introduction of MMDAs; 1 in 1983:2 and 0 otherwise.
GNP	Nominal GNP (two-quarter moving average).
MMDA	Dummy variable for the introduction of MMDAs; 0 through 1982:4 and 1 thereafter.
Opp	Opportunity cost of M2.
Taylog	The natural logarithm for values of the opportunity cost (*Opp*) greater than 50 basis points; the linear approximation of this function for values of the opportunity cost less than 50 basis points.
Time	Time-trend variable, with increments of 1 in each quarter.

Deposit-Rate Equations

The deposit-rate equations, like the M2-demand model, are formulated within an error-correction framework. The long-run equilibrium relation between a deposit rate and the federal funds rate is specified as

$$\text{(A.4)}\qquad R^e_t = \alpha_0 + \alpha_1 F,$$

where R^e is the equilibrium deposit rate and F is the rate on federal funds. This specification im-

15. Personal consumption was used in the short-run components of the model since, in comparison to GNP, it led to some moderate improvement in the fit. The improved fit may arise because short-run changes of some components of GNP, such as business fixed investment and inventories, may not generate a significant increase in the transactions demand for money balances in the short run.

A.1. Estimated coefficients for alternative deposit-rate models[1]

Coefficient	Model				
	Small time deposits (1)	MMMFs (2)	MMDAs (3)	Savings deposits[2] (4)	OCD (5)
	Long-run relation (equation A.4)[3]				
α_0	−.1628	−1.1565	−1.3024	−1.4274	−1.2499
α_1	1.00	1.00	1.00	1.00	.88
	Short-run relation (equation A.6)				
β^a	−.6699 (4.4)	−.71845 (2.6)	−.34572 (2.3)	−.08643	−.20895
β^b	−.6699 (4.4)	−.49937 (2.5)	−.11524 (2.3)	−.02881	−.035132
γ_0	.72711 (14.5)	.58908 (15.8)	.42849 (9.7)	.10712	−.12112
γ_1	...	.51081 (3.8)	.16294 (2.8)	.040736	...
δ	...	−.4104 (4.3)	...	...	...

1. The numbers in parentheses are the absolute values of the t statistics. Where no number appears, the t statistic was not available.

2. Savings deposit rates have been deregulated only since 1986:2 so that there are too few observations to estimate the short-run relation. The short-run parameters were judgmentally set equal to one-fourth of the values of the corresponding parameters of the MMDA rate equations. The intercept, α_0, was set about 25 basis points below the MMDA intercept.

3. The slope coefficients, α_1, are imposed to reflect the marginal reserve requirements on these accounts.

plicitly assumes that competitive forces will drive the slope coefficient α_1 to one minus the marginal reserve ratio, while the intercept α_0 will be negative, reflecting transaction costs associated with deposit activity that are not recovered by fees assessed on the depositor. Of course, deposit rates need not always be in equilibrium, and a short-run disequilibrium term, e_t, is introduced to model the data:

$$(A.5) \qquad R_t = R_t^e + e_t = \alpha_0 + \alpha_1 F_t + e_t.$$

When e_t is positive we expect R_t to fall because R_t is then above its long-run equilibrium level; conversely, when e_t is negative we expect R_t to rise because R_t is then below its equilibrium level.

The second fundamental component of the model is an error-correction equation that describes how the deposit rate adjusts toward its long-run equilibrium in response to the existing disequilibrium and to lagged changes in the deposit rate and the funds rate. To allow for the asymmetric upward and downward short-run responses that are evident in the data, we let e_t^a equal e_t when e_t is positive (that is, R_t is above its long-run equilibrium) and zero otherwise; similarly, we let e_t^b equal e_t when e_t is negative (that is, R_t is below its long-run equilibrium) and zero otherwise. Then the asymmetric error-correction equation with a lag structure adequate to fit the data is

$$(A.6) \quad \Delta R_t = \beta^a e_{t-1}^a + \beta^b e_{t-1}^b + \gamma_0 \Delta F_t + \gamma_1 \Delta F_{t-1} + \delta \Delta R_{t-1} + u_t,$$

where the disturbance term u_t is assumed to be uncorrelated over time. We expect, other things equal, the fall in R induced by an e^a to be larger than the rise in R induced by an e^b of the same magnitude, so that $\beta^a < \beta^b < 0$.

Table A.1 reports the estimates of the parameters in equations A.5 and A.6 for the models of rates paid on small time deposits, MMMFs, MMDAs, savings deposits, and other checkable deposits.

Transfer Risk in U.S. Banks

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The growth of international lending by U.S. banking organizations, especially during the last decade, has added new dimensions to the responsibilities of the federal regulatory agencies that supervise the operations of U.S. banking organizations. As a matter of general approach and philosophy, the agencies seek to apply the same criteria to evaluate both the domestic and the international activities of banking organizations. Evaluating international transactions, however, demands special procedures that take account of "country exposure"—that is, the amount of lending to a country—and of "country risk"—that is, the possibility that adverse economic, social, or political developments in a country may prevent that country, its businesses, and other local borrowers from making timely payment of interest or principal to creditors in other countries. The expansion of international lending has made an analysis of country risk an essential element in the overall evaluation of the financial condition of the largest U.S. banks.

A component of country risk is "transfer risk," which arises when borrowers incur debts denominated in the currencies of other countries. Specific government policies, general economic conditions in a borrower's country, or changes in the international environment may prevent that borrower from obtaining the foreign currencies needed to service its debt. Whatever the cause, foreign currency may not be sufficiently available to permit the government and other entities of the country to service all their foreign debt. In such circumstances, the condition of the lending banks suffers.

THE SUPERVISORY SYSTEM

In 1978, the three regulatory agencies—the Federal Reserve System, the Office of the Comptroller of the Currency, and the Federal Deposit Insurance Corporation—jointly developed an approach to improving their supervision of the transfer risks inherent in foreign lending by U.S. banks. The new system was designed to address transfer risks separately in the bank examination process, rather than attempt to analyze them in the supervisory framework that is used for evaluating commercial risks. A common supervisory approach was needed for two other purposes: to ensure that the bank regulatory agencies treated transfer risks uniformly; and to improve the quality and efficiency of regulatory review by drawing on and coordinating the best available expertise. The system was built around a process for reporting country exposure that had been adopted a few years earlier. This supervisory system has four parts:

1. The identification in examination reports of significant country exposures to bring to the attention of bank management exposures that are large relative to an institution's own capital.
2. Comments by the agency on large exposures to individual countries based on a country's economic condition and on the relation of the bank's exposure to its capital funds or to the exposures of its competitors.
3. The identification, or "classification," of exposures to countries with debt-servicing problems.
4. A review of the bank's policies, practices, procedures, and controls for managing country risk.

Like domestic lending, loans to individual foreign borrowers are subject to legal lending limits, but otherwise the agencies do not prohibit lending to any country per se. Bank regulators want assurance, however, that the bank's management and directors are aware of significant exposures and that reasonable procedures are in place to evaluate the risks.

Reporting

As the volume of international lending grew during the 1970s, the regulatory agencies needed more complete and accurate data about the level of bank exposures. They also needed to ensure that all banks that engaged in lending to foreign borrowers had sufficient information on aggregate lending to make informed decisions about portfolio diversification. The Country Exposure Report (form 009 of the Federal Financial Institutions Examination Council) was developed in 1976 to provide that information; it has become a key source of data on country exposure for the agencies, as well as for many commercial banks and other interested parties. Initially, banks reported on a semiannual basis, but they began to file quarterly reports in 1984, as required by the International Lending Supervision Act of 1983. As a general rule, a U.S. commercial bank that has $30 million or more in foreign lending must file the report.

The report currently consists of 24 different items of information on lending and covers almost 190 countries. A bank first lists the amount of credit it has extended to borrowers in a country and then provides information on any guarantees by parties in other countries. The report also categorizes the loans by their remaining maturity and by the sector of the borrower (bank, public, other). It lists the amount of lending in the local currency provided by the bank's local offices and the amount and nature of certain contingent liabilities. The focus of the report is the "adjusted" exposure, the result of transferring the bank's claims from the country of the "initial" borrower to the country of the guarantor (if any) and, in the case of claims on foreign branches of banks, to the home countries of those banks. Analysis of the various items reported and of the results of these adjustments indicates the location of the country risk in a bank's portfolio.

These individual reports are used to evaluate the exposure of the reporting institutions. The agencies hold them in confidence, but much information about foreign exposure remains available to the public. Specifically, banks must disclose their large exposures in annual reports to their shareholders and in other regulatory reports. For this purpose, large exposures are defined as those representing more than 1 percent of the bank's assets or more than 20 percent of its primary capital. Moreover, each quarter, the Federal Reserve Board's statistical release, "Country Exposure Lending Survey" (E.16), makes available to the public a substantial amount of information about the foreign exposure of U.S. banks to individual countries. It provides the information for all reporters combined and also for three subgroups separately: the nine money-center banks, a group of large regional banks, and all other reporting banks.

Aggregate data are used principally in making supervisory and regulatory policy, but they are also used for identifying the aggregate borrowings of foreign countries from U.S. banks. In addition, the Federal Reserve submits total figures on U.S. bank lending to each country to the Bank for International Settlements in Basle, Switzerland, where they are combined with similar data from banks in other major countries. These BIS statistics, in turn, provide the public with information about worldwide lending and borrowing trends.

Evaluation Process

In connection with the country-risk procedures adopted in 1978, the agencies established the Interagency Country Exposure Review Committee to assess transfer risk and to ensure uniform treatment of the risks during examinations. The committee consists of three voting members from each agency: a staff member from the agency's Washington office and two of its senior field examiners who have broad experience in international banking.

The committee meets three times each year to review conditions in countries where transfer risk to U.S. banks is significant. Formal economic analyses of each country are presented to the members by economists from the U.S. Treasury, the Federal Reserve Bank of New York, and the Board of Governors. In addition, the examiners recount views expressed and actions taken by major money-center and regional U.S. bank lenders with whom they met prior to the meeting. Drawing upon this information and using standards promulgated by the agencies, the members evaluate the transfer risk inherent in U.S. bank loans to borrowers as a group in each country discussed.

Categories of Risk

A number of broad categories are used to evaluate transfer risk. The first three apply to loans in countries that do not have current or imminent debt-service problems, according to the evidence available at the meeting. These categories divide the countries according to potential risk. The remaining categories apply to countries that already pose transfer risk.

Categories of Potential Problems

Countries that are evaluated according to their potential for transfer risk can range from developed countries and countries with strong balance of payments positions to countries with relatively weak balance of payment positions or other problems that could, unless addressed properly, lead to debt-servicing problems. The categories characterize the country as "strong," "moderately strong," and "weak" according to the degree of transfer risk it poses. These three categories are used only for determining whether a particular concentration of exposure warrants comment in the examination report.

Categories of Current Problems

Four other categories are used to identify credits that currently exhibit transfer-risk problems. However, for borrowers in these categories the committee often distinguishes between credit related to trade financing and credit for other purposes because even countries in severe economic difficulty usually give priority to servicing their international trade. Once credits are placed in one of these categories, a more favorable evaluation is not applied until the country has demonstrated a sustained ability to service its debts in an orderly manner. Its economic position, especially with respect to its external accounts, must also show improvement.

The first three categories are various levels of "classification," and they cover the loans subject to the more serious transfer risks.

The first category of classification, "losses," applies to loans to borrowers in countries that have repudiated their obligations to banks, the International Monetary Fund, or other lenders, or in countries whose payment records and economic conditions have deteriorated to the point that any payment is unlikely. The net carrying value of such loans must be reduced to zero.

The second category of classification, "value impaired," covers loans that the lender should not carry at face value. Loans to borrowers in a country with protracted arrearages, as indicated by at least two of the following conditions, receive this evaluation: the country of the borrower has not paid full interest for at least six months; it has not complied with an IMF-supported or similar program and has no immediate prospects for doing so; it has not met its obligations on rescheduled debt for one year or more; or it has no definite prospect for an orderly restoration of debt service.

When an asset receives this classification, the agencies require the lender either to charge off a certain percentage of the original claim or to establish an equivalent specific reserve, called an allocated transfer-risk reserve, that is not considered part of bank capital when measuring capital adequacy. The ratio of this reserve has ranged from 10 percent to 100 percent.

The least serious of the classifications is "substandard." It applies to loans to borrowers in countries that have not complied fully with their external debt obligations, have not adopted satisfactory reform programs, and have not negotiated a viable rescheduling agreement with their lending banks and appear unlikely to do so.

A final category of transfer-risk problems is labeled "other transfer-risk problems." Credits are placed in this category when transfer-risk problems have prevented borrowers in the country from fulfilling their obligations to service external debt, as evidenced by arrearages, forced restructurings, or rollovers. The country is, however, taking steps to restore debt service through economic reforms, which are usually part of an IMF-supported program. Two other kinds of credits fall into this category: those that are being serviced as scheduled but on which an interruption is deemed imminent; and those that have previously been categorized in one of the three classifications just described but for which classification is no longer warranted in light of recent improvements in debt-service performance. Such loans are ones that are viewed as subject to more than normal risks, but not enough to be "classified."

Implementation

Examiners use the evaluations of transfer risk by the Interagency Country Exposure Review Committee in judging the overall quality of a bank's assets. They must also consider commercial risk factors. If the examiner believes that the business risks a commercial borrower poses dictate a classification more severe than the transfer risk does, then that more severe classification is applied. After this adjustment, classified foreign loans are added to classified domestic loans as part of the process of determining the overall quality of the bank's assets and the adequacy of its capital and reserves.

Examiners may also comment in their reports about a bank's concentration of exposure to a particular country relative to the bank's capital funds. They are required to do so if lending to a country designated as "weak" for transfer-risk purposes exceeds 10 percent of the bank's total capital or if, for a "moderately strong country," the exposure exceeds 15 percent of capital. They do not ordinarily comment on exposures to borrowers in "strong" countries.

These examination comments consist of two paragraphs. The first contains a brief statement on conditions prevailing in the country and on the country's performance under any IMF-supported program. The interagency committee prepares this paragraph. The examiner prepares the second paragraph. It describes the nature of the bank's exposure (such as maturities and types of borrowers) and identifies trends in that exposure. When it is relevant to do so, the examiner may compare the bank's exposure with that of other banks (without revealing identities) and may also discuss the bank's plans for lending to the country.

Identifying and commenting on concentrations of credit to borrowers in any one country are important elements of bank supervision in the United States. When appropriate, the comments should prompt senior management and the bank's board of directors to review their lending policies and exposures. In some cases, the bank may revise its strategy about the nature and amount of lending to borrowers in such a country. If an examiner determines that the exposure is particularly high (relative to risk factors), or that the management of international risk poses other problems, he or she may call attention to those findings in the summary of the examination and also in the letter transmitting the examination report. In that case, the bank's board of directors is required to review and formally respond to the examiner's concerns.

Examiners also evaluate the procedures the bank uses to manage and control its international lending program. Specifically, they review three aspects of the bank's systems: (1) the measurement and monitoring of country risk; (2) the procedures for establishing and changing limits on lending to any one country; and (3) the procedures for evaluating overall country risk. Any material deficiencies in these areas are also criticized.

CONCLUSION

The approach the federal bank regulatory agencies take to evaluating international lending integrates concerns about transfer risks into the overall evaluation of a bank. The Interagency Country Exposure Review Committee enables the agencies to centralize decisionmaking, ensure uniform treatment of foreign lending, and conduct an efficient supervisory review of transfer risks. The related examination procedures ensure that both the supervisory agencies and bank management recognize significant transfer risks when evaluating concentrations and the overall condition of the bank. □

Treasury and Federal Reserve Foreign Exchange Operations

This quarterly report, covering the period November 1988 through January 1989, provides information on Treasury and System foreign exchange operations. It was presented by Sam Y. Cross, Manager of Foreign Operations of the System Open Market Account and Executive Vice President in charge of the Foreign Group of the Federal Reserve Bank of New York. Christopher Rude was primarily responsible for preparation of the report.[1]

The dollar moved lower in November, continuing the decline against most major currencies that had begun in late September. The dollar then gradually found support at the end of November and recovered through most of December and January to return to levels that had prevailed in the autumn. The U.S. monetary authorities intervened to resist the dollar's decline in November and early December and to resist the dollar's rise in January.

The reversal of the dollar's downward momentum during the period reflected shifts in the market's assessment of the strength of the U.S. economy, of the prospects for exchange rate and monetary policies in the United States and elsewhere, and of the effectiveness of the U.S. administration in dealing promptly with pressing economic issues.

THE DOLLAR'S DECLINE IN NOVEMBER

When the three-month period opened in November, market sentiment toward the dollar was decidedly negative. With statistics released in October suggesting that U.S. economic expansion might be moderating, market participants assumed that U.S. monetary policy would not be tightened further. They expected that the interest differentials that had attracted inflows into dollar-denominated assets might not continue to be so favorable. Moreover, concerns about the pace of international adjustment had been aroused by recent trade figures. Not only had the trade surpluses of Germany and Japan showed renewed strength, but also the U.S. trade figures released in mid-October showed that the U.S. trade deficit had widened in August. Market participants began to doubt that the substantial trade improvement the United States had experienced during early 1988 would continue. In addition, market participants expressed growing impatience with the lack of progress being made in reducing the U.S. fiscal deficit and with what seemed to be a lack of urgency given to the issue during the 1988 election campaign.

The dollar's decline through October gained momentum late in the month, especially against the yen. Some Japanese investors sold dollars to protect the yen value of their assets against a further drop in the dollar, and many Japanese exporters hedged their dollar receivables well into 1989. The Japanese currency benefited, too, from a favorable market assessment of the ease with which the Japanese economy had shifted from an emphasis on external demand to one on domestic demand, as well as from Japan's ability, as a major oil importer, to benefit from declining oil prices.

By the beginning of November, the dollar had given up most of its midyear gain against the yen to trade at ¥125.65. The U.S. monetary authorities continued the intervention operations started at the end of October to counter downward pressure on the dollar. These operations involved purchases totaling $350 million against yen during the first two days of November.

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

1. Federal Reserve reciprocal currency arrangements
Millions of dollars

Institution	Amount of facility, January 31, 1989
Austrian National Bank	250
National Bank of Belgium	1,000
Bank of Canada	2,000
National Bank of Denmark	250
Bank of England	3,000
Bank of France	2,000
German Federal Bank	6,000
Bank of Italy	3,000
Bank of Japan	5,000
Bank of Mexico	700
Netherlands Bank	500
Bank of Norway	250
Bank of Sweden	300
Swiss National Bank	4,000
Bank for International Settlements	
Dollars against Swiss francs	600
Dollars against other authorized European currencies	1,250
Total	**30,100**

At the time of the presidential election in the United States, sentiment toward the dollar became even more negative after comments by foreign officials brought the U.S. budget deficit issue back onto center stage. Market participants questioned whether a new administration could successfully negotiate a budget compromise with a Congress controlled even more than before by the opposition party. Market participants were also skeptical that the Group of Seven (G-7) countries would remain committed to exchange rate stability after additional comments from abroad indicated that other countries' intervention operations to support the dollar might come into conflict with the efforts of the G-7 to keep their own domestic inflation rates under control. The dollar continued to come under selling pressure, and, in the period from November 9 through November 16, the U.S. monetary authorities purchased another $625 million against yen in coordination with the Bank of Japan. U.S. and other G-7 officials also made statements expressing continuing official commitment to exchange rate stability.

Although the dollar benefited temporarily from these actions, it remained under pressure during the rest of November. The release of October U.S. retail sales and industrial production figures indicating that economic growth in the United States continued to be strong, as well as a rise in short-term dollar interest rates, had little positive impact on market sentiment. The U.S. trade report on November 16, showing that the trade deficit had narrowed in September and suggesting that the market's earlier concerns about the pace of international adjustment might have been exaggerated, was also largely ignored.

Near the middle of the month, the selling pressure on the dollar intensified, and the U.S. monetary authorities broadened their intervention operations to include the mark. Between November 17 and December 2, the U.S. authorities purchased a total of $630 million against marks and a further $795 million against yen in a series of intervention operations that were conducted in cooperation with the Bank of Japan, the Bundesbank, and other foreign central banks. The dollar reached its lows of the reporting period on November 25 at ¥120.65 against the yen and DM1.7085 against the mark. At these levels, the dollar was more than 4 percent lower against the yen and the mark from its level at the beginning of November and roughly 11½ percent lower than its autumn highs. Although the dollar had declined by comparable amounts against both currencies, against the yen it was only marginally higher than its record low of ¥120.20, reached on January 4, 1988.

Stabilization and Recovery in December

Market participants gradually came to believe that the G-7 monetary authorities were still committed to exchange rate stability. The authorities were seen as showing a consistent presence in the exchange market.

At the same time, market participants sensed from policy decisions taken by foreign central banks—including an increase of 1 percentage point in base lending rates in the United Kingdom on November 25—that containing potential inflationary pressures worldwide was a policy priority. Against this background, U.S. economic statistics that had been released earlier and that revealed unexpected strength in the economy were seen in a different light. Market participants were also impressed by the strong labor market statistics for November released in

2. Drawings and repayments by foreign central banks under special swap arrangement with the U.S. Treasury[1]

Millions of dollars; drawings or repayments (−)

Central bank drawing on the U.S. Treasury	Amount of facility	Outstanding, October 31, 1988	November	December	January	Outstanding, January 31, 1989
Central Bank of the Argentine Republic	265.0	0	47.7	0	−46.9	.8
National Bank of Yugoslavia	50.0	0	*	...	...	...
Central Bank of Brazil	250.0	0	*	...	...	...

1. Data are on a value-date basis.
*No facility.

early December. Noting that short-term dollar interest rates had firmed during November, they came to believe that the Federal Reserve might soon tighten its stance again, either via money market operations or by raising the discount rate.

In addition, market participants were impressed with the extent to which the dollar rallied when a speech by Soviet General Secretary Gorbachev, at the United Nations on December 7, proposing Soviet arms reductions, was temporarily seen as providing scope for the United States to reduce its budget deficit through defense spending cuts. Even though the euphoria of the moment quickly passed, the episode created a renewed sense of two-way market risk.

Under these circumstances, the foreign exchange market slowly shed its negative view of the dollar during the rest of December. Many market participants, who during October and November had postponed purchasing dollars for commercial and investment purposes, began to reenter the market. At the same time, investors who had previously increased their hedging of dollar exposures now lowered their hedge ratios, taking note of the widening of interest rate differentials favoring dollar assets and the increased costs of hedging. The dollar's gradual recovery did not waiver in mid-December when the Bundesbank increased its Lombard rate by ½ percentage point, and several other European central banks also announced increases in their key lending rates. Instead, with the year-end approaching, demand for dollars from bank customers and by bank dealers themselves, who moved to square positions in increasingly thin markets, kept the dollar relatively well bid. Although dealers were skeptical that the dollar's firmer tone would carry over into the new year, the dollar closed the year at DM1.7725 against the mark and ¥124.85 against the yen, 3½ percent higher than its lows of late November.

THE DOLLAR'S RISE IN JANUARY

In January, sentiment toward the dollar grew bullish. Actions and statements in the political sphere contributed to a sense of optimism about the new administration. Signs of Federal Reserve tightening early in the month added to the dollar's upward momentum. As January progressed, several reports showing continued strength in the U.S. economy, together with Chairman Greenspan's reiteration in congressional testimony of the Federal Reserve's concern about the dangers of inflation, supported expectations that dollar interest rates would continue to firm. Also, the market interpreted certain statements by foreign officials as implying a readiness of the G-7 industrial nations to tolerate a further appreciation of the dollar. In this atmosphere, market participants shrugged off the report on January 18 of a sharp rise in the U.S. trade deficit in November.

As the dollar moved up through levels not seen for several months, market participants continued to reduce their dollar hedges and reverse commercial leads and lags. Moreover, investors noted the relatively good performance of the dollar through 1988, and reports circulated of widespread Japanese and European interest in buying dollar-denominated securities. In the process, bidding for dollars became at times quite strong. The force of the dollar's rise was directed particularly against the German mark and other European currencies.

By mid-January the dollar had moved up to DM1.8713 against the mark and ¥128.52 against the yen. On January 19, the Bundesbank an-

3. Net profits or losses (−) on U.S. Treasury and Federal Reserve current foreign exchange operations, November 1, 1988–January 31, 1989[1]

Millions of dollars

Item	Federal Reserve	U.S. Treasury Exchange Stabilization Fund
Realized	155.3	155.4
Valuation profits and losses on outstanding assets and liabilities as of January 31, 1989	1,004.8	789.4

1. Data are on a value-date basis.

nounced a further increase of ½ percentage point in its Lombard rate and a similar increase in its discount rate. Several other European central banks also raised key lending rates. The rate increases, supported by coordinated intervention, injected a note of caution in the market, and, for a time, the dollar's upward momentum stalled. But the dollar soon resumed its rise to reach its period highs of DM1.8795 against the mark and ¥130.55 against the yen on January 31. It thus closed the three-month reporting period 5 percent higher against the mark and 3½ percent higher against the yen relative to its levels at the start of November. On a trade-weighted basis, as measured by the staff of the Federal Reserve Board, it was 4 percent higher on balance.

As the dollar moved up in January, the U.S. monetary authorities intervened to counter the rise. From January 6 to January 27, the U.S. authorities intervened on 12 days to sell a total of $1,880 million against marks in coordination with the Bundesbank and other foreign central banks.

In summary, for the period as a whole, the U.S. monetary authorities purchased a total of $2,400 million during November and December—$1,770 million against Japanese yen and $630 million against German marks—and sold $1,880 million against German marks during January. The U.S. Treasury, through the Exchange Stabilization Fund (ESF), and the Federal Reserve participated equally in the financing of all intervention operations.

The ESF also received $62.2 million equivalent of Japanese yen in principal repayments and interest payments under the Supplementary Financing Facility of the International Monetary Fund.

For the November–January period, the Federal Reserve and the Treasury realized profits of $155.3 million and $155.4 million respectively. As of the end of January 1989, cumulative bookkeeping or valuation gains on outstanding foreign currency balances were $1,004.8 million for the Federal Reserve and $789.4 million for the ESF. These valuation gains represent the increase in the dollar value of outstanding currency assets valued at end-of-period exchange rates, compared with the rates prevailing at the time the foreign currencies were acquired.

The Federal Reserve and the ESF regularly invest their foreign currency balances in a variety of instruments that yield market-related rates of return and that have a high degree of quality and liquidity. A portion of the balances is invested in securities issued by foreign governments. As of the end of January 1989, holdings of such securities by the Federal Reserve amounted to $1,457.9 million equivalent, and holdings by the ESF amounted to the equivalent of $1,821.3 million.

In other operations, on November 22, 1988, the Central Bank of the Argentine Republic drew $79.5 million from a $265 million swap facility with the ESF. This facility was provided as part of a $500 million short-term financing package arranged in October 1988 by a number of monetary institutions. Argentina repaid $31.8 million on November 23, 1988, and $46.9 million on January 26, 1989.

ESF short-term facilities with the Central Bank of Brazil and the National Bank of Yugoslavia expired in November 1988. There was no activity in either facility during the period.

Staff Studies

The staff members of the Board of Governors of the Federal Reserve System and of the Federal Reserve Banks undertake studies that cover a wide range of economic and financial subjects. From time to time the results of studies that are of general interest to the professions and to others are summarized in the FEDERAL RESERVE BULLETIN.

The analyses and conclusions set forth are those of the authors and do not necessarily indicate concurrence by the Board of Governors, by the Federal Reserve Banks, or by the members of their staffs.

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STUDY SUMMARY

M2 PER UNIT OF POTENTIAL GNP AS AN ANCHOR FOR THE PRICE LEVEL

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Prepared as a staff study in the winter of 1988–89

The velocities of the monetary aggregates have been quite variable during the current decade, leading some economists to conclude that the monetary authority cannot use any of the aggregates as a reliable anchor for the price level. This study questions that conclusion as it applies to M2: its velocity relative to the gross national product, while somewhat variable in the short run, has shown a flat trend over most of the twentieth century. This stability has likely stemmed in recent years from the flexibility of most rates paid on M2 deposits and, in earlier decades, from the flexible administration of Regulation Q and the introduction of new instruments. As a consequence of this stability, a comparatively reliable long-run link between M2 and the price level exists.

The study's analysis of M2 and prices starts with the question, What long-run price level will current holdings of M2 support? The long-run equilibrium price level, P^*, is defined as being consistent with the current value of M2 when V2 is at its long-run level, V^*, and when real GNP is at its long-run potential level, Q^*. Algebraically,

$$P^* = \frac{\mathrm{M2} \cdot V^*}{Q^*}.$$

Thus, P^* is proportional to M2 per unit of potential output. Operationally, the mean of V2 since 1955:1 is used as the estimate of V^*.

Discrepancies between the long-run equilibrium price level, P^*, and the actual price level, P, drive the inflation process. The relationship is best modeled as an equation in which, with a lag, $P - P^*$ determines the change in the inflation rate (the acceleration or deceleration of the price level). If P^* is greater than P, then the current level of M2, if maintained, will eventually yield an acceleration of prices. If P^* is below P, then maintaining the current level of M2 will eventually yield a deceleration.

This approach to forecasting inflation allows one to disregard forecasts of interest rates, exchange rates, fiscal policy, real output, and the like. It requires estimates of the future courses of only M2, potential real GNP, and long-run velocity and thus provides a framework in which the future price level is determined by the level of M2.

The model forecasts well over periods of one year or longer, even outside various periods over which it has been estimated. In particular, the model outperforms a simple version of the more traditional approach that relates changes in inflation to the "output gap." Moreover, the model's coefficients are stable over a 33-year period.

Over periods of less than one year, factors outside the model—wage trends, interest rates, foreign exchange movements, and the gap between real and potential output—are of great importance in the inflation process and remain essential to the assessment of short-run inflationary developments. Another limitation of the approach concerns the future long-run value of V2; permanent shifts in V2 are always a possibility, especially if significant progress is made toward price stability and, correspondingly, nominal interest rates decline markedly.

But the potential shortcomings of M2 should not deflect attention from the need for an analytic framework within which to formulate a long-term policy strategy and evaluate progress toward long-run price stability. In this regard, P^* appears to be a simple empirical guidepost that can help the monetary authorities track the implications of short- and intermediate-term policies for achieving the long-term objective of stable prices. □

Industrial Production

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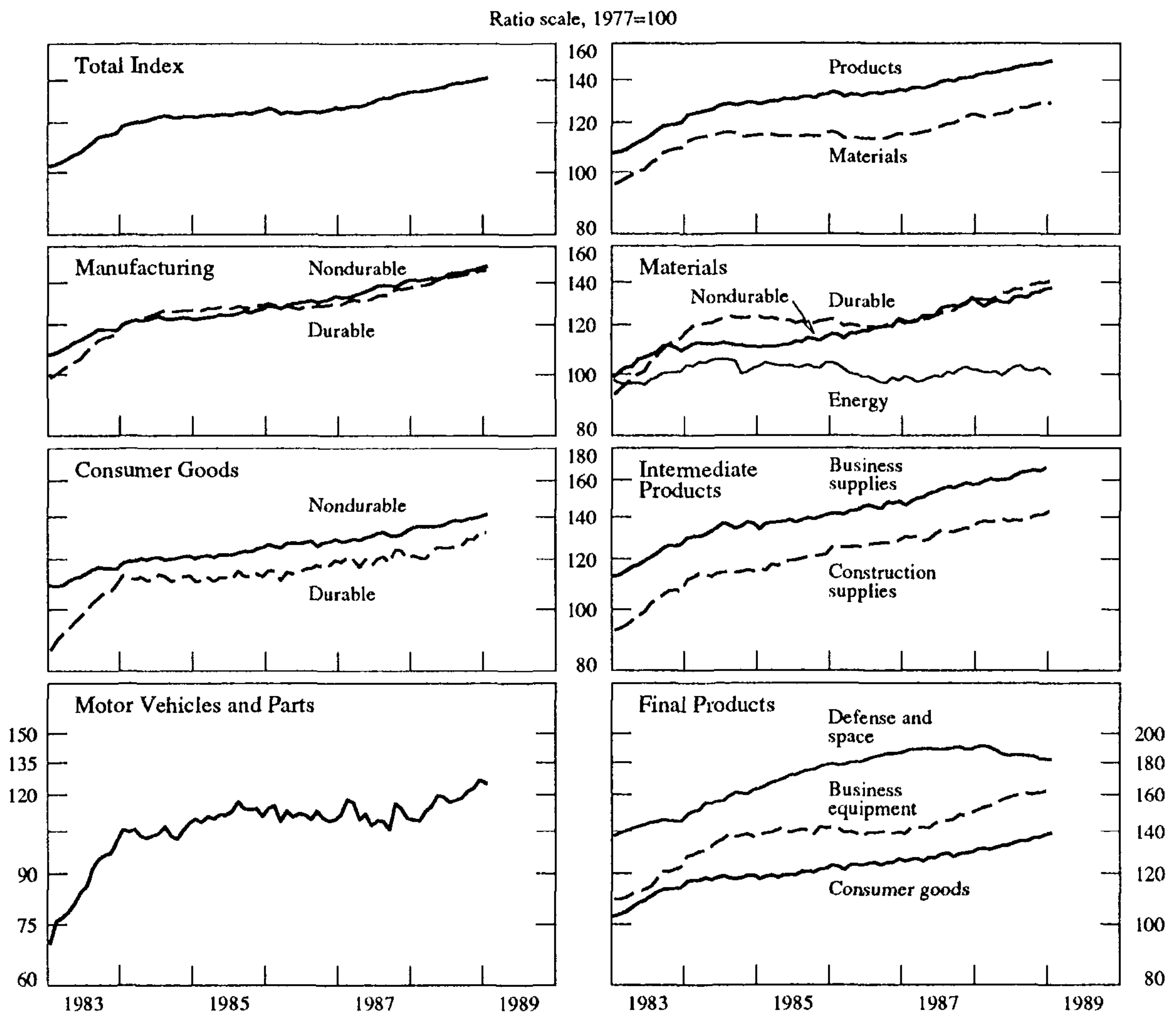
Industrial production increased 0.3 percent in January, after having risen a revised 0.5 percent in December. Total manufacturing output posted another gain of 0.5 percent in January, while production at mines and utilities declined. Among market groups, the most significant increases in January occurred in nondurable consumer goods, construction supplies, and durable materials. In contrast, output of motor vehicles fell sharply in January, retracing some of the large increases registered in December. At 141.1 percent of the 1977 average, the total index in January was 5.0 percent higher than it was a year earlier.

In market groups, the output of consumer goods rose in January, primarily reflecting wide-



All series are seasonally adjusted. Latest series: January.

Group	1977 = 100		Percentage change from preceding month					Percentage change, Jan. 1988 to Jan. 1989
	1989		1988				1989	
	Dec.	Jan.	Sept.	Oct.	Nov.	Dec.	Jan.	
	Major market groups							
Total industrial production	**140.6**	**141.1**	**.1**	**.6**	**.3**	**.5**	**.3**	**5.0**
Products, total	149.4	150.1	.1	.5	.2	.7	.5	5.2
Final products	147.6	148.2	.0	.4	.2	.6	.4	5.0
Consumer goods	138.0	138.9	−.1	1.2	.2	1.0	.6	5.8
Durable	132.1	132.2	.5	2.4	−.1	2.2	.1	8.6
Nondurable	140.2	141.3	−.3	.7	.3	.6	.8	4.9
Business equipment	162.0	162.5	.4	−.4	.6	.5	.3	7.5
Defense and space	182.3	181.9	−.2	−.3	−.8	−.1	−.2	−4.6
Intermediate products	155.4	156.8	.4	.7	.1	.8	.9	5.8
Construction supplies	141.4	143.4	.2	1.2	.7	.3	1.4	4.8
Materials	128.7	128.7	.0	.8	.6	.3	.0	4.7
	Major industry groups							
Manufacturing	146.6	147.4	.3	.6	.4	.5	.5	5.7
Durable	146.0	146.5	.4	.6	.5	.5	.3	6.2
Nondurable	147.6	148.6	.1	.7	.3	.6	.7	5.1
Mining	104.5	103.3	.0	−.6	1.3	.1	−1.2	.0
Utilities	114.1	113.2	−4.0	.8	−.7	.9	−.8	1.7

NOTE. Indexes are seasonally adjusted.

spread gains in nondurable consumer goods. Automobile assemblies decreased to an annual rate of 7.5 million units from a rate of 7.9 million units in December; however, the output of trucks for consumer use continued to rise. The output of total business equipment, which decelerated noticeably in the fourth quarter of 1988, rose 0.3 percent in January. The composition of the gain in production in January differed significantly from that of recent months. Transit equipment, which posted a huge increase in the fourth quarter of last year, fell sharply in January as the output of motor vehicles for business use dropped. However, a pickup in the production of both manufacturing and commercial equipment more than offset the decline in transit equipment. The output of materials was unchanged, on balance, in January. Both durable and nondurable materials posted gains, as steel and chemicals advanced. But output of energy materials decreased nearly 2 percent, reflecting declines in coal mining, crude oil extraction, and electricity generation.

In industry groups, within manufacturing, production of all major industries, except transportation equipment and paper, rose in January. Production at utilities was down 0.8 percent, mainly reflecting the unusually mild weather in January, and mining output declined 1.2 percent.

Capacity utilization in total industry for January was estimated at 84.4 percent, the same as in December. In manufacturing, capacity utilization for January was 84.8 percent, 0.2 percentage point higher than it was in December, and 2.1 percentage points higher than it was a year earlier. Detailed data for capacity utilization are shown separately in "Capacity Utilization," Federal Reserve monthly statistical release, G3.

Total industrial production—Revisions

Estimates as shown last month and current estimates

Month	Index (1977=100)		Percentage change from previous months	
	Previous	Current	Previous	Current
Oct.	139.3	139.4	.5	.6
Nov.	139.8	139.9	.4	.3
Dec.	140.2	140.6	.3	.5
Jan.	...	141.1	...	.3

Statements to Congress

Statement by Alan Greenspan, Chairman, Board of Governors of the Federal Reserve System, before the Committee on Ways and Means, U.S. House of Representatives, February 2, 1989.

I am pleased to be here today to discuss corporate restructuring and the need for reducing the federal budget deficit, issues raised in your letter of invitation.

CORPORATE RESTRUCTURING AND LEVERAGING

The spate of mergers, acquisitions, leveraged buyouts (LBOs), share repurchases, and divestitures in recent years has major implications for the American economy. While the evidence suggests that the restructurings of the 1980s probably are improving, on balance, the efficiency of our economy, the worrisome and possibly excessive degree of leveraging associated with this process could create a set of new problems for the financial system.

Corporate restructuring is not new to American business. It has long been a feature of our enterprise system, a means by which firms adjust to ever-changing product and resource markets and to perceived opportunities for gains from changes in management and management strategies.

However, the 1980s have been characterized by features not present in previous episodes. The recent period has been marked not only by acquisitions and mergers but also by significant increases in leveraged buyouts, divestitures, asset sales, and share repurchase programs. In many cases, recent activity reflects the breakup of the big conglomerate deals packaged in the 1960s and 1970s. Also, the recent period has been characterized by the retirement of substantial amounts of equity (more than $500 billion since 1983) mostly financed by borrowing in the credit markets.

The accompanying increase in debt has resulted in an appreciable rise in leverage ratios for many of our large corporations. Aggregate book value debt–equity ratios, based on balance sheet data for nonfinancial firms, have increased sharply in the 1980s, moving outside their range in recent decades, although measures based on market values have risen more modestly.

Along with this debt expansion, the ability of firms in the aggregate to cover interest payments has deteriorated. The ratio of gross interest payments to corporate cash flow before interest provision is currently about 35 percent, close to the 1982 peak when interest rates were much higher and profits were weak owing to the recession. Lately, profits have been fairly buoyant; the current deterioration has been due to heavier debt burdens.

A measure of credit quality erosion is suggested by an unusually large number of downgradings of corporate bonds in recent years. The average bond rating of a large sample of firms has declined fairly significantly since the late 1970s, from A+ to A−.

To fashion an appropriate policy response, if any, to this extraordinary restructuring–LBO phenomenon, there are some key questions that must be answered: What is behind the corporate restructuring movement? Why is it occurring now, in the middle and late 1980s, rather than in some earlier time? Why has it involved such a broad leveraging of corporate balance sheets? And finally, has it been good or bad for the American economy?

The 1980s has been a period of dramatic economic changes: large swings in the exchange value of the dollar, with substantial consequences for trade-dependent industries; rapid technological progress, especially in automation and telecommunications; rapid growth in the service sector; and large movements in real interest rates and relative prices. Clearly, such changes in the economic environment imply major, perhaps unprecedented, shifts in the optimal mix of assets at firms—owing to corresponding shifts in synergies—and new opportunities for improving efficiency. Some activities need to be shed or curtailed, and others added or beefed up. Moreover, the long period of slow productivity growth in the 1970s may have partly exacerbated the buildup of a backlog of inefficient corporate practices.

When assets become misaligned or less than optimally managed, there is clearly an increasing opportunity to create economic value by restructuring companies, restoring what markets perceive as a more optimal mix of assets. But restructuring requires corporate control. And managers, unfortunately, often have been slow in reacting to changes in their external environment, some more so than others. Hence, it shouldn't be a surprise that, in recent years, unaffiliated corporate restructurers, some call them corporate raiders, have significantly bid up the control premiums over the passive investment value of companies that are perceived to have suboptimal asset allocations. If a company has an optimal mix and is appropriately managed, there is no economic value to be gained from restructuring and, hence, no advantage in obtaining control of a company for such purposes. In that case, there is no incentive to bid up the stock price above the passive investment value based on its existing, presumed optimal, mix of assets. But in an economy knocked partially off kilter by real interest rate increases and gyrations in foreign exchange and commodity prices, there emerge significant opportunities for value-creating restructuring at many companies.

This presumably explains why common stock tender offer prices of potential candidates for restructuring have risen significantly during the past decade. Observed stock prices generally (though not always) reflect values of shares as passive investments. But there can be, for any individual company, two or more prices for its shares, reflecting the degree of control over a company's mix of assets.

Tender-offer premiums—which represent the price that active investors are willing to pay for corporate control—ranged from 13 percent to 25 percent in the 1960s, but have moved to 45 percent and higher during the past decade, underscoring the evident increase in the perceived profit to be gained from corporate control and restructuring.

Interest in restructuring also has been spurred by the apparent increased willingness and ability of corporate managers and owners to leverage balance sheets. The gradual replacement of managers who grew up in the Depression and developed a strong aversion to bankruptcy risk probably accounts for some of the increased proclivity to issue debt now.

Moreover, innovations in capital markets have made the increased propensity to leverage feasible. It is now much easier than it used to be to mobilize tremendous sums of debt capital for leveraged purchases of firms. Improvements in the loan-sale market among banks and the greater presence of foreign banks in U.S. markets have greatly increased the ability of the banking sector to participate in merger and acquisition transactions. The phenomenal development of the market for low-grade corporate debt, so-called junk bonds, also has enhanced the availability of credit for a wide variety of corporate transactions. The increased liquidity of this market has made it possible for investors to diversify away firm-specific risks by building portfolios of such debt.

The tax benefits of restructuring activities are, of course, undeniable, but this is not a particularly new phenomenon. Our tax system has long favored debt finance by taxing the earnings of corporate debt capital only at the investor level, while earnings on equity capital are taxed at both the investor and corporate levels. There have been other sources of tax savings in mergers that do not depend on debt finance, involving such items as the tax basis for depreciation and foreign tax credits. And taxable owners benefit when firms repurchase their own shares, using what is, in effect, a tax-favored method of paying cash dividends. In any event, the recent rise in restructuring activity is not easily tied to any change in tax law.

Evidence about the economic consequences of restructuring is beginning to take shape, but much remains conjectural. It is clear that the markets believe that the recent restructurings are potentially advantageous. Estimates range from

$200 billion to $500 billion or more in paper gains to shareholders since 1982. Apparently, only a small portion of that has come at the expense of bondholders. These gains are reflections of the expectations of market participants that the restructuring will, in fact, lead to a better mix of assets within companies and greater efficiencies in their use. This, in turn, is expected to produce marked increases in future productivity and, hence, in the value of American corporate business. Many of the internal adjustments brought about by changes in management or managerial policies are still being implemented, and it will take time before they show up for good or ill in measures of performance.

So far, various pieces of evidence indicate that the trend toward more ownership by managers and tighter control by other owners and creditors has generally enhanced operational efficiency. In the process, both jobs and capital spending in many firms have contracted as unprofitable projects are scrapped. But no clear trends in these variables are yet evident in restructured firms as a group. For the business sector, generally, growth of both employment and investment has been strong.

If what I have outlined earlier is a generally accurate description of the causes of the surge in restructurings of the past decade, one would assume that a stabilization of interest rates, exchange rates, and product prices would slow the emergence of newly misaligned companies and opportunities for further restructuring. Such a development would presumably lower control premiums and reduce the pace of merger, acquisition, and LBO activity.

This suggests that the most potent policies for defusing the restructuring–LBO boom over the long haul are essentially the same macroeconomic policies toward budget deficit reduction and price stability that have been the principal policy concerns of recent years.

Whatever the trends in restructuring, we cannot ignore the implications of the associated heavy leveraging for broad-based risk in the economy. Other things equal, greater use of debt makes the corporate sector more vulnerable to an economic downturn or a rise in interest rates. The financial stability of lenders, in turn, also may be affected. How much is another question. The answer depends greatly on which firms are leveraging, which financial institutions are lending, and how the financings are structured.

Most of the restructured firms appear to be in mature, stable, noncyclical industries. Restructuring activity has been especially prevalent in the trade, services, and, more recently, the food and tobacco industries. For such businesses, a substantial increase in debt may raise the probability of insolvency by only a relatively small amount. However, roughly two-fifths of merger and aquisition activity, as well as LBOs, have involved companies in cyclically sensitive industries that are more likely to run into trouble in the event of a severe economic downturn.

Lenders to leveraged enterprises have been, in large part, those that can most easily absorb losses without major systemic consequences. They include mutual funds, pension funds, and insurance companies, which generally have diversified portfolios and have traditionally invested in securities involving some risk, such as equities. To the extent that such debt is held by individual institutions that are not well diversified, there is some concern. At the Federal Reserve, we are particularly concerned about the increasing share of restructuring loans made by banks. Massive failures of these loans could have broad ramifications.

Generally, we must recognize that the line between equity and debt has become increasingly fuzzy in recent years. Convertible debt has always had an intermediate character, but now there is almost a continuum of securities varying in their relative proportions of debt and equity flavoring. Once there was a fairly sharp distinction between being unable to make interest payments on a bond, which frequently led to liquidation proceedings, and merely missing a dividend. Now the distinction is smaller. Outright defaults on original issue high-yield bonds have been infrequent to date, but payment difficulties have led to more frequent exchanges of debt that reduce the immediate cash needs of troubled firms. Investors know when they purchase such issues that the stream of payments received may well differ from the stream promised, and prices tend to move in response to changes in both debt and equity markets. In effect, the yields on debt capital rise toward that of equity capital when scheduled repayments are less secure.

In view of these considerations, and the very limited evidence on the effects of restructuring at the present time, it would be unwise to restrict arbitrarily corporate restructuring. We must resist the temptation to seek to allocate credit to specific uses through the tax system or through the regulation of financial institutions. Restrictions on the deductibility of interest unavoidably involve an important element of arbitrariness, one that will affect not only those types of lending intended but other types as well. Moreover, foreign acquirers could be given an artificial edge to the extent that they could avoid these restrictions. Also, the historical experience with various types of selective credit controls clearly indicates that, in time, borrowers and lenders find ways around them.

All that does not mean that we should do nothing. The contribution of our tax structure to corporate leveraging warrants attention. The double taxation of earnings from corporate equity capital has added to leveraging, and thus debt levels are higher than they need, or should, be. Our options for dealing with this distortion are, unfortunately, constrained severely by the federal government's still serious budget deficit problems, a matter that I will turn to in a moment. One straightforward approach to this distortion, of course, would be to substantially reduce the corporate income tax. Alternatively, partial integration of corporate and individual income taxes could be achieved by allowing corporations a deduction for dividends paid or by giving individuals credit for taxes paid at the corporate level. But these changes taken alone would result in substantial revenue losses; a rough estimate of IRS collections from taxing dividends is in the range of $20 billion to $25 billion annually.

Dangers of risk to the banking system associated with high debt levels also warrant attention. As I have noted, the Federal Reserve, in its role as a supervisor of banks, has particular concerns in this regard. In 1984, the Board issued supervisory guidelines for assessing LBO-related loans, which are set forth in an attachment to my text.[1] These guidelines emphasized that the circumstances associated with highly leveraged deals require that creditors exercise credit judgment with special care, assessing those risks that are firm-specific as well as those common to all highly leveraged firms. The Federal Reserve is currently in the process of reviewing guidelines regarding the evaluation of bank participation in highly leveraged financing transactions; we anticipate that this review will be completed shortly.

THE BUDGET DEFICIT AND THE ECONOMY

The remainder of my prepared remarks will concentrate on the budget deficit and the corrosive impact it is having on the economy.

It is beguiling to contemplate the strong economy of recent years in the context of very large deficits and to conclude that the concerns about the adverse effects of the deficit on the economy have been misplaced. But this argument is fanciful. The deficit already has begun to eat away at the foundations of our economic strength. And the need to deal with it is becoming ever more urgent. To the extent that some of the negative effects of deficits have not as yet been felt, they have been merely postponed, not avoided. Moreover, the scope for further such avoidance is shrinking.

To some degree, the effects of the federal budget deficits over the past several years have been muted by two circumstances, both of which are currently changing rapidly. One was the rather large degree of slack in the economy in the early years of the current expansion. This slack meant that the economy could accommodate growing demands from both the private and public sectors. In addition, to the extent that these demands could not be accommodated from U.S. resources, we went abroad and imported them. This can be seen in our large trade and current account deficits. By now, however, the slack in the U.S. economy has diminished substantially. And as inflows of foreign saving are reduced along with our trade deficit, other sources of saving must be found, or demands for

1. The attachments to this statement are available on request from publications Services, Board of Governors of the Federal Reserve System, Washington, D.C. 20551.

saving curtailed. The choices are limited; as will become clear, the best option for the American people is a further reduction in the federal budget deficit, and the need for such reduction is becoming more pressing.

Owing to significant efforts by the executive branch and the Congress, coupled with strong economic growth, the deficit has shrunk from 5 percent to 6 percent of gross national product a few years earlier to about 3 percent of GNP today. Such a deficit, nevertheless, is still very large by historical standards. Since World War II, the actual budget deficit has exceeded 3 percent of GNP only in the 1975 recession period and in the recent deficit experience beginning in 1982. On a cyclically adjusted or structural basis, the deficit has exceeded 3 percent of potential GNP only in the period since 1983.

Government deficits, however, place pressure on resources and credit markets, only if they are not offset by saving elsewhere in the economy. If the pool of private saving is small, federal deficits and private investment will be in keen competition for funds, and private investment will lose.

The U.S. deficits of recent years are threatening precisely because they have been occurring in the context of private saving that is low by both historical and international standards. In the 1980s, net personal plus business saving in the United States has been about 3 percentage points lower relative to GNP than its average in the preceding three decades. Internationally, government deficits have been quite common among the major industrial countries in the 1980s, but private saving rates in most of these countries have exceeded the deficits by very comfortable margins. In Japan, for example, less than 20 percent of its private saving has been absorbed by government deficits, even though the Japanese general government has been borrowing almost 3 percent of its gross domestic product in the 1980s. In contrast, more than half of private U.S. saving in the 1980s has been absorbed by the combined deficits of the federal and state and local sectors.

Under these circumstances, such large and persistent deficits are slowly but inexorably damaging the economy. The damage occurs because deficits tend to pull resources away from net private investment, which damps the growth of the nation's capital stock. This, in turn, has meant less capital per worker than would otherwise have been the case, and this will surely engender a shortfall in labor productivity growth and, with it, a shortfall in growth of the standard of living.

All else equal, the higher real interest rates associated with increased borrowing by the Treasury in the 1980s have reduced private investment in the aggregate. Moreover, the higher real interest rates have shifted the composition of investment away from long-lived assets, such as factories, toward computers and other shorter-lived equipment. The data also underscore a recent decline in the average service life of consumption as well as investment goods and a systematic tendency for this average to move inversely with real rates of interest. That is, the higher are real interest rates, the heavier is the concentration on short-lived assets.

Not surprisingly, we have already experienced a disturbing decline in the level of net investment as a share of GNP. Net investment has fallen to 4.7 percent of GNP in the 1980s from an average level of 6.7 percent in the 1970s and even higher in the 1960s. Moreover, it is low, not only by our own historical standards, but by international standards as well.

International comparisons of net investment should be viewed with some caution because of differences in the measurement of depreciation and in other technical details. Nevertheless, the existing data do indicate that total net private and public investment as a share of gross domestic product over the period between 1980 and 1986 was lower in the United States than in any of the other major industrial countries except the United Kingdom.

It is important to recognize, as I indicated earlier, that the negative effects of federal deficits on growth in the capital stock may be attenuated for a while by several forces in the private sector. One is a significant period of output growth in excess of potential GNP growth—such as occurred over much of the past six years—which undoubtedly boosts sales and profit expectations and, hence, business investment. Such rates of output growth, of course, cannot persist, making this factor inherently temporary in nature.

Another factor tending to limit the decline in investment spending would be any tendency for saving to respond positively to the higher interest rates that deficits would bring. The supply of domestic private saving has some interest elasticity, as people put off spending when borrowing costs are high and returns from their financial assets are favorable. But most analysts find that this elasticity is not sufficiently large to matter much.

Finally, net inflows of foreign saving can be, as recent years have demonstrated, an important addition to saving. In the 1980s, our ability to tap foreign saving has kept the decline in the gross investment–GNP ratio, on average, to only moderate dimensions (slightly more than ½ percentage point) compared with the 1970s, while the federal deficit rose about 2½ percentage points relative to GNP. Net inflows of foreign saving have amounted, on average, to almost 2 percent of GNP, an unprecedented level.

Looking ahead, the continuation of inflows of foreign saving at current levels is questionable. Evidence for the United States and for most other major industrial nations over the past 100 years indicates that such sizable foreign net capital inflows have not persisted and, hence, may not be a reliable substitute for domestic saving on a long-term basis. In other words, domestic investment tends to be supported by domestic saving alone in the long run.

Let me conclude by reiterating that the budget deficit must be brought down. I do not underestimate the difficult decisions that you must make if we are to achieve the necessary reduction in the deficit. But allowing deficits to persist courts a dangerous corrosion of our economy and risks potentially significant reductions over time in our standard of living. □

Statement by Alan Greenspan, Chairman, Board of Governors of the Federal Reserve System, before the Committee on Banking, Housing, and Urban Affairs, U.S. Senate, February 21, 1989.

I appreciate this opportunity to discuss with you recent monetary policy and our plans for the future. You have received our formal report to the Congress.[1] This morning, I would like to summarize the important points of that report and to place monetary policy in the context of the overall economic and financial situation.

ECONOMIC AND MONETARY DEVELOPMENTS IN 1988

Last year was a challenging one for monetary policy. Early in the year, uncertainties remained about the impact of the October 1987 worldwide stock market break on the economic expansion and financial system. Given these risks, the Federal Reserve increased the availability of bank reserves slightly further, adding to the easing put in place immediately after October 19; at the same time we monitored financial and economic indicators closely for any signs that the economic expansion was faltering.

Gradually, however, it became clear that the economic expansion remained well on track and that market confidence was on the mend. Spending was robust, and dwindling margins of unused resources as employment and output registered sizable gains indicated that the balance of risks was shifting in the direction of higher inflation. Consequently, the Federal Open Market Committee applied increased restraint to reserve positions in a series of steps beginning in the spring of 1988 and extending to the current period. In addition, the discount rate was raised from 6 percent to 6½ percent in August.

The policy restraint led to an appreciable rise in short-term market interest rates beginning in spring 1988. Growth of money moderated over the year as rates on deposits lagged the rise in market interest rates. M2 and M3, which were near the upper ends of their target ranges early in the year, slowed considerably in subsequent months and finished the year around the middle of their annual target ranges of 4 percent to 8

1. See "Monetary Policy Report to the Congress," FEDERAL RESERVE BULLETIN, vol. 75 (March 1989), pp. 107–19.

percent. Growth of M1 also was restrained by higher interest rates, slowing to about 4 percent, while the monetary base grew only a bit less rapidly than in 1987, as currency continued to expand at a strong pace. Thus, in both 1987 and 1988, most money measures grew appreciably more slowly than they had in many years. This more moderate pace of monetary expansion has been a necessary aspect of a monetary policy designed to contain inflation and to promote price stability and economic growth over time.

Despite tightening money markets, longer-term interest rates have been remarkably stable. Yields on Treasury bonds, for example, remained in a fairly narrow range around 9 percent for most of the year and have continued in that range so far in 1989. Moreover, the stock market recovered relatively steadily over the year and into 1989. The performance of the bond and stock markets in the face of rising short-term rates seemed to stem from expectations of continued relatively balanced economic expansion in the United States with inflation pressures not likely to intensify. U.S. investments looked attractive under these circumstances, and the dollar's average value against major foreign currencies recovered from the late 1987 plunge and was relatively stable over the course of the year.

The optimism of domestic and foreign investors evident in financial markets reflected the solid performance of the economy and prospects for its continuation. Our gross national product expanded around 3¼ percent in 1988, adjusted for crop losses caused by the drought. Over the year, payroll employment rose 3.7 million. Since the economic expansion began in late 1982, employment in the United States has increased more than 17 million, pushing the unemployment rate below 5½ percent, its lowest level since the mid-1970s. Employment gains in 1987 and 1988 were strong in nearly every major sector of the American economy, including manufacturing, construction, trade, and services. Although in 1988 farmers suffered one of their worst crop losses in this century, the situation in agriculture remains fundamentally much improved from that earlier in the 1980s. Industrial production in manufacturing rose 5½ percent, bringing average capacity utilization to the highest level since the late 1970s. Some industries that had been hit especially hard by the recession of 1981–82 and by the erosion of international competitiveness owing to the rise in the value of the dollar now are considerably improved. Quite a few firms in those industries are operating essentially flat out and experiencing notable profit improvement.

However, last year's economic performance had some disappointing features. The federal budget deficit remained high and our national saving low. This contributed to continued large current account and trade deficits. By keeping pressure on interest rates, the low rate of saving also was a factor behind the performance of business fixed investment last year. Investment slowed from 1987, especially in the second half of the year, even in the face of relatively rapid expansion of production and high levels of capacity utilization.

In addition, overall inflation, in the area of 4 percent to 4½ percent, during 1988 was a little above the general range in which it had fluctuated in the mid-1980s. The drought boosted food prices, adding somewhat to inflation last year, but this was largely offset by a leveling-off of energy prices. Prices of other consumer goods and services accelerated a bit. This acceleration is troubling, especially with inflation already at a level that would be unsatisfactory if it persisted.

Although the step-up in consumer inflation to date has been rather small, some signs have emerged of greater acceleration in broad measures of costs of production. Wage gains accelerated toward the end of last year. Moreover, benefits took an unusually large jump in 1988, boosted in part by a sharp rise in health insurance costs and a hike in social security taxes—both of which add to business costs as directly as do wages. Overall, the employment cost index, a comprehensive measure of hourly wage and benefit rates, rose 5 percent in 1988, up significantly from 1987. Materials inputs also were adding to costs; the producer price index for intermediate materials and supplies excluding food and energy rose about 7 percent over the past year.

Economic Prospects and Monetary Policy for 1989

On the whole, the economic expansion remains vigorous and unusually well balanced after more than six years. There are few of the telltale distortions, such as widespread inventory overhangs or constricted profit margins, that typically have signaled the last phases of expansions. But with the economy running close to its potential, the risks seem to be on the side of a further strengthening of price pressures. In these circumstances, the Federal Reserve remains more inclined to act in the direction of restraint than toward stimulus.

The determination to resist any pickup in inflation in 1989 and especially to move over time toward price stability shaped the Committee's decisions with respect to monetary and credit ranges for 1989. The Committee agreed that, particularly in this environment, progress toward these objectives likely will require continuing restraint on growth in money and credit.

To this end, the Committee lowered the range for M2 a full percentage point to 3 percent to 7 percent and reduced the range for M3 ½ percentage point to 3½ percent to 7½ percent. The Committee also lowered the monitoring range for domestic nonfinancial sector debt ½ percentage point to 6½ percentage points to 10½ percentage points. These were the ranges adopted on a tentative basis last June.

We decided to retain the wider, 4-percentage-point ranges that were adopted in 1988. The relationship of the monetary aggregates to economic performance has been quite variable in the 1980s. The relatively high interest elasticity of the aggregates, even after deregulation, makes them very sensitive to changes in money market conditions, which in turn can respond to developments in the real economy or prices. The resulting potential for sizable movements in velocity requires broader ranges to have reasonable assurance that the targets are consistent with satisfactory economic performance. Considerable uncertainties regarding the effects on the monetary aggregates of the resolution of difficulties in thrift institutions also argue for relatively wide ranges this year. Depending on the pace of asset growth of thrift institutions and changes in their deposit-pricing policies, the composition and growth of their liabilities could vary substantially from past patterns.

For the same reasons, the Committee agreed to continue its current approach to the implementation of policy, which involves monitoring a variety of economic and financial indicators, including growth of money and debt. In this regard, appropriate growth of M2 and M3 relative to their ranges will be determined in part by developments during the year. At present, it appears that the velocities of M2 and M3 are likely to rise this year, in response to the market interest rate increases to date and unusually sluggish adjustment of deposit rates.

The Federal Reserve expects its policy in 1989 to support continued economic expansion while putting in place conditions for a gradual easing in the rate of inflation over time. However, the wage and price process may have developed some momentum. The central tendency of forecasts made by members of the Federal Reserve Board and presidents of Federal Reserve Banks is for inflation to rise slightly in 1989. But let me stress that the current rate of inflation, let alone an increase, is not acceptable, and our policies are designed to reduce inflation in coming years.

This restraint will involve containing pressures on our productive resources, and, thus, some slowing in the underlying rate of growth of real GNP is likely in 1989. The central tendency of GNP forecasts for this year of Board members and Reserve Bank presidents is 2½ percent to 3 percent; abstracting from the expected rebound from last year's drought losses, real GNP is projected to grow at closer to a 2 percent rate. Net exports are expected to continue to improve in 1989 as we make further progress in reducing our external imbalances, but this implies the need for restraint on domestic demand to contain pressures on our productive resources. With demands for labor growing more in line with expansion of the labor force, the unemployment rate is expected to remain near its recent level over 1989.

Monetary Policy and Long-Run Economic Growth

Maximum sustainable economic growth over time is the Federal Reserve's ultimate objective. The primary role of monetary policy in the pursuit of this goal is to foster price stability. For all practical purposes, price stability means that expected changes in the average price level are small enough and gradual enough that they do not materially enter business and household financial decisions. Price stability contributes to economic efficiency in part by reducing the uncertainties that tend to inhibit investment. Also, it directs resources to productive economic activity that otherwise would tend to be diverted to mitigating the financial effects of inflation.

Price stability—indeed, even preventing inflation from accelerating—requires that aggregate demand be in line with potential aggregate supply. In the long run, that balance depends crucially on monetary policy. Inflation cannot persist without a supporting expansion in money and credit; conversely, price stability requires moderate growth in money—at rates below those prevailing in recent years.

In the short run, demands can fall short of, or run ahead of, available resources, with implications for wage and price pressures and the appropriate stance of monetary policy. By altering reserve conditions and the money supply, and thus interest and exchange rates and wealth positions, monetary policy can assist in bringing about a better match between demand and potential supply and thereby contribute to aggregate price stability.

When the economy is operating below capacity, bringing demand in line with supply can involve real GNP growth that is faster for a time than its long-run potential. For example, in the mid-1980s, the U.S. economy was recovering from a deep recession; with utilization of labor and capital not nearly complete, we were able to bring these resources back into the production process at a pace that substantially exceeded their underlying growth rates. In those circumstances, it is not surprising that growth of real GNP was relatively rapid while inflation performance was reasonably good.

But when the economy is operating essentially at capacity, monetary policy cannot force demand to expand more rapidly than potential supply without adverse consequences. Such an attempt will result in accelerating prices and wages, as producers bid for scarcer, and at the margin less productive, labor and capital. Over time it would result in little if any additional output.

As a result of robust expansion in the last few years, the U.S. economy has absorbed much of its unused labor and capital resources. No one can say precisely which level of resource utilization marks the dividing line between accelerating and decelerating prices. However, the evidence—in the form of direct measures of prices and wages—is clear that we are now in the vicinity of that line.

Thus, policies that foster more economic growth, if such growth is to be sustainable over the long run, should focus on aggregate supply. Aggregate supply depends on the size of the labor force and its productivity. Growth of the labor force basically is a function of increases in population and of individuals' decisions with regard to participation in the labor force. Labor productivity depends partly on the quantity and quality of capital and the overall efficiency in combining labor and capital in the production process. Given projections of likely expansion in the labor force and capital accumulation, most estimates of growth in long-run potential real GNP fall in a range below the average growth rates of real nonfarm GNP experienced over the last couple of years.

Faster growth in real GNP would be possible for a time if we could use more of our labor and plant capacity without putting pressure on wages and prices. Monetary policy is not a useful tool to accomplish this. But microeconomic policies may well be, such as policies designed to improve the match between labor demands and supplies. Conversely, we must be careful to avoid approaches to our national needs that would add unduly to business costs or increase rigidities in labor and product markets. Perhaps most important over the long run, as the composition of production in the U.S. economy continues to evolve, we must intensify our efforts to educate our labor force to be productive in the increasingly high-technology world marketplace.

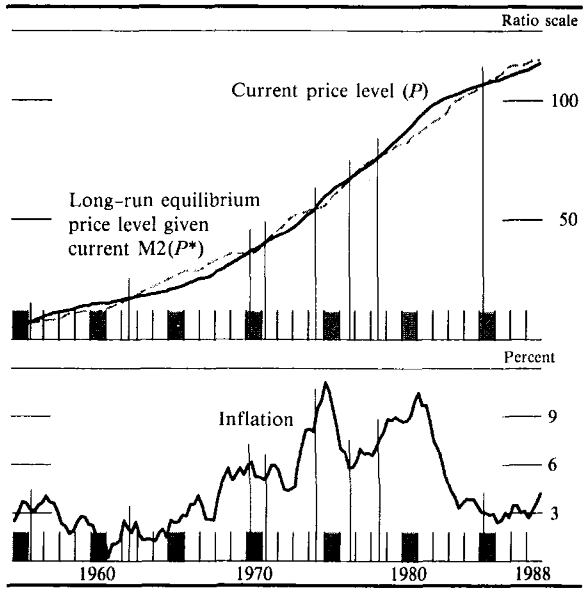
In addition, the United States could improve its longer-run growth prospects by stepping up the pace of capital accumulation. Government policies can contribute to a higher rate of investment. Tax policies can help by ensuring that returns from capital are not taxed excessively or unpredictably. And fiscal policy can help boost the national saving rate.

Ideally, increased national saving would involve some improvement in the *private* saving rate. Household saving is abysmally low in the United States, and business saving has not risen enough to offset that. However, it is not clear that past government policies have been very effective in boosting private saving. Probably the most direct and sure way of increasing saving is by a reduction in government dissaving. The Congress should follow the Gramm–Rudman–Hollings timetable and then seek a budgetary surplus by the mid-1990s.

An improving federal budget position should have a variety of favorable effects. It can pave the way for a reduction in our external imbalance by freeing resources currently absorbed by domestic demand. By putting downward pressure on real interest rates, it can encourage domestic business capital formation and make housing more affordable. It can encourage households and businesses to focus more on the long run in economic planning.

Monetary policy also has a role to play in encouraging capital formation and economic growth over time, by providing a stable price environment. Although the relationship between growth of money and the economy can vary from year to year, over the long haul there is a close relationship between money and prices. Recently, the Board's staff has done some interesting research on this subject. This work indicates that future changes in the rate of inflation have been fairly reliably linked to the difference between the prevailing price level and its equilibrium level. That equilibrium level is calculated at the current level of M2, assuming that real GNP is at its potential and velocity is at its long-run average. As you can see from the chart, inflation apparently tends to accelerate with a lag when actual prices are below the equilibrium value associated with current M2, and to decelerate when above it. This research suggests that despite relatively moderate expansion of M2 in recent years, the equilibrium value still is a little above the current price level, reinforcing the notion that the present risks are on the side of a pickup of inflation. This work also confirms that price stability ultimately will require somewhat slower M2 growth than we have experienced in recent years.

Inflation indicator based on M2



The current price level (P, the solid line in the top panel) is the implicit GNP deflator, which is set at 100 in 1982.

The long-run equilibrium price level given current M2 (P^*, the dashed line in the top panel), is calculated as $P^* = (\text{M2} \times V^*)/Q^*$, where V^* is an estimate of the long-run value of the GNP velocity of M2—the mean of V2 from 1955:1 to 1988:4—and Q^* is a Federal Reserve Board staff measure of potential real GNP.

The vertical lines mark the quarters when the difference between the current price level (P) and the long-run equilibrium price level (P^*) switches sign, and thus when inflation, with a lag, tends to begin accelerating or decelerating.

Inflation (bottom panel) is the percentage change in the implicit GNP deflator from four quarters earlier.

For more details, see Jeffrey Hallman, Richard D. Porter, and David H. Small, *M2 Per Unit of Potential GNP as an Anchor for the Price Level*, Staff Studies 157 (Board of Governors of the Federal Reserve System, April 1989).

Financial Developments and Monetary Policy

The Federal Reserve recognizes that monetary policy over the coming year will be carried out against the backdrop of a financial system facing certain difficulties. The thrift and Federal Savings and Loan Insurance Corporation situation is perhaps most pressing. The administration has proposed an extensive, workable plan for closing insolvent institutions, improving the regulation and supervision of savings and loan associations, and strengthening the deposit insurance funds. I will be presenting more detailed testimony on this topic before this committee. For now, let me simply encourage you and your colleagues to take the necessary legislative steps to resolve this situation promptly. There appears to have been little, if any, effect of the savings and loan problem on mortgage availability and housing—thanks in part to financial innovation in the form of the mortgage-backed securities market. However, without quick and effective action the situation could deteriorate.

Developments in the corporate sector warrant close scrutiny as well. The stock market has been recovering over the past 15 months, with few signs as yet of speculative excesses. However, as you know, corporate equity continues to be retired at a startling rate in conjunction with leveraged buyouts and other mergers and restructurings and has involved issuance of a correspondingly large amount of debt. As I have noted in recent congressional testimony, this phenomenon is complex, having both positive and negative dimensions. These restructurings often have added economic value through improved efficiency—an important consideration given the increasingly competitive nature of world markets. But the higher leverage leaves these firms, and potentially their creditors, more vulnerable to financial difficulties in event of a downturn. The Federal Reserve and other federal regulators are instructing bank examiners to review especially carefully loans to highly leveraged firms to maintain a safe and sound banking system.

The international economy also will command the continuing attention of policymakers around the world. Among the industrial countries, greater concern about rising inflation followed the substantial economic growth recorded last year. Meanwhile, the process of adjustment of international imbalances appeared to have slowed somewhat in the second half of last year, and many developing countries continued to face serious problems of achieving sustained economic growth, fostering development, and servicing large external debts.

Some have argued that these financial stresses, taken together, could hamstring the Federal Reserve's anti-inflationary policy. Certainly we have to take account of the effects of our actions on all sectors of the domestic and international economy and on financial markets; at the same time we recognize that monetary policy is not the instrument to deal with structural financial stresses and imbalances here and abroad—and that attempts to do so may even worsen these problems. Backing away from policy adjustments needed to contain inflation will not solve the thrift problem, make the debt burden of heavily leveraged firms lighter, speed the process of international adjustment, or contribute to a fundamental solution of the economic problems of the developing countries. In fact, the thrift industry's problems, as well as the external debt problems of the developing countries, were exacerbated by the inflation of the 1970s. Attempting to lower interest rates in the short run through more rapid money growth against countervailing market pressures would quickly raise inflationary expectations, leading soon to higher, not lower, interest rates. Instead, the structural financial problems require the prompt application of microeconomically oriented solutions within the supervisory, regulatory, and legal framework. Imbalances in the world economy require the continued, patient application of responsible macroeconomic policies in the United States and in other industrial countries, as well as further progress in economic reforms by the developing countries.

Conclusion

For its part, the Federal Reserve will continue to seek monetary conditions that will reduce inflation. Our major trading partners are following consistent policies in their own economies. Together, these policies should bring about a more stable financial environment and promote long-run worldwide economic growth. Relatively stable long-term nominal interest rates and flattening yield curves around the industrial world are strong evidence that savers and investors are in accord with this view. Monetary policy, at least for the moment, appears on track in the United States. The task is to keep it on track while making necessary adjustments to fiscal policy and reforms to the regulation of financial institutions. In this way we can ensure vigorous and balanced economic conditions over the long run. □

Chairman Greenspan presented identical testimony before the House Committee on Banking, Finance and Urban Affairs, February 22, 1989.

Statement by Alan Greenspan, Chairman, Board of Governors of the Federal Reserve System, before the Committee on Banking, Housing, and Urban Affairs, U.S. Senate, February 23, 1989.

I am pleased to appear today before this committee to outline the views of the Board of Governors of the Federal Reserve System on the legislation proposed by President Bush for the reform and recovery of the thrift industry. The Board supports this comprehensive package of proposals to strengthen the thrift industry, and depository institutions generally, as well as to prevent the serious problems of the thrift industry from recurring.

The proposals in the bill include the following: (1) greatly enhanced supervisory, regulatory, and enforcement authority; (2) a new framework for resolving insolvent thrift institutions; (3) a separate insurance fund for thrift institutions under the administration of the Federal Deposit Insurance Corporation (FDIC), and (4) a strengthening of this new thrift fund, as well as the FDIC fund, through higher premiums.

Besides this legislative program, a number of administrative measures have been taken, or are planned. As a first step to limit losses in insolvent institutions, more than 200 of them will be brought under federal control in the next few weeks. As part of this effort, we are contributing 150 Federal Reserve examiners to the overall task force.

Moreover, to help attract responsible buyers for troubled thrift institutions, and as a result of the important changes in the environment for interstate banking, the Federal Reserve Board intends to reconsider the tandem operations restrictions on applications brought to the Board for acquisitions of failed or failing savings and loan associations. In addition, we have made arrangements with the Federal Home Loan Banks and the Federal Savings and Loan Insurance Corporation (FSLIC) to support these basic sources of liquidity for the thrift industry.

I would like to focus my remarks today on the two major elements of the President's program: (1) the restructuring and reform proposals, and (2) the procedures for dealing with failed savings and loan corporations as well as the funding required to cover losses incurred by these institutions. Before turning to this task, I believe it would be useful to recall why we are facing a thrift problem and to draw some lessons from its causes.

Today's thrift industry losses grew partly out of the vulnerability of a fixed rate, long-term, lender with relatively short-term liabilities, to changes in interest rates. As inflation, and interest rates, rose in the late 1970s and early 1980s and as deposit rate ceilings were phased out, the resulting mismatch on the rising cost of deposit liabilities and the fixed return on mortgage assets produced substantial losses and a serious erosion of industry capital. Into this situation other elements were added. Expanded powers were mixed with inexperienced or dishonest management, brokered deposits that fed unchecked growth, lax accounting standards, and seriously inadequate supervision, all within the context of adverse economic conditions. It is sobering how these factors led so quickly to insolvencies. In a short period, the serious, but manageable, maturity-mismatch problem became the disastrous asset-quality problem that we face today.

In evaluating this situation, I would not limit my emphasis, as some have done, to focusing only on the decline in regional economies and, in particular, on the drop in oil prices. The regional economic problems were real, but in assessing responsibility it is important to recognize that the oversupply in the real estate market in certain areas was at least partially a result of the lending by the savings and loan associations themselves. During the period 1982 to 1985, in the face of declining oil prices, commercial real estate loans of savings and loan associations increased more than $57 billion (129 percent). In many cases these loans were made with an eye principally focused on front-end fees, and without any reasonable assurance of repayment.

A comparison with the banking industry is instructive. While the banks do not have real estate equity investment powers, nonrecourse lending by banks for commercial real estate development projects with thin borrower equity positions often puts the bank lenders in a position in which they are very close to equity investors. Taking this into account, it is all the more surprising that the estimated cost of resolving the thrift problems in Texas will run about $40 billion. In that state, where the economic environment for banks and thrift institutions is identical, the costs for resolving the problems of the banking industry, with assets that are much larger than those of the thrift institutions, should amount to considerably less than $10 billion. Clearly, the large absolute difference in costs, and the even larger difference in costs relative to assets, is evidence that the thrift industry experienced a systems failure, that is, a major lapse in public and private prudential standards.

