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U.S. Exchange Rate Policy: Bretton Woods to Present

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Over the past thirty years or so, the United States has operated under two distinct exchange rate regimes. The first, which lasted effectively from December 1958 to March 1973, was the Bretton Woods system of fixed exchange rates. In the second, which began in March 1973 and has continued to the present, exchange rates have been subject to managed floating. This article traces the evolution of U.S. exchange rate policy through these two regimes, focusing for each on the broad objectives of U.S. policy, operational objectives and approaches, and the major episodes in policy during the period.

THE BRETTON WOODS SYSTEM: DECEMBER 1958 TO MARCH 1973

The system of fixed exchange rates was provided for in the *Articles of Agreement*, the charter for the International Monetary Fund that was negotiated at Bretton Woods, New Hampshire, in 1944. Although the *Articles* went into force in December 1945, the system of fixed exchange rates envisaged at Bretton Woods became fully operational only at the end of 1958, when most major foreign currencies became convertible for the private sector into dollars for current account transactions.[1] Under the Bretton Woods system, par values were established for the currencies of IMF member countries in terms of gold or the "U.S. dollar of specified gold content."[2] Foreign monetary authorities were obliged to intervene in foreign exchange markets to maintain the value of their currencies within 1 percent of their dollar parities. Monetary authorities in major foreign countries undertook this intervention in dollars; the U.S. Treasury stood ready to sell gold to them or buy it from them at the official price of $35 per ounce. In light of this commitment by the United States and the dominance of the U.S. economy, the dollar was the principal reserve currency and, aside from gold, the principal reserve asset of the Bretton Woods system. Sterling remained a reserve currency, but it was only a minor one for countries outside of the British Commonwealth.

Because the responsibility for intervention in exchange markets lay with foreign authorities, direct U.S. intervention during the Bretton Woods era was extremely limited. Before August 15, 1971, U.S. operations were restricted largely to two types: selling gold to foreign authorities for the dollars acquired by those authorities in exchange market intervention; and, later, buying dollars from foreign authorities in return for that country's currency, which the United States had acquired by drawings on the Federal Reserve swap network and the issuance of bonds denominated in foreign currencies. Only after the dollar had been declared inconvertible into gold, had

1. In 1958, among European countries, only Germany also permitted convertibility for the proceeds of capital account transactions. The Japanese yen was not convertible for current account transactions until 1964.

2. Initially, the par value of the dollar was defined by the President at $35 per ounce of gold under the authority granted to him by the Gold Reserve Act of 1934. The Congress modified the par value of the dollar to $38 per ounce of gold in the Par Value Modification Act, passed in February 1972. This act was subsequently amended in September 1973, to redefine the par value as $42.22 per ounce of gold. When the Second Amendment to the *Articles of Agreement* was approved on October 19, 1976, the Congress repealed the Par Value Modification Act but retained the value of $42.22 per ounce of gold for the purpose of valuing the U.S. gold stock.

been devalued in the Smithsonian Agreement, and still was under downward pressure in exchange markets, did U.S. authorities undertake much direct intervention in the exchange market.

Broad Objectives of U.S. Exchange Rate Policy

In establishing the Bretton Woods system, the IMF's *Articles of Agreement* heavily stressed exchange rate stability. The intent was to discourage the competitive devaluations that were viewed as contributing to economic and financial chaos in the 1920s and 1930s. The *Articles* formally permitted adjustment of a currency's par value only if the country's balance of payments was in "fundamental disequilibrium." This was an imprecise concept, but it came to mean that exchange rates would be adjusted only as a last resort and only in conjunction with other policies to redress the disequilibrium.

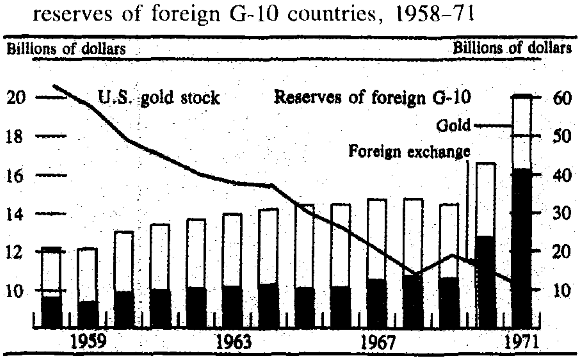
Given the widespread concern about competitive devaluations and the goal of maintaining a system of fixed exchange rates, the overriding objective of U.S. exchange rate policy was the maintenance of a fixed par value of the dollar. Keeping the dollar a leading standard and store of value provided a stable center for the world's monetary structure. Revaluations of foreign currencies against gold and the dollar, though few, were more readily accepted by the United States than devaluations, which were considered appropriate only if unavoidable. Devaluation of the dollar, under the Bretton Woods system, could be achieved only by an increase in the dollar price of gold without a commensurate increase in the price of gold in terms of other currencies. Hence, it could not be accomplished without the cooperation of foreign authorities. Moreover, most U.S. policymakers ruled out devaluation of the dollar: They saw it as likely to disturb the world economy by increasing the propensity to shift reserves out of dollars and into gold and thereby undermining confidence in the fixed exchange rate system.

Operational Objectives and Approaches

The credibility of the U.S. commitment to convert dollars into gold came into question in the early 1960s, when the United States began to cumulate deficits in its balance of payments. (See the glossary for a definition of this term and others used in this article.) From 1960 to 1967, as U.S. residents continued to invest in the reconstruction of Western Europe and Japan, large capital outflows generally outweighed surpluses in the U.S. trade and current accounts. Foreign monetary authorities began to accumulate dollars as they intervened to maintain the value of their currencies in the face of growing U.S. payments deficits. In turn, they purchased gold more and more from the U.S. Treasury with these dollars. The Treasury sold, net, more than $10 billion worth of gold between December 1958 and August 1971, cutting its gold stock in half (see chart 1). Sales to France and in the London gold market to stabilize the market price around the official price accounted for much of this total. Even if gold were not immediately demanded, there remained the threat that it could be demanded by foreign monetary authorities. To preserve the credibility of the offer to convert dollars into gold and, with it, the stability of the Bretton Woods system, the protection of the U.S. gold stock became the key operational objective of U.S. exchange rate policy. The government adopted five approaches to meeting this objective.

Operations in Foreign Currencies. As the first line of defense, U.S. authorities resumed operations in foreign currencies in the early 1960s, after a hiatus of nearly thirty years. The Treasury, using the Federal Reserve Bank of New York as its fiscal agent, began operations in 1961.

1. U.S. gold stock and gold and foreign exchange reserves of foreign G-10 countries, 1958–71



Gold is valued at $35 per ounce. The data are for the end of the periods, except for 1971, for which the data are for the end of August.

Glossary

Balance of Payments. The balance of payments is defined in various ways. Under the Bretton Woods system, analysis of longer-run fundamentals tended to focus on the basic balance, consisting of the current account plus net long-term capital flows. From the perspective of potential claims on the gold stock, however, policymakers generally used the official settlements balance—the basic balance plus net private short-term capital. Unless otherwise specified, the concept used in this paper for the Bretton Woods period is the official settlements balance. Under the regime of floating exchange rates, measures of the overall balance of payments were abandoned and attention focused on current account positions.

Carter Bonds. Carter bonds were two- to four-year notes denominated in marks and Swiss francs and issued publicly by the U.S. Treasury in the German and Swiss capital markets between late 1978 and January 1980. They were issued to supplement foreign currency resources for U.S. intervention.

Group of Five or G-5 Countries. The countries are France, Germany, Japan, the United Kingdom, and the United States.

Group of Seven or G-7 Countries. The countries include the G-5 countries plus Canada and Italy.

Group of Ten or G-10 Countries. The countries were those members of the IMF participating in the General Agreements to Borrow—originally, Belgium, Canada, France, Germany, Italy, Japan, the Netherlands, Sweden, the United Kingdom, and the United States. In 1984, Switzerland joined the G-10, making in fact eleven countries, but by convention the name remains the G-10. The usage of G-10 throughout this article includes Switzerland, even though it was not a member of the IMF, because it was party to the various agreements regarding exchange rates and before joining the G-10 had an agreement parallel to the General Agreements to Borrow to lend its currency to the IMF.

Roosa Bonds. Roosa bonds were medium-term bonds denominated in foreign currencies issued to official institutions of foreign countries intermittently from 1962 to 1971, in an effort to defend the U.S. gold stock. They were issued in German marks, Swiss francs, Italian lira, Belgian francs, and Austrian schillings. Earlier issues, also called Roosa bonds, were denominated in dollars and had special maturity and interest rate provisions.

SDRs. Special drawing rights are international reserve assets created by the International Monetary Fund. The IMF has allocated a total of SDR 21.4 billion in six allocations since the SDR was established in 1969. The amount allocated to a participant is proportionate to its quota in the Fund at the time of the allocation. The value of the SDR initially was defined in terms of gold, at SDR 35 per ounce. After the move to widespread floating of exchange rates in 1973, the value of the SDR was redefined in terms of a basket of currencies. Initially, the currencies were those of the sixteen countries that had a share in world exports of goods and services in excess of 1 percent on average over the period 1968–72—the G-10 countries plus Australia, Denmark, Norway, Spain, Austria, and South Africa. The composition and weights for the basket of sixteen currencies were revised in July 1978 to reflect export shares for 1972–76. In 1981, the Fund decided to restrict the currencies in the basket to those of the five most important countries in world trade—the United States, West Germany, Japan, France, and the United Kingdom.

Swap Network. The swap network is a series of bilateral arrangements between the Federal Reserve and fourteen foreign central banks and the BIS providing standby reciprocal facilities for obtaining foreign currencies. The facilities provide for the swap (simultaneous spot purchase and forward sale) of each other's currency by the Federal Reserve and the respective foreign central bank. Swap drawings typically have a three-month maturity, with an understanding that they may be more or less automatically rolled over for another three months.

Warehousing. In a warehousing operation, the Federal Reserve buys foreign currencies spot from the Exchange Stabilization Fund, and simultaneously sells back the proceeds for delivery at a specified future date. Because both purchase and sale are made at a given exchange rate, neither side incurs additional exchange rate risk; interest earnings on the foreign currencies warehoused accrue to the Federal Reserve.

It acted under the authority granted it by the Gold Reserve Act of 1934, which established the Exchange Stabilization Fund for the purpose of stabilizing the exchange value of the dollar. Because the ESF's resources were meager, the Treasury was anxious for the Federal Reserve to participate for its own account in foreign currency operations.[3] The Federal Reserve had operated on a very limited ad hoc basis for its own account in the forward exchange market in 1961. In early 1962, the Federal Open Market Committee (FOMC) authorized operations in foreign currencies, first on an experimental, then on an ongoing basis. In 1963, the Federal Reserve authorized the "warehousing" of foreign currencies for the ESF, and in that year, it made a warehousing-type transaction. By temporarily selling some of its foreign currency holdings to the Federal Reserve for dollars through warehousing, the ESF was able to continue to purchase foreign currencies even after it had exhausted its initial dollar resources.

To supplement resources for foreign currency operations, various credit facilities were developed. Beginning in 1962, the Federal Reserve established a network of reciprocal currency agreements (swap facilities) with the major foreign central banks and the Bank for International Settlements. By the end of 1967, this network consisted of lines with fourteen central banks and the BIS. Drawings on swap lines were explicitly of short term, and were intended to finance or accommodate short-term capital flows believed to be seasonal or temporary in nature. They were not intended as a substitute for more fundamental adjustment in the balance of payments. For its part, the Federal Reserve used its swap drawings mostly to purchase dollars unwillingly held by foreign monetary authorities, thereby assuming the exchange rate risk on those holdings. Otherwise, those dollars could have been converted into gold.

To obtain medium-term credit, the Treasury issued "Roosa bonds," named after then Undersecretary of the Treasury Robert V. Roosa. These bonds were designed to be attractive to foreign monetary authorities as an alternative to converting dollars into gold. Part of the foreign currency proceeds from Roosa bonds was used to extinguish swap debt that otherwise would have lingered beyond the one-year limit set by the FOMC on such drawings.

Finally, the Treasury also could obtain foreign currencies by drawing on its credit facilities with the International Monetary Fund. However, before 1961, the IMF's supply of usable nondollar currencies was limited by the small size of the quotas of its other members. In that year, the United States and the other Group of Ten countries negotiated a mechanism to increase the potential availability of their currencies to the IMF under the General Arrangements to Borrow.

Stabilizing the Market Price of Gold. A second approach used to protect the U.S. gold stock was an attempt to stabilize the *private* market price of gold around the official price of $35 an ounce. The United States was concerned that if the market price were allowed to rise appreciably above the official price, foreign monetary authorities would convert their dollar holdings into gold at the official price in order to profit by later reselling the gold at the higher market price. To eliminate this potential source of pressure on U.S. gold reserves, in 1961 the United States and seven other countries formed the Gold Pool, a consortium to sell officially held gold in the London market to keep the private market price below $35.20 an ounce (roughly the cost of delivering in London gold purchased in New York). The nominal share of the United States in Gold Pool sales was 60 percent; in fact, the share was larger because other central banks converted the dollar proceeds of their Gold Pool sales at the Treasury's gold window in order to replenish their gold stocks. Although the Gold Pool later became a gold-buying as well as gold-selling syndicate, most of its transactions were sales;

3. The ESF had an initial capital of $2 billion derived from the proceeds of the 1934 revaluation of the U.S. gold stock from $20.67 to $35.00 per ounce. Subsequently, the Bretton Woods Agreements Act directed the Secretary of the Treasury to pay $1.8 billion from the ESF for the U.S. quota subscription in the IMF, thereby reducing the ESF's appropriated capital to $200 million. The ESF grew over time through subsequent revaluations of gold, interest receipts, and net profits resulting from foreign exchange operations. Beginning in 1978, SDRs allocated by the IMF to the United States or otherwise acquired by the United States became resources of the ESF, and the ESF was authorized to issue SDR certificates to the Federal Reserve to help finance the ESF's foreign currency operations.

given the large U.S. share in the pool, in the end these sales played a major role in the decline in U.S. gold reserves. Ultimately, in March 1968, the Gold Pool was closed, and a two-tier market for gold was adopted with a fixed price for official transactions and a flexible price in the private market. The United States continued to sell gold to foreign monetary authorities at $35 an ounce, and they, in turn, agreed not to sell gold in the private market.