To deal with these problems, the new program focuses on the supervisory and regulatory reforms designed to ensure that the mistakes that have so adversely affected the thrift industry, its deposit insurance fund, and the taxpayers will not be repeated. A number of important steps have been proposed.

A new insurance fund for thrift institutions will be established to be administered by the FDIC, separately from the insurance fund for banks, but with special powers for the FDIC to approve applications by thrift institutions for insurance, to make examinations, to initiate enforcement actions, to terminate insurance on an expedited basis, and to prohibit thrift institutions from exercising powers that could cause undue risk to the FSLIC insurance fund.

Moreover, the proposal puts a new emphasis on adequate capital for the thrift industry as a cushion against losses and as a restraint on excessive risktaking. Accordingly, thrift institutions will be required to meet bank capital standards by June 1991, with the exception that they will be given 10 years to write off goodwill. For those institutions that do not meet this standard, growth can be restricted before the 1991 deadline and must be prohibited after this time.

Our estimates indicate that more than a majority of the thrift institutions with positive tangible capital under generally accepted accounting principles (GAAP) standards could meet the existing bank primary capital requirements; on a risk-adjusted basis, we estimate that nearly two-thirds would meet bank standards due largely to the favorable risk-weight given to 1- to 4- family residential mortgages under the risk-based measure of capital.

If goodwill were to be immediately excluded from capital, the institutions falling below the standard would have to raise about $15 billion to $20 billion in capital to meet bank minimums. However, the proposed legislation, as noted, gives thrift institutions a 10-year period to write off the goodwill; thus, this major capital-raising effort can be spread over several years.

It should be emphasized that if losses continue or accelerate due to further credit deterioration or interest rate exposure, the industry's need for capital could be substantial. Those institutions that cannot meet bank capital standards as set forth in the proposed legislation would necessarily have their growth restricted or may be required to shrink their assets.

The administration's program also takes major steps toward restructuring the thrift supervisory and regulatory framework. Besides separating the insurance and regulatory functions, the proposal would create a new federal thrift regulator. The new regulator—the Chairman of the Federal Home Loan Bank System (FHLBS), who would be under the Secretary of the Treasury in the same relationship as the Comptroller of the Currency—should be more independent from the industry. Importantly, the FHLBS would be required to apply bank supervisory and accounting standards to the savings and loan associations.

Moreover, the boards of directors of the Federal Home Loan Banks will be reconstituted along the lines of Federal Reserve Bank boards. This should make them more responsive to the broader public interest. In contrast to present arrangements, most of the membership of the boards will be drawn from outside the industry, including the chairman and vice chairman of the boards, who will be chosen by the new chief of the Federal Home Loan Bank System. Finally, the Chairman of the FHLBS, as the new regulator and supervisor, would carry a mandate emphasizing safety and soundness, and would appoint the head supervisory agent at the Home Loan Banks who would be directly responsible to the FHLBS in Washington. These are both necessary and important reforms.

Another step recommended by the President, to which we attach great importance, is the requirement that savings and loan associations that do not meet the qualified thrift lender (QTL) test (60 percent of assets in residential-related lending) in the Competitive Equality Banking Act of 1987 must, after an appropriate transition period, become banks and be subject to the entire regulatory and supervisory regime applicable to banks and their holding companies. We believe it is fully appropriate to confine the benefits of thrift status, involving both access to subsidized long-term borrowing from Federal Home Loan Banks and tax benefits, to only those institutions that devote a major part of their assets to promoting homeownership.

Another important part of the reform package is the increase in insurance premiums for both thrift institutions and banks, as well as the authority for the FDIC to raise premiums for both types of institutions in the light of experience. For thrift institutions, for which the fund is now insolvent and in need of rebuilding, premiums under the proposal will rise in 1990 from their present level of 20.8 basis points to 23 basis points in 1991, remain at that level for three years, and then fall to 18 basis points in 1994. For banks the current premium of 8 basis points would increase 4 basis points in 1990, and another 3 points in 1991; and then would be held at that level. However, when the insurance funds reach the target for reserves of 1.25 percent of insured deposits, rebates would again be possible.

The level of FDIC insurance reserves as a percentage of insured deposits has dropped in recent years to the present ratio of 0.83 percent, and it is important that this trend be reversed. The proposed premium increase for banks thus stands on its own merits, quite apart from anything that might be done about thrift institutions, as a necessary step to maintain the integrity of the FDIC fund against future contingencies.

Another element of the President's program is a funding package designed to provide sufficient financial resources to resolve current and prospective insolvencies among FSLIC-insured institutions. This function would be assigned to a newly created Resolution Trust Corporation (RTC), which would be managed by the FDIC and operate under the direction of the Oversight Board composed of the Secretary of the Treasury, the Chairman of the Federal Reserve Board, and the Attorney General. To accomplish its task, the RTC would be provided with $50 billion of funding—the proceeds of bonds issued by an RTC Funding Corporation. These funds would be used to resolve insolvent thrift institutions that have not received assistance from FSLIC or that will become insolvent over the next three years. Principal would be repaid with the proceeds of zero coupon bonds purchased from thrift industry resources, and the interest on the bonds would be paid with thrift industry and, if necessary, Treasury funds.

The most recent data available (for September 30, 1988) indicate that about 470 thrift institutions, with assets of about $250 billion, are tangible capital insolvent. It seems prudent to assume that all of these institutions will require RTC assistance. We cannot know exactly what the resolution costs will be for these institutions, but based on FSLIC's estimates of the costs of its 1988 resolutions we estimate that it will cost around $40 billion to take care of these 470 institutions. Of course, many other FSLIC-insured institutions are at present thinly capitalized, and some of these could well become insolvent during the three-year period for which RTC would be responsible for new insolvencies.

We have looked at the cost of resolving new and existing insolvencies under different scenarios, and under some, unlikely, circumstances the resolution costs could exceed $50 billion. However, in our judgment, all things considered, the $50 billion should be adequate. There is, of course, much that is unknown, and that is now unknowable, that will affect this judgment. Marginal adjustments may be necessary as experience is gained to take account of, for example, additional costs or recoveries. The critical point is that the fundamental approach is sound and has the necessary flexibility to adapt to changes in circumstances.

Key to the RTC's ability to minimize costs is flexibility to pursue various resolution options. Such flexibility would permit the separate marketing of franchises and troubled real estate portfolios, which might broaden the market and thereby increase the values of both. In particular, in cases in which no franchise value remains in an organization, the least-cost option would likely be liquidation rather than purchase and assumption. To reduce overall costs, the RTC must have the resources necessary to pursue this course.

When so much money is needed to make up for such large losses, partly from mismanagement, and in no small part due to fraud, is it reasonable to ask the taxpayers to pay any part of these costs?

It is. The basis for my answer goes far beyond the congressional pledge of the full faith and credit of the United States behind insured deposits. The reason for public expenditure to support deposit insurance is the basic benefits to the economy as a whole that we derive from deposit insurance. The certainty and stability provided by deposit insurance benefit the nation as a whole, while they protect the individual from catastrophic loss. By giving the public confidence in the safety of its funds we avoid the deposit withdrawal and losses that disrupted the payments system and the savings and investment process in the 1930s. Losses of the kind that we face today should not happen, but with the gains to society as a whole that come with deposit insurance we must accept both the possibility and the reality that there will be losses to be borne by society as a whole.

Our job now is *not* to see to it that there are never any losses as a result of deposit insurance; to do so would require limitations and rules that would put depository institutions lenders, and the economy they serve, in a straitjacket. Such a course would be costly to growth and efficiency. Our task is to see to it that the potential for losses is minimized to the extent possible and that steps are taken to ensure that the preventable governmental, regulatory, supervisory, and human failures that were the cause of the thrift industry losses do not happen again.

The Board attaches considerable importance to the provision of the proposed legislation that calls for the Secretary of the Treasury, in conjunction with the federal financial regulators, to undertake a study of the nation's deposit insurance system. There are major areas of concern about the system, focusing on its apparent bias toward excessive risktaking, its tendency in the direction of differential treatment of small and large institutions, and the unintended expansion of insurance coverage through such techniques as brokering deposits that have been disaggregated into $100,000 segments.

A review, at both a conceptual and practical level, is needed of the consistency of an insurance system that evolved out of the Great Depression, on the one hand, with today's deposit-gathering industry of both small banks and giant modern financial services organizations that operate across markets and national boundaries, on the other. It will be no easy task. It must be done carefully and the recommendations implemented gradually to ensure a smooth transition to modified insurance arrangements.

Without in any way meaning to prejudge the conclusions of the study, I would like to discuss several matters that should receive attention.

First, I would note that all analyses of which I am aware have suggested that depositors are not effective at restraining imprudence or risktaking at banks and thrift institutions. They cannot be expected to have sufficient information and tend, in any event, to be either unresponsive or to run when faced with bad news. If the study confirms that view, the policy options that then must be seriously considered surely will include other ways to limit risktaking, such as enhanced supervision, different insurance assessment techniques, or use of subordinated capital that would not be protected in case of failure. The large cost to the public of the legislation before you suggests that we must consider the potential benefits of requiring prompt recapitalization, merger, or closure of troubled insured entities whose capital is declining, but still positive.

Second, attention should be given to determining whether specialized fixed-rate residential lending institutions are needed today. This question is raised because of the costs and competitive distortions involved in subsidized borrowing from Home Loan Banks, the dangers inherent in special regulatory and supervisory regimes for subsidized depository institutions, and the continued vulnerability of a large element of the thrift industry to increased interest rates.

This question should also be considered because of the important changes in the mortgage market. In the past, home mortgages were a uniquely local product, almost always held to maturity by the original lender. Now, computers, modern telecommunications, and financial engineering have vastly changed this market. In today's market, mortgages frequently are originated by a wide variety of intermediaries, bundled into securitized products, and sold to institutional investors in all parts of the country—more than one-third of outstanding home mortgages are held in securitized form. This new environment may make it unnecessary to provide special government-subsidized facilities for mortgage lending and may make it possible to eventually bring all depository institutions under one regulatory and supervisory system. This issue should be given priority attention as part of the study of deposit insurance reform.

Third, in considering the reforms that should be developed, considerable attention has been focused on the expanded investment and lending powers that have been granted to state-chartered thrift institutions. The study must examine the safeguards that should be developed for the future. These safeguards should not require rigid prohibitions on types of activities that may be engaged in by depository institutions. Rather, as a first step, consideration should be given to requiring that nonbanking activities of banks and thrift institutions take place in subsidiaries of holding companies to ensure that these activities are not subsidized by the federal safety net and that this safety net will not be responsible for covering any losses that may arise from these nonbanking activities. We have such a proposal under review at the Board. In addition, consideration should be given to amending and expanding existing law to limit risky nonbanking activities in banks and thrift institutions.

I would like to close my testimony by stressing that it is vitally important for the Congress to move very promptly to consider and enact the President's proposals. We must make available the resources the regulators need to close insolvent thrift institutions. We must stop the continuing daily losses due to operating expenses that greatly exceed income as well as to the higher-than-normal rates that they must offer to attract deposits. In operating in this way, they not only hurt themselves and the insurance funds, but, as they drive up rates, they also injure their competitors and the economy as a whole. Prompt action is essential to maintaining public confidence in thrift institutions and their insurance fund. □

Statement by Alan Greenspan, Chairman, Board of Governors of the Federal Reserve System, before the Committee on the Budget, U.S. Senate, February 28, 1989.

It is a pleasure to appear before you this morning to discuss economic policy in the context of the broad objectives that are relevant to us in our respective spheres of policymaking. I have provided our recent Monetary Policy Report, and I shall avoid consuming a lot of your time discussing the details presented in that document.[1] I believe that it would be useful, however, if I were to review briefly where the economy has been over the past year and where it appears to us to be going. This may help to bring into focus the challenges that face monetary and fiscal policymakers. Principal among those challenges, in the view of the Federal Reserve, is setting the stage for sustainable, balanced growth, in part by preventing a corrosive inflationary psychology from taking hold. Fiscal, as well as monetary, policy has a role to play in achieving that objective and proceeding expeditiously is much more likely to get the job done.

Overall, the past year has been a good one for the economy. In 1988, real GNP grew about 3¼ percent, adjusted for crop losses caused by the

1. See "Monetary Policy Report to the Congress," FEDERAL RESERVE BULLETIN, vol. 75 (March 1989), pp. 107–19.

drought, and payroll employment rose more than 3½ million. Prospects had been uncertain as the year began, given the worldwide stock market break in October 1987, but gradually, it became clear that the economic expansion remained well on track and that market confidence was on the mend. Demand for goods and services was robust, and sizable gains in employment and output pushed levels of resource utilization still higher. The unemployment rate fell to, and then below, 5½ percent, the lowest level since the mid-1970s, and the average manufacturing capacity utilization rate rose to the highest level since the late 1970s. As these developments unfolded, it became clear that the balance of risks was shifting in the direction of higher inflation. Consequently, the Federal Open Market Committee has applied increased pressures on bank reserve positions, in a series of steps beginning in the spring of 1988 and extending into this year. In addition, the discount rate was raised from 6 percent to 6½ percent in August, and again last week to 7 percent.

The policy restraint has led to an appreciable rise in short-term market interest rates. Also, growth of money has moderated, as rates on deposits lagged the rise in market rates. M2 and M3 finished the past year around the middle of their annual target ranges of 4 percent to 8 percent, and they have grown relatively slowly in recent months.

Despite tightening money markets, longer-term interest rates have been relatively stable. Yields on Treasury bonds, for example, remained in a fairly narrow range around 9 percent for most of last year and, although rising most recently, are still not much above 9 percent. With inflation expectations apparently fairly stable and the expansion sustained, investments in the United States have looked attractive; the dollar's average value against major foreign currencies recovered from the late-1987 plunge and has been relatively stable for many months.

Some of the developments of the past year suggest, however, that we still have work to do if we are to succeed in our task of achieving the goals of balanced expansion and the reduced inflation needed to sustain it. In the area of your direct interest, the federal budget, the deficit remains large. Meanwhile, private saving remains low. The continued imbalance of domestic saving and investment is mirrored in the persistent large trade and current account deficits.

In addition, although overall inflation last year—in the area of 4 percent to 4½ percent—was only a little above the general range in which it had fluctuated in the mid-1980s, underlying trends were troubling. At the consumer level, the drought boosted food price inflation in 1988, but this was more than offset in the aggregate figures by a leveling-off of energy prices. Now energy prices are turning up. More fundamentally, prices of consumer goods and services other than food and energy accelerated last year and this faster pace extended into January.

Furthermore, some signs have emerged of greater pressures in production costs. Wage increases accelerated toward the end of last year. Moreover, benefits took an unusually large jump in 1988, boosted in part by a sharp rise in health insurance costs and a hike in social security taxes—both of which add to business costs as directly as do wages. Overall, the employment cost index, a comprehensive measure of hourly wage and benefit rates, rose 5 percent in 1988, up significantly from 1987. Materials inputs also were adding to costs; the producer price index for intermediate materials and supplies excluding food and energy has been rising at an annual pace of about 7 percent for some time. The large increases in the producer finished goods and consumer price indexes in January could be early warnings that the cost–price process is gathering force.

At the same time, the economy generally remains vigorous. The available data for January suggest that we moved into 1989 with considerable upward momentum. Moreover, widespread inventory overhangs or constricted profit margins, which typically have signaled the last phases of expansions, are not apparent. With the economy already operating at high levels of labor and plant utilization, and given the disturbing signs of strengthening price and cost pressures, the momentum of expansion implies risks that clearly remain on the side of accelerating inflation. It is just such an acceleration that could feed the kind of imbalances that ultimately bring expansions to an end. The Federal Reserve's earlier money market tightening and the discount rate action last week were taken to forestall such imbalances to keep the economy on a more sustainable path toward price stability.

The same determination to resist any pickup in inflation and especially to move over time toward price stability shaped the Committee's recent decisions with respect to target or monitoring ranges for money and credit in 1989. To this end, the Committee lowered the range for M2 by a full percentage point to 3 percent to 7 percent and reduced the range for M3 ½ percentage point to 3½ percent to 7½ percent. The Committee also lowered the monitoring range for domestic nonfinancial sector debt ½ percentage point to 6½ percent to 10½ percent.

The Federal Reserve expects its policy in 1989 to support continued economic expansion, even while putting in place conditions for a gradual easing in the rate of inflation over time. However, in light of present conditions, the central tendency of forecasts made by members of the Federal Reserve Board and presidents of Federal Reserve Banks is for inflation to rise slightly in 1989, with the consumer price index edging up to the range of 4½ percent to 5 percent.

With restraint on inflation requiring that we limit pressures on our productive resources, some slowing in the underlying rate of growth of real GNP is expected in 1989. The central tendency of GNP forecasts of Board members and Reserve Bank presidents for this year is 2½ percent to 3 percent from the fourth quarter of 1988 to the fourth quarter of 1989; abstracting from the expected rebound from last year's drought losses, real GNP is projected to grow at closer to a 2 percent rate. Net exports are likely to continue to improve as we make further progress in reducing our external imbalances, but this implies the need for counterbalancing restraint on domestic demand. With demands for labor growing more in line with expansion of the labor force, the unemployment rate is expected to remain near its recent level during the course of the year.

Looking beyond a one-year horizon, the primary role of monetary policy in the pursuit of the goal of maximum sustainable growth is to foster price stability. By this we mean establishing an environment in which expected changes in the average price level are small enough and gradual enough that they do not materially enter business and household financial decisions. Price stability—indeed, even preventing inflation from accelerating—requires that aggregate demand be in line with potential aggregate supply. Inflation in the longer term is essentially a monetary phenomenon. But large budget deficits contribute to the problem; they tend to put inordinate strains on financial markets and they directly fuel excess demand on resources. Thus, in the present circumstances, fiscal policy can help to smooth our progress over the next few years toward better price performance. Prompt and sustained action is becoming increasingly urgent.

The situation today differs markedly from that of the mid-1980s, when the U.S. economy was recovering from a deep recession. Then, with utilization of labor and capital still quite low, we were able to bring these resources back into the production process at a pace that substantially exceeded their underlying growth rates. And in those circumstances, the growth of real GNP could be relatively rapid while the inflation performance was reasonably good.

But as a result of the robust expansion, the U.S. economy has absorbed much of its unused labor and capital resources. No one can say precisely which level of resource utilization marks the dividing line between accelerating and decelerating prices. However, the evidence—in the form of direct measures of prices and wages—clearly suggests that we are now in the vicinity of that line.

Thus, the thrust of both monetary and fiscal policies in the short run appropriately is more toward restraint than stimulus. The extent and duration of the financial market pressures that are likely, until overall demand moderation is achieved, will depend on the size and credibility of deficit-reducing measures. In this context, credibility will be much enhanced by a multiyear approach to budget action.

I am mindful that, owing to significant efforts by the executive branch and the Congress, coupled with strong economic growth, the deficit has shrunk from 5 percent to 6 percent of GNP a few years earlier to a bit over 3 percent today. And abstracting from the effects of economic expansion, the cyclically adjusted, or structural, deficit as a share of potential GNP has fallen 1¼ percentage points from its 1986 peak. Nonetheless, at about 3 percent, this share is still very large. Since the end of World War II, the structural deficit has exceeded 3 percent of potential GNP only since 1983.

I am also mindful that the progress that has been made in narrowing the structural deficit in the past two years is even greater when we look only at the so-called primary portion of the deficit, that is when interest costs are removed. Interest outlays, of course, are now very large and their *level* will remain high as long as our stock of Treasury debt remains large. Nevertheless, *growth* in the interest component of the budget is volatile. It is spurred by large deficits, but it also picks up when interest rates are rising and then subsides when interest rates come down. For example, annual growth in interest costs averaged about $13 billion from 1980 to 1985, but since then has slowed to an average of about $7 billion per year.

The most effective way to keep interest costs down is to forestall another virulent burst of inflation expectations such as we experienced a decade ago. Simple arithmetic tells us that an increase of 1 percentage point in actual inflation raises the cost of indexed programs 1 percent. But if the faster rate of inflation were to become embedded in expectations throughout the financial structure, interest rates, and ultimately federal debt service costs, would rise more than 10 percent from their current levels. We are fortunate that inflation expectations so far seem not to have worsened, and long-term interest rates have risen little in the past year despite a tightening in money markets. Both fiscal and monetary policies have a role to play in maintaining this situation.

For the longer term, fiscal policy also has a special contribution to make in promoting growth in our production or supply capabilities. Reducing the deficit is the surest way to raise national saving, thereby lowering the average level of real interest rates, boosting domestic investment, and reducing our reliance on foreign capital. The federal deficits of recent years are threatening precisely because they have been occurring in the context of private saving that is low by both historical and international standards. In the 1980s, net personal plus business saving in the United States has been about 2 percentage points lower relative to GNP than its average in the preceding three decades. Internationally, government deficits have been quite common among the major industrial countries in the 1980s, but private saving rates in most of these countries have exceeded the deficits by very comfortable margins. In Japan, for example, about 15 percent of its private saving is estimated to have been absorbed by government deficits, even though the Japanese general government has been borrowing more than 2½ percent of its gross domestic product in the 1980s. In contrast, about half of private U.S. saving in the 1980s has been absorbed by the combined deficits of the federal and state and local sectors.

Under these circumstances, such large and persistent deficits are slowly but inexorably damaging the economy. The damage occurs because deficits, which must be financed regardless of the level of interest rates, tend to pull resources away from interest-elastic private investment. When the pool of private saving is small, federal deficits and private investment tend to be forced into competition and private investment loses. To the extent that more resources are demanded than are available to be financed, interest rates will rise until sufficient excess demand is crowded out of the private sector.

In the short run, the Federal Reserve can hold down nominal interest rates, but the result largely would be more inflation, with little or no lasting effect on real interest rates and the allocation of real resources. All else equal, any crowding out of productive investment damps the growth of the nation's capital stock, and the result is less capital per worker than would otherwise have been the case. This will surely engender a shortfall in labor productivity growth and, with it, a shortfall in growth of the standard of living.

Moreover, the higher real interest rates associated with increased borrowing by the Treasury in the 1980s have been associated with a shift in the composition of investment away from long-lived assets, such as factories, and toward computers and other shorter-lived equipment. Evidence points to a recent decline in the average service life of measured consumption spending as well, and suggests a systematic tendency for the average service life of all spending to move inversely with real rates of interest. That is, the higher are real interest rates, the heavier is the concentration on spending that satisfies immediate desires or yields its returns quickly.

Not surprisingly, we have already experienced a disturbing decline in the level of *net* investment relative to GNP, as depreciation has speeded up, reflecting shorter investment horizons. Net investment has fallen to 4.7 percent of GNP in the 1980s from an average level of 6.7 percent in the 1970s and even higher in the 1960s. The effects of this decline in the net investment share has been offset, to some extent, by increased productivity of certain short-lived capital such as computers, but nonetheless, slower investment has been associated with weak productivity performance.

The U.S. net investment ratio is low, not only by our own historical standards, but by international standards as well. International comparisons of net investment should be viewed with some caution because of differences in the measurement of depreciation and in other technical details. Nevertheless, the existing data indicate that total net private and public investment as a share of gross domestic product over the period between 1980 and 1986 was lower in the United States than in any of the other major industrial countries except the United Kingdom.

Even this U.S. investment performance may not be sustainable. The negative effects of federal deficits on growth in the capital stock in the 1980s may have been attenuated for a while by the strength of aggregate output growth over much of the past six years. Such rates of output growth undoubtedly boosted sales and profit expectations and, hence, business investment, but they cannot be maintained.

Furthermore, net inflows of foreign saving in recent years have been an important addition to aggregate saving. In the 1980s, our ability to tap foreign saving has moderated the decline in the investment–GNP ratio. While the federal deficit rose about 2½ percentage points relative to GNP between the 1970s and the 1980s, net inflows of foreign saving have mounted, on average, to almost 2 percent of GNP—an unprecedented level—from close to zero before.

We welcome the discipline and efficiency gains of an open economy, but the continuation of inflows of foreign saving at current levels may be neither desirable nor possible. Evidence for the United States and for other major industrial nations over the past 100 years indicates that, for most countries, such sizable foreign net capital inflows have not persisted; hence, they may not be a reliable substitute for domestic saving on a long-term basis. In other words, domestic investment tends to be supported by domestic saving alone in the long run.

Let me conclude by reiterating that the budget deficit must be brought down. While it is beguiling to contemplate the healthy growth of recent years in the context of large budget deficits, it is fanciful to conclude that these deficits have no adverse consequences. The prospect of a continuing imbalance between domestic saving and investment—with the accompanying constraints on growth and modernization of capital and the substantial reliance on foreign saving—poses risks for the future. Forward looking investors may react to those risks today in financial markets. I do not underestimate the difficult decisions that you must make if we are to achieve the necessary reduction in the deficit. But allowing deficits to persist courts instability in the near term and threatens potentially significant reductions over time in the U.S. standard of living.

Chairman Greenspan presented identical testimony before the House Committee on the Budget, March 2, 1989.

Announcements

CHANGE IN THE DISCOUNT RATE

In the light of inflationary pressures in the economy, the Federal Reserve Board announced on February 24, 1989, an increase in the discount rate from 6½ percent to 7 percent, effective immediately.

In taking the action, the Board voted on requests submitted by the Boards of Directors of the Federal Reserve Banks of Boston, New York, Philadelphia, Richmond, Atlanta, Chicago, St. Louis, Minneapolis, Kansas City, and San Francisco. The Board subsequently approved similar requests by the Federal Reserve Bank of Cleveland, also effective February 24; and by the Federal Reserve Bank of Dallas, effective February 27. The discount rate is the interest rate that is charged depository institutions when they borrow from their District Federal Reserve Banks.

EXPRESSION OF SUPPORT FOR REFORM AND RECOVERY PROGRAM

The Federal Reserve Board expressed its support for the reform and recovery program announced on February 6, 1989, by President Bush.

Federal Reserve Chairman Alan Greenspan said, "This comprehensive package of measures to strengthen the thrift industry, and depository institutions generally, should assure that the problems that occurred in the savings and loans will not happen again."

Chairman Greenspan urged prompt congressional consideration of the President's program.

AMENDMENT TO REGULATION H

The Federal Reserve Board approved on February 3, 1989, an amendment to Regulation H (Membership of State Banking Institutions in the Federal Reserve System) to facilitate public access to financial information regarding state member banks and U.S. branches and agencies of foreign banks.

The amendment to Regulation H requires that banks make available to shareholders and the public, upon request, one free copy of the full year-end Reports of Condition and Income ("Call Reports") for the preceding two years or, as a substitute, other specified financial reports, which are routinely prepared by banks and that contain information equivalent to that presented in Call Reports.

The amendment requires state-licensed agencies of foreign banks and state-licensed branches of foreign banks that are not insured by the Federal Deposit Insurance Corporation to make available, upon request, one free copy of the three specified schedules from the two most recent year-end Reports of Assets and Liabilities of U.S. Branches and Agencies of Foreign Banks.

Covered institutions must provide the information as soon as is reasonably possible, but not later than April 1 of the year immediately following the end of the year to which the most recently available information pertains. Covered institutions must notify shareholders and the public of the availability of the information. The amendment takes effect April 1, 1989.

INTERPRETATION TO REGULATION H

The Federal Reserve Board announced on February 14, 1989, approval of an interpretation to its regulations authorizing state member banks to buy stock in some types of investment companies. The action provides state member banks with parallel authority to that of national banks.

Under the interpretation to Regulation H, a state member bank could buy stock in an investment company that invests solely in U.S. Treasury and agency obligations, state and municipal obligations, corporate debt instruments, or other securities that a member bank may purchase directly. The interpretation also includes a prior authorization to invest in the stock of money market mutual funds.

PROPOSED ACTION

The Federal Reserve Board announced for comment on February 24, 1989, a series of revised proposals regarding the finality accorded automated clearinghouse (ACH) credit and debit transactions processed by Federal Reserve Banks. Comment was requested by March 31, 1989.

CHANGES IN BOARD STAFF

The Federal Reserve Board announced on February 27, 1989, the appointment of J. Virgil Mattingly, Jr. as its General Counsel to succeed Michael Bradfield, who resigned, effective February 28. Mr. Mattingly had been Deputy General Counsel since 1985.

Alan Greenspan, Chairman, Board of Governors, noted that Mr. Bradfield played a vital role, as a legal and policy advisor, in helping the Board manage its way through a particularly difficult period. "Mr. Bradfield's performance over the turbulent years of the 1980s has been outstanding," Dr. Greenspan said.

The Board also announced on February 27, 1989, the appointment of Barry R. Snyder as Assistant Inspector General in the Office of Inspector General.

Mr. Snyder has been a senior auditor since 1987. He holds certificates in information systems auditing and internal auditing, a bachelors degree from West Virginia University, and a masters degree from the University of Maryland.

AVAILABILITY OF FEDERAL RESERVE STATISTICAL RELEASES THROUGH COMPUTERIZED BULLETIN BOARD

The Federal Reserve Board and the Department of Commerce announced on February 27, 1989, the availability of six of the Board's statistical releases through Commerce's economic bulletin board.

Commerce's computerized bulletin board, which can be accessed by the public on a fee basis, initially will provide four weekly and two monthly Board releases. Weekly releases now available are the following: H3 (Aggregate Reserves), H6 (Money Supply), H8 (Bank Credit), and H15 (Selected Interest Rates). Monthly releases now available are G12.3 (Industrial Production) and G3 (Capacity Utilization).

Later this year, two other releases will be available in this form: the monthly G19 (Consumer Installment Credit) and the weekly H4.1 (Factors Affecting Reserve Balances).

The annual subscription to access the Commerce Department's bulletin board is $25, which includes two hours of free access time with additional usage at $.10 a minute. The bulletin board also carries major economic releases from the Commerce Department and the Labor Department.

The historical data for the six releases now available may be ordered in machine-readable form through the National Technical Information Service (NTIS), an agency of the Department of Commerce. For a free Catalog of Data Files produced by the Board of Governors of the Federal Reserve System, write to the National Technical Information Service, 5285 Port Royal Road, Springfield, Virginia 22161 or telephone (202) 487-4808 requesting PR790.

For further information about these releases, contact either the Federal Reserve Board at (202) 452-3240 or the Commerce Department at (202) 377-1986.

CHANGE IN DATABASE USED FOR COMPILING THE STATISTICAL APPENDIX TO THE BULLETIN

Starting with the March 1989 issue of the BULLETIN, some of the series in the statistical appendix, "Financial and Business Statistics" beginning on page A1, have been converted to a new database that uses a different software package. The new software will facilitate more precise computation of weekly, monthly, quarterly, and yearly averages. Because of the changes in averaging techniques, some small discontinuities will occur between current data that are stored in the new system and previously published data that were produced by the old system. The following tables have been converted to the new system: 1.10, 1.17, 1.20, 1.22, 1.23, 1.24, 1.25, 1.26, 1.28, 1.30, 1.31, 1.32, 1.35, 1.37, 1.39, 1.40, 1.41, 1.42, 1.43, 1.45, 1.46, 1.47, 1.48, 1.50, 1.53, 1.54, 1.55, 1.56, 2.11, 2.15, 2.16, 2.17, 3.14, and 3.21. Over the next year, the rest of the tables in the statistical appendix will be converted, and announcements will be made from time to time of tables that have been added to the new system.

Record of Policy Actions of the Federal Open Market Committee

MEETING HELD ON DECEMBER 13–14, 1988

Domestic Policy Directive

Information on employment and production reviewed at this meeting suggested that, apart from the direct effects of the drought, economic activity had continued to expand at a vigorous pace although some measures of demand, available on a less current basis, still indicated more moderate growth. Recent price data showed a fairly stable inflation rate, partly because of the favorable effects of earlier oil price declines, while labor cost measures continued to indicate some acceleration from a year earlier.

Total nonfarm payroll employment rose sharply in October and November. Following declines in late summer, gains in manufacturing employment were large in both months, with particularly sizable increases recorded in the machinery, electrical equipment, and lumber industries. Employment in service industries picked up significantly in November from the reduced pace of expansion in previous months. The civilian unemployment rate edged up to 5.4 percent in November but remained in the lower part of the narrow range that had prevailed since early spring.

Industrial production advanced considerably further in October and November after a strong third quarter. Output of consumer goods continued to increase, on balance, at a fairly vigorous pace, and production of materials posted another solid gain in November. Output of business equipment also increased in November, but revised data indicated that such growth had moderated appreciably in recent months. Total industrial capacity utilization edged up further in November, and the operating rate in manufacturing reached its highest level since July 1979.

Growth of overall consumer spending had moderated somewhat in recent months. Spending for nondurables had been sluggish in September and October, while outlays for durable goods had declined, mainly because of reduced purchases of cars. On the other hand, preliminary data for total retail sales in November indicated a strong advance following a large, upward-revised increase in October.

Indicators of business capital spending suggested a substantially slower rate of expansion in October than earlier in the year. Shipments of nondefense capital goods were little changed, reflecting a fairly broad-based deceleration. Nonresidential construction edged down a little further, as petroleum drilling fell again and expenditures on commercial structures other than office buildings declined. Inventory investment in the manufacturing and wholesale sectors in the third quarter remained about in line with the growth of sales. In the retail sector, a buildup in inventories in the third quarter largely reflected additions to stocks by auto dealers; the expansion of nonauto stocks remained broadly in line with sales. Housing starts strengthened in October after changing little on balance over the previous several months.

Excluding food and energy, producer prices of finished goods were unchanged in October after a sizable increase in September. At the consumer level, retail food prices eased in October and energy prices were little changed, but prices of other goods and services increased faster on balance than in preceding months. On a year-over-year basis, consumer prices continued to rise at about the 4½ percent annual rate evident since late 1987. The limited data available for labor costs in the fourth quarter suggested that increases in these costs continued to exceed those of a year earlier.

Preliminary data for the nominal U.S. merchandise trade deficit in October showed a slightly smaller deficit than in September. The value of total imports fell, with declines recorded in capital goods, consumer goods, and oil. Exports also declined in October owing to lower agricultural sales abroad. Boosted by higher aircraft shipments, nonagricultural exports were unchanged from their September level. Economic activity accelerated or remained strong in most of the major foreign industrial countries in the third quarter but appeared to have slowed somewhat in the fourth quarter.

In the foreign exchange markets, the trade-weighted value of the dollar in terms of the other G-10 currencies had declined about 2½ percent on balance over the period since the Committee meeting on November 1, bringing it to a level 8 percent below its peak of last August. Following a brief respite in the week before the U.S. elections, the dollar was under downward pressure over most of the intermeeting period. However, the dollar firmed somewhat near the end of the period, as prospects were seen to be increasing for further reductions in the federal deficit and a tightening of monetary policy.

At its meeting on November 1, the Committee adopted a directive calling for no immediate change in the degree of pressure on reserve positions. These reserve conditions were expected to be consistent with growth of M2 and M3 at annual rates of about 2½ and 6 percent respectively over the period from September to December. The members agreed that somewhat greater reserve restraint would, or slightly lesser reserve restraint might, be acceptable depending on indications of inflationary pressures, the strength of the business expansion, the behavior of the monetary aggregates, and developments in foreign exchange and domestic financial markets.

In the course of implementing policy following the November meeting, it became increasingly evident that a slightly higher federal funds rate than that anticipated at the time of the meeting was associated with a substantially lower volume of adjustment plus seasonal borrowing; for reasons that remained unclear, depository institutions exhibited a reduced willingness to come to the discount window. To take account of this change in borrowing behavior, and against a backdrop of recent information suggesting that the economic expansion retained considerable vigor and potential for price pressures, the Manager for Domestic Operations adjusted the reserve paths on November 22 to incorporate a lower level of borrowings, with the expectation that federal funds would continue trading in the slightly higher range that had prevailed recently. Over the intermeeting period, the federal funds rate rose nearly ¼ percentage point to around 8½ percent.

Other short-term market interest rates generally advanced by more than the federal funds rate over the intermeeting period, as expectations of a tighter monetary policy were stimulated by higher world oil prices, renewed weakness of the dollar, and the release of strong domestic economic data. The prime rate was increased 50 basis points. Rates in long-term debt markets also rose on balance, although by appreciably less than short-term rates. Stock prices fell over the first half of the intermeeting period, but most indexes rebounded subsequently to nearly their values at the time of the November 1 meeting.

Growth of the broader monetary aggregates strengthened in November from the relatively sluggish rates of expansion recorded in previous months, especially for M2. The acceleration in M2 reflected strong expansion in its liquid retail components. M3 growth picked up somewhat less, as bank credit growth and associated funding needs remained moderate. On average in October and November, growth of M2 had been somewhat faster, and that of M3 slightly faster, than the Committee expected at the time of the previous meeting. With demand deposits running off again, M1, which had increased only slightly on balance since midsummer, was virtually unchanged in November.

The staff projection prepared for this meeting suggested that, after adjustment for the effects of the drought, economic growth in the current quarter might be near the vigorous pace of the third quarter but that expansion in 1989 was likely to moderate on balance. However, to the extent that expansion of final demand at a pace that could foster higher inflation was not accommodated by monetary policy, pressures would be generated in financial markets that would tend to restrain domestic spending. The staff continued to project some slowing in the growth of consumer spending, sharply reduced expansion of business fixed investment, and sluggish housing activity. Foreign trade was expected to make an important contribution to growth in domestic output, despite some damping effects from the dollar appreciation that had occurred earlier in 1988 and somewhat slower growth abroad. The staff also anticipated some continuing cost pressures over the next several quarters, especially owing to reduced margins of unutilized labor and other production resources.

In the Committee's discussion of the economic situation and outlook, the members focused on indications of continuing strength in the economic expansion. While some signs of prospective slowing in the expansion remained in evidence, recent data on employment and production suggested that the economy retained considerable momentum. A number of members commented that business activity had remained more robust than had seemed likely earlier, and many expressed concern that continued expansion at a relatively rapid pace raised the risk that inflation would intensify, given already high rates of capacity utilization in many industries and tight labor markets in many parts of the country. On balance, while somewhat more moderate growth continued to be viewed as a reasonable expectation for 1989, most members interpreted recent developments as suggesting that, in the absence of some added policy restraint, any moderation in the expansion might well prove to be insufficient to forestall a pickup in inflation, much less to permit progress to be made in reducing inflation over time. At the same time, some members cautioned that the risk of a recession stemming from a substantial tightening of policy should not be overlooked; in addition to job and output losses, a recession could impede progress in bringing the federal budget into balance and could have severe repercussions on the viability of highly leveraged borrowers and many depository institutions.

In their review of developments bearing on the economic outlook, members took account of indications that overall domestic demands were being well maintained, including some recent strength in retail sales, and that exports remained on a clear uptrend. High levels of activity continued to characterize business conditions in many areas. Manufacturing was benefiting from growing export markets and the substitution of domestic products for higher-priced imports; moreover, many domestic producers had not yet exploited potential markets abroad. There were indications of some softening in business fixed investment, including a moderation of growth in outlays for equipment and reduced construction activity in a number of areas, notably those most affected by weak energy markets and previous overbuilding. Nonetheless, business contacts suggested that overall investment spending would continue to benefit from ongoing efforts in many industries to modernize or expand production facilities. With regard to housing construction, members reported somewhat depressed conditions in a number of areas, but the latest statistics for the nation as a whole were on the firm side of recent trends.

In the course of the Committee's discussion, members gave a good deal of attention to the outlook for inflation. On the positive side, inflationary expectations did not appear to be worsening, as evidenced for example by the stability of long-term bond markets, and strong competitive pressures were encouraging business firms to persist in their efforts to hold down costs. Such competition continued to make it difficult for many businesses to pass on increasing costs through higher prices and tended to harden business resistance to demands for higher wages. With regard to labor costs, reports from local areas suggested that nonwage components were rising at a faster rate than wages but that large increases in the latter still were infrequent despite some shortages of labor.

While the members saw no clear evidence in current aggregate measures of prices that the overall rate of inflation was worsening, key indicators of labor compensation suggested some uptrend and many members commented that the risks were in the direction of greater inflation, given the apparent growth of the economy at a pace above its long-run potential together with the relatively full employment of production resources. These risks would be heightened if the dollar were to decline significantly from current levels. Commodity prices appeared to have leveled off, but they showed little sign of reversing earlier increases, which themselves might not yet have been passed through fully to consumer prices. Of particular concern was the prospect that, in the absence of a timely move to restraint, greater inflation would become embedded in the economy, especially in the labor-cost structure. A new wage-price spiral would then be very difficult to avoid and the critical task of bringing inflation under control would be prolonged and much more disruptive. A worsening of inflationary pressures and inflation expectations, if unchecked, eventually would foster higher interest rates and would lead to growing imbalances and distortions in the economy and almost certainly to a downturn at some point in overall economic activity.

At its meeting in late June, the Committee reviewed its basic policy objectives for growth of the monetary and debt aggregates in 1988 and established tentative objectives for expansion of those aggregates in 1989. For the period from the fourth quarter of 1987 to the fourth quarter of 1988, the Committee reaffirmed the ranges of 4 to 8 percent that it had set in February for growth of both M2 and M3. The monitoring range for expansion of total domestic nonfinancial debt in 1988 was left unchanged from its February specification of 7 to 11 percent. For the year through November, M2 grew at an annual rate a little below, and M3 at a rate a little above, the midpoint of their annual ranges. Expansion of total domestic nonfinancial debt appeared to have moderated to a pace somewhat below the midpoint of its range. For 1989 the Committee agreed in June on tentative reductions to ranges of 3 to 7 percent for M2 and 3½ to 7½ percent for M3. The monitoring range for growth of total domestic nonfinancial debt was lowered to 6½ to 10½ percent for 1989. It was understood that all the ranges for next year were provisional and that they would be reviewed in February 1989 in the light of intervening developments. With respect to M1, the Committee reaffirmed in June its earlier decision not to set a specific target for growth in 1988, and it also decided not to establish a tentative range for 1989.

In the Committee's discussion of policy for the near term, nearly all the members supported a proposal that called for an immediate increase in the degree of reserve pressure to be followed by some further tightening at the start of 1989 unless incoming evidence on the behavior of prices, the performance of the economy, or conditions in financial markets differed greatly from current expectations. The appropriate degree of reserve restraint also would be reevaluated in the event of an increase in the discount rate. While the members recognized that the degree of monetary restraint could be overdone, they generally felt that the risks of a downturn stemming from the limited tightening under consideration were extremely small and needed to be accepted in light of what they perceived as the much greater threat of a recession if inflation were allowed to intensify. Expressing a differing view, one member commented that further restraint was undesirable in light of that member's expectation that economic growth over the next several quarters was likely to be at a pace consistent with progress against inflation.

While all but one member agreed on the need for some further monetary restraint, views differed to some extent with regard to the appropriate degree and timing of such restraint. A number of members indicated a preference for a stronger immediate move to greater restraint, given their perception of the urgency of countering inflation expectations and inflationary pressures in the economy. Other members did not disagree that inflation was a serious problem, but they preferred a more gradual approach to further restraint in order to minimize potential market disturbances, especially around the year-end, and to facilitate adjustments to rising interest rates. It also was suggested that more marked tightening at this time could have the unintended effect of fostering an escalation of interest rates in world markets, with especially undesirable effects on many less developed debtor nations.

In the discussion of adjustments in the provision of reserves through open market operations, many members commented on how a possible increase in the discount rate might interact with such operations. Several favored the implementation of a tighter policy through the discount rate in order to signal more clearly than through a gradual tightening of reserve conditions the System's ongoing commitment to an anti-inflationary policy. Other members expressed concern that, under immediately prevailing circumstances, an increase in the discount rate might have exaggerated repercussions on domestic and international financial markets. The Committee concluded that in the event of an increase in the discount rate during the intermeeting period the members would need to consult regarding the implications for the conduct of open market operations.

In the course of the Committee's discussion, the members took account of a staff analysis which suggested that monetary growth was likely to remain relatively restrained in the months immediately ahead, especially if reserve conditions were tightened. An increase in the degree of reserve restraint in line with that contemplated by the Committee would reduce growth of M2 somewhat from its recent pace, assuming a typically delayed adjustment in deposit rates to rising short-term market interest rates, while growth of M3 would continue at a somewhat higher rate than that of M2. Several members observed that restrained monetary growth would continue to be desirable, and some expressed concern that in the absence of some tightening of reserve conditions such growth might accelerate, with inflationary implications under foreseeable economic conditions. On the other hand, in light of the limited growth in the monetary base and reserves in the past several months, some other members cautioned that sharp additional restraint on reserve provision could have an undesirably restraining effect on monetary growth and the economy.

With regard to the proposed move toward further monetary restraint shortly after the year-end, it was understood that such firming would be implemented unless emerging economic and financial conditions were to differ markedly from current expectations. Should unanticipated developments of that kind occur or should the Board of Governors approve an increase in the discount rate during the intermeeting period, the Chairman would call for a special consultation of the Committee. On the question of any additional adjustment in policy, the members generally agreed that policy implementation should remain especially alert to incoming information that might call for further firming beyond that already contemplated. In light of the tightening of reserve conditions after today's meeting and the presumption that some further monetary restraint would be implemented later during the intermeeting period, the members decided to raise the intermeeting range for the federal funds rate by 1 percentage point to 7 to 11 percent. With such an increase, federal funds would be expected to trade at rates averaging closer to the middle of the range. That range provides one mechanism for initiating consultation of the Committee when its boundaries are persistently exceeded.

At the conclusion of the Committee's discussion, all but one of the members indicated that they favored or could accept a directive that called for some immediate firming of reserve conditions, with some further tightening to be implemented at the start of 1989, assuming that economic and financial conditions remained reasonably consistent with current expectations. In keeping with the Committee's usual approach to policy, the conduct of open market operations would be subject to further adjustment during the intermeeting period based on indications of inflationary pressures, the strength of the business expansion, the behavior of the monetary aggregates, and developments in foreign exchange and domestic financial markets. Depending on such developments, some added reserve restraint would be acceptable, or some slight lessening of reserve pressure might be acceptable. The reserve conditions contemplated at this meeting were expected to be consistent with growth of M2 and M3 at annual rates of around 3 percent and 6½ percent respectively over the four-month period from November 1988 to March 1989.

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

The information reviewed at this meeting suggests that, apart from the direct effects of the drought, economic activity has continued to expand at a vigorous pace. Total nonfarm payroll employment rose sharply in October and November, with sizable increases indicated in manufacturing after declines in late summer. The civilian unemployment rate, at 5.4 percent in November, remained in the lower part of the range that has prevailed since early spring. Industrial production advanced considerably in October and November. Housing starts turned up in October after changing little on balance over the previous several months. Growth in consumer spending has been somewhat more moderate in recent months, and indicators of business capital spending suggest a substantially slower rate of expansion than earlier in the year. The nominal U.S. merchandise trade deficit narrowed further in the third quarter. Preliminary data for October indicate a small decline from the revised deficit for September. The latest information on prices and wages suggests little if any change from recent trends.

Interest rates have risen since the Committee meeting on November 1, with appreciable increases occurring in short-term markets. In foreign exchange markets, the trade-weighted value of the dollar in terms of the other G-10 currencies declined significantly further on balance over the intermeeting period.

Expansion of M2 and M3 strengthened in November from relatively slow rates of growth in previous months, especially in the case of M2. Thus far this year, M2 has grown at a rate a little below, and M3 at a rate a little above, the midpoint of the ranges established by the Committee for 1988. M1 has increased only slightly on balance over the past several months, bringing growth so far this year to 4 percent. Expansion of total domestic nonfinancial debt for the year thus far appears to be at a pace somewhat below that in 1987 and around the midpoint of the Committee's monitoring range for 1988.

The Federal Open Market Committee seeks monetary and financial conditions that will foster price stability over time, promote growth in output on a sustainable basis, and contribute to an improved pattern of international transactions. In furtherance of these objectives, the Committee at its meeting in late June reaffirmed the ranges it had established in February for growth of 4 to 8 percent for both M2 and M3, measured from the fourth quarter of 1987 to the fourth quarter of 1988. The monitoring range for growth of total domestic nonfinancial debt was also maintained at 7 to 11 percent for the year.

For 1989, the Committee agreed on tentative ranges for monetary growth, measured from the fourth quarter of 1988 to the fourth quarter of 1989, of 3 to 7 percent for M2 and 3½ to 7½ percent for M3. The Committee set the associated monitoring range for growth of total domestic nonfinancial debt at 6½ to 10½ percent. It was understood that all these ranges were provisional and that they would be reviewed in early 1989 in the light of intervening developments.

With respect to M1, the Committee reaffirmed its decision in February not to establish a specific target for 1988 and also decided not to set a tentative range for 1989. The behavior of this aggregate will continue to be evaluated in the light of movements in its velocity, developments in the economy and financial markets, and the nature of emerging price pressures.

In the implementation of policy for the immediate future, the Committee seeks to increase somewhat the existing degree of pressure on reserve positions. Taking account of indications of inflationary pressures, the strength of the business expansion, the behavior of the monetary aggregates, and developments in foreign exchange and domestic financial markets, somewhat greater reserve restraint would, or slightly lesser reserve restraint might, be acceptable in the intermeeting period. The contemplated reserve conditions are expected to be consistent with growth of M2 and M3 over the period from November through March at annual rates of about 3 and 6½ percent, respectively. The Chairman may call for Committee consultation if it appears to the Manager for Domestic Operations that reserve conditions during the period before the next meeting are likely to be associated with a federal funds rate persistently outside a range of 7 to 11 percent.

Votes for this action: Messrs. Greenspan, Corrigan, Angell, Black, Forrestal, Heller, Hoskins, Johnson, Kelley, LaWare, and Parry.Vote against this action: Ms. Seger.

Ms. Seger dissented because she viewed current business indicators as already pointing on balance to slower economic expansion, and in the circumstances she did not feel that any added monetary restraint was needed to foster economic conditions consistent with progress in reducing inflationary pressures. In the context of already restrained monetary growth, she was concerned that a further increase in the degree of reserve pressure would pose unnecessary risks to interest-sensitive sectors of the economy and ultimately to the sustainability of the expansion itself. She expressed particular concern that the higher interest rates implied by greater monetary restraint would aggravate the condition of financially troubled thrift institutions.

At this meeting the Committee reviewed its current procedure for implementing open market operations against the background of a marked change over recent months in the relationship between the level of adjustment plus seasonal borrowing and the federal funds rate. The current procedure of focusing on the degree of reserve restraint, as indexed by borrowed reserves, had been implemented with some flexibility in recent weeks in light of the substantial shortfall of borrowing in relation to expectations. The policy results had been satisfactory, but some members proposed that consideration be given to focusing more directly on the federal funds rate in carrying out open market operations, particularly if uncertainty about the borrowing–federal funds relationship were to persist. Others felt that despite its drawbacks, the current procedure had a number of advantages, including that of allowing greater scope for market forces to determine short-term interest rates. The Committee concluded that no changes in the current procedure were needed at this time, but that flexibility would remain important in accomplishing Committee objectives under changing circumstances.

Legal Developments

INTERPRETATION OF REGULATION H

The Board of Governors has issued an interpretation of Regulation H, Membership of State Banking Institutions in the Federal Reserve System, 12 C.F.R. Part 208, authorizing state member banks to purchase and hold for their own accounts stock of investment companies that are authorized to invest in certain securities that the banks may purchase directly and no others, but that may also enter into futures, forwards, options, repurchase agreements, and securities lending contracts relating to assets the banks may purchase directly. This action will expand the investment authority of state member banks, and will provide those institutions an opportunity to increase the diversity of their investments. Because this authority includes authority for state member banks to invest in stock of money market mutual funds (MMMFs), the Board has also rescinded 12 C.F.R. 208.123. That interpretation authorized state member banks to invest in stock of MMMFs.

Effective February 17, 1989, pursuant to authority under section 9 of the Federal Reserve Act, 12 U.S.C. §§ 321 *et seq.*, the Board is amending 12 C.F.R. Part 208 as follows:

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

1. The authority citation for Part 208 continues to read as follows:

Authority: Sections 9, 11, and 21 of the Federal Reserve Act (12 U.S.C. §§ 321–338, 248, and 486, respectively); sections 4 and 13(j) of the Federal Deposit Insurance Act (12 U.S.C. § 814 and 1823(j), respectively); section 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); and section 5155 of the Revised Statutes (12 U.S.C. § 36) as amended by the McFadden Act of 1927.

2. Section 208.123 is removed.

3. Part 208 is amended by adding Section 208.124 to read as follows:

Section 208.124—Purchase of investment company stock by a state member bank

(a) *Scope.* The Board of Governors has been asked whether a state member bank may purchase and hold for its own account stock of investment companies (mutual funds) whose portfolios consist entirely of securities that state member banks may purchase directly, and futures, forwards, options, repurchase agreements and securities lending contracts relating to those securities.

(b) *Investment authority.* The National Bank Act, 12 U.S.C. § 24(7), provides that a national bank may purchase for its own account investment securities under such limits and restrictions as the Comptroller of the Currency may prescribe. The statute defines "investment securities" to mean marketable obligations evidencing indebtedness of any person, partnership, association, or corporation in the form of bonds, notes, and debentures. The Act further limits the holdings of securities of any one issuer to an amount equal to ten percent of the capital stock and surplus of the bank. These limits, however, do not apply to obligations issued by the United States, general obligations of any state or any political subdivision of any state, and to certain obligations of federal agencies. The restrictions of 12 U.S.C. 24(7) also apply to state member banks under 12 U.S.C. § 335.

(c) *Authorization.* The Board has determined that a state member bank may purchase and hold for its own account stock of any investment company (including a money market mutual fund), subject to the following conditions:

(1) *Investment authority of the investment company.* The investment company may have authority, as stated in the investment objectives of its current prospectus, to invest in the following securities and no others: United States Treasury and agency obligations, general obligations of states and municipalities, corporate debt securities, and any other securities designated in 12 U.S.C. § 24(7) as eligible for purchase by national banks that state member banks

are authorized to purchase directly. The investment company may have authority, as stated in the investment objectives of its current prospectus, to enter into futures, forwards and option contracts relating to the above securities when those futures, forwards and option contracts are to be used solely to reduce interest rate risk and not for speculation. The investment company may also have authority, as stated in the investment objectives of its current prospectus, to enter into repurchase agreements and securities lending contracts relating to the securities designated above if those contracts comply with policy statements adopted by the Federal Financial Institutions Examination Council. *See* 45 *Federal Register* 18,120 (March 20, 1980) and Federal Reserve Regulatory Service 3–1535, 3–1579.1, and 3–1579.5.

(2) *Limits on investment.*

(i) If the portfolio of the investment company in which a state member bank may invest consists solely of obligations that the bank could purchase without restriction as to amount, or solely of those obligations and futures, forwards, options, repurchase agreements and securities lending contracts relating solely to those obligations, no express limit is placed on investment.

(ii) If the portfolio of the investment company in which a state member bank may invest includes any securities that the bank could purchase subject to a restriction as to amount, the pro-rata share of holdings of such securities of an issuer indirectly held by a state member bank through its holdings of investment company stock (including money market mutual funds), when aggregated with the direct investment in securities of that issuer by the bank, must not exceed the investment limit.

(3) *Registration of publicly offered investment company stock.* Except as provided in section (c)(4), investment company stock purchased by a state member bank must be of an investment company registered with the Securities and Exchange Commission under the Investment Company Act of 1940 and the Securities Act of 1933.

(4) *Privately offered fund.* The stock purchased may be of a privately offered fund if the sponsor of the fund is a subsidiary of a bank holding company, and if the stock of the fund is held solely by subsidiaries of the bank holding company.

(5) *Proportionate and undivided interest.* The stock purchased must represent an equitable, equal, and proportionate undivided interest in the underlying assets of the investment company.

(6) *Stockholders shielded from liability.* The stockholders must be shielded from personal liability for acts and obligations of the investment company.

(7) *Bank investment policy and procedures.*

(i) The investment policy of the bank, as formally approved by its board of directors, must specifically provide for investment in investment company stock. The investment policy must establish procedures, standards, and controls that relate specifically to investments in investment company stock.

(ii) Prior approval of the board of directors of the bank must be obtained for investment in a specific investment company and recorded in the official board minutes.

(iii) Unless the investment objectives of the investment companies, as stated in their current prospectuses, restrict investments to those obligations that the state member bank could purchase without restrictions to amount, the bank must review its holdings of investment company stock at least quarterly to ensure that investments have been made in accordance with established bank policies and legal requirements.

(8) *Reporting and accounting.* Reporting of holdings of investment company stock must be consistent with established standards for "marketable equity securities." Accordingly, the instructions for the quarterly Reports of Condition and Income and the requirements of the Financial Accounting Standards Board Statement No. 12 must be followed.

(i) Holdings of investment company stock must be reported as "All other" securities on Schedule RC-B, Item 4(b) on the quarterly Reports of Condition, unless otherwise directed.

(ii) In no case may the carrying value of investment company stock be increased above aggregate cost as a result of net unrealized gains. Holdings of investment company stock must be reported in the Reports of Condition at the lower of their aggregate cost or aggregate market value, determined as of the report date.

(iii) Sales fees, both "front end load" and "deferred contingency," must be deducted in calculating market value.

(iv) Any net unrealized loss or increase in a previously recorded net unrealized loss must be charged directly against "undivided profits and capital reserves." Subsequent reductions of any net unrealized loss must be credited directly to "undivided profits and capital reserves."

(v) A loss on an individual investment that is other than temporary, as that term is used for purposes of FASB Statement No. 12, must be charged to "noninterest expense" on Schedule RI of the Income Statement.

(d) *Evaluation of investment risk.* Investments in stock of investment companies and direct investments in debt securities are not treated the same for accounting, tax, and other purposes. Consequently, state member banks should evaluate investments in investment company stock in light of these differences and give special attention to the risks these differences impose.[1]

(e) *No effect on state law.* This interpretation shall not be construed as exempting a state member bank from any provision of state law.

AMENDMENT TO REGULATION H

The Board of Governors is adopting three technical amendments to 12 C.F.R. Part 208, its Regulation H. The first change makes it clear that, if a state member bank has filed its Report of Condition and Income ("Call Report") electronically, the signatures on the published copy of the Call Report must be the same as the signatures on the hard copy retained in the bank's files. The second change replaces the current requirement that a state member bank submit a certification of publication to its Reserve Bank with a requirement that it retain a copy of its published Call Report in its files and make it available to examiners upon request. The last change deletes outdated references in Regulation H to a report form concerning state member bank affiliates.

Effective March 1, 1989, pursuant to the Board's authority under section 9 of the Federal Reserve Act, 12 U.S.C. §§ 321 *et seq.*, the Board is amending 12 C.F.R. Part 208 as follows:

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

1. The authority citation for 12 C.F.R. Part 208 continues 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); section 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); and section 5155 of the Revised Statutes (12 U.S.C. § 36) as amended by the McFadden Act of 1927.

2. Section 208.10(a)(3) is amended by changing the words "(Form F.R. 105a)" to read "(Forms FFIEC 031–034)" and by revising the last sentence to read as follows:

Section 208.10—[Amended]

(a) ***

(3) ***

All signatures shall be the same in the published statement (although they may be typed or otherwise copied on the report for publication):

(i) as in the original report submitted to the Federal Reserve Bank if the bank does not submit its report of condition electronically, or

(ii) as retained in the bank's files in hard copy if the bank has filed its report of condition electronically. The hard copy retained in the bank's file must be made available to examiners upon request.

* * * * *

3. Section 208.10(a)(4) is revised to read as follows:

(a) ***

(4) ***

A copy of the printed report shall be retained in the bank's files and made available to examiners upon request.

* * * * *

4. Section 208.10(b) is amended by deleting the first sentence in paragraph (2) and removing the words "attached to the certificate on Form F.R. 220a" at the end of paragraph (3).

AMENDMENT TO REGULATION H

The Board of Governors is amending 12 C.F.R. Part 208, its Regulation H. The purpose of the amendment is to make available to the public information regarding the financial condition of state member banks and U.S. branches and agencies of foreign banks. The amendment requires state member banks to make banks to make available to shareholders and any member of the public, upon request, information re-

1. The Board has issued a cautionary letter in conjunction with this interpretation. This letter recommends that a state member bank avoid undue concentration of investments in the stock of any fund or family of funds and apprises state member banks of the accounting and tax treatment of holding investment company stock. *See* Federal Reserve Regulatory Service 3–416.16.

garding each such bank's financial condition in the form of the bank's two most recent year-end Reports of Condition and Income ("Call Reports") (OMB No. 7100-0036). As alternatives to furnishing the Call Reports, at each bank's option, persons requesting such information may be given one of the following:

(1) specified schedules from the two most recent year-end Call Reports;

(2) in the case of a bank required to file statements and reports pursuant to Regulation H, a copy of the bank's annual report to shareholders for meetings at which directors are elected;

(3) copies of independently audited financial statements (accompanied by a company of the certificate or report of the independent accountant) if they contain information comparable to that presented in the two most recent year-end Call Report schedules specified for alternative (1) above; or

(4) in the case of a state member bank that is the only bank subsidiary of a bank holding company, that is majority owned by that bank company, and that has assets equal to 95 percent or more of the bank holding company's consolidated total assets:

(A) a copy of the annual report of the one-bank holding company prepared in conformity with the regulations of the Securities and Exchange Commission ("SEC"); or

(B) if the holding company has assets of $150 million or more, copies of those portions of the bank holding company's two most recent year-end Form FR-Y-9C, "Consolidated Financial Statements for Bank Holding Companies With Total Consolidated Assets of $150 Million or More, or With More Than One Subsidiary Bank" (OMB No. 7100-0128), that are comparable to the Call Report schedules specified for alternative (1) above.

The amendment also requires state licensed agencies of foreign banks and state licensed branches of such banks that are not insured by the Federal Deposit Insurance Corporation to make available, upon request, the following schedules from the two most recent year-end Reports of Assets and Liabilities of U.S. Branches and Agencies of Foreign Banks ("Foreign Branch and Agency Call Reports") (OMB No. 7100-0032): Schedules RAL (Assets and Liabilities), E (Deposit Liabilities and Credit Balances), and P (Other Borrowed Money).

Effective April 1, 1989, pursuant to the Board's authority under section 11 of the Federal Reserve Act of 1913, as amended (12 U.S.C. § 248), and section 7 of the International Banking Act of 1978 (12 U.S.C. § 3105(b)), the Board amends 12 C.F.R. Part 208 as follows:

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

1. The authority citation for Part 208 continues to read as follows:

Authority: Sections 9, 11, and 21 of the Federal Reserve Act (12 U.S.C. §§ 321–338, 248, and 486, respectively); sections 4 and 13(j) of the Federal Deposit Insurance Act (12 U.S.C. §§ 1814 and 1823(j), respectively); section 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); and section 5155 of the Revised Statutes (12 U.S.C. § 36) as amended by the McFadden Act of 1927.

2. Section 208.17 is added to read as follows:

Section 208.17—Disclosure of financial information by state member banks

(a) *Purpose and scope.* The purpose of this section is to facilitate the dissemination of publicly available information regarding the financial condition of state member banks, state licensed agencies of foreign banks, and state licensed branches of foreign banks that are not insured by the Federal Deposit Insurance Corporation. This section requires all state-chartered banks that are members of the Federal Reserve System and all other covered institutions:

(1) to make year-end Call Reports or Reports of Assets and Liabilities of U. S. Branches and Agencies of Foreign Banks or, in the case of state member banks, other alternative financial information, available to shareholders, customers, and the general public upon request; and

(2) to advise shareholders and the public of the availability of this information. This section does not amend or modify the publication requirements of section 208.10, or any other section of this regulation.

(b) *Definitions.*

For purposes of this section, the following definitions apply:

(1) "Call Report" means the Consolidated Reports of Condition and Income (OMB No. 7100-0036) filed pursuant to 12 U.S.C. § 324 and section 208.10 of this regulation (12 C.F.R. § 208.10).

(2) "State member bank" means a bank that is chartered by a State and is a member of the Federal Reserve System.
(3) "Other covered institutions" means state licensed agencies of foreign banks, or state licensed branches of foreign banks that are not insured by the Federal Deposit Insurance Corporation.

(c) *Availability of financial information.*
(1) *Shareholders.* Each state member bank shall advise its shareholders, by a written announcement, which may be included in the notice of the annual shareholders' meeting, that one copy of certain financial information is available free of charge upon request. The announcement shall include, at a minimum, an address or telephone number to which requests may be directed.
(2) *General public.* State member banks and other covered institutions shall use reasonable means at their disposal to advise the public of the availability of information pursuant to this section. Bankers' banks, as defined by the Federal Reserve Act, as amended by the Monetary Control Act of 1980 (Title I of Pub. L. 96–221), and 12 C.F.R. 204.121, are exempt from this requirement. The notification to the public shall state that one copy of the information is available free of charge upon request and state an address or telephone number to which requests may be directed.

(d) *Financial information to be provided by state member banks.* The bank shall have discretion to determine which type of information, identified in this subsection, to release. The bank shall make the information it chooses to release available as soon as is reasonably possible but not later than April 1 of the year immediately following the end of the year to which the most recently available information pertains. State member banks shall fulfill the requirements of this section by providing, upon request, at least one free copy to each requestor of the following information:
(1) copies of their entire Call Report for the most recent year end and the prior year end, excluding any information for which confidential treatment is permitted pursuant to the Call Report instructions; or
(2) copies of only the following schedules from their Call Reports for the most recent year end and the prior year end, excluding any information for which confidential treatment is permitted pursuant to the Call Report instructions:
(i) Schedule RC (Balance Sheet);
(ii) Schedule RC-N (Past Due and Nonaccrual Loans and Leases);
(iii) Schedule RI (Income Statement);
(iv) Schedule RI-A (Changes in Equity Capital); and
(v) Schedule RI-B (Charge-offs and Recoveries and Changes in Allowance for Loan and Lease Losses)—Part I may be omitted; or
(3) in the case of a bank required to file statements and reports pursuant to the Board's Regulation H a copy of the bank's annual report to shareholders for meetings at which directors are to be elected or the bank's annual report; or
(4) in the case of a bank with independently audited financial statements, copies of the audited financial statements and the certificate or report of the independent accountant if such statements contain information for the two most recent year ends comparable to that specified in subsection (d)(2); or
(5) in the case of a bank that is the only bank subsidiary of a bank holding company, that is majority owned by that bank holding company, and that has assets equal to 95 percent or more of the bank holding company's consolidated total assets, a copy of either:
(i) the annual report of the bank holding company prepared in conformity with the regulations of the Securities and Exchange Commission; or
(ii) if the holding company as consolidated assets of $150 million or more, the sections in the bank holding company's consolidated financial statements for the most recent year end and the prior year end on Form FR-Y-9C ("Consolidated Financial Statements for Bank Holding Companies With Total Consolidated Assets of $150 Million or More, or With More Than One Subsidiary Bank" (OMB No. 7100-0128)) prepared pursuant to the Board's Regulation Y, and comparable to the Call Report schedules enumerated in paragraph (d)(2) of this section.

(e) *Financial information to be provided by other covered institutions.* Other covered institutions shall fulfill the requirements of this section by providing, upon request, at least one free copy to each requestor of the following schedules from the Report of Assets and Liabilities of U. S. Branches and Agencies of Foreign Banks (OMB No. 7100-0032) for the most recent year end and the prior year end:
(1) Schedule RAL (Assets and Liabilities);
(2) Schedule E (Deposit Liabilities and Credit Balances);
(3) Schedule P (Other Borrowed Money).

The institution shall make the information available as soon as is reasonably possible but not later than April 1 of the year immediately following the end of the year to which the most recently available information pertains.

(f) *Disclaimer*. The following legend shall be included with any financial information provided pursuant to this section: "This financial information has not been reviewed, or confirmed for accuracy or relevance, by the Federal Reserve System."
(g) This section is not intended to create a private right of faction against any institution disclosing documents pursuant to this section.

ORDERS ISSUED UNDER THE BANK HOLDING COMPANY ACT

Orders Issued Under Section 3 of the Bank Holding Company Act

China Trust Holdings Corp.
New York, New York

China Trust Capital B.V.
The Netherlands

China Trust Holdings N.V.
Curacao, Netherlands Antilles

Order Approving the Formation of Bank Holding Companies

China Trust Holdings N.V., Curacao, Netherlands Antilles ("Holdings N.V."); China Trust Capital B.V., The Netherlands ("Capital"); and China Trust Holdings Corp., New York, New York ("Holdings Corp.") (collectively referred to as "Applicants"), have applied for the Board's approval under section 3(a)(1) of the Bank Holding Company Act, as amended ("BHC Act") (12 U.S.C. § 1842(a)(1)), to become bank holding companies through the acquisition by Holdings Corp. of all (100 percent) of the voting shares of China Trust Bank, New York, New York ("Bank").

Notice of the applications, affording an opportunity for interested persons to submit comments, has been given in accordance with section 3(b) of the BHC Act (12 U.S.C. § 1842(b)) (53 *Federal Register* 46,661 (1988)). 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 (12 U.S.C. § 1842(c)).

Applicants, all non-operating corporations, were organized for the purpose of becoming bank holding companies by acquiring Bank, a *de novo* bank.[1] Bank will operate in the Metropolitan New York—New Jersey market.[2] The principals of Applicants are not affiliated with any other depository institutions in this market. Based on all the facts of record, the Board believes that consummation of the proposal would not result in any adverse effects upon competition or increase in the concentration of banking resources in any relevant area. Accordingly, the Board concludes that competitive considerations under the BHC Act are consistent with approval.

Based upon the facts of record, including certain commitments made by Applicants' principals, the financial and managerial resources of Applicants and Bank are consistent with approval. Considerations relating to the convenience and needs of the communities to be served are also consistent with approval.

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

By order of the Board of Governors, effective February 10, 1989.

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

JENNIFER J. JOHNSON
Associate Secretary of the Board

Credit and Commerce American Holdings, N.V.
Curacao, Netherlands Antilles

Order Approving Acquisition of a Bank

Credit and Commerce American Holdings, N.V., Curacao, Netherlands Antilles ("CCAH"); Credit and Commerce American Investment, B.V., Amsterdam, The Netherlands ("Credit and Commerce"); First American Corporation, Washington, D.C. ("First

1. Holdings N.V. will own 100 percent of the voting shares of Capital; Capital will own 100 percent of the voting shares of Holdings Corp.; and Holdings Corp. will own 100 percent of the voting shares of Bank.

2. The Metropolitan New York - New Jersey market includes 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 parts of Fairfield County in Connecticut.

American"); First American Bankshares, Inc., Washington, D.C., Georgia Bankshares, Inc., Atlanta, Georgia; and National Bank of Georgia Corporation, Atlanta, Georgia (collectively, "Applicants"), bank holding companies within the meaning of the Bank Holding Company Act (the "BHC Act") (12 U.S.C. § 1842(a)(3)), have applied for the Board's approval under section 3(a)(3) of the BHC Act to retain 100 percent of the outstanding voting shares of Bank of Escambia, N.A., Pensacola, Florida ("Bank").[1]

Notice of the applications, affording interested persons an opportunity to submit comments, has been published (53 *Federal Register* 30,467 (1988)). 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.

The Douglas Amendment to the BHC Act prohibits the Board from approving an application by a bank holding company to acquire a bank located outside 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."[2]

The statute laws of Florida expressly authorize the acquisition of a banking institution in Florida by a bank holding company located in a state in a defined region, which includes Virginia, if that other state authorizes the acquisition of a financial institution in that state on a reciprocal basis by a Florida bank holding company.[3] Virginia law expressly authorizes the acquisition of a banking organization in Virginia by a Florida bank holding company on a reciprocal basis.[4] The Florida State Comptroller has approved Applicants' proposal pursuant to the Florida statute. In light of the foregoing, the Board has determined that its approval of the proposal is not prohibited by the Douglas Amendment.

Applicants operate seven banking subsidiaries located in the District of Columbia, Georgia, Maryland, New York, Tennessee, and Virginia. CCAH is the seventh largest banking organization in Virginia, controlling deposits of $2.64 billion, representing 5.9 percent of the total deposits in commercial banks in Virginia.[5] Bank is one of the smaller commercial banking organizations in Florida, controlling deposits of $27.0 million, representing less than one percent of total deposits in commercial banks in the state.[6] Consummation of the proposal would not have any significant adverse effect upon the concentration of banking resources in Virginia or Florida.

Applicants and Bank do not compete directly in any banking market. Accordingly, consummation of the proposal would not eliminate any significant existing competition in any relevant banking market. Consummation also would not have any significant adverse effect on probable future competition in any relevant banking market.

The financial and managerial resources of Applicants and their subsidiaries as well as Bank are consistent with approval.

In considering the convenience and needs of the communities to be served, the Board concludes that Applicants' records under the Community Reinvestment Act ("CRA") are consistent with approval, especially in light of First American's commitment to strengthen its record with regard to the CRA activities of one of its subsidiary banks. The bank has developed a report to monitor its CRA activities, including the ascertainment of community credit needs, an effort which will be aided by the bank's board of directors and CRA committee. The bank has also increased its community outreach activities, including a commitment to a marketing program that informs the public of its product offerings and is targeted to include minority areas of its community.

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

By order of the Board of Governors, effective February 16, 1989.

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

JENNIFER J. JOHNSON
Associate Secretary of the Board

1. The shares of Bank were acquired by National Bank of Georgia Corporation, Atlanta, Georgia, a subsidiary of Credit and Commerce, in satisfaction of a debt previously contracted.
2. 12 U.S.C. § 1842(d). A bank holding company's home state for purposes of the Douglas Amendment is that state in which the total deposits of its banking subsidiaries were largest on July 1, 1966, or on the date it became a bank holding company, whichever date is later. Applicants' home state is Virginia.
3. Fla. Stat. Ann. § 658.295 (West 1984). Florida law also requires that the applicant must have in excess of 80 percent of its total deposits in its bank subsidiaries in the Southern region. Applicants satisfy this requirement.
4. Va. Code § 6.1-399 (1988).
5. Data are as of December 31, 1987.
6. Data are as of June 30, 1988.

Continental Bank Corporation
Chicago, Illinois

Continental Illinois Bancorp, Inc.
Chicago, Illinois

Order Denying Acquisition of a Bank

Continental Bank Corporation, Chicago, Illinois, and Continental Illinois Bancorp, Inc., Chicago, Illinois (together, "Continental"), both bank holding companies within the meaning of the Bank Holding Company Act ("BHC Act"), have applied for the Board's approval under section 3 of the BHC Act (12 U.S.C. § 1842) to acquire 100 percent of the voting shares of Grand Canyon State Bank, Scottsdale, Arizona ("Grand Canyon").

Notice of the application, affording interested persons an opportunity to submit comments, has been published (53 *Federal Register* 2,092 (1988)). The time for filing comments has expired, and the Board has considered the application and all comments received in light of the factors set forth in section 3(c) of the BHC Act.

Continental is the second largest commercial banking organization in Illinois, controlling deposits of approximately $8.3 billion, representing approximately 7.8 percent of total deposits in commercial banking organizations ("total bank deposits") in Illinois.[1] Grand Canyon is one of the smaller commercial banking organizations in Arizona, controlling deposits of approximately $14.6 million.[2]

In its evaluation of the convenience and needs of the communities to be served, the Board has taken into account the record of Continental's subsidiary bank, Continental Bank, N.A. ("Bank"), in fulfilling its responsibilities under the Community Reinvestment Act ("CRA") to help meet the credit needs of its entire community. The CRA requires the federal bank supervisory agencies to encourage financial institutions to help meet the credit needs of the local communities in which they are chartered consistent with the safe and sound operation of such institutions. To accomplish this end, the CRA requires the appropriate federal supervisory authority, in connection with its examination of an institution, to "assess the institution's record of meeting the credit needs of its entire community, including low- and moderate-income neighborhoods, consistent with the safe and sound operation of the institution." 12 U.S.C. § 2903. The Board is required to "take such record into account in its evaluation" of applications by bank holding companies under section 3 of the BHC Act to acquire additional banks. *See* 12 C.F.R. 225.13(b)(3).

The Board's experience over the years in examining bank performance under the CRA has indicated that institutions with effective programs to help meet community credit needs share a number of elements. These institutions maintain outreach programs that include procedures to permit effective communication between the bank and various segments of the community, and formalized methods for incorporating findings regarding community credit needs into the development and delivery of products and services. The bank monitors institutional performance at senior management levels and periodically evaluates new opportunities for innovative lending programs, such as home mortgage and neighborhood residential rehabilitation lending and similar programs, designed to meet the credit needs of its designated community, including those of low- and moderate-income persons. An effective program also includes the use of specifically designed marketing and advertising plans to stimulate public-awareness of the bank's services throughout the community, including low- and moderate-income neighborhoods, as well as support of community development projects and programs.