Freeing Gold for International Settlement. The amount of U.S. gold reserves that were "free," or available for transactions with foreign monetary authorities, was limited by the legal requirement that U.S. monetary authorities hold gold equal to 25 percent of the value of domestic currency as backing for the currency. In a third approach to protecting the U.S. gold stock, this gold cover was repealed, also in March 1968, freeing up additional gold reserves for international settlement.[4]

Redressing the Balance of Payments. The fourth approach used to protect the U.S. gold stock was to redress the balance of payments deficit, both directly through commercial policies and capital controls and indirectly through demand-management policies. Devaluation of the dollar was ruled out by U.S. policy and could not be accomplished unilaterally in any case under the Bretton Woods system.

A sharp deterioration in the U.S. current account, which recorded a deficit in 1959, prompted the United States to tie its foreign aid to its exports and played some role in the adoption of more restrictive monetary and fiscal policies in that year. As the economy entered a recession in 1960, the current account returned to surplus, but the United States continued to run deficits in its balance of payments as a result of capital outflows. During the Kennedy Administration, fiscal policy was directed toward stimulating growth, and monetary policy emphasized redressing the capital outflow. In 1961, debt-management and monetary policies sought to sustain short-term interest rates while allowing long-term rates to decline. This policy, called Operation Twist, was aimed at discouraging capital outflows while encouraging business and residential investment. The investment tax credit, introduced in October 1962, was designed to boost investment without lowering long-term interest rates and possibly exacerbating capital outflows. In 1963, tax rates were reduced, and the Federal Reserve increased its discount rate in July from 3 to 3½ percent "to minimize short-term capital outflows prompted by higher interest rates prevalent in other countries."

In addition, a comprehensive program of capital controls was adopted, which targeted the three main types of capital outflow: American portfolio and direct investment abroad, particularly in Western Europe and Japan, and foreign borrowing in the United States. The interest equalization tax, initiated in 1963, was a reaction to the growing issuance of foreign bonds in the United States: Markets for these issues were developing slowly in other countries, and interest rates were lower in the United States than abroad. The tax was designed to curtail sales of new issues of stocks and bonds by foreigners to U.S. residents. The Federal Reserve's Voluntary Foreign Credit Restraint Program, established in 1965, was intended to limit funding in the United States of U.S. banks' foreign operations.[5] U.S. funding of direct foreign investment by U.S. corporations was limited by a Commerce Department program, begun on a voluntary basis in 1965 but made mandatory in 1968.

Creating a New Reserve Asset. While trying to remedy the payments deficit, U.S. policymakers recognized the need for a systematic means to provide for growth in international liquidity without putting pressure on the role of the dollar in the international monetary system. An expand-

4. The Gold Reserve Act of 1934 required 40 percent gold cover on Federal Reserve notes in circulation and 35 percent cover on deposits at Federal Reserve Banks. In 1945, these requirements were reduced to a uniform 25 percent. In March 1965, the 25 percent gold cover on deposits at Federal Reserve Banks was eliminated.

5. As a traditional borrower in U.S. markets, Canada was exempted from both the interest equalization tax and the Voluntary Foreign Credit Restraint Program on the understanding that it would not serve as a conduit for capital flows to the rest of the world.

ing world economy could be expected to generate a secular increase in the demand for international reserves—dollars and gold. That demand had been met through the early 1960s by a buildup of official claims on the United States as foreign monetary authorities intervened to maintain the value of their currencies against the dollar. Gold and foreign exchange reserves of the foreign G-10 countries tripled over the Bretton Woods period, as chart 1 shows. Most of the growth reflects an increase in foreign exchange (essentially dollars), which, as is evident from the chart, was not matched by a rise in the U.S. gold stock. Hence, confidence in the ability of the United States to meet calls on the gold stock diminished. Thus, reliance solely on increases in U.S. liabilities to foreign official institutions for an increase in world reserves was seen to be inconsistent in the long run with maintaining the convertibility of the dollar into gold.

In light of this fundamental tension, the final approach to protecting the U.S. gold stock and the stability of the Bretton Woods system was to create a reserve asset whose supply could be systematically increased as the world economy expanded. This approach was proposed by the United States and eventually resulted in an agreement to create SDRs (Special Drawing Rights of the International Monetary Fund) through the First Amendment to the IMF *Articles of Agreement*, which was adopted in 1968 and became effective the following year. The first allocation of SDRs was made in January 1970.

Major Episodes and U.S. Responses

Responding to the strains that divergent macroeconomic policies, structural changes in the world economy, and resulting payments imbalances placed on the Bretton Woods system, monetary authorities devalued and revalued currencies or on occasion allowed them to float. The United States generally welcomed revaluations but considered devaluations appropriate only if they were unavoidable. However, when sterling came under pressure intermittently in 1964–67, the United States was concerned that the devaluation of the other major reserve currency would exert substantial market pressure on the dollar.

During the summer of 1964, the U.K. balance of payments deteriorated sharply, largely because of a stimulative fiscal policy. After the Labor Party's victory in October 1964, selling pressure on sterling intensified as the new government's policies showed little prospect for redressing the payments deficit. The U.K. government strongly opposed the devaluation of sterling. The United States endorsed this position and participated in international credit packages to bolster U.K. reserves, including increases in the Federal Reserve's swap line with the Bank of England in 1964 and 1966. When sterling again came under downward pressure in the second half of 1965, the Federal Reserve joined a number of European central banks and the Bank of Japan in purchasing sterling in the market. Exchange rate risk on the sterling acquired was covered by agreements with the Bank of England.

After intermittent recoveries and bouts of selling pressure, sterling again came under persistent downward pressure beginning in the spring of 1967, for several reasons: U.K. monetary policy eased; tensions mounted in the Middle East culminating in war; and the U.K. trade position steadily deteriorated, especially after the closing of the Suez Canal. In an effort to support sterling, U.S. authorities purchased it in the market on a swap basis (that is, they bought sterling spot against redelivery to the market at a future date). After several increases in the Bank of England's official lending rate failed to relieve the pressure on sterling, the U.K. authorities devalued the pound in November 1967. No major country followed the United Kingdom in devaluing; nonetheless, the devaluation of sterling brought into question the basic premise of the Bretton Woods system that par values of reserve currencies should be regarded as fixed.

By late 1967, U.S. inflation had risen, and the balance of payments had worsened as a consequence of the economic expansion associated with the Vietnam War. Rapid advances in Japan's international competitiveness, following its postwar reconstruction, exacerbated the U.S. payments imbalance. In this context, selling pressure shifted from sterling to the dollar. The pressure took the form of record private purchases of gold in London and shifts of private funds from dollars into continental currencies.

The United States reaffirmed its commitment to maintain the official price of gold at $35 per ounce and, acting jointly with other members of the Gold Pool, continued to stabilize the market price through sales in the London market. The Federal Reserve also enlarged its swap lines, which were used to absorb some of the dollars flowing to foreign central banks; and to a limited extent it sold foreign currencies forward to the market. However, heavy sales of gold by members of the Gold Pool tended to encourage further speculative buying as market participants came to expect that, given the implied loss of gold, these operations would be abandoned. Indeed, the Gold Pool was disbanded in March 1968, and the two-tier pricing system was established.

Continued deterioration in the U.S. trade and current accounts was offset in 1969 by increases in U.S. monetary restraint, which supported the dollar. However, once U.S. monetary conditions eased as domestic economic activity slowed, the deterioration in the external accounts again came to the fore, and by 1971 the dollar came under heavy selling pressure. U.S. authorities responded initially with limited forward sales of foreign currencies and swap drawings to mop up part of the purchases of dollars by foreign central banks. Some foreign countries, notably Germany, abandoned parities and began to allow their currencies to float in May 1971. After selling pressure on the dollar intensified and foreign central banks stepped up their demands for gold conversions, President Nixon, on August 15, 1971, suspended convertibility of dollars into gold or other reserve assets for foreign monetary authorities. He also announced a temporary 10 percent surcharge on imports to ensure "that American products will not be at a disadvantage because of unfair exchange rates" and a 10 percent tax credit to businesses that invested in American-made equipment (the job development credit). Use of the Federal Reserve swap network was suspended after the closing of the gold window. Foreign authorities then had the choice of continuing to pile up dollars in their official reserves that were now inconvertible into gold or allowing their currencies to appreciate. The United States no longer intervened in the market to support the dollar. By the end of August, all major currencies except the French franc were floating. The use of exchange controls in foreign countries proliferated, and intervention by foreign central banks to slow the appreciation of their currencies against the dollar was substantial, even though they were no longer defending fixed dollar parities.

A system of fixed parities among the currencies of the G-10 countries was re-established through a negotiated realignment of exchange rates in the Smithsonian Agreement of December 1971. The dollar was devalued in terms of gold to $38 per ounce; other currencies generally were revalued against the dollar by varying amounts. These changes in parities resulted in an effective devaluation of the dollar of nearly 10 percent on average against the other G-10 currencies. The amount of the devaluation fell short of the best U.S. government estimates of what would be required to restore the U.S. external position to a sustainable balance. Other G-10 countries, however, would not agree to a larger devaluation of the dollar. Recognizing that somewhat more flexibility in exchange rates was desirable, the G-10 authorities widened the margins for intervention to 2¼ percent to permit small adjustments in exchange rates without changes in par values. The United States made no commitment to defend the Smithsonian parity for the dollar through intervention or to restore the convertibility of the dollar into gold: Intervention was still left to foreign monetary authorities if they wanted to maintain their new parities. The United States did agree to examine the case for a more thorough reform of the international monetary system, which led to the establishment in 1972 of the Committee on Reform of the International Monetary System and Related Issues (the Committee of Twenty, or C-20). It also terminated the import surcharge and the job development credit.

As downward pressure on the dollar continued after the Smithsonian Agreement, and the United States refrained from intervening to defend the dollar, market participants began to doubt that foreign monetary authorities would continue to buy inconvertible dollars. As selling pressure on the dollar mounted, the United States, in July 1972, resumed limited sales of foreign currencies to defend the dollar's Smithsonian parities, and the swap network was reactivated.

New concerns about the durability of the Smithsonian Agreement surfaced in early 1973, after the Swiss authorities permitted their currencies to float and Italian authorities adopted dual exchange rates. (The United Kingdom had already allowed sterling to float, in June 1972.) In this context, a tightening of monetary policies abroad, the partial relaxation of the U.S. wage–price controls imposed in August 1971, and the sluggish response of the U.S. trade account to the dollar's depreciation in the Smithsonian realignment helped renew downward pressure on the dollar. In February 1973, the dollar was devalued a second time, by 10 percent in terms of gold to $42.22 per ounce. Nearly all other major currencies accepted the full devaluation of the dollar, and the yen floated to an even higher level. At the same time the dollar was devalued, U.S. authorities stated their intention to phase out all controls on capital outflows over the next two years.[6] They expected that the second devaluation of the dollar would be sufficient to remedy the disequilibrium in the U.S. balance of payments, but the market was not persuaded. The dollar fell to its new floor against the major continental European currencies, a development that triggered massive intervention by some foreign central banks. Ultimately, in March, the system of fixed parities effectively was suspended, and the G-10 authorities de facto adopted generalized floating of their exchange rates.

Managed Floating: March 1973 to Date

Initially, the move to generalized floating was widely viewed as a temporary means of coping with speculative pressures, rather than as a permanent feature of the international monetary system. In the discussions of the Committee of Twenty, the par value system still was regarded as the "normal" regime, and "the task of monetary reform was viewed as one of improving the Bretton Woods system so that it would operate without frequent crises, and in a more symmetrical fashion" than previously, "to facilitate the continued expansion of international trade and productive capital flows."[7]

Although some issues were never completely resolved, the Committee of Twenty described a reformed monetary system in its *Outline for Monetary Reform* issued in June 1974. The system had five broad features:

1. *An exchange rate regime based on stable but adjustable par values.* It would include the right to float in particular situations, subject to Fund authorization.

2. *A greater symmetry in adjustments to the balance of payments.* Under the old system, a country in deficit that was losing reserves was pushed more quickly than a country in surplus to deal with its balance of payments problem, either through demand-management policy, or by adjusting the par value of its currency. The U.S. authorities, in particular, believed that because the exchange rate parities of other currencies were defined in terms of the dollar so that the dollar was the residual currency, other countries were allowed to maintain undervalued currencies and accumulate payments surpluses, while the United States ran deficits. As a means of remedying this asymmetry, countries in surplus would now have a larger responsibility for correcting their payments positions.

3. *Multilateral surveillance.* In the context of a par value system in which convertibility could be suspended, the United States favored an international reserve indicator as an objective gauge of whether a country's policies were consistent with overall equilibrium in the balance of payments and with adequate growth in global liquidity (at existing par values). The use of this indicator was thought to put more pressure on countries in surplus to adjust.