The Board has stated that the CRA "provisions were intended to cover all banks that are in the business of extending credit to the public, including both 'wholesale' and 'retail' banks," because "[the] lending activities of these banks affect the economic health of the communities in which they are chartered."[3] Although the CRA was not intended to limit an institution's discretion to develop the types of products and services it believes are best suited to its expertise and business objectives and to the needs of its community, the institution's program must meet the objectives of the CRA. The Board expects all banks to ascertain the needs of the community and to undertake to accommodate those needs, including the needs of the low- and moderate-income areas of the community.

With regard to wholesale banks that generally are not active providers of consumer credit and services on a retail basis, these activities may, for example, include lending to inner-city revitalization efforts, supporting state and local governmental financing efforts, lending to small or minority-owned businesses, lending support for low-income multi-family rehabilitation and new construction projects, lending to or otherwise financing non-profit developers of low-income housing and small business development, or financing major

1. Data are as of June 30, 1987.
2. Data are as of September 30, 1988.
3. 12 C.F.R. 228.100.

upgrades and/or expansion of industrial plants that would otherwise relocate outside of the city served by the bank.

In the Board's opinion, financial institutions that make meeting their responsibilities under the CRA a part of their management and operational structure are best able to accomplish the goals of the statute. In that light, the Board expects banking organizations to have addressed their CRA responsibilities before the submission of applications to the Board. This is in accord with the requirements of the CRA, under which an institution's record of performance in helping to meet the credit needs of its entire community is a critical factor in determining whether the institution has lived up to its responsibilities under the statute.

In this case, the Board has noted important deficiencies in Bank's CRA performance, including the absence until quite recently of a program containing the elements outlined above and in applicable agency regulations. In response to issues raised by a public commenter regarding Bank's record in meeting the credit needs of its community, the Federal Reserve Bank of Chicago, in early 1988, performed an evaluation of Bank's CRA activities to resolve these issues. That evaluation indicated a number of areas of concern with Bank's CRA performance, including a misunderstanding on the part of Bank staff and management of the requirements of the CRA.

For example, it appeared to be Bank's view that it could meet its CRA responsibilities in the normal course of its commercial lending business and it did not monitor or promote specific CRA activities. Continental did not have a plan as to how the Bank was to meet its responsibilities under the CRA. Bank's CRA officer did not interact substantially with other staff, and Bank's board of directors confined CRA compliance discussions to approval of a formal annual CRA statement. These CRA statements were substantially inaccurate for a number of years, listing products which were not routinely offered by the Bank. The Bank made no significant effort to ascertain the credit needs of its communities or to advertise its products to the community. Finally, given Continental's size, as well as the opportunities available in the Chicago area, Bank's participation in community development and redevelopment efforts was unsatisfactory.

In response to these concerns, Continental submitted a plan to promote Bank's compliance with its responsibilities under the CRA, particularly with respect to the ascertainment of community credit needs, outreach efforts to its community, awareness of CRA responsibilities, and internal monitoring of CRA compliance. As part of its proposal, Bank intends to provide additional training to its managers regarding Bank's CRA policies and programs and to require its CRA officers and branch managers to meet with representatives of local community organizations to discuss the credit needs of the community. Several training sessions have been held, and representatives of Continental have begun meeting with neighborhood organizations, governmental entities, and community groups to discuss Continental's new CRA plan and CRA activities.

Furthermore, each of Continental's business units has appointed CRA liaisons who will be responsible for identifying credit needs in the local community, channeling information between the community, other lenders within the unit, and the CRA officer, and designing, implementing and marketing CRA-related products and services. Continental's board of directors will also hold semi-annual meetings to discuss the bank's progress in meeting its CRA responsibilities. Continental proposes an increase in its CRA-related loans and has committed to pursue actively the financial needs of privately held small businesses, with strong attention to those businesses and financial institutions owned by minorities and women, and those servicing low- and moderate-income neighborhoods. Continental has stated that it will seek referrals about such businesses from existing borrowers who are operating similar businesses, and will examine the possibility of participations with a minority-owned or community bank in a low- or moderate-income neighborhood. Bank expects to complete a comprehensive community credit needs ascertainment study by June 30, 1989.

The Board believes that Continental's CRA plan, when implemented, should make a substantial contribution to correcting the past deficiencies in Bank's CRA performance. The plan and Bank's progress in implementing that plan indicates an improved awareness by Bank of its responsibilities under the CRA and that Bank has adopted as an affirmative management objective a program to work toward achieving compliance with those responsibilities.

The Board has, in the past, taken CRA improvement commitments from bank holding companies into account in considering the performance of subsidiary banks under CRA. The Board believes this is only appropriate, however, when there has been a basic level of compliance on which the commitments can be evaluated. As noted above, that is not the situation in the case now before the Board. Moreover, the Board wishes to stress that banking organizations should address their CRA responsibilities and implement the necessary policies before they file an application with the Board. The Board does not believe that commitments by themselves can serve as a substitute for the established record of CRA performance required by the statute. Accordingly, while the Board believes that

Bank has evidenced an improved understanding of its CRA responsibilities, its record of performance in the past has been inadequate and, until corrected, weighs against approval of this application.

In the course of reviewing this application, the Board has also considered the public policy concerns raised by the Federal Deposit Insurance Corporation's ("FDIC") ongoing assistance agreement with Continental, particularly with regard to the propriety of Continental's proposed expansion plans while the institution is still funded in part by the FDIC and subject to FDIC control.

The Board believes this situation raises important public policy concerns with regard to the potential for distortion of competition due to continued use of government provided capital in competition with private capital. In this situation, careful consideration must be given to expansion of activities where the growth is in effect being financed with public funds. In this case, the proposed acquisition would represent an interstate expansion which would not, in the Board's opinion, so substantially further the goals of the Federal Deposit Insurance Act aimed at stabilizing troubled institutions as to outweigh the significant public policy concerns noted above.

Based upon Bank's inadequate CRA performance as well as the adverse effects on competition resulting from the continued government ownership of Bank, the Board finds that the approval of this application would not serve the convenience and needs of the community.

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

By order of the Board of Governors, effective February 15, 1989.

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

JENNIFER J. JOHNSON
Associate Secretary of the Board

Dissenting Statement of Governors Heller and LaWare

We believe that the record in this case on balance supports approval of this application.

As the majority recognizes, Continental has taken substantial steps to address its responsibilities under the Community Reinvestment Act and to improve its performance in the areas noted by the supervisory authorities. In our view, Continental's plan, and the progress Continental has made in implementing the plan, should be given substantial positive weight in the evaluation of this application, consistent with the Board's practice.

We recognize the public policy concerns raised by the majority regarding the continued FDIC ownership of Continental. We note, however, that the FDIC has made substantial progress in returning the Bank to private ownership and is continuing its efforts to achieve this goal. Furthermore, we believe that this acquisition would be consistent with prior Board precedent regarding the expansion of Continental's operations and the maintenance of the organization's competitive position.

Accordingly, we dissent from the Board's decision denying the application.

February 15, 1989

Public Bank Holding Company, Inc.
Wilmington, Delaware

Order Approving Formation of a Bank Holding Company

Public Bank Holding Company, Inc., Wilmington, Delaware ("Public"), has applied for the Board's approval pursuant to section 3(a)(1) of the Bank Holding Company Act ("Act"), (12 U.S.C. § 1841 *et seq.*), to become a bank holding company by acquiring 100 percent of the voting shares of The First Women's Bank, New York, New York ("Bank").

Notice of the application, affording interested persons an opportunity to submit comments, has been duly published (53 *Federal Register* 26,117 (1988)). The time for filing comments has expired, and the Board has considered the application and all comments received in light of the factors set forth in section 3(c) of the Act.

Public is a non-operating company formed for the purpose of acquiring Bank. Bank is the 34th largest commercial banking organization in New York, controlling deposits of $415.9 million, representing less than one percent of the total deposits in commercial banking organizations in the state.[1] This proposal represents a restructuring of existing ownership interests. Consummation of this proposal would not result in any significant adverse effect on the concentration of banking resources in New York.

1. State banking data are as of June 30, 1988. Market data are as of June 30, 1987.

Bank competes in the Metropolitan New York-New Jersey banking market, and its deposits represent less than one percent of the total deposits in commercial banking organizations in the market.[2] Principals of Public and Bank are not associated with any other banking organization in the market. Based on the facts of record, consummation of this proposal would not result in any adverse effects upon competition or increase the concentration of banking resources in any relevant market. Accordingly, the Board concludes that competitive considerations are consistent with approval of this application.

The Board also has considered Public's and Bank's managerial resources, particularly with regard to Bank's previous violations of the Currency and Foreign Transactions Reporting Act (31 U.S.C. § 5311 *et seq.*) ("CFTRA") uncovered in an examination of Bank in 1985. Since the reporting violations were discovered, Bank's management and ownership have changed, and Bank has undertaken comprehensive remedial and preventative actions with regard to its reporting program.[3] In addition, a recent examination of Bank indicates that its CFTRA compliance program and reporting record since the management change is satisfactory. Based on these considerations, and all other facts of record, the Board concludes that Public's and Bank's overall compliance with CFTRA is satisfactory and that Public's and Bank's managerial resources therefore are consistent with approval of this proposal.

The financial resources of Public and Bank are consistent with approval of this application. In addition, considerations relating to the convenience and needs of the communities to be served by Public and Bank also are consistent with approval.

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

By order of the Board of Governors, effective February 28, 1989.

2. 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 parts of Fairfield County in Connecticut.

3. Based on a report of this examination, the Department of Treasury has assessed $80,000 in civil money penalties against Bank.

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

JENNIFER J. JOHNSON
Associate Secretary of the Board

United Community Corporation
BancFirst and Trust Company
Oklahoma City, Oklahoma

Order Approving Acquisition of Bank and Merger of Banking Subsidiaries

United Community Corporation, Oklahoma City, Oklahoma ("UCC"), a bank holding company within the meaning of the Bank Holding Company Act (12 U.S.C. § 1841 *et seq.*), ("BHC Act"), has applied for the Board's approval under section 3(a)(3) of the BHC Act to acquire 98.1 percent of the voting shares of BancFirst and Trust Company, Oklahoma City, Oklahoma ("BancFirst"), a *de novo* bank. In addition, BancFirst has applied for the Board's approval under the Bank Merger Act (12 U.S.C. § 1828(c)) to merge with the twelve subsidiary banks of UCC listed in Appendix A under the charter and title of BancFirst. After the proposed merger, the existing offices of the twelve subsidiary banks of UCC would become branch offices of BancFirst.

In connection with this proposal, BancFirst has applied to the Board under section 9 of the Federal Reserve Act (12 U.S.C. § 321) to become a member of the Federal Reserve System. BancFirst has also applied for the Board's approval under section 5(b) of the Bank Service Corporation Act, as amended (12 U.S.C. § 1861 *et seq.*), to acquire approximately 70 percent of the shares of United Community Mortgage Company, Oklahoma City, Oklahoma ("UCMC"), a bank service corporation engaged in mortgage banking activities and owned jointly by the twelve banks to be merged.[1]

Notice of the applications, affording interested persons the opportunity to submit comments, has been published (53 *Federal Register* 43,771 (1988)). The time for filing comments has expired, and the Board has considered the applications and all comments received in light of the factors and considerations set forth in the foregoing statutes.[2]

1. The Board has previously authorized UCMC, pursuant to the Bank Service Corporation Act, to engage directly and through its subsidiary, Citizen's Mortgage Corporation, in the activity of providing mortgage banking services. *American Bank of Commerce/United Community Mortgage Company*, 70 FEDERAL RESERVE BULLETIN 535 (1984). Upon consummation of the proposed merger, the name of UCMC would be changed to BancFirst Service Corporation.

2. The Board received two comments in opposition to this proposal, relating to a credit application of an individual customer and to the

UCC is the fourth largest banking organization in Oklahoma, controlling deposits of $660 million, representing approximately three percent of the total deposits in commercial banking organizations in the state.[3] The proposal by UCC represents a corporate reorganization under which UCC's existing banking subsidiaries would be merged into BancFirst, a *de novo* bank. Accordingly, the acquisition by UCC of BancFirst would have no adverse effects on the concentration of banking resources in Oklahoma or on competition in any relevant banking market.

Where the principal of an applicant controls other banking organizations, the Board considers the financial and managerial resources and future prospects of all the institutions comprising the chain. UCC's principal controls a number of other commercial banking organizations in Oklahoma.[4] Accordingly, the banks involved and the affiliated banking organizations have been reviewed in light of the Board's Capital Adequacy Guidelines,[5] which are generally applicable to bank holding companies and chain banking organizations with total assets of over $150 million.[6] Based upon the record, the financial and managerial resources of UCC and the affiliated banks are consistent with approval. No additional debt will be incurred in connection with the acquisition by BancFirst. Considerations relating to the convenience and needs of the communities to be served also are consistent with approval.

The Board has also considered the factors it is required to consider when approving applications for membership in the Federal Reserve System pursuant to section 9 of the Federal Reserve Act and finds those factors to be consistent with approval. In addition, the Board has considered the factors it is required to consider when acting on applications under the Bank Service Corporation Act and finds those factors to be consistent with approval. Based on the foregoing and other facts of record, and subject to resolutions of UCC and BancFirst, the Board has determined that the applications should be and hereby are approved.

The acquisition by UCC of BancFirst and the merger of UCC's twelve subsidiary banks into BancFirst 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, and BancFirst shall be opened for business not later than six months after the effective date of this Order. These time periods may be extended for good cause by the Board or by the Federal Reserve Bank of Kansas City, pursuant to delegated authority.

By order of the Board of Governors, effective February 10, 1989.

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

JENNIFER J. JOHNSON
Associate Secretary of the Board

Orders Issued Under Section 4 of the Bank Holding Company Act

The Nippon Credit Bank, Ltd. Tokyo, Japan

Order Approving Application to Acquire a Company Engaged in Certain Securities, Foreign Exchange and Financial Advisory Activities

The Nippon Credit Bank, Ltd., Tokyo, Japan ("Nippon Credit Bank"), a foreign bank subject to the Bank Holding Company Act ("BHC Act"), has applied for the Board's approval under section 4(c)(8) of the BHC Act (12 U.S.C. § 1843(c)(8)) and section 225.23 of the Board's Regulation Y (12 C.F.R. 225.23), to acquire Eastbridge Capital Inc., New York, New York ("Eastbridge"), which will engage in the following activities that the Board has determined by regulation or order to be closely related to banking and generally permissible for bank holding companies:

(1) underwriting and dealing in obligations of the United States, general obligations of states and their political subdivisions, and other obligations that a state member bank of the Federal Reserve System may underwrite and deal in ("bank-eligible securities") pursuant to 12 C.F.R. 225.25(b)(16);[1]

(2) providing transactional services with respect to foreign exchange by arranging for "swaps" among customers with complementary foreign exchange

effect of the proposal on competition in Oklahoma. In light of the facts of record of this case, the Board has determined that these comments do not warrant denial of the applications.

3. Banking data are as of December 31, 1987.

4. *See United Community Corporation*, 71 FEDERAL RESERVE BULLETIN 589 (1985). The Board considered the competitive effects of the transactions whereby common control of the organizations was established in that case and determined the affiliations did not substantially lessen competition in any relevant market.

5. 12 C.F.R. Parts 208, 225, 263.

6. The combined banking assets of the chain were $1.04 billion as of June 30, 1988.

1. Eastbridge will also engage in the following incidental activities: engaging in repurchase and reverse repurchase transactions on such securities, collateralized borrowing and lending of such securities, and providing clearing, settling, accounting, record keeping and other ancillary services to those counterparties with which it deals that do not maintain accounts with clearing agencies. *The Long-Term Credit Bank of Japan*, 74 FEDERAL RESERVE BULLETIN 573 (1988); *The Sanwa Bank, Limited*, 74 FEDERAL RESERVE BULLETIN 578 (1988).

exposures and for the execution of foreign exchange transactions pursuant to 12 C.F.R. 225.25(b)(17);
(3) providing portfolio investment advice and research and furnishing general economic information and advice, general economic statistical forecasting services and industry studies with respect to a customer's entire portfolio of bank-eligible securities in connection with and as an incident to the proposed bank-eligible securities activities, but not in connection with any of its brokerage activities, pursuant to 12 C.F.R. 225.25(b)(4)(iii) and (iv);[2]
(4) providing financial advice to state and local governments pursuant to 12 C.F.R. 225.25(b)(4)(v);
(5) purchasing and selling as agent municipal revenue bonds under limited circumstances pursuant to 12 C.F.R. 225.25(b)(15);[3]
(6) providing, on an explicit-fee basis, discretionary management of short-term monies for a small number of institutional customers;[4]
(7) providing advice in connection with merger, acquisition/divestiture and financing transactions, valuations and fairness opinions in connection with merger, acquisition and similar transactions, all for unaffiliated financial and nonfinancial institutional customers;[5]
(8) dealing in foreign exchange spot contracts for Eastbridge's own account;[6]
(9) purchasing and selling futures, forward and options contracts for foreign exchange for Eastbridge's own account for hedging purposes only in accordance with 12 C.F.R. 225.142 and providing transactional services for such activities;[7]
(10) purchasing and selling futures, forward and options contracts for bank-eligible securities for hedging purposes only in accordance with 12 C.F.R. 225.142;[8] and
(11) acting as an "introducing broker" only with respect to transactions in exchange-traded futures and options contracts on bank-eligible securities and foreign exchange.[9] Eastbridge also proposes to engage in the following activity that has not been expressly approved by Board regulation or Order: providing advice in connection with the structuring of and arranging for interest rate and currency "swaps", interest rate "caps" and similar transactions.

Notice of the application, affording interested persons an opportunity to submit comments, has been duly published (*54 Federal Register* 1,236 (1989)). The time for filing comments has expired, and the Board has considered the application and all comments received in light of the public interest factors set forth in section 4(c)(8) of the BHC Act.

Nippon Credit Bank, with total assets equivalent to approximately $110.7 billion, is the 37th largest banking organization in the world.[10] It is subject to the BHC Act by virtue of owning a New York State-licensed branch in New York and a California State-licensed agency in Los Angeles.

The Board has previously determined that all of the proposed activities, except providing advice relating to the structuring of and arranging for currency "swaps", are closely related to banking and the Board reaffirms its determinations on these activities.[11] Regarding advice on currency "swaps", most banks that provide advice relating to interest rate "swaps" also provide advice relating to currency "swaps." Additionally, providing advice relating to currency "swaps" is functionally and operationally similar to providing advice relating to the structuring of and

2. Eastbridge will disclose its interest as principal, or that of Nippon Credit Bank, whenever Eastbridge provides advice regarding a bank-eligible security that is held by it, Nippon Credit Bank, or any affiliate of Nippon Credit Bank for its own account. In conducting this activity, Eastbridge may occasionally give advice with respect to bank-ineligible securities, at times for a separate fee.

3. These circumstances would involve an institutional customer's request to Eastbridge to locate other dealers in municipal securities or other institutional customers who may wish to purchase or to sell municipal revenue bonds. Eastbridge will not purchase such securities for its own account, will not privately place such securities for issuers either as principal or agent, and will broker municipal revenue bonds only in connection with secondary trades.

4. This activity will be conducted in accordance with the limitations set forth in *Sovran Financial Corporation*, 73 FEDERAL RESERVE BULLETIN 744 (1987).

5. This activity will be conducted in accordance with the limitations on financial feasibility studies set forth in *Signet Banking Corporation*, 73 FEDERAL RESERVE BULLETIN 59 (1987).

6. *The Long-Term Credit Bank of Japan, supra. See also The Hongkong and Shanghai Banking Corporation*, 75 FEDERAL RESERVE BULLETIN 217 (1989); and *Standard and Chartered Group, Ltd.*, 38 *Federal Register* 27,552 (1973).

7. *See The Hongkong and Shanghai Banking Corporation, supra. See also Midland Bank, PLC*, 74 FEDERAL RESERVE BULLETIN 577 (1988). Nippon Credit Bank has represented that this activity will not constitute a substantial part of its foreign exchange dealing and will be an incidental activity to support positions it takes in the spot foreign exchange market.

8. *The Long-Term Credit Bank of Japan, supra.*

9. As an "introducing broker", Eastbridge would receive customer orders to purchase and to sell these contracts and pass them on to an unaffiliated futures commission merchant ("FCM") for execution, clearing and settlement. Eastbridge will not take a position as principal in such contracts and will conduct this activity in accordance with section 225.25(b)(18) of the Board's Regulation Y (12 C.F.R. 225.25(b)(18)). The Board has previously approved "introducing broker" activities as a preliminary step before engaging in FCM activities. *The Sanwa Bank, Limited, supra.*

10. Asset and banking data are as of September 30, 1988. Ranking is as of March 31, 1988.

11. Advice on interest rate "swaps" and "caps" and "similar transactions" has been previously approved by the Board in *Signet Banking Corporation, supra.* A currency "swap" is a transaction between two parties in which they agree to exchange streams of payments denominated in different currencies on one or more future dates, most commonly on the basis of predetermined fixed sums or the product of a principal multiplied by a fixed or floating interest rate.

arranging for interest rate "swaps" and interest rate "caps."[12] Both transactions have the common objectives of securing low cost funds and converting one type of risk to another, and both transactions require similar documentation. Accordingly, the Board concludes that the proposed activity is closely related to banking and similar to transactions previously approved by Board Order.

In order to approve this application, the Board must also find that performance of the proposed activities "can reasonably be expected to produce benefits to the public . . . that outweigh possible adverse effects, such as undue concentration of resources, decreased or unfair competition, conflicts of interests, or unsound banking practices." 12 U.S.C. § 1843(c)(8).

In regard to conflicts of interests, the application raises a potential conflict between Eastbridge's proposal to take positions and execute trades in foreign exchange, and section 225.25(b)(17) of the Board's Regulation Y, which prohibits a company that arranges for foreign exchange transactional services from either taking positions for its own account or executing its own trades.[13] These prohibitions are based on a potential conflict of interest in performing the combined activities of giving foreign exchange advice, taking positions in foreign exchange and executing trades.[14] Eastbridge will not, however, provide advice to customers on foreign exchange exposures or on investment in foreign currency. Furthermore, the limited extent of Eastbridge's foreign exchange dealing and execution activities, and the sophistication of its customers, who can turn to many other banks or nonbanking firms for services, minimize the potential for a conflict in the proposed combined activities.[15]

In every case involving a nonbanking acquisition by a bank holding company under section 4 of the BHC Act, the Board considers the financial condition and resources of the applicant and its subsidiaries and the effect of the transaction on these resources.[16] In accordance with the principles of national treatment and competitive equity, the Board has stated it expects a foreign bank to meet the same general standards of financial strength as domestic bank holding companies and to be able to serve as a source of strength to its United States banking operations.[17] In considering applications of foreign banking organizations, the Board has noted that foreign banks operate outside the United States in accordance with different regulatory and supervisory requirements, accounting principles, asset-quality standards, and banking practices and traditions, and that these differences make it difficult to compare the capital positions of domestic and foreign banks. In the past, the Board has addressed the complex issues involved in balancing these concerns in the context of individual applications on a case-by-case basis, making adjustments as appropriate to an applicant's capital to reflect differences in accounting treatment and regulatory practices.

The Board recently has adopted a proposal to supplement its consideration of capital adequacy with a risk-based system that is simultaneously being proposed by the member countries of the Basle Committee on Banking Regulations and Supervisory Practices and the other domestic federal banking agencies.[18] The Japanese Ministry of Finance in April of last year acted to implement for Japanese banking organizations the risk-based capital framework developed by the Basle Committee. The Board considers the Basle Committee proposal an important step toward a more consistent and equitable international norm for assessing capital adequacy. Until that framework becomes effective, however, the Board will continue to evaluate applications involving foreign banking organizations on a case-by-case basis consistent with its prior precedent.

In this case, the primary capital ratio of Nippon Credit Bank, as publicly reported, is well below the 5.5

12. In *National Courier Association v. Board of Governors*, 516 F.2d 1229 (D.C. Cir. 1975), the court concluded that an activity would be closely related to banking if it is demonstrated that, among other factors, banks generally have, in fact, provided the proposed services or that banks generally provide services that are operationally or functionally so similar to the proposed services as to equip them particularly well to provide the proposed services.

13. The Board has previously approved the provision of exchange rate information with trading activities in the same subsidiary. *See Midland Bank, PLC, supra*. The Board also notes that it has approved prior applications by bank holding companies to conduct combined activities of securities and other nonbanking activities in addition to FCM and investment advice activities in the same subsidiary. *See e.g. The Sanwa Bank, Limited, supra* (Order approving underwriting and dealing in bank-eligible securities, hedging bank-eligible securities, providing investment advice and research but not in connection with brokerage activities, providing discount brokerage services and acting as an FCM).

14. *The Hongkong and Shanghai Banking Corporation*, 69 FEDERAL RESERVE BULLETIN 221 (1983).

15. The Board has previously noted that in appropriate circumstances the sophistication of institutional customers serves to minimize concerns over conflicts of interests involved when a firm provides both advice and execution services. *The Hongkong and Shanghai Banking Corporation, supra*. *See also National Westminister Bank PLC*, 72 FEDERAL RESERVE BULLETIN 584 (1986) (Order approving the combination of investment advice and execution services activities).

16. 12 C.F.R. 225.24; *Bayerische Vereinsbank AG*, 73 FEDERAL RESERVE BULLETIN 155, 156 (1987).

17. *The Long-Term Credit Bank, supra; Sumitomo Trust & Banking Co., Ltd.*, 73 FEDERAL RESERVE BULLETIN 749 (1987); *Ljubljanska Banka-Associated Bank*, 72 FEDERAL RESERVE BULLETIN 489 (1986); *The Mitsubishi Trust and Banking Corporation*, 72 FEDERAL RESERVE BULLETIN 256 (1986); *The Industrial Bank of Japan, Ltd.*, 72 FEDERAL RESERVE BULLETIN 71 (1986); *The Mitsubishi Bank, Limited*, 70 FEDERAL RESERVE BULLETIN 518 (1984). *See also* Policy Statement on Supervision and Regulation of Foreign-Based Bank Holding Companies, Federal Reserve Regulatory Service 4–835 (1979).

18. 54 *Federal Register* 4,186 (1989).

percent minimum level specified in the Board's Capital Adequacy Guidelines. After making adjustments to reflect Japanese banking and accounting practices, however, including consideration of a portion of the unrealized appreciation in Nippon Credit Bank's portfolio of equity securities consistent with the principles in the Basle capital framework, Nippon Credit Bank's capital ratio meets United States standards.

The Board also considered several additional factors that mitigate its concern in this case. The Board notes that the application involves nonbanking activities that require a small commitment of capital. The Board notes further that Nippon Credit Bank is in compliance with the capital and other financial requirements of Japanese banking organizations. In this regard, the Board has considered as favorable factors that, in anticipation of implementation of the Basle Committee risk-based capital framework, Nippon Credit Bank has, through the issuance of common stock, increased its equity capital by the equivalent of almost $446.5 million in its latest fiscal year and that Nippon Credit Bank's capital improvement program is consistent with meeting the standards in the Basle Committee capital framework for 1990 and 1992.

Based on these and other facts of record, the Board concludes that financial considerations are consistent with approval of the application.

Consummation of the proposal would provide increased convenience to customers and gains in efficiency. In addition, the Board expects that the *de novo* entry of Eastbridge into the market for these services would increase the level of competition among providers of these services. Accordingly, the Board has determined that the performance of the proposed activities by Eastbridge can reasonably be expected to produce benefits to the public.

The Board believes that the proposal is not likely to result in decreased or unfair competition, conflicts of interests, unsound banking practices, concentration of resources, or other adverse effects. Based on the foregoing and other facts of record, the Board has determined that the balance of public interest factors that must it consider under section 4(c)(8) of the BHC Act is favorable. Accordingly, the Board has determined that the application should be, and hereby is, approved. This determination is further subject to all of the conditions set forth in the Board's Regulation Y, including sections 225.4(d) and 225.23(b) (12 C.F.R 225.4(d) and 225.23(b)), and to the Board's authority to require such modification or termination of the activities of a bank holding company or any of its subsidiaries as the Board finds necessary to assure compliance with the provisions and purposes of the BHC Act and the Board's regulations and orders issued thereunder, or to prevent evasion thereof.

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

By order of the Board of Governors, effective February 13, 1989.

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

JENNIFER J. JOHNSON
Associate Secretary of the Board

Scandinavian Bank Group plc London, United Kingdom

Order Approving Application to Engage in Financial Advisory Activities

Scandinavian Bank Group plc, London, United Kingdom ("Scandinavian"), has applied pursuant to section 4(c)(8) of the Bank Holding Company Act (12 U.S.C. § 1843(c)(8)) ("BHC Act") for approval to establish *de novo* a subsidiary, Cambridge International Partners L.P., New York, New York ("Cambridge"),[1] to act as a financial adviser in providing corporate finance advisory services, including advice concerning domestic and international mergers, acquisitions, joint ventures and divestitures, financings, and the structuring of leveraged buyouts and capital-raising vehicles.

Scandinavian is a foreign bank that is subject to section 4(c)(8) of the BHC Act pursuant to section 8(a) of the International Banking Act of 1978 (12 U.S.C. § 3106(a)) ("IBA") by virtue of its control of an agency and a branch office in the United States.

Notice of the application, affording interested persons an opportunity to submit comments on the relation of the proposed activities to banking and on the balance of public interest factors, has been duly published (53 *Federal Register* 45,821 (1988)). The time for filing comments has expired, and the Board has considered the application and all comments received in light of the public interest factors set forth in section 4(c)(8) of the BHC Act.

1. Cambridge will be established as a limited partnership. Cambridge will be owned as follows: Scandinavian will have a 50.5 percent ownership interest as a limited partner, three professional corporations formed by three members of Cambridge's management will have a 48.5 percent ownership interest as limited partners, and Cambridge International Partners, Inc. ("CIP") will have a one percent ownership interest as a general partner. Fifty-one percent of the voting shares of CIP are held by Scandinavian, and the remaining 49 percent are held by the three above-mentioned professional corporations.

Scandinavian, with total consolidated assets of $5.1 billion, is the eleventh largest international bank in London.[2] Scandinavian operates 17 offices in 14 countries and maintains a commercial paper funding subsidiary in Delaware, a branch in New York, and an agency in Los Angeles.

The Board has previously determined by Order that the proposed activities are closely related to banking and permissible for bank holding companies.[3]

Under section 4 of the BHC Act, the Board is also required to determine that the performance of the proposed activities by applicant "can reasonably be expected to produce benefits to the public . . . that outweigh possible adverse effects, such as undue concentration of resources, decreased or unfair competition, conflicts of interests, or unsound banking practices." 12 U.S.C. § 1843(c)(8).

The Board has expressed its concerns regarding conflicts of interest and related adverse effects that, absent certain limitations, may be associated with financial advisory activities. In order to address these potential adverse effects, Scandinavian has committed that:

(1) Cambridge's financial advisory activities shall not encompass the performance of routine tasks or operations for a customer on a daily or continuous basis;

(2) Disclosure will be made to each potential customer of Cambridge that Cambridge is an affiliate of Scandinavian;

(3) Advice rendered by Cambridge on an explicit fee basis will be without regard to correspondent balances maintained by a customer of Cambridge at Scandinavian or any of its depository subsidiaries; and

(4) Cambridge will not make available to Scandinavian or any of its subsidiaries confidential information received from Cambridge's clients, except with the client's consent.

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

Consummation of Scandinavian's proposal would provide added convenience to its clients. The Board expects that the *de novo* entry of Scandinavian into the market for these services would increase the level of competition among providers of these services already in operation. Accordingly, the Board concludes that the performance of the proposed activities by Scandinavian can reasonably be expected to provide benefits to the public.

The financial and managerial resources and future prospects of Scandinavian are considered consistent with approval. Moreover, there is no evidence in the record that consummation of the proposed financial advisory activities would result in any other adverse effects such as undue concentration of resources, decreased or unfair competition, conflicts of interests, or unsound banking practices.

After consideration of all the relevant facts, the Board concludes that the balance of the public interest factors that it is required to consider under section 4(c)(8) is favorable. Accordingly, based on all the facts of record and the commitments made by Scandinavian, the Board has determined that the proposed application should be, and hereby is, approved. This determination is subject to all of the conditions set forth in Regulation Y, including sections 225.4(d) and 225.23(b)(3) (12 C.F.R. 225.4(d) and 225.23(b)(3)), and to the Board's authority to require such modification or termination of the activities of a bank holding company or any of its subsidiaries as the Board finds necessary to assure compliance with, or to prevent evasion of, the provisions and purposes of the BHC Act and the Board's regulations and orders issued thereunder.

The transaction shall be made not 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 San Francisco, pursuant to delegated authority.

By order of the Board of Governors, effective February 6, 1989.

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

JENNIFER J. JOHNSON
Associate Secretary of the Board

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

PNC Financial Corp. Pittsburgh, Pennsylvania

Order Approving Acquisition of a Bank Holding Company, Bank, and Nonbanking Subsidiaries

PNC Financial Corp., Pittsburgh, Pennsylvania ("Applicant"), a bank holding company within the meaning of the Bank Holding Company Act ("Act"), has applied for the Board's approval under section 3 of the

2. All financial data are as of September 30, 1988.

3. *See The Bank of Nova Scotia*, 74 FEDERAL RESERVE BULLETIN 249 (1988); *Sovran Financial Corporation*, 73 FEDERAL RESERVE BULLETIN 744 (1987); *Signet Banking Corporation*, 73 FEDERAL RESERVE BULLETIN 59 (1987).

Act to acquire all of the voting shares of Bank of Delaware Corporation, Wilmington, Delaware ("Corporation"), and thereby to acquire indirectly Corporation's subsidiary bank, Bank of Delaware, Wilmington, Delaware.[1] Applicant also has applied for the Board's approval under section 4(c)(8) of the Act to acquire indirectly Corporation's nonbanking subsidiaries.[2]

Notice of the applications, affording opportunity for interested persons to submit comments, has been published (53 *Federal Register* 51,320 (1988)). 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(c)(8) of the Act.

Section 3(d) of the Act, the Douglas Amendment, prohibits the Board from approving an application by a bank holding company to acquire control of any bank located outside of the holding company's home state,[3] unless such acquisition is "specifically authorized by the statute laws of the State in which [the] bank is located, by language to that effect and not merely by implication." 12 U.S.C. § 1842(d). The Board has previously determined that the acquisition of a Delaware bank by a Pennsylvania bank holding company is specifically authorized by the statute laws of Delaware, subject to the applicant's obtaining the approval required pursuant to Delaware law.[4] Based on the foregoing, the Board has determined that the proposed acquisition is specifically authorized by the statute laws of Delaware and that Board approval of the proposal is not barred by the Douglas Amendment, subject to Applicant's obtaining the required approval pursuant to section 843(a) of Title 5 of the Delaware Code.[5]

Applicant, with approximately $24.3 billion in domestic deposits, is the twelfth largest commercial banking organization in the United States, with full-service banks in Delaware, Indiana, Kentucky, New Jersey, Ohio, and Pennsylvania. Applicant ranks second in deposit size in Pennsylvania, controlling 14.5 percent of total deposits in commercial banks in the state.[6] Corporation is the second largest commercial banking organization in Delaware, with domestic deposits of approximately $1.5 billion, representing approximately 24.2 percent of the total deposits in commercial banks in Delaware.

Applicant competes with Corporation in the Kent County, Delaware, banking market.[7] Applicant is the eighth largest of 10 commercial banking organizations in the market, controlling deposits of approximately $16.8 million, representing approximately 3.1 percent of total deposits in commercial banking organizations in the market ("market deposits").[8] Corporation is the second largest commercial banking organization in the market, controlling deposits of approximately $103.6 million, representing approximately 18.8 percent of market deposits. Upon consummation, Applicant would become the second largest commercial banking organization in the market, controlling deposits of approximately $120.4 million, representing approximately 21.9 percent of total market deposits. The Kent County market is considered moderately concentrated, with a Herfindahl-Hirschman Index ("HHI") of 1532, which would increase by 117 points to 1649 upon consummation of the proposal.[9] Based on the facts of record, the Board concludes that consummation of the proposal would not have a significant adverse effect on competition in the Kent County market or in any other relevant market. The Board also does not believe that the consummation of the proposal would have a significant adverse effect on probable future competitors in any relevant market.

The financial and managerial resources of Applicant and Corporation are consistent with approval. The

1. Applicant will acquire Corporation through the merger of Applicant's wholly owned subsidiary, New Financial Corp., Wilmington, Delaware, with and into Corporation. In connection with these applications, New Financial Corp. also has applied to acquire Corporation's banking and nonbanking subsidiaries.

2. Applicant has applied for approval to acquire indirectly the following nonbanking subsidiaries of Corporation, located in Wilmington, Delaware: Del Vest, Inc., and thereby engage in providing portfolio investment advisory services for institutional and individual customers pursuant to section 225.25(b)(4) of the Board's Regulation Y; and Christina Life Insurance Company, and thereby engage in underwriting, as reinsurer, credit life, disability, accident, and health insurance policies written in conjunction with loans made by Bank of Delaware, pursuant to section 225.25(b)(8).

3. 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.

4. *Meridian Bancorp, Inc.*, 74 FEDERAL RESERVE BULLETIN 51 (1988).

5. In addition to obtaining approval from the Delaware State Bank Commissioner, Applicant must obtain approval from the Pennsylvania Department of Banking, 7 P.S. § 116(h).

6. State banking data are as of June 30, 1988.

7. The Kent County market is comprised of Kent County, Delaware.

8. Market data are as of June 30, 1987.

9. Under the revised Department of Justice Merger Guidelines (49 *Federal Register* 26,823 (June 29, 1984)), a market in which the post-merger HHI is between 1000 and 1800 is considered moderately concentrated. In such markets, the Department of Justice is unlikely to challenge a merger or acquisition resulting in an HHI between 1000 and 1800 if the increase in the HHI is less than 100 points. The Department of Justice has informed the Board that a bank merger or acquisition generally will not be challenged (in the absence of other factors indicating anticompetitive effects) unless the post-merger HHI is at least 1800 and the merger increases the HHI by at least 200 points. The Department of Justice has stated that the higher than normal HHI thresholds for screening bank mergers for anticompetitive effects implicitly recognizes the competitive effect of limited purpose lenders and other non-depository financial entities.

Board notes that the transaction would be accomplished through an exchange of shares without any significant impact on Applicant's capital position.

In considering the convenience and needs of the communities to be served, the Board has taken into account the record of Applicant under the Community Reinvestment Act ("CRA") (12 U.S.C. § 2901 *et seq.*). The CRA requires the federal bank supervisory agencies to encourage financial institutions to help meet the credit needs of the local communities in which they are chartered consistent with the safe and sound operation of such institutions. To accomplish this end, the CRA requires the appropriate federal supervisory authority, in connection with its examination of an institution, to "assess the institution's record of meeting the credit needs of its entire community, including low- and moderate-income neighborhoods, consistent with the safe and sound operation of such institution." 12 U.S.C. § 2903. The Board is required to "take such record into account in its evaluation" of applications by bank holding companies under section 3 of the Act to acquire additional banks. *See* 12 C.F.R. 225.13(b)(3).

The Board's experience over the years in examining bank performance under the CRA has indicated that institutions with effective programs to help meet community credit needs share a number of elements. These institutions maintain outreach programs that include procedures to permit effective communication between the bank and various segments of the community and formalized methods for incorporating findings regarding community credit needs into the development and delivery of products and services. They monitor institutional performance at the senior management or board of director level and periodically evaluate new opportunities for innovative lending programs, such as home mortgage and neighborhood residential rehabilitation lending and similar programs, designed to meet the credit needs of their designated community, including those of low- and moderate-income persons. An effective program also includes the use of specifically designed marketing and advertising plans to stimulate public awareness of the bank's services throughout the community, including low- and moderate-income neighborhoods, as well as support of community development projects and programs.

In the Board's opinion, financial institutions that make meeting their responsibilities under the CRA a part of their management and operational structure are best able to accomplish the goals of the statute. In that light, the Board expects banking organizations to have addressed their CRA responsibilities before the submission of applications to the Board. This is in accord with the requirements of the CRA, under which an institution's record of performance in helping to meet the credit needs of its entire community is a critical factor in determining whether the institution has lived up to its responsibilities under the statute.

The Board has received a protest from the Philadelphia Association of Community Organizations for Reform Now ("ACORN") regarding the CRA performance of Provident National Bank, Philadelphia, Pennsylvania ("Provident"), one of Applicant's subsidiary banks. Specifically, ACORN alleges that, since Applicant's 1983 acquisition of Provident, Provident has:

> (i) decreased its level of real estate lending to low- and moderate-income and minority communities;
> (ii) abandoned its participation in government housing programs; and
> (iii) located its Philadelphia branches in a manner that shows a lack of interest in minority and low-income communities. As a result, ACORN alleges, Provident has failed to meet local credit needs with respect to low- and moderate-income and minority neighborhoods in its community.[10]

Applicant has submitted a detailed response to the comments made by ACORN. In this regard, Applicant and ACORN have met privately on several occasions in an attempt to clarify and resolve the concerns raised by ACORN. These meetings, however, did not produce a resolution of all of the differences between Applicant and ACORN.[11]

The Board has carefully considered the record of this application, including the comments of ACORN (including comments submitted on February 22 and 23, 1989) and Applicant's response, in light of the requirements of the CRA and the implementing regulations of the federal banking agencies. Based upon this record, the Board believes that Applicant has a satisfactory program in place to ensure that its subsidiary banks, including Provident, carry out their re-

10. In addition, ACORN alleges that Applicant's application does not take into account the lending needs of low- and moderate-income residents of Delaware. The Board believes, however, that Applicant's CRA record evidences Applicant's commitment to meet its responsibilities under the CRA to help meet the credit needs of the low- and moderate-income residents of all of its subsidiary banks' communities. The Board expects Applicant to ensure that its CRA policies and programs are fully implemented at the Bank of Delaware.

11. ACORN has also requested that the Board order a public meeting and public hearing. Although section 3(b) of the Act does not require a public meeting or hearing in this instance, the Board may, in any case, order such proceedings. In the Board's view, the parties have had ample opportunity to present their arguments in writing and to respond to one another's submissions. Moreover, Applicant and ACORN have had private meetings to discuss these issues. In light of these facts, the Board has determined that the record has been developed through these proceedings and that a public meeting or hearing would serve no useful purpose in this case. Accordingly, ACORN's request for a public meeting and hearing is hereby denied.

sponsibilities under the CRA to serve the convenience and needs of their communities, including low- and moderate-income and minority neighborhoods, and that its subsidiary banks' CRA performance is consistent with approval of the application. The Board notes that, with one exception, Applicant's 23 subsidiary banks (including Provident) have each received satisfactory ratings from their primary regulators in examinations of their CRA performance.[12]

In light of ACORN's protest, the Board has given careful attention to the CRA record of Provident. Provident was examined by the Office of the Comptroller of the Currency in January 1988 and received a satisfactory rating for its CRA performance. In addition, the record of this application shows that Applicant has developed a comprehensive program that establishes standards for its subsidiary banks to ascertain community credit needs, to respond to those needs through products and services, and to properly evaluate its success in meeting those needs. In accordance with that policy, Provident personnel establish personal contacts, visit neighborhoods, and hold meetings with community leaders and government officials in order to ascertain the credit needs of their communities and to communicate with members of their communities regarding the credit services they provide. In addition, officers serve as board or committee members for community organizations and attend community educational programs.

Provident's Board of Directors and senior management officials participated in formulating Provident's CRA policies and regularly review Provident's CRA performance. Provident has a CRA Management Committee, headed by the CRA Compliance Officer, which monitors and assesses Provident's CRA performance, develops and recommends policy on key CRA issues, assures implementation of policy decisions, formulates Provident's responses to CRA needs and opportunities, and encourages and enhances Provident's position in the communities in which it operates. The Committee studies quarterly reviews of community credit program activity, regular small business lending updates, and real estate development loans in relation to low- and moderate-income areas of the delineated community. In addition, the Board of Directors receives periodic reports on Provident's CRA activities from the Committee and reviews all proposals for branch closings or relocations to determine that they do not conflict with Provident's CRA goals.

Provident makes use of a variety of marketing strategies to communicate the availability of credit and other bank products. For example, Provident regularly uses eight city-wide newspapers, including ethnic publications, and two suburban newspapers to reach all segments of the community. In addition, Provident has actively participated and invested in local community development and redevelopment projects and programs.

The record also shows that Provident has made loans in all segments of its community, including low- and moderate-income and minority neighborhoods. An analysis of Provident's Home Mortgage Disclosure Act ("HMDA") data indicates that a substantial percentage of its residential real estate loans were made in low- and moderate-income and minority communities. While the number of loans made in these communities has dropped somewhat since 1983, the decline is less than that exhibited by other HMDA reporters.[13] The Board also notes that the proportion of Provident's residential real estate loans extended in these areas closely parallels the actual percentage of low- and moderate-income and minority census tracts in Provident's delineated community.[14] Accordingly, the Board finds that Provident's record of residential real estate lending in low- to moderate-income neighborhoods is consistent with its responsibilities under the CRA.

In response to ACORN's comment with respect to Provident's participation in government housing programs, Provident has agreed to provide FHA/VA mortgages either directly or through an affiliate and to participate in Pennsylvania Housing Finance Agency

12. The Board notes that the most recent examination of a recently acquired subsidiary bank of Applicant in Ohio identified certain deficiencies in the bank's CRA performance. Although a formal response to the examination is not yet due, Applicant already has initiated steps to correct the noted deficiencies. The Federal Reserve Bank of Cleveland will, as part of the supervisory process, carefully monitor the bank's response to the examination report to ensure that the bank addresses the weaknesses noted and improves its CRA performance.

13. In addition, the Office of the Comptroller of the Currency found no evidence of discrimination in Provident's lending practices at its January 1988 examination.

14. ACORN alleges that Applicant's sale in 1986 of its mortgage subsidiary, The Kissell Company, is further evidence of its lending shift away from originating residential mortgage credit. ACORN contends that this divestiture has adversely affected the number of real estate loans made by Provident. Applicant argues that it chose to sell Kissell at a premium price rather than invest a substantial amount to develop the data processing required to upgrade its servicing and compete with major nonbank entrants into the mortgage servicing market. In addition, Kissell had suffered key management losses, rendering it necessary to rebuild Kissell's management structure. In light of these considerations and Provident's satisfactory real estate lending record, the Board does not find that the sale of Kissel has had a serious adverse effect on Provident's service to the convenience and needs of its community.

ACORN also alleges that patterns of home mortgage lending by Provident since 1985 show a tendency to exclude lending from neighborhoods where property values had not risen between 1981 and 1985. ACORN provides no data to support this allegation, however, and the Board finds nothing in the record to indicate that Provident has excluded lending from such neighborhoods.

loans. Provident has also set several specific objectives with respect to Provident's lending in low- and moderate-income and minority neighborhoods in response to comments by ACORN.[15]

Provident maintains nine branches in low- and moderate-income tracts within the Philadelphia PMSA, two of which have been opened since 1986. In addition, Provident is presently renovating existing branch offices in those areas to update their facilities. Provident has closed no branches in low- or moderate-income or minority neighborhoods to date, although a branch located in Coatesville, Pennsylvania, has been scheduled to close effective March 17, 1989. The Board notes that Provident has in place a written corporate policy concerning branch closings that requires management to notify the public in advance of any proposed closing and to conduct an analysis of the impact of the branch closing on the local community, alternative branch service options, and the profitability of the branch. The decision to close the Coatesville branch was made in accordance with this policy. The Coatesville branch's customers have been notified of the effective date of the closing and informed that continuation of services will be provided by another Coatesville branch less than a mile away.

Based upon the record, the Board concludes that Provident's CRA program contains all of the elements that the Board has identified in the past as demonstrating an affirmative, ongoing commitment on the part of an institution to meet its responsibilities under the CRA to help meet the credit needs of its entire community. Provident's program has been in place for a number of years, and the record shows that Provident has an established record of satisfactory performance under the program, including service to the credit needs of low- and moderate-income neighborhoods of its community. Based on the foregoing and other facts of record, the Board has determined that convenience and needs considerations, including those related to Applicant's and Provident's record of service to their entire communities, are consistent with approval.

Applicant competes with Corporation in the provision of investment advisory services. The market for this activity has numerous competitors and is regional to national in scope. In addition, neither Applicant nor Corporation is a dominant participant in the market for investment advisory services. Accordingly, the Board concludes that this proposal will not have any significant adverse effect upon existing or probable future competition in any relevant market for these services.

Furthermore, there is no evidence in the record to indicate that approval of this proposal would result in undue concentration of resources, decreased or unfair competition, conflicts of interests, unsound banking practices, or other adverse effects on the public interest. Accordingly, the Board has determined that the balance of public interest factors it must consider under section 4(c)(8) of the Act is favorable and consistent with approval of the applications to acquire the nonbanking subsidiaries of Corporation.

Based on the foregoing and other facts of record, the Board has determined that consummation of the transaction would be in the public interest and that the applications under sections 3 and 4 of the Act should be, and hereby are, approved, subject to Applicant's obtaining the approval of the Delaware State Bank Commissioner and the Pennsylvania Department of Banking. The acquisition of Corporation 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. The determinations as to Applicant's nonbanking activities are subject to all of the conditions contained in Regulation Y, including those in sections 225.4(d) and 225.23(b)(3) (12 C.F.R. 225.4(d) and 225.23(b)(3)), and to the Board's authority to require such modification or termination of the activities of a holding company or any of its subsidiaries as the Board finds necessary to assure compliance

15. Provident has undertaken to implement the following policies:
• Effective February 1, 1989, Provident will increase its maximum loan-to-value ratio to 95 percent.
• Provident will begin to include food stamps and LIHEAP funds as sources of income in evaluating an applicant's ability to repay a loan.
• Provident will continue to develop other means of facilitating residential support in low- and moderate-income communities through such means as land trusts, swing financing, donating vacant properties, use of sweat equity, and other types of purchase/rehabilitation financing.
• Provident will afford applicants an opportunity to provide an explanation accompanying an application. In cases where a creditor has refused to accept payment, or a bill is in dispute, an applicant may deposit in an escrow account all funds that would have been paid, and the applicant will be considered to have an acceptable payment record. In any event, the emphasis will be on the applicant's credit experience in the 12 months prior to application. The absence of a credit history will not be an obstacle to borrowing; such applicants may be asked to supply substitute records of payment.
• Provident will implement a procedure whereby mortgage loan denials will be reviewed by a senior officer of the bank and an analysis will be prepared and reviewed by Provident's CRA Management Committee on a quarterly basis.
• Provident will make a limited quantity of uninsured mortgage loans for specified purposes.
• Provident will aim to increase its residential mortgage volume in low- and moderate-income communities for 1989 by 100 percent over its 1987 performance to a level of approximately $6.3 million and minimally maintain that level for the next five years.

ACORN has suggested that Provident offer conventional loans at two percent, rather than one percent, below market rates and that Applicant provide ACORN with a direct grant of $50,000 to operate its programs. Provident has declined to incorporate ACORN's suggestions in its CRA program.

with the provisions and purposes of the Act and the Board's regulations and orders issued thereunder, or to prevent evasion thereof.

By order of the Board of Governors, effective February 27, 1989.

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

JENNIFER J. JOHNSON
Associate Secretary of the Board

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	Bank(s)	Reserve Bank	Effective date
Baldwin Bancshares, Inc., Milledgeville, Georgia	First National Bank of Baldwin County, Milledgeville, Georgia	Atlanta	February 6, 1989
Chandlerville Bancshares, Inc., Chandlerville, Illinois	Peoples State Bank of Chandlerville, Chandlerville, Illinois	Chicago	February 6, 1989
CitNat Bancorp, Inc., Urbana, Ohio	The Citizens National Bank of Urbana, Urbana, Ohio	Cleveland	February 6, 1989
Citizens Investment Co., Inc., Glenville, Minnesota	Frost State Bank, Frost, Minnesota	Minneapolis	January 31, 1989
CNB Bancshares, Inc., Evansville, Indiana	Bank of St. Helens, Shively, Kentucky	St. Louis	January 31, 1989
Adam Bank Group, Inc., Bryan, Texas	First American Bank, Bryan, Texas	Dallas	February 9, 1989
First Commerce Bancshares, Inc., Lincoln, Nebraska Stuart Family Partnership, Lincoln, Nebraska Catherine Stuart Schmoker Family Partnership, Lincoln, Nebraska James Stuart, Jr. Family Partnership, Lincoln, Nebraska Scott Stuart Family Partnership, Lincoln, Nebraska	Lincoln Bank South, Lincoln, Nebraska	Kansas City	February 22, 1989
First Community Bank, Inverness, Florida	First Community Bank, Inverness, Florida	Atlanta	February 10, 1989
First of America Bank Corporation, Kalamazoo, Michigan	Antrim Financial Corporation, Mancelona, Michigan	Chicago	February 16, 1989

Section 3—Continued

Applicant	Bank(s)	Reserve Bank	Effective date
First of America Bank Corporation, Kalamazoo, Michigan First of America Bancorporation-Illinois, Inc., Libertyville, Illinois	Whiteside County Bank, Morrison, Illinois	Chicago	February 1, 1989
First of Searcy, Inc., Searcy, Arkansas	Baxter County Bancshares, Inc., Mountain Home, Arkansas	St. Louis	February 9, 1989
First National Bancshares of Winfield, Inc., Winfield, Kansas	Butler Financial Corp., Inc., Douglass, Kansas	Kansas City	February 10, 1989
First Tuttle Bancorp, Inc., Tuttle, Oklahoma	First National Bank of Tuttle, Tuttle, Oklahoma	Kansas City	February 22, 1989
First Wisconsin Corporation, Milwaukee, Wisconsin	Stillwater Holding Company, Stillwater, Minnesota	Chicago	January 30, 1989
Four County Bancshares, Inc., Allentown, Georgia	The Four County Bank, Allentown, Georgia	Atlanta	February 14, 1989
The George Washington Banking Corporation, Alexandria, Virginia	The George Washington National Bank (in organization), Alexandria, Virginia	Richmond	February 10, 1989
Jason Bankshares, Inc., Offerle, Kansas	The Bucklin State Bank, Bucklin, Kansas	Kansas City	January 27, 1989
Johnson Heritage Bancorp, Ltd., Racine, Wisconsin	Rock County Bancorp, Janesville, Wisconsin	Chicago	February 10, 1989
Jorgenson Holding Company, Kenmare, North Dakota	The Citizens State Bank at Mohall, Mohall, North Dakota	Minneapolis	February 2, 1989
JTNB Bancorp, Inc., Jim Thorpe, Pennsylvania	Jim Thorpe National Bank, Jim Thorpe, Pennsylvania	Philadelphia	February 7, 1989
Lower Rio Grande Valley Bancshares, Inc., Employee Stock Option Plan, La Feria, Texas	Lower Rio Grande Valley Bancshares, Inc., La Feria, Texas	Dallas	February 16, 1989
Magna Group, Inc., Belleville, Illinois MCB Acquisition Company, Belleville, Illinois	New Holland Farmers Bank, New Holland, Illinois Magna Bank of Lincoln, N.A., Lincoln, Illinois	St. Louis	February 6, 1989
Marshall & Ilsley Corporation, Milwaukee, Wisconsin	M&I Greater Waukesha Bank, Pewaukee, Wisconsin	Chicago	February 17, 1989
MidConn Bancorp, Inc., Kensington, Connecticut	MidConn Bank, Kensington, Connecticut	Boston	February 6, 1989
Mineral King Bancorp, Inc., Visalia, California	Mineral King National Bank, Visalia, California	San Francisco	February 13, 1989
Old National Bancorp, Evansville, Indiana	Morganfield National Service Corp., Morganfield, Kentucky	St. Louis	February 17, 1989
Old National Bancorp, Evansville, Indiana	The First National Bank of Harrisburg, Harrisburg, Illinois	St. Louis	February 17, 1989

Section 3—Continued

Applicant	Bank(s)	Reserve Bank	Effective date
Panhandle Aviation, Inc., Clarinda, Iowa	Humboldt Investment, Inc., Humboldt, Iowa	Chicago	February 7, 1989
Peoples Investment Corporation, Cuba, Missouri	Peoples Bank of Steelville, Steelville, Missouri	St. Louis	February 7, 1989
Sweet Water State Bancshares, Inc., Sweet Water, Alabama	Sweet Water State Bank, Sweet Water, Alabama	Atlanta	February 6, 1989
Union Bancorporation, Defiance, Iowa	Defiance State Bank, Defiance, Iowa	Chicago	February 15, 1989
Union Planters Corporation, Memphis, Tennessee	Cumberland City Bank, Cumberland City, Tennessee	St. Louis	February 17, 1989
Wellington Bancorp, Inc., *Springfield, Illinois*	Community Bank, *Hoopeston, Illinois*	Chicago	February 6, 1989
Western Bancshares, Inc., Coos Bay, Oregon	Western Bank, Coos Bay, Oregon	San Francisco	February 15, 1989

Section 4

Applicant	Nonbanking Activity/Company	Reserve Bank	Effective date
Barnett Banks, Inc., Jacksonville, Florida	Barnett Bond Service, Inc., Jacksonville, Florida	Atlanta	February 3, 1989
CB&T Bancshares, Inc., Columbus, Georgia	Calumet Financial Associates, Inc., Columbus, Georgia	Atlanta	February 8, 1989
Chesapeake Bank Corporation, Chesapeake, Virginia	South Norfolk Loan Corporation, Chesapeake, Virginia	Richmond	February 16, 1989
United Bancshares of Nebraska, Inc., Omaha, Nebraska	Fremont Computer Services, Inc., Omaha, Nebraska	Kansas City	February 17, 1989
Wood Lake Bancorporation, Inc., Wood Lake, Minnesota	Simonson Insurance Agency, Hanley Falls, Minnesota	Minneapolis	February 17, 1989

Sections 3 and 4

Applicant	Nonbanking Activity/Company	Reserve Bank	Effective date
Eastern Savings Bancorp, Inc., Lynn, Massachusetts Eastern Bank, Lynn, Massachusetts Family Bancorp, Haverhill, Massachusetts	Eastern Bank & Trust Company, Salem, Massachusetts	Boston	February 17, 1989

Applications Approved Under Bank Merger Act

By Federal Reserve Banks

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

Applicant	Bank(s)	Reserve Bank	Effective date
Sovran Bank/Memphis, Memphis, Tennessee	First National Bank of Collierville, Collierville, Tennessee	St. Louis	February 16, 1989

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.

Securities Industry Association v. Board of Governors, No. 89–1127 (D.C. Cir. filed February 16, 1989).

American Land Title Association v. Board of Governors, No. 88–1872 (D.C. Cir., filed December 16, 1988).

MCorp v. Board of Governors, No. CA3–88–2693-F (N.D. Tex., filed October 28, 1988).

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

VanDyke v. Board of Governors, No. 88–5280 (8th Cir., filed July 13, 1988).

Whitney v. United States, et al., No. CA3–88–1596-H (N.D. Tex., filed July 7, 1988).

Baugh v. Board of Governors, No. C88–3037 (N.D. Iowa, filed April 8, 1988).

Bonilla v. Board of Governors, No. 88–1464 (7th Cir., filed March 11, 1988).

Cohen v. Board of Governors, No. 88–1061 (D.N.J., filed March 7, 1988).

Stoddard v. Board of Governors, No. 88–1148 (D.C. Cir., filed February 25, 1988).

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

National Association of Casualty & Surety Agents, et al., v. Board of Governors, Nos. 87–1644, 87–1801, 88–1001 88–1206, 88–1245, 88–1270 (D.C. Cir., filed Nov. 4, Dec. 21, 1987, Jan. 4, March 18, March 30, April 7, 1988).

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

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

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

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

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

Financial and Business Statistics

NOTE. *The following tables may have some discontinuities in historical data for some series beginning with the March 1989 issue: 1.10, 1.17, 1.20, 1.21, 1.22, 1.23, 1.24, 1.25, 1.26, 1.28, 1.30, 1.31, 1.32, 1.35, 1.36, 1.37, 1.39, 1.40, 1.41, 1.42, 1.43, 1.45, 1.46, 1.47, 1.48, 1.50, 1.53, 1.54, 1.55, 1.56, 2.11, 2.14, 2.15, 2.16, 2.17, 3.14, and 3.21. For a more detailed explanation of the changes, see the announcement on pages 288–89 of this* BULLETIN.

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

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

Monetary and credit aggregates	1988[r]				1988[r]				1989
	Q1	Q2	Q3	Q4	Sept.	Oct.	Nov.	Dec.	Jan.
Reserves of depository institutions[2]									
1 Total	3.5	5.8	4.3	−.7	−1.9	−.8	2.0	−1.5	−8.4
2 Required	2.9	7.2	4.0	−1.4	−2.3	−2.6	.8	.1	−10.7
3 Nonborrowed	1.5	−6.5	2.5	5.3	6.4	10.3	−9.5	22.1	−7.6
4 Monetary base[3]	8.1	7.4	6.7	5.0	5.9	5.7	3.9	5.0	4.1
Concepts of money, liquid assets, and debt[4]									
5 M1	3.2	6.4	5.2	2.3	1.9	2.7	1.8	5.5	−6.0
6 M2	6.1	6.9	3.8	3.7	2.1	2.8	6.7	5.0	−1.1
7 M3	6.8	7.2	5.6	5.0	2.7	5.4	6.9	5.7	1.5
8 L	6.6	8.5	7.2	6.1	2.0	5.9	8.5	10.5	n.a.
9 Debt	8.2	8.7	8.6	8.2	8.9	7.5	8.2	7.5	n.a.
Nontransaction components									
10 In M2[5]	7.2	7.1	3.3	4.2	2.1	2.9	8.4	4.8	.6
11 In M3 only[6]	9.1	8.3	12.2	9.8	4.8	14.8	7.8	8.2	10.7
Time and savings deposits									
Commercial banks									
12 Savings[7]	7.1	10.4	7.9	4.0	.7	−2.2	18.9	−1.9	−10.4
13 Small-denomination time[8]	13.4	12.9	11.6	18.0	17.8	20.6	15.3	18.3	21.8
14 Large-denomination time[9,10]	6.3	9.1	18.2	13.1	14.4	14.3	6.7	13.0	17.4
Thrift institutions									
15 Savings[7]	−1.3	2.6	2.1	−2.5	−2.7	−4.7	−1.7	−1.2	−9.2
16 Small-denomination time	20.5	12.5	5.4	6.6	8.8	7.7	5.4	1.8	4.4
17 Large-denomination time[9]	13.0	9.2	3.9	7.9	22.1	7.7	2.7	−2.4	6.3
Debt components[4]									
18 Federal	8.0	8.2	7.3	7.9	12.2	5.1	6.7	7.6	n.a.
19 Nonfederal	8.2	8.9	9.0	8.3	7.8	8.2	8.7	7.4	n.a.
20 Total loans and securities at commercial banks[11]	5.3	11.0	7.3	4.4	−.7	7.1	6.0	.1	2.5

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

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

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

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

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

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

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

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

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

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

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

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

7. Excludes MMDAs.

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

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

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

11. Changes calculated from figures shown in table 1.23.

1.11 RESERVES OF DEPOSITORY INSTITUTIONS AND RESERVE BANK CREDIT

Millions of dollars

Factors	Monthly averages of daily figures			Weekly averages of daily figures for week ending						
	1988		1989	1988			1989			
	Nov.	Dec.	Jan.	Dec. 14	Dec. 21	Dec. 28	Jan. 4	Jan. 11	Jan. 18	Jan. 25
SUPPLYING RESERVE FUNDS										
1 **Reserve Bank credit**	**258,858**	**263,823**	**264,482**	**262,357**	**263,885**	**264,494**	**270,106**	**268,011**	**262,812**	**261,033**
2 U.S. government securities[1]	229,131	234,567	235,128	233,266	234,972	234,552	238,002	236,983	233,808	233,420
3 Bought outright	228,390	233,606	233,851	232,906	234,480	232,881	233,504	234,526	233,808	232,989
4 Held under repurchase agreements	741	961	1,277	360	492	1,671	4,498	2,457	0	431
5 Federal agency obligations	7,332	7,565	7,702	7,414	7,117	7,918	9,431	8,736	6,966	7,084
6 Bought outright	7,106	7,041	6,923	7,066	7,018	7,010	6,966	6,966	6,966	6,903
7 Held under repurchase agreements	226	524	779	348	99	908	2,465	1,770	0	181
8 Acceptances	0	0	0	0	0	0	0	0	0	0
9 Loans	2,883	1,749	1,570	2,012	1,332	1,362	2,280	1,816	1,879	1,174
10 Float	1,186	1,436	877	1,342	1,760	1,771	1,323	1,816	933	68
11 Other Federal Reserve assets	18,327	18,507	19,205	18,323	18,704	18,891	19,071	18,659	19,225	19,286
12 Gold stock[2]	11,061	11,061	11,057	11,062	11,061	11,060	11,060	11,057	11,057	11,056
13 Special drawing rights certificate account	5,018	5,018	5,018	5,018	5,018	5,018	5,018	5,018	5,018	5,018
14 Treasury currency outstanding	18,718	18,769	18,831	18,759	18,773	18,787	18,801	18,815	18,829	18,843
ABSORBING RESERVE FUNDS										
15 Currency in circulation	240,343	244,540	243,398	243,390	244,312	246,598	247,768	245,887	243,652	241,475
16 Treasury cash holdings[2]	401	399	406	404	398	397	395	400	408	409
Deposits, other than reserve balances, with Federal Reserve Banks										
17 Treasury	5,268	5,364	8,303	4,807	6,462	4,500	8,459	6,242	4,368	9,360
18 Foreign	246	248	257	237	270	183	299	251	247	281
19 Service-related balances and adjustments	1,746	2,014	1,999	2,073	1,789	1,849	1,979	2,183	1,884	1,950
20 Other	380	369	402	310	371	412	491	332	330	381
21 Other Federal Reserve liabilities and capital	7,955	8,040	7,913	7,930	8,130	8,120	7,777	7,975	7,847	8,025
22 Reserve balances with Federal Reserve Banks[3]	37,316	37,697	36,710	38,044	37,004	37,299	37,816	39,632	38,981	34,068
	End-of-month figures			Wednesday figures						
	1988		1989	1988			1989			
	Nov.	Dec.	Jan.	Dec. 14	Dec. 21	Dec. 28	Jan. 4	Jan. 11	Jan. 18	Jan. 25
SUPPLYING RESERVE FUNDS										
23 **Reserve Bank credit**	**261,971**	**269,748**	**261,056**	**261,481**	**263,705**	**269,055**	**273,893**	**269,463**	**262,485**	**266,298**
24 U.S. government securities[1]	232,702	238,422	232,933	231,552	235,293	237,268	240,122	237,875	233,131	235,988
25 Bought outright	228,701	233,662	232,933	231,313	234,839	233,562	233,025	234,916	233,131	232,974
26 Held under repurchase agreements	4,001	4,760	0	239	454	3,706	7,097	2,959	0	3,014
27 Federal agency obligations	8,384	9,067	6,819	7,092	7,052	8,402	10,530	8,637	6,966	8,087
28 Bought outright	7,102	6,966	6,819	7,018	7,017	6,967	6,966	6,966	6,966	6,819
29 Held under repurchase agreements	1,282	2,101	0	74	35	1,435	3,564	1,671	0	1,268
30 Acceptances	0	0	0	0	0	0	0	0	0	0
31 Loans	2,328	2,170	863	2,197	961	1,603	1,994	1,814	1,314	2,018
32 Float	389	1,286	798	2,058	1,695	2,691	2,576	1,955	1,914	569
33 Other Federal Reserve assets	18,168	18,803	19,643	18,582	18,704	19,091	18,671	19,182	19,160	19,636
34 Gold stock[2]	11,059	11,060	11,056	11,061	11,060	11,060	11,060	11,057	11,056	11,056
35 Special drawing rights certificate account	5,018	5,018	5,018	5,018	5,018	5,018	5,018	5,018	5,018	5,018
36 Treasury currency outstanding	18,743	18,799	18,855	18,771	18,785	18,799	18,813	18,827	18,841	18,855
ABSORBING RESERVE FUNDS										
37 Currency in circulation	242,472	247,649	239,581	243,951	245,411	247,745	247,647	244,862	243,191	240,425
38 Treasury cash holdings[2]	402	395	412	398	398	390	396	408	408	412
Deposits, other than reserve balances, with Federal Reserve Banks										
39 Treasury	5,198	8,656	11,766	4,638	10,156	5,822	8,814	4,806	3,650	13,769
40 Foreign	251	347	279	233	201	216	189	177	245	204
41 Service-related balances and adjustments	1,613	1,605	1,589	1,612	1,594	1,594	1,605	1,606	1,591	1,594
42 Other	398	548	390	300	318	556	330	578	365	749
43 Other Federal Reserve liabilities and capital	8,058	7,683	7,746	7,695	7,674	8,070	7,860	7,828	7,634	7,961
44 Reserve balances with Federal Reserve Banks[3]	38,399	37,742	34,221	37,504	32,816	39,539	41,943	44,101	40,316	36,113

1. *Includes* securities loaned—fully guaranteed by U.S. government securities pledged with Federal Reserve Banks—and *excludes* any securities sold and scheduled to be bought back under matched sale-purchase transactions.
2. Revised for periods between October 1986 and April 1987. At times during this interval, outstanding gold certificates were inadvertently in excess of the gold stock. Revised data not included in this table are available from the Division of Research and Statistics, Banking Section.
3. Excludes required clearing balances and adjustments to compensate for float.

NOTE. For amounts of currency and coin held as reserves, see table 1.12.

1.12 RESERVES AND BORROWINGS Depository Institutions[1]

Millions of dollars

Reserve classification	Monthly averages[9]									
	1985	1986	1987	1988						1989
	Dec.	Dec.	Dec.	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
1 Reserve balances with Reserve Banks[2]	27,620	37,360	37,673	37,992	36,911	37,213	36,421	36,997	37,830	36,475
2 Total vault cash[3]	22,953	24,079	26,155	26,479	26,895	26,726	27,196	26,746	27,197	28,376
3 Vault[4]	20,522	22,199	24,449	24,763	25,054	24,940	25,494	25,410	25,909	26,993
4 Surplus[5]	2,431	1,879	1,706	1,715	1,841	1,786	1,702	1,335	1,291	1,383
5 Total reserves[6]	48,142	59,560	62,123	62,756	61,965	62,153	61,915	62,407	63,736	63,468
6 Required reserves	47,085	58,191	61,094	61,749	61,012	61,181	60,853	61,287	62,696	62,323
7 Excess reserve balances at Reserve Banks[7]	1,058	1,369	1,029	1,007	953	972	1,062	1,119	1,040	1,145
8 Total borrowings at Reserve Banks	1,318	827	777	3,440	3,241	2,839	2,299	2,861	1,716	1,662
9 Seasonal borrowings at Reserve Banks	56	38	93	376	423	421	332	186	130	76
10 Extended credit at Reserve Banks[8]	499	303	483	2,538	2,653	2,059	1,781	2,322	1,244	1,046
	Biweekly averages of daily figures for weeks ending									
	1988							*1989*		
	Oct. 5	Oct. 19	Nov. 2	Nov. 16	Nov. 30	Dec. 14	Dec. 28	Jan. 11	Jan. 25	Feb. 8
11 Reserve balances with Reserve Banks[2]	36,527	36,678	36,078	38,143	35,981	38,363	37,106	38,724	36,514	32,260
12 Total vault cash[3]	26,924	27,612	26,825	26,221	27,259	26,316	27,927	27,904	27,414	31,488
13 Vault[4]	25,063	25,806	25,309	25,022	25,814	25,128	26,525	26,679	26,243	29,318
14 Surplus[5]	1,861	1,806	1,516	1,200	1,446	1,188	1,403	1,225	1,171	2,170
15 Total reserves[6]	61,590	62,484	61,387	63,165	61,795	63,491	63,631	65,403	62,757	61,578
16 Required reserves	60,442	61,509	60,260	61,562	61,160	62,515	62,550	64,256	61,786	60,035
17 Excess reserve balances at Reserve Banks[7]	1,148	975	1,128	1,603	635	976	1,081	1,147	972	1,543
18 Total borrowings at Reserve Banks	2,438	2,204	2,353	3,233	2,562	2,014	1,347	2,048	1,527	1,270
19 Seasonal borrowings at Reserve Banks	433	337	285	180	178	131	137	94	61	78
20 Extended credit at Reserve Banks[8]	1,704	1,681	1,931	2,838	1,863	1,529	968	1,208	1,028	792

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

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

Averages of daily figures, in millions of dollars

Maturity and source	1988 week ending Monday								
	Apr. 18	Apr. 25	May 2	May 9	May 16	May 23	May 30	June 6	June 13
Federal funds purchased, repurchase agreements, and other selected borrowing in immediately available funds									
From commercial banks in the United States									
1 For one day or under continuing contract	72,737	67,632	64,874	66,700	63,447	63,088	64,248	71,726	70,428
2 For all other maturities	10,492	10,738	10,683	10,857	11,208	9,894	10,388	10,816	11,780
From other depository institutions, foreign banks and foreign official institutions, and U.S. government agencies									
3 For one day or under continuing contract	36,509	31,334	28,596	32,399	33,207	34,265	32,706	33,220	34,264
4 For all other maturities	7,543	8,080	9,081	8,146	8,205	7,486	7,534	7,130	7,740
Repurchase agreements on U.S. government and federal agency securities in immediately available funds									
Brokers and nonbank dealers in securities									
5 For one day or under continuing contract	13,659	13,648	13,705	15,256	16,394	16,467	17,941	17,697	17,216
6 For all other maturities	14,777	16,544	17,892	17,652	17,513	15,092	15,342	14,767	15,953
All other customers									
7 For one day or under continuing contract	25,461	24,743	25,708	24,271	25,333	25,536	25,573	25,070	25,553
8 For all other maturities	10,279	9,705	9,324	9,238	9,444	9,348	10,648	10,049	10,136
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	34,565	34,092	34,774	34,480	32,915	31,181	33,269	37,361	34,293
10 To all other specified customers[2]	13,321	13,252	14,708	14,540	13,607	13,154	13,410	15,880	16,959

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

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

1.14 FEDERAL RESERVE BANK INTEREST RATES

Percent per year

Current and previous levels

Federal Reserve Bank	Adjustment credit and Seasonal credit[1]			Extended credit[2]						
				First 30 days of borrowing			After 30 days of borrowing[3]			
	On 2/28/89	Effective date	Previous rate	On 2/28/89	Effective date	Previous rate	On 2/28/89	Effective date	Previous rate	Effective date
Boston	7	2/24/89	6½	7	2/24/89	6½	9.90	2/23/89	9.70	2/9/89
New York		2/24/89			2/24/89			2/23/89		2/9/89
Philadelphia		2/24/89			2/24/89			2/23/89		2/9/89
Cleveland		2/24/89			2/24/89			2/23/89		2/9/89
Richmond		2/24/89			2/24/89			2/23/89		2/9/89
Atlanta		2/24/89			2/24/89			2/23/89		2/9/89
Chicago		2/24/89			2/24/89			2/23/89		2/9/89
St. Louis		2/24/89			2/24/89			2/23/89		2/9/89
Minneapolis		2/24/89			2/24/89			2/23/89		2/9/89
Kansas City		2/24/89			2/24/89			2/23/89		2/9/89
Dallas		2/27/89			2/27/89			2/23/89		2/9/89
San Francisco	7	2/24/89	6½	7	2/24/89	6½	9.90	2/23/89	9.70	2/9/89

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	6–6½	6½
20	6½	6½
May 11	6½–7	7
12	7	7
July 3	7–7¼	7¼
10	7¼	7¼
Aug. 21	7¾	7¾
Sept. 22	8	8
Oct. 16	8–8½	8½
20	8½	8½
Nov. 1	8½–9½	9½
3	9½	9½
1979—July 20	10	10
Aug. 17	10–10½	10½
20	10½	10½
Sept. 19	10½–11	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

Effective date	Range (or level)— All F.R. Banks	F.R. Bank of N.Y.
1980—July 28	10–11	10
29	10	10
Sept. 26	11	11
Nov. 17	12	12
Dec. 5	12–13	13
1981—May 5	13–14	14
8	14	14
Nov. 2	13–14	13
6	13	13
Dec. 4	12	12
1982—July 20	11½–12	11½
23	11½	11½
Aug. 2	11–11½	11
3	11	11
16	10½	10½
27	10–10½	10
30	10	10
Oct. 12	9½–10	9½
13	9½	9½
Nov. 22	9–9½	9
26	9	9
Dec. 14	8½–9	9
15	8½–9	8½
17	8½	8½

Effective date	Range (or level)— All F.R. Banks	F.R. Bank of N.Y.
1984—Apr. 9	8½–9	9
13	9	9
Nov. 21	8½–9	8½
26	8½	8½
Dec. 24	8	8
1985—May 20	7½–8	7½
24	7½	7½
1986—Mar. 7	7–7½	7
10	7	7
Apr. 21	6½–7	6½
July 11	6	6
Aug. 21	5½–6	5½
22	5½	5½
1987—Sept. 4	5½–6	6
11	6	6
1988—Aug. 9	6–6½	6½
11	6½	6½
1989—Feb. 24	6½–7	7
27	7	7
In effect February 28, 1989	7	7

1. Adjustment credit is available on a short-term basis to help depository institutions meet temporary needs for funds that cannot be met through reasonable alternative sources. After May 19, 1986, the highest rate established for loans to depository institutions may be charged on adjustment credit loans of unusual size that result from a major operating problem at the borrower's facility.

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

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

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

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

In 1980 and 1981, the Federal Reserve applied a surcharge to short-term adjustment credit borrowings by institutions with deposits of $500 million or more that had borrowed in successive weeks or in more than four weeks in a calendar quarter. A 3 percent surcharge was in effect from Mar. 17, 1980 through May 7, 1980. There was no surcharge until Nov. 17, 1980, when a 2 percent surcharge was adopted; the surcharge was subsequently raised to 3 percent on Dec. 5, 1980, and to 4 percent on May 5, 1981. The surcharge was reduced to 3 percent effective Sept. 22, 1981, and to 2 percent effective Oct. 12, 1981. As of Oct. 1, 1981 the formula for applying the surcharge was changed from a calendar quarter to a moving 13-week period. The surcharge was eliminated on Nov. 17, 1981.

1.15 RESERVE REQUIREMENTS OF DEPOSITORY INSTITUTIONS[1]

Percent of deposits

Type of deposit, and deposit interval[2]	Depository institution requirements after implementation of the Monetary Control Act	
	Percent of deposits	Effective date
Net transaction accounts[3,4]		
$0 million–$41.5 million	3	12/20/88
More than $41.5 million	12	12/20/88
Nonpersonal time deposits[5]		
By original maturity		
Less than 1½ years	3	10/6/83
1½ years or more	0	10/6/83
Eurocurrency liabilities		
All types	3	11/13/80

1. Reserve requirements in effect on Dec. 31, 1988. Required reserves must be held in the form of deposits with Federal Reserve Banks or vault cash. Nonmembers may maintain reserve balances with a Federal Reserve Bank indirectly on a pass-through basis with certain approved institutions. For previous reserve requirements, see earlier editions of the *Annual Report* and of the FEDERAL RESERVE BULLETIN. Under provisions of the Monetary Control Act, depository institutions include commercial banks, mutual savings banks, savings and loan associations, credit unions, agencies and branches of foreign banks, and Edge corporations.

2. The Garn–St Germain Depository Institutions Act of 1982 (Public Law 97–320) requires that $2 million of reservable liabilities (transaction accounts, nonpersonal time deposits, and Eurocurrency liabilities) of each depository institution be subject to a zero percent reserve requirement. The Board is to adjust the amount of reservable liabilities subject to this zero percent reserve requirement each year for the succeeding calendar year by 80 percent of the percentage increase in the total reservable liabilities of all depository institutions, measured on an annual basis as of June 30. No corresponding adjustment is to be made in the event of a decrease. On Dec. 20, 1988, the exemption was raised from $3.2 million to $3.4 million. In determining the reserve requirements of depository institutions, the exemption shall apply in the following order: (1) net NOW accounts (NOW accounts less allowable deductions); (2) net other transaction accounts; and (3) nonpersonal time deposits or Eurocurrency liabilities starting with those with the highest reserve ratio. With respect to NOW accounts and other transaction accounts, the exemption applies only to such accounts that would be subject to a 3 percent reserve requirement.

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

4. The Monetary Control Act of 1980 requires that the amount of transaction accounts against which the 3 percent reserve requirement applies be modified annually by 80 percent of the percentage increase in transaction accounts held by all depository institutions, determined as of June 30 each year. Effective Dec. 20, 1988 for institutions reporting quarterly and Dec. 27, 1988 for institutions reporting weekly, the amount was increased from $40.5 million to $41.5 million.

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

1.17 FEDERAL RESERVE OPEN MARKET TRANSACTIONS[1]

Millions of dollars

Type of transaction	1986	1987	1988	1988						
				June	July	Aug.	Sept.	Oct.	Nov.	Dec.
U.S. TREASURY SECURITIES										
Outright transactions (*excluding matched transactions*)										
Treasury bills										
1 Gross purchases	22,604	18,983	8,223	0	515	0	1,280	375	3,599	1,125
2 Gross sales	2,502	6,051	587	0	0	0	0	0	0	0
3 Exchange	0	0	0	0	0	0	0	0	0	0
4 Redemptions	1,000	9,029	2,200	0	0	0	0	0	0	0
Others within 1 year										
5 Gross purchases	190	3,659	2,176	0	0	0	0	0	0	1,084
6 Gross sales	0	300	0	0	0	0	0	0	0	0
7 Maturity shift	18,674	21,504	23,854	1,384	1,033	3,932	1,368	1,669	5,264	1,750
8 Exchange	−20,180	−20,388	−24,588	−1,826	−87	−4,296	−1,646	−916	−2,391	−1,703
9 Redemptions	0	70	0	0	0	0	0	0	0	0
1 to 5 years										
10 Gross purchases	893	10,231	5,485	0	0	0	0	0	0	1,824
11 Gross sales	0	452	800	0	0	0	0	0	0	0
12 Maturity shift	−17,058	−17,975	−17,720	−1,384	−997	−1,821	−1,368	−1,544	−3,088	−1,750
13 Exchange	16,985	18,938	22,515	1,826	0	3,971	1,646	639	2,091	1,703
5 to 10 years										
14 Gross purchases	236	2,441	1,579	0	0	0	0	0	0	562
15 Gross sales	0	0	175	0	0	0	0	0	0	0
16 Maturity shift	−1,620	−3,529	−5,946	0	−36	−2,111	0	−125	−2,145	0
17 Exchange	2,050	950	1,797	0	87	325	0	276	300	0
Over 10 years										
18 Gross purchases	158	1,858	1,398	0	0	0	0	0	0	432
19 Gross sales	0	0	0	0	0	0	0	0	0	0
20 Maturity shift	0	0	−188	0	0	0	0	0	−31	0
21 Exchange	1,150	500	275	0	0	0	0	0	0	0
All maturities										
22 Gross purchases	24,081	37,170	18,863	0	515	0	1,280	375	3,599	5,028
23 Gross sales	2,502	6,803	1,562	0	0	0	0	0	0	0
24 Redemptions	1,000	9,099	2,200	0	0	0	0	0	0	0
Matched transactions										
25 Gross sales	927,999	950,923	1,168,484	73,708	81,979	124,875	113,886	98,804	98,618	93,650
26 Gross purchases	927,247	950,935	1,168,142	72,966	83,464	123,220	113,384	97,897	100,680	93,584
Repurchase agreements[2]										
27 Gross purchases	170,431	314,621	152,613	10,520	22,978	0	35,800	4,715	17,867	15,575
28 Gross sales	160,268	324,666	151,497	5,334	28,164	0	30,191	7,727	16,463	14,815
29 Net change in U.S. government securities	29,988	11,234	15,872	4,444	−3,186	−1,655	6,386	−3,544	7,064	5,721
FEDERAL AGENCY OBLIGATIONS										
Outright transactions										
30 Gross purchases	0	0	0	0	0	0	0	0	0	0
31 Gross sales	0	0	0	0	0	0	0	0	0	0
32 Redemptions	398	276	587	0	67	10	0	75	14	135
Repurchase agreements[2]										
33 Gross purchases	31,142	80,353	57,259	5,083	12,355	0	12,107	2,223	4,763	7,672
34 Gross sales	30,521	81,350	56,471	2,843	14,594	0	8,225	4,454	5,132	6,853
35 Net change in federal agency obligations	222	−1,274	198	2,239	−2,306	−10	3,882	−2,306	−383	683
36 Total net change in System Open Market Account	**30,212**	**9,961**	**16,070**	**6,683**	**−5,492**	**−1,665**	**10,268**	**−5,850**	**6,681**	**6,404**

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

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

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

Millions of dollars

Account	Wednesday					End of month		
	1988	1989				1988		1989
	Dec. 28	Jan. 4	Jan. 11	Jan. 18	Jan. 25	Nov.	Dec.	Jan.
	Consolidated condition statement							
ASSETS								
1 Gold certificate account	11,060	11,060	11,057	11,056	11,056	11,059	11,060	11,057
2 Special drawing rights certificate account	5,018	5,018	5,018	5,018	5,018	5,018	5,018	5,018
3 Coin	408	382	399	425	457	404	395	480
Loans								
4 To depository institutions	1,603	1,994	1,814	1,314	2,018	2,328	2,170	863
5 Other	0	0	0	0	0	0	0	0
6 Acceptances held under repurchase agreements	0	0	0	0	0	0	0	0
Federal agency obligations								
7 Bought outright	6,967	6,966	6,966	6,966	6,819	7,102	6,966	6,819
8 Held under repurchase agreements	1,435	3,564	1,671	0	1,268	1,282	2,101	0
U.S. Treasury securities								
Bought outright								
9 Bills	112,782	112,145	114,036	112,251	112,094	111,724	112,782	112,076
10 Notes	90,850	90,950	90,950	90,950	90,950	87,484	90,950	90,928
11 Bonds	29,930	29,930	29,930	29,930	29,930	29,493	29,930	29,929
12 Total bought outright[2]	233,562	233,025	234,916	233,131	232,974	228,701	233,662	232,933
13 Held under repurchase agreements	3,706	7,097	2,959	0	3,014	4,001	4,760	0
14 Total U.S. Treasury securities	237,268	240,122	237,875	233,131	235,988	232,702	238,422	232,933
15 **Total loans and securities**	**247,273**	**252,646**	**248,326**	**241,411**	**246,093**	**243,414**	**249,659**	**240,615**
16 Items in process of collection	11,136	13,015	8,532	13,745	6,605	6,121	8,739	9,959
17 Bank premises	746	750	751	751	752	743	750	754
Other assets								
18 Denominated in foreign currencies[3]	9,455	9,130	9,236	9,551	9,860	9,565	9,129	9,824
19 All other[4]	8,890	8,791	9,195	8,858	9,024	8,096	8,924	9,065
20 **Total assets**	**293,986**	**300,792**	**292,514**	**290,815**	**288,865**	**284,420**	**293,674**	**286,771**
LIABILITIES								
21 Federal Reserve notes	229,744	229,612	226,841	225,183	222,439	224,535	229,640	221,619
Deposits								
22 To depository institutions	41,133	43,548	45,707	41,907	37,707	40,012	39,347	35,810
23 U.S. Treasury—General account	5,822	8,814	4,806	3,650	13,769	5,198	8,656	11,766
24 Foreign—Official accounts	216	189	177	245	204	251	347	279
25 Other	556	330	578	365	749	398	548	390
26 **Total deposits**	**47,727**	**52,881**	**51,268**	**46,167**	**52,429**	**45,859**	**48,898**	**48,245**
27 Deferred credit items	8,445	10,439	6,577	11,831	6,036	6,020	7,453	9,161
28 Other liabilities and accrued dividends[5]	3,487	3,421	3,206	3,007	3,349	3,221	3,457	3,079
29 **Total liabilities**	**289,403**	**296,353**	**287,892**	**286,188**	**284,253**	**279,635**	**289,448**	**282,104**
CAPITAL ACCOUNTS								
30 Capital paid in	2,113	2,114	2,114	2,115	2,117	2,106	2,113	2,117
31 Surplus	2,047	2,113	2,113	2,113	2,113	2,047	2,113	2,112
32 Other capital accounts	423	212	395	399	382	632	0	438
33 **Total liabilities and capital accounts**	**293,986**	**300,792**	**292,514**	**290,815**	**288,865**	**284,420**	**293,674**	**286,771**
34 MEMO: Marketable U.S. Treasury securities held in custody for foreign and international accounts	232,926	233,779	230,643	230,210	228,413	235,131	234,733	229,817
	Federal Reserve note statement							
35 Federal Reserve notes outstanding issued to bank	271,942	271,326	270,803	270,765	270,349	270,577	271,492	269,942
36 LESS: Held by bank	42,198	41,714	43,962	45,582	47,910	46,042	41,852	48,323
37 Federal Reserve notes, net	229,744	229,612	226,841	225,183	222,439	224,535	228,640	221,619
Collateral held against notes net:								
38 Gold certificate account	11,060	11,060	11,056	11,056	11,056	11,059	11,060	11,057
39 Special drawing rights certificate account	5,018	5,018	5,018	5,018	5,018	5,018	5,018	5,018
40 Other eligible assets	0	0	0	0	0	0	0	0
41 U.S. Treasury and agency securities	213,666	213,534	210,767	209,109	206,365	208,458	213,562	205,544
42 **Total collateral**	**229,744**	**229,612**	**226,841**	**225,183**	**222,439**	**224,535**	**229,640**	**221,619**

1. Some of these data also appear in the Board's H.4.1 (503) release. For address, see inside front cover.
2. Includes securities loaned—fully guaranteed by U.S. Treasury securities pledged with Federal Reserve Banks—and excludes securities sold and scheduled to be bought back under matched sale-purchase transactions.
3. Valued monthly at market exchange rates.
4. Includes special investment account at the Federal Reserve Bank of Chicago in Treasury bills maturing within 90 days.
5. Includes exchange-translation account reflecting the monthly revaluation at market exchange rates of foreign-exchange commitments.

1.19 FEDERAL RESERVE BANKS Maturity Distribution of Loan and Security Holdings

Millions of dollars

Type and maturity groupings	Wednesday					End of month		
	1988	1989				1988		1989
	Dec. 28	Jan. 4	Jan. 11	Jan. 18	Jan. 25	Nov. 30	Dec. 30	Jan. 31
1 Loans—Total	1,602	1,994	1,814	1,314	2,018	2,328	2,170	863
2 Within 15 days	1,592	1,981	1,799	1,307	2,017	2,289	2,152	854
3 16 days to 90 days	10	13	15	7	1	39	18	9
4 91 days to 1 year	0	0	0	0	0	0	0	0
5 Acceptances—Total	0	0	0	0	0	0	0	0
6 Within 15 days	0	0	0	0	0	0	0	0
7 16 days to 90 days	0	0	0	0	0	0	0	0
8 91 days to 1 year	0	0	0	0	0	0	0	0
9 U.S. Treasury securities—Total	237,268	240,122	237,875	233,131	235,988	232,702	238,422	232,933
10 Within 15 days[1]	12,562	16,446	13,200	9,162	10,213	12,583	9,935	5,457
11 16 days to 90 days	54,917	54,256	55,234	57,032	56,994	53,659	58,448	58,957
12 91 days to 1 year	74,986	74,664	74,684	72,050	73,894	74,475	75,236	73,405
13 Over 1 year to 5 years	55,326	55,279	55,279	55,277	55,277	53,501	55,326	55,524
14 Over 5 years to 10 years	12,568	12,568	12,569	12,701	12,701	12,007	12,568	12,681
15 Over 10 years	26,909	26,909	26,909	26,909	26,909	26,477	26,909	26,909
16 Federal agency obligations—Total	8,402	10,530	8,637	6,966	8,087	8,384	9,067	6,819
17 Within 15 days[1]	1,605	3,564	1,865	195	1,364	1,557	2,271	136
18 16 days to 90 days	697	837	742	742	825	675	697	835
19 91 days to 1 year	1,492	1,522	1,435	1,435	1,353	1,457	1,492	1,303
20 Over 1 year to 5 years	3,419	3,418	3,406	3,405	3,359	3,413	3,418	3,359
21 Over 5 years to 10 years	1,000	1,000	1,000	1,000	997	1,093	1,000	997
22 Over 10 years	189	189	189	189	189	189	189	189

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

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

Billions of dollars, averages of daily figures

Item	1985 Dec.	1986 Dec.	1987 Dec.	1988 Dec.	1988 June	July	Aug.	Sept.	Oct.	Nov.	Dec.	1989 Jan.
	Seasonally adjusted											
ADJUSTED FOR CHANGES IN RESERVE REQUIREMENTS[2]												
1 **Total reserves[3]**	**47.26**	**57.46**	**58.72**	**60.98**	**60.64**	**61.24**	**61.09**	**61.00**	**60.96**	**61.06**	**60.98**	**60.55**
2 Nonborrowed reserves	45.94	56.63	57.94	59.26	57.55	57.80	57.85	58.16	58.66	58.19	59.26	58.89
3 Nonborrowed reserves plus extended credit[4]	46.44	56.93	58.43	60.51r	60.11	60.34	60.50	60.21	60.44	60.52	60.51r	59.93
4 Required reserves	46.20	56.09	57.69	59.94	59.75	60.23	60.14	60.02	59.89	59.94	59.94	59.40
5 Monetary base[5]	218.29r	240.82r	258.06r	275.81r	268.27r	270.50r	271.14r	272.47r	273.77r	274.66r	275.81r	276.75
	Not seasonally adjusted											
6 **Total reserves[3]**	**48.27**	**58.70**	**60.02**	**62.43r**	**60.68**	**61.47**	**60.59**	**60.65**	**60.54**	**61.15**	**62.43r**	**62.28**
7 Nonborrowed reserves	46.95	57.87	59.25	60.71	57.60	58.03	57.35	57.82	58.24	58.29	60.71	60.62
8 Nonborrowed reserves plus extended credit[4]	47.45	58.18	59.73	61.96r	60.15	60.57	60.00	59.87	60.02	60.62	61.96r	61.67
9 Required reserves	47.21	57.33	58.99	61.39r	59.79	60.46	59.64	59.68	59.48	60.04	61.39r	61.13
10 Monetary base[5]	221.49	244.55	262.05	279.89r	269.44	272.41	271.73	271.57	272.44	275.48	279.89	278.10
NOT ADJUSTED FOR CHANGES IN RESERVE REQUIREMENTS[6]												
11 **Total reserves[3]**	**48.14**	**59.56**	**62.12**	**63.74**	**61.99**	**62.76**	**61.97**	**62.15**	**61.92**	**62.41**	**63.74**	**63.47**
12 Nonborrowed reserves	46.82	58.73	61.35	62.02	58.91	59.32	58.72	59.31	59.62	59.55	62.02	61.81
13 Nonborrowed reserves plus extended credit[4]	47.32	59.04	61.83	63.27r	61.46	61.85	61.38	61.37	61.40	61.87	63.27r	62.86
14 Required reserves	47.08	58.19	61.09	62.70	61.10	61.75	61.01	61.18	60.85	61.29	62.70	62.33
15 Monetary base[5]	223.53	247.71	266.16	283.18	272.65	275.59	275.03	274.87	275.78	278.65	283.18	281.32

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

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

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

4. Extended credit consists of borrowing at the discount window under the terms and conditions established for the extended credit program to 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.

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

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

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

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

Billions of dollars, averages of daily figures

Item[2]	1985 Dec.[r]	1986 Dec.[r]	1987 Dec.[r]	1988 Dec.[r]	1988[r] Oct.	1988[r] Nov.	1988[r] Dec.	1989 Jan.
				Seasonally adjusted				
1 M1	620.5	725.9	752.3	790.2	785.4	786.6	790.2	786.3
2 M2	2,567.4	2,811.2	2,909.5	3,071.8	3,042.2	3,059.1	3,071.8	3,069.0
3 M3	3,201.7	3,494.9	3,677.1	3,917.3	3,876.5	3,898.9	3,917.3	3,922.1
4 L	3,830.6	4,137.1	4,340.2	4,688.9	4,615.6	4,648.1	4,688.9	n.a.
5 Debt	6,719.9	7,576.8	8,282.2	8,992.5	8,876.2	8,937.0	8,992.5	n.a.
M1 components								
6 Currency[3]	167.8	180.5	196.4	211.8	209.7	210.5	211.8	213.4
7 Travelers checks[4]	5.9	6.5	7.1	7.6	7.4	7.5	7.6	7.6
8 Demand deposits[5]	267.3	303.2	288.3	288.6	288.9	287.7	288.6	284.0
9 Other checkable deposits[6]	179.5	235.8	260.4	282.3	279.4	280.9	282.3	281.3
Nontransactions components								
10 In M2[7]	1,946.9	2,085.3	2,157.2	2,281.5	2,256.7	2,272.5	2,281.5	2,282.7
11 In M3 only[8]	634.3	683.7	767.6	845.6	834.4	839.8	845.6	853.1
Savings deposits[9]								
12 Commercial Banks	125.0	155.8	178.5	192.5	189.8	192.8	192.5	190.8
13 Thrift institutions	176.6	215.2	237.8	238.8	239.4	239.0	238.8	237.0
Small-denomination time deposits[10]								
14 Commercial Banks	383.3	364.6	385.3	443.0	430.9	436.4	443.0	451.1
15 Thrift institutions	499.2	489.3	528.8	582.2	578.8	581.4	582.2	584.4
Money market mutual funds								
16 General purpose and broker-dealer	176.5	208.0	221.1	239.6	231.3	237.4	239.6	242.0
17 Institution-only	64.5	84.4	89.6	87.6	84.6	87.4	87.6	89.3
Large-denomination time deposits[11]								
18 Commercial Banks[12]	285.1	288.8	325.4	365.1	359.2	361.2	365.1	370.4
19 Thrift institutions	151.5	150.1	162.0	172.9	172.8	173.2	172.9	173.8
Debt components								
20 Federal debt	1,585.3	1,805.8	1,956.1	2,113.7	2,088.7	2,100.4	2,113.7	n.a.
21 Nonfederal debt	5,134.6	5,771.1	6,326.0	6,878.8	6,787.4	6,836.6	6,878.8	n.a.
				Not seasonally adjusted				
22 M1	633.5	740.4	766.4	804.3	782.1	788.3	804.3	793.0
23 M2	2,576.2	2,821.1	2,918.3	3,079.5	3,038.3	3,057.7	3,079.5	3,079.3
24 M3	3,213.3	3,507.4	3,688.1	3,927.1	3,874.2	3,904.0	3,927.1	3,929.6
25 L	3,843.7	4,152.0	4,354.5	4,702.7	4,611.5	4,656.1	4,702.7	n.a.
26 Debt	6,710.2	7,561.0	8,264.2	8,968.3	8,842.1	8,894.8	8,968.3	n.a.
M1 components								
27 Currency[3]	170.2	183.0	199.3	214.9	209.0	211.3	214.9	211.8
28 Travelers checks[4]	5.5	6.0	6.5	6.9	7.5	7.1	6.9	7.0
29 Demand deposits[5]	276.9	314.0	298.6	298.8	288.8	290.0	298.8	290.5
30 Other checkable deposits[6]	180.9	237.4	262.0	283.7	276.9	279.8	283.7	283.7
Nontransactions components								
31 M2[7]	1,942.7	2,080.7	2,151.9	2,275.1	2,256.2	2,269.4	2,275.1	2,286.3
32 M3 only[8]	637.1	686.3	769.8	847.7	835.9	846.4	847.7	850.3
Money market deposit accounts								
33 Commercial Banks	332.8	379.6	358.8	352.4	353.0	354.1	352.4	348.3
34 Thrift institutions	180.7	192.9	167.5	150.3	154.5	152.6	150.3	146.8
Savings deposits[9]								
35 Commercial Banks	123.7	154.2	176.6	190.3	190.2	192.2	190.3	189.2
36 Thrift institutions	174.8	212.7	234.8	235.6	240.7	238.2	235.6	233.5
Small-denomination time deposits[10]								
37 Commercial Banks	384.0	365.3	386.1	444.1	431.3	437.7	444.1	453.1
38 Thrift institutions	499.9	489.8	529.1	582.4	579.3	581.8	582.4	588.2
Money market mutual funds								
39 General purpose and broker-dealer	176.5	208.0	221.1	239.6	231.3	237.4	239.6	242.0
40 Institution-only	64.5	84.4	89.6	87.6	84.6	87.4	87.6	89.3
Large-denomination time deposits[11]								
41 Commercial Banks[12]	285.4	289.1	325.8	365.8	360.8	362.3	365.8	370.1
42 Thrift institutions	151.8	150.7	163.0	174.0	174.7	174.9	174.0	174.9
Debt components								
43 Federal debt	1,583.7	1,803.9	1,954.1	2,111.5	2,068.9	2,089.8	2,111.5	n.a.
44 Nonfederal debt	5,126.4	5,757.2	6,310.1	6,856.8	6,773.2	6,805.0	6,856.8	n.a.

For notes see following page.

NOTES TO TABLE 1.21

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

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

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

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

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

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

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

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

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

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

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

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

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

9. Savings deposits exclude MMDAs.

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

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

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

1.22 BANK DEBITS AND DEPOSIT TURNOVER[1]

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

Bank group, or type of customer	1985[2]	1986[2]	1987[2]	1988					
				June	July	Aug.	Sept.	Oct.	Nov.
DEBITS TO	Seasonally adjusted								
Demand deposits[3]									
1 All insured banks	156,091.8	188,346.0	217,116.2	230,198.8	224,512.7	228,898.2	227,617.3	235,980.5	238,497.5
2 Major New York City banks	70,585.8	91,397.3	104,496.3	111,402.1	107,336.7	110,150.0	108,741.8	114,876.4	112,071.8
3 Other banks	85,506.0	96,948.8	112,619.8	118,796.6	117,176.0	118,748.2	118,875.5	121,104.1	126,425.7
4 ATS-NOW accounts[4]	1,823.5	2,182.5	2,402.7	2,786.0	2,570.4	2,963.6	2,871.2	2,820.2	2,897.2
5 Savings deposits[5]	384.9	403.5	526.5	597.1	583.3	609.6	578.6	521.3	574.9
DEPOSIT TURNOVER									
Demand deposits[3]									
6 All insured banks	500.3	556.5	612.1	649.8	622.7	645.8	651.0	659.7	676.6
7 Major New York City banks	2,196.9	2,498.2	2,670.6	2,911.0	2,789.6	2,939.3	3,102.4	3,086.1	3,034.6
8 Other banks	305.7	321.2	357.0	376.0	363.8	374.6	377.9	377.9	400.6
9 ATS-NOW accounts[4]	15.8	15.6	13.8	14.8	13.5	15.6	15.1	14.8	15.1
10 Savings deposits[5]	3.2	3.0	3.1	3.2	2.9	3.2	3.1	2.8	3.1
DEBITS TO	Not seasonally adjusted								
Demand deposits[3]									
11 All insured banks	156,052.5	188,506.7	217,125.1	241,133.2	217,350.7	237,459.0	224,089.2	227,485.2	228,743.0
12 Major New York City banks	70,559.2	91,500.1	104,518.8	117,287.7	103,561.2	112,654.6	107,115.7	111,019.4	108,689.1
13 Other banks	85,493.2	97,006.7	112,606.2	123,845.5	113,789.6	124,804.4	116,973.5	116,465.8	120,053.9
14 ATS-NOW accounts[4]	1,826.4	2,184.6	2,404.8	2,851.4	2,536.6	2,828.0	2,951.1	2,805.4	2,714.1
15 MMDA[6]	1,223.9	1,609.4	1,954.2	2,557.1	2,399.0	2,530.0	2,409.4	2,325.8	2,539.7
16 Savings deposits[5]	385.3	404.1	526.8	598.3	566.2	615.9	570.1	540.9	523.7
DEPOSIT TURNOVER									
Demand deposits[3]									
17 All insured banks	499.9	556.7	612.3	679.5	599.9	681.6	642.9	39.8	643.3
18 Major New York City banks	2,196.3	2,499.1	2,674.9	3,121.4	2,660.7	3,170.3	3,046.4	3,059.1	2,998.6
19 Other banks	305.6	321.2	356.9	390.3	351.9	398.9	373.3	364.8	375.9
20 ATS-NOW accounts[4]	15.8	15.6	13.8	15.2	13.4	15.1	15.6	14.9	14.3
21 MMDA[6]	4.0	4.5	5.3	7.2	6.7	7.2	6.9	6.7	7.3
22 Savings deposits[5]	3.2	3.0	3.1	3.2	3.0	3.3	3.1	2.9	2.8

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

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

2. Annual averages of monthly figures.

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

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

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

6. Money market deposit accounts.

1.23 LOANS AND SECURITIES All Commercial Banks[1]

Billions of dollars; averages of Wednesday figures

Category	1988											1989
	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.r	Jan.
	Seasonally adjusted											
1 **Total loans and securities**[2]	**2,264.1**	**2,281.3**	**2,304.7**	**2,328.5**	**2,348.4**	**2,360.8**	**2,374.9**	**2,373.6**	**2,387.5**	**2,398.1**	**2,398.3**	**2,403.3**
2 U.S. government securities	336.4	340.2	343.8	346.5	350.5	348.0	350.5	352.5	355.1	356.8	360.9	360.8
3 Other securities	193.7	195.7	196.6	196.1	196.5	196.8	196.4	194.2	195.4	194.8	190.9	186.2
4 Total loans and leases[2]	1,734.0	1,745.4	1,764.3	1,786.0	1,801.5	1,815.9	1,827.9	1,826.8	1,836.9	1,846.5	1,846.5	1,856.3
5 Commercial and industrial	569.3	568.6	578.1	586.3	592.4	598.3	599.4	597.1	600.9	599.2	599.9	605.4
6 Bankers acceptances held[3]	4.3	4.7	4.6	4.4	4.4	4.4	4.6	4.5	4.2	4.2	3.9	4.2
7 Other commercial and industrial	564.9	564.0	573.5	582.0	588.1	593.9	594.7	592.7	596.7	595.0	596.0	601.2
8 U.S. addressees[4]	556.3	555.8	565.5	575.1	581.3	587.4	588.4	586.4	590.6	589.5	589.6	594.8
9 Non-U.S. addressees[4]	8.7	8.2	8.1	6.9	6.8	6.5	6.3	6.3	6.1	5.5	6.4	6.4
10 Real estate	599.2	604.9	611.3	618.6	625.0	631.4	638.7	644.7	652.0	659.2	663.2	668.2
11 Individual	333.0	337.0	340.4	342.8	344.4	345.3	347.0	349.1	349.6	350.8	353.6	355.4
12 Security	42.0r	41.2r	39.6r	40.0r	39.5r	38.7r	40.0r	36.0r	37.8r	37.0r	36.3	36.4
13 Nonbank financial institutions	31.8	31.2	30.4	30.9	30.6	31.0	30.8	29.8r	29.6r	29.5r	29.6	30.5
14 Agricultural	29.5	29.3	29.4	29.6	29.6	29.6	29.5	29.5	29.7r	30.3	30.8	31.3
15 State and political subdivisions	51.0	50.1	49.6	49.4	49.2	48.9	48.3	48.1	49.0r	48.3r	46.8	44.7
16 Foreign banks	7.4	7.8	8.3	7.9	7.9	8.2	8.1	7.3	7.6r	8.2r	7.4	7.5
17 Foreign official institutions	5.1	5.1	5.1	5.1	5.0	5.0	5.2	5.2	5.2r	5.4	5.6	5.7
18 Lease financing receivables	25.3	25.4	25.7	26.0	26.5	27.2	27.3	27.7	28.1	28.1	28.1	28.2
19 All other loans	40.4r	44.8r	46.3r	49.3r	51.2r	52.2r	53.8r	52.2r	47.5r	50.6r	45.4	43.0
	Not seasonally adjusted											
20 **Total loans and securities**[2]	**2,268.8**	**2,281.6**	**2,305.9**	**2,325.2**	**2,344.6**	**2,350.7**	**2,363.5**	**2,370.3**	**2,382.0**	**2,397.3**	**2,416.3**	**2,416.7**
21 U.S. government securities	341.5	342.0	343.4	344.9	347.0	347.1	350.5	352.7	352.8	356.9	360.8	362.4
22 Other securities	194.4	195.3	196.2	196.1	196.0	195.5	196.3	194.3	194.3	194.1	191.4	188.9
23 Total loans and leases[2]	1,732.9	1,744.2	1,766.3	1,784.2	1,801.6	1,808.1	1,816.7	1,823.3	1,834.9	1,846.2	1,864.0	1,865.5
24 Commercial and industrial	568.5	573.8	582.1	588.8	594.0	595.4	594.2	593.7	596.4	598.1	604.4	605.1
25 Bankers acceptances held[3]	4.3	4.7	4.5	4.4	4.5	4.4	4.6	4.5	4.1	4.2	4.0	4.0
26 Other commercial and industrial	564.2	569.1	577.6	584.4	589.5	591.0	589.6	589.1	592.3	593.9	600.4	601.1
27 U.S. addressees[4]	556.0	561.2	569.7	577.3	582.6	584.0	582.9	582.5	586.1r	587.8r	594.2	595.7
28 Non-U.S. addressees[4]	8.2	7.9	7.9	7.1	6.9	7.0	6.7	6.6	6.2	6.2	6.2	5.4
29 Real estate	598.5	604.1	610.3	618.1	624.8	631.5	638.7	645.5	652.7	659.7	664.2	668.6
30 Individual	332.4	333.9	337.4	339.9	342.3	343.8	347.1	350.7	351.3	352.7	358.2	359.1
31 Security	40.5r	40.6r	41.4r	40.5r	40.9r	38.3r	38.2r	35.0r	36.6r	37.0r	38.0	37.2
32 Nonbank financial institutions	30.8	30.3	30.3	30.7	30.6	30.8	30.7	30.2	29.6r	29.9r	30.8	30.7
33 Agricultural	28.5	28.3	28.6	29.3	29.9	30.3	30.4	30.5	30.6	30.5	30.5	30.6
34 State and political subdivisions	52.2	51.0	50.0	49.3	48.9	48.2	47.7	47.4r	48.2r	47.3	46.9	46.2
35 Foreign banks	7.6	7.7	7.9	7.7	7.8	8.2	7.9	7.5	7.8r	8.1	7.7	7.7
36 Foreign official institutions	5.1	5.1	5.1	5.1	5.0	5.0	5.2	5.2	5.2r	5.4	5.6	5.7
37 Lease financing receivables	25.4	25.6	25.9	26.1	26.7	27.2	27.2	27.5	27.6	27.8	28.1	28.4
38 All other loans	43.3r	43.9r	47.3r	48.7r	50.7r	49.4r	49.5r	50.0r	48.9r	49.7r	49.7	46.2

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

1.24 MAJOR NONDEPOSIT FUNDS OF COMMERCIAL BANKS[1]

Monthly averages, billions of dollars

Source	1988											1989
	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
Seasonally adjusted												
1 Total nondeposit funds[2]	195.0	189.8	204.1	209.9	213.3	215.2	222.4	210.4	210.5	217.8	212.7	207.1
2 Net balances due to related foreign offices[3]	2.7	−6.5	4.5	6.5	8.8	14.0	21.8	8.9	4.3	9.9	6.7	8.1
3 Borrowings from other than commercial banks in United States[4]	192.3	196.3	199.7	203.4	204.4	201.2	200.6	201.5	206.2	207.8	206.1	199.1
4 Domestically chartered banks	164.4	166.7	167.6	170.8	170.6	166.8	166.1	165.6	168.0	168.5	167.1	162.1
5 Foreign-related banks	27.9	29.6	32.1	32.6	33.8	34.4	34.5	35.9	38.2	39.3	38.9	36.9
Not seasonally adjusted												
6 Total nondeposit funds[2]	200.2	199.2	206.4	218.2	215.8	210.6	218.5	206.1	205.4	213.8	207.2	206.3
7 Net balances due to related foreign offices[3]	3.1	−3.1	2.0	9.7	8.7	10.8	18.6	9.1	4.9	10.2	9.1	7.7
8 Domestically chartered banks	−20.2	−25.3	−22.2	−16.5	−16.3	−14.0	−7.3	−15.7	−20.6	−19.2	−20.7	−20.3
9 Foreign-related banks	23.3	22.1	24.2	26.2	25.0	24.8	25.9	24.7	25.5	29.4	29.8	28.1
10 Borrowings from other than commercial banks in United States[4]	197.1	202.4	204.4	208.4	207.1	199.8	199.9	197.1	200.5	203.6	198.0	198.5
11 Domestically chartered banks	168.2	171.5	171.6	175.4	171.9	164.9	165.6	161.8	163.7	167.2	161.1	160.5
12 Federal funds and security RP borrowings[5]	166.2	168.1	166.8	170.8	167.1	159.5	160.6	157.4	159.6	162.6	157.6	157.1
13 Other[6]	2.0	3.4	4.8	4.6	4.8	5.4	5.0	4.4	4.1	4.6	3.5	3.4
14 Foreign-related banks[6]	28.8	30.8	32.8	33.0	35.2	34.9	34.2	35.3	36.8	36.3	36.9	38.1
MEMO												
Gross large time deposits[7]												
15 Seasonally adjusted	395.9r	398.0r	397.1r	399.8r	403.2r	408.4r	414.6r	419.7	423.2r	424.5r	429.1r	434.9
16 Not seasonally adjusted	395.7	399.5r	395.4r	398.9r	401.8r	405.9r	415.1r	421.7r	424.7r	425.6r	429.8r	434.5
U.S. Treasury demand balances at commercial banks[8]												
17 Seasonally adjusted	22.2r	25.2r	22.4r	23.9r	22.0	21.3r	17.1r	23.5r	27.2r	23.0r	24.9r	20.4
18 Not seasonally adjusted	28.2	22.3	21.7	30.4	21.0	22.0	11.9	24.6	27.7	16.3	22.9	25.1

1. *The nondeposit funds series that is published regularly in this table has been* revised starting with this issue. For details see the Announcements section, p. 151–152.

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

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

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

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

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

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

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

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

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

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

Billions of dollars

	Account	1988 Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.r	1989 Jan.
	ALL COMMERCIAL BANKING INSTITUTIONS[2]											
1	Loans and securities	2,450.0	2,466.8	2,473.2	2,511.7	2,509.0	2,523.3	2,522.7	2,537.9	2,575.6	2,586.0	2,571.0
2	Investment securities	517.7	519.7	521.6	518.6	521.6	525.4	525.9	523.6	529.6	529.7	531.0
3	U.S. government securities	325.7	328.8	330.7	328.0	331.6	334.6	336.5	334.4	340.4	343.9	347.7
4	Other	192.0	190.9	191.0	190.6	190.0	190.8	189.4	189.2	189.2	185.8	183.3
5	Trading account assets	20.3	19.6	20.3	22.1	23.9	22.8	21.3	24.9	24.8	19.2	21.5
6	Total loans	1,912.0	1,927.5	1,931.3	1,971.0	1,963.5	1,975.1	1,975.5	1,989.4	2,021.2	2,037.0	2,018.5
7	Interbank loans	159.5	158.0	152.3	163.7	158.7	154.7	151.2	158.5	167.7	163.7	158.1
8	Loans excluding interbank	1,752.4	1,769.5	1,779.1	1,807.3	1,804.8	1,820.4	1,824.3	1,830.9	1,853.5	1,873.3	1,860.4
9	Commercial and industrial	576.2	583.4	587.8	598.2	592.4	592.8	593.8	593.8	600.0	608.4	603.0
10	Real estate	607.3	612.5	619.7	627.5	633.1	641.8	647.8	654.1	661.6	666.6	669.8
11	Individual	334.8	339.1	340.0	343.2	344.1	349.2	351.5	351.9	354.1	360.4	359.2
12	All other	234.1	234.6	231.7	238.4	235.2	236.6	231.2	231.1	237.8	237.9	228.4
13	Total cash assets	211.2	214.3	200.3	221.4	217.0	221.8	215.9	208.5	235.4	245.6	215.1
14	Reserves with Federal Reserve Banks	32.0	32.2	26.0	34.4	30.7	33.0	31.1	31.6	33.7	34.5	31.5
15	Cash in vault	24.8	25.4	25.4	26.5	25.9	26.5	26.2	26.3	28.7	30.3	27.5
16	Cash items in process of collection	74.1	76.4	71.5	77.2	75.7	79.9	76.4	72.6	89.5	92.0	76.1
17	Demand balances at U.S. depository institutions	32.0	30.3	29.2	31.6	31.3	31.5	29.4	29.2	32.1	34.2	27.8
18	Other cash assets	48.2	49.9	48.3	51.8	53.5	50.9	52.8	48.8	51.4	54.5	52.2
19	Other assets	193.1	190.9	186.6	194.3	188.4	187.5	191.8	201.2	201.3	198.5	196.1
20	**Total assets/total liabilities and capital**	**2,854.3**	**2,871.9**	**2,860.2**	**2,927.5**	**2,914.4**	**2,932.6**	**2,930.3**	**2,947.6**	**3,012.2**	**3,030.1**	**2,982.2**
21	Deposits	2,008.5	2,011.6	2,008.6	2,042.5	2,050.2	2,072.9	2,058.8	2,067.3	2,120.6	2,140.9	2,091.9
22	Transaction deposits	588.5	595.9	579.1	603.3	598.4	609.5	588.3	586.9	627.1	641.2	585.0
23	Savings deposits	540.0	536.4	542.2	544.5	545.4	542.2	536.9	538.4	542.2	537.1	530.3
24	Time deposits	879.9	879.3	887.3	894.7	906.4	921.2	933.6	941.9	951.2	962.7	976.6
25	Borrowings	454.9	465.8	458.4	487.4	470.7	452.4	470.8	481.3	476.8	470.7	492.3
26	Other liabilities	207.7	210.1	207.4	209.7	208.2	218.5	213.1	210.0	222.6	227.3	204.0
27	Residual (assets less liabilities)	183.2	184.4	185.8	187.8	185.3	188.7	187.6	189.0	192.2	191.2	194.0
	MEMO											
28	U.S. government securities (including trading account)	341.2	343.4	346.3	344.7	349.2	351.4	352.7	354.3	359.9	357.9	364.9
29	Other securities (including trading account)	196.8	195.9	195.6	196.0	196.4	196.7	194.4	194.2	194.5	191.0	187.6
	DOMESTICALLY CHARTERED COMMERCIAL BANKS[3]											
30	Loans and securities	2,266.0	2,282.3	2,286.4	2,314.7	2,319.3	2,330.5	2,329.1	2,342.4	2,376.2	2,378.7	2,372.5
31	Investment securities	491.7	494.6	495.7	492.8	495.3	499.3	501.0	498.5	504.7	505.4	505.9
32	U.S. Treasury securities	314.5	317.7	318.6	316.3	319.3	322.8	325.0	323.1	329.2	332.9	335.3
33	Other	177.2	177.0	177.1	176.6	176.1	176.5	175.9	175.5	175.6	172.5	170.6
34	Trading account assets	20.3	19.6	20.3	22.1	23.9	22.8	21.3	24.9	24.8	19.2	21.5
35	Total loans	1,754.0	1,768.1	1,770.4	1,799.7	1,800.1	1,808.5	1,806.8	1,819.0	1,846.7	1,854.1	1,845.1
36	Interbank loans	131.2	128.5	124.9	133.1	130.7	125.2	121.8	127.8	136.3	130.5	128.7
37	Loans excluding interbank	1,622.9	1,639.6	1,645.6	1,666.6	1,669.4	1,683.3	1,685.0	1,691.2	1,710.4	1,723.6	1,716.4
38	Commercial and industrial	481.0	487.4	488.8	492.6	490.8	489.7	489.2	490.2	495.4	497.6	495.9
39	Real estate	592.1	597.0	603.6	611.4	617.5	625.4	631.5	636.5	642.7	647.8	651.6
40	Individual	334.5	338.8	339.7	342.9	343.8	348.9	351.2	351.6	353.7	360.1	358.8
41	All other	215.3	216.4	213.5	219.7	217.3	219.2	213.2	212.9	218.5	218.1	210.0
42	Total cash assets	193.9	196.7	183.0	201.6	196.4	202.8	193.4	189.7	215.2	223.4	194.0
43	Reserves with Federal Reserve Banks	30.1	30.7	23.6	32.9	29.5	31.4	29.0	29.8	32.6	33.1	30.1
44	Cash in vault	24.7	25.4	25.4	26.5	25.9	26.5	26.2	26.3	28.7	30.3	27.4
45	Cash items in process of collection	73.5	75.8	71.0	76.5	75.1	79.2	75.7	71.9	88.7	91.2	75.3
46	Demand balances at U.S. depository institutions	30.4	28.7	27.5	29.8	29.4	29.8	27.3	27.2	30.2	32.2	25.8
47	Other cash assets	35.2	36.0	35.6	35.8	36.5	36.0	35.3	34.4	35.1	36.7	35.4
48	Other assets	123.1	121.3	118.3	125.6	121.6	123.8	127.8	132.9	134.0	135.3	128.0
49	**Total assets/liabilities and capital**	**2,583.0**	**2,600.3**	**2,587.7**	**2,641.8**	**2,637.4**	**2,657.2**	**2,650.3**	**2,665.0**	**2,725.4**	**2,737.3**	**2,694.5**
50	Deposits	1,944.5	1,948.1	1,944.7	1,976.9	1,984.4	2,006.4	1,991.0	1,999.1	2,051.1	2,068.1	2,020.9
51	Transaction deposits	580.0	587.2	570.7	594.5	589.6	600.6	579.1	577.3	617.2	631.4	575.7
52	Savings deposits	537.6	533.9	539.8	541.8	542.9	539.7	534.4	535.8	539.8	534.6	527.9
53	Time deposits	826.9	827.0	834.2	840.6	851.9	866.1	877.5	885.9	894.2	902.2	917.3
54	Borrowings	350.1	358.4	351.7	369.4	358.5	345.7	358.6	363.2	362.5	360.2	373.8
55	Other liabilities	108.6	112.7	108.8	111.0	112.5	119.6	116.4	117.0	123.0	121.2	109.1
56	Residual (assets less liabilities)	179.9	181.1	182.4	184.5	182.0	185.4	184.3	185.6	188.8	187.8	190.6
	MEMO[4]											
57	Real estate loans, revolving	32.1	33.0	33.7	34.8	35.3	36.3	37.3	37.9	39.1	39.7	40.2
58	Real estate loans, other	560.0	564.0	569.9	576.6	582.2	589.2	594.1	598.5	603.7	608.1	611.4

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

Data have been revised because of benchmarking to new Call reports beginning January 1987.

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

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

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

4. Memorandum items for real estate loans; revolving and other, are shown as separate breakdowns for the first time.

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

Millions of dollars, Wednesday figures

Account	1988					1989				Adjustment bank 1988[2]
	Nov. 30	Dec. 7	Dec. 14	Dec. 21	Dec. 28	Jan. 4	Jan. 11	Jan. 18	Jan. 25	
1 Cash and balances due from depository institutions	118,357	108,707	112,772	107,318	125,023	140,505	115,869	130,199	106,823	2,328
2 **Total loans, leases, and securities, net**	**1,157,799**	**1,150,152**	**1,150,648**	**1,157,660**	**1,154,340**	**1,177,194**	**1,172,696**	**1,176,749**	**1,175,392**	**20,658**
3 U.S. Treasury and government agency	135,859	135,819	133,576	132,944	128,584	131,352	132,175	134,266	135,361	2,108
4 Trading account	19,817	19,009	16,908	16,532	14,371	14,619	15,367	17,292	17,121	−342
5 Investment account	116,042	116,810	116,668	116,412	114,214	116,733	116,808	116,974	118,240	2,450
6 Mortgage-backed securities[3]	46,164	46,407	46,275	46,188	46,306	47,211	47,154	47,338	47,766	0
All other maturing in										
7 One year or less	20,975	21,434	21,369	21,410	20,458	21,048	21,074	21,072	21,761	436
8 Over one through five years	40,354	40,373	40,251	39,804	39,527	40,465	40,600	40,704	40,868	1,186
9 Over five years	8,550	8,596	8,773	9,009	7,923	8,010	7,979	7,860	7,844	140
10 Other securities	73,349	72,563	72,284	72,279	72,315	73,358	72,989	72,937	72,688	880
11 Trading account	1,681	1,622	1,550	1,680	1,713	1,535	1,334	1,273	1,299	−85
12 Investment account	71,668	70,941	70,734	70,599	70,602	71,823	71,655	71,664	71,388	965
13 States and political subdivisions, by maturity	45,456	44,988	44,811	44,717	44,653	45,216	45,206	45,192	45,159	793
14 One year or less	5,106	4,960	4,937	4,859	4,865	4,948	4,911	4,902	4,893	92
15 Over one year	40,349	40,027	39,874	39,858	39,788	40,268	40,295	40,291	40,266	700
16 Other bonds, corporate stocks, and securities	26,212	25,953	25,923	25,882	25,949	26,607	26,449	26,472	26,229	172
17 Other trading account assets	3,723	3,900	3,415	3,409	3,596	3,693	3,700	3,524	3,041	−8
18 Federal funds sold[4]	76,096	72,375	73,388	75,911	74,401	77,259	76,387	74,237	75,321	1,167
19 To commercial banks	51,082	45,665	47,158	49,233	49,135	52,820	50,946	49,351	50,565	1,162
20 To nonbank brokers and dealers in securities	15,593	17,182	17,008	17,242	16,707	16,343	16,616	16,734	16,934	0
21 To others	9,420	9,528	9,222	9,435	8,558	8,096	8,825	8,152	7,822	5
22 Other loans and leases, gross	909,402	906,165	908,550	913,634	915,695	931,160	926,724	930,980	928,366	17,318
23 Other loans, gross	886,030	882,597	884,900	889,939	891,942	907,061	902,576	906,762	904,068	17,182
24 Commercial and industrial	301,179	300,591	299,880	301,558	301,992	306,444	304,239	304,269	305,192	3,709
25 Bankers acceptances and commercial paper	1,875	1,786	1,802	1,756	1,780	1,930	1,733	1,693	1,626	15
26 All other	299,304	298,805	298,077	299,802	300,213	304,513	302,506	302,577	303,567	3,694
27 U.S. addressees	297,046	296,575	295,835	297,543	297,854	302,262	300,318	300,686	301,628	3,693
28 Non-U.S. addressees	2,257	2,230	2,242	2,258	2,359	2,252	2,188	1,890	1,938	1
29 Real estate loans	295,937	296,152	297,531	298,565	299,604	308,449	309,320	310,108	310,582	8,983
30 Revolving, home equity	295,937	296,152	297,531	298,565	299,604	308,449	309,320	310,108	310,582	8,983
31 All other	295,937	296,152	297,531	298,565	299,604	308,449	309,320	310,108	310,582	8,983
32 To individuals for personal expenditures	165,852	166,414	167,605	168,206	169,179	173,078	172,696	172,362	172,119	3,431
33 To depository and financial institutions	49,134	48,813	47,837	48,150	48,728	47,404	48,199	48,973	47,205	134
34 Commercial banks in the United States	22,689	22,990	22,114	21,951	22,185	21,044	22,246	22,852	22,289	35
35 Banks in foreign countries	4,679	4,108	3,963	4,065	3,685	3,890	4,017	4,277	3,445	0
36 Nonbank depository and other financial institutions	21,765	21,714	21,760	22,134	22,858	22,470	21,937	21,844	21,472	99
37 For purchasing and carrying securities	15,271	12,780	14,219	14,313	13,926	12,237	11,520	12,915	12,455	70
38 To finance agricultural production	5,477	5,458	5,463	5,487	5,508	5,809	5,777	5,740	5,682	150
39 To states and political subdivisions	28,914	28,714	28,685	28,694	28,648	28,374	28,250	28,252	28,204	477
40 To foreign governments and official institutions	2,042	2,180	2,051	2,104	1,964	1,910	1,861	1,828	1,888	0
41 All other	22,224	21,495	21,628	22,860	22,390	23,356	20,713	22,314	20,740	228
42 Lease financing receivables	23,372	23,568	23,650	23,694	23,753	24,098	24,148	24,218	24,299	136
43 LESS: *Unearned income*	4,845	4,851	4,864	4,872	4,889	4,990	5,023	5,028	5,046	128
44 Loan and lease reserve[5]	35,785	35,819	35,702	35,644	35,362	34,638	34,256	34,167	34,339	0
45 Other loans and leases, net	868,772	865,495	867,985	873,117	875,444	891,531	887,445	891,784	888,981	16,511
46 All other assets	131,083	132,283	132,861	135,240	132,941	134,681	131,374	132,566	127,306	1,695
47 **Total assets**	**1,407,239**	**1,391,141**	**1,396,281**	**1,400,219**	**1,412,305**	**1,452,380**	**1,419,940**	**1,439,514**	**1,409,521**	**24,681**
48 Demand deposits	240,653	230,811	238,701	233,932	247,195	270,603	235,299	248,581	219,354	5,093
49 Individuals, partnerships, and corporations	191,638	182,951	191,692	186,205	195,382	214,182	187,645	194,618	175,052	4,419
50 States and political subdivisions	6,455	5,864	6,514	6,976	6,993	8,144	6,207	6,385	6,770	149
51 U.S. government	2,949	2,878	3,332	1,609	2,711	2,626	3,484	3,172	2,531	104
52 Depository institutions in the United States	22,067	21,951	20,684	22,518	24,187	28,284	22,032	27,294	19,413	135
53 Banks in foreign countries	7,239	7,013	6,840	6,453	6,662	7,244	6,127	7,076	6,006	46
54 Foreign governments and official institutions	832	878	920	1,054	985	754	959	869	787	0
55 Certified and officers' checks	9,474	9,277	8,719	9,117	10,274	9,369	8,844	9,167	8,795	240
56 Transaction balances other than demand deposits	73,637	75,258	74,519	75,080	75,412	82,675	79,506	78,750	75,237	2,802
57 Nontransaction balances	622,745	625,000	626,317	625,120	623,960	651,710	652,082	652,718	651,113	22,854
58 Individuals, partnerships, and corporations	583,097	585,622	586,652	586,391	585,172	610,601	610,725	611,569	609,460	20,343
59 States and political subdivisions	30,025	30,036	30,207	29,520	29,480	31,102	31,439	31,345	31,469	1,748
60 U.S. government	965	945	942	938	928	885	858	845	855	7
61 Depository institutions in the United States	7,829	7,596	7,799	7,567	7,702	8,444	8,350	8,254	8,623	755
62 Foreign governments, official institutions, and banks	829	801	717	704	677	678	710	705	705	0
63 Liabilities for borrowed money	278,942	272,591	269,511	280,079	278,142	264,596	270,184	277,733	282,167	−8,043
64 Borrowings from Federal Reserve Banks	1,872	1,515	1,785	571	1,035	1,655	1,462	1,015	1,574	0
65 Treasury tax-and-loan notes	12,852	4,614	5,991	25,227	21,053	3,155	9,825	20,625	24,107	0
66 All other liabilities for borrowed money[6]	264,218	266,461	261,734	254,281	256,054	259,785	258,897	256,094	256,486	−8,043
67 Other liabilities and subordinated notes and debentures	97,009	92,690	91,977	90,901	93,585	87,365	86,340	85,324	85,334	1,466
68 **Total liabilities**	**1,312,985**	**1,296,350**	**1,301,025**	**1,305,112**	**1,318,294**	**1,356,949**	**1,323,411**	**1,343,107**	**1,313,205**	**24,172**
69 Residual (total assets minus total liabilities)[7]	94,253	94,791	95,257	95,107	94,011	95,431	96,528	96,407	96,316	508
MEMO										
70 Total loans and leases (gross) and investments adjusted[8]	1,124,658	1,122,167	1,121,942	1,126,992	1,123,271	1,142,958	1,138,784	1,143,741	1,141,924	20,269
71 Total loans and leases (gross) adjusted[8]	911,726	909,885	912,666	918,360	918,776	934,555	929,920	933,013	930,834	17,288
72 Time deposits in amounts of $100,000 or more	194,464	195,830	195,955	195,915	196,083	204,475	206,249	206,332	206,773	8,186
73 U.S. Treasury securities maturing in one year or less	19,860	19,997	20,195	20,001	18,560	18,503	18,965	18,835	19,531	0
74 Loans sold outright to affiliates—total[9]	1,308	1,380	1,330	1,370	1,380	1,461	1,521	1,520	1,555	0
75 Commercial and industrial	929	1,000	956	1,012	1,029	1,115	1,176	1,195	1,240	0
76 Other	380	380	374	358	350	346	345	325	315	0
77 Nontransaction savings deposits (including MMDAs)	253,021	253,063	253,440	251,994	250,402	259,084	256,923	256,479	253,433	5,596

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

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

Millions of dollars, Wednesday figures

Account	1988					1989			
	Nov. 30	Dec. 7	Dec. 14	Dec. 21	Dec. 28	Jan. 4	Jan. 11	Jan. 18	Jan. 25
1 Cash balances due from depository institutions	27,884	24,348	24,272	22,154	26,940	29,826	25,318	27,633	24,996
2 **Total loans, leases and securities, net**[2]	**221,963**	**216,483**	**217,293**	**218,999**	**221,039**	**216,341**	**215,771**	**215,823**	**218,381**
Securities									
3 U.S. Treasury and government agency[3]	0	0	0	0	0	0	0	0	0
4 Trading account[3]	0	0	0	0	0	0	0	0	0
5 Investment account	15,623	15,559	15,558	15,702	15,689	15,800	15,595	16,069	16,032
6 Mortgage-backed securities[4]	6,809[r]	6,701[r]	6,717	6,770	6,782	6,913	6,910	6,977	6,948
All other maturing in									
7 One year or less	2,068[r]	2,177[r]	2,176	2,225	2,225	2,276	2,268	2,672	2,663
8 Over one through five years	4,835	4,695	4,612	4,641	4,617	4,563	4,509	4,510	4,495
9 Over five years	1,911	1,986	2,053	2,066	2,066	2,048	1,908	1,911	1,925
10 Other securities[3]	0	0	0	0	0	0	0	0	0
11 Trading account[3]	0	0	0	0	0	0	0	0	0
12 Investment account	17,718	17,694	17,539	17,514	17,468	17,834	17,761	17,817	17,646
13 States and political subdivisions, by maturity	12,482	12,359	12,269	12,263	12,205	12,198	12,198	12,198	12,190
14 One year or less	1,092	979	960	978	969	1,033	1,038	1,049	1,053
15 Over one year	11,390	11,380	11,308	11,284	11,236	11,165	11,160	11,149	11,137
16 Other bonds, corporate stocks, and securities	5,236	5,334	5,270	5,251	5,262	5,636	5,563	5,618	5,456
17 Other trading account assets[3]	0	0	0	0	0	0	0	0	0
Loans and leases									
18 Federal funds sold[5]	29,736	26,803	27,708	27,442	29,229	26,613	28,214	25,878	29,830
19 To commercial banks	14,717	10,946	12,719	12,527	14,683	13,640	14,043	11,882	15,804
20 To nonbank brokers and dealers in securities	8,394	9,563	8,944	8,771	8,970	8,276	8,666	8,871	9,266
21 To others	6,625	6,294	6,045	6,144	5,576	4,698	5,505	5,125	4,760
22 Other loans and leases, gross	173,781	171,331	171,370	173,228	173,521	170,542	168,847	170,705	169,587
23 Other loans, gross	168,182	165,647	165,687	167,551	167,825	164,848	163,174	165,016	163,910
24 Commercial and industrial	56,290	55,368	54,907	55,441	55,398	55,590	55,190	54,878	55,675
25 Bankers acceptances and commercial paper	483	416	400	363	389	353	343	301	289
26 All other	55,807	54,952	54,507	55,078	55,009	55,237	54,847	54,577	55,386
27 U.S. addressees	55,372	54,524	54,109	54,647	54,487	54,874	54,474	54,166	54,947
28 Non-U.S. addressees	436	427	398	430	522	363	372	412	438
29 Real estate loans	49,292	49,360	49,645	50,170	50,600	50,318	50,362	50,500	50,306
30 Revolving, home equity	3,222	3,246	3,248	3,262	3,271	3,285	3,282	3,288	3,282
31 All other	46,069	46,114	46,397	46,908	47,328	47,033	47,080	47,213	47,023
32 To individuals for personal expenditures	20,709	20,740	20,897	20,779	20,923	20,901	20,827	20,809	20,788
33 To depository and financial institutions	21,789	22,169	21,179	21,480	21,851	20,530	20,956	21,086	20,048
34 Commercial banks in the United States	11,748	12,700	12,002	12,030	12,310	11,355	11,717	11,855	11,260
35 Banks in foreign countries	2,964	2,482	2,276	2,317	2,061	2,261	2,470	2,553	2,007
36 Nonbank depository and other financial institutions	7,077	6,987	6,901	7,133	7,479	6,914	6,769	6,678	6,780
37 For purchasing and carrying securities	6,294	4,761	6,216	6,129	5,874	4,305	3,896	4,855	4,751
38 To finance agricultural production	197	200	164	161	159	149	172	164	158
39 To states and political subdivisions	6,397	6,378	6,369	6,377	6,362	6,160	6,142	6,132	6,146
40 To foreign governments and official institutions	592	709	591	680	517	500	455	427	474
41 All other	6,622	5,963	5,717	6,333	6,142	6,395	5,173	6,163	5,564
42 Lease financing receivables	5,600	5,684	5,683	5,677	5,696	5,693	5,673	5,689	5,678
43 LESS: Unearned income	1,611	1,616	1,620	1,630	1,646	1,627	1,642	1,651	1,654
44 Loan and lease reserve	13,284	13,288	13,261	13,258	13,221	12,820	13,003	12,995	13,060
45 Other loans and leases, net[6]	158,886	156,427	156,488	158,341	158,654	156,095	154,201	156,059	154,873
46 All other assets[7]	61,130	62,323	59,462	61,242	58,804	61,787	59,831	63,838	58,760
47 **Total assets**	**310,977**	**303,154**	**301,027**	**302,395**	**306,783**	**307,954**	**300,920**	**307,294**	**302,137**
Deposits									
48 Demand deposits	57,536	55,393	58,192	55,789	59,274	62,132	53,603	57,492	52,045
49 Individuals, partnerships, and corporations	40,412	37,702	42,218	39,407	41,640	45,280	38,046	39,950	36,748
50 States and political subdivisions	661	625	627	633	593	909	650	641	822
51 U.S. government	596	542	531	176	458	287	630	436	454
52 Depository institutions in the United States	5,542	6,050	5,015	5,931	5,848	6,303	5,340	6,578	5,069
53 Banks in foreign countries	5,922	5,798	5,679	5,168	5,481	6,018	4,976	5,784	4,691
54 Foreign governments and official institutions	666	730	761	913	831	582	788	672	647
55 Certified and officers' checks	3,736	3,946	3,361	3,562	4,423	2,755	3,172	3,430	3,615
56 Transaction balances other than demand deposits (ATS, NOW, Super NOW, telephone transfers)	8,608	8,735	8,718	8,909	9,110	9,540	9,161	9,004	8,605
57 Nontransaction balances	110,972	111,317	111,046	111,688	110,517	113,046	112,688	113,638	112,383
58 Individuals, partnerships, and corporations	100,625	101,202	101,024	101,664	100,417	103,166	102,687	103,534	101,840
59 States and political subdivisions	8,140	8,020	7,985	7,997	8,014	7,796	7,917	8,034	8,201
60 U.S. government	32	30	31	33	33	32	23	24	32
61 Depository institutions in the United States	1,894	1,788	1,742	1,737	1,797	1,793	1,802	1,786	2,047
62 Foreign governments, official institutions, and banks	282	278	265	257	257	258	260	259	262
63 Liabilities for borrowed money	68,091	66,294	61,958	65,583	65,301	65,526	66,669	69,269	70,186
64 Borrowings from Federal Reserve Banks	0	0	0	0	0	0	0	0	875
65 Treasury tax-and-loan notes	3,451	886	1,175	6,243	5,392	625	2,509	5,410	6,404
66 All other liabilities for borrowed money[8]	64,640	65,408	60,783	59,340	59,909	64,901	64,160	63,859	62,907
67 Other liabilities and subordinated notes and debentures	38,718	33,810	33,038	32,668	35,359	30,174	30,698	29,900	30,968
68 **Total liabilities**	**283,926**	**275,549**	**272,953**	**274,636**	**279,562**	**280,418**	**272,820**	**279,303**	**274,187**
69 Residual (total assets minus total liabilities)[9]	27,051	27,604	28,074	27,759	27,221	27,536	28,100	27,991	27,951
MEMO									
70 Total loans and leases (gross) and investments adjusted[2,10]	210,393	207,741	207,454	209,329	208,913	205,793	204,656	206,732	206,032
71 Total loans and leases (gross) adjusted[10]	177,052	174,488	174,357	176,113	175,756	172,160	171,300	172,846	172,354
72 Time deposits in amounts of $100,000 or more	41,053	41,857	41,244	41,492	41,246	41,924	42,316	42,982	42,260
73 U.S. Treasury securities maturing in one year or less	3,299	3,528	3,354	2,934	2,984	2,751	2,836	3,288	3,277

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

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

Millions of dollars, Wednesday figures

Account	1988					1989			
	Nov. 30	Dec. 7	Dec. 14	Dec. 21	Dec. 28	Jan. 4	Jan. 11	Jan. 18	Jan. 25
1 Cash and due from depository institutions	10,817	11,067	11,181	11,086	12,181	11,424	11,386	11,304	11,706
2 Total loans and securities	112,854	111,964	114,403	113,961	118,172	126,253	122,532	123,038	121,752
3 U.S. Treasury and government agency securities	7,651	7,575	7,794	7,980	7,492	8,012	7,824	8,151	8,542
4 Other securities	7,259	7,227	7,163	7,123	7,156	7,421	7,441	7,392	7,147
5 Federal funds sold[2]	10,172	7,780	10,306	7,964	9,290	8,298	7,106	6,446	6,319
6 To commercial banks in the United States	7,878	5,615	8,208	5,969	7,282	7,445	6,349	5,272	5,385
7 To others	2,294	2,165	2,098	1,995	2,008	853	757	1,174	934
8 Other loans, gross	87,772	89,382	89,140	90,894	94,234	102,522	100,161	101,049	99,744
9 Commercial and industrial	56,065	57,292	57,006	58,540	59,713	67,318	65,604	66,061	64,582
10 Bankers acceptances and commercial paper	1,554	1,618	1,485	1,532	1,420	1,651	1,648	1,786	1,703
11 All other	54,511	55,674	55,521	57,008	58,293	65,667	63,956	64,275	62,879
12 U.S. addressees	52,871	53,941	53,829	55,355	56,624	64,215	62,474	62,771	61,340
13 Non-U.S. addressees	1,640	1,733	1,692	1,653	1,669	1,452	1,482	1,504	1,539
14 Loans secured by real estate[3]	n.a.	n.a.	n.a.	n.a.	n.a.	13,108	13,285	13,458	13,630
15 To financial institutions	16,308	17,289	17,291	17,460	18,666	18,206	17,581	17,410	17,929
16 Commercial banks in the United States	12,018	12,929	12,931	12,927	14,098	13,517	13,020	12,715	13,188
17 Banks in foreign countries	1,220	1,298	1,194	1,307	1,269	1,225	1,126	1,198	1,214
18 Nonbank financial institutions	3,070	3,062	3,166	3,226	3,299	3,464	3,435	3,497	3,527
19 To foreign governments and official institutions	830	830	906	864	857	756	811	754	746
20 For purchasing and carrying securities	1,761	1,535	1,514	1,780	2,317	1,772	1,664	2,053	1,642
21 All other[3]	12,808	12,436	12,423	12,250	12,861	1,362	1,216	1,313	1,215
22 Other assets (claims on nonrelated parties)	33,025	32,537	33,007	33,288	32,511	32,727	32,206	31,341	31,401
23 Net due from related institutions	15,233	17,869	14,524	15,202	13,002	14,573	16,154	14,452	16,286
24 Total assets	171,928	173,439	173,117	173,540	175,865	184,976	182,280	180,134	181,146
25 Deposits or credit balances due to other than directly related institutions	44,179	44,843	44,601	45,246	46,626	43,635	42,897	43,351	43,276
26 Transaction accounts and credit balances[4]	3,954	3,965	4,010	4,179	4,183	3,747	3,516	3,463	3,451
27 Individuals, partnerships, and corporations	2,451	2,323	2,520	2,581	2,453	2,436	2,316	2,325	2,140
28 Other	1,503	1,642	1,490	1,598	1,730	1,311	1,200	1,138	1,311
29 Nontransaction accounts[5]	40,225	40,878	40,591	41,067	42,443	39,888	39,381	39,888	39,825
30 Individuals, partnerships, and corporations	33,713	34,417	34,340	35,061	36,436	33,186	32,630	33,148	33,408
31 Other	6,512	6,461	6,251	6,006	6,007	6,702	6,751	6,740	6,417
32 Borrowings from other than directly related institutions	68,197	69,676	68,404	70,772	66,140	78,632	80,060	74,284	76,952
33 Federal funds purchased[6]	31,021	31,238	29,087	30,677	27,492	36,769	37,577	32,285	34,756
34 From commercial banks in the United States	16,454	15,670	15,553	14,778	14,188	21,548	23,006	15,838	18,974
35 From others	14,567	15,568	13,534	15,899	13,304	15,221	14,571	16,447	15,782
36 *Other liabilities for borrowed money*	37,176	38,438	39,317	40,095	38,648	41,863	42,483	41,999	42,196
37 To commercial banks in the United States	25,744	26,714	27,267	26,577	25,716	28,034	28,491	28,220	28,025
38 To others	11,432	11,724	12,050	13,518	12,932	13,829	13,992	13,779	14,171
39 Other liabilities to nonrelated parties	34,168	33,981	34,556	34,255	34,088	33,697	33,189	32,446	32,546
40 Net due to related institutions	25,383	24,937	25,556	23,266	29,011	29,013	26,134	30,051	28,373
41 Total liabilities	171,928	173,439	173,117	173,540	175,865	184,976	182,280	180,134	181,146
MEMO									
42 Total loans (gross) and securities adjusted[7]	92,958	93,420	93,264	95,065	96,792	105,291	103,163	105,051	103,179
43 Total loans (gross) adjusted[7]	78,048	78,618	78,307	79,962	82,144	89,858	87,898	89,508	87,490

1. *Effective Jan. 4, 1989, the reporting panel includes a new group of large U.S. branches and agencies of foreign banks.* Earlier data included 65 U.S. branches and agencies of foreign banks that included those branches and agencies with assets of $750 million or more on June 30, 1980, plus those branches and agencies that had reached the $750 million asset level on Dec. 31, 1984. These data also appear in the Board's H.4.2 (504) release. For address, see inside front cover.
2. Includes securities purchased under agreements to resell.
3. Effective Jan. 4, 1989, loans secured by real estate are being reported as a separate component of Other loans, gross. Formerly, these loans were included in "All other", line 21.
4. Includes credit balances, demand deposits, and other checkable deposits.
5. Includes savings deposits, money market deposit accounts, and time deposits.
6. Includes securities sold under agreements to repurchase.
7. Exclusive of loans to and federal funds sold to commercial banks in the United States.

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

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

Type of holder	Commercial banks									
	1984 Dec.	1985 Dec.	1986 Dec.	1987 Dec.	1987 Sept.	1987 Dec.	1988 Mar.	1988 June	1988 Sept.	1988 Dec.
1 **All holders—Individuals, partnerships, and corporations**	**302.7**	**321.0**	**363.6**	**343.5**	**339.0**	**343.5**	**328.6**	**346.5**	**337.8**	n.a.
2 Financial business	31.7	32.3	41.4	36.3	36.5	36.3	33.9	37.2	34.8	n.a.
3 Nonfinancial business	166.3	178.5	202.0	191.9	188.2	191.9	184.1	194.3	190.3	n.a.
4 Consumer	81.5	85.5	91.1	90.0	88.7	90.0	86.9	89.8	87.8	n.a.
5 Foreign	3.6	3.5	3.3	3.4	3.2	3.4	3.5	3.4	3.2	n.a.
6 Other	19.7	21.2	25.8	21.9	22.4	21.9	20.3	21.9	21.7	n.a.
	Weekly reporting banks									
	1984 Dec.	1985 Dec.	1986 Dec.	1987 Dec.	1987 Sept.	1987 Dec.	1988 Mar.	1988 June	1988 Sept.	1988 Dec.
7 **All holders—Individuals, partnerships, and corporations**	**157.1**	**168.6**	**195.1**	**183.8**	**179.1**	**183.8**	**181.8**	**191.5**	**185.3**	**198.3**
8 Financial business	25.3	25.9	32.5	28.6	29.3	28.6	27.0	30.0	27.2	30.5
9 Nonfinancial business	87.1	94.5	106.4	100.0	96.0	100.0	98.2	103.1	101.5	108.7
10 Consumer	30.5	33.2	37.5	39.1	37.2	39.1	41.7	42.3	41.8	42.6
11 Foreign	3.4	3.1	3.3	3.3	3.1	3.3	3.4	3.4	3.1	3.6
12 Other	10.9	12.0	15.4	12.7	13.5	12.7	11.4	12.8	11.7	12.9

1. Figures include cash items in process of collection. Estimates of gross deposits are based on reports supplied by a sample of commercial banks. Types of depositors in each category are described in the June 1971 BULLETIN, p. 466. Figures may not add to totals because of rounding.

2. Beginning in March 1984, these data reflect a change in the panel of weekly reporting banks, and are not comparable to earlier data. Estimates in billions of dollars for December 1983 based on the new weekly reporting panel are: financial business, 24.4; nonfinancial business, 80.9; consumer, 30.1; foreign, 3.1; other 9.5.

3. Beginning March 1985, financial business deposits and, by implication, total gross demand deposits have been redefined to exclude demand deposits due to thrift institutions. Historical data have not been revised. The estimated volume of such deposits for December 1984 is $5.0 billion at all insured commercial banks and $3.0 billion at weekly reporting banks.

4. Historical data back to March 1985 have been revised to account for corrections of bank reporting errors. Historical data before March 1985 have not been revised, and may contain reporting errors. Data for all commercial banks for March 1985 were revised as follows (in billions of dollars): all holders, −.3; financial business, −.8; nonfinancial business, −.4; consumer, .9; foreign, .1; other, −.1. Data for weekly reporting banks for March 1985 were revised as follows (in billions of dollars): all holders, −.1; financial business, −.7; nonfinancial business, −.5; consumer, 1.1; foreign, .1; other, −.2.

5. Beginning March 1988, these data reflect a change in the panel of weekly reporting banks, and are not comparable to earlier data. Estimates in billions of dollars for December 1987 based on the new weekly reporting panel are: financial business, 29.4; nonfinancial business, 105.1; consumer, 41.1; foreign, 3.4; other, 13.1.

1.32 COMMERCIAL PAPER AND BANKERS DOLLAR ACCEPTANCES OUTSTANDING

Millions of dollars, end of period

Instrument	1984 Dec.	1985 Dec.	1986 Dec.	1987 Dec.	1988 Dec.	1988 July	Aug.	Sept.	Oct.	Nov.	Dec.
	Commercial paper (seasonally adjusted unless noted otherwise)										
1 **All issuers**	**237,586**	**298,779**	**329,991**	**357,129**	**455,017**	**423,054**^{r}	**424,504**^{r}	**421,383**^{r}	**426,216**^{r}	**443,531**^{r}	**455,017**
Financial companies[1]											
Dealer-placed paper[2]											
2 Total	56,485	78,443	101,072	101,958	159,947	148,130^{r}	146,592^{r}	149,995^{r}	149,845^{r}	157,042^{r}	159,947
3 Bank-related (not seasonally adjusted)	2,035	1,602	2,265	1,428	1,248	1,301^{r}	911^{r}	901	840	995	1,248
Directly placed paper[3]											
4 Total	110,543	135,320	151,820	173,939	192,442	184,514^{r}	187,031^{r}	180,905^{r}	184,044^{r}	192,220^{r}	192,442
5 Bank-related (not seasonally adjusted)	42,105	44,778	40,860	43,173	43,155	44,217^{r}	46,224^{r}	43,887	42,204	43,729	43,155
6 Nonfinancial companies[4]	70,558	85,016	77,099	81,232	102,628	90,411	90,881^{r}	90,483^{r}	92,327^{r}	94,269^{r}	102,628
	Bankers dollar acceptances (not seasonally adjusted)[5]										
7 **Total**	**78,364**	**68,413**	**64,974**	**70,565**	**66,678**	**63,240**	**64,036**	**63,452**	**62,253**	**65,961**	**66,678**
Holder											
8 Accepting banks	9,811	11,197	13,423	10,943	9,082	9,655	9,661	9,334	9,083	9,483	9,082
9 Own bills	8,621	9,471	11,707	9,464	8,018	8,702	8,664	8,400	8,026	8,768	8,018
10 Bills bought	1,191	1,726	1,716	1,479	1,064	953	888	934	1,057	715	1,064
Federal Reserve Banks											
11 Own account	0	0	0	0	0	0	0	0	0	0	0
12 Foreign correspondents	671	937	1,317	965	1,493	1,114	9,915	963	1,166	1,393	1,493
13 Others	67,881	56,279	50,234	58,658	56,103	52,471	53,493	53,154	52,004	55,086	56,103
Basis											
14 Imports into United States	17,845	15,147	14,670	16,483	14,991	14,001	14,608	14,622	14,064	14,959	14,991
15 Exports from United States	16,305	13,204	12,960	15,227	15,622	14,676	14,345	13,946	14,067	14,578	15,622
16 All other	44,214	40,062	37,344	38,855	36,065	34,564	35,083	34,884	34,122	36,424	36,065

1. Institutions engaged primarily in activities such as, but not limited to, commercial savings, and mortgage banking; sales, personal, and mortgage financing; factoring, finance leasing, and other business lending; insurance underwriting; and other investment activities.
2. Includes all financial company paper sold by dealers in the open market.
3. As reported by financial companies that place their paper directly with investors.
4. Includes public utilities and firms engaged primarily in such activities as communications, construction, manufacturing, mining, wholesale and retail trade, transportation, and services.
5. Beginning January 1988, the number of respondents in the bankers acceptance survey were reduced from 155 to 111 institutions—those with $100 million or more in total acceptances. The new reporting group accounts for over 90 percent of total acceptances activity.