4. *Convertibility.* European authorities focused on the lack of mandatory convertibility of dollars under the Bretton Woods system and believed that if the United States were required to finance its payments deficits with reserve assets (gold, SDRs, and Fund drawings), it would have a greater incentive to adopt policies to eliminate its deficits. The United States wanted to limit the

6. U.S. capital controls were dismantled in early 1974.

7. Robert Solomon, *The International Monetary System 1945–1981*, rev. ed. (Harper & Row, 1982).

convertiblity of dollars beyond a certain point for surplus countries as a means of encouraging a more symmetric adjustment of payments imbalances.

5. *Better international management of global liquidity.* The SDR would become the principal reserve asset, and the role of gold and reserve currencies would be reduced.

Meanwhile, the increase in worldwide inflation in 1972–74, associated in part with the runup in oil prices in 1973, led to a divergence in rates of inflation across countries and increased strains on countries' external positions; these problems were aggravated by the worldwide recession in 1974–75. Under these circumstances, a system of par values seemed even less viable than before. Moreover, the world economy had been functioning reasonably well under a mixed floating system for a few years. The United States shifted from favoring a system of stable, but adjustable par values, with floating in particular situations, to explicitly advocating a system of floating exchange rates as a long-run option.

The Committee of Twenty recognized that the international monetary system was in flux and that it might be particularly difficult in the circumstances of the time to return to a par value system. However, it recommended the immediate adoption in the interim of "appropriate guidelines for the management of floating exchange rates." These were agreed to in 1974, though many of the rest of the committee's recommendations were not adopted because there was never a return to a par value system.

Floating was finally legitimatized at the Rambouillet Economic Summit among the major industrial countries in November 1975. The agreement reached there, which had been worked out in advance between the representatives of the United States and France, had two basic elements. The first was to "deepen, systematize, and broaden" daily consultation among the monetary authorities, including central banks, of the larger countries with regard to exchange market intervention. Second, Article IV of the IMF's *Articles of Agreement*, governing exchange arrangements, was to be revised to permit a member to choose its own exchange arrangements—including floating. Under the revised article, completed in 1976, a return to a generalized par value system, if deemed appropriate, requires an 85 percent majority vote of the IMF membership, effectively giving the United States a veto over such a move.

Article IV also provides for surveillance over the Fund's members to ensure effective operation of the international monetary system and compliance with members' general obligations, which include (1) "endeavoring to direct economic and financial policies toward . . . fostering orderly economic growth with reasonable price stability;" (2) "fostering orderly economic and financial conditions and a monetary system that does not tend to produce erratic disruptions;" and (3) "avoiding manipulating exchange rates or the international monetary system in order to prevent effective balance of payments adjustment or to gain an unfair competitive advantage over other members." This new Article IV was incorporated, along with a number of other significant changes, in the Second Amendment of the IMF's *Articles of Agreement*, which became effective April 1, 1978.

Broad Objectives of U.S. Exchange Rate Policy

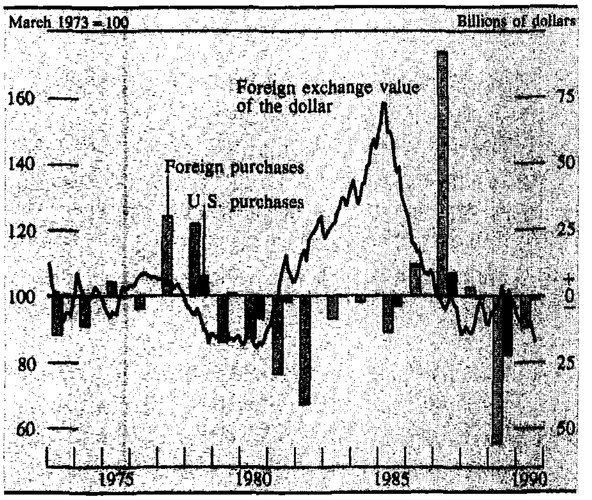
In conjunction with the decision in March 1973 to suspend the commitment to intervene in support of fixed parities against the dollar, the G-10 countries issued a communiqué stating that "official intervention may be useful at appropriate times, to facilitate the maintenance of *orderly* market conditions"(emphasis added). An eventual return to a par value system was assumed, and intervention was viewed as a way to maintain order in the interim. Subsequently, as a system of floating exchange rates came to be regarded as the norm, the statement about intervention in the Rambouillet Declaration was changed to "countering *disorderly* market conditions" (emphasis added). The Rambouillet formulation was repeated in the IMF's *Principles for the Guidance of Members' Exchange Rate Policies.*[8] This concept has since guided U.S.

8. International Monetary Fund, *Selected Decisions and Selected Documents*, Fourteenth Issue (IMF, April 30, 1989). These principles, first adopted in April 1977, specify that "(1) A member shall avoid manipulating exchange rates or the international monetary system in order to prevent effective balance of payments adjustment or to gain an unfair

exchange rate policy and appears in both the U.S. notification to the IMF of its exchange arrangements and the FOMC's Foreign Currency Directive.[9]

A precise official definition of "disorderly market conditions" has never been attempted. In a narrow sense, the phrase has been understood to mean market disruptions of very short duration. In a broader sense, the phrase has referred to episodes in which policymakers deem market exchange rates to be clearly out of line with economic fundamentals. In his testimony before the Joint Economic Committee in January 1989, Alan Greenspan, the Chairman of the Federal Reserve Board, interpreted the phrase "countering disorderly market conditions" as fostering exchange rate stability, consistent with understandings among the Group of Seven (G-7) countries.

2. Net official purchases of dollars and the foreign exchange value of the dollar, 1973–90



Net official foreign purchases of dollars are those by thirteen major foreign countries. The foreign exchange value of the dollar is its weighted average against the currencies of the foreign G-10 countries; the weights used are total trade for 1972–76. This series is plotted monthly. The 1990 data for both series are for the first seven months.

Operational Objectives and Approaches

Since 1973, the frequency and size of U.S. foreign exchange operations have varied, as chart 2 illustrates. Intervention was substantial in 1977–79, when the dollar was deemed unacceptably low. U.S. operations were minimal during the first Reagan Administration, in line with its policy of limiting government interference in markets generally; they were directed mainly at countering short-run market disruptions. Intervention was substantial again in the autumn of 1985, when the dollar was regarded as unacceptably high. By far the most extensive U.S. intervention operations, however, have taken place since the Louvre Accord of February 1987; since then U.S. operations have been guided largely by informal understandings with the other G-7 countries about the limits of tolerance for exchange rate fluctuations. Throughout the floating-rate period, other countries' intervention policies have been mixed, with some countries adopting a consistently more active policy than the United States.

Although episodes of U.S. intervention have been relatively infrequent since 1973, the amounts involved sometimes have been sizable. Accordingly, the United States at times has taken steps to increase foreign currency resources for intervention, particularly when the dollar was under sustained downward pressure. The overall size of the Federal Reserve's swap lines with other central banks was enlarged. A new swap line between the ESF and the Bundesbank was established in early 1978, and the ESF became an active partner in the financing of intervention at that time. During 1978, the Treasury sold SDRs for foreign currency, drew on its reserve position at the IMF, and began to issue securities denominated in foreign currencies in the private market ("Carter bonds"). In late 1980, U.S. authorities for the first time began to build up substantial foreign currency reserves through purchases in the market and from other central banks, after having first covered outstanding foreign currency liabilities.

competitive advantage over other members. (2) A member should intervene in the exchange market if necessary to counter disorderly conditions which may be characterized inter alia by disruptive short-term movements in the exchange value of its currency. (3) Members should take into account in their intervention policies the interests of other members, including those of the countries in whose currencies they intervene."

9. The U.S. notification to the IMF was amended following the Plaza Agreement of September 1985 to provide for intervention "to counter disorderly market conditions, or when otherwise deemed appropriate."

During times when the dollar's exchange value raised particular concern—in 1977–79, 1984–85, and 1987—it became a significant factor in Federal Reserve decisions regarding monetary policy. Furthermore, consultation and cooperation on macroeconomic policies by the major industrial countries have increased over the floating-rate era amid a growing perception that the existing international monetary arrangements have not exerted as much equilibrating influence on payments imbalances, or provided as much independence for monetary policies, as had been hoped. Wide swings in exchange rates have occurred, contributing to large trade imbalances and resource reallocations, and pointing up the need for more compatible policies among the major countries.

Major Episodes and U.S. Responses

The first time U.S. authorities intervened following the adoption of generalized floating was in July 1973. Concern over rising U.S. inflation, forecasts of vastly higher energy imports, and the potential ramifications of the Watergate affair weighed on the dollar; at the same time, a tightening of German monetary policy supported the mark and associated European currencies. As the dollar fell, trading became increasingly disorderly, with many banks refusing to quote rates. In these circumstances, U.S. authorities intervened to counter disorderly conditions in the markets.

The scale of operations was expanded a bit in the winter of 1974–75. Inflation in the United States was still worrisome, whereas price pressures in many other industrialized countries were abating. Though worldwide, the recession was most severe in the United States. The Federal Reserve had begun to ease money market conditions in the autumn of 1974, and the federal funds rate plummeted from 13 percent in July 1974 to 5⅜ percent in March 1975. With interest differentials between dollar and foreign currency assets eroding, the dollar depreciated. U.S. authorities intervened at first to cushion the dollar's decline. In mid-January 1975, they became more concerned with the dollar's progressive slippage, and stepped up intervention in support of the dollar in concert with the central banks of Germany and Switzerland. Between October 1974 and March 1975, U.S. authorities made gross purchases of $1.4 billion, and the central banks of Germany and Switzerland made somewhat larger dollar purchases. The dollar did not recover until March, when U.S. interest rates stabilized while foreign interest rates declined.

The first sustained period of U.S. intervention under the floating-rate regime occurred in 1977–79. By 1977, rapid growth in U.S. domestic demand had contributed to a deterioration of the U.S. current account balance, which swung from a surplus of more than $4 billion in 1976 to a deficit of more than $14 billion in 1977; it had also contributed to a pick-up in inflation to nearly 7 percent (December to December), up from 5 percent in the previous twelve months. Short-term interest rates in the United States rose during 1977, and the Federal Reserve raised its discount rate twice by year-end. But, with M1 expanding at a rate well beyond the upper limit of the target range set by the FOMC, the perception in exchange markets was that the Federal Reserve was too slow in responding to inflationary pressures. These conditions contrasted with those in Germany and Japan, where a more rapid policy response to inflationary pressures resulted in slower economic growth, contributing to surpluses in current accounts.

As the depreciation of the dollar intensified around the turn of the year, the Federal Reserve responded by raising its discount rate in January 1978 to 6½ percent, citing developments in foreign exchange markets. However, the pace of U.S. inflation quickened to 9 percent in 1978, in part reflecting the past depreciation of the dollar; meanwhile, inflation in the other G-10 countries, on average, declined—from 5½ percent in 1975 to slightly more than 4 percent in 1978. Efforts to reduce the U.S. trade deficit by curbing oil imports also were unsuccessful. The Federal Reserve engineered further firming in money market conditions through the spring and summer, but the growth of M1 still exceeded its targeted range and the dollar continued to fall. Noting both disorderly conditions in exchange markets and the serious U.S. inflation problem, the Federal Reserve in August 1978 raised its discount rate ½ percentage point further to 7¾ percent. This move and subsequent increases in the autumn provided only temporary support for the dollar. Between May and October 1978, President Carter announced a series of measures to fight inflation, including delays and reductions in the amount of scheduled tax cuts, budgetary restraints, and voluntary wage–price guidelines. Following the announcement of the last two measures in October, the dollar tumbled still further, hitting on October 30 a record low on the trade-weighted index compiled by the Federal Reserve Board staff. Two days later, a dollar-defense package was announced. It included a further hike in the discount rate by an unprecedented full percentage point, to a then historic high of 9½ percent. In unveiling the package, President Carter stated that "the continuing decline in the exchange value of the dollar is clearly not warranted by the fundamental economic situation" and "as a major step in the anti-inflation program, it is now necessary to correct the excessive decline in the dollar."

During 1977–79, U.S. authorities also took steps to bolster their resources for intervention. In December 1977, the President announced an explicit undertaking to intervene in concert with other countries to support the dollar. In January 1978, the Treasury stated that the ESF would henceforth be used as an active partner in the financing of intervention, and that a new swap line with the Bundesbank had been established. Furthermore, in March, the Federal Reserve's swap line with the Bundesbank was doubled, and the Treasury sold SDRs to the German central bank for marks. The Treasury also indicated that it was prepared to draw on its reserve position at the IMF to acquire foreign currencies. To further support the dollar, the Treasury announced in May that it would resume auctioning gold to the public.[10] Finally, as part of the November 1, 1978, dollar-defense program, a $30 billion package of foreign currency resources to finance U.S. intervention in cooperation with foreign authorities was put together. It consisted of an increase in Federal Reserve swap lines with the central banks of Germany, Japan, and Switzerland; sales of SDRs; a drawing on the U.S. reserve position at the IMF by the Treasury; and issuance of Carter bonds.[11]

With these resources, U.S. authorities intervened aggressively, sometimes in concert with other central banks. Net official purchases by U.S. authorities in the market from October 1977 through the end of 1978 amounted to about $10 billion, while foreign authorities bought about $37 billion. In 1978, the major central banks more than financed the current account deficit, with net official purchases more than double the $15 billion deficit.

In the first half of 1979, the dollar recovered somewhat, but by mid-June it came under renewed selling pressure. The second oil-price shock in 1979 added substantial upward pressure to price levels worldwide and restricted output. In the United States, these problems were acute: Inflation already was more rapid than in most foreign economies, and the data pointed to a slowdown in economic activity. In contrast, foreign economic growth had not yet begun to decline, with German and Japanese authorities having committed themselves to stimulative fiscal packages at the Bonn Economic Summit in the summer of 1978. Policymakers in most foreign countries responded to the hike in oil prices by tightening monetary conditions, but the Federal Reserve, responding to signs of weakness in the U.S. economy, took less vigorous steps, raising its discount rate 1½ percentage points in three moves in the third quarter of 1979. Nevertheless, the growth of U.S. monetary aggregates remained well above projected rates during the summer of 1979. Furthermore, U.S. energy policy was widely regarded in exchange markets as being in disarray. The subsequent shake-up of the Carter cabinet raised concerns in exchange markets about political leadership as well. Under these circumstances, U.S. authorities intervened substantially during the summer of 1979 to resist the dollar's decline.

The continued weakness in the dollar and other signs of rapidly deteriorating inflation ex-

10. The U.S. Treasury had auctioned a small amount of gold—1.3 million ounces—during 1975–77 to underline the U.S. policy position that gold was no longer a monetary asset and should be treated like any other commodity.

11. In 1978, the FOMC extended the warehousing facility to include the U.S. Treasury's General Fund, which used the warehousing facility for the proceeds of the Carter bonds.

pectations, including sharply rising prices of gold and other commodities, were important considerations in the adoption of new monetary operating procedures by the Federal Reserve on October 6, 1979. The shift in operating procedures entailed a greater emphasis on the control of banks' nonborrowed reserves and, therefore, less control of the federal funds rate. These procedures were intended to assure better control over the growth of the monetary aggregates and, in general, to damp inflationary pressures. The Federal Reserve also increased its discount rate a full percentage point to 12 percent and imposed a supplemental reserve requirement on banks' managed liabilities.

Following the change in operating procedures, U.S. interest rates rose sharply, but political developments in late 1979 weighed on the dollar. These included the taking of U.S. hostages by Iranian militants, the threat by Iranian authorities to withdraw funds from U.S. banks, the freezing of Iranian assets in U.S. banks, and the Soviet invasion of Afghanistan.

During the first quarter of 1980, the dollar strengthened. The demand for money and credit was increasing rapidly: Inflationary expectations were mounting, as increases in consumer prices topped 14 percent in the year ending in March 1980; and financial markets were anxious about the Carter Administration's economic policies, including the imposition of credit controls in March. The Federal Reserve continued to restrain the growth of nonborrowed reserves, and interest rates in the United States soared, with the federal funds rate increasing nearly 4 percentage points, in barely four months, from 13¾ percent in December 1979 to 17⅝ percent in April. U.S. authorities took advantage of the dollar's rebound to acquire foreign currencies to repay debt incurred as a result of dollar-support operations in 1978–79.

Subsequently, as economic activity in the United States contracted sharply in the second quarter of 1980, short-term interest rates in the United States plummeted. Between April and July, the federal funds rate fell more than 8 percentage points, prompting a sharp decline in the dollar. During this period U.S. authorities intervened heavily to slow the dollar's fall.

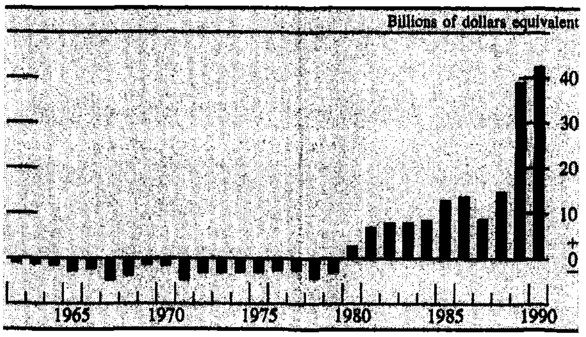
By September 1980, the dollar began to strengthen as the U.S. economy performed favorably compared with other economies. Inflation in the United States had begun to wane, while in several other countries, especially the traditionally low-inflation countries of Europe, it remained high relative to postwar experience. The U.S. economy also showed more resilience, bouncing back from the sharp downturn in the second quarter of 1980; output in most European economies stagnated and unemployment increased. As the U.S. economy rebounded and the Federal Reserve continued to emphasize nonborrowed reserves, interest rate differentials moved sharply in favor of dollar assets. Two additional factors lent further support to the dollar later that fall: The election of Ronald Reagan suggested to the market a political commitment to bringing down inflation; and the global pattern of external balances shifted in favor of the United States. The U.S. current account swung into surplus in the second half of 1980, reflecting a strong improvement in non-oil trade as a result of the past depreciation of the dollar.

In the fall of 1980, U.S. monetary authorities still had outstanding foreign currency obligations in the form of swap debt and maturing Carter bonds to cover. As the dollar began to strengthen, they purchased the foreign currencies needed to cover those obligations when they judged that doing so would not depress the dollar.

Even after the outstanding obligations were covered, U.S. authorities continued to purchase foreign currencies to build up U.S. foreign currency reserves. Before this time, the Federal Reserve and the Treasury had had essentially no long-term net asset position in foreign currencies (see chart 3). U.S. authorities decided to acquire foreign currency balances to avoid having to finance intervention by incurring swap debts with sometimes reluctant foreign monetary authorities. In addition, they judged that the dollar's strength could well be temporary. The dollar had been supported primarily by unusually favorable interest differentials and, in an environment of volatile interest rates, these might narrow, putting downward pressure on the dollar.

The Federal Reserve and the Treasury intervened in this manner from October 1980 through

3. U.S. net foreign currency balances, 1962–90



Foreign currency balances are valued at historical cost. The data are for the end of the periods, except the datum for 1990, which is for the end of July.

mid-February 1981, purchasing nearly $7 billion equivalent of German marks and small amounts of Swiss francs and French francs. As of February 1981, their combined net position in foreign currencies (marks, yen, and Swiss francs) was $6 billion equivalent. This position compares with net foreign currency liabilities that peaked at $3.5 billion equivalent (valued at February 1981 exchange rates) in September 1979.

In early 1981, the new Reagan Administration decided to move away from what it judged to have been the heavy intervention inherited from the previous administration. This decision reflected the view that exchange rates were the product of economic policies and that a "convergence" of economic policies was the way to stabilize exchange rates, a view consistent with the Administration's general desire to minimize government interference in markets. Testifying before the Joint Economic Committee of the U.S. Congress on May 4, 1981, then Undersecretary of the Treasury Beryl Sprinkel described the new Administration's exchange market policy as "a return to fundamentals" by "concentrating on strengthening and stabilizing the domestic economic factors which have undermined the dollar during the last decade or so." In conjunction with the emphasis on economic fundamentals, Undersecretary Sprinkel stated that the Administration intended to "return to the more limited pre-1978 concept of intervention by intervening only when necessary to counter conditions of disorder in the market." He anticipated little need for U.S. intervention in light of the President's proposed program of incentive-enhancing tax cuts and deregulation and in light of the Federal Reserve's policy of gradually reducing money growth to noninflationary levels.

From 1981 through early 1985, the dollar continued to strengthen, for several reasons. U.S. monetary conditions were restrictive in the context of a robust recovery, and prospects for continued large U.S. fiscal deficits exerted upward pressure on real interest rates. Meanwhile, monetary authorities abroad initially were reluctant to raise interest rates because their recoveries appeared more fragile. Investment, including foreign investment, boomed in the United States, attracted by the increasingly favorable business climate. In addition, dollar-denominated assets were sought as a "safe haven" following the onset of the international debt crisis and amid apprehensions about the political situations in some European countries.

U.S. intervention operations from April 1981 through 1984 were very limited, occurring on only twenty days, in line with the Administration's view that the strong dollar was an indication of the robust U.S. economy and not a cause for concern. Moreover, most of these operations were undertaken at the urging of foreign monetary authorities. On net, U.S. authorities sold $750 million against marks and yen during this period.

Some European monetary authorities who favored more active management of exchange rates objected to the U.S. policy of "nonintervention." In this context, the G-7 Economic Summit at Versailles in June 1982, agreed to establish a working group (the Jurgensen Group) to study the effectiveness of intervention in foreign exchange markets.[12]

By mid-1984, however, the dollar had risen nearly 60 percent on average against the other G-10 currencies from its level in the fourth quar-

12. Paragraph 38 of the Jurgensen report concludes that "intervention had been an effective tool in the pursuit of certain exchange rate objectives—notably those oriented towards influencing the behavior of the exchange rate in the short run. There was also broad agreement that sterilized intervention [intervention that leaves the monetary base unchanged] did not generally have a lasting effect, but that intervention in conjunction with domestic policy changes did have a more durable impact. At the same time it was recognized that attempts to pursue exchange rate objectives which were inconsistent with the fundamentals through intervention alone tended to be counterproductive."

ter of 1980, and its strength concerned some U.S. policymakers. Concern was expressed in FOMC meetings, among other forums, about the implications of the strong dollar for the U.S. manufacturing sector and about the consequences for inflation should the dollar drop precipitously. These considerations were among the arguments leading to an adoption of an easier monetary stance in mid-1984.

As the dollar continued to rise, the second Reagan Administration began to reverse its policy of nonintervention in currency markets. Group of Five (G-5) officials, meeting on January 22, 1985, issued a statement reaffirming their commitment to promote the convergence of economic policies, to remove structural rigidities, and (as agreed at the Williamsburg Economic Summit of April 1983) to undertake coordinated intervention in exchange markets as necessary. Subsequently, in coordinated operations with other central banks, U.S. authorities sold about $650 million between January and March 1985.

Although the dollar had started to decline by late February, that decline had not yet had time to produce an improvement in the U.S. trade deficit. So, protectionist sentiment in the United States mounted as the trade deficit swelled to an annual rate of $120 billion in the summer of 1985. In part to deflect protectionist legislation, U.S. officials arranged a meeting of G-5 officials at the Plaza Hotel in New York on September 22 with the purpose of ratifying an initiative to bring about an orderly decline in the dollar. In their statement, G-5 officials drew attention to the significant progress that had been made in promoting favorable economic performance along a path of steady noninflationary growth. Yet, they observed, "recent shifts in fundamental economic conditions among their countries, together with policy commitments for the future, have not been fully reflected in exchange markets." Large imbalances in external positions were noted, along with the potentially "mutually destructive" protectionism they might engender. The statement concluded:

> The Ministers and Governors agreed that exchange rates should play a role in adjusting external imbalances. In order to do this, exchange rates should better reflect fundamental economic conditions than has been the case. They believe that agreed policy actions must be implemented and reinforced to improve the fundamentals further, and that in view of the present and prospective changes in fundamentals, some further orderly appreciation of the main non-dollar currencies against the dollar is desirable. They stand ready to cooperate more closely to encourage this when to do so would be helpful.

This statement that exchange rates were out of line with economic fundamentals represented a sharp reversal of the U.S. Administration's previous stance.

Although intervention in exchange markets was not explicitly mentioned, the last sentence of the G-5 statement quoted above encompassed it. During the seven weeks following the Plaza Accord, G-5 authorities sold nearly $9 billion, of which the United States sold $3.3 billion.

With respect to policy intentions, the communiqué said little that was new. No commitments were made regarding U.S. monetary policy. However, Japanese government officials stated their intention to implement "flexible management of monetary policy with due attention to the yen [exchange] rate." Since the imbalance in external positions reflected, to some extent, the misalignment of fiscal policies, specific programs consistent with current policy intentions to reduce fiscal stimulus in the United States and increase it abroad were included in the statements. The United States promised to "implement fully the deficit reduction package for fiscal year 1986" specified in the Gramm–Rudman–Hollings act and indicated its intention to implement revenue-neutral tax reform. Japan agreed to increase investment by local governments, conditional on the circumstances of each region. The West German government stated its intention to continue its tax reform, with tax cuts due to take effect in 1986 and 1988. The United Kingdom and France each promised to curb public expenditure and to reduce tax burdens.

In reaction to the G-5 statement and subsequent intervention, the dollar fell sharply. Monetary tightening in Japan in late October provided further downward impetus for the dollar. By year-end the dollar had fallen 17 percent against the yen and 14 percent against the mark from its levels just before the Plaza meeting, leaving it 24 and 29 percent respectively below its peaks in February.

Throughout this period, the Federal Reserve emphasized that, given the dependence of the United States on large capital inflows for the time being, underlying confidence in the dollar needed to be maintained. Although it believed that a precipitous fall in the dollar was only a remote possibility, it was concerned that, should it occur, it could force sharply higher interest rates and inflationary pressures, thereby threatening the financial system and the economy. In light of these considerations, the decisions to lower the Federal Reserve's discount rate in March and April 1986 were carefully coordinated with similar moves by other central banks. The March move coincided with reductions in official rates in Japan, Germany, France, and the Netherlands. Subsequently, the United Kingdom and several other countries in the European Monetary System cut their official rates. In April, the United States and Japan lowered their discount rates in tandem.

Formal procedures to improve G-7 policy coordination and strengthen multilateral surveillance were agreed to at the Tokyo Economic Summit in May 1986. In particular, a framework for the systematic consideration of national policies and performance was adopted, involving the use of economic indicators. According to the summit declaration, the purposes of improved coordination "should explicitly include . . . fostering greater stability of exchange rates." Although the United States supported improved coordination of macroeconomic policies to foster increased stability in exchange rates, U.S. authorities did not intervene in exchange markets in 1986 because the dollar's continued decline was regarded as orderly and not cause for concern. Japanese authorities, however, became quite concerned about the yen's appreciation, particularly in the runup to the national elections in Japan, and the Bank of Japan intervened quite heavily in support of the dollar in the spring and summer of 1986.

The dollar declined to seven-year lows in early 1987, amid signs that the U.S. economy might be weakening while the U.S. trade deficit continued to grow. Furthermore, various press statements attributed to U.S. Administration officials were interpreted in exchange markets as indicating a lack of concern about the ramifications of a further decline in the dollar. In these circumstances, U.S. monetary authorities at the end of January intervened on one occasion in support of the dollar. This was the first operation in support of the dollar since mid-1980, except for small operations when President Reagan was shot in March 1981 and during the Continental Bank crisis in May 1984. It was conducted in coordination with the Bank of Japan.