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

Percent per year

Date of change	Rate	Period	Average rate	Period	Average rate	Period	Average rate
1986—Mar. 7	9.00	1986	8.33	1987—Jan.	7.50	1988—Jan.	8.75
Apr. 21	8.50	1987	8.21	Feb.	7.50	Feb.	8.51
July 11	8.00	1988	9.32	Mar.	7.50	Mar.	8.50
Aug. 26	7.50			Apr.	7.75	Apr.	8.50
		1986—Jan.	9.50	May	8.14	May	8.84
1987—Apr. 1	7.75	Feb.	9.50	June	8.25	June	9.00
May 1	8.00	Mar.	9.10	July	8.25	July	9.29
15	8.25	Apr.	8.83	Aug.	8.25	Aug.	9.84
Sept. 4	8.75	May	8.50	Sept.	8.70	Sept.	10.00
Oct. 7	9.25	June	8.50	Oct.	9.07	Oct.	10.00
22	9.00	July	8.16	Nov.	8.78	Nov.	10.05
Nov. 5	8.75	Aug.	7.90	Dec.	8.75	Dec.	10.50
		Sept.	7.50				
1988—Feb. 2	8.50	Oct.	7.50			1989—Jan.	10.50
May 11	9.00	Nov.	7.50				
July 14	9.50	Dec.	7.50				
Aug. 11	10.00						
Nov. 28	10.50						
1989—Feb. 10	11.00						
24	11.50						

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

1.35 INTEREST RATES Money and Capital Markets

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

Instrument	1986	1987	1988	1988 Oct.	1988 Nov.	1988 Dec.	1989 Jan.	1988 and 1989, week ending Dec. 30	Jan. 6	Jan. 13	Jan. 20	Jan. 27
MONEY MARKET RATES												
1 Federal funds[1,2]	6.80	6.66	7.57	8.30	8.35	8.76	9.12	8.86	9.22	9.08	9.13	9.06
2 Discount window borrowing[1,2,3]	6.32	5.66	6.20	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50
Commercial paper[4,5]												
3 1-month	6.61	6.74	7.58	8.12	8.38	9.31	9.03	9.30	9.05	9.04	9.02	9.00
4 3-month	6.49	6.82	7.66	8.24	8.66	9.11	9.04	9.07	9.02	9.06	9.04	9.04
5 6-month	6.39	6.85	7.68	8.24	8.55	8.97	9.02	8.97	8.99	9.04	9.04	9.02
Finance paper, directly placed[4,5]												
6 1-month	6.57	6.61	7.44	8.05	8.29	9.00	8.90	9.00	8.91	8.93	8.91	8.84
7 3-month	6.38	6.54	7.38	8.06	8.20	8.50	8.78	8.55	8.68	8.86	8.81	8.73
8 6-month	6.31	6.37	7.14	7.80	7.94	8.24	8.44	8.29	8.36	8.46	8.50	8.41
Bankers acceptances[5,6]												
9 3-month	6.38	6.75	7.56	8.15	8.55	8.96	8.93	8.90	8.93	8.95	8.93	8.92
10 6-month	6.28	6.78	7.60	8.13	8.46	8.83	8.92	8.83	8.92	8.94	8.92	8.91
Certificates of deposit, secondary market[7]												
11 1-month	6.61	6.75	7.59	8.15	8.43	9.37	9.06	9.36	9.08	9.08	9.06	9.02
12 3-month	6.51	6.87	7.73	8.36	8.78	9.25	9.20	9.20	9.20	9.23	9.21	9.17
13 6-month	6.50	7.01	7.91	8.48	8.81	9.28	9.36	9.26	9.35	9.41	9.36	9.34
14 Eurodollar deposits, 3-month[8]	6.71r	7.06r	7.85r	8.51	8.91	9.30	9.28	9.31	9.20	9.31	9.30	9.26
U.S. Treasury bills[5]												
Secondary market[9]												
15 3-month	5.97	5.78	6.67	7.35	7.76	8.07	8.27	8.16	8.24	8.26	8.24	8.29
16 6-month	6.02	6.03	6.91	7.50	7.86	8.22	8.36	8.28	8.41	8.41	8.30	8.32
17 1-year	6.07	6.33	7.13	7.54	7.87	8.32	8.37	8.38	8.47	8.43	8.28	8.30
Auction average[10]												
18 3-month	5.98r	5.82r	6.68	7.34r	7.68r	8.09r	8.29	8.22	8.24	8.36	8.30	8.26
19 6-month	6.03r	6.05r	6.92	7.50r	7.76r	8.24r	8.38	8.33	8.37	8.48	8.35	8.31
20 1-year	6.18r	6.33	7.17	7.57	7.92	8.49	8.45	n.a.	n.a.	n.a.	8.45	n.a.
CAPITAL MARKET RATES												
U.S. Treasury notes and bonds[11]												
Constant maturities[12]												
21 1-year	6.45	6.77	7.65	8.11	8.48	8.99	9.05	9.07	9.17	9.11	8.96	8.97
22 2-year	6.86	7.42	8.10	8.35	8.67	9.09	9.18	9.18	9.28	9.23	9.13	9.10
23 3-year	7.06	7.68	8.26	8.43	8.72	9.11	9.20	9.20	9.30	9.27	9.14	9.11
24 5-year	7.30	7.94	8.47	8.51	8.79	9.09	9.15	9.18	9.28	9.23	9.09	9.04
25 7-year	7.54	8.23	8.71	8.69	8.89	9.13	9.14	9.22	9.31	9.25	9.07	9.02
26 10-year	7.67	8.39	8.85	8.80	8.96	9.11	9.09	9.17	9.24	9.18	9.02	8.97
27 20-year	7.84	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
28 30-year	7.78	8.59	8.96	8.89	9.02	9.01	8.93	9.00	9.08	9.00	8.87	8.81
Composite[13]												
29 Over 10 years (long-term)	8.14	8.64	8.98	8.89	9.07	9.13	9.07	9.13	9.23	9.14	9.01	8.96
State and local notes and bonds												
Moody's series[14]												
30 Aaa	6.95	7.14	7.36	7.25	7.35	7.35	7.23	7.30	7.33	7.28	7.20	7.10
31 Baa	7.76	8.17	7.83	7.72	7.78	7.76	7.67	7.70	7.73	7.70	7.63	7.60
32 *Bond Buyer* series[15]	7.32	7.63	7.68	7.47	7.46	7.61	7.35	7.50	7.44	7.40	7.29	7.27
Corporate bonds												
Seasoned issues[16]												
33 All industries	9.71	9.91	10.18r	9.90	9.91	10.03	10.05	10.06	10.11	10.10	10.03	9.99
34 Aaa	9.02	9.38	9.71r	9.51	9.45	9.57	9.62	9.60	9.66	9.69	9.61	9.56
35 Aa	9.47	9.68	n.a.	9.71	9.72	9.81	9.81	9.84	9.88	9.86	9.79	9.75
36 A	9.95	9.99	10.24r	9.99	9.99	10.11	10.10	10.14	10.18	10.15	10.08	10.04
37 Baa	10.39	10.58	10.83r	10.41	10.48	10.65	10.65	10.67	10.73	10.70	10.62	10.61
38 A-rated, recently offered utility bonds[17]	9.61	9.95	n.a.	10.11	10.12	10.08	10.09	10.12	10.19	10.11	10.05	10.00
MEMO: Dividend/price ratio[18]												
39 Preferred stocks	8.76	8.37	9.23	9.23	9.29	9.38	9.31	9.34	9.33	9.42	9.25	9.23
40 Common stocks	3.48	3.08	3.64	3.61	3.70	3.68	3.64	3.70	3.67	3.65	3.61	3.61

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

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

1.36 STOCK MARKET Selected Statistics

Indicator	1986	1987	1988	1988 May	1988 June	1988 July	1988 Aug.	1988 Sept.	1988 Oct.	1988 Nov.	1988 Dec.	1989 Jan.
	Prices and trading (averages of daily figures)											
Common stock prices												
1 New York Stock Exchange (Dec. 31, 1965 = 50)	136.00	161.70	149.91	144.99	152.72	152.12	149.25	151.47	156.36	152.67	155.35	160.40
2 Industrial	155.85	195.31	180.83	176.02	184.92	184.09	179.72	182.18	188.58	182.25	187.75	194.62
3 Transportation	119.87	140.39	134.01	127.63	136.02	136.49	132.52	136.27	141.83	137.51	144.06	153.09
4 Utility	71.36	74.29	72.22	68.66	72.25	71.49	70.67	71.83	74.19	79.28	74.81	75.87
5 Finance	147.19	146.48	127.41	120.35	129.04	129.99	130.77	133.15	136.09	130.05	128.83	132.26
6 Standard & Poor's Corporation (1941–43 = 10)[1]	236.34	286.83	266.18	256.12	270.68	269.05	263.73	267.97	277.40	271.02	281.28	285.41
7 American Stock Exchange (Aug. 31, 1973 = 50)[2]	264.38	316.61	294.90	296.30	306.13	307.48	297.76	297.86	302.83	292.25	298.59	316.14
Volume of trading (thousands of shares)												
8 New York Stock Exchange	141,385	188,647	161,450	153,906	195,772	166,916	144,668	145,702	162,631	134,427	135,473	168,204
9 American Stock Exchange	11,846	13,832	9,955	8,931	11,348	9,938	9,307	8,198	9,051	8,497	11,227	10,797
	Customer financing (end-of-period balances, in millions of dollars)											
10 **Margin credit at broker-dealers**[3]	**36,840**	**31,990**	**32,740**	**33,070**	**32,300**	**31,770**	**31,930**	**32,770**	**33,410**	**33,640**	**32,740**	**32,530**
Free credit balances at brokers[4]												
11 Margin-account[5]	4,880	4,750	5,660	4,380	4,580	4,485	4,655	4,725	5,065	4,920	5,660	5,790
12 Cash-account	19,000	15,640	16,595	14,150	14,460	14,340	14,045	14,175	14,880	15,185	16,595	15,705

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

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

1. Effective July 1976, includes a new financial group, banks and insurance companies. With this change the index includes 400 industrial stocks (formerly 425), 20 transportation (formerly 15 rail), 40 public utility (formerly 60), and 40 financial.
2. Beginning July 5, 1983, the American Stock Exchange rebased its index effectively cutting previous readings in half.
3. Beginning July 1983, under the revised Regulation T, margin credit at broker-dealers includes credit extended against stocks, convertible bonds, stocks acquired through exercise of subscription rights, corporate bonds, and government securities. Separate reporting of data for margin stocks, convertible bonds, and subscription issues was discontinued in April 1984.
4. Free credit balances are in accounts with no unfulfilled commitments to the brokers and are subject to withdrawal by customers on demand.
5. New series beginning June 1984.
6. These regulations, adopted by the Board of Governors pursuant to the Securities Exchange Act of 1934, limit the amount of credit to purchase and carry "margin securities" (as defined in the regulations) when such credit is collateralized by securities. Margin requirements on securities other than options are the difference between the market value (100 percent) and the maximum loan value of collateral as prescribed by the Board. Regulation T was adopted effective Oct. 15, 1934; Regulation U, effective May 1, 1936; Regulation G, effective Mar. 11, 1968; and Regulation X, effective Nov. 1, 1971.

On Jan. 1, 1977, the Board of Governors for the first time established in Regulation T the initial margin required for writing options on securities, setting it at 30 percent of the current market-value of the stock underlying the option. On Sept. 30, 1985, the Board changed the required initial margin, allowing it to be the same as the option maintenance margin required by the appropriate exchange or self-regulatory organization; such maintenance margin rules must be approved by the Securities and Exchange Commission. Effective Jan. 31, 1986, the SEC approved new maintenance margin rules, permitting margins to be the price of the option plus 15 percent of the market value of the stock underlying the option.

1.37 SELECTED FINANCIAL INSTITUTIONS Selected Assets and Liabilities

Millions of dollars, end of period

Account	1986	1987	1988 Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.r	Nov.
	FSLIC-insured institutions											
1 **Assets**	**1,163,851**	**1,250,855**	**1,257,466**	**1,261,581**	**1,274,482r**	**1,285,338r**	**1,289,979r**	**1,299,408r**	**1,311,704r**	**1,323,954r**	**1,332,962r**	**1,332,995**
2 Mortgages	697,451	721,593	723,856	725,625	728,984	733,547	736,893r	743,128r	751,468r	754,470r	760,933r	763,122
3 Mortgage-backed securities	158,193	201,828	197,811	197,889	202,767	205,053	207,744	208,532r	210,596r	211,180r	211,999r	212,503
4 Contra-assets to mortgage assets[1]	41,799	42,344	40,836	41,268	39,358	39,764	40,251r	40,308r	39,113r	38,443r	38,279r	37,716
5 Commercial loans	23,683	23,163	23,340	24,004	24,243	24,201	24,672r	24,959r	25,094r	24,883r	25,252r	25,391
6 Consumer loans	51,622	57,902	58,687	58,390	59,121	60,250	61,151	61,568	62,412r	61,785r	61,308r	61,779
7 Contra-assets to nonmortgage loans[2]	3,041	3,467	3,524	3,628	3,513	3,395	3,513r	3,389r	3,156r	3,078r	2,932r	2,961
8 Cash and investment securities	164,844	169,717	174,106	176,386	177,955	179,506	177,533r	178,446r	176,099r	183,163r	184,652r	180,015
9 Other[3]	112,898	122,462	124,025	124,184	124,284	125,939	125,751r	126,472r	128,305r	129,994r	130,028r	130,862
10 **Liabilities and net worth**	**1,163,851**	**1,250,855**	**1,257,466**	**1,261,581**	**1,274,482r**	**1,285,338r**	**1,289,979r**	**1,299,408r**	**1,311,704r**	**1,323,954r**	**1,332,962r**	**1,332,995**
11 Savings capital	890,664	932,616	946,790	958,471	962,304	963,761	966,750r	968,213r	968,293r	973,743r	976,164r	971,492
12 Borrowed money	196,929	249,917	239,452	237,663r	244,990	250,697	257,134r	262,745r	266,787r	273,666r	278,244r	281,027
13 FHLBB	100,025	116,363	112,725	112,389	113,029	114,994	117,287r	118,213r	120,677r	123,436r	124,368r	127,547
14 Other	96,904	133,554	126,727	125,274r	131,961	135,703	139,847r	144,532r	146,110r	150,230r	153,876r	153,480
15 Other	23,975	21,941	25,818	22,555	24,618	27,160r	24,563r	27,111r	28,905r	26,014r	27,544r	29,163
16 Net worth	52,282	46,382	45,406	42,892	42,570	43,720	41,531r	41,339r	47,719r	50,531r	51,011r	51,313
	FSLIC-insured federal savings banks											
17 **Assets**	**210,562**	**284,270r**	**295,951**	**307,756**	**311,434**	**323,028**	**329,736**	**333,610**	**357,860**	**367,974**	**369,698**	**374,891**
18 Mortgages	113,638	161,926r	169,340r	176,090r	178,394r	184,575	188,454	190,897	201,999	205,549	207,200	210,686
19 Mortgage-backed securities	29,766	45,826	46,687	47,979	49,075	51,290	52,648	53,049	55,710	56,408	56,770	57,609
20 Contra-assets to mortgage assets[1]	....	9,100	9,175	9,460	9,347r	9,735	10,089	10,136	10,917	11,019	10,875	10,883
21 Commercial loans	....	6,504	6,971	7,376r	7,531	7,639	7,904	7,919	8,570	8,719	8,910	9,071
22 Consumer loans	13,180	17,696	18,795	19,141	19,616	20,426	21,142	21,444	22,520	22,411	22,409	22,666
23 Contra-assets to nonmortgage loans[2]	....	678	737	800	724	707	738	699	772	783	789	804
24 Finance leases plus interest	....	591	584	611	615	652	708	735	791	806	805	804
25 Cash and investment	....	35,347	35,718	38,224	38,259r	39,889	40,286	40,825	45,084	48,985	48,703	48,231
26 Other	19,034	24,069r	25,517	26,424	25,822	26,758	27,230	27,318	32,516	34,428	34,054	34,935
27 **Liabilities and net worth**	**210,562**	**284,270r**	**295,951**	**307,756**	**311,434**	**323,028**	**329,736**	**333,610**	**357,860**	**367,974**	**369,698**	**374,891**
28 Savings capital	157,872	203,196	214,169	224,169	226,544	232,656	236,759	239,591	256,224	261,865	262,926	263,924
29 Borrowed money	37,329	60,716	59,704	61,552	62,566	66,816	69,356	70,015	75,807	80,688	80,782	83,622
30 FHLBB	19,897	29,617	29,169	30,456	30,075	31,682	32,177	31,941	35,357	37,245	37,510	39,628
31 Other	17,432	31,099	30,535	31,096	32,491	35,134	37,179	38,074	40,450	43,443	43,272	43,994
32 Other	4,263	5,324	6,602	6,089	6,390	7,118	6,639	7,061	8,061	7,376	7,680	8,321
33 Net worth	11,098	15,034r	15,477	15,946	16,086r	16,589	16,886	16,847	17,665	17,913	18,217	18,907
	Savings banks											
34 **Assets**	**236,866**	**259,643**	**259,224**	**262,100**	**262,269**	**264,507**	**249,927**	**252,875**	**253,453**	**255,510**	**257,127**	**258,537**
Loans												
35 Mortgage	118,323	138,494	139,108	140,835	139,691	143,235	138,148	139,844	141,316	143,626	145,398	146,501
36 Other	35,167	33,871	35,752	36,476	37,471	35,927	32,399	32,941	32,799	32,879	33,234	33,791
Securities												
37 U.S. government	14,209	13,510	12,269	12,225	13,203	12,490	11,597	11,563	11,353	11,182	10,896	10,804
38 Mortgage-backed securities	25,836	32,772	32,423	32,272	31,072	31,861	29,735	30,064	30,006	29,190	29,893	29,372
39 State and local government	2,185	2,003	2,053	2,033	2,013	1,933	1,849	1,840	1,901	1,878	1,872	1,887
40 Corporate and other	20,459	18,772	18,271	18,336	18,549	18,298	17,492	17,527	17,301	17,234	16,886	16,773
41 Cash	6,894	5,864	5,002	4,881	5,237	5,383	4,831	5,186	4,950	5,463	4,825	5,093
42 Other assets	13,793	14,357	14,346	15,042	15,033	15,380	13,876	13,910	13,827	14,058	14,123	14,316
43 **Liabilities**	**236,866**	**259,643**	**259,224**	**262,100**	**262,269**	**264,507**	**249,927**	**252,875**	**253,453**	**255,510**	**257,127**	**258,537**
44 Deposits	192,194	201,497	200,391	203,407	203,273	205,692	194,018	195,537	195,907	197,665	197,925	199,092
45 Regular[4]	186,345	196,037	195,336	198,273	197,801	200,098	188,571	189,993	190,716	192,228	192,663	194,095
46 Ordinary savings	37,717	41,959	41,234	41,867	41,741	42,403	40,179	40,124	39,738	39,618	39,375	39,482
47 Time	100,809	112,429	113,751	115,529	115,887	117,297	110,738	112,272	114,255	116,387	117,712	119,026
48 Other	5,849	5,460	5,055	5,134	5,472	5,594	5,447	5,544	5,191	5,427	5,262	4,997
49 Other liabilities	25,274	35,720	35,787	35,737	35,827	35,836	34,038	34,686	34,776	35,001	35,997	36,012
50 General reserve accounts	18,105	20,633	20,894	21,024	21,109	21,179	19,875	20,069	20,018	20,151	20,324	20,462

1.37—Continued

Account	1986	1987	1988 Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.
	Credit unions[5]											
51 **Total assets/liabilities and capital**	**147,726**			**169,111**	**169,175**	**172,456**	**172,345**	**173,276**	**173,044**	**174,649**	**174,722**	**174,406**
52 Federal	95,483			109,797	109,913	112,595	112,573	113,068	112,686	113,383	113,474	113,717
53 State	52,243			59,314	59,262	59,855	59,772	60,208	60,358	61,266	61,248	61,135
54 Loans outstanding	86,137	n.a.	n.a.	101,965	103,271	105,704	105,800	107,065	108,974	110,939	111,624	112,452
55 Federal	55,304			65,732	66,431	68,213	68,658	69,626	70,944	72,200	72,551	73,100
56 State	30,833			36,233	36,840	37,491	37,142	37,439	38,030	38,739	39,073	39,352
57 Savings	134,327			156,045	155,105	157,764	158,186	159,314	158,731	157,944	160,174	159,021
58 Federal	87,954			101,847	101,048	103,129	103,347	104,256	103,657	103,698	104,184	103,223
59 State	46,373			54,198	54,057	54,635	54,839	55,058	55,074	54,246	55,990	55,798
	Life insurance companies											
60 **Assets**	**937,551**	**1,044,459**	**1,052,645**	**1,065,549**	**1,075,541**	**1,094,827**	**1,105,546**	**1,113,547**	**1,121,337**	**1,131,179**	**1,139,490**	
Securities												
61 Government	84,640	84,426	92,497	92,408	93,946	86,711	87,160	88,218	88,362	87,588	88,883	
62 United States[6]	59,033	57,078	65,534	65,218	66,749	58,988	59,351	60,244	60,407	59,874	60,621	
63 State and local	11,659	10,681	11,859	12,033	11,976	11,016	11,114	11,102	11,190	11,054	11,069	
64 Foreign[7]	13,948	16,667	15,104	15,157	15,221	16,707	16,695	16,872	16,765	16,660	17,193	
65 Business	492,807	569,199	571,070	580,392	587,846	606,445	614,052	618,742	624,917	630,086	633,390	n.a.
66 Bonds	401,943	472,684	476,448	484,403	490,285	503,728	509,105	514,926	520,796	525,336	527,419	
67 Stocks	90,864	96,515	94,622	95,989	97,561	102,717	104,947	103,816	104,121	104,750	105,971	
68 Mortgages	193,842	203,545	213,182	214,815	215,383	219,012	220,870	221,990	233,438	225,627	227,342	
69 Real estate	31,615	34,172	34,503	34,845	34,964	35,484	35,545	35,737	35,920	35,892	36,892	
70 Policy loans	54,055	53,626	52,720	52,604	52,568	53,013	53,107	53,142	53,194	53,149	53,157	
71 Other assets	80,592	89,586	88,673	90,499	90,834	94,162	94,812	95,718	95,505	98,837	99,826	

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

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

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

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

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

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

1.38 FEDERAL FISCAL AND FINANCING OPERATIONS

Millions of dollars

Type of account or operation	Fiscal year 1986	Fiscal year 1987	Fiscal year 1988	Calendar year					
				1988					1989
				Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
U.S. budget[1]									
1 Receipts, total	769,091	854,143	908,953	69,479	97,803	63,646	64,408	93,795	89,369
2 On-budget	568,862	640,741	667,462	51,015	75,586	45,847	47,023	74,682	65,250
3 Off-budget	200,228	213,402	241,491	18,464	22,217	17,799	17,385	19,114	24,119
4 Outlays, total	990,258	1,003,830	1,064,044	92,561	87,588	90,655	93,541r	105,241r	86,563
5 On-budget	806,760	809,998	861,352	74,756	70,071	73,514	75,542r	91,610r	68,999
6 Off-budget	183,498	193,832	202,691	17,805	17,518	17,141	17,999	13,632	17,564
7 Surplus, or deficit (−), total	−221,167	−149,687	−155,090	−23,082r	10,214r	−27,009	−29,133r	−11,446r	2,806
8 On-budget	−237,898	−169,257	−193,890	−23,741	5,515	−27,667	−28,518r	−16,928r	−3,749
9 Off-budget	16,731	19,570	38,800	659	4,699	658	−614	5,482	6,555
Source of financing (total)									
10 Borrowing from the public	236,187	150,070	162,062	23,370	14,665	10,716	31,520	12,036	7,359
11 Operating cash (decrease, or increase (−))	−14,324	−5,052	−7,963	10,954	−31,444	13,748	9,218	−12,268	−8,135
12 Other[2]	−696	4,669	991	−11,242	6,564	2,545	−11,605r	11,678r	−2,030
MEMO									
13 Treasury operating balance (level, end of period)	31,384	36,436	44,398	12,954	44,398	30,650	21,432	33,700	41,835
14 Federal Reserve Banks	7,514	9,120	13,024	4,390	13,024	6,151	5,198	8,657	11,766
15 Tax and loan accounts	23,870	27,316	31,375	8,564	31,375	24,499	16,234	25,044	30,069

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

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

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

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

Millions of dollars

Source or type	Fiscal year 1987	Fiscal year 1988	Calendar year						
			1987		1988		1988		1989
			H1	H2	H1	H2	Nov.	Dec.	Jan.
RECEIPTS									
1 **All sources**	**854,143**	**908,954**	**447,282**	**421,712**	**476,115**	**449,821**	**64,408**	**93,795**	**89,369**
2 Individual income taxes, net	392,557	401,181	205,157	192,575	207,659	200,299	29,822	39,673	48,627
3 Withheld	322,463	341,435	156,760	170,203	169,300	179,600	30,092	37,578	28,049
4 Presidential Election Campaign Fund	33	33	30	4	28	4	0	0	0
5 Nonwithheld	142,957	132,199	112,421	31,223	101,614	29,880	1,367	3,034	20,993
6 Refunds	72,896	72,487	64,052	8,853	63,283	9,187	1,638	939	415
Corporation income taxes									
7 Gross receipts	102,859	109,683	52,396	52,821	58,002	56,409	2,662	23,100	4,003
8 Refunds	18,933	15,487	10,881	7,119	8,706	7,384	1,219	940	822
9 Social insurance taxes and contributions, net	303,318	334,335	163,519	143,755	181,058	157,603	25,075	24,698	31,652
10 Employment taxes and contributions[2]	273,028	305,093	146,696	130,388	164,412	144,983	22,051	24,100	30,351
11 Self-employment taxes and contributions[3]	13,987	17,691	12,020	1,889	14,839	3,032	326	0	1,181
12 Unemployment insurance	25,575	24,584	14,514	10,977	14,363	10,359	2,641	189	949
13 Other net receipts[4]	4,715	4,659	2,310	2,390	2,284	2,262	382	410	351
14 Excise taxes	32,457	35,540	15,845	17,680	16,440	19,434	3,247	3,155	2,597
15 Customs deposits	15,085	16,198	7,494[r]	7,993	7,913[r]	8,535	1,403	1,391	1,316
16 Estate and gift taxes	7,493	7,594	3,818	3,610	3,863	4,054	753	673	687
17 Miscellaneous receipts[5]	19,307	19,909	10,299	10,399	9,950	10,873	2,666	2,046	1,309
OUTLAYS									
18 **All types**	**1,004,586**	**1,064,054**	**503,267**	**532,839**	**513,210**	**553,220[r]**	**93,541[r]**	**105,241[r]**	**86,563**
19 National defense	281,999	290,349	142,886	146,995	143,080	150,496	24,702	28,934	19,916
20 International affairs	11,649	10,469	4,374	4,487	7,150	2,636	−2,055	805	938
21 General science, space, and technology	9,216	10,876	4,324	5,469	5,361	5,852	1,116	1,007	946
22 Energy	4,115	2,342	2,335	1,468	555	1,966	539	406	234
23 Natural resources and environment	13,363	14,538	6,175	7,590	6,776	8,330	1,465	1,480	932
24 Agriculture	26,606	17,210	11,824	14,640	7,872	7,725	3,243	1,712	2,141
25 Commerce and housing credit	6,156	19,064	4,893	3,852	5,951	20,274	2,764	7,217	836
26 Transportation	26,221	27,196	12,113	14,096	12,700	14,922	2,570	2,249	2,293
27 Community and regional development	5,051	5,577	3,108	2,075	2,765	2,690	588	536	425
28 Education, training, employment, and social services	29,724	30,856	14,182	15,592	15,451	16,152	3,054	2,849	3,463
29 Health	39,968	44,482	20,318	20,750	22,643	23,360	3,962	4,102	3,922
30 Social security and medicare	282,472	297,828	142,864	158,469	135,322	149,017	25,310	25,374	25,641
31 Income security	123,255	130,174	62,248	61,201	65,555	64,978	11,054	12,355	10,701
32 Veterans benefits and services	26,782	29,248	12,264	14,956	13,241	15,797	2,713	3,539	1,188
33 Administration of justice	7,548	9,205	3,626	4,291	4,761	4,778	803	765	884
34 General government	7,564	9,506	3,344	3,560	4,337	5,137	819	1,600	389
35 General-purpose fiscal assistance	0	0	337	1,175	448	0	0	0	0
36 Net interest[6]	138,570	151,711	70,110	71,933	76,098	78,317	13,622	12,972	14,780
37 Undistributed offsetting receipts[7]	−36,455	−36,576	−19,102	−17,684	−17,766	−18,771	−2,844	−2,537	−3,068

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

SOURCES. U.S. Department of the Treasury, *Monthly Treasury Statement of Receipts and Outlays of the U.S. Government*, and the U.S. Office of Management and Budget, *Budget of the U.S. Government, Fiscal Year 1988*.

1.40 FEDERAL DEBT SUBJECT TO STATUTORY LIMITATION

Billions of dollars

Item	1986		1987				1988		
	Sept. 30	Dec. 31	Mar. 31	June 30	Sept. 30	Dec. 31	Mar. 31	June 30	Sept. 30
1 **Federal debt outstanding**	**2129.5**	**2218.9**	**2250.7**	**2313.1**	**2354.3**	**2435.2**	**2493.2**	**2555.1**	**2614.6**
2 Public debt securities	2125.3	2214.8	2246.7	2309.3	2350.3	2431.7	2487.6	2547.7	2602.3
3 Held by public	1742.4	1811.7	1839.3	1871.1	1893.1	1954.1	1996.7	2013.4	2051.7
4 Held by agencies	382.9	403.1	407.5	438.1	457.2	477.6	490.8	534.2	550.4
5 Agency securities	4.2	4.0	4.0	3.8	4.0	3.5	5.6	7.4	12.4
6 Held by public	3.2	3.0	2.9	2.8	3.0	2.7	5.1	7.0	12.2
7 Held by agencies	1.1	1.1	1.1	1.0	1.0	.8	.6	.5	.2
8 **Debt subject to statutory limit**	**2111.0**	**2200.5**	**2232.4**	**2295.0**	**2336.0**	**2417.4**	**2472.6**	**2532.2**	**2586.9**
9 Public debt securities	2109.7	2199.3	2231.1	2293.7	2334.7	2416.3	2472.1	2532.1	2586.7
10 Other debt[1]	1.3	1.3	1.3	1.3	1.3	1.1	.5	.1	.1
11 MEMO: Statutory debt limit	2111.0	2300.0	2300.0	2320.0	2800.0	2800.0	2800.0	2800.0	2800.0

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

SOURCES. *Treasury Bulletin* and *Monthly Statement of the Public Debt of the United States.*

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

Billions of dollars, end of period

Type and holder	1984	1985	1986	1987	1987	1988		
					Q4	Q1	Q2	Q3
1 ***Total gross public debt***	**1663.0**	**1945.9**	**2214.8**	**2431.7**	**2431.7**	**2487.6**	**2547.7**	**2602.3**
By type								
2 Interest-bearing debt	1660.6	1943.4	2212.0	2428.9	2428.9	2484.9	2545.0	2599.9
3 Marketable	1247.4	1437.7	1619.0	1724.7	1724.7	1758.7	1769.9	1802.9
4 Bills	374.4	399.9	426.7	389.5	389.5	392.6	382.3	398.5
5 Notes	705.1	812.5	927.5	1037.9	1037.9	1059.9	1072.7	1089.6
6 Bonds	167.9	211.1	249.8	282.5	282.5	291.3	299.9	299.9
7 Nonmarketable[1]	413.2	505.7	593.1	704.2	704.2	726.2	775.1	797.0
8 State and local government series	44.4	87.5	110.5	139.3	139.3	142.9	146.9	147.6
9 Foreign issues[2]	9.1	7.5	4.7	4.0	4.0	6.1	5.7	6.3
10 Government	9.1	7.5	4.7	4.0	4.0	6.1	5.7	6.3
11 Public	.0	.0	.0	.0	.0	.0	.0	.0
12 Savings bonds and notes	73.1	78.1	90.6	99.2	99.2	102.3	104.5	106.2
13 Government account series[3]	286.2	332.2	386.9	461.3	461.3	474.4	517.5	536.5
14 Non-interest-bearing debt	2.3	2.5	2.8	2.8	2.8	2.6	2.7	2.5
By holder[4]								
15 U.S. government agencies and trust funds	289.6	348.9	403.1	477.6	477.6	490.8	534.2	550.4
16 Federal Reserve Banks	160.9	181.3	211.3	222.6	222.6	217.5	227.6	229.2
17 Private investors	1212.5	1417.2	1602.0	1745.2	1745.2	1778.2	1784.9	1819.0
18 Commercial banks	186.0	198.2	203.5	201.2	201.2	201.0	202.5	203.0
19 Money market funds	25.9	25.1	28.0	14.3	14.3	14.9	13.1	10.8
20 Insurance companies	64.5	78.5	105.6	120.6	120.6	125.5	132.2	135.0
21 Other companies	50.1	59.0	68.8	84.6	84.6	83.0	86.5	86.0
22 State and local Treasurys	173.0	226.7	262.8	282.6	282.6	285.8	n.a.	n.a.
Individuals								
23 Savings bonds	74.5	79.8	92.3	101.1	101.1	104.0	106.2	107.8
24 Other securities	69.3	75.0	70.5	72.3	72.3	69.8	71.7	72.0
25 Foreign and international[5]	192.9	212.5	251.6	287.3	287.3	321.0	333.8	334.3
26 Other miscellaneous investors[6]	376.3	462.4	518.9	581.2	581.2	573.2	n.a.	n.a.

1. Includes (not shown separately): Securities issued to the Rural Electrification Administration; depository bonds, retirement plan bonds, and individual retirement bonds.
2. Nonmarketable dollar-denominated and foreign currency-denominated series held by foreigners.
3. Held almost entirely by U.S. Treasury agencies and trust funds.
4. Data for Federal Reserve Banks and U.S. Treasury agencies and trust funds are actual holdings; data for other groups are Treasury estimates.
5. Consists of investments of foreign and international accounts. Excludes non-interest-bearing notes issued to the International Monetary Fund.
6. Includes savings and loan associations, nonprofit institutions, credit unions, mutual savings banks, corporate pension trust funds, dealers and brokers, certain U.S. Treasury deposit accounts, and federally-sponsored agencies.

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

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

Par value; averages of daily figures, in millions of dollars

	Item	1986	1987	1988r	1988r		1989	1988r		1989			
					Nov.	Dec.	Jan.	Dec. 21	Dec. 28	Jan. 4	Jan. 11	Jan. 18	Jan. 25
	Immediate delivery[2]												
1	**U.S. Treasury securities**	**95,444**	**110,050**	**101,623**	**114,807**	**89,962**	**107,144**	**85,718**	**61,942**	**71,660**	**103,367**	**122,526**	**108,046**
	By maturity												
2	Bills	34,247	37,924	29,388	32,553	28,533	31,930	32,188	24,612	25,724	34,216	36,779	29,886
3	Other within 1 year	2,115	3,271	3,426	3,537	2,925	3,776	3,336	2,364	3,742	3,742	3,974	3,563
4	1–5 years	24,667	27,918	27,777	32,824	23,379	28,259	19,340	17,355	21,785	26,451	28,291	31,153
5	5–10 years	20,455	24,014	24,939	27,072	21,480	27,317	18,379	10,801	13,465	25,328	33,775	26,378
6	Over 10 years	13,961	16,923	16,093	18,822	13,643	15,861	12,475	6,810	6,945	13,630	19,708	17,066
	By type of customer												
7	U.S. government securities dealers	3,669	2,936	2,761	3,123	2,810	2,427	2,580	3,376	1,964	2,572	2,937	2,414
8	U.S. government securities brokers	49,558	61,539	59,844	67,174	51,787	63,244	48,361	32,559	39,292	59,209	71,840	65,400
9	All others[3]	42,217	45,575	39,019	44,511	35,364	41,472	34,777	26,006	30,404	41,586	47,748	40,233
10	Federal agency securities	16,747	18,084	15,903	17,541	14,801	19,427	12,563	11,939	14,747	21,030	20,376	18,507
11	Certificates of deposit	4,355	4,112	3,369	3,535	2,759	3,779	3,202	1,978	3,134	3,662	4,167	3,745
12	Bankers acceptances	3,272	2,965	2,316	2,563	1,898	2,608	1,814	1,438	2,422	2,813	2,943	2,338
13	Commercial paper	16,660	17,135	22,927	26,590	28,156	35,573	29,704	26,165	35,696	35,970	36,787	34,323
	Futures contracts[4]												
14	Treasury bills	3,311	3,233	2,627	2,466	2,643	2,924	2,717	1,112	1,997	2,508	2,968	2,814
15	Treasury coupons	7,175	8,963	9,695	11,015	9,490	9,837	9,077	4,833	5,297	7,743	12,481	10,116
16	Federal agency securities	16	5	1	0	0	0	0	0	0	0	0	0
	Forward transactions[5]												
17	U.S. Treasury securities	1,876	2,029	2,095	3,112	1,747	1,662	1,311	1,891	1,239	2,272	1,208	1,618
18	Federal agency securities	7,830	9,290	8,008	8,188	9,217	8,211	10,799	3,636	4,702	10,407	9,723	6,921

1. Transactions are market purchases and sales of securities as reported to the Federal Reserve Bank of New York by the U.S. government securities dealers on its published list of primary dealers.

Averages for transactions are based on the number of trading days in the period. The figures exclude allotments of, and exchanges for, new U.S. Treasury securities, redemptions of called or matured securities, purchases or sales of securities under repurchase agreement, reverse repurchase (resale), or similar contracts.

2. Data for immediate transactions do not include forward transactions.

3. Includes, among others, all other dealers and brokers in commodities and securities, nondealer departments of commercial banks, foreign banking agencies, and the Federal Reserve System.

4. Futures contracts are standardized agreements arranged on an organized exchange in which parties commit to purchase or sell securities for delivery at a future date.

5. Forward transactions are agreements arranged in the over-the-counter market in which securities are purchased (sold) for delivery after 5 business days from the date of the transaction for Treasury securities (Treasury bills, notes, and bonds) or after 30 days for mortgage-backed agency issues.

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

Averages of daily figures, in millions of dollars

Item	1986	1987	1988[r]	1988 Nov.	1988 Dec.[r]	1989 Jan.	1988 Dec. 28[r]	1989 Jan. 4	1989 Jan. 11	1989 Jan. 18	1989 Jan. 25
	Positions										
Net immediate[2]											
1 **U.S. Treasury securities**	12,912	**−6,216**	**−22,754**	**−24,048**	**−32,980**	**−32,135**	**−36,617**	**−37,430**	**−38,789**	**−28,110**	**−29,390**
2 Bills	12,761	4,317	2,247	329	−1,524	−3,421	−3,395	−5,041	−6,051	−2,411	−1,484
3 Other within 1 year	3,705	1,557	−2,233	−3,587	−1,939	−1,831	−1,728	−1,983	−1,559	−1,424	−1,962
4 1–5 years	9,146	649	−3,019	−1,334	−10,021	−10,076	−12,340	−10,639	−10,330	−9,048	−11,176
5 5–10 years	−9,505	−6,564	−9,666	−7,697	−7,115	−8,492	−7,841	−9,479	−11,393	−7,264	−7,410
6 Over 10 years	−3,197	−6,174	−10,082	−11,759	−12,380	−8,316	−11,313	−10,288	−9,457	−7,963	−7,358
7 Federal agency securities	32,984	31,911	28,230	32,172	27,283	26,586	24,238	23,407	25,624	27,542	27,081
8 Certificates of deposit	10,485	8,188	7,300	8,445	8,767	6,812	8,858	9,120	7,361	6,487	6,072
9 Bankers acceptances	5,526	3,660	2,486	2,579	2,128	2,236	2,157	2,124	2,262	2,441	2,122
10 Commercial paper	8,089	7,496	6,152	5,957	9,363	8,618	11,426	11,476	8,137	9,242	8,112
Futures positions											
11 Treasury bills	−18,059	−3,373	−2,210	−1,878	1,014	−1,582	804	−272	−1,994	−1,962	−2,804
12 Treasury coupons	3,473	5,988	6,224	5,875	6,611	3,325	5,390	6,319	5,864	2,801	1,788
13 Federal agency securities	−153	−95	0	0	0	0	0	0	0	0	0
Forward positions											
14 U.S. Treasury securities	−2,144	−1,211	345	−770	−451	57	6	121	−198	−462	357
15 Federal agency securities	−11,840	−18,817	−16,348	−16,959	−12,847	−12,783	−10,832	−10,169	−13,326	−14,555	−12,467
	Financing[3]										
Reverse repurchase agreements[4]											
16 Overnight and continuing	98,913	126,709	136,327	143,423	147,712	121,612	140,953	154,812	145,671	145,077	151,458
17 Term	108,607	148,288	177,477	205,634	202,052	159,767	209,170	175,141	199,354	190,511	208,025
Repurchase agreements[5]											
18 Overnight and continuing	141,823	170,763	172,695	173,173	183,081	155,641	177,749	189,331	185,493	193,810	191,920
19 Term	102,397	121,270	137,056	165,035	145,045	111,476	150,729	115,741	135,047	131,848	154,157

1. Data for dealer positions and sources of financing are obtained from reports submitted to the Federal Reserve Bank of New York by the U.S. Treasury *securities dealers on its published list of primary dealers.*

Data for positions are averages of daily figures, in terms of par value, based on the number of trading days in the period. Positions are net amounts and are shown on a commitment basis. Data for financing are in terms of actual amounts borrowed or lent and are based on Wednesday figures.

2. Immediate positions are net amounts (in terms of par values) of securities owned by nonbank dealer firms and dealer departments of commercial banks on a commitment, that is, trade-date basis, including any such securities that have been sold under agreements to repurchase (RPs). *The maturities of some* repurchase agreements are sufficiently long, however, to suggest that the securities involved are not available for trading purposes. Immediate positions include reverses to maturity, which are securities that were sold after having been obtained under reverse repurchase agreements that mature on the same day as the securities. Data for immediate positions do not include forward positions.

3. Figures cover financing involving U.S. Treasury and federal agency securities, negotiable CDs, bankers acceptances, and commercial paper.

4. Includes all reverse repurchase agreements, including those that have been arranged to make delivery on short sales and those for which the securities obtained have been used as collateral on borrowings, that is, matched agreements.

5. Includes both repurchase agreements undertaken to finance positions and "matched book" repurchase agreements.

NOTE. *Data on positions for the period* May 1 *to Sept.* 30, 1986, *are partially* estimated.

1.44 FEDERAL AND FEDERALLY SPONSORED CREDIT AGENCIES Debt Outstanding

Millions of dollars, end of period

Agency	1984	1985	1986	1987	1988				
					Aug.	Sept.	Oct.	Nov.	Dec.
1 **Federal and federally sponsored agencies**	**271,220**	**293,905**	**307,361**	**341,386**	**360,004**	**363,894**	**364,491**	**390,639**	n.a.
2 Federal agencies	35,145	36,390	36,958	37,981	35,694	35,448	35,070	35,209	35,668
3 Defense Department[1]	142	71	33	13	11	11	8	8	8
4 Export-Import Bank[2,3]	15,882	15,678	14,211	11,978	11,232	10,964	10,964	10,964	11,033
5 Federal Housing Administration[4]	133	115	138	183	115	120	118	139	150
6 Government National Mortgage Association participation certificates[5]	2,165	2,165	2,165	1,615	0	0	0	0	0
7 Postal Service[6]	1,337	1,940	3,104	6,103	5,842	5,842	5,842	5,842	6,142
8 Tennessee Valley Authority	15,435	16,347	17,222	18,089	18,494	18,511	18,138	18,256	18,335
9 United States Railway Association[6]	51	74	85	0	0	0	0	0	0
10 Federally sponsored agencies[7]	237,012	257,515	270,553	303,405	324,310	328,446	329,421	355,430	n.a.
11 Federal Home Loan Banks	65,085	74,447	88,752	115,725	121,266	126,011	127,113	130,630	135,834
12 Federal Home Loan Mortgage Corporation	10,270	11,926	13,589	17,645	19,652	18,368	17,384	19,500	n.a.
13 Federal National Mortgage Association	83,720	93,896	93,563	97,057	105,730	105,986	105,698	53,420	53,420
14 Farm Credit Banks[8]	72,192	68,851	62,478	55,275	53,582	53,764	53,923	105,337	105,452
15 Student Loan Marketing Association[9]	5,745	8,395	12,171	16,503	19,880	20,117	21,112	21,403	22,073
16 Financing Corporation[10]	n.a.	n.a.	n.a.	1,200	3,750	3,750	3,750	4,450	5,850
17 Farm Credit Financial Assistance Corporation[11]	n.a.	n.a.	n.a.	n.a.	450	450	450	690	690
MEMO									
18 **Federal Financing Bank debt[12]**	**145,217**	**153,373**	**157,510**	**152,417**	**149,809**	**146,151**	**145,529**	**143,321**	**142,850**
Lending to federal and federally sponsored agencies									
19 Export-Import Bank[3]	15,852	15,670	14,205	11,972	11,226	10,958	10,958	10,958	11,027
20 Postal Service[6]	1,087	1,690	2,854	5,853	5,592	5,592	5,592	5,592	5,892
21 Student Loan Marketing Association	5,000	5,000	4,970	4,940	4,940	4,910	4,910	4,910	4,910
22 Tennessee Valley Authority	13,710	14,622	15,797	16,709	17,114	17,131	16,758	16,876	16,955
23 United States Railway Association[6]	51	74	85	0	0	0	0	0	0
Other Lending[13]									
24 Farmers Home Administration	58,971	64,234	65,374	59,674	59,464	58,496	58,496	58,496	58,496
25 Rural Electrification Administration	20,693	20,654	21,680	21,191	19,225	19,205	19,222	19,220	19,246
26 Other	29,853	31,429	32,545	32,078	32,248	29,859	29,593	27,269	26,324

1. Consists of mortgages assumed by the Defense Department between 1957 and 1963 under family housing and homeowners assistance programs.
2. Includes participation certificates reclassified as debt beginning Oct. 1, 1976.
3. Off-budget Aug. 17, 1974, through Sept. 30, 1976; on-budget thereafter.
4. Consists of debentures issued in payment of Federal Housing Administration insurance claims. Once issued, these securities may be sold privately on the securities market.
5. Certificates of participation issued before fiscal 1969 by the Government National Mortgage Association acting as trustee for the Farmers Home Administration; Department of Health, Education, and Welfare; Department of Housing and Urban Development; Small Business Administration; and the Veterans Administration.
6. Off-budget.
7. Includes outstanding noncontingent liabilities: notes, bonds, and debentures. Some data are estimated.
8. Excludes borrowing by the Farm Credit Financial Assistance Corporation, shown in line 17.
9. Before late 1981, the Association obtained financing through the Federal Financing Bank (FFB). Borrowing excludes that obtained from the FFB, which is shown on line 21.
10. The Financing Corporation, established in August 1987 to recapitalize the Federal Savings and Loan Insurance Corporation, undertook its first borrowing in October 1987.
11. The Farm Credit Financial Assistance Corporation (established in January 1988 to provide assistance to the Farm Credit System) undertook its first borrowing in July 1988.
12. The FFB, which began operations in 1974, is authorized to purchase or sell obligations issued, sold, or guaranteed by other federal agencies. Since FFB incurs debt solely for the purpose of lending to other agencies, its debt is not included in the main portion of the table in order to avoid double counting.
13. Includes FFB purchases of agency assets and guaranteed loans; the latter contain loans guaranteed by numerous agencies with the guarantees of any particular agency being generally small. The Farmers Home Administration item consists exclusively of agency assets, while the Rural Electrification Administration entry contains both agency assets and guaranteed loans.

1.45 NEW SECURITY ISSUES Tax-Exempt State and Local Governments

Millions of dollars

Type of issue or issuer, or use	1986	1987	1988	1988							1989
				June	July	Aug.	Sept.	Oct.	Nov.	Dec.^{r}	Jan.
1 **All issues, new and refunding**[1]	**147,011**	**102,407**	**108,078**	**13,912**	**9,746**	**6,966**	**9,669**	**10,455**	**8,551**	**11,268**	**6,324**
Type of issue											
2 General obligation	46,346	30,589	29,662	4,237	1,959	2,472	2,370	2,058	2,368	2,491	1,709
3 Revenue	100,664	71,818	78,417	9,675	7,788	4,494	7,299	8,397^r	6,183	8,777	4,615
Type of issuer											
4 State	14,474	10,102	9,254	1,349	140	576	1,206	734	525	1,011	232
5 Special district and statutory authority[2]	89,997	65,460	69,447	8,629	6,752	3,749	6,407	7,283	5,550	7,690	4,620
6 Municipalities, counties, and townships	42,541	26,845	29,377	3,934	2,854	2,641	2,056	2,438	2,476	2,567	1,472
7 **Issues for new capital, total**	**83,492**	**56,789**	**75,064**	**8,935**	**8,386**	**5,317**	**7,076**	**6,965**	**5,830**	**8,738**	**4,185**
Use of proceeds											
8 Education	12,307	9,524	13,722	1,320	1,699	694	1,351	512	827	2,564	829
9 Transportation	7,246	3,677	6,974	858	1,446	265	732	559	237	636	344
10 Utilities and conservation	14,594	7,912	7,929	635	225	613	694	1,238	1,055	463	1,368
11 Social welfare	11,353	11,106	17,824	2,060	1,222	1,242	2,358	2,478	1,991	2,072	531
12 Industrial aid	6,190	7,474	6,276	434	128	460	280	393	294	1,010	246
13 Other purposes	31,802	18,020	22,339	3,628	3,666	2,043	1,661	1,785	1,426	1,993	867

1. Par amounts of long-term issues based on date of sale.
2. Includes school districts beginning 1986.

SOURCES. Securities Data/Bond Buyer Municipal Data Base beginning 1986. Public Securities Association for earlier data.

1.46 NEW SECURITY ISSUES U.S. Corporations

Millions of dollars

Type of issue or issuer, or use	1986	1987	1988	1988							
				May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1 **All issues**[1]	**423,726**	**392,156**	**264,881**	**23,413**	**30,043**	**18,037**	**19,305**	**23,933**	**21,667**^{r}	**24,489**^{r}	**12,251**
2 **Bonds**[2]	**355,293**	**325,648**	**222,425**	**19,382**	**25,748**	**12,899**	**15,970**	**20,928**	**18,880**^{r}	**21,054**^{r}	**10,200**
Type of offering											
3 Public, domestic	231,936	209,279	199,182	17,496	22,753	10,905	14,631^r	18,240^r	17,368^r	16,756^r	10,000
4 Private placement, domestic[3]	80,760	92,070	90,000	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5. Sold abroad	42,596	24,299	23,243	1,886	2,995	1,994	1,339	2,688^r	1,512	4,298^r	200
Industry group											
6 Manufacturing	91,548	61,666	40,958	4,206	5,305	2,205^r	3,476	3,750^r	3,552	2,890^r	1,446
7 Commercial and miscellaneous	40,124	49,327	18,614	1,446	2,281	1,530^r	2,226^r	1,035	764^r	3,260^r	722
8 Transportation	9,971	11,974	3,771	184	580	100	0	150	605^r	45	0
9 Public utility	31,426	23,004	13,775	1,929	1,707	540	298	856	1,346	672^r	138
10 Communication	16,659	7,340	4,044	69	925	577	29	1,064	100^r	289	158
11 Real estate and financial	165,564	172,343	141,262	11,546	14,949	7,948	9,940^r	14,072^r	12,513^r	13,899^r	7,736
12 **Stocks**[3]	**68,433**	**66,508**	**42,456**	**4,031**	**4,295**	**5,138**	**3,335**	**3,005**	**2,787**	**3,435**	**2,051**
Type											
13 Preferred	11,514	10,123	6,544	285	501	407	498	385	865	478	495
14 Common	50,316	43,225	35,911	3,746	3,794	4,731	2,837	2,620	1,922	2,957^r	1,556
15 Private placement[3]	6,603	13,157	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Industry group											
16 Manufacturing	15,027	13,880	6,115	1,080	1,676	296	538	244	288	430^r	425
17 Commercial and miscellaneous	10,617	12,888	4,766	157	522	2,073	347	525	222	52^r	89
18 Transportation	2,427	2,439	845	15	51	0	72	5	25	20	0
19 Public utility	4,020	4,322	1,581	59	207	20	135	215	282	70	20
20 Communication	1,825	1,458	448	78	13	20	3	23	0	20	59
21 Real estate and financial	34,517	31,521	28,701	2,642	1,826	2,729	2,240	1,993	1,970	2,843^r	1,459

1. Figures which represent gross proceeds of issues maturing in more than one year, are principal amount or number of units multiplied by offering price. Excludes secondary offerings, employee stock plans, investment companies other than closed-end, intracorporate transactions, equities sold abroad, and Yankee bonds. Stock data include ownership securities issued by limited partnerships.
2. Monthly data include only public offerings.
3. Data are not available on a monthly basis. Before 1987, annual totals include underwritten issues only.

SOURCES. IDD Information Services, Inc., U.S. Securities and Exchange Commission and the Board of Governors of the Federal Reserve System.

1.47 OPEN-END INVESTMENT COMPANIES Net Sales and Asset Position

Millions of dollars

Item	1987	1988	1988							
			May	June	July	Aug.	Sept.	Oct.	Nov.[r]	Dec.
INVESTMENT COMPANIES[1]										
1 **Sales of own shares[2]**	**381,260**	**271,237**	**19,579**	**22,503**	**20,728**	**20,595**	**19,872**	**20,494**	**20,327**	**25,780**
2 Redemptions of own shares[3]	314,252	267,451	21,412	23,168	20,561	22,837[r]	21,330	19,362	20,599	25,976
3 Net sales	67,008	3,786	-1,833	-665	167	-2,242	-1,458	1,132	-272	-196
4 **Assets[4]**	**453,842**	**472,297**	**468,735**	**481,120**	**477,076**	**465,822**	**474,662**	**481,571**	**470,660**	**472,297**
5 Cash position[5]	38,006	45,090	45,003	43,229	44,015	45,229	46,706	45,976	43,488	45,090
6 Other	415,836	427,207	423,732	437,891	433,061	420,595	427,956	435,595	427,172	427,207

1. Data on sales and redemptions exclude money market mutual funds but include limited maturity municipal bond funds. Data on asset positions exclude both money market mutual funds and limited maturity municipal bond funds.
2. Includes reinvestment of investment income dividends. Excludes reinvestment of capital gains distributions and share issue of conversions from one fund to another in the same group.
3. Excludes share redemption resulting from conversions from one fund to another in the same group.
4. Market value at end of period, less current liabilities.
5. Also includes all U.S. government securities and other short-term debt securities.

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

1.48 CORPORATE PROFITS AND THEIR DISTRIBUTION

Billions of dollars; quarterly data are at seasonally adjusted annual rates.

Account	1986	1987	1988	1987				1988			
				Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
1 Corporate profits with inventory valuation and capital consumption adjustment	298.9	310.4	323.8	298.3	305.2	322.0	316.1	316.2	326.5	330.0	n.a.
2 Profits before tax	236.4	276.7	302.1	261.8	273.7	289.4	281.9	286.2	305.9	313.9	n.a.
3 Profits tax liability	106.6	133.8	140.9	126.3	132.6	140.0	136.2	136.9	143.2	144.8	n.a.
4 Profits after tax	129.8	142.9	161.3	135.5	141.1	149.5	145.7	149.4	162.7	169.1	n.a.
5 Dividends	88.2	95.5	104.5	91.7	94.0	97.0	99.3	101.3	103.1	105.7	108.0
6 Undistributed profits	41.6	47.4	56.8	43.8	47.0	52.4	46.4	48.1	59.6	63.4	n.a.
7 Inventory valuation	8.3	-18.0	-23.9	-14.4	-20.0	-19.5	-18.2	-19.4	-27.4	-29.3	-19.6
8 Capital consumption adjustment	54.2	51.7	45.6	50.8	51.5	52.1	52.4	49.4	48.0	45.4	39.7

SOURCE. *Survey of Current Business* (Department of Commerce).

1.50 TOTAL NONFARM BUSINESS EXPENDITURES on New Plant and Equipment ▲

Billions of dollars; quarterly data are at seasonally adjusted annual rates.

Industry	1986	1987	1988	1987			1988				1989
				Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1
1 **Total nonfarm business**	**379.47**	**389.67**	**430.95**	**380.66**	**394.54**	**406.82**	**412.02**	**426.94**	**436.01**	**445.73**	**466.76**
Manufacturing											
2 Durable goods industries	69.14	71.01	78.06	69.05	71.96	72.28	75.70	76.87	79.48	78.97	84.25
3 Nondurable goods industries	73.56	74.88	85.50	72.66	76.24	79.92	82.90	84.82	89.43	90.00	93.56
Nonmanufacturing											
4 Mining	11.22	11.39	12.62	11.02	11.81	12.32	12.59	13.26	12.47	11.97	11.62
Transportation											
5 Railroad	6.66	5.92	7.05	5.84	6.07	6.12	6.92	7.01	6.84	8.07	9.26
6 Air	6.26	6.53	7.61	6.02	6.15	6.94	6.43	6.66	8.06	6.84	10.07
7 Other	5.89	6.40	6.91	6.26	6.97	6.28	7.08	7.05	7.26	7.20	7.58
Public utilities											
8 Electric	33.91	31.63	32.20	31.47	31.57	32.28	30.31	30.95	32.20	33.54	32.69
9 Gas and other	12.47	13.25	14.27	12.47	13.73	14.11	14.30	14.48	14.50	15.25	16.66
10 Commercial and other[2]	160.38	168.65	186.74	165.86	170.05	176.56	175.79	185.83	185.76	193.87	201.07

▲Trade and services are no longer being reported separately. They are included in Commercial and other, line 10.
1. Anticipated by business.
2. "Other" consists of construction; wholesale and retail trade; finance and insurance; personal and business services; and communication.
SOURCE. *Survey of Current Business* (Department of Commerce).

1.51 DOMESTIC FINANCE COMPANIES Assets and Liabilities[1]

Billions of dollars, end of period

Account	1983	1984	1985	1986 Q2	1986 Q3	1986 Q4	1987 Q1	1987 Q2	1987 Q3	1987 Q4
ASSETS										
Accounts receivable, gross										
1 Consumer	83.3	89.9	111.9	123.4	135.3	134.7	131.1	134.7	141.6	141.1
2 Business	113.4	137.8	157.5	166.8	159.7	173.4	181.4	188.1	188.3	207.6
3 Real estate	20.5	23.8	28.0	29.8	31.0	32.6	34.7	36.5	38.0	39.5
4 Total	217.3	251.5	297.4	320.0	326.0	340.6	347.2	359.3	367.9	388.2
Less:										
5 Reserves for unearned income	30.3	33.8	39.2	40.7	42.4	41.5	40.4	41.2	42.5	45.3
6 Reserves for losses	3.7	4.2	4.9	5.1	5.4	5.8	5.9	6.2	6.5	6.8
7 Accounts receivable, net	183.2	213.5	253.3	274.2	278.2	293.3	300.9	311.9	318.9	336.1
8 All other	34.4	35.7	45.3	49.5	60.0	58.6	59.0	57.7	64.5	58.2
9 **Total assets**	**217.6**	**249.2**	**298.6**	**323.7**	**338.2**	**351.9**	**359.9**	**369.6**	**383.4**	**394.3**
LIABILITIES										
10 Bank loans	18.3	20.0	18.0	16.3	16.8	18.6	17.2	17.3	15.9	16.4
11 Commercial paper	60.5	73.1	99.2	108.4	112.8	117.8	119.1	120.4	124.2	128.4
Debt										
12 Other short-term	11.1	12.9	12.7	15.8	16.4	17.5	21.8	24.8	26.9	28.0
13 Long-term	67.7	77.2	94.4	106.9	111.7	117.5	118.7	121.8	128.2	137.1
14 All other liabilities	31.2	34.5	41.5	40.9	45.0	44.1	46.5	49.1	48.6	52.8
15 Capital, surplus, and undivided profits	28.9	31.5	32.8	35.4	35.6	36.4	36.6	36.3	39.5	31.5
16 **Total liabilities and capital**	**217.6**	**249.2**	**298.6**	**323.7**	**338.2**	**351.9**	**359.9**	**369.6**	**383.4**	**394.3**

1. NOTE. Components may not add to totals because of rounding.

1.52 DOMESTIC FINANCE COMPANIES Business Credit Outstanding and Net Change[1]

Millions of dollars, seasonally adjusted

Type	1985	1986	1987	1988 July	1988 Aug.	1988 Sept.	1988 Oct.	1988 Nov.	1988 Dec.
1 **Total**	**156,297**	**171,966**	**205,869**	**223,706**	**223,958**	**230,474**	**231,807**	**234,059**	**234,808**
Retail financing of installment sales									
2 Automotive (commercial vehicles)	20,660	25,952	35,674	37,682	37,519	37,120	37,359	36,984	37,067
3 Business, industrial, and farm equipment	22,483	22,950	24,987	27,428	27,603	27,569	27,841	28,160	27,919
Wholesale financing									
4 Automotive	23,988	23,419	31,059	28,449	27,721	32,732	32,523	32,523	33,879
5 Equipment	4,568	5,423	5,693	5,654	5,803	5,949	5,888	6,045	6,083
6 All other	6,809	7,079	8,408	8,458	8,531	8,738	8,867	9,025	9,278
Leasing									
7 Automotive	16,275	19,783	21,943	24,400	24,370	23,861	24,186	24,623	24,639
8 Equipment	34,768	37,833	43,002	52,803	53,671	55,400	55,786	56,294	58,147
9 Loans on commercial accounts receivable and factored commercial accounts receivable	15,765	15,959	18,024	19,095	19,132	19,386	19,239	19,616	18,133
10 All other business credit	10,981	13,568	17,079	19,736	19,609	19,719	20,117	20,790	19,664
	Net change (during period)								
11 **Total**	**19,607**	**15,669**	**3,040**	**1,573**	**252**	**6,515**	**1,333**	**2,252**	**749**
Retail financing of installment sales									
12 Automotive (commercial vehicles)	5,067	5,292	1,220	163	−163	−399	239	−375	83
13 Business, industrial, and farm equipment	−363	467	223	−120	175	−35	272	319	−240
Wholesale financing									
14 Automotive	5,423	−569	158	−282	−728	5,011	−208	0	1,355
15 Equipment	−867	855	−101	97	149	146	−60	157	38
16 All other	1,069	270	257	−23	73	207	129	158	253
Leasing									
17 Automotive	3,896	3,508	−70	324	−30	−509	325	436	16
18 Equipment	2,685	3,065	1,038	438	867	1,729	386	508	1,853
19 Loans on commercial accounts receivable and factored commercial accounts receivable	2,161	194	−477	500	37	255	−148	377	−1,483
20 All other business credit	536	2,587	792	476	−127	110	398	673	−1,126

1. These data also appear in the Board's G.20 (422) release. For address, see inside front cover.

1.53 MORTGAGE MARKETS

Millions of dollars; exceptions noted.

Item	1986	1987	1988	1988 July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
	Terms and yields in primary and secondary markets									
PRIMARY MARKETS										
Conventional mortgages on new homes										
Terms[1]										
1 Purchase price (thousands of dollars)	118.1	137.0	150.0	152.9	154.2	148.3	153.8	155.3	150.0[r]	156.2
2 Amount of loan (thousands of dollars)	86.2	100.5	110.5	111.9	114.9	109.8	114.0	115.6	110.8[r]	115.8
3 Loan/price ratio (percent)	75.2	75.2	75.5[r]	75.2	76.7	75.4	75.8	76.1	75.6[r]	75.6
4 Maturity (years)	26.6	27.8	28.0	28.4	28.5	27.6	28.4	28.4	28.3	28.8
5 Fees and charges (percent of loan amount)[2]	2.48	2.26	2.19	2.24	2.35	2.14	1.98	2.28	2.08	1.93
6 Contract rate (percent per year)	9.82	8.94	8.81	8.80	8.68	8.90	8.77	9.05	9.04[r]	9.23
Yield (percent per year)										
7 FHLBB series[3]	10.26	9.31	9.18	9.17	9.06	9.26	9.10	9.43	9.39[r]	9.55
8 HUD series[4]	10.07	10.17	10.30[r]	10.47	10.55	10.39	10.21	10.37	10.67	n.a.
SECONDARY MARKETS										
Yield (percent per year)										
9 FHA mortgages (HUD series)[5]	9.91	10.16	10.49[r]	10.66	10.74	10.58	10.23	10.63	10.81	n.a.
10 GNMA securities[6]	9.30	9.43	9.83	9.91	10.09	9.93	9.77	9.85	10.07	10.02
	Activity in secondary markets									
FEDERAL NATIONAL MORTGAGE ASSOCIATION										
Mortgage holdings (end of period)										
11 Total	98,048	95,030	101,329	102,540	102,540	102,453	102,493	102,696	103,013	102,370
12 FHA/VA-insured	29,683	21,660	19,762	19,677	19,586	19,526	19,464	19,467	19,415	19,354
13 Conventional	68,365	73,370	81,567	82,864	82,954	82,927	83,032	83,228	83,598	83,016
Mortgage transactions (during period)										
14 Purchases	30,826	20,531	23,110	1,960	1,638	1,111	1,488	1,596	1,726	1,037
Mortgage commitments[7]										
15 Contracted (during period)	32,987	25,415	23,435	1,108	1,041	1,439	1,740	1,289	1,350	1,087
16 Outstanding (end of period)	3,386	4,886	2,148	4,277	3,135	3,257	3,165	2,740	2,148	2,081
FEDERAL HOME LOAN MORTGAGE CORPORATION										
Mortgage holdings (end of period)[8]										
17 Total	13,517	12,802	n.a.	15,133	15,142	15,442	15,669	15,419	n.a.	n.a.
18 FHA/VA	746	686	n.a.	619	611	606	601	595	n.a.	n.a.
19 Conventional	12,771	12,116	n.a.	14,514	14,531	14,836	15,068	14,824	n.a.	n.a.
Mortgage transactions (during period)										
20 Purchases	103,474	76,845	n.a.	3,879	3,858	4,192	4,037	4,109	n.a.	n.a.
21 Sales	100,236	75,082	39,516[r]	4,115	3,719	3,728	3,674	4,231[r]	5,246	n.a.
Mortgage commitments[9]										
22 Contracted (during period)	110,855	71,467	n.a.	5,328	3,480	6,209	4,406	5,419	n.a.	n.a.

1. Weighted averages based on sample surveys of mortgages originated by major institutional lender groups; compiled by the Federal Home Loan Bank Board in cooperation with the Federal Deposit Insurance Corporation.
2. Includes all fees, commissions, discounts, and "points" paid (by the borrower or the seller) to obtain a loan.
3. Average effective interest rates on loans closed, assuming prepayment at the end of 10 years.
4. Average contract rates on new commitments for conventional first mortgages; from Department of Housing and Urban Development.
5. Average gross yields on 30-year, minimum-downpayment, Federal Housing Administration-insured first mortgages for immediate delivery in the private secondary market. Based on transactions on first day of subsequent month. Large monthly movements in average yields may reflect market adjustments to changes in maximum permissable contract rates.
6. Average net yields to investors on Government National Mortgage Association guaranteed, mortgage-backed, fully modified pass-through securities, assuming prepayment in 12 years on pools of 30-year FHA/VA mortgages carrying the prevailing ceiling rate. Monthly figures are averages of Friday figures from the *Wall Street Journal*.
7. Includes some multifamily and nonprofit hospital loan commitments in addition to 1- to 4-family loan commitments accepted in FNMA's free market auction system, and through the FNMA-GNMA tandem plans.
8. Includes participation as well as whole loans.
9. Includes conventional and government-underwritten loans. FHLMC's mortgage commitments and mortgage transactions include activity under mortgage/securities swap programs, while the corresponding data for FNMA exclude swap activity.

1.54 MORTGAGE DEBT OUTSTANDING[1]

Millions of dollars, end of period

	Type of holder, and type of property	1985	1986	1987	1987		1988		
					Q3	Q4	Q1	Q2	Q3
1	**All holders**	**2,289,843**	**2,597,175**	**2,943,144**	**2,864,736**	**2,943,144**	**2,988,100**	**3,067,566**	**3,151,956**
2	1- to 4-family	1,488,009	1,698,524	1,925,197	1,870,635	1,925,197	1,955,770	2,015,646	2,079,706
3	Multifamily	214,470	247,831	273,830	268,911	273,830	277,622	282,511	286,918
4	Commercial	481,514	555,039	655,249	635,230	655,249	666,521	681,478	697,919
5	Farm	105,850	95,781	88,868	89,960	88,868	88,187	87,931	87,413
6	Selected financial institutions	1,390,394	1,507,289	1,700,820	1,648,328	1,700,820	1,723,737	1,773,444	1,827,383
7	Commercial banks[2]	429,196	502,534	591,151	567,000	591,151	604,403	628,132	653,288
8	1- to 4-family	213,434	235,814	275,761	263,762	275,761	280,439	291,767	304,029
9	Multifamily	23,373	31,173	33,296	32,114	33,296	33,640	34,672	35,936
10	Commercial	181,032	222,799	267,663	256,981	267,663	275,535	286,366	297,880
11	Farm	11,357	12,748	14,431	14,143	14,431	14,789	15,327	15,443
12	Savings institutions[3]	760,499	777,312	856,945	838,737	856,945	863,110	881,924	905,372
13	1- to 4-family	554,301	558,412	598,886	583,432	598,886	603,532	622,863	644,676
14	Multifamily	89,739	97,059	106,359	104,609	106,359	107,687	109,108	109,800
15	Commercial	115,771	121,236	150,943	149,938	150,943	151,136	149,201	150,144
16	Farm	688	605	....	....	....	....	....	....
17	Life insurance companies	171,797	193,842	212,375	204,263	212,375	214,815	220,870	225,245
18	1- to 4-family	12,381	12,827	13,226	12,742	13,226	13,653	14,172	14,892
19	Multifamily	19,894	20,952	22,524	21,968	22,524	22,723	23,021	23,100
20	Commercial	127,670	149,111	166,722	159,464	166,722	168,774	174,086	178,012
21	Farm	11,852	10,952	9,903	10,089	9,903	9,665	9,591	9,241
22	Finance companies[4]	28,902	33,601	40,349	38,328	40,349	41,409	42,518	43,478
23	Federal and related agencies	166,928	203,800	192,721	191,520	192,721	196,909	199,474	197,885
24	Government National Mortgage Association	1,473	889	444	458	444	434	42	43
25	1- to 4-family	539	47	25	25	25	25	24	24
26	Multifamily	934	842	419	433	419	409	18	19
27	Farmers Home Administration[5]	733	48,421	43,051	42,978	43,051	43,076	42,767	41,836
28	1- to 4-family	183	21,625	18,169	18,111	18,169	18,185	18,248	18,268
29	Multifamily	113	7,608	8,044	7,903	8,044	8,115	8,213	8,349
30	Commercial	159	8,446	6,603	6,592	6,603	6,640	6,288	5,300
31	Farm	278	10,742	10,235	10,372	10,235	10,136	10,018	9,919
32	Federal Housing and Veterans Administration	4,920	5,047	5,574	5,330	5,574	5,660	5,673	5,545
33	1- to 4-family	2,254	2,386	2,557	2,452	2,557	2,608	2,564	2,445
34	Multifamily	2,666	2,661	3,017	2,878	3,017	3,052	3,109	3,100
35	Federal National Mortgage Association	98,282	97,895	96,649	94,884	96,649	99,787	102,368	102,453
36	1- to 4-family	91,966	90,718	89,666	87,901	89,666	92,828	95,404	95,417
37	Multifamily	6,316	7,177	6,983	6,983	6,983	6,959	6,964	7,036
38	Federal Land Banks	47,498	39,984	34,131	34,930	34,131	33,566	33,048	32,566
39	1- to 4-family	2,798	2,353	2,008	2,055	2,008	1,975	1,945	1,917
40	Farm	44,700	37,631	32,123	32,875	32,123	31,591	31,103	30,649
41	Federal Home Loan Mortgage Corporation	14,022	11,564	12,872	12,940	12,872	14,386	15,576	15,442
42	1- to 4-family	11,881	10,010	11,430	11,570	11,430	12,749	13,631	13,589
43	Multifamily	2,141	1,554	1,442	1,370	1,442	1,637	1,945	1,853
44	Mortgage pools or trusts[6]	439,058	565,428	718,297	692,944	718,297	736,344	754,045	782,093
45	Government National Mortgage Association	212,145	262,697	317,555	308,339	317,555	322,976	322,616	332,926
46	1- to 4-family	207,198	256,920	309,806	300,815	309,806	315,095	314,728	324,469
47	Multifamily	4,947	5,777	7,749	7,524	7,749	7,881	7,888	8,457
48	Federal Home Loan Mortgage Corporation	100,387	171,372	212,634	208,872	212,634	214,724	216,155	220,683
49	1- to 4-family	99,515	166,667	205,977	202,308	205,977	208,138	209,702	214,063
50	Multifamily	872	4,705	6,657	6,564	6,657	6,586	6,453	6,620
51	Federal National Mortgage Association	54,987	97,174	139,960	130,540	139,960	145,242	157,438	167,170
52	1- to 4-family	54,036	95,791	137,988	128,770	137,988	142,330	153,253	162,228
53	Multifamily	951	1,383	1,972	1,770	1,972	2,912	4,185	4,942
54	Farmers Home Administration[5]	47,523	348	245	333	245	172	106	106
55	1- to 4-family	22,186	142	121	144	121	65	23	27
56	Multifamily	6,675	....	....	....	....	....	....	....
57	Commercial	8,190	132	63	124	63	58	41	38
58	Farm	10,472	74	61	65	61	49	42	41
59	Individuals and others[7]	293,463	320,658	331,306	331,944	331,306	331,110	340,603	344,595
60	1- to 4-family	162,419	177,374	171,325	173,360	171,325	169,509	177,074	178,976
61	Multifamily	55,849	66,940	75,368	74,795	75,368	76,021	76,935	77,706
62	Commercial	48,692	53,315	63,255	62,131	63,255	64,378	65,496	66,545
63	Farm	26,503	23,029	21,358	21,658	21,358	21,202	21,098	21,368

1. Based on data from various institutional and governmental sources, with some quarters estimated in part by the Federal Reserve. Multifamily debt refers to loans on structures of five or more units.
2. Includes loans held by nondeposit trust companies but not bank trust departments.
3. Includes savings banks and savings and loan associations. Beginning 1987:1, data reported by FSLIC-insured institutions include loans in process and other contra assets (credit balance accounts that must be subtracted from the corresponding gross asset categories to yield net asset levels).
4. Assumed to be entirely 1- to 4-family loans.
5. FmHA-guaranteed securities sold to the Federal Financing Bank were reallocated from FmHA mortgage pools to FmHA mortgage holdings in 1986:4, because of accounting changes by the Farmers Home Administration.
6. Outstanding principal balances of mortgage pools backing securities insured or guaranteed by the agency indicated.
7. Other holders include mortgage companies, real estate investment trusts, state and local credit agencies, state and local retirement funds, noninsured pension funds, credit unions, and other U.S. agencies.