On February 22, 1987, officials of the major industrial countries met at the Louvre in Paris. They concluded that "substantial exchange rate changes since the Plaza Agreement will increasingly contribute to reducing external imbalances and have now brought their currencies within ranges broadly consistent with underlying economic fundamentals." In addition, they expressed concern that "further substantial exchange rate shifts could damage growth and adjustment prospects in their countries." Therefore, they agreed to "cooperate closely to foster stability of exchange rates around current levels." In this regard, the G-7 authorities reached certain general understandings about the tolerable range of fluctuations in exchange rates for the dollar and about cooperation in exchange market operations.

No new commitments regarding monetary policy were made at the Louvre, although the Bank of Japan announced a reduction of a half percentage point in its discount rate effective the next day. Only two aspects of the agreements on fiscal policy represented new initiatives. Japan promised that "a comprehensive economic program will be prepared after the approval of the 1987 budget by the Diet, so as to stimulate domestic demand, with the prevailing economic situation duly taken into account." Germany agreed to "propose to increase the size of the tax reductions already enacted for 1988." On the U.S. side, the commitment to "policies with a view to reducing the fiscal 1988 deficit to 2.3 percent of GNP from its estimated level of 3.9 percent in fiscal year 1987" was consistent with the Gramm–Rudman–Hollings target, which in the event was not reached.

Despite heavy intervention purchases of dollars following the Louvre Accord, the dollar continued to decline, particularly against the yen. Market participants perceived delays in the implementation of expansionary fiscal measures in Japan expected after the Louvre Accord, and talk of trade sanctions on some Japanese products heightened concern about a deterioration in U.S.–Japanese trade relations. By the time of the G-7 meeting in early April, the dollar had fallen more than 5 percent against the yen from its level at the time of the Louvre Accord. At the April meeting, the G-7 officials "reaffirmed the view that around current levels their currencies are within ranges broadly consistent with economic fundamentals and the basic policy intentions outlined at the Louvre meeting." They urged further measures, however, to "resist rising protectionist pressures, sustain global economic expansion, and reduce trade imbalances." In this regard, they welcomed newly announced proposals by Japan for a large supplementary budget to stimulate the economy.

The dollar began to firm in May when monetary conditions tightened in the United States and eased abroad. In addition, the passage of the supplementary budget in Japan and more favorable U.S. trade data offered some optimism regarding adjustment of trade imbalances. But the dollar turned down again with the release of disappointing U.S. trade data in mid-August. Citing "the potential for greater inflation, associated in part with weakness in the dollar," the Federal Reserve raised its discount rate ½ percentage point to 6 percent in early September. However, record U.S. trade deficits and market perceptions that the G-7 authorities were pursuing their own domestic objectives soon sparked a further selloff of the dollar, and equity prices plunged worldwide. The dollar's decline gathered momentum once the Federal Reserve moved more aggressively than its foreign counterparts to supply liquidity in the aftermath of the stock market crash. The Federal Reserve's actions in this regard led market participants to believe that it would emphasize domestic objectives, if necessary at the cost of a further decline in the dollar. By year-end, the dollar's value had fallen 21 percent against the yen and 14 percent against the mark from its levels at the time of the Louvre Accord.

In these circumstances, G-7 officials reconvened by telephone in late December and reached a new set of understandings about fluctuations in exchange rates and cooperation in exchange market operations. They stated that "either excessive fluctuation of exchange rates, a further decline of the dollar, or a rise in the dollar to an extent that becomes destabilizing to the adjustment process, could be counterproductive by damaging growth prospects in the world economy." They also reaffirmed their commitment to "cooperate closely on exchange markets." In addition, the agreements on fiscal policy measures contained in the Louvre Accord were extended to include policies for 1988.

Following the Louvre Accord, the G-7 authorities intervened heavily in support of the dollar throughout the episodes of dollar weakness in 1987, and sold dollars on several occasions when the dollar strengthened significantly. Net official dollar purchases by the G-7 and other major central banks effectively financed more than two-thirds of the $144 billion U.S. current account deficit in 1987. The U.S. share of these purchases was $8.5 billion, and the share of the other G-7 countries was $82 billion.

The G-7 authorities continued to make large purchases of dollars into January 1988, and the dollar stabilized. Subsequently, the dollar strengthened as monetary conditions in the United States were tightened earlier than those abroad and U.S. external accounts improved. As some foreign authorities began to tighten monetary conditions and external adjustment stalled during the second half of 1988, the dollar eased back somewhat. For the year as a whole, the dollar appreciated moderately; U.S. authorities both bought and sold dollars, so that intervention was small on balance. When the dollar again strengthened in the first part of 1989, reaching a 2½-year high against the mark and threatening to undermine progress on external adjustment, the U.S. authorities became more active in selling dollars.

In September 1989, G-7 officials issued a communiqué stating that they "considered the rise in recent months of the dollar inconsistent with longer run fundamentals" and "agreed that a rise in the dollar above current levels or an excessive decline could adversely affect prospects for the world economy. In this context, they agreed to cooperate closely in exchange markets." The release of this statement was followed by three weeks of coordinated intervention with the initial objective of lowering the dollar and the later objective of keeping the dollar lower. For 1989 as a whole, U.S. authorities sold $22 billion net, by far the largest U.S. annual operation ever; other G-7 countries made net sales of $43 billion.[13] To facilitate these operations, the Treasury made extensive use of the warehousing facility with the Federal Reserve—its first use since the proceeds of the Carter bonds were unwound in 1982. Chiefly as a result of intervention, the combined Federal Reserve and Treasury net position in foreign currencies increased to $38 billion equivalent at the end of 1989 valued at historical cost, as shown in chart 3.

During late 1989 and early 1990, the dollar's movements against the major currencies diverged. The opening of the Berlin Wall and subsequent steps toward unification of the two Germanys bolstered the mark, while political uncertainty and concern in exchange markets that monetary policy in Japan was too lax depressed the yen. Consistent with G-7 understandings, U.S. authorities intervened in support of the yen in early 1990, buying more than $2 billion equivalent of yen. The Bank of Japan also bought yen against dollars. As the yen continued to weaken nonetheless, G-7 officials—meeting in early April—issued a communiqué stating that they had discussed "developments in global financial markets, especially the decline of the yen against other currencies and its undesirable consequences for the global adjustment process and . . . reaffirmed their commitment to economic policy coordination, including cooperation in the exchange markets." In fact, there was little U.S. intervention in support of the yen after the communiqué was released. Concerns about Japanese monetary policy dissipated, and the yen recovered somewhat. Between May and July of 1990, in order to adjust balances of foreign currencies and to facilitate the retirement of a portion of the amounts of foreign currencies held by the Federal Reserve under its warehousing arrangements with the ESF, the Treasury liquidated $2 billion equivalent of DM balances in ways that would not significantly influence prevailing exchange rates.

13. The scale of U.S. intervention was much larger in 1989 than in 1977–79. However, somewhat larger operations probably are required to influence exchange rates now, because the size of the net open position of the private sector undoubtedly has increased during this period. Though there are no reliable measures of the latter, according to a survey by the Federal Reserve Bank of New York, the size of the U.S. market increased from an estimated average daily turnover of $18 billion in 1980 to $129 billion in 1989.

Industrial Production and Capacity Utilization

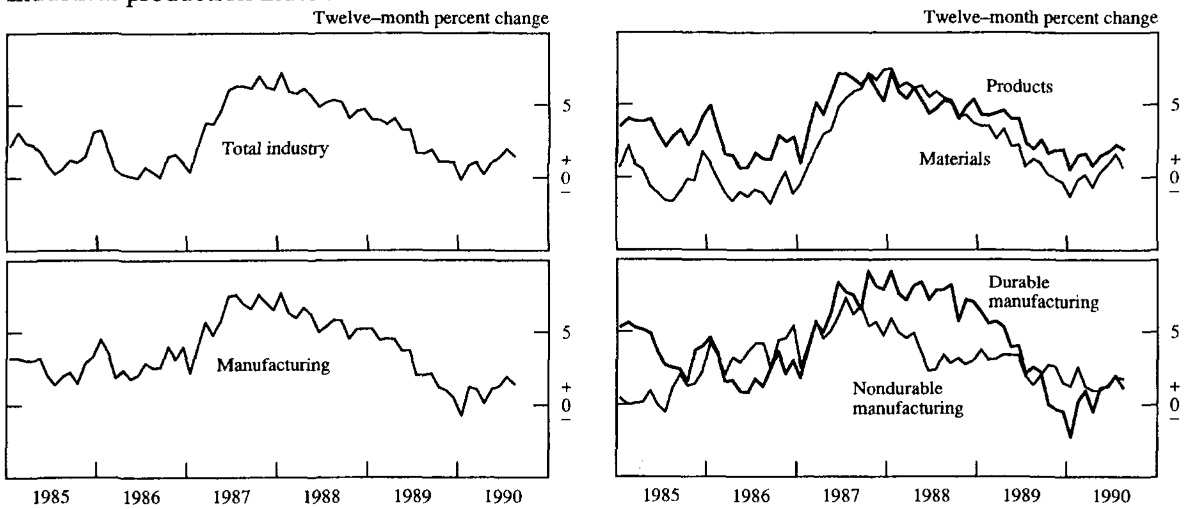
Released for publication on September 14

Industrial production decreased 0.2 percent in August after no change in July; industrial capacity utilization declined 0.4 percentage point in August to 83.1 percent.

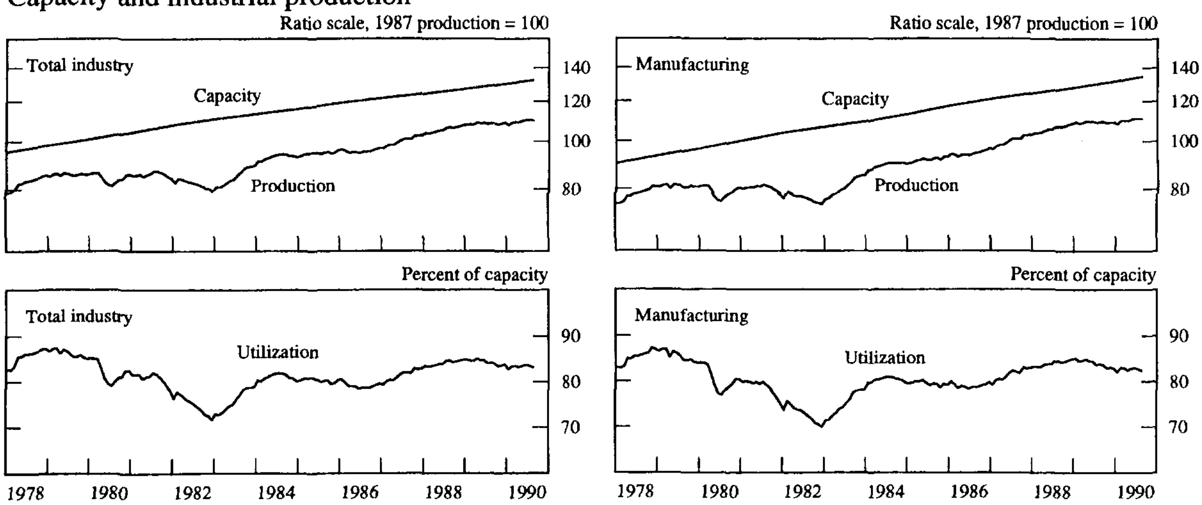
Small declines were evident among many market and industry groups in August; industries posting gains included steel and utilities. During the past year, total industrial production has risen 1.5 percent to 109.8 percent of its 1987 annual average.

In market groups, overall, output of consumer goods was little changed in August. Gains in output of nondurables, particularly food and electricity for residential use, were about balanced by declines in the production of durables such as light trucks and goods for the home.

Industrial production indexes



Capacity and industrial production



All series are seasonally adjusted. Latest series, August.

Output of motor vehicles for business use was unchanged after having fallen sharply in July. Excluding autos and trucks, output of business equipment decreased slightly in August but remained well above its level of last winter. Output of construction supplies edged down in August. It has changed little, on balance, since May after having fallen significantly earlier this year. Materials production declined in August. Decreases were widespread among the categories of nondurables; in addition, coal mining dropped back after having posted a sharp gain in July.

In industry groups, manufacturing output edged down 0.1 percent in August, lowering the factory utilization rate 0.3 percentage point to 82.4 percent. Output declined in most industries in both durable and nondurable manufacturing. However, iron and steel production increased about 2½ percent in August, bringing its utilization rate to 85.2 percent—the highest in more than a year. With flat or declining output, utilization rates for chemicals, instruments, lumber, stone, clay and glass products, and apparel have dropped several percentage points during the past year.

Output in mining declined about 2½ percent in August. Besides the drop in coal production, oil and gas well drilling fell sharply, and iron ore mining was curtailed because of a strike. Utilities production rose more than 1 percent as a result of a significant increase in electricity generation. The operating rate for electric utilities hit 93.1 percent in August, well above its longer-run average.

Industrial production	1987 = 100				Percentage change from preceding month				Percentage change, Aug. 1989 to Aug. 1990
	1990				1990				
	May^r	June^r	July^r	Aug.^p	May^r	June^r	July^r	Aug.^p	
Total index	**109.4**	**110.0**	**110.0**	**109.8**	**.5**	**.5**	**.0**	**−.2**	**1.5**
Previous estimates	109.4	109.9	109.9	...	.6	.4	.0	...	...
Major market groups									
Products, total	**110.5**	**111.0**	**110.7**	**110.6**	**.6**	**.4**	**−.3**	**.0**	**1.9**
Consumer goods	107.4	108.1	107.5	107.7	.3	.6	−.5	.1	1.9
Business equipment	123.5	123.9	123.8	123.6	1.6	.3	−.1	−.2	2.6
Construction supplies	105.5	106.0	105.4	105.3	−.8	.4	−.6	−.1	−.2
Materials	107.7	108.5	109.0	108.6	.4	.8	.5	−.4	.7
Major industry groups									
Manufacturing	110.3	110.7	110.8	110.6	.7	.4	.0	−.1	1.4
Durable	112.6	113.2	112.9	112.6	1.4	.5	−.3	−.2	1.2
Nondurable	107.4	107.6	108.1	108.1	−.1	.2	.5	.0	1.8
Mining	102.2	102.6	103.2	100.8	−.6	.3	.6	−2.3	.0
Utilities	107.1	109.2	108.7	110.1	.4	2.0	−.4	1.2	3.6

Capacity utilization	Percent of capacity								Capacity growth, Aug. 1989 to Aug. 1990
	Average, 1967–89	Low, 1982	High, 1988–89	1989	1990				
				Aug.	May^r	June^r	July^r	Aug.^p	
Total industry	**82.2**	**71.8**	**85.0**	**84.0**	**83.4**	**83.6**	**83.5**	**83.1**	**2.6**
Manufacturing	81.5	70.0	85.1	83.8	82.8	82.9	82.7	82.4	3.1
Advanced processing	81.1	71.4	83.6	82.4	82.0	81.9	81.5	81.1	3.4
Primary processing	82.3	66.8	89.0	86.9	84.9	85.5	85.8	85.5	2.5
Mining	87.3	80.6	87.2	86.4	88.7	89.1	89.7	87.8	−1.6
Utilities	86.8	76.2	92.3	84.7	84.7	86.3	85.9	86.9	1.0

r Revised.
p Preliminary.

NOTE. Indexes are seasonally adjusted.

Statements to the Congress

Statement by Wayne D. Angell, Member, Board of Governors of the Federal Reserve System, before the Committee on Banking, Housing, and Urban Affairs, U.S. Senate, September 10, 1990.

I am pleased to be here on behalf of the Federal Reserve Board to discuss regulatory accounting standards and capital requirements for depository institutions. Both of these standards play particularly important roles in the supervisory process. Accounting standards, by promoting consistent and accurate financial reports, enhance the ability of supervisors to monitor developments at depository institutions and to identify situations of deteriorating financial conditions that require immediate corrective actions. Capital standards are perhaps even more critical. A strong capital position enables an organization to withstand an unexpected setback and return to financial health, and when that does not prove possible, helps to limit potential losses to the government deposit insurance fund.

The importance of accounting and capital standards, of course, was recognized by the Congress when it enacted the Financial Institutions Reform, Recovery, and Enforcement Act (FIRREA). FIRREA directed the depository institution supervisory agencies to develop uniform accounting standards for all federally insured depository institutions, and mandated that capital standards for thrift institutions be no less stringent than those for commercial banks. Furthermore, the Congress asked the agencies to submit reports discussing any differences among their accounting and capital standards by August 9, 1990. The Federal Reserve's report was submitted on that date.

Today, I do not want to repeat all of the details set forth in that report. Rather, I would like to address some important policy issues regarding the accounting and capital standards employed by the Federal Reserve and the other banking agencies. I particularly want to focus upon those issues raised in your letter of invitation, Mr. Chairman, including market value accounting and our view on how the banking agencies might proceed to assess interest rate risk for examination and capital adequacy purposes.

The Role of Accounting Standards

The Federal Reserve has long viewed accounting standards as a necessary step to efficient market discipline and bank supervision. Accounting standards provide the foundation for credible financial statements and other financial reports. Accurate information reported in a timely manner provides a basis for the decisions of market participants. The effectiveness of market discipline, to a very considerable degree, rests on the quality and timeliness of reported financial information.

Financial statements and regulatory financial reports perform a critical role for depository institution supervisors. The supervisory agencies have in place monitoring systems that enable them to follow, on an off-site basis, financial developments at depository institutions. When reported financial information indicates that a deterioration in financial condition has occurred, these systems can signal the need for on-site examinations and any other appropriate actions. The better the quality of financial information, the greater the ability to monitor and supervise effectively.

Financial statements provide information needed to evaluate an enterprise's financial condition and performance. Generally accepted accounting principles (GAAP) must be followed in the preparation of financial statements filed with the Securities and Exchange Commission or that otherwise are audited by Certified Public Accountants (CPAs). The regulatory financial statements for federally insured commercial banks and savings banks are the reports of condition and income, commonly referred to as call reports. The call reports, the form and content of which, by law, are developed by the Federal Financial Institutions Examination Council (FFIEC), are currently required to be filed in a manner generally consistent with GAAP. In those few instances in which the call report specifies reporting requirements that differ from GAAP, these requirements are intended to be more conservative than GAAP.

Call reports include balance sheets, income statements, and supporting schedules providing information on types of loans, securities, and deposits, and the extent of off-balance-sheet activities. Other supporting schedules also provide information on past due and nonaccrual loans and leases, loan losses and recoveries, and changes in the allowance for loan and lease losses. Certain information on the maturity or repricing frequency of securities, loans, and time certificates of deposit is also presented. Furthermore, the call report provides information necessary for the calculation of capital ratios.

FIRREA MANDATE FOR UNIFORM ACCOUNTING STANDARDS

As you know, section 1215 of FIRREA provides that each federal bank and thrift regulatory agency "establish uniform accounting standards to be used for determining the capital ratios of all federally insured depository institutions and for other regulatory purposes." As I have explained, the banking agencies, under the auspices of the FFIEC, have in place uniform call reports for all commercial banks and savings banks supervised by the Federal Deposit Insurance Corporation (FDIC). The banking agencies base their capital adequacy and other regulatory and supervisory computations on the call report. Thus, for the Federal Reserve Board, the Office of the Comptroller of the Currency (OCC), and the FDIC, uniform "accounting standards" for capital and other regulatory purposes are in place.

On the other hand, the Office of Thrift Supervision (OTS) utilizes the Thrift Financial Report (TFR), which differs from the bank call report in scope, detail, and definition of terms. Furthermore, the TFR is based entirely on GAAP for thrift institutions, which is somewhat different from GAAP for banks. Some of the reporting differences between banks and thrift institutions were appropriate given the different type of assets that thrift institutions typically held. However, FDIC-insured mutual savings banks file the same call report as commercial banks, and the FDIC has been able to accommodate the differences between these two types of institutions while still preserving comparability and definitional consistency.

Table 1 in the appendix summarizes the primary areas of difference that exist between the reporting standards of the federal banking agencies and the OTS.[1] Some of these differences, such as those involving loan-loss reserves for real estate loans and the valuation of foreclosed real estate, arise from differences between GAAP for banks and GAAP for savings and loan associations. Other differences arise in those areas in which bank reporting standards are intended to be more conservative than GAAP, such as in the areas of asset sales with recourse, futures contracts, excess servicing, and in-substance defeasance of debt. These areas of difference are discussed in more detail in our report to the Congress.

The Federal Reserve Board and the other banking agencies have held preliminary discussions with the OTS to study ways in which a more uniform reporting scheme can be developed for all banking and thrift institutions. The Federal Reserve Board is prepared to work constructively to resolve differences between the call report and the thrift financial report. Also, the Financial Accounting Standards Board (FASB) and the American Institute of CPAs have been asked by the FDIC to consider eliminating the differences in GAAP as applied to banks and thrift institutions. More uniform reporting by all institutions is a goal of the Federal Reserve Board.

1. The attachments to this statement are available on request from Publications Services, mail stop 138, Board of Governors of the Federal Reserve System, Washington, D.C. 20551.

Market Value Accounting

A major issue relating to accounting standards is the appropriateness of market value accounting. Under market value accounting, an institution's assets, liabilities, and off-balance-sheet items would be reported in financial statements at their market values. Alternatively, market values could be disclosed in supplemental schedules without affecting the balance sheet and income statement.

The problems in our financial system over the past several years have focused attention on the differences that often exist between accounting and economic measures of the financial condition and performance of banking and thrift institutions. Market value accounting has been proposed by some as a way to narrow these differences between accounting and economic measures. It is argued that the use of market value accounting might lead to more effective regulation and supervision of financial institutions and to the closure of problem institutions long before they would become insolvent on the basis of financial statements prepared under GAAP.

While market value accounting has theoretical appeal, several concerns have been expressed regarding this accounting model that should be considered. One major potential problem is that market values do not exist for a large portion of a financial institution's assets and liabilities and standards have not been developed for the estimation of reliable market values for these items. In addition, the overall cost and reporting burden associated with market value accounting could be considerable, including the cost of verifying market value quotations and estimates during audits and supervisory examinations. Furthermore, market value accounting could result in more volatility in the reported financial condition and earnings of financial institutions.

Clearly, information about the economic value of financial institutions is beneficial for supervisory purposes. However, the Federal Reserve believes that the preceding issues should be thoroughly studied before dramatic moves toward market value accounting are made. In particular, the Federal Reserve is concerned that, without the development of standards for the estimation of market values, financial statements prepared on a market value accounting basis would not be reliable or verifiable by audits and examinations. The federal banking agencies are reviewing the use of market values in connection with the federal deposit insurance study mandated by the FIRREA. At the same time, the FASB is studying the need for greater use of market values in GAAP as part of a project to develop new comprehensive standards for all financial instruments. These studies should provide additional information regarding the appropriateness of market value accounting for purposes of bank regulation and financial reporting.

It is also important to emphasize that much can be done to reduce the differences between accounting and economic measures of financial condition and performance without adopting market value accounting. This is accomplished when declines in economic value that result from credit problems are accurately reflected in loan-loss reserves and capital positions in a timely manner.

Chairman Greenspan addressed the need to accurately measure capital positions in his testimony before this committee on July 12, 1990, when he discussed his proposal for prompt corrective action. In this regard, a key part of this proposal is the conduct of on-site examinations—focusing on the quality of asset portfolios and off-balance-sheet commitments—at least annually, when it is not already in practice. This rigorous review helps ensure that the loan-loss reserves are consistent with the quality of the portfolio. When they are not, the examiner requires that additional reserves be created with an associated reduction in the earnings and equity capital of the bank. This process leads to a timely review of the adequacy of loan-loss reserves and an accurate measurement of capital positions. When the resultant capital position of the bank is not adequate and credible capital raising commitments are not met, the regulatory agency should promptly require such responses as lowered dividends, slower asset growth, divestiture of affiliates, and other corrective measures while an institution's capital position is still positive. Such a policy not only deters banks from riskier lending practices, it also minimizes the ultimate resolution costs.

While the adjustment of recorded asset values for inherent credit losses could be accomplished through market or economic value accounting, it can also be accomplished under existing GAAP. Timely, thorough on-site examinations focusing on asset quality, together with rigorous application of GAAP, result in loan-loss reserves that accurately reflect the estimated credit losses inherent in loan portfolios and in accurate reported capital positions. This process narrows differences between accounting and economic measures of depository institutions' financial condition and performance, while avoiding many of the potential problems associated with market value accounting. While not provided for in current GAAP, if further guidance were provided to determine an appropriate method for deriving the present value of asset and liability cash flows, even more accurate measures of market or economic value could be estimated.

THE IMPORTANCE OF CAPITAL STANDARDS

For several years, the Federal Reserve and the other banking agencies have been working to strengthen bank capital positions. The Federal Reserve has long viewed adequate capital as essential to protecting the soundness of individual banks and our banking system as a whole. While some have set forth arguments about the competitive disadvantages of stronger capital requirements, we must not ignore the long-term benefits of strong capital positions. Well-capitalized banks are the ones best positioned to be successful in the establishment of long-term relationships, to be the most attractive counterparties for a large number of financial transactions and guarantees, and to expand their business activities to meet new opportunities and changing circumstances. Indeed, many successful U.S. and foreign institutions would today meet substantially increased risk-based capital standards. In addition, although there has been uncertainty lately in the current market, the evidence of recent years suggests that U.S. banks have raised sizable amounts of equity. The dollar volume of new stock issues by banking organizations has grown at a greater rate since the late 1970s than the total dollar volume of new issues of all domestic corporate firms.

I would like to elaborate on some of the important benefits that would result from stronger capital requirements. First, a stronger capital position would strengthen the incentives of bank owners and managers to evaluate more prudently the risks and benefits of portfolio choices because a substantial amount of their money would be at risk. In effect, the moral hazard risk of deposit insurance would be reduced. Second, stronger capital levels would create a larger buffer between the mistakes of bank owners and managers and the need to draw on the deposit insurance fund. For too many institutions, that buffer has been too low in recent years. The key to creating incentives to behave as the market would dictate, and at the same time creating these buffers or shock absorbers, is to require that those who would profit from an institution's success have the appropriate amount of their own capital at risk. Third, requiring stronger capital positions would impose on bank managers an additional market test, in that they must convince investors that the expected returns justify the commitment of risk capital. Those banks unable to do so would not be able to receive the additional funds necessary for expansion. Fourth, strongly capitalized financial institutions are in a better position to take advantage of opportunities that may arise. Furthermore, it would not be necessary to apply as rigorous supervisory attention to such institutions. Thus, it is important that regulators make sure that financial institutions are operating not from a minimal capital base, but from a strong capital base.

The three federal bank regulatory agencies have a long-established history of cooperation in setting minimum capital standards. Throughout most of the 1980s, the banking agencies required banks to meet minimum ratios of capital-to-total assets or leverage ratios. In 1989, the federal banking agencies also adopted a risk-based capital standard. Furthermore, the Federal Reserve System has adopted new leverage guidelines that will supplement the risk-based capital framework. However, the primary supervisory emphasis has shifted to the risk-based capital requirement. Prudent banking organizations would continue to operate with a cushion above the minimum leverage and risk-based capital ratios.