1.55 CONSUMER INSTALLMENT CREDIT[1] Total Outstanding, and Net Change, seasonally adjusted

Millions of dollars

Holder, and type of credit	1987	1988	1988 Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.[r]	Dec.
	Amounts outstanding (end of period)										
1 **Total**	**613,022**	**667,328**	**633,336**	**636,318**	**644,372**	**647,993**	**653,317**	**653,319**	**657,226**	**661,889**	**667,328**
By major holder											
2 Commercial banks	281,564	320,226	293,166	295,546	300,275	303,189	307,119	308,960	312,968	317,128	320,226
3 Finance companies[2]	140,072	143,523	144,516	144,454	144,748	143,812	143,962	142,723	142,480	142,226	143,523
4 Credit unions	81,065	86,070	83,204	83,881	84,912	85,468	85,881	85,553	86,024	86,102	86,070
5 Retailers[3]	42,782	45,370	43,295	43,162	43,450	43,634	43,712	43,956	44,250	44,644	45,370
6 Savings institutions	63,949	68,482	65,387	65,509	67,274	68,182	68,909	68,462	67,845	68,140	68,482
7 Gasoline companies	3,590	3,657	3,769	3,765	3,713	3,707	3,735	3,665	3,658	3,648	3,657
By major type of credit											
8 Automobile	267,180	290,434	278,567	279,418	282,254	283,359	285,560	284,782	286,107	287,474	290,434
9 Commercial banks	108,438	126,693	114,868	115,951	117,322	118,650	120,380	121,450	122,995	124,583	126,693
10 Credit unions	43,474	48,243	45,293	45,831	46,565	47,043	47,444	47,436	47,870	48,088	48,243
11 Finance companies	98,026	96,368	100,564	99,708	99,900	98,896	98,711	96,939	96,400	95,825	96,368
12 Savings institutions	17,242	19,130	17,841	17,928	18,465	18,770	19,026	18,958	18,842	18,979	19,130
13 Revolving	159,307	185,870	167,356	169,154	172,809	174,927	177,568	178,675	181,277	184,467	185,870
14 Commercial banks	98,808	117,137	104,250	105,742	108,309	109,645	111,623	112,341	114,404	116,824	117,137
15 Retailers	36,959	39,095	37,414	37,259	37,526	37,671	37,708	37,914	38,169	38,481	39,095
16 Gasoline companies	3,590	3,657	3,769	3,765	3,713	3,707	3,735	3,665	3,658	3,648	3,657
17 Savings institutions	13,279	16,516	14,309	14,518	15,098	15,492	15,850	15,938	15,984	16,244	16,516
18 Credit unions	6,671	9,465	7,614	7,870	8,162	8,413	8,652	8,816	9,063	9,270	9,465
19 Mobile home	25,957	25,610	25,764	25,703	25,852	25,882	25,915	25,746	25,776	25,830	25,610
20 Commercial banks	9,101	8,825	9,047	8,966	8,933	8,913	8,893	8,833	9,048	9,079	8,825
21 Finance companies	7,771	7,210	7,575	7,578	7,513	7,436	7,387	7,341	7,243	7,224	7,210
22 Savings institutions	9,085	9,574	9,142	9,159	9,406	9,533	9,634	9,572	9,485	9,527	9,574
23 Other	160,578	165,415	161,649	162,043	163,456	163,825	164,274	164,116	164,066	164,117	165,415
24 Commercial banks	65,217	67,572	65,001	64,887	65,710	65,981	66,222	66,335	66,522	66,642	67,572
25 Finance companies	34,275	39,945	36,376	37,168	37,335	37,480	37,863	38,443	38,837	39,177	39,945
26 Credit unions	30,920	28,362	30,297	30,180	30,184	30,012	29,785	29,302	29,091	28,745	28,362
27 Retailers	5,823	6,275	5,880	5,903	5,923	5,964	6,004	6,041	6,081	6,163	6,275
28 Savings institutions	24,343	23,261	24,095	23,904	24,305	24,388	24,399	23,995	23,534	23,390	23,261
	Net change (during period)										
29 **Total**	**41,189**	**54,306**	**3,851**	**2,982**	**8,054**	**3,621**	**5,324**	**2**	**3,907**	**4,663**	**5,439**
By major holder											
30 Commercial banks	19,425	38,662	2,335	2,380	4,729	2,914	3,930	1,841	4,008	4,160	3,098
31 Finance companies[2]	6,374	3,451	463	-62	294	-936	150	-1,239	-243	-254	1,297
32 Credit unions	4,874	5,005	609	677	1,031	556	413	-328	471	78	-32
33 Retailers[3]	3,122	2,588	24	-133	288	184	78	244	294	394	726
34 Savings institutions	7,068	4,533	309	122	1,765	908	727	-447	-617	295	342
35 Gasoline companies	326	67	112	-4	-52	-6	28	-70	-7	-10	9
By major type of credit											
36 Automobile	21,071	23,254	1,805	851	2,836	1,105	2,201	-778	1,325	1,367	2,960
37 Commercial banks	7,531	18,255	1,275	1,083	1,371	1,328	1,730	1,070	1,545	1,588	2,110
38 Credit unions	5,061	4,769	498	538	734	478	401	-8	434	218	155
39 Finance companies	5,676	-1,658	-105	-856	192	-1,004	-185	-1,772	-539	-575	543
40 Savings institutions	2,803	1,888	136	87	537	305	256	-68	-116	137	151
41 Revolving	22,926	26,563	1,713	1,798	3,655	2,118	2,641	1,107	2,602	3,190	1,403
42 Commercial banks	12,051	18,329	1,098	1,492	2,567	1,336	1,978	718	2,063	2,420	313
43 Retailers	2,639	2,136	6	-155	267	145	37	206	255	312	614
44 Gasoline companies	326	67	112	-4	-52	-6	28	-70	-7	-10	9
45 Savings institutions	4,913	3,237	250	209	580	394	358	88	46	260	272
46 Credit unions	2,997	2,794	246	256	292	251	239	164	247	207	195
47 Mobile home	-926	-347	32	-61	149	30	33	-169	30	54	-220
48 Commercial banks	175	-276	54	-81	-33	-20	-20	-60	215	31	-254
49 Finance companies	-1,051	-561	-65	3	-65	-77	-49	-46	-98	-19	-14
50 Savings institutions	-50	489	43	17	247	127	101	-62	-87	42	47
51 Other	-1,882	4,837	301	394	1,413	369	449	-158	-50	51	1,298
52 Commercial banks	-332	2,355	-93	-114	823	271	241	113	187	120	930
53 Finance companies	1,749	5,670	632	792	167	145	383	580	394	340	768
54 Credit unions	-3,184	-2,558	-135	-117	4	-172	-227	-483	-211	-346	-383
55 Retailers	483	452	17	23	20	41	40	37	40	82	112
56 Savings institutions	-598	-1,082	-121	-191	401	83	11	-404	-461	-144	-129

1. The Board's series cover most short- and intermediate-term credit extended to individuals that is scheduled to be repaid (or has the option of repayment) in two or more installments.

These data also appear in the Board's G.19 (421) release. For address, see inside front cover.

2. More detail for finance companies is available in the G. 20 statistical release.

3. Excludes 30-day charge credit held by travel and entertainment companies.

1.56 TERMS OF CONSUMER INSTALLMENT CREDIT[1]

Percent unless noted otherwise

	Item	1986	1987	1988	1988 June	July	Aug.	Sept.	Oct.	Nov.	Dec.
	INTEREST RATES										
	Commercial banks[2]										
1	48-month new car[3]	11.33	10.45	10.86	n.a.	n.a.	10.93	n.a.	n.a.	11.22	n.a.
2	24-month personal	14.83	14.23	14.68	n.a.	n.a.	14.81	n.a.	n.a.	15.06	n.a.
3	120-month mobile home[3]	13.99	13.38	13.54	n.a.	n.a.	13.62	n.a.	n.a.	13.61	n.a.
4	Credit card	18.26	17.92	17.78	n.a.	n.a.	17.79	n.a.	n.a.	17.77	n.a.
	Auto finance companies										
5	New car	9.44	10.73	12.60	12.32	12.44	12.64	12.93	13.10	13.20	13.25
6	Used car	15.95	14.60	15.11	14.83	14.99	15.16	15.46	15.67	15.75	15.80
	OTHER TERMS[4]										
	Maturity (months)										
7	New car	50.0	53.5	56.2	56.3	56.4	56.5	56.3	56.3	56.2	56.3
8	Used car	42.6	45.2	46.7	46.9	46.8	46.8	46.5	46.3	46.2	46.0
	Loan-to-value ratio										
9	New car	91	93	94	94	94	94	94	94	94	94
10	Used car	97	98	98	99	99	98	98	99	98	98
	Amount financed (dollars)										
11	New car	10,665	11,203	11,663	11,626	11,663	11,593	11,530	11,845	11,975	12,068
12	Used car	6,555	7,420	7,824	7,899	7,947	7,918	7,903	7,944	7,991	8,022

1. These data also appear in the Board's G.19 (421) release. For address, see inside front cover.
2. Data for midmonth of quarter only.
3. Before 1983 the maturity for new car loans was 36 months, and for mobile home loans was 84 months.
4. At auto finance companies.

1.57 FUNDS RAISED IN U.S. CREDIT MARKETS

Billions of dollars; quarterly data are at seasonally adjusted annual rates.

Transaction category, sector	1983	1984	1985	1986	1987	1987				1988		
						Q1	Q2	Q3	Q4	Q1	Q2	Q3
	Nonfinancial sectors											
1 **Total net borrowing by domestic nonfinancial sectors**	**546.8**	**750.8**	**846.3**	**830.6**	**680.6**	**552.0**	**751.7**	**652.1**	**766.8**	**731.8**	**704.0**	**760.4**
By sector and instrument												
2 U.S. government	186.6	198.8	223.6	215.0	143.8	161.6	145.2	101.8	166.7	226.3	87.6	195.5
3 Treasury securities	186.7	199.0	223.7	214.7	142.3	157.7	147.1	102.7	161.8	226.8	79.8	174.6
4 Agency issues and mortgages	−.1	−.2	−.1	.4	1.5	3.9	−1.9	−.9	5.0	−.5	7.7	20.9
5 Private domestic nonfinancial sectors	360.2	552.0	622.7	615.6	536.8	390.3	606.4	550.3	600.1	505.6	616.5	564.9
6 Debt capital instruments	257.6	319.3	452.3	460.7	446.1	473.3	466.7	428.1	416.1	363.3	452.2	457.1
7 Tax-exempt obligations	53.7	50.4	136.4	30.8	34.5	38.7	33.1	32.7	33.5	24.8	32.6	44.4
8 Corporate bonds	16.0	46.1	73.8	121.3	99.9	128.9	88.5	100.7	81.6	101.3	118.4	90.8
9 Mortgages	187.9	222.8	242.2	308.6	311.6	305.7	345.1	294.7	301.1	237.1	301.2	322.0
10 Home mortgages	120.4	136.7	156.8	210.9	221.7	224.2	243.5	212.1	206.9	177.9	228.0	210.1
11 Multifamily residential	14.1	25.2	29.8	33.5	24.3	27.4	30.9	23.1	15.9	21.4	14.0	33.5
12 Commercial	51.0	62.2	62.2	73.6	72.0	66.5	77.2	64.1	80.2	43.2	60.8	72.7
13 Farm	2.4	−1.2	−6.6	−9.5	−6.4	−12.4	−6.6	−4.7	−1.9	−5.4	−1.6	5.7
14 Other debt instruments	102.6	232.7	170.3	154.9	90.7	−83.0	139.7	122.2	184.0	142.3	164.2	107.8
15 Consumer credit	49.0	81.6	82.5	54.4	40.7	−.3	52.4	61.4	49.4	34.8	59.5	43.3
16 Bank loans n.e.c.	23.2	67.1	38.6	69.3	8.8	−107.8	36.6	21.0	85.3	40.4	74.2	2.6
17 Open market paper	−.8	21.7	14.6	−9.3	2.3	−.5	4.7	1.0	3.9	−3.8	4.0	11.1
18 Other	31.3	62.2	34.6	40.5	38.9	25.5	46.1	38.7	45.5	70.9	26.6	50.7
19 By borrowing sector	360.2	552.0	622.7	615.6	536.8	390.3	606.4	550.3	600.1	505.6	616.5	564.9
20 State and local governments	34.0	27.4	91.8	44.3	34.4	37.0	31.4	34.8	34.6	22.3	31.1	41.3
21 Households	186.1	231.5	283.6	286.1	261.5	197.3	302.7	281.2	264.9	220.0	288.0	250.9
22 Nonfinancial business	140.1	293.1	247.3	285.1	240.8	156.0	272.4	234.2	300.7	263.3	297.3	272.7
23 Farm	3.9	−.4	−14.5	−16.3	−11.2	−23.5	−12.7	−9.4	.8	−12.5	−3.6	1.3
24 Nonfarm noncorporate	81.9	123.2	129.3	127.6	115.8	108.4	125.7	105.4	123.8	91.0	87.1	120.3
25 Corporate	54.4	170.3	132.4	173.8	136.3	71.2	159.4	138.3	176.1	184.9	213.9	151.1
26 Foreign net borrowing in United States	17.3	8.4	1.2	9.6	4.3	−8.7	−.1	12.3	13.9	−1.0	4.9	9.7
27 Bonds	3.1	3.8	3.8	3.0	6.8	3.0	−4.1	6.7	21.6	16.8	−2.9	7.4
28 Bank loans n.e.c.	3.6	−6.6	−2.8	−1.0	−3.6	−1.2	−3.5	−3.7	−6.1	.7	−3.5	.3
29 Open market paper	6.5	6.2	6.2	11.5	2.1	−4.2	−6.4	21.6	−2.5	1.5	6.4	10.7
30 U.S. government loans	4.1	5.0	−5.9	−3.9	−1.0	−6.4	13.9	−12.3	.8	−19.9	4.9	−8.8
31 **Total domestic plus foreign**	**564.1**	**759.2**	**847.5**	**840.2**	**685.0**	**543.3**	**751.6**	**664.3**	**780.7**	**730.9**	**709.0**	**770.1**
	Financial sectors											
32 **Total net borrowing by financial sectors**	**99.2**	**148.7**	**198.3**	**297.2**	**303.1**	**340.0**	**316.7**	**306.4**	**249.2**	**218.9**	**250.1**	**249.1**
By instrument												
33 U.S. government related	67.8	74.9	101.5	178.1	185.8	193.5	196.8	185.5	167.5	137.4	84.7	140.2
34 Sponsored credit agency securities	1.4	30.4	20.6	15.2	30.2	−4.4	21.5	32.0	71.6	56.8	9.4	42.8
35 Mortgage pool securities	66.4	44.4	79.9	163.3	156.4	200.7	175.4	153.5	95.9	80.5	75.3	97.4
36 Loans from U.S. government	.....	.....	1.1	−.4	−.7	−2.9	−.1	.....	.....	.....	.....	.....
37 Private financial sectors	31.4	73.8	96.7	119.1	117.2	146.5	119.9	120.8	81.7	81.6	165.4	108.9
38 Corporate bonds	17.3	33.0	47.9	70.9	67.1	103.2	45.6	77.7	41.8	74.7	67.9	65.9
39 Mortgages	*	.4	.1	.1	.3	.4	.1	.2	.4	.2	*	*
40 Bank loans n.e.c.	−.1	.7	2.6	4.0	−3.3	−9.5	.6	6.3	−10.7	−26.8	8.7	−4.9
41 Open market paper	21.3	24.1	32.0	24.2	28.8	41.5	54.0	14.3	5.4	28.0	78.7	21.3
42 Loans from Federal Home Loan Banks	−7.0	15.7	14.2	19.8	24.4	11.0	19.6	22.2	44.9	5.4	10.1	26.6
By sector												
43 **Total**	**99.2**	**148.7**	**198.3**	**297.2**	**303.1**	**340.0**	**316.7**	**306.4**	**249.2**	**218.9**	**250.1**	**249.1**
44 Sponsored credit agencies	1.4	30.4	21.7	14.9	29.5	−7.2	21.4	32.0	71.6	56.8	9.4	42.8
45 Mortgage pools	66.4	44.4	79.9	163.3	156.4	200.7	175.4	153.5	95.9	80.5	75.3	97.4
46 Private financial sectors	31.4	73.8	96.7	119.1	117.2	146.5	119.9	120.8	81.7	81.6	165.4	108.9
47 Commercial banks	5.0	7.3	−4.9	−3.6	7.1	6.4	20.0	−13.1	15.0	−22.4	6.2	−12.9
48 Bank affiliates	12.1	15.6	14.5	4.6	2.9	25.6	−2.7	11.3	−22.6	−5.0	7.6	5.2
49 Savings and loan associations	−2.1	22.7	22.3	29.8	36.0	28.0	22.2	41.9	51.9	9.1	18.2	52.9
50 Finance companies	13.0	18.2	52.7	48.4	30.6	18.1	39.9	36.3	28.2	54.5	100.4	40.6
51 REITs	−.2	.8	.5	1.0	1.5	1.7	−.5	1.7	3.2	2.4	1.8	1.9
52 CMO Issuers	3.6	9.3	11.5	39.0	39.1	66.8	41.0	42.7	6.0	43.1	31.2	21.3

1.57—Continued

Transaction category, sector	1983	1984	1985	1986	1987	1987				1988		
						Q1	Q2	Q3	Q4	Q1	Q2	Q3
	All sectors											
53 **Total net borrowing**	**663.4**	**907.9**	**1,045.7**	**1,137.4**	**988.0**	**883.3**	**1,068.3**	**970.7**	**1,029.9**	**949.8**	**959.1**	**1,019.2**
54 U.S. government securities	254.4	273.8	324.2	393.5	330.4	358.0	342.2	287.3	334.2	363.6	172.3	335.7
55 State and local obligations	53.7	50.4	136.4	30.8	34.5	38.7	33.1	32.7	33.5	24.8	32.6	44.4
56 Corporate and foreign bonds	36.4	83.0	125.4	195.2	173.8	235.2	130.0	185.1	145.0	192.8	183.5	164.1
57 Mortgages	187.8	223.1	242.2	308.6	311.9	306.0	345.2	294.9	301.4	237.4	301.2	322.0
58 Consumer credit	49.0	81.6	82.5	54.4	40.7	-.3	52.4	61.4	49.4	34.8	59.5	43.3
59 Bank loans n.e.c.	26.7	61.1	38.3	72.3	1.9	-118.5	33.8	23.6	68.5	14.2	79.4	-2.0
60 Open market paper	26.9	52.0	52.8	26.4	33.2	36.8	52.3	36.9	6.7	25.7	89.1	43.1
61 Other loans	28.4	82.9	44.0	56.1	61.6	27.3	79.4	48.7	91.2	56.4	41.7	68.6
62 MEMO: U.S. government, cash balance	-7.1	6.3	14.4	*	-7.9	-34.9	77.7	-19.6	-54.7	60.9	3.3	6.4
Totals net of changes in U.S. government cash balances												
63 Net borrowing by domestic nonfinancial	553.9	744.5	831.9	830.6	688.5	586.9	674.0	671.7	821.5	670.9	700.8	754.0
64 Net borrowing by U.S. government	193.7	192.5	209.3	215.0	151.7	196.6	67.6	121.4	221.4	165.4	84.3	189.1
	External corporate equity funds raised in United States											
65 **Total net share issues**	**58.1**	**-36.0**	**20.1**	**93.9**	**13.3**	**170.1**	**13.9**	**-47.1**	**-83.6**	**-73.7**	**-141.0**	**-70.3**
66 Mutual funds	27.2	29.3	84.4	161.8	72.3	205.4	79.1	13.8	-9.1	5.0	-8.1	6.0
67 All other	30.8	-65.3	-64.3	-68.0	-59.0	-35.3	-65.2	-60.9	-74.6	-78.7	-132.9	-76.3
68 Nonfinancial corporations	23.5	-74.5	-81.5	-80.7	-76.5	-57.0	-83.0	-78.0	-88.0	-95.0	-140.0	-92.0
69 Financial corporations	3.6	8.2	13.5	11.5	19.9	19.1	16.5	18.4	25.5	17.0	13.8	13.6
70 Foreign shares purchased in United States	3.7	.9	3.7	1.3	-2.4	2.7	1.2	-1.3	-12.0	-.7	-6.7	2.1

1.58 DIRECT AND INDIRECT SOURCES OF FUNDS TO CREDIT MARKETS

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

Transaction category, or sector	1983	1984	1985	1986	1987	1987 Q1	1987 Q2	1987 Q3	1987 Q4	1988 Q1	1988 Q2	1988 Q3
1 **Total funds advanced in credit markets to domestic nonfinancial sectors**	**546.8**	**750.8**	**846.3**	**830.6**	**680.6**	**552.0**	**751.7**	**652.1**	**766.8**	**731.8**	**704.0**	**760.4**
By public agencies and foreign												
2 Total net advances	117.8	157.6	193.1	304.2	256.3	270.9	279.3	211.1	264.0	281.7	162.5	196.6
3 U.S. government securities	29.0	38.9	37.9	69.4	68.2	59.0	55.3	35.1	123.3	148.6	38.2	17.3
4 Residential mortgages	76.1	56.5	94.6	160.3	153.2	194.8	169.4	146.0	102.7	100.7	89.7	97.5
5 FHLB advances to savings and loans	−7.0	15.7	14.2	19.8	24.4	11.0	19.6	22.2	44.9	5.4	10.1	26.6
6 Other loans and securities	19.7	46.6	46.3	54.6	10.5	6.1	35.1	7.8	−6.8	27.0	24.5	55.3
Total advanced, by sector												
7 U.S. government	9.7	17.1	16.8	9.7	−11.5	−8.5	−12.3	−24.1	−.9	−8.9	−10.1	1.5
8 Sponsored credit agencies	69.8	74.3	95.5	177.3	180.6	204.9	177.0	187.0	153.6	123.3	86.3	119.9
9 Monetary authorities	14.7	8.4	18.4	19.4	24.7	9.4	29.8	29.0	30.4	−5.5	4.1	17.1
10 Foreign	23.7	57.9	62.3	97.8	62.5	65.1	84.8	19.1	81.0	172.9	82.2	58.2
Agency and foreign borrowing not in line 1												
11 Sponsored credit agencies and mortgage pools	67.8	74.9	101.5	178.1	185.8	193.5	196.8	185.5	167.5	137.4	84.7	140.2
12 Foreign	17.3	8.4	1.2	9.6	4.3	−8.7	−.1	12.3	13.9	−1.0	4.9	9.7
Private domestic funds advanced												
13 Total net advances	514.2	676.4	756.0	714.1	614.5	465.9	669.1	638.7	684.2	586.5	631.2	713.7
14 U.S. government securities	225.4	234.9	286.2	324.1	262.2	299.0	286.9	252.2	210.9	215.0	134.1	318.4
15 State and local obligations	53.7	50.4	136.4	30.8	34.5	38.7	33.1	32.7	33.5	24.8	32.6	44.4
16 Corporate and foreign bonds	14.5	35.1	40.8	84.1	86.5	100.4	58.8	83.7	102.9	115.7	88.1	68.6
17 Residential mortgages	58.3	105.3	91.8	84.1	92.8	56.7	105.0	89.3	120.0	98.7	152.4	146.1
18 Other mortgages and loans	155.1	266.3	214.9	210.8	162.9	−18.0	204.8	203.0	261.7	137.7	234.1	162.8
19 LESS: Federal Home Loan Bank advances	−7.0	15.7	14.2	19.8	24.4	11.0	19.6	22.2	44.9	5.4	10.1	26.6
Private financial intermediation												
20 Credit market funds advanced by private financial institutions	394.7	581.0	569.8	746.3	564.9	521.5	549.7	639.7	548.5	674.9	615.7	606.4
21 Commercial banking	144.3	168.9	186.3	194.8	136.3	−56.2	198.0	150.9	252.6	56.0	213.3	132.3
22 Savings institutions	135.6	150.2	83.0	105.5	140.4	89.9	132.0	188.7	151.0	87.9	120.7	166.4
23 Insurance and pension funds	100.1	121.8	148.9	181.9	210.8	266.3	178.0	246.2	152.8	282.4	235.3	217.6
24 Other finance	14.7	140.1	151.6	264.3	77.3	221.6	41.7	54.0	−7.9	248.6	46.5	90.1
25 Sources of funds	394.7	581.0	569.8	746.5	564.9	521.5	549.7	639.7	548.5	674.9	615.7	606.4
26 Private domestic deposits and RPs	210.4	321.9	210.6	264.7	146.2	−17.1	141.1	193.9	266.8	287.7	127.3	206.1
27 Credit market borrowing	31.4	73.8	96.7	119.1	117.2	146.5	119.9	120.8	81.7	81.6	165.4	108.9
28 Other sources	152.9	185.3	262.5	362.7	301.4	392.1	288.6	325.0	200.0	305.6	323.0	291.3
29 Foreign funds	14.6	8.8	19.7	12.9	43.7	14.9	35.1	99.5	25.2	−80.1	106.6	−39.2
30 Treasury balances	−5.3	4.0	10.3	1.7	−5.8	−36.9	43.6	6.1	−36.1	53.3	−17.5	−1.9
31 Insurance and pension reserves	115.0	124.0	131.9	144.3	175.0	195.1	191.1	194.8	118.9	247.6	207.8	173.7
32 Other, net	28.7	48.5	100.7	203.8	88.6	219.0	18.9	24.6	91.9	84.8	26.1	158.6
Private domestic nonfinancial investors												
33 Direct lending in credit markets	150.9	169.2	282.9	86.7	166.8	90.9	239.3	119.8	217.3	−6.9	180.9	216.2
34 U.S. government securities	91.0	115.4	175.7	50.1	103.2	52.1	170.1	70.9	119.6	117.6	23.8	160.0
35 State and local obligations	38.8	26.5	39.6	−13.6	46.1	27.8	58.1	42.4	56.0	1.5	29.7	39.1
36 Corporate and foreign bonds	−8.3	−.8	2.4	32.6	5.1	9.3	−58.6	28.3	41.5	−40.6	52.7	−25.9
37 Open market paper	12.4	4.0	45.6	−3.0	7.9	−1.9	64.2	−23.3	−7.5	−65.6	77.7	40.5
38 Other	17.0	24.2	19.6	20.7	4.6	3.6	5.6	1.6	7.7	−19.7	−3.0	2.5
39 Deposits and currency	227.8	325.4	220.9	285.0	162.4	−46.6	149.2	229.3	317.6	282.7	134.9	256.7
40 Currency	14.3	8.6	12.4	14.4	19.0	9.4	12.5	17.3	36.8	8.2	11.9	17.5
41 Checkable deposits	28.8	28.0	40.9	93.2	−2.4	−98.7	40.3	34.5	14.4	4.2	21.5	−.6
42 Small time and savings accounts	215.4	150.7	138.4	120.6	75.9	31.3	69.3	79.9	123.1	195.1	125.5	102.1
43 Money market fund shares	−39.0	49.0	8.9	41.5	28.2	14.4	2.4	32.7	63.3	59.1	−34.8	13.0
44 Large time deposits	−8.3	84.3	7.7	−11.5	27.6	13.7	4.8	.2	91.6	12.0	−7.6	92.0
45 Security RPs	13.5	10.0	14.6	20.8	16.9	22.1	24.3	46.6	−25.6	17.3	22.7	−.4
46 Deposits in foreign countries	3.1	−5.1	−2.1	5.9	−2.8	−38.9	−4.4	18.1	13.9	−13.3	−4.3	33.1
47 **Total of credit market instruments, deposits, and currency**	**378.7**	**494.6**	**503.7**	**371.8**	**329.2**	**44.3**	**388.5**	**349.1**	**534.9**	**275.8**	**315.8**	**472.9**
48 Public holdings as percent of total	20.9	20.8	22.8	36.2	37.4	49.9	37.2	31.8	33.8	38.5	22.9	25.5
49 Private financial intermediation (in percent)	76.8	85.9	75.4	104.5	91.9	112.0	82.2	100.2	80.2	115.1	97.6	85.0
50 Total foreign funds	38.2	66.7	82.0	110.7	106.2	80.0	119.9	118.7	106.2	92.8	188.9	19.0
MEMO: Corporate equities not included above												
51 **Total net issues**	**58.1**	**−36.0**	**20.1**	**93.9**	**13.3**	**170.1**	**13.9**	**−47.1**	**−83.6**	**−73.7**	**−141.0**	**−70.3**
52 Mutual fund shares	27.2	29.3	84.4	161.8	72.3	205.4	79.1	13.8	−9.1	5.0	−8.1	6.0
53 Other equities	30.8	−65.3	−64.3	−68.0	−59.0	−35.3	−65.2	−60.9	−74.6	−78.7	−132.9	−76.3
54 Acquisitions by financial institutions	50.4	15.8	45.6	48.5	22.6	29.2	72.6	5.2	−16.5	−33.0	−10.1	−9.4
55 Other net purchases	7.7	−51.8	−25.5	45.4	−9.3	140.9	−58.7	−52.4	−67.1	−40.7	−131.0	−61.0

NOTES BY LINE NUMBER.
1. Line 1 of table 1.57.
2. Sum of lines 3–6 or 7–10.
6. Includes farm and commercial mortgages.
11. Credit market funds raised by federally sponsored credit agencies, and net issues of federally related mortgage pool securities.
13. Line 1 less line 2 plus line 11 and 12. Also line 20 less line 27 plus line 33. Also sum of lines 28 and 47 less lines 40 and 46.
18. Includes farm and commercial mortgages.
26. Line 39 less lines 40 and 46.
27. Excludes equity issues and investment company shares. Includes line 19.
29. Foreign deposits at commercial banks, bank borrowings from foreign branches, and liabilities of foreign banking agencies to foreign affiliates, less claims on foreign affiliates and deposits by banking in foreign banks.
30. Demand deposits and note balances at commercial banks.
31. Excludes net investment of these reserves in corporate equities.
32. Mainly retained earnings and net miscellaneous liabilities.
33. Line 13 less line 20 plus line 27.
34–38. Lines 14–18 less amounts acquired by private finance plus amounts borrowed by private finance. Line 38 includes mortgages.
40. Mainly an offset to line 9.
47. Lines 33 plus 39, or line 13 less line 28 plus 40 and 46.
48. Line 2/line 1.
49. Line 20/line 13.
50. Sum of lines 10 and 29.
51, 53. Includes issues by financial institutions.

NOTE. Full statements for sectors and transaction types in flows and in amounts outstanding may be obtained from Flow of Funds Section, Division of Research and Statistics, Board of Governors of the Federal Reserve System, Washington, D.C. 20551.

1.59 SUMMARY OF CREDIT MARKET DEBT OUTSTANDING

Billions of dollars; period-end levels.

Transaction category, sector	1983	1984	1985	1986	1987 Q1	1987 Q2	1987 Q3	1987 Q4	1988 Q1	1988 Q2	1988 Q3
	Nonfinancial sectors										
1 **Total credit market debt owed by domestic nonfinancial sectors**	**5,204.3**	**5,953.7**	**6,797.0**	**7,618.1**	**7,725.8**	**7,917.4**	**8,074.1**	**8,301.3**	**8,444.3**	**8,629.8**	**8,817.3**
By sector and instrument											
2 U.S. government	1,177.9	1,376.8	1,600.4	1,815.4	1,843.9	1,875.3	1,897.0	1,959.2	2,001.8	2,020.4	2,063.8
3 Treasury securities	1,174.4	1,373.4	1,597.1	1,811.7	1,839.3	1,871.2	1,893.1	1,954.1	1,996.7	2,013.5	2,051.6
4 Agency issues and mortgages	3.6	3.4	3.3	3.6	4.6	4.2	3.9	5.2	5.0	7.0	12.2
5 Private domestic nonfinancial sectors	4,026.4	4,577.0	5,196.6	5,802.7	5,881.9	6,042.1	6,177.1	6,342.1	6,442.6	6,609.4	6,753.5
6 Debt capital instruments	2,717.8	3,040.0	3,488.4	3,946.4	4,065.6	4,189.4	4,296.9	4,404.5	4,479.3	4,596.7	4,715.0
7 Tax-exempt obligations	471.7	522.1	658.4	689.2	696.9	705.2	715.5	723.7	728.0	735.8	749.4
8 Corporate bonds	423.0	469.2	542.9	664.2	696.4	718.5	743.7	764.1	789.4	819.1	841.7
9 Mortgages	1,823.1	2,048.8	2,287.1	2,593.0	2,672.2	2,765.7	2,837.7	2,916.6	2,961.8	3,041.9	3,123.8
10 Home mortgages	1,200.2	1,336.2	1,490.2	1,699.6	1,730.4	1,800.7	1,853.8	1,908.7	1,939.7	2,000.4	2,056.6
11 Multifamily residential	158.8	183.6	213.0	246.3	254.2	259.9	264.9	269.9	273.8	278.1	285.6
12 Commercial	350.4	416.5	478.1	551.4	594.8	613.8	629.0	649.2	660.2	675.5	692.5
13 Farm	113.7	112.4	105.9	95.8	92.8	91.3	90.0	88.9	88.2	87.9	89.2
14 Other debt instruments	1,308.6	1,536.9	1,708.2	1,856.3	1,816.4	1,852.7	1,880.2	1,937.6	1,963.3	2,012.6	2,038.5
15 Consumer credit	437.7	519.3	601.8	656.2	643.3	658.7	680.9	696.9	692.2	709.6	727.8
16 Bank loans n.e.c.	490.2	552.9	592.6	658.6	627.7	636.3	637.5	656.7	669.4	689.9	688.7
17 Open market paper	36.8	58.5	72.2	62.9	63.6	67.9	68.1	73.8	73.5	77.8	80.3
18 Other	344.0	406.2	441.6	478.6	481.7	489.9	493.7	510.1	528.1	535.3	541.6
19 By borrowing sector	4,026.4	4,577.0	5,196.6	5,802.7	5,881.9	6,042.1	6,177.1	6,342.1	6,442.6	6,609.4	6,753.5
20 State and local governments	357.7	385.1	476.9	520.2	527.5	535.3	546.2	554.7	558.3	565.7	578.5
21 Households	1,811.6	2,038.2	2,314.5	2,594.2	2,605.4	2,691.2	2,762.8	2,836.6	2,866.2	2,945.7	3,016.4
22 Nonfinancial business	1,857.1	2,153.7	2,405.2	2,688.3	2,749.0	2,815.7	2,868.1	2,950.9	3,018.1	3,097.9	3,158.5
23 Farm	188.4	187.9	173.4	156.6	149.9	150.2	148.5	144.9	141.5	144.0	145.0
24 Nonfarm noncorporate	645.8	769.0	898.3	1,025.9	1,053.8	1,084.3	1,106.7	1,141.7	1,165.2	1,186.0	1,211.9
25 Corporate	1,022.9	1,196.8	1,333.5	1,505.8	1,545.3	1,581.2	1,612.9	1,664.3	1,711.5	1,767.8	1,801.6
26 Foreign credit market debt held in United States	227.3	235.1	236.7	238.2	236.7	236.8	238.9	244.3	245.1	246.3	247.8
27 Bonds	64.2	68.0	71.8	74.8	75.1	74.6	75.9	81.6	85.4	85.2	86.7
28 Bank loans n.e.c.	37.4	30.8	27.9	26.9	26.0	25.4	24.2	23.3	22.8	22.4	22.0
29 Open market paper	21.5	27.7	33.9	37.4	37.3	35.6	40.6	41.2	42.5	44.0	46.3
30 U.S. government loans	104.1	108.6	103.0	99.1	98.3	101.2	98.2	98.1	94.4	94.7	92.8
31 **Total domestic plus foreign**	**5,431.6**	**6,188.8**	**7,033.7**	**7,856.3**	**7,962.5**	**8,154.2**	**8,313.1**	**8,545.6**	**8,689.4**	**8,876.1**	**9,065.1**
	Financial sectors										
32 **Total credit market debt owed by financial sectors**	**857.9**	**1,006.2**	**1,206.2**	**1,510.8**	**1,621.8**	**1,710.0**	**1,783.8**	**1,862.6**	**1,903.8**	**1,972.6**	**2,035.7**
By instrument											
33 U.S. government related	456.7	531.2	632.7	810.3	887.1	937.1	981.6	1,026.5	1,054.8	1,076.9	1,113.7
34 Sponsored credit agency securities	206.8	237.2	257.8	273.0	268.4	275.8	283.7	303.2	313.5	317.9	328.5
35 Mortgage pool securities	244.9	289.0	368.9	531.6	613.7	656.4	692.9	718.3	736.3	754.0	780.2
36 Loans from U.S. government	5.0	5.0	6.1	5.7	5.0	5.0	5.0	5.0	5.0	5.0	5.0
37 Private financial sectors	401.2	475.0	573.4	700.5	734.8	772.9	802.1	836.1	849.0	895.7	922.0
38 Corporate bonds	115.8	148.9	197.5	268.4	293.4	304.6	324.2	335.5	353.2	370.0	386.8
39 Mortgages	2.1	2.5	2.7	2.7	2.8	2.9	2.9	3.0	3.1	3.1	3.1
40 Bank loans n.e.c.	28.9	29.5	32.1	36.1	36.5	40.1	42.2	40.8	31.7	34.3	33.9
41 Open market paper	195.5	219.5	252.4	284.6	295.2	311.1	312.7	323.8	331.5	353.4	356.8
42 Loans from Federal Home Loan Banks	59.0	74.6	88.8	108.6	106.8	114.3	120.1	133.1	129.5	134.8	141.6
43 **Total, by sector**	**857.9**	**1,006.2**	**1,206.2**	**1,510.8**	**1,621.8**	**1,710.0**	**1,783.8**	**1,862.6**	**1,903.8**	**1,972.6**	**2,035.7**
44 Sponsored credit agencies	211.8	242.2	263.9	278.7	273.4	280.7	288.7	308.2	318.5	322.9	333.5
45 Mortgage pools	244.9	289.0	368.9	531.6	613.7	656.4	692.9	718.3	736.3	754.0	780.2
46 Private financial sectors	401.2	475.0	573.4	700.5	734.8	772.9	802.1	836.1	849.0	895.7	922.0
47 Commercial banks	76.8	84.1	79.2	75.6	76.1	80.7	78.6	82.7	76.4	77.2	75.4
48 Bank affiliates	71.0	86.6	101.2	101.3	109.0	108.7	109.5	104.2	104.4	106.5	105.8
49 Savings and loan associations	73.9	93.2	115.5	145.1	146.6	157.0	165.4	181.1	177.4	187.3	198.0
50 Finance companies	171.7	193.2	246.9	308.1	315.4	328.8	339.9	357.0	368.3	393.8	406.3
51 REITs	3.5	4.3	5.6	6.5	7.0	6.8	7.3	8.1	8.7	9.1	9.6
52 CMO issuers	4.2	13.5	25.0	64.0	80.7	90.9	101.6	103.1	113.9	121.7	127.0
	All sectors										
53 **Total credit market debt**	**6,289.5**	**7,195.0**	**8,239.8**	**9,367.2**	**9,584.3**	**9,864.2**	**10,096.9**	**10,408.1**	**10,593.3**	**10,848.6**	**11,100.8**
54 U.S. government securities	1,629.4	1,902.8	2,227.0	2,620.0	2,726.0	2,807.4	2,873.7	2,980.7	3,051.6	3,092.3	3,172.5
55 State and local obligations	471.7	522.1	658.4	689.2	696.9	705.2	715.5	723.7	728.0	735.8	749.4
56 Corporate and foreign bonds	603.0	686.0	812.1	1,007.4	1,064.9	1,097.7	1,143.9	1,181.2	1,228.1	1,274.2	1,315.2
57 Mortgages	1,825.4	2,051.4	2,289.8	2,595.8	2,675.1	2,768.6	2,840.6	2,919.7	2,964.9	3,045.0	3,127.0
58 Consumer credit	437.7	519.3	601.8	656.2	643.3	658.7	680.9	696.9	692.2	709.6	727.8
59 Bank loans n.e.c.	556.5	613.2	652.6	721.6	690.3	701.7	703.8	720.8	723.9	746.6	744.6
60 Open market paper	253.8	305.7	358.5	384.9	396.1	414.6	421.4	438.8	447.5	475.3	483.4
61 Other loans	512.1	594.4	639.5	692.0	691.8	710.4	717.0	746.3	757.0	769.8	780.9

1.60 SUMMARY OF CREDIT MARKET CLAIMS, BY HOLDER

Billions of dollars, except as noted; period-end levels.

Transaction category, or sector	1983	1984	1985	1986	1987 Q1	1987 Q2	1987 Q3	1987 Q4	1988 Q1	1988 Q2	1988 Q3
1 **Total funds advanced in credit markets to domestic nonfinancial sectors**	**5,204.3**	**5,953.7**	**6,797.0**	**7,618.1**	**7,725.8**	**7,917.4**	**8,074.1**	**8,301.3**	**8,444.3**	**8,629.8**	**8,817.3**
By public agencies and foreign											
2 Total held	1,101.7	1,259.2	1,459.4	1,759.3	1,847.6	1,918.0	1,967.0	2,037.8	2,098.6	2,144.4	2,192.8
3 U.S. government securities	339.0	377.9	421.8	491.2	502.3	519.5	525.6	559.4	592.7	606.1	607.1
4 Residential mortgages	367.0	423.5	518.2	678.5	758.9	800.0	834.6	862.0	884.8	906.1	932.2
5 FHLB advances to savings and loans	59.0	74.6	88.8	108.6	106.8	114.3	120.1	133.1	129.5	134.8	141.6
6 Other loans and securities	336.8	383.1	430.6	481.0	479.6	484.3	486.8	483.4	491.5	497.4	511.9
7 Total held, by type of lender	1,101.7	1,259.2	1,459.4	1,759.3	1,847.6	1,918.0	1,967.0	2,037.8	2,098.6	2,144.4	2,192.8
8 U.S. government	212.8	229.7	247.6	254.3	249.2	242.9	237.1	235.4	233.7	232.0	232.6
9 Sponsored credit agencies and mortgage pools	482.0	556.3	657.8	833.9	912.0	957.9	1,003.7	1,044.1	1,068.2	1,091.6	1,124.2
10 Monetary authority	159.2	167.6	186.0	205.5	204.1	214.9	219.6	230.1	224.9	229.7	230.8
11 Foreign	247.7	305.6	367.9	465.7	482.3	502.3	506.7	528.2	571.8	591.1	605.3
Agency and foreign debt not in line 1											
12 Sponsored credit agencies and mortgage pools	456.7	531.2	632.7	810.3	887.1	937.1	981.6	1,026.5	1,054.8	1,076.9	1,113.7
13 Foreign	227.3	235.1	236.7	238.2	236.7	236.8	238.9	244.3	245.1	246.3	247.8
Private domestic holdings											
14 Total private holdings	4,786.6	5,460.8	6,207.0	6,907.3	7,002.0	7,173.2	7,327.7	7,534.2	7,645.7	7,808.6	7,985.9
15 U.S. government securities	1,290.4	1,524.9	1,805.2	2,128.7	2,223.7	2,287.9	2,348.1	2,421.3	2,458.9	2,486.3	2,565.3
16 State and local obligations	471.7	522.1	658.4	689.2	696.9	705.2	715.5	723.7	728.0	735.8	749.4
17 Corporate and foreign bonds	441.7	476.8	517.6	601.7	626.0	642.4	663.4	688.1	716.3	740.1	757.3
18 Residential mortgages	992.2	1,096.5	1,185.1	1,267.4	1,225.8	1,260.6	1,284.2	1,316.7	1,328.7	1,372.4	1,410.0
19 Other mortgages and loans	1,649.6	1,915.2	2,129.5	2,328.9	2,336.4	2,391.5	2,436.6	2,517.4	2,543.3	2,608.9	2,645.5
20 LESS: Federal Home Loan Bank advances	59.0	74.6	88.8	108.6	106.8	114.3	120.1	133.1	129.5	134.8	141.6
Private financial intermediation											
21 Credit market claims held by private financial institutions	4,111.2	4,691.0	5,264.4	6,009.5	6,126.1	6,277.5	6,433.5	6,585.2	6,723.0	6,892.6	7,042.6
22 Commercial banking	1,622.1	1,791.1	1,978.5	2,173.2	2,155.9	2,207.9	2,248.7	2,309.6	2,322.1	2,377.5	2,414.3
23 Savings institutions	944.0	1,092.8	1,178.4	1,283.0	1,308.4	1,355.4	1,396.5	1,434.2	1,440.3	1,486.8	1,523.4
24 Insurance and pension funds	1,093.5	1,215.3	1,364.2	1,546.0	1,608.7	1,652.6	1,715.3	1,756.9	1,823.0	1,880.9	1,937.2
25 Other finance	451.6	591.7	743.4	1,007.3	1,053.1	1,061.5	1,073.0	1,084.6	1,137.6	1,147.5	1,167.7
26 Sources of funds	4,111.2	4,691.0	5,264.4	6,009.5	6,126.1	6,277.5	6,433.5	6,585.2	6,723.0	6,892.6	7,042.6
27 Private domestic deposits and RPs	2,389.8	2,711.5	2,922.1	3,182.6	3,165.0	3,198.6	3,234.4	3,328.8	3,385.7	3,417.0	3,455.1
28 Credit market debt	401.2	475.0	573.4	700.5	734.8	772.9	802.1	836.1	849.0	895.7	922.0
29 Other sources	1,320.2	1,504.5	1,768.9	2,126.4	2,226.3	2,305.9	2,397.0	2,420.4	2,488.4	2,579.9	2,665.6
30 Foreign funds	−23.0	−14.1	5.6	18.6	26.7	26.1	52.7	62.2	45.9	62.3	54.8
31 Treasury balances	11.5	15.5	25.8	27.5	8.6	30.9	33.0	21.6	23.5	32.6	31.5
32 Insurance and pension reserves	1,036.1	1,160.8	1,289.5	1,427.9	1,461.8	1,507.5	1,552.8	1,592.2	1,656.3	1,706.7	1,751.9
33 Other, net	295.6	342.2	448.0	652.5	729.2	741.4	758.5	744.3	762.8	778.3	827.4
Private domestic nonfinancial investors											
34 Credit market claims	1,076.6	1,244.8	1,516.0	1,598.3	1,610.7	1,668.7	1,696.3	1,785.0	1,771.6	1,811.6	1,865.3
35 U.S. government securities	548.6	663.6	830.7	881.2	912.0	950.4	969.4	1,014.7	1,025.7	1,027.0	1,071.4
36 Tax-exempt obligations	170.0	196.3	235.9	222.3	226.2	243.1	255.9	268.4	265.6	275.3	287.3
37 Corporate and foreign bonds	45.4	44.5	47.6	80.1	88.8	71.4	80.6	85.3	82.7	93.0	88.4
38 Open market paper	68.4	72.4	118.0	115.0	115.5	132.6	118.7	143.5	127.8	148.5	149.6
39 Other	244.3	268.0	283.8	299.7	268.1	271.2	271.9	273.2	269.9	267.9	268.5
40 Deposits and currency	2,566.4	2,891.7	3,112.5	3,393.4	3,364.7	3,405.6	3,444.5	3,555.7	3,607.4	3,646.4	3,690.7
41 Currency	150.9	159.6	171.9	186.3	185.3	191.3	192.4	205.4	204.0	209.9	210.7
42 Checkable deposits	350.9	378.8	419.7	512.9	468.5	488.0	487.2	510.5	491.1	506.8	497.3
43 Small time and savings accounts	1,542.9	1,693.5	1,831.9	1,948.3	1,965.2	1,977.7	1,990.8	2,024.2	2,079.4	2,107.9	2,126.8
44 Money market fund shares	169.5	218.5	227.3	268.9	281.3	279.5	286.4	297.1	322.1	310.4	311.1
45 Large time deposits	247.7	332.1	339.8	328.4	323.4	322.5	326.3	356.0	351.0	346.1	372.4
46 Security RPs	78.8	88.7	103.3	124.1	126.6	130.9	143.6	141.0	142.1	145.9	147.4
47 Deposits in foreign countries	25.7	20.6	18.5	24.5	14.4	15.7	17.8	21.6	17.8	19.4	25.0
48 **Total of credit market instruments, deposits, and currency**	**3,643.0**	**4,136.5**	**4,628.5**	**4,991.7**	**4,975.4**	**5,074.2**	**5,140.8**	**5,340.8**	**5,379.0**	**5,458.0**	**5,556.1**
49 Public holdings as percent of total	20.3	20.3	20.7	22.4	23.2	23.5	23.7	23.8	24.2	24.2	24.2
50 Private financial intermediation (in percent)	85.9	85.9	84.8	87.0	87.5	87.5	87.8	87.4	87.9	88.3	88.2
51 Total foreign funds	224.7	291.5	373.5	484.2	509.0	528.4	559.4	590.5	617.6	653.4	660.0
MEMO: Corporate equities not included above											
52 **Total market value**	**2,134.0**	**2,158.2**	**2,824.5**	**3,362.0**	**3,990.2**	**4,110.0**	**4,300.8**	**3,313.4**	**3,494.8**	**3,612.6**	**3,577.5**
53 Mutual fund shares	112.1	136.7	240.2	413.5	485.2	520.7	525.1	460.1	479.2	486.8	483.9
54 Other equities	2,021.9	2,021.5	2,584.3	2,948.5	3,505.0	3,589.3	3,775.7	2,853.2	3,015.7	3,125.9	3,093.6
55 Holdings by financial institutions	612.0	615.6	800.0	972.2	1,175.7	1,238.9	1,312.5	1,021.7	1,087.1	1,133.8	1,133.0
56 Other holdings	1,522.0	1,542.6	2,024.5	2,389.8	2,814.5	2,871.1	2,988.4	2,291.7	2,407.7	2,478.9	2,444.4

NOTES BY LINE NUMBER.
1. Line 1 of table 1.59.
2. Sum of lines 3–6 or 7–10.
6. Includes farm and commercial mortgages.
12. Credit market debt of federally sponsored agencies, and net issues of federally related mortgage pool securities.
14. Line 1 less line 2 plus line 12 and 13. Also line 21 less line 28 plus line 34. Also sum of lines 29 and 48 less lines 41 and 47.
19. Includes farm and commercial mortgages.
27. Line 40 less lines 41 and 47.
28. Excludes equity issues and investment company shares. Includes line 20.
30. Foreign deposits at commercial banks plus bank borrowings from foreign affiliates, less claims on foreign affiliates and deposits by banking in foreign banks.
31. Demand deposits and note balances at commercial banks.
32. Excludes net investment of these reserves in corporate equities.
33. Mainly retained earnings and net miscellaneous liabilities.
34. Line 14 less line 21 plus line 28.
35–39. Lines 15–19 less amounts acquired by private finance plus amounts borrowed by private finance. Line 39 includes mortgages.
41. Mainly an offset to line 10.
48. Lines 34 plus 40, or line 14 less line 29 plus 41 and 47.
49. Line 2/line 1 and 13.
50. Line 21/line 14.
51. Sum of lines 11 and 30.
52–54. Includes issues by financial institutions.

NOTE. Full statements for sectors and transaction types in flows and in amounts outstanding may be obtained from Flow of Funds Section, Stop 95, Division of Research and Statistics, Board of Governors of the Federal Reserve System, Washington, D.C. 20551.

2.10 NONFINANCIAL BUSINESS ACTIVITY Selected Measures[1]

1977 = 100; monthly and quarterly data are seasonally adjusted. Exceptions noted.

Measure	1986	1987	1988	1988								1989
				May	June	July	Aug.	Sept.	Oct.[r]	Nov.[r]	Dec.[r]	Jan.
1 **Industrial production**	**125.1**	**129.8**	**137.2**	**136.1**	**136.5**	**138.0**	**138.5**	**138.6**	**139.4**	**139.9**	**140.6**	**141.1**
Market groupings												
2 Products, total	133.3	138.3	145.9	145.0	145.3	146.5	147.3	147.4	148.1	148.3	149.4	150.1
3 Final, total	132.5	136.8	144.3	143.5	144.0	145.0	145.8	145.8	146.4	146.7	147.6	148.2
4 Consumer goods	124.0	127.7	133.9	132.7	133.0	134.2	135.0	134.8	136.4	136.7	138.0	138.9
5 Equipment	143.6	148.8	158.2	157.7	158.5	159.4	160.1	160.4	159.7	159.9	160.3	160.5
6 Intermediate	136.2	143.5	151.5	150.4	150.0	151.6	152.3	152.9	154.0	154.2	155.4	156.8
7 Materials	113.8	118.2	125.3	123.9	124.5	126.4	126.5	126.5	127.5	128.3	128.7	128.7
Industry groupings												
8 Manufacturing	129.1	134.6	142.8	141.8	142.1	143.6	144.0	144.4	145.3	145.9	146.6	147.4
Capacity utilization (percent)[2]												
9 Manufacturing	79.7	81.1	83.5	83.3	83.3	84.0	84.0	84.0	84.3	84.4	84.6	84.8
10 Industrial materials industries	78.6	80.5	83.7	83.0	83.2	84.4	84.3	84.1	84.7	85.0	85.2	85.0
11 Construction contracts (1982 = 100)[3]	158.0	164.0[r]	161.0[r]	166.0[r]	169.0[r]	160.0[r]	162.0[r]	157.0[r]	164.0	158.0	163.0	155.0
12 Nonagricultural employment, total[4]	120.7	124.1	128.6	127.9	128.6	128.9	129.1	129.4	129.7	130.3	130.5	131.0
13 Goods-producing, total	100.9	101.8	105.0	104.6	105.1	105.4	105.3	105.4	105.8	106.2	106.4	107.0
14 Manufacturing, total	96.3	96.8	99.2	99.0	99.3	99.5	99.4	99.3	99.8	100.1	100.3	100.5
15 Manufacturing, production-worker	91.2	92.1	94.3	94.1	94.4	94.6	94.4	94.3	94.9	95.2	95.3	95.7
16 Service-producing	129.0	133.4	138.5	137.7	138.4	138.7	139.0	139.5	139.8	140.3	140.6	141.1
17 Personal income, total	219.7	235.1	252.8	250.2	251.6	253.5[r]	254.5	256.0	259.9	259.4	261.8	266.4
18 Wages and salary disbursements	210.7	226.2	245.2	242.3	244.2	246.7	247.4	249.0	252.3	253.2	254.8	257.8
19 Manufacturing	177.4	183.8	196.0	193.8	195.4	196.6	196.8	198.1	202.3	201.3	201.2	202.8
20 Disposable personal income[5]	218.9	232.7	251.8	249.5	251.2	253.1	254.2	255.6	259.7	259.0	261.5	265.9
21 Retail sales[6]	199.5	209.3	222.9[r]	221.2	222.5	223.7	224.4	223.7	227.4	230.3	230.1	231.4
Prices[7]												
22 Consumer (1982–84 = 100)	109.6	113.6	118.3	117.5	118.0	118.5	119.0	119.8	120.2	120.3	120.5	121.1
23 Producer finished goods (1982 = 100)	103.2	105.4	108.0	107.5	107.7[r]	108.6[r]	108.7[r]	108.6	109.3	109.7	110.0	111.0

1. A major revision of the industrial production index and the capacity utilization rates was released in July 1985. See "A Revision of the Index of Industrial Production" and accompanying tables that contain revised indexes (1977=100) through December 1984 in the FEDERAL RESERVE BULLETIN, vol. 71 (July 1985), pp. 487–501. The revised indexes for January through June 1985 were shown in the September BULLETIN.

2. Ratios of indexes of production to indexes of capacity. Based on data from Federal Reserve, McGraw-Hill Economics Department, Department of Commerce, and other sources.

3. Index of dollar value of total construction contracts, including residential, nonresidential and heavy engineering, from McGraw-Hill Information Systems Company, F. W. Dodge Division.

4. Based on data in *Employment and Earnings* (U.S. Department of Labor). Series covers employees only, excluding personnel in the Armed Forces.

5. Based on data in *Survey of Current Business* (U.S. Department of Commerce).

6. Based on Bureau of Census data published in *Survey of Current Business*.

7. Data without seasonal adjustment, as published in *Monthly Labor Review*. Seasonally adjusted data for changes in the price indexes may be obtained from the Bureau of Labor Statistics, U.S. Department of Labor.

NOTE. Basic data (not index numbers) for series mentioned in notes 4, 5,and 6, and indexes for series mentioned in notes 3 and 7 may also be found in the *Survey of Current Business*.

Figures for industrial production for the last two months are preliminary and estimated, respectively.

2.11 LABOR FORCE, EMPLOYMENT, AND UNEMPLOYMENT

Thousands of persons; monthly data are seasonally adjusted. Exceptions noted.

Category	1986	1987	1988	1988							1989
				June	July	Aug.	Sept.	Oct.	Nov.[r]	Dec.[r]	Jan.
HOUSEHOLD SURVEY DATA											
1 **Noninstitutional population**[1]	**182,822**	**185,010**	**186,837**	**186,755**	**186,911**	**187,033**	**187,178**	**187,333**	**187,471**	**187,618**	**187,859**
2 Labor force (including Armed Forces)[1]	120,078	122,122	123,893	123,717	123,840	124,203	124,200	124,310	124,737	124,779	125,643
3 Civilian labor force	117,834	119,865	121,669	121,524	121,658	122,000	121,984	122,091	122,510	122,563	123,428
Employment											
4 Nonagricultural industries[2]	106,434	109,232	111,800	111,880	111,974	112,061	112,194	112,335	112,709	112,816	113,411
5 Agriculture	3,163	3,208	3,169	3,121	3,060	3,142	3,176	3,238	3,238	3,193	3,300
Unemployment											
6 Number	8,237	7,425	6,701	6,523	6,624	6,797	6,614	6,518	6,563	6,554	6,716
7 Rate (percent of civilian labor force)	7.0	6.2	5.5	5.4	5.4	5.6	5.4	5.3	5.4	5.3	5.4
8 Not in labor force	62,744	62,888	62,944	63,038	63,071	62,830	62,978	63,023	62,734	62,839	62,216
ESTABLISHMENT SURVEY DATA											
9 **Nonagricultural payroll employment**[3]	**99,525**	**102,310**	**106,039**	**106,057**	**106,271**	**106,425**	**106,737**	**106,973**	**107,419**	**107,640**	**108,048**
10 Manufacturing	18,965	19,065	19,536	19,544	19,593	19,560	19,549	19,648	19,714	19,737	19,783
11 Mining	777	721	733	740	740	739	734	729	722	719	719
12 Contract construction	4,816	4,998	5,294	5,308	5,330	5,340	5,365	5,366	5,413	5,436	5,538
13 Transportation and public utilities	5,255	5,385	5,584	5,582	5,598	5,605	5,618	5,631	5,658	5,667	5,713
14 Trade	23,683	24,381	25,362	25,353	25,435	25,471	25,510	25,573	25,676	25,727	25,893
15 Finance	6,283	6,549	6,679	6,679	6,684	6,689	6,692	6,708	6,725	6,743	6,735
16 Service	23,053	24,196	25,464	25,472	25,561	25,662	25,737	25,826	25,947	26,065	26,139
17 Government	16,693	17,015	17,387	17,379	17,330	17,359	17,532	17,492	17,564	17,546	17,528

1. Persons 16 years of age and over. Monthly figures, which are based on sample data, relate to the calendar week that contains the 12th day; annual data are averages of monthly figures. By definition, seasonality does not exist in population figures. Based on data from *Employment and Earnings* (U.S. Department of Labor).
2. Includes self-employed, unpaid family, and domestic service workers.
3. Data include all full- and part-time employees who worked during, or received pay for, the pay period that includes the 12th day of the month, and exclude proprietors, self-employed persons, domestic servants, unpaid family workers, and members of the Armed Forces. Data are adjusted to the March 1984 benchmark and only seasonally adjusted data are available at this time. Based on data from *Employment and Earnings* (U.S. Department of Labor).

2.12 OUTPUT, CAPACITY, AND CAPACITY UTILIZATION[1]

Seasonally adjusted

Series	1988				1988				1988			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4[r]
	Output (1977 = 100)				Capacity (percent of 1977 output)				Utilization rate (percent)			
1 **Total industry**	**134.5**	**136.0**	**138.2**	**139.8**	**163.1**	**164.2**	**165.2**	**166.2**	**82.4**	**82.8**	**83.8**	**84.2**
2 Mining	102.5	103.3	104.8	103.9	127.7	127.0	126.2	125.5	80.3	81.5	82.3	82.8
3 Utilities	114.7	111.7	114.9	114.6	139.8	140.1	140.4	140.7	82.0	79.9	81.9	80.8
4 **Manufacturing**	**139.6**	**141.6**	**143.7**	**145.7**	**168.9**	**170.2**	**171.5**	**172.7**	**82.7**	**83.2**	**84.0**	**84.4**
5 Primary processing	123.0	123.9	125.7	127.9	141.6	142.7	143.9	145.1	86.9	86.8	87.5	88.2
6 Advanced processing	149.7	152.3	154.5	156.4	185.6	186.7	188.1	189.4	80.7	81.5	82.4	82.7
7 **Materials**	**122.5**	**124.0**	**126.6**	**128.1**	**148.5**	**149.3**	**150.1**	**150.9**	**82.5**	**83.0**	**84.3**	**85.0**
8 Durable goods	131.5	134.2	136.9	139.3	165.7	166.8	167.9	169.0	79.4	80.4	81.6	82.6
9 Metal materials	86.2	88.1	92.4	94.8	108.8	109.1	109.4	109.7	79.2	80.8	84.8	86.9
10 Nondurable goods	129.4	130.5	132.4	135.5	146.8	148.3	149.8	151.4	88.1	87.9	88.7	89.6
11 Textile, paper, and chemical	131.6	132.6	135.1	138.3	146.7	148.5	150.2	152.0	89.7	89.2	90.0	91.2
12 Paper	145.7	145.9	......	......	147.6	149.2	......	......	98.7	97.8	98.8	97.4
13 Chemical	133.5	135.7	......	......	153.5	155.4	......	......	87.0	87.3	88.6	90.8
14 Energy materials	100.9	100.4	103.5	102.0	119.7	119.4	119.1	118.8	84.3	84.2	86.0	85.8

Series	Previous cycle[2]		Latest cycle[3]		1988	1988								1989
	High	Low	High	Low	Jan.	May	June	July	Aug.	Sept.	Oct.[r]	Nov.[r]	Dec.[r]	Jan.
	Capacity utilization rate (percent)													
15 **Total industry**	**88.6**	**72.1**	**86.9**	**69.5**	**82.5**	**82.9**	**83.0**	**83.7**	**83.8**	**83.7**	**84.0**	**84.1**	**84.4**	**84.4**
16 Mining	92.8	87.8	95.2	76.9	80.7	80.8	81.2	82.5	82.2	82.3[r]	81.9	83.1	83.3	82.5
17 Utilities	95.6	82.9	88.5	78.0	82.4	79.7	80.8	81.5	83.9	80.4[r]	81.0	80.4	81.0	80.4
18 **Manufacturing**	**87.7**	**69.9**	**86.5**	**68.0**	**82.7**	**83.3**	**83.3**	**84.0**	**84.0**	**84.0**	**84.3**	**84.4**	**84.6**	**84.8**
19 Primary processing	91.9	68.3	89.1	65.0	87.1	87.0	86.6	87.8	87.4	87.2	87.9	88.1	88.6	89.1
20 Advanced processing	86.0	71.1	85.1	69.5	80.7	81.7	81.7	82.2	82.4	82.4	82.6	82.6	82.9	83.0
21 **Materials**	**92.0**	**70.5**	**89.1**	**68.5**	**83.0**	**83.0**	**83.2**	**84.4**	**84.3**	**84.1**	**84.7**	**85.0**	**85.2**	**85.0**
22 Durable goods	91.8	64.4	89.8	60.9	79.7	80.8	80.7	81.7	81.4	81.9	82.4	82.7	82.6	83.0
23 Metal materials	99.2	67.1	93.6	45.7	80.1	82.1	80.8	84.9	83.4	86.0	87.3	87.1	86.3	87.6
24 Nondurable goods	91.1	66.7	88.1	70.7	88.8	87.7	87.4	88.9	88.8	88.2	89.3	89.4	90.2	90.1
25 Textile, paper, and chemical	92.8	64.8	89.4	68.8	90.8	88.8	88.9	90.4	90.3	89.4	90.9	90.9	91.7	91.6
26 Paper	98.4	70.6	97.3	79.9	100.6	98.1	97.1	100.0	98.4	97.9	97.8	96.6	97.8	......
27 Chemical	92.5	64.4	87.9	63.5	87.8	86.9	87.0	88.8	89.0	88.0	90.2	90.5	91.7	......
28 Energy materials	94.6	86.9	94.0	82.3	84.7	83.3	84.4	86.2	86.6	85.3	85.3	86.1	86.1	84.6

1. These data also appear in the Board's G.3 (402) release. For address, see inside front cover.
2. Monthly high 1973; monthly low 1975.
3. Monthly highs 1978 through 1980; monthly lows 1982.

2.13 INDUSTRIAL PRODUCTION Indexes and Gross Value[1]

Monthly data are seasonally adjusted

Groups	1977 proportion	1987 avg.	1987 Dec.	1988 Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.[r]	Nov.	Dec.[p]	1989 Jan.[e]
			Index (1977 = 100)												
MAJOR MARKET															
1 **Total index**	**100.00**	**129.8**	**133.9**	**134.4**	**134.7**	**135.4**	**136.1**	**136.5**	**138.0**	**138.5**	**138.6**	**139.4**	**139.9**	**140.6**	**141.1**
2 Products	57.72	138.3	141.3	143.4	143.6	144.1	145.0	145.3	146.5	147.3	147.4	148.1	148.3	149.4	150.1
3 Final products	44.77	136.8	139.8	141.6	141.8	142.5	143.5	144.0	145.0	145.8	145.8	146.4	146.7	147.6	148.2
4 Consumer goods	25.52	127.7	129.8	131.3	131.2	131.9	132.7	133.0	134.2	135.0	134.8	136.4	136.7	138.0	138.9
5 *Equipment*	19.25	148.8	153.1	155.3	155.9	156.5	157.7	158.5	159.4	160.1	160.4	159.7	159.9	160.3	160.5
6 Intermediate products	12.94	143.4	146.5	149.4	149.9	149.6	150.4	150.0	151.6	152.3	152.9	154.0	154.2	155.4	156.8
7 Materials	42.28	118.2	123.7	122.1	122.5	123.6	123.9	124.5	126.4	126.5	126.5	127.5	128.3	128.7	128.7
Consumer goods															
8 Durable consumer goods	6.89	120.2	120.3	120.6	120.4	123.3	125.6	125.3	125.3	125.7	126.3	129.3	129.2	132.1	132.2
9 Automotive products	2.98	118.5	115.4	117.6	120.6	121.9	127.1	127.1	124.4	124.2	126.4	128.9	129.5	134.8	134.6
10 Autos and trucks	1.79	115.1	110.2	111.8	116.4	118.0	126.9	125.3	120.8	123.1	124.8	128.3	129.5	138.0	137.2
11 Autos, consumer	1.16	90.7	83.7	79.5	86.3	91.0	98.9	99.0	93.8	93.0	97.7	101.3	101.0	105.1	99.6
12 Trucks, consumer	.63	160.5	159.5	171.6	172.2	168.2	178.9	174.1	170.8	179.0	175.3	178.4	182.4	199.1	....
13 Auto parts and allied goods	1.19	123.5	123.3	126.4	126.9	127.8	127.4	129.7	129.9	125.9	128.8	129.8	129.5	130.0	130.7
14 Home goods	3.91	121.6	123.9	122.8	120.2	124.3	124.4	123.9	125.9	126.8	126.2	129.7	128.9	130.0	130.4
15 Appliances, A/C and TV	1.24	141.5	142.7	140.6	132.8	143.2	142.2	138.0	143.3	146.5	144.9	154.4	150.4	151.5	149.9
16 Appliances and TV	1.19	142.1	142.6	141.4	132.7	142.2	143.0	137.1	143.8	146.1	143.7	151.9	148.9	150.5	....
17 Carpeting and furniture	.96	130.7	133.9	132.3	133.1	133.1	135.8	135.9	136.6	137.2	137.1	138.8	139.8	140.9	....
18 Miscellaneous home goods	1.71	102.0	104.8	104.7	103.9	105.7	105.2	107.0	107.4	106.8	106.6	106.7	107.3	108.4	....
19 Nondurable consumer goods	18.63	130.5	133.3	135.3	135.1	135.1	135.4	135.8	137.5	138.5	138.0	139.0	139.5	140.2	141.3
20 Consumer staples	15.29	137.3	140.7	142.9	142.5	142.5	143.1	143.5	145.3	146.6	145.8	147.0	147.6	148.6	149.6
21 Consumer foods and tobacco	7.80	136.2	139.2	140.8	139.4	138.3	139.2	139.3	141.1	141.3	141.1	142.4	143.6	144.4	....
22 Nonfood staples	7.49	138.5	142.2	145.0	145.7	146.8	147.0	147.9	149.6	152.1	150.7	151.8	151.8	152.9	154.1
23 Consumer chemical products	2.75	162.9	167.7	171.7	172.7	175.6	177.9	179.5	181.8	183.8	185.0	186.1	185.2	186.1	....
24 Consumer paper products	1.88	151.8	157.0	157.5	159.1	161.4	162.4	162.8	164.0	165.3	166.3	167.1	167.8	168.3	....
25 Consumer energy	2.86	106.3	108.0	111.3	111.0	109.6	107.3	107.7	109.3	113.0	107.6	108.9	109.2	110.9	....
26 Consumer fuel	1.44	93.1	95.4	97.0	97.9	98.9	94.3	93.0	94.6	95.5	92.7	95.3	94.1	96.3	....
27 Residential utilities	1.42	119.8	120.7	125.8	124.5	120.5	120.6	122.6	124.4	130.9	122.8	122.7	124.5	....	....
Equipment															
28 Business and defense equipment	18.01	153.6	157.8	160.3	160.8	161.4	162.7	163.5	164.6	165.2	165.6	165.1	165.5	166.2	166.4
29 Business equipment	14.34	144.5	149.8	152.4	153.3	154.6	156.9	158.1	159.3	160.2	160.8	160.2	161.2	162.0	162.5
30 Construction, mining, and farm	2.08	62.2	67.4	67.6	68.3	70.8	71.8	72.4	73.6	73.1	74.3	74.2	74.5	75.2	75.2
31 Manufacturing	3.27	117.9	122.2	124.9	127.0	127.7	128.3	130.3	132.4	134.0	135.8	136.2	136.6	137.1	138.3
32 Power	1.27	82.6	84.2	88.3	87.8	87.0	87.4	88.3	89.8	90.9	92.2	91.5	92.1	92.3	92.9
33 Commercial	5.22	226.5	235.5	240.3	239.9	241.5	245.7	247.1	248.2	249.8	248.7	245.4	246.8	247.3	248.3
34 Transit	2.49	108.4	109.1	108.2	111.1	112.3	115.3	115.7	115.9	115.2	116.8	120.3	121.9	124.5	123.1
35 Defense and space equipment	3.67	188.9	188.9	191.0	189.9	187.9	185.5	184.6	184.9	184.9	184.5	184.0	182.5	182.3	181.9
Intermediate products															
36 Construction supplies	5.95	131.5	133.8	137.7	137.3	137.6	138.8	137.6	138.4	138.1	138.4	140.0	141.0	141.4	143.4
37 Business supplies	6.99	153.5	157.4	159.4	160.7	159.9	160.3	160.6	162.8	164.4	165.2	165.9	165.4	167.2	....
38 General business supplies	5.67	158.6	163.3	165.0	166.6	165.7	165.5	165.9	168.6	170.6	171.8	172.3	172.7	174.1	....
39 Commercial energy products	1.31	131.1	131.8	135.3	135.3	134.6	137.8	137.5	137.6	137.7	136.7	138.2	133.7	137.6	....
Materials															
40 Durable goods materials	20.50	125.0	132.0	131.4	131.3	132.7	134.8	134.9	136.8	136.6	137.8	138.9	139.8	139.9	140.8
41 Durable consumer parts	4.92	100.9	104.6	104.4	103.5	106.2	110.0	110.3	110.1	109.8	111.0	111.4	113.9	113.7	113.7
42 Equipment parts	5.94	159.0	165.3	167.6	167.3	168.9	170.8	171.6	174.1	173.5	174.0	174.9	175.0	174.9	175.2
43 Durable materials n.e.c.	9.64	116.4	125.5	123.0	123.4	124.0	125.3	124.8	127.5	127.6	129.2	130.8	131.2	131.7	133.5
44 Basic metal materials	4.64	86.7	100.0	91.4	90.5	91.6	94.8	93.7	98.4	97.3	100.3	101.1	101.6	101.5	103.3
45 Nondurable goods materials	10.09	125.8	132.5	128.1	130.1	131.1	130.1	130.1	132.8	133.1	132.6	134.7	135.1	136.8	137.1
46 Textile, paper, and chemical materials	7.53	127.6	135.6	129.9	132.4	133.3	131.9	132.1	135.3	135.7	134.9	137.4	137.9	139.7	140.0
47 Textile materials	1.52	111.7	113.6	110.2	112.7	111.9	107.5	107.5	108.5	110.1	109.2	109.5	110.1	109.5	....
48 Pulp and paper materials	1.55	141.0	149.0	144.4	144.8	145.8	146.4	145.4	150.3	148.3	148.1	148.4	147.1	149.4	....
49 *Chemical materials*	4.46	128.4	138.4	131.5	134.8	136.2	135.1	135.8	139.2	140.0	139.0	143.1	144.2	146.7	....
50 Miscellaneous nondurable materials	2.57	120.4	123.3	123.0	123.2	124.6	125.1	124.2	125.6	125.6	125.9	126.6	126.9	....	....
51 Energy materials	11.69	99.8	101.7	100.6	100.6	101.0	99.5	101.3	102.7	103.2	101.5	101.3	102.2	102.1	100.2
52 Primary energy	7.57	105.0	107.7	104.8	105.0	106.7	104.0	105.6	106.8	106.2	106.8	106.0	108.6	108.3	....
53 Converted fuel materials	4.12	90.3	90.7	93.0	92.6	90.5	91.2	93.5	95.3	97.7	91.8	92.6	90.5	90.6	....

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

Groups	SIC code	1977 proportion	1987 avg.	1987	1988											1989
				Dec.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.[p]	Jan.[e]
				Index (1977 = 100)												
MAJOR INDUSTRY																
1 Mining and utilities	.....	15.79	104.3	107.3	106.8	106.7	107.1	106.0	106.8	108.1	109.0	107.2	107.2	107.7	108.2	107.1
2 Mining	.....	9.83	100.7	104.6	101.5	102.7	104.7	102.6	103.0	104.3	103.8	103.7	103.1	104.5	104.5	103.3
3 Utilities	.....	5.96	110.3	111.7	115.6	113.3	111.0	111.6	113.2	114.4	117.8	113.0	113.9	113.1	114.1	113.2
4 Manufacturing	.....	84.21	134.6	138.9	139.5	140.0	140.8	141.8	142.1	143.6	144.0	144.4	145.3	145.9	146.6	147.4
5 Nondurable	.....	35.11	136.7	141.3	141.1	141.7	142.3	142.1	142.6	144.6	145.1	145.3	146.3	146.7	147.6	148.6
6 Durable	.....	49.10	133.1	137.3	138.4	138.8	139.7	141.5	141.7	142.9	143.2	143.8	144.6	145.2	146.0	146.5
Mining																
7 Metal	10	.50	77.5	96.5	83.9	84.9	86.9	86.0	82.2	94.0	96.6	99.1	101.6	102.7	......	......
8 Coal	11.12	1.60	131.8	140.6	133.7	129.1	136.0	127.8	126.9	141.5	137.2	142.2	138.5	149.7	155.1	148.1
9 *Oil and gas extraction*	13	7.07	92.7	94.1	92.4	94.8	95.5	94.6	95.8	93.3	93.2	92.0	91.5	90.8	89.4	......
10 Stone and earth minerals	14	.66	128.2	135.6	134.3	136.9	141.2	140.1	137.4	140.2	141.3	139.7	142.8	142.6	144.7	......
Nondurable manufactures																
11 Foods	20	7.96	137.7	140.1	141.9	141.1	140.3	141.0	141.3	143.3	143.3	143.2	144.0	145.3	145.9	......
12 Tobacco products	21	.62	103.4	110.5	107.0	107.2	107.2	107.2	104.5	100.6	105.1	105.0	105.4	106.6	......	......
13 Textile mill products	22	2.29	115.8	118.2	115.3	117.0	117.3	114.6	114.3	117.1	116.4	116.2	117.0	117.2	117.2	......
14 Apparel products	23	2.79	107.4	107.8	108.5	108.7	109.2	108.6	109.3	109.4	108.9	109.9	109.5	110.1	......	......
15 Paper and products	26	3.15	144.4	150.6	148.0	149.1	149.2	149.5	148.6	152.3	151.0	150.9	151.8	150.7	152.6	......
16 Printing and publishing	27	4.54	172.0	176.9	178.7	180.4	181.8	180.7	182.3	184.9	186.7	188.0	188.1	188.8	189.5	191.5
17 Chemicals and products	28	8.05	140.1	147.9	145.4	146.4	148.9	149.1	150.5	153.4	154.8	155.3	156.7	157.3	158.1	......
18 Petroleum products	29	2.40	93.5	96.1	95.9	98.4	98.5	95.2	94.1	95.0	96.0	93.7	96.3	95.0	98.1	99.8
19 Rubber and plastic products	30	2.80	163.6	170.6	172.3	172.2	172.3	173.4	174.4	175.4	175.3	175.3	176.9	177.5	179.0	......
20 Leather and products	31	.53	60.0	57.5	59.7	59.5	58.0	57.1	58.9	59.1	59.4	59.9	61.0	61.9	62.5	......
Durable manufactures																
21 Lumber and products	24	2.30	130.3	133.6	139.0	137.8	138.0	139.8	136.4	136.6	133.8	133.5	137.5	139.6	141.7	......
22 Furniture and fixtures	25	1.27	152.8	159.4	158.3	159.4	159.2	160.5	161.2	162.9	164.9	164.9	164.5	165.4	166.6	......
23 Clay, glass, and stone products	32	2.72	119.1	120.1	121.6	122.5	121.4	121.5	123.4	122.2	122.6	122.6	123.3	124.7	125.1	......
24 Primary metals	33	5.33	81.5	90.6	86.4	85.1	85.3	89.2	87.5	91.5	90.8	93.1	94.2	93.2	92.0	94.2
25 Iron and steel	331.2	3.49	70.8	81.9	77.4	74.2	74.5	78.6	74.2	80.2	78.9	81.4	83.1	81.3	79.8	......
26 Fabricated metal products	34	6.46	111.0	115.8	117.6	118.8	118.8	119.8	120.4	121.7	122.1	122.5	122.6	124.6	125.3	125.6
27 Nonelectrical machinery	35	9.54	152.7	161.0	163.6	164.6	167.2	170.3	171.2	173.1	174.1	174.8	173.8	175.3	176.4	176.8
28 Electrical machinery	36	7.15	172.3	175.9	177.8	176.6	178.7	179.1	179.5	181.5	182.2	181.8	183.0	182.2	182.7	182.6
29 Transportation equipment	37	9.13	129.2	128.1	128.4	130.0	130.4	133.1	132.8	131.9	131.8	132.7	134.8	135.1	137.0	136.4
30 Motor vehicles and parts	371	5.25	111.8	110.2	109.3	113.0	114.8	119.6	119.1	116.6	117.5	118.5	121.7	122.9	126.6	125.2
31 Aerospace and miscellaneous transportation equipment	372–6.9	3.87	152.8	152.4	154.5	153.0	151.5	151.5	151.4	152.7	151.3	151.9	152.7	151.7	151.1	151.6
32 *Instruments*	38	2.66	143.9	145.5	149.2	149.7	150.5	151.3	153.0	156.4	156.8	157.8	159.9	160.0	159.5	160.2
33 Miscellaneous manufactures	39	1.46	102.6	105.6	104.4	105.1	105.9	106.0	107.6	107.8	108.3	108.5	107.7	109.0	109.7	......
Utilities																
34 Electric	.....	4.17	126.6	125.6	130.7	129.0	127.6	129.7	132.1	134.6	138.8	132.2	132.8	131.5	132.6	......
	Gross value (billions of 1982 dollars, annual rates)															
MAJOR MARKET																
35 Products, total	.....	**517.5**	**1,735.8**	**1,778.8**	**1,797.5**	**1,807.5**	**1,812.2**	**1,820.1**	**1,813.9**	**1,822.3**	**1,828.6**	**1,828.9**	**1,853.4**	**1,853.5**	**1,874.0**	**1,887.8**
36 Final	.....	405.7	1,333.8	1,359.4	1,381.1	1,385.9	1,393.9	1,397.1	1,394.3	1,398.9	1,404.2	1,404.3	1,423.5	1,424.4	1,440.2	1,450.6
37 Consumer goods	.....	272.7	866.0	881.2	893.7	893.2	899.1	898.9	893.6	895.6	900.4	897.2	915.0	916.7	932.7	941.5
38 Equipment	.....	133.0	467.8	478.2	487.3	492.7	494.7	498.3	500.7	503.2	503.8	507.1	508.4	507.7	507.6	509.1
39 Intermediate	.....	111.9	402.0	419.4	416.5	421.6	418.4	423.0	419.6	423.4	424.3	424.5	430.0	429.2	433.7	437.3

1. These data also appear in the Board's G.12.3 (414) release. For address, see inside front cover.

A major revision of the industrial production index and the capacity utilization rates was released in July 1985. See "A Revision of the Index of Industrial Production" and accompanying tables that contain revised indexes (1977=100) through December 1984 in the FEDERAL RESERVE BULLETIN, vol. 71 (July 1985), pp. 487–501. The revised indexes for January through June 1985 were shown in the September BULLETIN.

2.14 HOUSING AND CONSTRUCTION

Monthly figures are at seasonally adjusted annual rates except as noted.

Item	1986	1987	1988	1988 Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.[r]	Nov.[r]	Dec.
	Private residential real estate activity (thousands of units)												
NEW UNITS													
1 Permits authorized	1,750	1,535	1,451	1,476	1,449	1,436	1,493	1,420	1,464	1,394	1,516	1,516	1,566
2 1-family	1,071	1,024	1,000	1,030	960	982	1,002	984	1,022	974	1,027	1,046	1,082
3 2-or-more-family	679	511	452	446	489	454	491	436	442	420	489	470	484
4 Started	1,805	1,621	1,488	1,528[r]	1,576[r]	1,392[r]	1,463[r]	1,478[r]	1,459[r]	1,463[r]	1,532	1,567	1,568
5 1-family	1,179	1,146	1,080	1,169[r]	1,087[r]	1,001[r]	1,088[r]	1,067[r]	1,076[r]	1,039[r]	1,136	1,138	1,123
6 2-or-more-family	626	474	408	359[r]	489[r]	391[r]	375[r]	411[r]	383	424[r]	396	429	445
7 Under construction, end of period[1]	1,074	987	927	999	999	984	982	974	965	955	952	957	958
8 1-family	583	591	575	617	622	610	609	606	603	596	598	602	605
9 2-or-more-family	490	397	352	382	377	374	373	368	362	359	354	355	353
10 Completed	1,756	1,669	1,528	1,598	1,665	1,450	1,518	1,529	1,538	1,533	1,516	1,432	1,517
11 1-family	1,120	1,123	1,083	1,094	1,059	1,090	1,106	1,077	1,072	1,089	1,086	1,038	1,085
12 2-or-more-family	636[r]	546	445	504	606	360	412	452	466	444	430	394	432
13 Mobile homes shipped	244	233	218	213[r]	215[r]	221[r]	227[r]	207[r]	223	224[r]	216	227	225
Merchant builder activity in 1-family units													
14 Number sold	748	672	677	664	681	681	718	703	714	691[r]	722	665	669
15 Number for sale, end of period[1]	357	365	366	372	367	370	367	365	363	361[r]	354	364	366
Price (thousands of dollars)[2]													
Median													
16 Units sold	92.2	104.7	113.3	108.9	111.0	110.0	111.5	118.0	110.0	116.6[r]	113.0	110.3	121.0
Average													
17 Units sold	112.2	127.9	139.3	133.2	135.6	133.5	136.5	141.3	140.6	142.7[r]	136.8	137.0	152.2
EXISTING UNITS (1-family)													
18 Number sold	3,566	3,530	3,624	3,330	3,520	3,590	3,820	3,630	3,710	3,670	3,670	3,670	3,920
Price of units sold (thousands of dollars)[2]													
19 Median	80.3	85.6	88.7	87.9	87.3	88.8	90.2	90.7	91.4	88.2	88.1	88.0	88.7
20 Average	98.3	106.2	111.9	110.7	108.7	111.9	115.4	114.8	115.1	112.3	110.9	111.8	112.0
	Value of new construction[3] (millions of dollars)												
CONSTRUCTION													
21 **Total put in place**	**386,093**	**398,848**	**403,371**	**403,555**	**396,238**	**398,473**	**395,714**	**404,164**	**403,172**	**406,906**	**408,184**	**412,436**	**422,695**
22 Private	314,651	323,819	325,103	324,257	318,515	320,194	317,708	324,658	326,763	327,164	330,291	331,900	335,929
23 Residential	187,147	194,772	195,180	195,554	192,026	190,374	188,071	194,215	195,393	196,945	199,567	200,269	200,922
24 Nonresidential, total	127,504	129,047	129,923	128,703	126,489	129,820	129,637	130,443	131,370	130,219	130,724	131,631	135,007
Buildings													
25 Industrial	13,747	13,707	14,256	14,546	13,849	13,907	13,676	13,928	14,006	13,546	15,234	16,032	15,059
26 Commercial	56,762	55,448	55,739	54,843	56,169	57,447	56,585	56,687	56,404	55,815	54,706	53,881	57,359
27 Other	13,216	15,464	16,789	17,301	16,382	16,847	16,757	16,166	16,613	16,600	17,132	16,796	17,399
28 Public utilities and other	43,779	44,428	43,139	42,013	40,089	41,619	42,619	43,662	44,347	44,258	43,652	44,922	45,190
29 Public	71,437	75,028	78,266	79,298	77,723	78,278	78,007	79,506	76,409	79,742	77,893	80,536	86,766
30 Military	3,868	4,327	4,077	4,216	3,872	3,547	4,844	4,350	3,984	4,897	3,659	3,932	4,147
31 Highway	22,681	22,758	25,777	26,963	26,912	25,254	24,822	27,673	23,491	23,841	25,997	26,724	31,976
32 Conservation and development	4,646	5,162	4,519	4,899	4,226	4,460	4,596	4,861	4,793	5,045	3,927	3,829	4,389
33 Other	40,242	42,781	43,893	43,220	42,713	45,017	43,745	42,622	44,141	45,959	44,310	46,051	46,254

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

NOTE. Census Bureau estimates for all series except (1) mobile homes, which are private, domestic shipments as reported by the Manufactured Housing Institute and seasonally adjusted by the Census Bureau, and (2) sales and prices of existing units, which are published by the National Association of Realtors. All back and current figures are available from the originating agency. Permit authorizations are those reported to the Census Bureau from 16,000 jurisdictions beginning with 1978.

2.15 CONSUMER AND PRODUCER PRICES

Percentage changes based on seasonally adjusted data, except as noted

Item	Change from 12 months earlier		Change from 3 months earlier (at annual rate)				Change from 1 month earlier					Index level Jan. 1989[1]
	1988 Jan.	1989 Jan.	1988[r] Mar.	1988[r] June	1988[r] Sept.	1988[r] Dec.	1988[r] Sept.	1988[r] Oct.	1988[r] Nov.	1988[r] Dec.	1989 Jan.	
CONSUMER PRICES[2] (1982–84=100)												
1 **All items**	**4.0**	**4.7**	**3.9**	**4.9**	**4.8**	**4.1**	**.4**	**.4**	**.3**	**.3**	**.6**	**121.1**
2 Food	3.2	5.6	2.5	6.4	8.8	3.0	.7	.2	.2	.3	.7	122.2
3 Energy items	4.2	1.8	−4.0	3.7	2.7	−.4	−.2	−.1	.3	−.3	.8	89.0
4 All items less food and energy	4.3	4.6	5.4	4.3	4.3	4.9	.5	.5	.3	.4	.5	126.4
5 Commodities	3.4	4.2	4.7	3.9	3.1	4.2	.7	.5	.3	.3	.5	117.9
6 Services	4.8	5.0	5.6	4.5	4.8	5.4	.3	.5	.4	.5	.5	131.4
PRODUCER PRICES (1982=100)												
7 Finished goods	2.2	4.4	4.2	3.0	5.7	3.0	.6	.0	.3	.5	1.0	111.0
8 Consumer foods	2.3	5.4	6.8	5.5	9.2	2.1	.9	.2	.3	.1	1.1	116.5
9 Consumer energy	2.1	2.9	−7.0	−5.2	−2.7	2.1	−.8	.0	.5	.0	4.9	60.9
10 Other consumer goods	2.9	4.5	5.3	3.5	5.9	4.4	.4	.0	.3	.7	.4	121.8
11 Capital equipment	1.3	3.6	3.6	2.9	6.1	1.4	.9	−.3	.3	.3	.6	117.0
12 Intermediate materials[3]	5.1	5.8	5.1	7.4	4.6	4.5	.4	.1	.6	.5	.9	110.2
13 Excluding energy	5.9	6.8	8.2	6.9	7.2	6.7	.5	.5	.7	.4	.6	119.4
Crude materials												
14 Foods	5.9	15.6	18.5	21.3	29.1	−7.9	2.0	−.1	−4.0	2.1	2.2	112.4
15 Energy	−1.8	.6	−24.1	7.8	−27.0	12.9	−2.1	−1.9	−1.4	6.5	6.7	71.2
16 Other	22.9	6.6	17.3	−6.5	8.5	5.8	−.5	.1	.5	.7	2.2	137.7

1. *Not seasonally adjusted.*
2. Figures for consumer prices are those for all urban consumers and reflect a rental equivalence measure of homeownership after 1982.
3. Excludes intermediate materials for food manufacturing and manufactured animal feeds.

SOURCE. Bureau of Labor Statistics.

2.16 GROSS NATIONAL PRODUCT AND INCOME

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

Account	1986	1987	1988[r]	1987	1988			
				Q4	Q1	Q2	Q3	Q4[r]
GROSS NATIONAL PRODUCT								
1 **Total**	**4,240.3**	**4,526.7**	**4,863.1**	**4,662.8**	**4,724.5**	**4,823.8**	**4,909.0**	**4,995.2**
By source								
2 Personal consumption expenditures	2,807.5	3,012.1	3,227.2	3,076.3	3,128.1	3,194.6	3,261.2	3,325.1
3 Durable goods	406.5	421.9	451.1	422.0	437.8	449.8	452.9	464.0
4 Nondurable goods	943.6	997.9	1,047.4	1,012.4	1,016.2	1,036.6	1,060.8	1,076.1
5 Services	1,457.3	1,592.3	1,728.7	1,641.9	1,674.1	1,708.2	1,747.5	1,785.0
6 Gross private domestic investment	665.9	712.9	766.1	764.9	763.4	758.1	772.5	770.4
7 Fixed investment	650.4	673.7	717.5	692.9	698.1	714.4	722.8	734.8
8 Nonresidential	433.9	446.8	487.8	464.1	471.5	487.8	493.7	498.0
9 Structures	138.5	139.5	142.9	147.7	140.1	142.3	143.8	145.3
10 Producers' durable equipment	295.4	307.3	344.8	316.3	331.3	345.5	349.9	352.6
11 Residential structures	216.6	226.9	229.8	228.8	226.6	226.5	229.1	236.8
12 Change in business inventories	15.5	39.2	48.6	72.0	65.3	43.7	49.7	35.6
13 Nonfarm	17.4	40.7	42.4	72.8	49.4	33.1	41.9	45.2
14 Net exports of goods and services	−104.4	−123.0	−94.3	−125.7	−112.1	−90.4	−80.0	−94.8
15 Exports	378.4	428.0	520.2	459.7	487.8	507.1	536.1	549.7
16 Imports	482.8	551.1	614.5	585.4	599.9	597.5	616.0	644.5
17 Government purchases of goods and services	871.2	924.7	964.1	947.3	945.2	961.6	955.3	994.5
18 Federal	366.2	382.0	380.5	391.4	377.7	382.2	367.7	394.4
19 State and local	505.0	542.8	583.6	555.9	567.5	579.4	587.6	600.1
By major type of product								
20 Final sales, total	4,224.7	4,487.5	4,814.6	4,590.7	4,659.2	4,780.1	4,859.3	4,959.6
21 Goods	1,697.9	1,792.5	1,939.3	1,849.3	1,879.5	1,928.0	1,960.1	1,989.5
22 Durable	725.3	776.3	858.0	808.7	819.3	849.5	881.6	881.6
23 Nondurable	972.6	1,016.3	1,081.3	1,040.7	1,060.1	1,078.5	1,078.5	1,107.9
24 Services	2,118.3	2,295.7	2,476.4	2,363.9	2,405.2	2,451.5	2,501.6	2,547.2
25 Structures	424.0	438.4	447.5	449.5	439.9	444.3	447.3	458.5
26 Change in business inventories	15.5	39.2	48.6	72.0	65.3	43.7	49.7	35.6
27 Durable goods	4.3	26.6	31.1	50.5	26.6	17.8	45.1	34.7
28 Nondurable goods	11.3	12.6	17.5	21.6	38.6	25.9	4.6	0.9
MEMO								
29 **Total GNP in 1982 dollars**	**3,721.7**	**3,847.0**	**3,995.1**	**3,923.0**	**3,956.1**	**3,985.2**	**4,009.4**	**4,029.7**
NATIONAL INCOME								
30 **Total**	**3,437.1**	**3,678.7**	**3,965.0**	**3,802.0**	**3,850.8**	**3,928.8**	**4,000.7**	n.a.
31 Compensation of employees	2,507.1	2,683.4	2,905.2	2,769.9	2,816.4	2,874.0	2,933.2	2,997.2
32 Wages and salaries	2,094.0	2,248.4	2,437.3	2,324.8	2,358.7	2,410.0	2,462.0	2,518.7
33 Government and government enterprises	393.7	420.1	446.1	429.2	437.1	442.9	449.1	455.4
34 Other	1,700.3	1,828.3	1,991.2	1,895.6	1,921.6	1,967.1	2,012.9	2,063.3
35 Supplement to wages and salaries	413.1	435.0	467.8	445.1	457.7	464.0	471.1	478.5
36 Employer contributions for social insurance	217.0	227.1	249.6	232.7	243.1	247.5	251.7	256.0
37 Other labor income	196.1	207.9	218.3	212.4	214.6	216.5	219.5	222.5
38 Proprietors' income[1]	286.7	312.9	324.7	326.0	323.9	328.8	321.6	324.7
39 Business and professional[1]	250.3	270.0	288.5	279.0	279.2	285.3	290.7	298.6
40 Farm[1]	36.4	43.0	36.3	47.0	44.7	43.4	30.9	26.1
41 Rental income of persons[2]	12.4	18.4	19.5	20.5	20.5	19.1	19.7	18.6
42 Corporate profits[1]	298.9	310.4	323.8	316.1	316.2	326.5	330.0	n.a.
43 Profits before tax[3]	236.4	276.7	302.1	281.9	286.2	305.9	313.9	n.a.
44 Inventory valuation adjustment	8.3	−18.0	−23.9	−18.2	−19.4	−27.4	−29.3	−19.6
45 Capital consumption adjustment	54.2	51.7	45.6	52.4	49.4	48.0	45.4	39.7
46 Net interest	331.9	353.6	391.9	369.5	373.9	380.6	396.2	416.7

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

SOURCE. *Survey of Current Business* (Department of Commerce).

2.17 PERSONAL INCOME AND SAVING

Billions of current dollars; quarterly data are at seasonally adjusted annual rates. Exceptions noted.

Account	1986	1987	1988[r]	1987	1988			
				Q4	Q1	Q2	Q3	Q4[r]
PERSONAL INCOME AND SAVING								
1 **Total personal income**	**3,531.1**	**3,780.0**	**4,063.4**	**3,906.8**	**3,951.4**	**4,022.4**	**4,094.0**	**4,185.5**
2 Wage and salary disbursements	2,094.0	2,248.4	2,437.3	2,325.1	2,358.7	2,410.0	2,462.0	2,518.7
3 Commodity-producing industries	625.5	649.8	695.6	665.5	676.0	689.1	701.3	716.1
4 Manufacturing	473.1	490.3	522.6	501.3	509.6	517.4	525.9	537.7
5 Distributive industries	498.9	531.7	578.9	547.3	558.2	572.1	585.8	599.4
6 Service industries	575.9	646.8	716.8	682.8	687.4	705.9	725.8	747.8
7 Government and government enterprises	393.7	420.1	446.1	429.5	437.1	442.9	449.1	455.4
8 Other labor income	196.1	207.9	218.3	212.4	214.6	216.5	219.5	222.5
9 Proprietors' income[1]	286.7	312.9	324.7	326.0	323.9	328.8	321.6	324.7
10 Business and professional[1]	250.3	270.0	288.5	279.0	279.2	285.3	290.7	298.6
11 Farm[1]	36.4	43.0	36.3	47.0	44.7	43.4	30.9	26.1
12 Rental income of persons[2]	12.4	18.4	19.5	20.5	20.5	19.1	19.7	18.6
13 Dividends	82.8	88.6	96.3	91.9	93.5	95.0	97.3	99.4
14 Personal interest income	499.1	527.0	576.3	550.0	554.2	563.7	581.9	605.5
15 Transfer payments	521.1	548.8	586.0	556.8	576.3	582.8	588.6	596.3
16 Old-age survivors, disability, and health insurance benefits	269.3	282.9	301.8	286.5	298.1	300.4	303.1	305.7
17 LESS: Personal contributions for social insurance	161.1	172.0	195.1	175.9	190.2	193.5	196.7	200.1
18 EQUALS: Personal income	3,531.1	3,780.0	4,063.4	3,906.8	3,951.4	4,022.4	4,094.0	4,185.5
19 LESS: Personal tax and nontax payments	511.4	570.3	590.4	591.0	575.8	601.0	586.5	598.2
20 EQUALS: Disposable personal income	3,019.6	3,209.7	3,473.0	3,315.8	3,375.6	3,421.5	3,507.5	3,587.4
21 LESS: Personal outlays	2,898.0	3,105.5	3,327.2	3,171.8	3,225.7	3,293.6	3,361.8	3,427.6
22 EQUALS: Personal saving	121.7	104.2	145.8	144.0	149.9	127.8	145.7	159.8
MEMO								
Per capita (1982 dollars)								
23 Gross national product	15,401.2	15,772.9	16,227.1	16,031.9	16,127.6	16,213.2	16,265.3	16,308.0
24 Personal consumption expenditures	10,160.1	10,336.2	10,528.4	10,346.1	10,435.4	10,492.3	10,563.1	10,627.3
25 Disposable personal income	10,929.0	11,012.0	11,331.0	11,145.0	11,260.0	11,237.0	11,362.0	11,465.0
26 Saving rate (percent)	4.0	3.2	4.2	4.3	4.4	3.7	4.2	4.5
GROSS SAVING								
27 **Gross saving**	**537.2**	**560.4**	**642.2**	**603.4**	**627.0**	**634.1**	**665.4**	n.a.
28 Gross private saving	681.6	665.3	730.6	714.1	726.3	711.2	732.9	n.a.
29 Personal saving	121.7	104.2	145.8	144.0	149.9	127.8	145.7	159.8
30 Undistributed corporate profits[1]	104.1	81.1	78.4	80.5	78.1	80.1	79.5	n.a.
31 Corporate inventory valuation adjustment	8.3	−18.0	−23.9	−18.2	−19.4	−27.4	−29.3	−19.6
Capital consumption allowances								
32 Corporate	282.4	297.5	315.7	303.7	309.8	313.3	316.8	322.9
33 Noncorporate	173.5	182.5	190.7	185.8	188.5	189.9	190.9	193.3
34 Government surplus, or deficit (−), national income and product accounts	−144.4	−104.9	−88.4	−110.7	−99.2	−77.1	−67.5	n.a.
35 Federal	−205.6	−157.8	−143.3	−160.4	−155.1	−133.3	−123.5	n.a.
36 State and local	61.2	52.9	54.9	49.7	55.8	56.2	56.0	n.a.
37 **Gross investment**	**523.6**	**552.3**	**630.1**	**597.0**	**612.0**	**629.0**	**651.4**	**628.2**
38 Gross private domestic	665.9	712.9	766.1	764.9	763.4	758.1	772.5	770.4
39 Net foreign	−142.4	−160.6	−135.9	−167.8	−151.3	−129.1	−121.1	−142.2
40 **Statistical discrepancy**	**−13.6**	**−8.1**	**−12.0**	**−6.4**	**−15.0**	**−5.1**	**−14.0**	**−14.0**

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

SOURCE. *Survey of Current Business* (Department of Commerce).

3.10 U.S. INTERNATIONAL TRANSACTIONS Summary

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

Item credits or debits	1985	1986	1987	1987		1988		
				Q3	Q4	Q1	Q2	Q3[p]
1 Balance on current account	−115,102	−138,827	−153,964	−41,967	−33,523	−36,938	−33,739	−30,894
2 Not seasonally adjusted	....	....	....	−47,330	−31,803	−32,179	−34,606	−37,029
3 Merchandise trade balance[2]	−122,148	−144,547	−160,280	−39,665	−41,192	−35,184	−30,151	−28,533
4 Merchandise exports	215,935	223,969	249,570	64,902	68,013	75,300	79,606	82,306
5 Merchandise imports	−338,083	−368,516	−409,850	−104,567	−109,205	−110,484	−109,757	−110,839
6 Military transactions, net	−3,431	−4,372	−2,369	−851	−1,261	−1,033	−914	−934
7 Investment income, net	25,936	23,143	20,374	1,067	12,539	1,159	−1,940	−337
8 Other service transactions, net	−449	2,257	1,755	87	479	1,241	2,017	2,028
9 *Remittances, pensions, and other transfers*	−3,786	−3,571	−3,434	−855	−828	−882	−793	−806
10 U.S. government grants (excluding military)	−11,223	−11,738	−10,011	−2,125	−3,545	−2,239	−1,958	−2,312
11 Change in U.S. government assets, other than official reserve assets, net (increase, −)	−2,829	−2,000	1,162	252	1,012	−814	−801	1,931
12 Change in U.S. official reserve assets (increase, −)	−3,858	312	9,149	32	3,741	1,503	39	−7,380
13 Gold	0	0	0	0	0	0	0	0
14 Special drawing rights (SDRs)	−897	−246	−509	−210	−205	155	180	−35
15 Reserve position in International Monetary Fund	908	1,500	2,070	407	722	446	69	202
16 Foreign currencies	−3,869	−942	7,588	−165	3,225	901	−210	−7,547
17 Change in U.S. private assets abroad (increase, −)	−25,949	−96,303	−86,298	−25,576	−43,645	5,903	−18,210	−34,181
18 Bank-reported claims[3]	−1,323	−59,975	−40,531	−16,519	−23,460	17,108	−13,274	−27,023
19 Nonbank-reported claims	923	−4,220	3,145	−215	1,248	−315	−7,061	....
20 U.S. purchase of foreign securities, net	−7,481	−4,297	−4,456	−972	−1,757	−4,467	1,529	−1,521
21 U.S. direct investments abroad, net	−18,068	−27,811	−44,456	−7,870	−19,676	−6,423	596	−5,637
22 Change in foreign official assets in United States (increase, +)	−1,196	35,507	44,968	611	20,047	24,670	5,946	−2,902
23 U.S. Treasury securities	−838	34,364	43,361	842	19,243	27,701	5,863	−3,706
24 Other U.S. government obligations	−301	−1,214	1,570	714	662	−121	202	572
25 Other U.S. government liabilities[4]	767	2,054	−2,824	−287	108	−123	−570	−354
26 Other U.S. liabilities reported by U.S. banks[3]	645	1,187	3,901	−34	−223	−1,954	868	1,094
27 Other foreign official assets[5]	−1,469	−884	−1,040	−624	257	−833	−417	−508
28 Change in foreign private assets in United States (increase, +)	131,096	185,746	166,521	71,047	36,025	1,395	59,549	50,928
29 U.S. bank-reported liabilities[3]	41,045	79,783	87,778	46,153	29,764	−17,233	31,121	30,434
30 U.S. nonbank-reported liabilities	−366	−2,906	2,150	−116	−1,000	2,015	113	....
31 Foreign private purchases of U.S. Treasury securities, net	20,433	3,809	−7,596	−2,835	496	6,887	5,457	4,322
32 Foreign purchases of other U.S. securities, net	50,962	70,969	42,213	12,819	−4,977	2,379	9,797	8,043
33 Foreign direct investments in United States, net	19,022	34,091	41,976	15,026	11,742	7,347	13,061	8,129
34 Allocation of SDRs	0	0	0	0	0	0	0	0
35 Discrepancy	17,839	15,566	18,461	−4,399	16,342	4,282	−12,784	22,498
36 Owing to seasonal adjustments	....	....	....	−4,658	3,138	3,747	−3,585	−5,205
37 Statistical discrepancy in recorded data before seasonal adjustment	17,839	15,566	18,461	259	13,204	535	−9,199	27,703
MEMO								
Changes in official assets								
38 U.S. official reserve assets (increase, −)	−3,858	312	9,149	32	3,741	1,503	39	−7,380
39 Foreign official assets in United States (increase, +) excluding line 25	−1,963	33,453	47,792	898	19,939	24,793	6,516	−2,548
40 Change in Organization of Petroleum Exporting Countries official assets in United States (part of line 22 above)	−6,709	−9,327	−9,956	−1,723	−2,750	−1,375	−1,783	−423
41 Transfers under military grant programs (excluded from *lines 4, 6, and 10 above*)	46	101	58	13	12	45	4	5

1. Seasonal factors are not calculated for lines 6, 10, 12–16, 18–20, 22–34, and 38–41.

2. Data are on an international accounts (IA) basis. Differs from the Census basis data, shown in table 3.11, for reasons of coverage and timing. Military exports are excluded from merchandise data and are included in line 6.

3. Reporting banks include all kinds of depository institutions besides commercial banks, as well as some brokers and dealers.

4. Primarily associated with military sales contracts and other transactions arranged with or through foreign official agencies.

5. Consists of investments in U.S. corporate stocks and in debt securities of private corporations and state and local governments.

NOTE. Data are from Bureau of Economic Analysis, *Survey of Current Business* (Department of Commerce).

3.11 U.S. FOREIGN TRADE[1]

Millions of dollars; monthly data are seasonally adjusted.

Item	1986	1987	1988	1988 June	July	Aug.	Sept.	Oct.	Nov.[r]	Dec.
1 EXPORTS of domestic and foreign merchandise excluding grant-aid shipments, f.a.s. value	227,159	254,122	322,225	26,283	26,516	27,493	27,989	27,816	27,542	29,192
GENERAL IMPORTS including *merchandise for immediate* consumption plus entries into bonded warehouses										
2 C.I.F. value	382,295	424,442	459,565	39,499	35,989	39,763	38,662	38,078	39,760	41,086
3 Customs value	365,438	406,241	440,940	37,948	34,533	38,140	37,178	36,600	38,200	39,419
Trade balance										
4 **C.I.F. value**	**−155,137**	**−170,320**	**−137,340**	**−13,216**	**−9,473**	**−12,270**	**−10,673**	**−10,262**	**−12,218**	**−11,894**
5 **Customs value**	**−138,279**	**−152,119**	**−118,716**	**−11,665**	**−8,017**	**−10,647**	**−9,189**	**−8,784**	**−10,658**	**−10,227**

1. The Census basis data differ from merchandise trade data shown in table 3.10, U.S. International Transactions Summary, for reasons of coverage and timing. On the *export side*, the largest adjustment is the exclusion of military sales (which are combined with other military transactions and reported separately in the "service account" in table 3.10, line 6). On the *import side*, additions are made for gold, ship purchases, imports of electricity from Canada, and other transactions; military payments are excluded and shown separately as indicated above. As of Jan. 1, 1987 census data are released 45 days after the end of the month; the previous month is revised to reflect late documents. Total exports and the trade balance reflect adjustments for undocumented exports to Canada.

SOURCE. FT900 "Summary of U.S. Export and Import Merchandise Trade" (Department of Commerce, Bureau of the Census).

3.12 U.S. RESERVE ASSETS

Millions of dollars, end of period

Type	1985	1986	1987	1988 July	Aug.	Sept.	Oct.	Nov.	Dec.	1989 Jan.[p]
1 **Total**	**43,186**	**48,511**	**45,798**	**43,876**	**47,778**	**47,788**	**50,204**	**48,944**	**47,802**	**48,190**
2 Gold stock, including Exchange Stabilization Fund[1]	11,090	11,064	11,078	11,063	11,061	11,062	11,062	11,059	11,057	11,056
3 Special drawing rights[2,3]	7,293	8,395	10,283	8,984	9,058	9,074	9,464	9,785	9,637	9,388
4 Reserve position in International Monetary Fund[2]	11,947	11,730	11,349	9,773	9,642	9,637	10,075	10,103	9,745	9,422
5 Foreign currencies[4]	12,856	17,322	13,088	14,056	18,017	18,015	19,603	17,997	17,363	18,324

1. Gold held under earmark at Federal Reserve Banks for foreign and international accounts is not included in the gold stock of the United States; see table 3.13. Gold stock is valued at $42.22 per fine troy ounce.
2. Beginning July 1974, the IMF adopted a technique for valuing the SDR based on a weighted average of exchange rates for the currencies of member countries. From July 1974 through December 1980, 16 currencies were used; from January 1981, 5 currencies have been used. The U.S. SDR holdiings and reserve position in the IMF also are valued on this basis beginning July 1974.
3. Includes allocations by the International Monetary Fund of SDRs as follows: $867 million on Jan. 1, 1970; $717 million on Jan. 1, 1971; $710 million on Jan. 1, 1972; $1,139 million on Jan. 1, 1979; $1,152 million on Jan. 1, 1980; and $1,093 million on Jan. 1, 1981; plus transactions in SDRs.
4. Valued at current market exchange rates.

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

Millions of dollars, end of period

Assets	1985	1986	1987	1988 July	Aug.	Sept.	Oct.	Nov.	Dec.	1989 Jan.[p]
1 Deposits	480	287	244	269	230	338	301	251	347	279
Assets held in custody										
2 U.S. Treasury securities[2]	121,004	155,835	195,126	223,296	221,715	221,119	226,533	229,926	232,547	228,399
3 Earmarked gold[3]	14,245	14,048	13,919	13,666	13,658	13,653	13,637	13,640	13,636	13,635

1. Excludes deposits and U.S. Treasury securities held for international and regional organizations.
2. Marketable U.S. Treasury bills, notes, and bonds; and nonmarketable U.S. Treasury securities payable in dollars and in foreign currencies.
3. Earmarked gold and the gold stock are valued at $42.22 per fine troy ounce. Earmarked gold is gold held for foreign and international accounts and is not included in the gold stock of the United States.

3.14 FOREIGN BRANCHES OF U.S. BANKS Balance Sheet Data[1]

Millions of dollars, end of period

Asset account	1985	1986	1987	1988						
				June	July	Aug.	Sept.	Oct.	Nov.	Dec.
				All foreign countries						
1 **Total, all currencies**	**458,012**	**456,628**	**518,618**	**487,677**	**488,283**	**487,895**	**490,582**	**493,728**	**512,361[r]**	**505,271**
2 Claims on United States	119,706	114,563	138,034	140,932	147,662	157,021	155,386	155,432[r]	169,458[r]	168,483
3 Parent bank	87,201	83,492	105,845	104,405	109,929	117,525	115,286	115,954	129,096	130,063
4 Other banks in United States	13,057	13,685	16,416	14,424	15,954	16,176	16,121	14,744[r]	16,075[r]	15,046
5 Nonbanks	19,448	17,386	15,773	22,103	21,779	23,320	23,979	24,734	24,287	23,374
6 Claims on foreigners	315,676	312,955	342,520	311,308	305,556	295,270	298,466	300,954[r]	304,895[r]	300,253
7 Other branches of parent bank	91,399	96,281	122,155	106,722	103,646	98,299	102,355	100,609	105,121	107,461
8 Banks	102,960	105,237	108,859	100,669	99,660	98,982	98,563	102,057[r]	100,608[r]	97,279
9 Public borrowers	23,478	23,706	21,832	20,438	19,276	18,709	18,444	18,205	18,170	17,077
10 Nonbank foreigners	97,839	87,731	89,674	83,479	82,974	79,280	79,104	80,083	80,996	78,436
11 Other assets	22,630	29,110	38,064	35,437	35,065	35,604	36,730	37,342	38,008[r]	36,535
12 **Total payable in U.S. dollars**	**336,520**	**317,487**	**350,107**	**334,990**	**336,233**	**342,906**	**340,901**	**337,346**	**351,654[r]**	**357,653**
13 Claims on United States	116,638	110,620	132,023	135,348	141,415	151,581	149,764	149,713[r]	162,988[r]	162,827
14 Parent bank	85,971	82,082	103,251	101,422	106,792	114,943	112,621	113,569	125,954	127,136
15 Other banks in United States	12,454	12,830	14,657	13,661	14,434	14,901	14,687	13,265[r]	14,771[r]	14,288
16 Nonbanks	18,213	15,708	14,115	20,265	20,189	21,737	22,456	22,879	22,263	21,403
17 Claims on foreigners	210,129	195,063	202,428	183,568	179,076	174,433	174,271	171,566[r]	171,862[r]	178,428
18 Other branches of parent bank	72,727	72,197	88,284	79,774	78,071	73,792	76,506	73,508	75,866	81,023
19 Banks	71,868	66,421	63,707	55,234	54,189	54,839	52,503	54,642[r]	53,483[r]	55,285
20 Public borrowers	17,260	16,708	14,730	13,851	13,247	12,933	12,770	12,616	12,234	11,959
21 Nonbank foreigners	48,274	39,737	35,707	34,709	33,569	32,869	32,492	30,800	30,279	30,161
22 Other assets	9,753	11,804	15,656	16,074	15,742	16,892	16,866	16,067	16,804[r]	16,398
				United Kingdom						
23 **Total, all currencies**	**148,599**	**140,917**	**158,695**	**151,835**	**151,017**	**149,646**	**147,329**	**155,580**	**159,556**	**155,981**
24 Claims on United States	33,157	24,599	32,518	33,852	35,708	36,307	32,048	36,210	39,222	40,030
25 Parent bank	26,970	19,085	27,350	28,535	30,615	30,767	26,661	30,569	33,138	34,190
26 Other banks in United States	1,106	1,612	1,259	1,322	1,064	1,197	1,238	994	1,343	1,117
27 Nonbanks	5,081	3,902	3,909	3,995	4,029	4,343	4,149	4,647	4,741	4,723
28 Claims on foreigners	110,217	109,508	115,700	107,856	105,594	103,527	105,824	109,793	110,356	106,307
29 Other branches of parent bank	31,576	33,422	39,903	32,446	30,228	29,656	31,758	33,103	33,243	35,404
30 Banks	39,250	39,468	36,735	37,108	37,805	38,259	38,848	40,236	40,875	36,870
31 Public borrowers	5,644	4,990	4,752	4,742	4,665	4,543	4,250	4,190	4,276	3,963
32 Nonbank foreigners	33,747	31,628	34,310	33,560	32,896	31,069	30,968	32,264	31,962	30,070
33 Other assets	5,225	6,810	10,477	10,127	9,715	9,812	9,457	9,577	9,978	9,644
34 **Total payable in U.S. dollars**	**108,626**	**95,028**	**100,574**	**95,326**	**94,492**	**96,767**	**93,790**	**99,868**	**101,341**	**102,790**
35 Claims on United States	32,092	23,193	30,439	31,855	33,795	34,535	30,116	34,134	36,881	37,952
36 Parent bank	26,568	18,526	26,304	27,672	29,706	29,837	25,692	29,667	32,115	33,199
37 Other banks in United States	1,005	1,475	1,044	1,069	870	1,039	910	606	849	958
38 Nonbanks	4,519	3,192	3,091	3,114	3,219	3,659	3,514	3,861	3,917	3,795
39 Claims on foreigners	73,475	68,138	64,560	57,969	55,832	57,037	58,474	61,034	59,405	60,397
40 Other branches of parent bank	26,011	26,361	28,635	23,843	22,549	22,465	24,472	25,703	25,574	28,253
41 Banks	26,139	23,251	19,188	17,477	18,025	19,165	19,066	20,488	19,452	18,587
42 Public borrowers	3,999	3,677	3,313	3,188	3,133	3,105	3,022	2,984	2,898	2,840
43 Nonbank foreigners	17,326	14,849	13,424	13,461	12,125	12,302	11,914	11,859	11,481	10,717
44 Other assets	3,059	3,697	5,575	5,502	4,865	5,195	5,200	4,700	5,055	4,441
				Bahamas and Caymans						
45 **Total, all currencies**	**142,055**	**142,592**	**160,321**	**159,718**	**160,516**	**165,771**	**164,313**	**155,265**	**164,942[r]**	**170,977**
46 Claims on United States	74,864	78,048	85,318	88,116	92,308	99,090	99,541	94,452[r]	104,211[r]	104,751
47 Parent bank	50,553	54,575	60,048	58,579	61,397	67,034	66,607	62,709	71,916	73,669
48 Other banks in United States	11,204	11,156	14,277	12,236	13,863	13,907	13,878	12,504[r]	13,774[r]	13,272
49 Nonbanks	13,107	12,317	10,993	17,301	17,048	18,149	19,056	19,239	18,521	17,810
50 Claims on foreigners	63,882	60,005	70,162	65,855	62,508	60,822	57,887	54,479[r]	54,070[r]	59,223
51 Other branches of parent bank	19,042	17,296	21,277	24,745	22,797	20,789	20,320	17,331	17,016	18,460
52 Banks	28,192	27,476	33,751	27,650	26,120	26,866	24,545	25,312[r]	25,306[r]	28,576
53 Public borrowers	6,458	7,051	7,428	6,835	6,457	6,185	6,219	6,045	5,862	5,825
54 Nonbank foreigners	10,190	8,182	7,706	6,625	7,134	6,982	6,803	5,791	5,886	6,362
55 Other assets	3,309	4,539	4,841	5,747	5,700	5,859	6,885	6,334	6,661[r]	7,003
56 **Total payable in U.S. dollars**	**136,794**	**136,813**	**151,434**	**152,219**	**152,685**	**157,975**	**156,409**	**147,481**	**157,147[r]**	**163,857**

1. Beginning with June 1984 data, reported claims held by foreign branches have been reduced by an increase in the reporting threshold for "shell" branches from \$50 million to \$150 million equivalent in total assets, the threshold now applicable to all reporting branches.

3.14—Continued

Liability account	1985	1986	1987	1988						
				June	July	Aug.	Sept.	Oct.	Nov.	Dec.
	All foreign countries									
57 **Total, all currencies**	**458,012**	**456,628**	**518,618**	**487,677**	**488,283**	**487,895**	**490,582**	**493,728**	**512,361[r]**	**505,271**
58 Negotiable CDs	34,607	31,629	30,929	29,485	30,159	31,203	28,953	27,969	30,734	28,511
59 To United States	156,281	152,465	161,390	156,294	159,009	164,401	165,492	161,783	172,644[r]	185,986
60 Parent bank	84,657	83,394	87,606	87,260	84,196	88,819	94,953	95,427	104,555[r]	114,903
61 Other banks in United States	16,894	15,646	20,559	14,680	15,310	16,356	14,272	14,029	13,567[r]	14,854
62 Nonbanks	54,730	53,425	53,225	54,354	59,503	59,226	56,267	52,327	54,522[r]	56,229
63 To foreigners	245,939	253,775	304,803	280,939	277,776	270,678	274,822	281,143	285,460[r]	270,364
64 Other branches of parent bank	89,529	95,146	124,601	110,429	107,084	100,538	106,284	106,010	110,637[r]	110,762
65 Banks	76,814	77,809	87,274	82,380	83,086	80,606	80,382	81,946	82,308[r]	72,792
66 Official institutions	19,520	17,835	19,564	17,159	16,628	17,232	16,911	18,786	17,743	15,182
67 Nonbank foreigners	60,076	62,985	73,364	70,971	70,978	72,302	71,245	74,401	74,772	71,628
68 Other liabilities	21,185	18,759	21,496	20,959	21,339	21,613	21,315	22,833	23,523[r]	20,410
69 **Total payable in U.S. dollars**	**353,712**	**336,406**	**361,438**	**341,411**	**341,539**	**346,185**	**348,248**	**343,233**	**359,426[r]**	**366,796**
70 Negotiable CDs	31,063	28,466	26,768	25,015	24,870	26,128	24,353	23,218	26,130	24,045
71 To United States	150,905	144,483	148,442	144,464	147,551	152,745	154,647	150,497	159,287[r]	173,558
72 Parent bank	81,631	79,305	81,783	80,752	77,503	81,710	88,413	88,447	96,229[r]	107,353
73 Other banks in United States	16,264	14,609	19,155	13,256	14,011	15,153	13,153	12,868	12,230[r]	13,523
74 Nonbanks	53,010	50,569	47,504	50,456	56,037	55,882	53,081	49,182	50,828[r]	52,682
75 To foreigners	163,583	156,806	177,711	162,056	158,901	156,358	158,325	158,514	162,518[r]	160,165
76 Other branches of parent bank	71,078	71,181	90,469	83,493	81,144	75,014	79,450	78,423	81,137[r]	83,523
77 Banks	37,365	33,850	35,065	28,909	28,495	30,041	29,341	28,831	30,805[r]	28,765
78 Official institutions	14,359	12,371	12,409	9,571	9,354	9,938	9,207	10,624	9,121	8,222
79 Nonbank foreigners	40,781	39,404	39,768	40,083	39,908	41,365	40,327	40,636	41,455	39,655
80 Other liabilities	8,161	6,651	8,517	9,876	10,217	10,954	10,923	11,004	11,491[r]	9,028
	United Kingdom									
81 **Total, all currencies**	**148,599**	**140,917**	**158,695**	**151,835**	**151,017**	**149,646**	**147,329**	**155,580**	**159,556**	**155,981**
82 Negotiable CDs	31,260	27,781	26,988	25,390	25,750	26,998	24,311	23,345	26,013	24,528
83 To United States	29,422	24,657	23,470	25,120	26,859	25,013	25,657	31,575	32,420	36,726
84 Parent bank	19,330	14,469	13,223	15,996	16,844	15,100	17,115	22,800	23,226[r]	27,758
85 Other banks in United States	2,974	2,649	1,740	1,791	2,051	1,878	2,021	2,192	1,768	2,228
86 Nonbanks	7,118	7,539	8,507	7,333	7,964	8,035	6,521	6,583	7,426[r]	6,740
87 To foreigners	78,525	79,498	98,689	91,691	88,489	87,504	87,212	89,934	90,404	85,935
88 Other branches of parent bank	23,389	25,036	33,078	28,967	26,948	25,570	26,837	25,743	26,268	26,827
89 Banks	28,581	30,877	34,290	33,125	32,763	31,829	31,701	32,385	33,029	30,482
90 Official institutions	9,676	6,836	11,015	8,893	9,034	9,982	8,570	10,656	9,542	7,872
91 Nonbank foreigners	16,879	16,749	20,306	20,706	19,744	20,123	20,104	21,150	21,565	20,754
92 Other liabilities	9,392	8,981	9,548	9,634	9,919	10,131	10,149	10,726	10,719	8,792
93 **Total payable in U.S. dollars**	**112,697**	**99,707**	**102,550**	**97,555**	**96,908**	**97,926**	**96,970**	**101,689**	**102,933**	**104,900**
94 Negotiable CDs	29,337	26,169	24,926	22,960	22,846	24,229	22,043	20,864	23,543	22,063
95 To United States	27,756	22,075	17,752	20,889	23,105	20,993	22,177	28,063	27,123	32,529
96 Parent bank	18,956	14,021	12,026	14,712	15,729	13,745	16,031	21,665	21,003[r]	26,313
97 Other banks in United States	2,826	2,325	1,512	1,512	1,817	1,655	1,819	1,978	1,366	1,943
98 Nonbanks	5,974	5,729	4,214	4,665	5,559	5,593	4,327	4,420	4,754[r]	4,273
99 To foreigners	51,980	48,138	55,919	48,777	46,083	47,227	47,149	47,278	46,843	46,656
100 Other branches of parent bank	18,493	17,951	22,334	20,303	18,539	17,550	18,696	17,384	17,443	18,578
101 Banks	14,344	15,203	15,580	12,957	12,240	13,501	13,417	13,436	14,029	13,334
102 Official institutions	7,661	4,934	7,530	4,700	5,036	5,781	4,519	6,186	4,713	4,346
103 Nonbank foreigners	11,482	10,050	10,475	10,817	10,268	10,395	10,517	10,272	10,658	10,398
104 Other liabilities	3,624	3,325	3,953	4,929	4,874	5,477	5,601	5,484	5,424	3,652
	Bahamas and Caymans									
105 **Total, all currencies**	**142,055**	**142,592**	**160,321**	**159,718**	**160,516**	**165,771**	**164,313**	**155,265**	**164,942[r]**	**170,977**
106 Negotiable CDs	610	847	885	941	940	731	924	1,092	1,361	953
107 To United States	104,556	106,081	113,950	109,424	112,540	117,765	116,687	107,115	115,159[r]	122,821
108 Parent bank	45,554	49,481	53,239	52,221	49,896	54,174	56,818	51,522	58,214[r]	63,188
109 Other banks in United States	12,778	11,715	17,224	11,451	12,069	13,412	11,106	10,824	10,823[r]	11,419
110 Nonbanks	46,224	44,885	43,487	45,752	50,575	50,179	48,763	44,769	46,122[r]	48,214
111 To foreigners	35,053	34,400	43,815	47,361	44,993	45,062	44,478	44,636	45,814[r]	44,940
112 Other branches of parent bank	14,075	12,631	19,185	24,755	22,288	21,221	22,872	23,283	22,835[r]	23,171
113 Banks	10,669	8,617	10,769	9,779	10,155	9,607	8,405	8,154	9,707[r]	8,632
114 Official institutions	1,776	2,719	1,504	1,850	1,015	1,099	1,067	972	1,060	1,074
115 Nonbank foreigners	8,533	10,433	12,357	10,977	11,535	13,135	12,134	12,227	12,212	12,063
116 Other liabilities	1,836	1,264	1,671	1,992	2,043	2,213	2,224	2,422	2,608[r]	2,263
117 **Total payable in U.S. dollars**	**138,322**	**138,774**	**152,927**	**151,684**	**152,235**	**157,512**	**156,215**	**147,718**	**156,694[r]**	**163,288**

3.15 SELECTED U.S. LIABILITIES TO FOREIGN OFFICIAL INSTITUTIONS

Millions of dollars, end of period

Item	1986	1987	1988 June	July	Aug.	Sept.	Oct.[r]	Nov.	Dec.[p]
1 **Total**[1]	**211,834**	**259,556**[r]	**290,842**	**290,944**	**290,263**	**288,601**	**295,017**[r]	**300,588**	**299,821**
By type									
2 Liabilities reported by banks in the United States[2]	27,920	31,838	30,761	32,070	32,813	32,224	34,594[r]	34,719	31,577
3 U.S. Treasury bills and certificates[3]	75,650	88,829	95,299	96,715	96,698	96,812	100,814	103,843	103,724
U.S. Treasury bonds and notes									
4 Marketable	91,368	122,432	149,333	146,971	145,521	144,040	144,617[r]	146,813	149,025
5 Nonmarketable[4]	1,300	300	502	506	509	513	516	520	523
6 U.S. securities other than U.S. Treasury securities[5]	15,596	16,157[r]	14,947	14,682	14,722	15,012	14,476	14,693	14,972
By area									
7 Western Europe[1]	88,629	124,620	126,772	125,195	123,428	121,206	125,204[r]	128,297	125,092
8 Canada	2,004	4,961	10,773	10,725	9,981	10,054	11,014	10,066	9,584
9 Latin America and Caribbean	8,417	8,328	9,407	9,888	11,336	10,136	9,840	10,501	10,052
10 Asia	105,868	116,098	134,285	135,657	136,165	137,513	139,447[r]	142,792	145,722
11 Africa	1,503	1,402	1,266	1,179	1,196	1,130	1,094	993	1,369
12 Other countries[6]	5,412	4,147	7,837	7,793	7,646	8,049	7,903[r]	7,418	7,479

1. Includes the Bank for International Settlements.
2. Principally demand deposits, time deposits, bankers acceptances, commercial paper, negotiable time certificates of deposit, and borrowings under repurchase agreements.
3. Includes nonmarketable certificates of indebtedness (including those payable in foreign currencies through 1974) and Treasury bills issued to official institutions of foreign countries.
4. Excludes notes issued to foreign official nonreserve agencies. Includes bonds and notes payable in foreign currencies.
5. Debt securities of U.S. government corporations and federally sponsored agencies, and U.S. corporate stocks and bonds.
6. Includes countries in Oceania and Eastern Europe.

NOTE. Based on Treasury Department data and on data reported to the Treasury Department by banks (including Federal Reserve Banks) and securities dealers in the United States.

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

Millions of dollars, end of period

Item	1984	1985	1986	1987 Dec.	1988 Mar.	June	Sept.[r]
1 Banks' own liabilities	8,586	15,368	29,702	55,438	55,818	55,110	61,243
2 Banks' own claims	11,984	16,294	26,180	51,271	52,221	51,183	60,957
3 Deposits	4,998	8,437	14,129	18,861	18,407	17,785	22,139
4 Other claims	6,986	7,857	12,052	32,410	33,814	33,398	38,818
5 Claims of banks' domestic customers[2]	569	580	2,507	551	810	1,004	392

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

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

Millions of dollars, end of period

Holder and type of liability	1985	1986	1987	1988						
				June	July	Aug.	Sept.	Oct.[r]	Nov.	Dec.[p]
1 **All foreigners**	**435,726**	**540,996**	**618,874**	**637,694**	**654,809**	**658,039**	**657,404**	**651,776**	**678,002**	**684,564**
2 Banks' own liabilities	341,070	406,485	470,070	476,484	490,856	493,988	491,108	482,560	503,465	512,644
3 Demand deposits	21,107	23,789	22,383	22,991	21,983	20,314	21,375	21,830	22,049	21,817
4 Time deposits[2]	117,278	130,891	148,374	141,145	142,551	145,123	148,747	141,948	149,229	150,970
5 Other[3]	29,305	42,705	51,677	47,418	50,747	52,630	53,840	57,199	53,896	51,884
6 Own foreign offices[4]	173,381	209,100	247,635	264,931	275,575	275,920	267,145	261,583	278,290	287,973
7 Banks' custody liabilities[5]	94,656	134,511	148,804	161,209	163,953	164,050	166,296	169,215	174,537	171,919
8 U.S. Treasury bills and certificates[6]	69,133	90,398	101,743	108,614	109,555	109,106	109,768	112,267	116,860	114,976
9 Other negotiable and readily transferable instruments[7]	17,964	15,417	16,776	16,626	16,231	15,971	15,555	16,397	16,614	16,332
10 Other	7,558	28,696	30,285	35,969	38,167	38,973	40,973	40,551	41,063	40,612
11 **Nonmonetary international and regional organizations**[8]	**5,821**	**5,807**	**4,464**	**7,879**	**7,061**	**4,749**	**7,764**	**5,879**	**4,752**	**3,102**
12 Banks' own liabilities	2,621	3,958	2,702	5,142	4,882	2,925	5,104	4,067	3,496	2,405
13 Demand deposits	85	199	124	84	92	85	104	143	76	71
14 Time deposits[2]	2,067	2,065	1,538	1,873	1,857	966	1,688	1,101	1,384	1,183
15 Other[3]	469	1,693	1,040	3,185	2,933	1,874	3,311	2,823	2,036	1,150
16 Banks' custody liabilities[5]	3,200	1,849	1,761	2,737	2,179	1,824	2,660	1,812	1,256	698
17 U.S. Treasury bills and certificates[6]	1,736	259	265	745	286	43	755	62	83	57
18 Other negotiable and readily transferable instruments[7]	1,464	1,590	1,497	1,989	1,861	1,769	1,899	1,750	1,163	641
19 Other	0	0	0	3	32	12	5	0	10	0
20 **Official institutions**[9]	**79,985**	**103,569**	**120,667**	**126,060**	**128,786**	**129,511**	**129,036**	**135,408**	**138,562**	**135,300**
21 Banks' own liabilities	20,835	25,427	28,703	27,882	28,486	29,079	28,725	30,820	30,740	27,170
22 Demand deposits	2,077	2,267	1,757	1,834	1,696	1,405	1,756	1,781	1,584	1,929
23 Time deposits[2]	10,949	10,497	12,843	11,865	11,520	12,289	11,573	11,209	11,809	9,839
24 Other[3]	7,809	12,663	14,103	14,183	15,270	15,385	15,396	17,830	17,348	15,402
25 Banks' custody liabilities[5]	59,150	78,142	91,965	98,178	100,300	100,432	100,311	104,589	107,822	108,130
26 U.S. Treasury bills and certificates[6]	53,252	75,650	88,829	95,299	96,715	96,698	96,812	100,814	103,843	103,724
27 Other negotiable and readily transferable instruments[7]	5,824	2,347	2,990	2,672	3,368	3,450	3,221	3,612	3,758	4,121
28 Other	75	145	146	207	217	284	279	163	221	286
29 **Banks**[10]	**275,589**	**351,745**	**414,280**	**423,854**	**436,443**	**439,532**	**436,310**	**425,242**	**447,584**	**459,525**
30 Banks' own liabilities	252,723	310,166	371,665	375,461	387,578	390,416	385,217	374,639	395,766	408,198
31 Unaffiliated foreign banks	79,341	101,066	124,030	110,529	112,003	114,495	118,072	113,056	117,475	120,225
32 Demand deposits	10,271	10,303	10,898	10,899	10,217	9,258	9,349	10,228	10,398	9,965
33 Time deposits[2]	49,510	64,232	79,717	72,187	73,000	73,826	77,713	71,096	76,650	80,386
34 Other[3]	19,561	26,531	33,415	27,444	28,787	31,412	31,010	31,733	30,427	29,875
35 Own foreign offices[4]	173,381	209,100	247,635	264,931	275,575	275,920	267,145	261,583	278,290	287,973
36 Banks' custody liabilities[5]	22,866	41,579	42,615	48,394	48,865	49,116	51,093	50,603	51,819	51,327
37 U.S. Treasury bills and certificates[6]	9,832	9,984	9,134	9,212	9,324	9,299	8,969	7,976	8,087	7,602
38 Other negotiable and readily transferable instruments[7]	6,040	5,165	5,392	4,725	4,625	4,090	4,230	5,265	5,686	5,682
39 Other	6,994	26,431	28,089	34,457	34,916	35,727	37,893	37,362	38,046	38,043
40 **Other foreigners**	**74,331**	**79,875**	**79,463**	**79,900**	**82,520**	**84,247**	**84,294**	**85,247**	**87,104**	**86,636**
41 Banks' own liabilities	64,892	66,934	67,000	67,999	69,910	71,568	72,061	73,035	73,463	74,871
42 Demand deposits	8,673	11,019	9,604	10,173	9,979	9,566	10,166	9,678	9,991	9,852
43 Time deposits[2]	54,752	54,097	54,277	55,220	56,174	58,042	57,772	58,542	59,386	59,562
44 Other[3]	1,467	1,818	3,119	2,606	3,757	3,960	4,123	4,814	4,085	5,456
45 Banks' custody liabilities[5]	9,439	12,941	12,463	11,901	12,610	12,678	12,233	12,212	13,641	11,765
46 U.S. Treasury bills and certificates[6]	4,314	4,506	3,515	3,358	3,231	3,066	3,231	3,415	4,848	3,593
47 Other negotiable and readily transferable instruments[7]	4,636	6,315	6,898	7,241	6,378	6,663	6,205	5,771	6,007	5,889
48 Other	489	2,120	2,050	1,303	3,002	2,950	2,797	3,026	2,786	2,283
49 MEMO: Negotiable time certificates of deposit in custody for foreigners	9,845	7,496	7,314	7,711	6,975	6,792	6,121	6,123	6,137	6,344

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

3.17—Continued

Area and country	1985	1986	1987	1988						
				June	July	Aug.	Sept.	Oct.	Nov.	Dec.p
1 **Total**	**435,726**	**540,996**	**618,874**	**637,694**	**654,809**	**658,039**	**657,404**	**651,776r**	**678,002**	**684,564**
2 **Foreign countries**	**429,905**	**535,189**	**614,411**	**629,815**	**647,749**	**653,289**	**649,640**	**645,896r**	**673,250**	**681,462**
3 Europe	164,114	180,556	234,641	227,661	231,218	232,797	224,663	227,308r	233,943	236,367
4 Austria	693	1,181	920	941	1,425	1,245	1,072	1,271	1,607	1,198
5 Belgium-Luxembourg	5,243	6,729	9,347	10,363	9,531	10,051	9,937	10,247	11,108	10,001
6 Denmark	513	482	760	1,364	1,474	2,078	1,402	2,362r	3,089	2,180
7 Finland	496	580	377	426	549	417	447	339	339	284
8 France	15,541	22,862	29,835	26,980	26,005	24,237	24,295	23,285	24,564	24,736
9 Germany	4,835	5,762	7,022	5,110	5,211	6,226	5,085	5,898	7,981	6,727
10 Greece	666	700	689	653	620	694	633	675r	683	720
11 Italy	9,667	10,875	12,073	10,705	9,921	9,766	8,550	12,512	13,337	14,614
12 Netherlands	4,212	5,600	5,014	5,351	5,007	5,647	6,167	6,377	5,939	5,306
13 Norway	948	735	1,362	1,078	1,322	900	1,060	1,143	1,342	1,558
14 Portugal	652	699	801	897	859	848	858	915	738	903
15 Spain	2,114	2,407	2,621	4,173	5,011	5,570	6,248	6,838	5,976	5,507
16 Sweden	1,422	884	1,379	1,522	1,926	2,011	2,196	1,579	1,819	1,276
17 Switzerland	29,020	30,534	33,766	31,197	30,416	29,043	31,330	31,333r	32,286	34,320
18 Turkey	429	454	703	570	537	709	706	878	793	1,014
19 United Kingdom	76,728	85,334	116,852	115,531	121,895	122,620	113,287	109,996	111,733	116,231
20 Yugoslavia	673	630	710	690	614	629	579	655	569	529
21 Other Western Europe[1]	9,635	3,326	9,798	9,259	8,215	9,463	10,207	10,240r	9,255	8,534
22 U.S.S.R.	105	80	32	239	80	99	45	100	74	138
23 Other Eastern Europe[2]	523	702	582	611	598	544	558	667r	711	591
24 Canada	17,427	26,345	30,095	30,037	29,944	28,128	28,247	26,697	26,188	21,034
25 Latin America and Caribbean	167,856	210,318	220,372	233,041	242,719	246,723	246,743	240,074r	257,303	266,851
26 Argentina	6,032	4,757	5,006	5,876	5,975	6,775	7,106	7,065	7,307	7,751
27 Bahamas	57,657	73,619	74,767	74,282	76,002	78,889	77,921	76,805	83,613	86,499
28 Bermuda	2,765	2,922	2,344	2,077	2,413	2,394	2,389	2,577	2,821	2,622
29 Brazil	5,373	4,325	4,005	4,205	4,489	4,524	4,475	4,726	5,135	5,148
30 British West Indies	42,674	72,263	81,494	94,347	101,332	99,907	101,711	95,828	104,906	110,471
31 Chile	2,049	2,054	2,210	2,378	2,323	2,463	2,467	2,727	2,653	2,919
32 Colombia	3,104	4,285	4,204	4,502	4,441	4,403	4,171	4,136	4,221	4,314
33 Cuba	11	7	12	10	9	8	9	12	9	10
34 Ecuador	1,239	1,236	1,082	1,212	1,216	1,224	1,244	1,265	1,360	1,360
35 Guatemala	1,071	1,123	1,082	1,209	1,183	1,182	1,177	1,150	1,178	1,186
36 Jamaica	122	136	160	156	154	149	166	177	164	186
37 Mexico	14,060	13,745	14,480	15,801	16,334	17,260	15,842	15,636r	15,457	15,122
38 Netherlands Antilles	4,875	4,970	4,975	5,338	4,798	5,011	5,252	5,354	5,907	6,675
39 Panama	7,514	6,886	7,414	4,171	4,251	4,262	4,128	4,114	4,046	4,230
40 Peru	1,167	1,163	1,275	1,438	1,514	1,539	1,584	1,605	1,650	1,612
41 Uruguay	1,552	1,537	1,582	1,882	1,828	1,898	1,884	1,788	1,885	1,878
42 Venezuela	11,922	10,171	9,048	8,950	9,116	9,330	9,752	9,547	9,301	9,129
43 Other	4,668	5,119	5,234	5,207	5,343	5,504	5,462	5,560	5,690	5,740
44 Asia	72,280	108,831	121,288	128,096	133,933	135,851	139,845	142,062r	145,891	147,094
China										
45 Mainland	1,607	1,476	1,162	1,725	1,564	1,757	1,608	1,479	1,401	1,892
46 Taiwan	7,786	18,902	21,503	23,072	24,023	23,422	22,334	23,377	24,791	26,039
47 Hong Kong	8,067	9,393	10,180	9,321	9,951	10,417	10,875	11,532	12,386	11,724
48 India	712	674	582	942	858	845	1,013	793	761	710
49 Indonesia	1,466	1,547	1,404	1,075	1,036	1,254	1,121	1,286	995	1,189
50 Israel	1,601	1,892	1,292	1,334	1,244	1,194	1,130	2,323	1,063	1,498
51 Japan	23,077	47,410	54,322	60,846	63,460	64,559	70,188	70,594	73,103	73,770
52 Korea	1,665	1,141	1,637	1,572	1,459	1,720	2,091	2,440	2,813	2,546
53 Philippines	1,140	1,866	1,085	954	1,085	1,001	971	1,140	1,150	1,143
54 Thailand	1,358	1,119	1,345	1,099	1,650	1,422	1,369	1,363	1,205	1,235
55 Middle-East oil-exporting countries[3]	14,523	12,352	13,988	12,089	14,298	12,787	14,091	13,232r	12,871	12,053
56 Other	9,276	11,058	12,788	14,066	13,306	15,472	13,053	12,503	13,352	13,296
57 Africa	4,883	4,021	3,945	4,023	3,837	3,846	3,659	3,702	3,530	3,968
58 Egypt	1,363	706	1,151	1,187	1,039	969	813	850	757	911
59 Morocco	163	92	194	73	80	70	111	66	64	67
60 South Africa	388	270	202	245	200	204	247	245	267	437
61 Zaire	163	74	67	60	63	67	71	71	72	71
62 Oil-exporting countries[4]	1,494	1,519	1,014	1,108	1,052	1,039	1,015	993	952	1,016
63 Other	1,312	1,360	1,316	1,351	1,403	1,498	1,402	1,477	1,418	1,465
64 Other countries	3,347	5,118	4,070	6,957	6,098	5,945	6,484	6,054	6,396	6,148
65 Australia	2,779	4,196	3,327	6,017	5,329	5,170	5,639	5,199	5,426	5,279
66 All other	568	922	744	939	769	775	845	854	970	869
67 Nonmonetary international and regional organizations	5,821	5,807	4,464	7,879	7,061	4,749	7,764	5,879	4,752	3,102
68 International[5]	4,806	4,620	2,830	5,925	5,130	2,979	5,721	3,912	3,265	2,381
69 Latin American regional	894	1,033	1,272	1,769	1,651	1,614	1,762	1,662	1,276	589
70 Other regional[6]	121	154	362	185	279	156	281	306	211	133

1. Includes the Bank for International Settlements and Eastern European countries that are not listed in line 23.
2. Comprises Bulgaria, Czechoslovakia, the German Democratic Republic, Hungary, Poland, and Romania.
3. Comprises Bahrain, Iran, Iraq, Kuwait, Oman, Qatar, Saudi Arabia, and United Arab Emirates (Trucial States).
4. Comprises Algeria, Gabon, Libya, and Nigeria.
5. Excludes "holdings of dollars" of the International Monetary Fund.
6. Asian, African, Middle Eastern, and European regional organizations, except the Bank for International Settlements, which is included in "Other Western Europe."

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

Millions of dollars, end of period

Area and country	1985	1986	1987	1988						
				June	July	Aug.	Sept.	Oct.[r]	Nov.	Dec.[p]
1 **Total**	**401,608**	**444,745**	**459,877**	**458,967**	**470,241**	**469,243**	**477,149**	**465,916**	**485,566**	**489,260**
2 **Foreign countries**	**400,577**	**441,724**	**456,472**	**456,372**	**467,427**	**466,799**	**471,566**	**462,814**	**481,244**	**487,571**
3 Europe	106,413	107,823	102,348	100,909	99,751	99,284	102,409	105,855	108,157	116,780
4 Austria	598	728	793	806	888	743	808	812	721	490
5 Belgium-Luxembourg	5,772	7,498	9,397	7,863	8,530	8,419	8,786	8,902	8,951	8,468
6 Denmark	706	688	717	640	742	608	582	631	599	480
7 Finland	823	987	1,010	954	1,325	1,231	1,195	912	1,157	1,065
8 France	9,124	11,356	13,548	12,186	11,861	11,965	12,164	12,327	12,478	13,085
9 Germany	1,267	1,816	2,039	2,862	2,169	2,000	1,728	2,315	2,305	2,323
10 Greece	991	648	462	589	562	523	506	493	601	431
11 Italy	8,848	9,043	7,460	7,072	6,607	6,626	6,118	6,027	7,092	7,942
12 Netherlands	1,258	3,296	2,619	2,656	3,017	2,933	3,202	2,666	2,763	2,548
13 Norway	706	672	934	589	484	534	510	534	478	453
14 Portugal	1,058	739	477	358	333	321	333	266	253	257
15 Spain	1,908	1,492	1,853	1,862	1,973	2,011	1,969	1,800	2,054	1,823
16 Sweden	2,219	1,964	2,254	2,087	1,958	2,256	1,983	1,852	2,086	1,976
17 Switzerland	3,171	3,352	2,718	3,291	2,491	2,569	2,559	2,918	2,983	4,069
18 Turkey	1,200	1,543	1,680	1,495	1,432	1,397	1,396	1,344	1,265	1,222
19 United Kingdom	62,566	58,335	50,823	52,033	51,918	51,789	54,669	57,906	57,988	65,597
20 Yugoslavia	1,964	1,835	1,700	1,624	1,559	1,537	1,476	1,472	1,450	1,390
21 Other Western Europe[2]	998	539	619	647	671	524	889	1,125	926	1,152
22 U.S.S.R.	130	345	389	506	431	466	473	754	1,207	1,245
23 Other Eastern Europe[3]	1,107	948	852	787	800	831	1,065	800	801	764
24 Canada	16,482	21,006	25,368	24,634	23,937	24,137	23,804	22,482	23,274	18,865
25 Latin America and Caribbean	202,674	208,825	214,789	202,663	205,268	206,798	212,897	201,049	211,334	212,922
26 Argentina	11,462	12,091	11,996	12,365	12,342	12,238	12,235	12,077	12,023	11,825
27 Bahamas	58,258	59,342	64,587	55,554	60,350	63,305	64,253	59,322	67,525	67,003
28 Bermuda	499	418	471	818	460	430	688	596	511	483
29 Brazil	25,283	25,716	25,897	26,230	26,023	25,909	25,610	25,461	26,399	25,729
30 British West Indies	38,881	46,284	50,042	51,763	50,483	49,641	55,262	48,881	50,637	54,395
31 Chile	6,603	6,558	6,308	5,881	5,771	5,677	5,656	5,459	5,332	5,401
32 Colombia	3,249	2,821	2,740	3,095	3,127	3,029	3,023	3,016	2,964	2,839
33 Cuba	0	0	1	0	0	0	0	0	0	100
34 Ecuador	2,390	2,439	2,286	2,142	2,143	2,156	2,185	2,168	2,162	2,075
35 Guatemala[4]	194	140	144	144	157	148	150	175	167	190
36 Jamaica[4]	224	198	188	187	214	184	185	201	205	268
37 Mexico	31,799	30,698	29,532	26,177	26,022	25,885	25,971	25,645	25,366	24,562
38 Netherlands Antilles	1,340	1,041	980	1,238	1,055	1,269	1,079	1,491	1,427	1,309
39 Panama	6,645	5,436	4,744	2,492	2,400	2,370	2,238	2,214	2,350	2,486
40 Peru	1,947	1,661	1,329	1,149	1,137	1,192	1,080	1,065	1,012	1,012
41 Uruguay	960	940	963	885	878	889	891	850	888	910
42 Venezuela	10,871	11,108	10,843	10,912	11,021	10,862	10,754	10,803	10,735	10,755
43 Other Latin America and Caribbean	2,067	1,936	1,738	1,631	1,684	1,612	1,636	1,626	1,628	1,580
44 Asia	66,212	96,126	106,096	120,202	130,573	128,787	124,835	125,067	130,224	130,801
China										
Mainland	639	787	968	1,065	1,033	1,017	888	756	777	762
46 Taiwan	1,535	2,681	4,592	3,957	3,562	3,241	3,121	3,040	3,845	4,184
47 Hong Kong	6,797	8,307	8,218	9,632	8,342	7,451	8,389	9,495	10,826	9,896
48 India	450	321	510	499	508	548	540	634	568	560
49 Indonesia	698	723	580	772	765	786	778	808	767	730
50 Israel	1,991	1,634	1,363	1,213	1,206	1,174	1,180	1,174	1,230	1,147
51 Japan	31,249	59,674	68,658	82,350	93,140	92,840	87,246	87,626	89,464	90,420
52 Korea	9,226	7,182	5,148	5,003	4,889	4,909	5,137	5,192	5,395	5,155
53 Philippines	2,224	2,217	2,071	2,055	2,029	2,030	2,009	1,912	1,900	1,875
54 Thailand	845	578	496	641	668	683	759	766	778	850
55 Middle East oil-exporting countries[5]	4,298	4,122	4,858	4,574	6,400	6,216	6,401	5,412	6,657	6,137
56 Other Asia	6,260	7,901	8,635	8,441	8,031	7,891	8,389	8,253	8,018	9,085
57 Africa	5,407	4,650	4,742	5,423	5,493	5,462	5,454	5,633	5,629	5,706
58 Egypt	721	567	521	605	539	530	535	540	532	509
59 Morocco	575	598	542	484	481	478	478	476	488	511
60 South Africa	1,942	1,550	1,507	1,693	1,726	1,711	1,693	1,707	1,698	1,676
61 Zaire	20	28	15	41	38	36	16	17	18	17
62 Oil-exporting countries[6]	630	694	1,003	1,275	1,340	1,359	1,388	1,483	1,491	1,525
63 Other	1,520	1,213	1,153	1,325	1,369	1,348	1,343	1,410	1,402	1,469
64 Other countries	3,390	3,294	3,129	2,541	2,404	2,331	2,167	2,728	2,625	2,497
65 Australia	2,413	1,949	2,100	1,678	1,554	1,499	1,392	1,879	1,566	1,624
66 All other	978	1,345	1,029	863	850	832	775	849	1,059	874
67 Nonmonetary international and regional *organizations*[7]	1,030	3,021	3,404	2,595	2,814	2,445	5,583	3,101	4,322	1,688

1. Reporting banks include all kinds of depository institutions besides commercial banks, as well as some brokers and dealers.
2. Includes the Bank for International Settlements. Beginning April 1978, also includes Eastern European countries not listed in line 23.
3. Beginning April 1978 comprises Bulgaria, Czechoslovakia, the German Democratic Republic, Hungary, Poland, and Romania.
4. Included in "Other Latin America and Caribbean" through March 1978.
5. Comprises Bahrain, Iran, Iraq, Kuwait, Oman, Qatar, Saudi Arabia, and United Arab Emirates (Trucial States).
6. Comprises Algeria, Gabon, Libya, and Nigeria.
7. Excludes the Bank for International Settlements, which is included in "Other Western Europe."

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

Millions of dollars, end of period

Type of claim	1985	1986	1987	1988						
				June	July	Aug.	Sept.	Oct.[r]	Nov.	Dec.[p]
1 **Total**	**430,489**	**478,650**	**497,635**	**494,280**	....	....	**512,950**	....	....	**489,260**
2 Banks' own claims on foreigners	401,608	444,745	459,877	458,967	470,241	469,243	477,149	465,916	485,566	489,260
3 Foreign public borrowers	60,507	64,095	64,605	62,758	62,825	61,696	63,736	60,649	64,475	61,312
4 Own foreign offices[2]	174,261	211,533	224,727	229,972	239,112	237,012	245,397	237,414	255,023	256,214
5 Unaffiliated foreign banks	116,654	122,946	127,609	123,498	127,298	128,447	124,852	121,950	123,204	129,254
6 Deposits	48,372	57,484	60,687	59,043	60,184	60,558	61,521	54,180	56,042	66,091
7 Other	68,282	65,462	66,922	64,455	67,114	67,889	63,330	67,771	67,161	63,163
8 All other foreigners	50,185	46,171	42,936	42,738	41,006	42,089	43,164	45,902	42,864	42,481
9 Claims of banks' domestic customers[3]	28,881	33,905	37,758	35,314	....	....	35,801	....	....	....
10 Deposits	3,335	4,413	3,692	4,843	....	....	5,391	....	....	....
11 Negotiable and readily transferable instruments[4]	19,332	24,044	26,696	24,002	....	....	20,916	....	....	....
12 Outstanding collections and other claims	6,214	5,448	7,370	6,468	....	....	9,494	....	....	....
13 MEMO: Customer liability on acceptances	28,487	25,706	23,107	19,618	....	....	18,730	....	....	....
Dollar deposits in banks abroad, reported by nonbanking business enterprises in the United States[5]	38,102	43,984	40,087	42,763	46,837	49,732	42,720	41,869	48,676	n.a.