Risk-Based Capital

The risk-based capital framework adopted by all three of the federal bank supervisory agencies, in 1989, is based upon the international Capital Accord developed by the Basle Committee on Banking Supervision and endorsed by the central bank governors of the G-10 countries. Under this framework, total capital comprises tier 1 (or equity capital) and tier 2 (or supplemental) capital instruments. The risk-based capital standards establish for all commercial banking organizations a minimum ratio of total capital to risk-weighted assets of 7.25 percent for year-end 1990. This minimum standard increases to 8.0 percent as of year-end 1992. Besides identical ratios, the risk-based framework includes a common definition of regulatory capital as well as a uniform system of risk weights and categories.

The principal objectives of risk-based capital are to make regulatory capital requirements more sensitive to differences in risk profiles of banks, to factor off-balance-sheet exposures more explicitly into the assessment of capital adequacy, and minimize disincentives to holding liquid, low-risk assets.

Leverage Ratio

The banking agencies are also engaged in implementing new minimum leverage ratios that will be based upon a definition of capital consistent with the tier 1 capital definition that is used in the risk-based capital guidelines. The Federal Reserve has issued a new supplementary leverage standard that will require a minimum ratio of capital to assets of 3.0 percent for the safest institutions. These minimum risk-based and leverage ratio requirements will enable us to remove the current capital-to-assets standards at year-end 1990. Similar leverage guidelines are being developed by the OCC and the FDIC, as explained in detail in the Federal Reserve's report to the Congress on capital and accounting standards used by the regulatory agencies.

The objective of the new leverage ratio is to ensure that banking organizations that hold substantial amounts of low credit risk assets must still maintain a minimum amount of capital. A financial institution operating at or near the established minimum level must have well-diversified risk, including no undue interest rate risk exposure, excellent asset quality, high liquidity, good earnings, and, in general, be considered a strong banking organization. Institutions without these characteristics, including institutions with supervisory, financial, or operational weaknesses, are expected to operate well above the minimum standard. Also, institutions experiencing or anticipating significant growth are expected to maintain above average capital ratios.

It should be stressed that the banking agencies have generally viewed their capital ratios as minimums. Furthermore, most banking organizations would wish to operate well above these levels. Over the years, the Federal Reserve has encouraged banks to continue to strengthen their capital positions. We have done this primarily through the bank examination process, and by requiring strong capital positions of those institutions undertaking expansion.

Differences in Capital Standards

As you are aware, we have submitted a report to this committee detailing the capital and accounting standards used by the federal banking and thrift agencies. The differences in the capital standards of the banking agencies and the OTS are discussed in detail in our report. A summary of the primary areas of difference is presented in the appendix. The staffs of the banking agencies and the OTS meet regularly to identify and address differences in their capital standards and work toward consistency.

Assessment of Capital Adequacy

While current capital standards generally provide a cushion against losses from operations or a weak loan portfolio, they do not address all risks of an institution. For example, the bank risk-based capital guidelines, at present, do not yet address noncredit factors, such as interest rate risk and foreign exchange positions.

Interest rate risk is defined as the sensitivity of an institution's earnings and capital to changes in interest rates. This sensitivity may result from differences in the maturity or repricing of an institution's assets, liabilities, and off-balance-sheet instruments. This type of mismatch occurs, for example, when an institution funds a long-term, fixed-rate loan with a short-term or variable-rate deposit. When significant interest rate exposure exists, a relatively small adverse change in interest rates may result in a substantial reduction in an institution's earnings and capital.

Interest rate risk has been evaluated in connection with the overall determination of an organization's capital adequacy and financial condition during on-site examinations. Since a conclusive assessment of capital adequacy can be made only after consideration of all the quantitative factors that determine the need for capital, we think it is clear that the time has now come to place greater emphasis on the quantitative measurement of interest rate risk and to more explicitly factor interest rate risk into the assessment of capital adequacy.

To this end, the Federal Reserve is working with the other U.S. banking agencies and regulatory authorities on the Basle Supervisors' Committee to develop methods to measure and address interest rate and other noncredit risks. These methods are necessary to enhance the basic risk-based capital framework.

In considering how best to factor interest rate risk into capital adequacy calculations, we are guided by the following principles:

1. The system should provide incentives to reduce risk or a means to ensure that those risks that are assumed are backed by sufficient capital to fully protect the deposit insurance system and investors.

2. The system should assess the impact on the firm of interest rate volatility and hedging activities, including proper risk weighting of hedging instruments.

3. The system should be straightforward so that it can be widely understood and utilized by bank directors and management.

4. The system or the data required to implement it should not place excessive burdens or costs upon the institution.

5. The system should strengthen U.S. banking organizations so as to enhance their international competitiveness.

Although domestic and international work has been under way for some time, we have not yet achieved a consensus on how to measure interest rate risk or assess an appropriate capital requirement. However, it is necessary to find a measure that produces an acceptable interest rate risk measurement tool.

While the Board has not officially approved a particular approach to interest rate risk measurement, there are a number of possible approaches that the Board is likely to consider. One alternative might be to require that all institutions, regardless of size, provide detailed information on the maturity and repricing of their assets, liabilities, and off-balance-sheet exposures. This information would then be used to calculate an institution's interest rate exposure and the corresponding capital requirement. One drawback, however, is that this approach could impose substantial reporting burdens on institutions with minimal interest rate risk.

Another alternative that the supervisory agencies might explore to deal with interest rate risk involves a two-phased approach. Under this approach, institutions would be screened by the use of a rather rough measure of interest rate risk, derived from minimally enhanced data that is, for the most part, already available in the call report. For institutions that undertake interest rate risks outside of established parameters, more detailed reporting would be required and could be the basis for a more precise calculation of an additional capital requirement.

We would certainly work to ensure that any approach that is finally adopted would be compatible with the rate risk measurement mechanism that might be developed internationally under the auspices of the Basle Supervisor's Committee. The approach that is finally adopted should be designed to afford regulators considerable comfort that institutions with undue interest rate risk have been appropriately identified, that a reasonable amount of additional capital for that added risk is being held, and that additional supervisory action could be taken as warranted. In addition, institutions that undertake interest risk outside of the established parameters would be expected to have the management expertise, together with strong reporting and control systems that would enable them to undertake such risks on a knowledgeable basis. Moreover, the interest rate data that banks provide would be verified regularly through the examination process.

One area that must also be addressed involves the accounting treatment for off-balance-sheet instruments. To better factor these instruments into the assessment of interest rate risk, more work will have to be done by the FASB to improve the accounting standards for these diverse instruments and to provide more specific criteria for hedge accounting.

CONCLUSION

In summary, the Federal Reserve believes that both accounting and capital standards play an important role in the supervisory process. Besides providing important information to market participants, accurate and timely financial reports enhance the supervisor's ability to monitor an institution's financial condition and to take prompt corrective action.

Stronger capital positions and prompt corrective action by supervisors will help reduce excessive risktaking by insured institutions. The requirement for depository institutions to maintain strong capital positions sufficient to cover on- and off-balance-sheet risks will promote the safety and stability of our banking system and protect the interest of the U.S. taxpayers. The Federal Reserve will continue to work with the other supervisory agencies to develop uniform capital and accounting standards that achieve these important objectives. □

Statement by Alan Greenspan, Chairman, Board of Governors of the Federal Reserve System, before the Committee on Banking, Finance and Urban Affairs, U.S. House of Representatives, September 13, 1990.

I am pleased to appear before this committee to discuss deposit insurance reform. Your letter of invitation contained a list of important issues and questions that I will try to address. Our recent experience with thrift institutions underlines the pressing need for deposit insurance reform. Indeed, the Congress recognized that last year's landmark Financial Institutions Reform, Recovery, and Enforcement Act of 1989 (FIRREA) was only a first step when it mandated a Treasury study of deposit insurance issues. This study, in which the Federal Reserve is an active participant, will be published late this year or early next. By holding hearings considerably before that research is complete, I hope that the Congress will be able to focus on the needed legislation immediately after the release of the Treasury study.

Your letter of invitation suggested that the topic of these hearings would be solely deposit insurance reform. While this subject is complex, the Board believes that the issue is intimately related to the need for legislation to also modernize our banking system in other ways. The Congress and the Board repeatedly are reminded of the erosion of the competitiveness of our banking system both domestically and internationally. The Board believes that addressing this problem should be joined with deposit insurance reform, and my statement will intertwine both topics.

The fundamental problems with our current deposit insurance program are clearly understood and are, I believe, subject to little debate among those with drastically different prescriptions for reform. The safety net—deposit insurance, as well as the discount window—has so lowered the risks perceived by depositors as to make them relatively indifferent to the soundness of the depository recipients of their funds, except in unusual circumstances. With depositors exercising insufficient discipline through the risk premium they demand on the interest rate they receive on their deposits, the incentive of some banks' owners to control risktaking has been dulled. Profits associated with risktaking accrue to owners, while losses in excess of bank capital that would otherwise fall on depositors are absorbed by the Federal Deposit Insurance Corporation (FDIC).

Weak depositor discipline and this moral hazard of deposit insurance have two important implications. First, the implicit deposit insurance subsidy has encouraged banks to enhance their profitability by increasing their reliance on deposits rather than capital to fund their assets. In effect, the deposit insurance funds have been increasingly substituted for private capital as the cushion between the asset portfolios of insured institutions and their liabilities to depositors. A hundred years ago, the average equity capital to assets ratio of U.S. banks was almost 25 percent, approximately four times the current level. Much of the decline over the past century no doubt reflects the growing efficiency of our financial system. But it is difficult to believe that many of the banks operating over recent decades would have been able to expand their assets so much, with so little additional investment by their owners, were it not for the depositors' perception that, despite the relatively small capital buffer, their risks were minimal. Regulatory efforts over the past ten to fifteen years have stabilized and partially reversed the sharp decline in ratios of bank equity capital to assets. This reversal has occurred despite the sizable write-off of loans and the substantial buildup in loan-loss reserves in the past three years or so. But the capital ratios of many banks are still too low.

Second, government assurances of the liquidity and availability of deposits have enabled some banks with declining capital ratios to fund riskier asset portfolios at a lower cost and on a much larger scale, with governmental regulations and supervision, rather than market processes, as the major constraint on risktaking. As a result, more resources have been allocated to finance risky projects than would have been dictated by economic efficiency.

In brief, the subsidy implicit in our current deposit insurance system has stimulated the growth of banks and thrift institutions. In the process the safety net has distorted market signals to depositors and bankers about the economics of the underlying transactions. This distortion has led depositors to be less cautious in choosing among institutions and has induced some owners and their managers to take excessive risk. In turn, the expanded lending to risky ventures has required increased effort and resources by supervisors and regulators to monitor and modify behavior.

But, in reviewing the list of deficiencies of the deposit insurance system, we should not lose sight of the contribution that both deposit insurance and the discount window have made to macroeconomic stability. The existence and use of the safety net have shielded the broader financial system and the real economy from instabilities in banking markets. More specifically, it has protected the economy from the risk of deposit runs, especially the risk of such runs spreading from bank to bank, disrupting credit and payment flows and the level of trade and commerce. Confidence in the stability of the banking and payments system has been the major reason why the United States has not suffered a financial panic or systemic bank run in the last half century.

There are thus important reasons to take care as we modify our deposit insurance system. Reform is required. So is caution. The ideal is an institutional framework that, to the extent possible, induces banks both to hold more capital and to be managed as if there were no safety net, while at the same time shielding unsophisticated depositors and minimizing disruptions to credit and payment flows.

If we were starting from scratch, the Board believes it would be difficult to make the case that deposit insurance coverage should be as high as its current $100,000 level. However, whatever the merits of the 1980 increase in the deposit insurance level from $40,000 to $100,000, it is clear that the higher level of depositor protection has been in place long enough to be fully capitalized in the market value of depository institutions and incorporated into the financial decisions of millions of households. The associated scale and cost of funding have been incorporated into a wide variety of bank and thrift decisions, including portfolio choices, staffing, branch structure, and marketing strategy. Consequently, a return to lower deposit insurance coverage—like any tightening of the safety net—would reduce insured depository market values and involve significant transition costs. It is one thing initially to offer and then to maintain a smaller degree of insurance coverage, and quite another to reimpose on the existing system a lower level of insurance, with its associated readjustment and unwinding costs. This is why the granting of subsidies by the Congress should be considered so carefully: They not only distort the allocation of resources but also are extremely difficult to eliminate, imposing substantial transition costs on the direct and indirect beneficiaries. For such reasons, the Board has concluded that, should the Congress decide to lower deposit insurance limits, a meaningful transition period would be needed.

Another relevant factor that should be considered in evaluating the $100,000 insurance limit is the distribution of deposit holders by size of account. Unfortunately, data to analyze this issue by individual account holder do not exist. However, we have been able to use data collected on an individual household basis in our 1983 Survey of Consumer Finances to estimate the distribution of account holders. While these data are seven years old, they are the best available until results from our 1989 Survey of Consumer Finances become available this fall. I have attached as an appendix to this statement summary tables and descriptive text of the 1983 survey results.[1] Briefly, the survey suggests that between 1.0 and 1.5 percent of U.S. households held, in 1983, deposit balances in excess of $100,000. The demographic characteristics of these account holders suggest that they are mainly older, retired citizens with most of their financial assets in insured accounts. These characteristics of heads of households owning deposits are remarkably stable as the size of deposits declines to $50,000.