1. Data for banks' own claims are given on a monthly basis, but the data for claims of banks' own domestic customers are available on a quarterly basis only.
Reporting banks include all kinds of depository institutions besides commercial banks, as well as some brokers and dealers.
2. *U.S. banks:* includes amounts due from own foreign branches and foreign subsidiaries consolidated in "Consolidated Report of Condition" filed with bank regulatory agencies. *Agencies, branches, and majority-owned subsidiaries of foreign banks:* principally amounts due from head office or parent foreign bank, and foreign branches, agencies, or wholly owned subsidiaries of head office or parent foreign bank.
3. Assets owned by customers of the reporting bank located in the United States that represent claims on foreigners held by reporting banks for the account of their domestic customers.
4. Principally negotiable time certificates of deposit and bankers acceptances.
5. Includes demand and time deposits and negotiable and nonnegotiable certificates of deposit denominated in U.S. dollars issued by banks abroad. For description of changes in data reported by nonbanks, see July 1979 BULLETIN, p. 550.

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

Millions of dollars, end of period

Maturity; by borrower and area	1984	1985	1986	1987	1988		
				Dec.	Mar.	June	Sept.[r]
1 **Total**	**243,952**	**227,903**	**232,295**	**235,130**	**219,323**	**227,589**	**228,887**
By borrower							
2 Maturity of 1 year or less[2]	167,858	160,824	160,555	163,997	152,658	162,912	166,342
3 Foreign public borrowers	23,912	26,302	24,842	25,889	24,488	25,608	27,721
4 All other foreigners	143,947	134,522	135,714	138,108	128,171	137,304	138,622
5 Maturity over 1 year[2]	76,094	67,078	71,740	71,133	66,664	64,677	62,545
6 Foreign public borrowers	38,695	34,512	39,103	38,625	35,879	35,613	35,101
7 All other foreigners	37,399	32,567	32,637	32,507	30,785	29,064	27,445
By area							
Maturity of 1 year or less[2]							
8 Europe	58,498	56,585	61,784	59,027	51,552	55,242	53,859
9 Canada	6,028	6,401	5,895	5,680	4,978	6,426	5,913
10 Latin America and Caribbean	62,791	63,328	56,271	56,535	55,544	56,333	55,661
11 Asia	33,504	27,966	29,457	35,919	35,579	38,893	41,909
12 Africa	4,442	3,753	2,882	2,833	2,596	2,914	3,112
13 All other[3]	2,593	2,791	4,267	4,003	2,410	3,103	5,888
Maturity of over 1 year[2]							
14 Europe	9,605	7,634	6,737	6,696	5,914	5,420	5,323
15 Canada	1,882	1,805	1,925	2,661	2,213	2,337	2,075
16 Latin America and Caribbean	56,144	50,674	56,719	53,817	51,541	49,775	48,293
17 Asia	5,323	4,502	4,043	3,830	3,680	3,711	3,954
18 Africa	2,033	1,538	1,539	1,747	2,201	2,429	2,265
19 All other[3]	1,107	926	777	2,381	1,114	1,006	635

1. Reporting banks include all kinds of depository institutions besides commercial banks, as well as some brokers and dealers.
2. Remaining time to maturity.
3. Includes nonmonetary international and regional organizations.

3.21 CLAIMS ON FOREIGN COUNTRIES Held by U.S. Offices and Foreign Branches of U.S.-Chartered Banks[1,2]

Billions of dollars, end of period

Area or country	1984	1985	1986		1987				1988		
			Sept.	Dec.	Mar.	June	Sept.	Dec.	Mar.	June	Sept.
1 **Total**	**405.7**	**385.4**	**381.6**	**385.1**	**395.4**	**384.6**	**387.7**	**381.4**	**373.1**	**352.6**	**356.9**
2 G-10 countries and Switzerland	148.1	146.0	154.8	156.6	162.7	158.1	155.2	160.0	156.7	150.5	149.5[r]
3 Belgium-Luxembourg	8.7	9.2	8.3	8.3	9.1	8.3	8.2	10.1	9.3	9.2	9.5
4 France	14.1	12.1	14.5	13.7	13.3	12.5	13.7	13.8	11.5	10.8	10.0
5 Germany	9.0	10.5	12.4	11.6	12.7	11.2	10.5	12.6	11.8	10.6	8.9
6 Italy	10.1	9.6	7.8	9.0	8.7	7.5	6.6	7.3	7.4	6.1	5.9
7 Netherlands	3.9	3.7	3.9	4.6	4.4	7.3	4.8	4.0	3.3	3.3	3.0
8 Sweden	3.2	2.7	2.7	2.4	3.0	2.4	2.6	2.1	2.1	1.9	2.0
9 Switzerland	3.9	4.4	4.7	5.8	5.8	5.7	5.4	5.6	5.1	5.6	5.2
10 United Kingdom	60.3	63.0	68.8	71.0	73.7	72.0	72.1	69.1	71.4	69.8	68.0[r]
11 Canada	7.9	6.8	5.9	5.3	5.3	4.7	4.7	5.6	4.9	5.4	5.2
12 Japan	27.1	23.9	25.8	24.9	26.9	26.3	26.5	29.8	29.9	27.9	31.7
13 Other developed countries	33.6	29.9	28.9	25.7	25.7	25.2	25.9	26.2	26.2	23.7	22.7
14 Austria	1.6	1.5	1.7	1.7	1.9	1.8	1.9	1.9	1.6	1.6	1.6
15 Denmark	2.2	2.3	2.2	1.7	1.7	1.5	1.6	1.7	1.4	1.0	1.1
16 Finland	1.9	1.6	1.6	1.4	1.4	1.4	1.4	1.3	1.0	1.2	1.3
17 Greece	2.9	2.6	2.3	2.3	2.1	2.0	1.9	2.0	2.3	2.2	2.1
18 Norway	3.0	2.9	2.7	2.4	2.2	2.1	2.0	2.3	2.0	2.0	2.0
19 Portugal	1.4	1.2	1.0	.8	.9	.8	.8	.5	.4	.4	.4
20 Spain	6.5	5.8	6.7	5.8	6.3	6.1	7.4	8.0	9.0	7.2	6.3
21 Turkey	1.9	1.8	1.9	1.8	1.7	1.7	1.5	1.6	1.6	1.5	1.3
22 Other Western Europe	1.7	2.0	1.6	1.4	1.4	1.5	1.6	1.6	1.9	1.6	1.9
23 South Africa	4.5	3.2	3.0	3.0	3.0	3.0	2.9	2.9	2.8	2.8	2.7
24 Australia	6.0	5.0	4.2	3.5	3.2	3.1	2.9	2.4	2.1	2.2	1.8
25 OPEC countries[3]	24.9	21.3	19.7	19.3	20.0	18.8	19.0	17.1	17.2	16.4	17.6
26 Ecuador	2.2	2.1	2.2	2.2	2.1	2.1	2.1	1.9	1.9	1.8	1.8
27 Venezuela	9.3	8.9	8.7	8.6	8.5	8.4	8.3	8.1	8.1	8.0	7.9
28 Indonesia	3.3	3.0	2.8	2.5	2.4	2.2	2.0	1.9	1.9	1.9	1.9
29 Middle East countries	7.9	5.3	4.4	4.3	5.4	4.4	5.0	3.6	3.6	3.1	4.3
30 African countries	2.3	2.0	1.7	1.7	1.6	1.7	1.7	1.7	1.7	1.7	1.7
31 Non-OPEC developing countries	111.8	104.2	99.1	99.1	100.7	100.4	97.7	97.7	94.0	91.3	87.0
Latin America											
32 Argentina	8.7	8.8	9.2	9.5	9.5	9.5	9.3	9.4	9.5	9.4	9.2
33 Brazil	26.3	25.4	25.2	25.2	26.2	25.1	25.1	24.7	23.9	23.7	22.4
34 Chile	7.0	6.9	7.1	7.1	7.3	7.2	7.0	6.9	6.6	6.4	6.2
35 Colombia	2.9	2.6	1.9	2.1	2.0	1.9	1.9	2.0	1.9	2.1	2.1
36 Mexico	25.7	23.9	23.9	23.8	24.1	25.3	24.8	23.7	22.5	21.1	20.6
37 Peru	2.2	1.8	1.5	1.4	1.4	1.3	1.2	1.1	1.1	.9	.8
38 Other Latin America	3.9	3.4	3.3	3.1	3.0	2.9	2.8	2.7	2.8	2.6	2.5
Asia											
China											
39 Mainland	.7	.5	.6	.4	.9	.6	.3	.3	.4	.3	.2[r]
40 Taiwan	5.1	4.5	4.3	4.9	5.5	6.6	6.0	8.2	6.1	4.9	3.2[r]
41 India	.9	1.2	1.3	1.2	1.8	1.7	1.9	1.9	2.1	2.3	2.0
42 Israel	1.8	1.6	1.4	1.5	1.4	1.3	1.3	1.0	1.0	1.0	1.0
43 Korea (South)	10.6	9.2	7.1	6.6	6.2	5.6	4.9	5.0	5.7	5.9	6.0
44 Malaysia	2.7	2.4	2.1	2.1	1.9	1.7	1.6	1.5	1.5	1.5	1.6
45 Philippines	6.0	5.7	5.4	5.4	5.4	5.4	5.4	5.1	5.1	4.9	4.5
46 Thailand	1.8	1.4	1.0	.9	.9	.8	.7	.7	1.0	1.1	1.2
47 Other Asia	1.1	1.0	.6	.7	.6	.7	.7	.7	.7	.8	.8
Africa											
48 Egypt	1.2	1.0	.7	.7	.6	.6	.6	.5	.5	.6	.5
49 Morocco	.8	.9	.9	.9	.9	.9	.8	.9	.9	.9	.8
50 Zaire	.1	.1	.1	.1	.1	.1	.1	.0	.1	.1	.0
51 Other Africa[4]	2.1	1.9	1.6	1.6	1.4	1.3	1.3	1.3	1.0	1.2	1.2
52 Eastern Europe	4.4	4.1	3.3	3.2	3.0	3.3	3.3	3.0	2.9	3.1	3.0[r]
53 U.S.S.R.	.1	.1	.1	.1	.1	.3	.5	.4	.3	.4	.4
54 Yugoslavia	2.3	2.2	1.9	1.7	1.6	1.7	1.7	1.6	1.7	1.7	1.7
55 Other	2.0	1.8	1.4	1.4	1.3	1.3	1.2	1.0	.9	1.0	1.0[r]
56 Offshore banking centers	65.6	62.9	58.3	61.3	63.1	60.7	64.3	54.3	54.6	45.3	49.8[r]
57 Bahamas	21.5	21.2	19.6	22.0	23.9	19.9	25.5	17.1	18.3	11.0	15.8
58 Bermuda	.9	.7	.4	.7	.8	.6	.6	.6	.8	1.0	.9
59 Cayman Islands and other British West Indies	11.8	11.6	11.3	12.4	12.2	14.0	12.8	13.3	12.2	10.6	11.5[r]
60 Netherlands Antilles	3.4	2.2	1.8	1.8	1.7	1.3	1.2	1.2	1.3	1.2	1.2
61 Panama[5]	6.7	6.0	5.1	4.0	4.3	3.9	3.7	3.7	3.2	3.0	2.7
62 Lebanon	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
63 Hong Kong	11.4	11.4	10.3	11.1	11.4	12.5	12.3	11.3	11.3	11.7	10.6
64 Singapore	9.8	9.8	9.7	9.2	8.6	8.3	8.1	7.0	7.4	6.8	7.0
65 Others[6]	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
66 Miscellaneous and unallocated[7]	17.3	16.9	17.3	19.8	20.1	18.1	22.3	23.2	21.5	22.2	27.0

1. The banking offices covered by these data are the U.S. offices and foreign branches of U.S.-owned banks and of U.S. subsidiaries of foreign-owned banks. Offices *not* covered include (1) U.S. agencies and branches of foreign banks, and (2) foreign subsidiaries of U.S. banks. To minimize duplication, the data are adjusted to exclude the claims on foreign branches held by a U.S. office or another foreign branch of the same banking institution. The data in this table combine *foreign branch claims in table 3.14 (the sum of lines 7 through 10) with the claims* of U.S. offices in table 3.18 (excluding those held by agencies and branches of foreign banks and those constituting claims on own foreign branches).

2. Beginning with June 1984 data, reported claims held by foreign branches have been reduced by an increase in the reporting threshold for "shell" branches from $50 million to $150 million equivalent in total assets, the threshold now applicable to all reporting branches.

3. This group comprises the Organization of Petroleum Exporting Countries shown individually, other members of OPEC (Algeria, Gabon, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, and United Arab Emirates), and Bahrain and Oman (not formally members of OPEC).

4. Excludes Liberia.

5. Includes Canal Zone beginning December 1979.

6. Foreign branch claims only.

7. Includes New Zealand, Liberia, and international and regional organizations.

3.22 LIABILITIES TO UNAFFILIATED FOREIGNERS Reported by Nonbanking Business Enterprises in the United States[1]

Millions of dollars, end of period

Type, and area or country	1984	1985	1986	1987		1988		
				Sept.	Dec.	Mar.	June	Sept.
1 **Total**	**29,357**	**27,825**	**25,587**	**28,571**	**27,852**	**28,877**	**29,387**	**30,989**
2 Payable in dollars	26,389	24,296	21,749	24,006	22,468	23,293	24,136	25,758
3 Payable in foreign currencies	2,968	3,529	3,838	4,565	5,384	5,584	5,251	5,231
By type								
4 Financial liabilities	14,509	13,600	12,133	12,936	11,828	13,134	13,112	13,512
5 Payable in dollars	12,553	11,257	9,609	9,945	8,303	9,459	9,607	10,090
6 Payable in foreign currencies	1,955	2,343	2,524	2,991	3,525	3,675	3,505	3,422
7 Commercial liabilities	14,849	14,225	13,454	15,635	16,025	15,743	16,275	17,477
8 Trade payables	7,005	6,685	6,450	7,548	7,425	6,560	6,867	6,586
9 Advance receipts and other liabilities	7,843	7,540	7,004	8,086	8,600	9,183	9,409	10,891
10 Payable in dollars	13,836	13,039	12,140	14,061	14,165	13,834	14,529	15,668
11 Payable in foreign currencies	1,013	1,186	1,314	1,574	1,859	1,909	1,746	1,809
By area or country								
Financial liabilities								
12 Europe	6,728	7,700	7,917	9,162	8,065	8,983	8,758	9,450
13 Belgium-Luxembourg	471	349	270	230	202	241	269	326
14 France	995	857	661	615	364	365	332	329
15 Germany	489	376	368	505	583	586	626	709
16 Netherlands	590	861	542	505	884	883	880	893
17 Switzerland	569	610	646	685	493	652	707	697
18 United Kingdom	3,297	4,305	5,140	6,357	5,346	6,074	5,772	6,326
19 Canada	863	839	399	397	400	467	461	439
20 Latin America and Caribbean	5,086	3,184	1,944	998	829	1,178	1,175	894
21 Bahamas	1,926	1,123	614	280	278	249	211	233
22 Bermuda	13	4	4	0	0	0	0	0
23 Brazil	35	29	32	22	25	23	20	35
24 British West Indies	2,103	1,843	1,146	618	459	807	878	581
25 Mexico	367	15	22	17	13	15	26	2
26 Venezuela	137	3	0	3	0	2	0	0
27 Asia	1,777	1,815	1,805	2,300	2,429	2,426	2,641	2,672
28 Japan	1,209	1,198	1,398	1,830	2,042	1,987	2,066	2,076
29 Middle East oil-exporting countries[2]	155	82	8	7	8	11	11	11
30 Africa	14	12	1	2	4	5	2	3
31 Oil-exporting countries[3]	0	0	1	0	1	3	1	1
32 All other[4]	41	50	67	76	100	75	74	55
Commercial liabilities								
33 Europe	4,001	4,074	4,446	4,951	5,635	5,738	5,836	6,855
34 Belgium-Luxembourg	48	62	101	59	134	156	150	203
35 France	438	453	352	437	451	441	433	470
36 Germany	622	607	715	674	916	818	798	1,203
37 Netherlands	245	364	424	336	428	463	535	653
38 Switzerland	257	379	385	556	559	527	482	510
39 United Kingdom	1,095	976	1,341	1,473	1,668	1,798	1,848	2,186
40 Canada	1,975	1,449	1,405	1,399	1,301	1,392	1,168	1,106
41 Latin America and Caribbean	1,871	1,088	924	1,082	865	938	996	995
42 Bahamas	7	12	32	22	19	15	58	20
43 Bermuda	114	77	156	252	168	325	272	222
44 Brazil	124	58	61	40	46	59	53	58
45 British West Indies	32	44	49	47	19	14	28	30
46 Mexico	586	430	217	231	189	164	233	178
47 Venezuela	636	212	216	176	162	85	111	204
48 Asia	5,285	6,046	5,080	6,511	6,573	5,888	6,262	6,644
49 Japan	1,256	1,799	2,042	2,422	2,580	2,510	2,659	2,767
50 Middle East oil-exporting countries[2,5]	2,372	2,829	1,679	2,104	1,964	1,062	1,318	1,312
51 Africa	588	587	619	572	574	575	624	462
52 Oil-exporting countries[3]	233	238	197	151	135	139	115	106
53 All other[4]	1,128	982	980	1,119	1,078	1,211	1,390	1,414

1. For a description of the changes in the International Statistics tables, see July 1979 BULLETIN, p. 550.
2. Comprises Bahrain, Iran, Iraq, Kuwait, Oman, Qatar, Saudi Arabia, and United Arab Emirates (Trucial States).
3. Comprises Algeria, Gabon, Libya, and Nigeria.
4. Includes nonmonetary international and regional organizations.
5. Revisions include a reclassification of transactions, which also affects the totals for Asia and the grand totals.

3.23 CLAIMS ON UNAFFILIATED FOREIGNERS Reported by Nonbanking Business Enterprises in the United States[1]

Millions of dollars, end of period

	Type, and area or country	1984	1985	1986	1987		1988		
					Sept.	Dec.	Mar.	June	Sept.
1	**Total**	**29,901**	**28,876**	**36,265**	**33,265**	**31,967**	**31,445**	**38,716**	**37,497**
2	Payable in dollars	27,304	26,574	33,867	30,705	29,114	29,368	36,637	34,899
3	Payable in foreign currencies	2,597	2,302	2,399	2,561	2,854	2,077	2,078	2,597
	By type								
4	Financial claims	19,254	18,891	26,273	22,847	21,338	20,612	27,102	26,508
5	Deposits	14,621	15,526	19,916	17,274	15,214	13,257	20,037	19,866
6	Payable in dollars	14,202	14,911	19,331	16,366	13,997	12,604	19,195	18,666
7	Payable in foreign currencies	420	615	585	908	1,217	654	842	1,200
8	Other financial claims	4,633	3,364	6,357	5,572	6,124	7,355	7,064	6,642
9	Payable in dollars	3,190	2,330	5,005	4,448	5,020	6,301	6,238	5,814
10	Payable in foreign currencies	1,442	1,035	1,352	1,124	1,104	1,054	826	828
11	Commercial claims	10,646	9,986	9,992	10,419	10,630	10,832	11,614	10,989
12	Trade receivables	9,177	8,696	8,783	9,420	9,565	9,719	10,558	10,004
13	Advance payments and other claims	1,470	1,290	1,209	999	1,065	1,113	1,056	985
14	Payable in dollars	9,912	9,333	9,530	9,891	10,097	10,464	11,204	10,419
15	Payable in foreign currencies	735	652	462	528	533	369	410	570
	By area or country								
	Financial claims								
16	Europe	5,762	6,929	10,744	10,785	10,182	10,314	12,577	11,126
17	Belgium-Luxembourg	15	10	41	26	7	15	16	49
18	France	126	184	138	171	360	335	185	212
19	Germany	224	223	116	103	122	112	181	119
20	Netherlands	66	161	151	157	351	336	337	364
21	Switzerland	66	74	185	44	84	57	82	84
22	United Kingdom	4,864	6,007	9,855	10,074	9,008	9,210	11,407	9,675
23	Canada	3,988	3,260	4,808	3,295	3,293	2,777	3,074	3,473
24	Latin America and Caribbean	8,216	7,846	9,291	7,568	6,817	6,572	10,898	11,177
25	Bahamas	3,306	2,698	2,628	3,299	1,804	2,349	4,145	4,088
26	Bermuda	6	6	6	2	7	43	126	138
27	Brazil	100	78	86	113	63	86	46	65
28	British West Indies	4,043	4,571	6,078	3,705	4,427	3,561	6,077	6,421
29	Mexico	215	180	174	174	172	154	147	133
30	Venezuela	125	48	21	18	19	35	28	27
31	Asia	961	731	1,317	1,105	908	874	446	610
32	Japan	353	475	999	737	628	708	211	425
33	Middle East oil-exporting countries[2]	13	4	7	10	10	7	6	6
34	Africa	210	103	85	71	65	53	60	96
35	Oil-exporting countries[3]	85	29	28	14	7	7	10	9
36	All other[4]	117	21	28	24	72	23	47	26
	Commercial claims								
37	Europe	3,801	3,533	3,725	4,166	4,190	4,201	4,901	4,261
38	Belgium-Luxembourg	165	175	133	169	179	192	159	171
39	France	440	426	431	462	652	554	686	535
40	Germany	374	346	444	551	562	637	770	604
41	Netherlands	335	284	164	190	135	151	173	146
42	Switzerland	271	284	217	206	185	172	262	182
43	United Kingdom	1,063	898	999	1,228	1,086	1,084	1,300	1,187
44	Canada	1,021	1,023	934	1,051	931	1,155	946	933
45	Latin America and Caribbean	2,052	1,753	1,857	1,732	1,947	1,973	2,090	2,122
46	Bahamas	8	13	28	12	19	14	13	12
47	Bermuda	115	93	193	143	170	171	174	161
48	Brazil	214	206	234	231	227	214	234	236
49	British West Indies	7	6	39	20	26	24	25	22
50	Mexico	583	510	412	369	368	374	399	462
51	Venezuela	206	157	237	192	298	314	343	293
52	Asia	3,073	2,982	2,755	2,800	2,919	2,857	3,002	2,981
53	Japan	1,191	1,016	881	1,027	1,160	1,109	1,169	956
54	Middle East oil-exporting countries[2]	668	638	563	434	450	408	445	407
55	Africa	470	437	500	407	401	419	422	419
56	Oil-exporting countries[3]	134	130	139	124	144	126	136	136
57	All other[4]	229	257	222	262	241	227	253	272

1. For a description of the changes in the International Statistics tables, see July 1979 BULLETIN, p. 550.
2. Comprises Bahrain, Iran, Iraq, Kuwait, Oman, Qatar, Saudi Arabia, and United Arab Emirates (Trucial States).
3. Comprises Algeria, Gabon, Libya, and Nigeria.
4. Includes nonmonetary international and regional organizations.

3.24 FOREIGN TRANSACTIONS IN SECURITIES

Millions of dollars

Transactions, and area or country	1986	1987	1988	1988						
			Jan.–Dec.	June	July	Aug.	Sept.	Oct.	Nov.	Dec.[p]
	U.S. corporate securities									
STOCKS										
1 Foreign purchases	148,114	249,122	180,951	20,007	19,207	17,275	11,971	13,232	11,973	11,215
2 Foreign sales	129,395	232,849	183,014	19,678	18,383	16,704	12,552	14,852	11,861	12,464
3 **Net purchases, or sales (−)**	**18,719**	**16,272**	**−2,062**	**329**	**824**	**572**	**−581**	**−1,620**	**112**	**−1,249**
4 **Foreign countries**	**18,927**	**16,321**	**−1,887**	**287**	**793**	**548**	**−554**	**−1,507**	**89**	**−1,204**
5 Europe	9,559	1,932	−3,428	33	227	287	−616	−128	−901	−776
6 France	459	905	−281	121	−34	−21	−37	89	−49	−64
7 Germany	341	−70	223	−36	−3	9	−14	107	−20	−59
8 Netherlands	936	892	−535	−56	20	−5	−56	17	−30	−1
9 Switzerland	1,560	−1,123	−2,242	−204	−90	−37	−506	−217	−268	−273
10 United Kingdom	4,826	631	−1,034	146	253	234	245	−41	−579	−423
11 Canada	816	1,048	1,088	−172	58	162	44	−116	576	275
12 Latin America and Caribbean	3,031	1,318	1,248	−116	58	159	310	374	98	−23
13 Middle East[1]	976	−1,360	−2,466	−549	−159	91	−188	−846	151	−132
14 Other Asia	3,876	12,896	1,362	1,039	518	−228	−127	−693	138	−567
15 Japan	3,305	11,365	1,923	1,187	475	−282	24	−626	133	−407
16 Africa	297	123	188	3	78	41	5	5	21	−1
17 Other countries	373	365	121	51	13	36	19	−102	6	19
18 **Nonmonetary international and regional organizations**	**−208**	**−48**	**−175**	**42**	**31**	**23**	**−28**	**−112**	**23**	**−45**
BONDS[2]										
19 Foreign purchases	123,169	105,856	86,362	8,341	8,277	5,966	7,450	7,552	7,650	8,423
20 Foreign sales	72,520	78,312	57,721	4,590	5,064	4,144	5,048	4,674[r]	4,794	4,447
21 **Net purchases, or sales (−)**	**50,648**	**27,544**	**28,641**	**3,751**	**3,213**	**1,822**	**2,401**	**2,878**[r]	**2,856**	**3,976**
22 **Foreign countries**	**49,801**	**26,804**	**29,188**	**3,569**	**3,190**	**1,837**	**2,337**	**3,002**[r]	**2,825**	**3,973**
23 Europe	39,313	21,989	17,886	2,203	1,744	1,482	1,611	2,341	1,240	2,554
24 France	389	194	143	15	−7	5	90	45	13	−130
25 Germany	−251	33	1,344	226	8	166	160	34	−122	75
26 Netherlands	387	269	1,514	55	17	41	415	545	171	17
27 Switzerland	4,529	1,587	513	−71	−139	84	97	175	−13	273
28 United Kingdom	33,900	19,770	13,642	1,738	1,685	1,188	793	1,339	1,141	2,468
29 Canada	548	1,296	711	216	130	27	−155	20	5	178
30 Latin America and Caribbean	1,552	2,857	1,930	174	254	193	45	198	58	240
31 Middle East[1]	−3,113	−1,314	−174	−124	−101	−87	−14	−45	143	159
32 Other Asia	11,346	2,021	8,900	1,091	1,152	254	916	485[r]	1,353	840
33 Japan	9,611	1,622	7,686	1,049	1,035	178	575	381[r]	1,210	746
34 Africa	16	16	−8	4	0	1	1	4	−1	0
35 Other countries	139	−61	−58	5	10	−33	−67	−1	26	2
36 **Nonmonetary international and regional organizations**	**847**	**740**	**−547**	**182**	**23**	**−14**	**64**	**−124**	**31**	**3**
	Foreign securities									
37 Stocks, net purchases, or sales (−)	−1,853	1,081	−1,685	−160	−126	−257	−57	−126[r]	−186	−1,046
38 Foreign purchases	49,149	95,458	74,720	6,413	7,052	5,904	5,054	6,070[r]	7,625	7,414
39 Foreign sales	51,002	94,377	76,405	6,573	7,178	6,161	5,111	6,196	7,810	8,460
40 Bonds, net purchases, or sales (−)	−3,685	−7,946	−9,999	−699	−659	−363	−509	−3,407[r]	431	−1,550
41 Foreign purchases	166,992	199,089	217,576	17,033	19,224	17,038	25,271	20,525	20,873	21,627
42 Foreign sales	170,677	207,035	227,575	17,732	19,882	17,401	25,780	23,932[r]	20,443	23,177
43 **Net purchases, or sales (−), of stocks and bonds**	**−5,538**	**−6,865**	**−11,684**	**−858**	**−785**	**−620**	**−566**	**−3,533**[r]	**245**	**−2,595**
44 **Foreign countries**	**−6,493**	**−6,757**	**−12,160**	**−770**	**−759**	**−650**	**−547**	**−3,582**[r]	**209**	**−2,690**
45 Europe	−18,026	−12,101	−10,315	−1,185	−488	−897	−446	−2,881	−479	−1,545
46 Canada	−876	−4,072	−3,799	−190	−319	216	−730	−273	392	−658
47 Latin America and Caribbean	3,476	828	1,477	301	−48	−34	290	−120	59	−33
48 Asia	10,858	9,299	1,097	552	237	−114	189	112[r]	166	39
49 Africa	52	89	−54	1	11	37	28	−189	18	−33
50 Other countries	−1,977	−800	−566	−248	−153	143	121	−230	52	−461
51 **Nonmonetary international and regional organizations**	**955**	**−108**	**476**	**−89**	**−26**	**30**	**−19**	**49**	**36**	**95**

1. Comprises oil-exporting countries as follows: Bahrain, Iran, Iraq, Kuwait, Oman, Qatar, Saudi Arabia, and United Arab Emirates (Trucial States).
2. Includes state and local government securities, and securities of U.S. government agencies and corporations. Also includes issues of new debt securities sold abroad by U.S. corporations organized to finance direct investments abroad.

3.25 MARKETABLE U.S. TREASURY BONDS AND NOTES Foreign Transactions

Millions of dollars

Country or area	1986	1987	1988 Jan.–Dec.	1988 June	July	Aug.	Sept.	Oct.	Nov.	Dec.[p]
	Transactions, net purchases or sales (–) during period[1]									
1 **Estimated total[2]**	**19,388**	**25,587**	**48,529**	**–2,161**	**905**	**–383**	**–1,937**	**2,193[r]**	**8,582**	**133**
2 Foreign countries[2]	20,491	30,889	47,842	–3,336	2,156	–149	–2,259	–244[r]	8,247	2,144
3 Europe[2]	16,326	23,716	14,255	–3,226	–1,460	–836	–1,233	–175	1,719	299
4 Belgium-Luxembourg	–245	653	923	–68	122	–209	–333	–3	133	–90
5 Germany[2]	7,670	13,330	–5,348	–4,241	–4,240	–2,020	–720	277	–1,015	–406
6 Netherlands	1,283	–913	–356	–796	312	–346	–58	41	135	–114
7 Sweden	132	210	–323	–232	–187	175	–121	–162	355	118
8 Switzerland[2]	329	1,917	–1,074	654	–51	344	–1,355	87	–411	–18
9 United Kingdom	4,546	3,975	9,667	47	837	416	2,023	–1,019	1,945	–231
10 Other Western Europe	2,613	4,563	10,776	1,420	1,755	803	–663	615	577	1,054
11 Eastern Europe	0	–19	–10	–10	–9	0	–7	–10	–2	–15
12 Canada	881	4,526	3,761	669	–314	–315	–167	633	–368	788
13 Latin America and Caribbean	926	–2,192	695	–580	0	–312	269	–574	582	–105
14 Venezuela	–96	150	–109	2	–2	–128	–17	1	0	0
15 Other Latin America and Caribbean	1,130	–1,142	1,112	63	57	–292	285	–331	506	139
16 Netherlands Antilles	–108	–1,200	–308	–645	–55	108	1	–244	77	–244
17 Asia	1,345	4,488	27,357	–381	3,246	919	–1,351	–107[r]	6,870	812
18 Japan	–22	868	21,753	–52	3,006	1,540	–2,841	220[r]	4,224	–157
19 Africa	–54	–56	–13	–1	–10	5	31	0	–8	–7
20 All other	1,067	407	1,786	183	694	391	193	–21	–548	358
21 Nonmonetary international and regional organizations	–1,104	–5,300	689	1,174	–1,251	–234	323	2,438	335	–2,011
22 International	–1,430	–4,387	1,142	1,546	–1,137	–282	294	2,365	489	–2,019
23 Latin America regional	157	3	–31	–38	–14	–8	0	0	10	10
Memo										
24 Foreign countries[2]	20,491	30,889	47,842	–3,336	2,156	–149	–2,259	–244[r]	8,247	2,144
25 Official institutions	14,214	31,064	26,593	–1,658	–2,362	–1,450	–1,481	577[r]	2,196	2,212
26 Other foreign[2]	6,283	–181	21,246	–1,678	4,518	1,301	–779	–821[r]	6,050	–68
Oil-exporting countries										
27 Middle East[3]	–1,529	–3,142	1,715	–201	295	449	–182	–1,023	2,121	881
28 Africa[4]	5	16	1	0	0	0	0	0	0	0

1. Estimated official and private transactions in marketable U.S. Treasury securities with an original maturity of more than 1 year. Data are based on monthly transactions reports. Excludes nonmarketable U.S. Treasury bonds and notes held by official institutions of foreign countries.
2. Includes U.S. Treasury notes publicly issued to private foreign residents denominated in foreign currencies.
3. Comprises Bahrain, Iran, Iraq, Kuwait, Oman, Qatar, Saudi Arabia, and United Arab Emirates (Trucial States).
4. Comprises Algeria, Gabon, Libya, and Nigeria.

3.26 DISCOUNT RATES OF FOREIGN CENTRAL BANKS

Percent per year

Country	Rate on Feb. 28, 1989		Country	Rate on Feb. 28, 1989		Country	Rate on Feb. 28, 1989	
	Percent	Month effective		Percent	Month effective		Percent	Month effective
Austria	4.5	Jan. 1989	France[1]	8.25	Jan. 1989	Norway	8.0	June 1983
Belgium	8.25	Jan. 1989	Germany, Fed. Rep. of	4.0	Jan. 1989	Switzerland	4.0	Jan. 1989
Brazil	49.0	Mar. 1981	Italy	12.5	Aug. 1988	United Kingdom[2]	....	....
Canada	11.86	Feb. 1989	Japan	2.5	Feb. 1987	Venezuela	8.0	Oct. 1985
Denmark	7.0	Oct. 1983	Netherlands	5.0	Jan. 1989			

1. As of the end of February 1981, the rate is that at which the Bank of France discounts Treasury bills for 7 to 10 days.
2. Minimum lending rate suspended as of Aug. 20, 1981.
NOTE. Rates shown are mainly those at which the central bank either discounts or makes advances against eligible commercial paper and/or government commercial banks or brokers. For countries with more than one rate applicable to such discounts or advances, the rate shown is the one at which it is understood the central bank transacts the largest proportion of its credit operations.

3.27 FOREIGN SHORT-TERM INTEREST RATES

Percent per year, averages of daily figures

Country, or type	1986	1987	1988	1988					1989	
				Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.
1 Eurodollars	6.70	7.07	7.86	8.47	8.31	8.51	8.91	9.30	9.28	9.61
2 United Kingdom	10.87	9.65	10.28	11.29	12.09	11.94	12.23	13.07	13.06	12.97
3 Canada	9.18	8.38	9.63	9.92	10.48	10.48	10.86	11.15	11.34	11.69
4 Germany	4.58	3.97	4.28	5.28	4.93	5.03	4.91	5.32	5.63	6.36
5 Switzerland	4.19	3.67	2.94	3.57	3.34	3.62	4.10	4.77	5.31	5.69
6 Netherlands	5.56	5.24	4.72	4.50	5.51	5.35	5.30	5.60	5.99	6.75
7 France	7.68	8.14	7.80	7.58	7.86	7.87	8.03	8.36	8.55	9.11
8 Italy	12.60	11.15	11.04	11.02	11.27	11.30	11.48	11.96	11.84	12.26
9 Belgium	8.04	7.01	6.69	7.25	7.39	7.24	7.18	7.38	7.59	8.04
10 Japan	4.96	3.87	3.96	3.98	4.15	4.26	4.22	4.16	4.24	4.21

NOTE. Rates are for 3-month interbank loans except for Canada, finance company paper; Belgium, 3-month Treasury bills; and Japan, Gensaki rate.

3.28 FOREIGN EXCHANGE RATES[1]

Currency units per dollar

Country/currency	1986	1987	1988	1988 Sept.	1988 Oct.	1988 Nov.	1988 Dec.	1989 Jan.	1989 Feb.
1 Australia/dollar[2]	67.093	70.136	78.408	79.15	80.96	85.07	85.73	87.05	85.64
2 Austria/schilling	15.260	12.649	12.357	13.135	12.777	12.307	12.359	12.904	13.022
3 Belgium/franc	44.662	37.357	36.783	39.149	38.077	36.670	36.815	38.441	38.792
4 Canada/dollar	1.3896	1.3259	1.2306	1.2267	1.2055	1.2186	1.1962	1.1913	1.1891
5 China, P.R./yuan	3.4615	3.7314	3.7314	3.7314	3.7314	3.7314	3.7314	3.7314	3.7314
6 Denmark/krone	8.0954	6.8477	6.7411	7.1764	7.0055	6.7547	6.7891	7.1143	7.2094
7 Finland/markka	5.0721	4.4036	4.1933	4.4282	4.3041	4.1522	4.1408	4.2553	4.3006
8 France/franc	6.9256	6.0121	5.9594	6.3515	6.1975	5.9746	5.9994	6.2538	6.3004
9 Germany/deutsche mark	2.1704	1.7981	1.7569	1.8668	1.8165	1.7491	1.7563	1.8356	1.8505
10 Greece/drachma	139.93	135.47	142.00	151.47	148.71	145.22	146.10	152.25	154.72
11 Hong Kong/dollar	7.8037	7.7985	7.8071	7.8106	7.8133	7.8095	7.8062	7.8047	7.8009
12 India/rupee	12.597	12.943	13.899	14.490	14.720	14.966	15.019	15.092	15.240
13 Ireland/punt[2]	134.14	148.79	152.49	143.60	147.30	152.70	152.29	145.82	144.10
14 Italy/lira	1491.16	1297.03	1302.39	1393.15	1353.36	1300.22	1295.61	1345.12	1355.28
15 Japan/yen	168.35	144.60	128.17	134.32	128.68	123.20	123.61	127.36	127.74
16 Malaysia/ringgit	2.5830	2.5185	2.6189	2.6643	2.6785	2.6779	2.6935	2.7221	2.7307
17 Netherlands/guilder	2.4484	2.0263	1.9778	2.1063	2.0486	1.9729	1.9824	2.0723	2.0895
18 New Zealand/dollar[2]	52.456	59.327	65.558	61.480	62.113	64.067	63.621	62.412	61.629
19 Norway/krone	7.3984	6.7408	6.5242	6.9150	6.7400	6.5796	6.5234	6.6808	6.7254
20 Portugal/escudo	149.80	141.20	144.26	154.18	150.13	145.57	145.56	150.74	152.10
21 Singapore/dollar	2.1782	2.1059	2.0132	2.0409	2.0202	1.9616	1.9442	1.9404	1.9285
22 South Africa/rand	2.2918	2.0385	2.1900	2.4575	2.4662	2.3943	2.3487	2.3847	2.4570
23 South Korea/won	884.61	825.93	734.51	723.00	712.72	696.08	687.89	685.28	680.28
24 Spain/peseta	140.04	123.54	116.52	124.36	120.02	115.17	113.73	114.78	115.67
25 Sri Lanka/rupee	27.933	29.471	31.847	32.953	32.989	32.989	33.016	33.132	33.115
26 Sweden/krona	7.1272	6.3468	6.1369	6.4448	6.2694	6.0968	6.0888	6.2725	6.3238
27 Switzerland/franc	1.7979	1.4918	1.4642	1.5763	1.5372	1.4675	1.4799	1.5619	1.5740
28 Taiwan/dollar	37.837	31.756	28.636	28.914	28.880	28.170	28.199	27.821	27.716
29 Thailand/baht	26.314	25.774	25.312	25.548	25.365	25.146	25.146	25.322	25.386
30 United Kingdom/pound[2]	146.77	163.98	178.13	168.40	173.87	180.85	182.58	177.37	175.34
MEMO									
31 United States/dollar[3]	112.22	96.94	92.72	97.91	95.10	91.91	91.88	95.12	95.77

1. Averages of certified noon buying rates in New York for cable transfers. Data in this table also appear in the Board's G.5 (405) release. For address, see inside front cover.
2. Value in U.S. cents.
3. Index of weighted-average exchange value of U.S. dollar against the currencies of 10 industrial countries. The weight for each of the 10 countries is the 1972–76 average world trade of that country divided by the average world trade of all 10 countries combined. Series revised as of August 1978 (see FEDERAL RESERVE BULLETIN, vol. 64, August 1978, p. 700).

Guide to Tabular Presentation, Statistical Releases, and Special Tables

GUIDE TO TABULAR PRESENTATION

Symbols and Abbreviations

c	Corrected	0	Calculated to be zero
e	Estimated	n.a.	Not available
p	Preliminary	n.e.c.	Not elsewhere classified
r	Revised (Notation appears on column heading when about half of the figures in that column are changed.)	IPCs	Individuals, partnerships, and corporations
*	Amounts insignificant in terms of the last decimal place shown in the table (for example, less than 500,000 when the smallest unit given is millions)	REITs	Real estate investment trusts
		RPs	Repurchase agreements
		SMSAs	Standard metropolitan statistical areas
		. . .	Cell not applicable

General Information

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

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

In some of the tables, details do not add to totals because of rounding.

STATISTICAL RELEASES

List Published Semiannually, with Latest Bulletin Reference

SPECIAL TABLES

Published Irregularly, with Latest Bulletin Reference

Special tables begin on next page.

4.23 TERMS OF LENDING AT COMMERCIAL BANKS Survey of Loans Made, November 7–11, 1988[1]

A. Commercial and Industrial Loans[2]

Characteristic	Amount of loans (thousands of dollars)	Average size (thousands of dollars)	Weighted average maturity[3]	Loan rate (percent)			Loans made under commitment (percent)	Participation loans (percent)	Most common base pricing rate[7]
			Days	Weighted average effective[4]	Standard error[5]	Interquartile range[6]			
ALL BANKS									
1 Overnight[8]	10,032,481	4,728	*	9.27	.10	8.94–9.35	58.9	10.7	Fed funds
2 One month and under	5,792,879	776	18	9.51	.19	9.11–9.95	77.9	12.2	Other
3 Fixed rate	4,782,599	1,044	17	9.39	.24	9.11–9.70	76.6	13.5	Other
4 Floating rate	1,010,280	374	20	10.11	.16	9.36–10.49	84.2	6.1	Other
5 Over one month and under a year	6,938,988	129	141	10.51	.17	9.58–11.34	81.4	11.8	Prime
6 Fixed rate	4,276,464	154	105	10.15	.20	9.35–11.07	84.4	11.6	Domestic
7 Floating rate	2,662,525	102	199	11.10	.16	10.38–11.63	76.5	12.1	Prime
8 Demand[9]	13,378,620	267	*	10.80	.20	9.25–12.01	83.4	8.4	Prime
9 Fixed rate	1,714,414	666	*	9.66	.14	9.00–10.22	92.4	15.7	Domestic
10 Floating rate	11,664,206	245	*	10.96	.20	9.57–12.13	82.1	7.3	Prime
11 Total short term	**36,142,969**	**318**	**48**	**10.11**	**.15**	**9.09–11.02**	**75.3**	**10.3**	**Prime**
12 Fixed rate (thousands of dollars)	20,378,070	547	29	9.51	.14	8.97–9.76	70.4	12.2	Fed funds
13 1–24	199,044	8	106	12.19	.16	11.46–13.00	20.0	.1	Other
14 25–49	124,207	33	99	11.52	.15	10.71–12.19	26.1	3.6	Prime
15 50–99	147,692	64	98	12.10	.30	11.22–12.72	24.0	.9	Prime
16 100–499	377,087	184	89	10.86	.12	10.05–11.57	47.9	2.8	Prime
17 500–999	334,234	671	47	10.03	.11	9.20–10.71	72.5	10.3	Domestic
18 1000 and over	19,195,807	7,885	26	9.42	.11	8.94–9.67	71.9	12.7	Fed funds
19 Floating rate (thousands of dollars)	15,764,899	207	134	10.89	.19	9.62–11.91	81.8	7.8	Prime
20 1–24	355,261	10	149	12.12	.09	11.55–12.68	69.3	.9	Prime
21 25–49	413,527	34	169	11.92	.08	11.30–12.68	77.6	3.3	Prime
22 50–99	677,716	66	163	11.65	.08	11.02–12.13	79.5	2.8	Prime
23 100–499	2,651,834	198	182	11.38	.06	10.52–11.91	86.0	10.0	Prime
24 500–999	1,210,272	653	157	11.20	.07	10.47–11.85	86.0	7.7	Prime
25 1000 and over	10,456,288	5,212	110	10.59	.23	9.20–11.63	80.9	8.0	Prime
			Months						
26 Total long term	**2,576,575**	**173**	**47**	**10.79**	**.25**	**9.54–11.63**	**70.8**	**9.1**	**Prime**
27 Fixed rate (thousands of dollars)	1,074,644	147	46	10.48	.43	9.12–11.29	79.7	3.1	Domestic
28 1–99	126,456	19	74	12.65	.31	11.57–12.68	26.4	.2	Other
29 100–499	48,232	172	59	11.53	.27	11.00–12.40	35.3	2.9	Prime
30 500–999	32,073	635	56	10.60	.41	9.64–11.49	85.6	.0	Other
31 1000 and over	867,884	5,393	40	10.11	.22	8.88–11.07	89.7	3.7	Domestic
32 Floating rate (thousands of dollars)	1,501,931	196	49	11.00	.22	9.96–11.74	64.4	13.3	Prime
33 1–99	152,876	27	63	12.05	.17	11.57–12.68	25.8	1.7	Prime
34 100–499	362,589	220	48	11.69	.20	10.52–12.13	48.5	16.1	Prime
35 500–999	137,278	657	53	11.30	.21	10.52–11.91	50.1	5.8	Prime
36 1000 and over	849,187	3,942	46	10.47	.19	9.29–11.57	80.5	15.5	Prime
			Days	Loan rate (percent)		Prime rate[11]			
				Effective[4]	Nominal[10]				
LOANS MADE BELOW PRIME[12]									
37 Overnight[8]	9,456,175	9,008	*	9.13	8.74	10.00	56.7	12.5	
38 One month and under	4,962,395	3,056	16	9.19	8.80	10.00	78.3	13.5	
39 Over one month and under a year	3,344,030	628	128	9.54	9.18	10.07	93.4	12.1	
40 Demand[9]	4,636,975	1,728	*	9.21	8.84	10.01	65.4	8.6	
41 Total short term	**22,399,574**	**2,096**	**30**	**9.22**	**8.84**	**10.01**	**68.8**	**11.9**	
42 Fixed rate	17,441,987	2,500	23	9.19	8.81	10.01	69.0	13.9	
43 Floating rate	4,957,587	1,337	94	9.33	8.96	10.04	68.1	4.9	
			Months						
44 Total long term	**1,015,037**	**750**	**31**	**9.43**	**9.11**	**10.11**	**94.0**	**9.8**	
45 Fixed rate	512,241	813	26	9.20	8.94	10.02	91.7	0.0	
46 Floating rate	502,796	695	37	9.66	9.27	10.19	96.3	19.7	

For notes see end of table.

4.23—Continued
A. Commercial and Industrial Loans[2]—Continued

Characteristic	Amount of loans (thousands of dollars)	Average size (thousands of dollars)	Weighted average maturity[3]	Loan rate (percent)			Loans made under commitment (percent)	Participation loans (percent)	Most common base pricing rate[7]
			Days	Weighted average effective[4]	Standard error[5]	Interquartile range[6]			
LARGE BANKS									
1 Overnight[8]	7,580,092	7,985	*	9.36	.16	8.94–9.42	66.1	13.9	Fed funds
2 One month and under	4,379,053	3,029	18	9.38	.29	9.11–9.89	76.8	12.4	Other
3 Fixed rate	3,729,185	3,951	17	9.29	.42	9.04–9.70	75.2	13.8	Other
4 Floating rate	649,869	1,295	21	9.90	.18	9.30–10.47	85.9	4.6	Domestic
5 Over one month and under a year	4,458,520	903	125	10.18	.14	9.44–11.07	91.7	11.9	Domestic
6 Fixed rate	3,313,942	2,006	99	10.03	.15	9.35–10.94	93.9	14.4	Domestic
7 Floating rate	1,144,578	349	202	10.62	.27	9.88–11.48	85.5	4.6	Prime
8 Demand[9]	8,766,153	634	*	10.78	.39	9.20–12.01	80.5	6.3	Prime
9 Fixed rate	976,243	2,411	*	9.89	.17	9.18–10.47	90.0	1.4	Domestic
10 Floating rate	7,789,910	580	*	10.90	.40	9.20–12.19	79.3	6.9	Prime
11 **Total short term**	**25,183,818**	**1,190**	**39**	**10.00**	**.13**	**9.09–10.61**	**77.5**	**10.6**	**Prime**
12 Fixed rate (thousands of dollars)	15,177,755	3,877	28	9.52	.18	9.02–9.80	75.0	13.6	Fed funds
13 1–24	7,762	10	81	11.78	.22	11.35–12.57	21.7	.0	Prime
14 25–49	10,019	33	73	11.38	.26	10.51–12.05	41.3	.0	Prime
15 50–99	20,468	67	60	11.42	.32	10.94–12.09	46.7	.4	Prime
16 100–499	118,503	217	55	10.76	.14	10.09–11.50	69.7	3.4	Prime
17 500–999	169,961	693	34	10.27	.08	9.55–11.03	78.3	13.9	Domestic
18 1000 and over	14,851,042	8,547	28	9.50	.18	9.01–9.80	75.1	13.7	Fed funds
19 Floating rate (thousands of dollars)	10,006,063	580	112	10.73	.36	9.25–12.01	81.3	6.2	Prime
20 1–24	61,274	11	133	11.88	.15	11.02–12.68	83.1	.4	Prime
21 25–49	92,129	34	154	11.75	.13	11.02–12.40	85.8	1.0	Prime
22 50–99	178,726	67	157	11.53	.13	10.75–12.13	88.4	2.1	Prime
23 100–499	898,907	209	148	11.24	.09	10.47–11.71	89.3	5.2	Prime
24 500–999	595,723	658	150	11.07	.07	10.47–11.63	92.1	8.2	Prime
25 1000 and over	8,179,305	6,774	104	10.61	.45	9.18–12.01	79.4	6.4	Prime
			Months						
26 **Total long term**	**1,538,426**	**972**	**42**	**10.22**	**.29**	**9.19–11.07**	**93.3**	**9.5**	**Domestic**
27 Fixed rate (thousands of dollars)	815,479	2,081	39	10.06	.61	8.88–11.07	95.6	3.9	Domestic
28 1–99	5,155	25	46	12.46	.44	11.07–13.24	34.9	.0	Other
29 100–499	9,015	244	61	10.68	.50	10.47–12.01	54.6	.0	Other
30 500–999	12,287	648	43	10.09	.72	9.59–10.47	94.5	.0	Other
31 1000 and over	789,021	6,179	39	10.04	.26	8.88–11.07	96.5	4.1	Domestic
32 Floating rate (thousands of dollars)	722,947	607	45	10.40	.29	9.28–11.57	90.6	15.8	Prime
33 1–99	20,573	34	35	12.15	.35	11.02–12.75	65.2	.5	Prime
34 100–499	77,293	211	45	11.33	.25	10.52–11.73	77.7	5.5	Prime
35 500–999	59,726	633	40	10.97	.23	10.38–11.71	81.4	8.7	Prime
36 1000 and over	565,355	4,841	46	10.15	.31	9.23–11.07	94.3	18.6	Domestic
			Days	Loan rate (percent)		Prime rate[11]			
				Effective[4]	Nominal[10]				
LOANS MADE BELOW PRIME[12]									
37 Overnight[8]	7,039,554	10,028	*	9.20	8.80	10.00	63.7	14.9	
38 One month and under	3,867,427	5,576	17	9.15	8.77	10.00	76.0	13.2	
39 Over one month and under a year	2,708,342	5,569	121	9.54	9.19	9.99	96.1	12.0	
40 Demand[9]	3,317,365	5,428	*	9.18	8.81	10.00	56.0	.5	
41 **Total short term**	**16,932,688**	**6,792**	**29**	**9.24**	**8.86**	**10.00**	**70.2**	**11.3**	
42 Fixed rate	13,004,772	7,002	22	9.23	8.85	10.00	72.2	14.5	
43 Floating rate	3,927,916	6,180	96	9.25	8.88	10.00	63.5	.5	
			Months						
44 **Total long term**	**819,308**	**4,031**	**32**	**9.22**	**8.94**	**9.99**	**96.9**	**6.2**	
45 Fixed rate	478,578	4,613	26	9.14	8.90	10.00	95.4	.0	
46 Floating rate	340,730	3,425	40	9.34	8.99	9.98	98.9	15.0	

For notes see end of table.

4.23 TERMS OF LENDING AT COMMERCIAL BANKS Survey of Loans Made, November 7–11, 1988[1]—Continued

A. Commercial and Industrial Loans—Continued[2]

Characteristic	Amount of loans (thousands of dollars)	Average size (thousands of dollars)	Weighted average maturity[3]	Loan rate (percent)			Loans made under commitment (percent)	Participation loans (percent)	Most common base pricing rate[7]
			Days	Weighted average effective[4]	Standard error[5]	Interquartile range[6]			
OTHER BANKS									
1 Overnight[8]	2,452,389	2,092	*	8.99	.12	8.73–9.14	36.7	.7	Fed funds
2 One month and under	1,413,826	235	17	9.92	.17	9.15–10.15	81.4	11.5	Fed funds
3 Fixed rate	1,053,415	276	17	9.72	.19	9.15–9.74	81.5	12.4	Fed funds
4 Floating rate	360,411	164	18	10.49	.20	9.83–11.57	81.2	8.6	Other
5 Over one month and under a year	2,480,468	51	170	11.11	.13	10.38–11.85	62.8	11.7	Prime
6 Fixed rate	962,522	37	129	10.57	.30	9.23–11.96	51.9	2.1	Prime
7 Floating rate	1,517,947	67	196	11.46	.08	10.92–11.85	69.8	17.7	Prime
8 Demand[9]	4,612,468	127	*	10.82	.13	10.22–11.57	88.9	12.3	Prime
9 Fixed rate	738,171	340	*	9.36	.16	9.00–9.54	95.5	34.7	Domestic
10 Floating rate	3,874,297	114	*	11.10	.07	10.47–11.85	87.7	8.1	Prime
11 **Total short term**	**10,959,151**	**119**	**71**	**10.36**	**.22**	**9.05–11.57**	**70.4**	**9.5**	**Prime**
12 Fixed rate (thousands of dollars)	5,200,315	156	33	9.48	.21	8.83–9.52	56.9	8.1	Fed funds
13 1–24	191,282	8	107	12.21	.14	11.46–13.10	19.9	.1	Other
14 25–49	114,188	33	101	11.53	.13	10.92–12.19	24.8	3.9	Prime
15 50–99	127,224	63	104	12.21	.35	11.46–12.83	20.4	1.0	Prime
16 100–499	258,583	171	104	10.90	.22	10.05–11.63	37.9	2.5	Prime
17 500–999	164,273	650	61	9.79	.17	9.00–10.38	66.5	6.5	Fed funds
18 1000 and over	4,344,766	6,236	19	9.13	.13	8.79–9.27	61.2	9.2	Fed funds
19 Floating rate (thousands of dollars)	5,758,836	98	161	11.15	.06	10.47–11.85	82.6	10.6	Prime
20 1–24	293,988	9	151	12.17	.08	11.57–12.71	66.4	1.0	Prime
21 25–49	321,398	33	171	11.97	.07	11.35–12.68	75.3	3.9	Prime
22 50–99	498,989	66	164	11.69	.06	11.02–12.19	76.3	3.0	Prime
23 100–499	1,752,928	193	191	11.45	.04	10.75–12.13	84.3	12.4	Prime
24 500–999	614,549	648	162	11.32	.10	10.47–12.13	80.1	7.2	Prime
25 1000 and over	2,276,984	2,851	128	10.52	.17	9.50–11.19	86.4	14.1	Prime
			Months						
26 **Total long term**	**1,038,149**	**78**	**56**	**11.62**	**.12**	**10.75–12.13**	**37.4**	**8.4**	**Prime**
27 Fixed rate (thousands of dollars)	259,165	38	66	11.82	.45	10.86–12.40	29.4	.6	Other
28 1–99	121,301	18	76	12.66	.48	11.57–12.68	26.1	.2	Other
29 100–499	39,217	161	59	11.72	.14	11.02–12.40	30.8	3.6	Prime
30 500–999	19,786	628	64	10.92	.52	9.66–11.85	80.0	.0	Other
31 1000 and over	78,862	2,374	57	10.82	.13	10.76–10.86	21.2	.0	Other
32 Floating rate (thousands of dollars)	778,983	121	52	11.56	.19	10.47–12.13	40.1	11.0	Prime
33 1–99	132,303	27	67	12.04	.09	11.57–12.68	19.6	1.9	Prime
34 100–499	285,296	223	49	11.78	.30	10.52–12.68	40.6	19.0	Prime
35 500–999	77,552	677	64	11.55	.25	11.57–11.91	26.0	3.5	Prime
36 1000 and over	283,832	2,877	45	11.10	.16	10.42–11.63	53.0	9.3	Prime

Characteristic	Amount of loans (thousands of dollars)	Average size (thousands of dollars)	Days	Loan rate (percent)		Prime rate[11]	Loans made under commitment (percent)	Participation loans (percent)	Most common base pricing rate[7]
				Effective[4]	Nominal[10]				
LOANS MADE BELOW PRIME[12]									
37 Overnight[8]	2,416,621	6,950	*	8.93	8.56	10.00	36.3	5.6	
38 One month and under	1,094,967	1,177	15	9.33	8.93	10.01	86.4	14.2	
39 Over one month and under a year	635,688	131	159	9.50	9.14	10.39	81.8	12.4	
40 Demand[9]	1,319,610	637	*	9.28	8.92	10.04	89.2	28.9	
41 **Total short term**	**5,466,886**	**667**	**30**	**9.16**	**8.79**	**10.06**	**64.4**	**13.8**	
42 Fixed rate	4,437,215	867	23	9.06	8.68	10.03	59.4	12.0	
43 Floating rate	1,029,671	335	88	9.62	9.24	10.19	86.0	21.4	
			Months						
44 **Total long term**	**195,729**	**170**	**30**	**10.28**	**9.81**	**10.59**	**81.9**	**24.7**	
45 Fixed rate	33,663	64	26	10.03	9.57	10.41	39.3	0.4	
46 Floating rate	162,066	260	31	10.34	9.86	10.63	90.7	29.7	

For notes see end of table.

4.23—Continued

B. Construction and Land Development Loans[1]

Characteristic	Amount of loans (thousands of dollars)	Average size (thousands of dollars)	Weighted average maturity (months)[3]	Loan rate (percent): Weighted average effective[4]	Loan rate (percent): Standard error[5]	Loan rate (percent): Inter-quartile range[6]	Loans made under commitment (percent)	Partici-pation loans (percent)
ALL BANKS								
1 **Total**	**2,404,957**	**196**	**15**	**11.04**	**.14**	**10.62–11.57**	**84.9**	**17.2**
2 Fixed rate (thousands of dollars)	718,378	170	7	10.41	.20	9.92–10.64	81.6	7.4
3 1–24	19,298	6	5	11.59	.25	11.05–12.13	75.9	.0
4 25–49	13,750	34	10	11.64	.19	11.02–12.13	63.4	.0
5 50–99	6,219	76	10	11.44	.27	11.26–11.57	68.4	.0
6 100–499	27,971	214	18	11.27	.32	10.61–12.13	74.8	30.4
7 500 and over	651,141	3,076	6	10.31	.21	9.92–10.64	82.5	6.8
8 Floating rate (thousands of dollars)	1,686,579	209	20	11.30	.10	11.02–11.57	86.4	21.3
9 1–24	42,052	10	11	12.12	.11	11.57–12.68	83.8	3.4
10 25–49	45,693	36	8	11.83	.10	11.57–12.19	85.9	4.6
11 50–99	76,861	67	9	12.18	.12	11.57–13.31	89.1	2.6
12 100–499	251,029	228	16	11.57	.05	11.03–11.85	88.4	3.1
13 500 and over	1,270,943	2,765	22	11.15	.15	11.02–11.57	85.9	27.3
By type of construction								
14 Single family	304,238	40	13	11.44	.12	11.02–12.13	82.1	1.1
15 Multifamily	235,929	304	23	10.98	.16	9.92–11.57	49.4	1.7
16 Nonresidential	1,864,790	470	14	10.98	.16	10.61–11.57	89.9	21.8
LARGE BANKS[13]								
1 **Total**	**1,418,010**	**897**	**14**	**11.02**	**.21**	**10.64–11.30**	**88.6**	**27.2**
2 Fixed rate (thousands of dollars)	484,890	2,888	2	10.46	.23	10.34–10.64	95.1	9.5
3 1–24	669	11	7	11.45	.45	10.94–11.57	79.2	.0
4 25–49	665	33	9	11.43	.34	11.31–11.57	80.1	.0
5 50–99	*	*	*	*	*	*	*	*
6 100–499	*	*	*	*	*	*	*	*
7 500 and over	478,966	9,566	2	10.46	.24	10.34–10.64	95.2	9.3
8 Floating rate (thousands of dollars)	933,121	660	21	11.31	.12	11.02–11.57	85.2	36.4
9 1–24	4,701	10	10	12.15	.18	11.57–12.75	88.7	1.1
10 25–49	5,965	36	14	11.63	.16	11.30–12.13	92.6	.8
11 50–99	12,357	71	15	11.74	.11	11.30–12.13	97.8	7.3
12 100–499	99,219	253	16	11.54	.07	11.30–11.85	95.3	1.7
13 500 and over	810,879	3,587	21	11.27	.15	11.02–11.57	83.7	41.6
By type of construction								
14 Single family	91,849	152	15	11.60	.14	11.30—12.01	92.6	.0
15 Multifamily	143,194	911	25	11.31	.12	11.02–11.57	63.3	1.4
16 Nonresidential	1,182,967	1,443	13	10.94	.21	10.64–11.30	91.3	32.5
OTHER BANKS[13]								
1 **Total**	**986,946**	**92**	**17**	**11.06**	**.22**	**10.47–11.57**	**79.7**	**2.7**
2 Fixed rate (thousands of dollars)	233,488	58	16	10.31	.35	9.42–11.02	53.4	2.9
3 1–24	18,629	6	5	11.59	.21	11.06–12.13	75.8	.0
4 25–49	13,085	34	10	11.65	.24	11.02–12.13	62.5	.0
5 50–99	5,311	77	8	11.52	.48	11.35–11.57	65.0	.0
6 100–499	24,289	223	19	11.32	.43	10.67–12.13	72.2	27.6
7 500 and over	*	*	*	*	*	*	*	*
8 Floating rate (thousands of dollars)	753,458	113	18	11.30	.17	10.75–11.63	87.8	2.6
9 1–24	37,351	10	11	12.12	.14	11.57–12.68	83.1	3.6
10 25–49	39,727	36	7	11.86	.11	11.57–12.19	84.9	5.2
11 50–99	64,504	67	9	12.27	.19	11.57–13.31	87.5	1.7
12 100–499	151,811	213	16	11.59	.06	11.02–12.13	83.9	4.0
13 500 and over	460,064	1,970	23	10.95	.24	10.47–11.57	89.8	2.0
By type of construction								
14 Single family	212,389	31	13	11.37	.21	11.02–12.17	77.6	1.5
15 Multifamily	92,735	150	22	10.47	.31	9.92–11.02	27.9	2.0
16 Nonresidential	681,823	216	18	11.05	.27	10.47–11.57	87.4	3.2

For notes see end of table.

4.23 TERMS OF LENDING AT COMMERCIAL BANKS Survey of Loans Made, November 7–11, 1988[1]—Continued

C. Loans to Farmers[14]

Characteristic	Size class of loans (thousands)						
	All sizes	$1–9	$10–24	$25–49	$50–99	$100–249	$250 and over
ALL BANKS							
1 Amount of loans (thousands of dollars)	$753,960	$72,689	$94,609	$93,406	$126,989	$166,393	$199,874
2 Number of loans	32,302	19,936	6,515	2,611	1,947	1,077	216
3 Weighted average maturity (months)[3]	7.4	6.1	8.0	9.3	10.2	7.2	4.6
4 Weighted average interest rate (percent)[4]	11.59	12.10	11.91	12.01	12.03	11.49	10.84
5 Standard error[5]	.60	.52	.45	.89	.55	.97	.22
6 Interquartile range[6]	10.74–12.13	11.57–12.55	11.42–12.40	11.40–12.68	11.63–12.47	10.56–12.01	10.38–11.57
By purpose of loan							
7 Feeder livestock	11.57	12.25	11.53	12.19	11.76	11.34	11.02
8 Other livestock	11.72	13.31	12.75	11.62	11.98	*	*
9 Other current operating expenses	11.57	12.06	11.93	11.87	12.17	11.06	10.73
10 Farm machinery and equipment	12.22	11.89	12.33	*	*	*	*
11 Farm real estate	11.53	11.54	12.14	*	*	*	*
12 Other	11.35	11.58	12.40	12.00	12.15	11.71	11.03
Percentage of amount of loans							
13 With floating rates	62.6	51.7	53.7	65.8	52.7	71.1	68.4
14 Made under commitment	61.6	43.2	48.5	58.0	38.5	56.9	94.7
By purpose of loan							
15 Feeder livestock	28.6	14.4	31.1	39.2	27.7	42.0	16.9
16 Other livestock	13.8	4.2	6.8	6.3	17.3	*	*
17 Other current operating expenses	38.0	68.6	46.5	41.1	32.7	34.8	27.4
18 Farm machinery and equipment	3.5	5.4	6.2	*	*	*	*
19 Farm real estate	3.1	1.2	4.6	*	*	*	*
20 Other	13.1	6.2	4.7	3.7	9.5	6.0	32.4
LARGE BANKS[14]							
1 Amount of loans (thousands of dollars)	$273,529	$6,442	$10,980	$17,162	$22,379	$35,282	$181,285
2 Number of loans	3,480	1,555	706	479	332	242	165
3 Weighted average maturity (months)[3]	5.6	7.0	5.7	9.7	9.6	12.3	4.0
4 Weighted average interest rate (percent)[4]	11.10	12.37	12.09	11.89	11.76	11.58	10.75
5 Standard error[5]	.56	.49	.43	.85	.51	.68	.18
6 Interquartile range[6]	10.47–11.63	11.81–12.83	11.57–12.68	11.46–12.40	11.30–12.28	11.02–12.02	10.38–11.07
By purpose of loan							
7 Feeder livestock	11.08	11.86	11.71	11.67	11.62	11.35	10.71
8 Other livestock	10.73	12.46	12.14	12.04	*	*	*
9 Other current operating expenses	11.22	12.41	12.14	11.87	11.60	11.69	10.73
10 Farm machinery and equipment	11.99	12.71	*	*	*	*	*
11 Farm real estate	11.98	*	*	*	*	*	*
12 Other	11.17	12.07	12.29	12.00	11.95	11.71	10.93
Percentage of amount of loans							
13 With floating rates	74.9	86.8	94.4	96.4	91.2	95.9	65.1
14 Made under commitment	91.4	78.5	89.7	87.8	81.2	88.3	94.1
By purpose of loan							
15 Feeder livestock	16.5	8.7	13.7	19.1	23.3	28.5	13.5
16 Other livestock	19.0	5.8	6.0	7.5	*	*	*
17 Other current operating expenses	35.4	68.2	61.4	52.3	41.2	35.7	30.2
18 Farm machinery and equipment	.8	4.2	*	*	*	*	*
19 Farm real estate	.9	*	*	*	*	*	*
20 Other	27.4	9.6	13.2	17.1	21.3	28.2	30.5
OTHER BANKS[14]							
1 Amount of loans (thousands of dollars)	$480,431	$66,248	$83,628	$76,244	$104,611	$131,111	*
2 Number of loans	28,822	18,381	5,808	2,132	1,616	835	*
3 Weighted average maturity (months)[3]	8.2	6.0	8.2	9.2	10.3	6.7	*
4 Weighted average interest rate (percent)[4]	11.86	12.07	11.89	12.04	12.09	11.46	*
5 Standard error[5]	.20	.16	.12	.27	.19	.68	*
6 Interquartile range[6]	11.30–12.47	11.57–12.50	11.41–12.36	11.40–12.68	11.63–12.47	10.56–11.91	*
By purpose of loan							
7 Feeder livestock	11.70	12.27	11.52	12.24	11.79	*	*
8 Other livestock	12.72	13.43	*	*	*	*	*
9 Other current operating expenses	11.75	12.03	11.89	11.88	*	*	*
10 Farm machinery and equipment	12.24	11.83	*	*	*	*	*
11 Farm real estate	11.48	*	*	*	*	*	*
12 Other	11.91	11.50	*	*	*	*	*

For notes see end of table.

4.23—Continued
C. Loans to Farmers[14]—Continued

Characteristic	Size class of loans (thousands)						
	All sizes	$1–9	$10–24	$25–49	$50–99	$100–249	$250 and over
Percentage of amount of loans							
13 With floating rates	55.6	48.3	48.4	58.9	44.5	64.5	*
14 Made under commitment	44.6	39.8	43.1	51.3	29.4	48.4	*
By purpose of loan							
15 Feeder livestock	35.4	15.0	33.4	43.7	28.7	*	*
16 Other livestock	10.8	4.0	*	*	*	*	*
17 Other current operating expenses	39.5	68.6	44.6	38.6	*	*	*
18 Farm machinery and equipment	5.0	5.5	*	*	*	*	*
19 Farm real estate	4.4	*	*	*	*	*	*
20 Other	5.0	5.8	*	*	*	*	*

*Fewer than 10 sample loans.

1. The survey of terms of bank lending to business collects data on gross loan extensions made during the first full business week in the mid-month of each quarter by a sample of 340 commercial banks of all sizes. A subsample of 250 banks also report loans to farmers. The sample data are blown up to estimate the lending terms at all insured commercial banks during that week. The estimated terms of bank lending are not intended for use in collecting the terms of loans extended over the entire quarter or residing in the portfolios of those banks. Construction and land development loans include both unsecured loans and loans secured by real estate. Thus, some of the construction and land development loans would be reported on the statement of condition as real estate loans and the remainder as business loans. Mortgage loans, purchased loans, foreign loans, and loans of less than $1,000 are excluded from the survey.

As of Dec. 31, 1987, assets of most of the large banks were at least $6.0 billion. For all insured banks total assets averaged $220 million.

2. Beginning with the August 1986 survey respondent banks provide information on the type of base rate used to price each commercial and industrial loan made during the survey week. This reporting change is reflected in the new column on the most common base pricing rate in table A and footnote 13 from table B.

3. Average maturities are weighted by loan size and exclude demand loans.

4. Effective (compounded) annual interest rates are calculated from the stated rate and other terms of the loan and weighted by loan size.

5. The chances are about two out of three that the average rate shown would differ by less than this amount from the average rate that would be found by a complete survey of lending at all banks.

6. The interquartile range shows the interest rate range that encompasses the middle 50 percent of the total dollar amount of loans made.

7. The most common base rate is that rate used to price the largest dollar volume of loans. Base pricing rates include the prime rate (sometimes referred to as a bank's "basic" or "reference" rate); the federal funds rate; domestic money market rates other than the federal funds rate; foreign money market rates; and other base rates not included in the foregoing classifications.

8. Overnight loans are loans that mature on the following business day.

9. Demand loans have no stated date of maturity.

10. Nominal (not compounded) annual interest rates are calculated from survey data on the stated rate and other terms of the loan and weighted by loan size.

11. The prime rate reported by each bank is weighted by the volume of loans extended and then averaged.

12. The proportion of loans made at rates below prime may vary substantially from the proportion of such loans outstanding in banks' portfolios.

13. 58.5 percent of construction and land development loans were priced relative to the prime rate.

14. Among banks reporting loans to farmers (Table C), most "large banks" (survey strata 1 to 3) had over $600 million in total assets, and most "other banks" (survey strata 4 to 6) had total assets below $600 million.

The survey of terms of bank lending to farmers now includes loans secured by farm real estate. In addition, the categories describing the purpose of farm loans have now been expanded to include "purchase or improve farm real estate." In previous surveys, the purpose of such loans was reported as "other."

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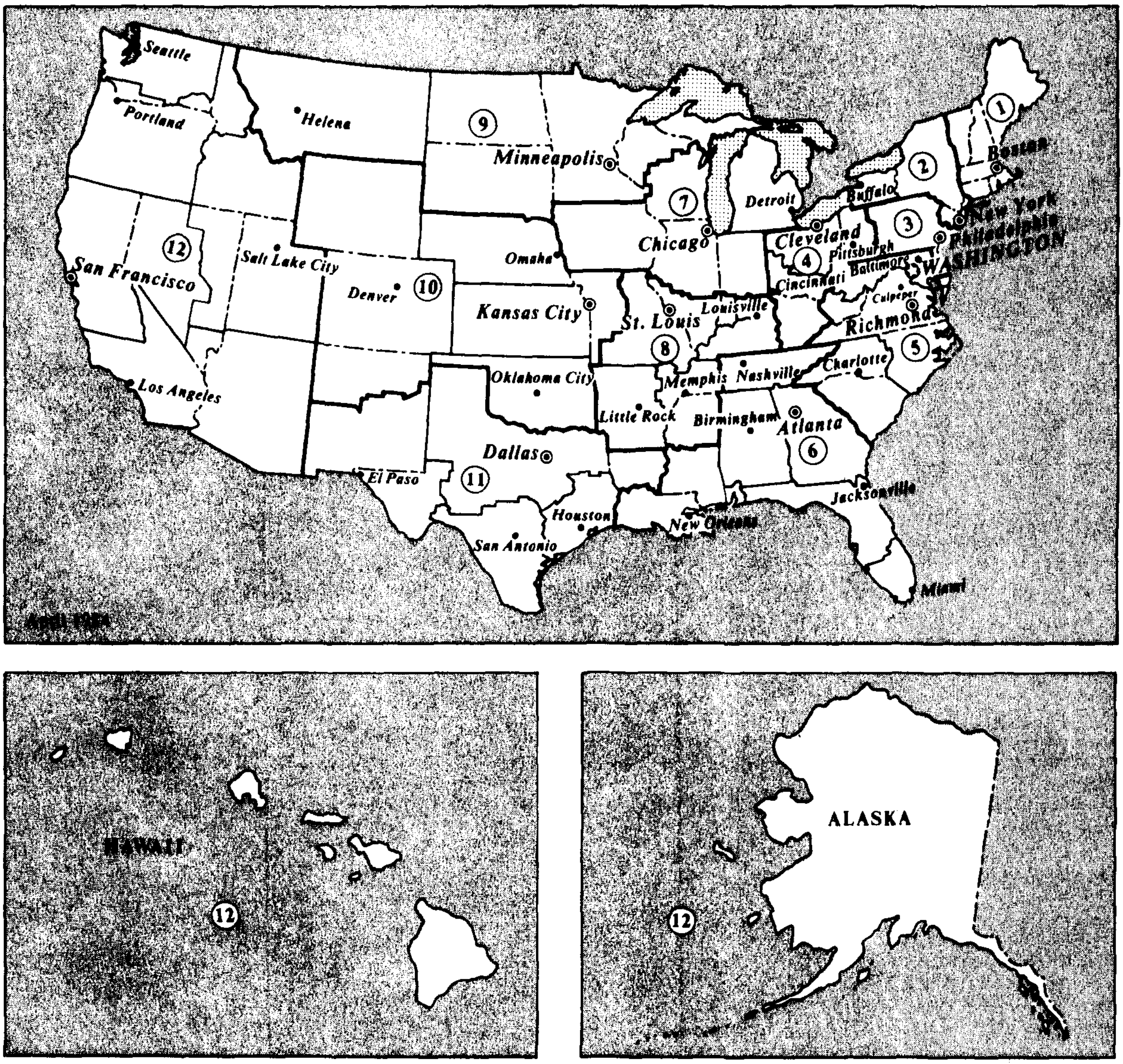

LEGEND

- Boundaries of Federal Reserve Districts
- Boundaries of Federal Reserve Branch Territories
- Board of Governors of the Federal Reserve System
- Federal Reserve Bank Cities
- Federal Reserve Branch Cities
- Federal Reserve Bank Facility