A decision by the Congress to leave the $100,000 limit unchanged, however, should not preclude other reforms that would reduce current inequities in, and abuses of, the deposit insurance system, often thwarting its purpose. Serious study should be devoted to the cost and effectiveness of policing the $100,000 limit so that multiple accounts are not used to obtain more protection for individual depositors than the Congress intends. We at the Federal Reserve believe that it is administratively feasible—but not costless—to establish controls on the number and dollar value of insured accounts per individual at one depository institution, at all institutions in the same holding company, and perhaps even across depositories of different ownership. But we are concerned about the cost and administrative complexity of such schemes and would urge the careful weighing of benefits and costs before adopting any specific plan.

The same study could consider the desirability of limiting pass-through deposit insurance—under which up to $100,000 of insurance protection is now explicitly extended to each of the multiple beneficiaries of some large otherwise uninsured deposits. Brokered accounts of less than $100,000 also have been used to abuse deposit insurance protection, particularly by undercapitalized institutions. However, we must be careful to remember that the use of brokered deposits by healthy firms can be the economy's most efficient way of allocating funds to their most productive use. The study should keep in mind these considerations, as well as the power that the Congress has already provided the agencies to constrain misuse of brokered accounts.

No matter what the Congress decides on deposit insurance limits, we must be cautious of our treatment of uninsured depositors. Such depositors should be expected to assess the quality of their bank deposits just as they are expected to evaluate any other financial asset they purchase. Earlier I noted that our goal should be for banks to operate as much as possible as if there were no safety net. In fact, runs of uninsured deposits from banks under stress have become commonplace.

So far, the pressure transmitted from such episodes to other banks whose strength may be in doubt has been minimal. Nevertheless, the clear response pattern of uninsured depositors to protect themselves by withdrawing their deposits from a bank under pressure raises the very real risk that in a stressful environment the flight to quality could precipitate wider financial market and payments distortions. These systemic effects could easily feed back to the real economy, no matter how open the discount window and how expansive open market operations. Thus, while deposits in excess of insurance limits should not be protected by the safety net at any bank, reforms designed to rely mainly on increased

1. The attachments to this statement are available on request from Publications Services, mail stop 138, Board of Governors of the Federal Reserve System, Washington, D.C. 20551.

market discipline by uninsured depositors raise serious stability concerns.

An example of one such approach is depositor coinsurance or a deductible under which a depositor at a failed institution receives most, but not all, of his or her deposit in excess of a reduced (or the current) insurance limit. This option has some attractions, coupling depositor market discipline with relatively modest possible losses to depositors. The Board believes, however, that an explicit policy that requires imposition of uninsured depositor loss—no matter how small—is likely to increase the risk of depositor runs and to exacerbate the depositor response to rumors.

Another option to rely more on private-market incentives is the use of private deposit insurance as a supplement or replacement for FDIC insurance. This use would require, of course, that all relevant supervisory information—much of which is now held confidential—be shared with private insurers who would be obligated to use that information only to evaluate the risk of depositor insurance and not for the purposes of adjusting any of their own portfolio options. In addition, it is clearly unreasonable to impose on private insurers any responsibilities for macrostability in their commercial underwriting of deposit insurance. Private insurers' withdrawal of coverage in a weakening economy or their unwillingness to forebear in such circumstances would be understandable but counterproductive. The inability of private insurers to meet their obligations after an underwriting error would be disruptive at best and involve taxpayer responsibility at worst. Private insurance and public responsibility unfortunately are not always compatible. We have similar concerns with mutual assurance among groups of banks who would seek to evaluate each other's risk exposure and to discipline overly risky entities by expulsion from their mutual guarantee syndicate. In addition, a system of mutual guarantees by banks could raise serious anticompetitive issues.

There has also been support for the increased use of subordinated debentures in the capital structure of banking organizations. Intriguing attractions of this option are the thoughts that nonrunnable, but serially maturing, debt would provide both enhanced market discipline and a periodic market evaluation of the bank. The Board continues to support the use of subordinated debt for these reasons, as well as the fact that it provides supplementary capital to act as an additional buffer to the FDIC over and above that provided by the owners' equity capital. But, in our view, subordinated debentures can only be supporting players and not be awarded the central role in reform. This is a limited source of capital and one that may prove difficult and expensive to obtain when advertised as having constrained returns whose holders are expected to absorb losses for the FDIC. Adding features to make it more attractive adds complications that perhaps are best met directly by additional pure equity and other reforms.

A promising approach that seeks to simulate market discipline with minimal stability implications is the application of risk-based deposit insurance premiums by the FDIC. The idea is to make the price of insurance a function of the bank's risk, reducing the subsidy to risktaking and spreading the cost of insurance more fairly across depository institutions. In principle, this approach has many attractive characteristics, and could be designed to augment risk-based capital. For example, banks with high risk-based capital ratios might be charged lower insurance premiums. But the range of premiums necessary to induce genuine behavioral changes in portfolio management might well be many multiples of the existing premium, thereby raising practical concerns about its application. Risk-based premiums also would have to be designed with some degree of complexity if they are to be fair and if unintended incentives are to be avoided. In any event, the potential additional benefits on top of an internationally negotiated risk-based capital system, while positive, require further evaluation.

Another approach that has induced increasing interest is the insured narrow bank. Such an institution would invest only in high quality, short-maturity, liquid investments, recovering its costs for checking accounts and wire transfers from user fees. The narrow bank would thus require drastic institutional changes, especially for thousands of our smaller banks and for virtually all households using checking accounts. Movement from the present structure for delivery of many bank services would be difficult and costly, placing U.S. banks at a disadvantage internationally. In addition, this approach might shift and possibly focus systemic risk on larger banks. Banking organizations would have to locate their business and household credit operations in nonbank affiliates funded by uninsured deposits and borrowings raised in money and capital markets. Only larger organizations could fund in this way, and these units, unless financed longer term than banks today, would, even with the likely higher capital ratio imposed on them by the market, be subject to the same risks of creditor runs that face uninsured banks, with all of the associated systemic implications. If this were the case, we might end up with the same set of challenges we face today, refocused on a different set of institutions. We at the Board believe that while the notion of a narrow bank to insulate the insurance fund is intriguing, in our judgment further study of these systemic and operational implications is required.

If, in fact, proposals that rely on uninsured depositor discipline, private insurance, subordinated debentures, risk-based premiums, and structural changes in the delivery of bank services raise significant difficulties, reform should then look to other ways to curb banks' risk appetites, and to limit the likelihood that the deposit insurance fund, and possibly the taxpayer, will be called on to protect depositors. The Board believes that the most promising approach is to reform both bank capital and supervisory policies. This would build upon the groundwork laid in the FIRREA, in which the Congress recognized as key components of a sound banking system the essentiality of strong capital plus effective supervisory controls. Both would be designed to reduce the value of the insurance subsidy. Neither would rule out either concurrent or subsequent additions to deposit insurance reform, such as the changes discussed previously, other proposals, or new approaches that may emerge in the years ahead. In fact, higher capital, by reducing the need for, and thereby the value of, deposit insurance would make subsequent reform easier. There would be less at stake for the participants in the system.

At the end of this year, the phase-in to the International Capital Standards under the Basle Accord will begin. This risk-based capital approach provides a framework for incorporating portfolio and off-balance-sheet risk into capital calculations. Most U.S. banks have already made the adjustment required for the fully phased-in standard that will be effective at the end of 1992. However, the prospect of an increasingly competitive environment suggests that the minimum level of capital called for by the 1992 requirements may not be adequate, especially for institutions that want to take on additional activities. As a result of the safety net, too many banking organizations, in our judgment, have traveled too far down the road of operating with modest capital levels. It may well be necessary to retrace our steps and begin purposefully to move to capital requirements that would, over time, be more consistent with what the market would require if the safety net were more modest. The argument for more capital is strengthened by the necessity to provide banking organizations with a wider range of service options in an increasingly competitive world. Indeed, projections of the competitive pressures only intensify the view that if our financial institutions are to be among the strongest in the world, let alone avoid an extension of the taxpayers' obligation to even more institutions, we must increase capital requirements. Our international agreements under the Basle Accord permit us to do so.

There are three objectives of a higher capital requirement. First, higher capital would strengthen the incentives of bank owners and managers to evaluate more prudently the risks and benefits of portfolio choices because more of their money would be at risk. In effect, the moral hazard risk of deposit insurance would be reduced. Second, higher capital levels would create a larger buffer between the mistakes of bank owners and managers and the need to draw on the deposit insurance fund. For too many institutions, that buffer has been too low in recent years. The key to creating incentives to behave as the market would dictate, and at the same time creating these buffers or shock absorbers, is to require that those who would profit from an institution's success have the appropriate amount of their own capital at risk. Third, requiring higher capital imposes on bank managers an additional market test. They must convince investors that the expected returns justify the commitment of risk capital. Those banks unable to do so would not be able to expand.

We are in the process in the Federal Reserve System of developing more specific capital proposals, including appropriate transition arrangements designed to minimize disruptions. However, at the outset I would like to anticipate several criticisms. For many banks, raising significant new capital will be neither easy nor cheap. Maintaining return on equity will be more difficult, and those foreign banks that only adhere to the Basle minimums may be put in a somewhat better competitive position relative to some U.S. banks. Higher capital requirements also will tend to accelerate the move toward bank consolidation and slow growth in bank assets. However, these concerns must be balanced against the increasing need for reform now, the difficulties with all the other options, and both the desire of, and necessity for, banking organizations to broaden their scope of activities to operate successfully.

More generally, many of the arguments about the competitive disadvantages of higher capital requirements are shortsighted. Well-capitalized banks are the ones best positioned to be successful in the establishment of long-term relationships, to be the most attractive counterparties for a large number of financial transactions and guarantees, and to expand their business activities to meet new opportunities and changing circumstances. Indeed, many successful U.S. and foreign institutions would today meet substantially increased risk-based capital standards. In addition, the evidence of recent years suggests that U.S. banks can raise sizable equity. The dollar volume of new stock issues by banking organizations has grown since the late 1970s at a greater rate than the total dollar volume of new issues by all domestic corporate firms.

Higher capital standards should go a long way toward inducing marketlike behavior by banks. However, the Board believes that, so long as a significant safety net exists, additional inducements will be needed through an intensification of supervisory efforts to deter banks from maintaining return on equity by acquiring riskier assets. When it is not already the practice, full in-bank supervisory reviews—focusing on asset portfolios and off-balance-sheet commitments—should occur at least annually, and the results of such examinations should promptly be shared with the board of directors of the bank and used to evaluate the adequacy of the bank's capital. The examiner should be convinced after a rigorous and deliberate review that the loan-loss reserves are consistent with the quality of the portfolio. If they are not, the examiner should insist that additional reserves be created with an associated reduction in the earnings or equity capital of the bank.

This method of adjusting and measuring capital by reliance on examiner loan evaluations does not depend on market value accounting to adjust the quality of the assets. Some day, perhaps, we may be able to apply generally accepted precepts of market value accounting to both the assets and liabilities of a financial going concern with a wide spectrum of financial assets and liabilities. But the Board is not comfortable with the process as it has developed so far, either regarding the ability of market value accounting to reflect market values accurately over reasonable periods or to avoid being overly sensitive to short-run events. For most banks, loans are the predominant asset, an asset that the examiners should evaluate in each of the proposed annual in-bank supervisory reviews. We at the Federal Reserve believe that the examiners' classification of loan quality should, as I noted, be fully reflected in the banks' loan-loss reserves by a diversion of earnings or a reduction in capital. If the resultant capital is not consistent with minimum capital standards, the board of directors and the bank's regulators should begin the process of requiring the bank either to reduce those assets or to rebuild equity capital.

If credible capital raising commitments are not forthcoming, and if those commitments are not promptly met, the authorities should pursue such responses as lowered dividends, slower asset growth, or perhaps even asset contraction, restrictions on the use of insured brokered deposits, if any, and divestiture of affiliates with the resources used to recapitalize the bank. What is important is that the supervisory responses occur promptly and firmly and that they be anticipated by the bank. This progressive discipline or prompt corrective action of a bank with inadequate capital builds on our current bank supervisory procedures and is designed to simulate market pressures from risktaking—to link more closely excessive risktaking with its costs—without creating market disruptions. It is also intended to help preserve the franchise value of a going concern by acting early and quickly to restore a depository to financial health. In this way, the precipitous drop in value that normally occurs when a firm is placed in conservatorship or receivership would, for the large majority of cases, be avoided.

While some flexibility is certainly required in this approach, the Board believes that there must be a prescribed set of responses and a presumption that these responses will be applied unless the regulator determines that the circumstances do not warrant them. Even though prompt corrective action implies some limit on the discretion of supervisors to delay for reasons that they perceive to be in the public interest, the Board is of the opinion that it would be a mistake to eliminate completely the discretion of the regulator.

Accordingly, the Board believes that a system that combined a statutorily prescribed course of action with an allowance for regulatory flexibility would result in meaningful prompt resolution. For example, if a depository institution failed to meet minimum capital requirements established by its primary regulatory agency, the agency might be required by statute to take certain remedial action unless it determined on the basis of particular circumstances that such action was not required. The presumption would thus be shifted toward supervisory action, and delay would require an affirmative act by the regulatory agency.

The prescribed remedial action required in a given case would be dependent upon the adequacy of the institution's capital. As the capital fell below established levels, the supervisor could be required, for example, to order the institution to formulate a capital plan, limit its growth, limit or eliminate dividends, or divest certain nonbank affiliates. In the event of seriously depleted capital, the supervisor could require a merger, sale, conservatorship, or liquidation.

In adopting such a statutory framework, the Congress should consider designing the system so that forced mergers, divestitures, and, when necessary, conservatorships could be required while there is still positive equity capital in the depository institution. While existing stockholders should be given a reasonable period of time to correct deteriorating capital positions, the Congress should specifically provide the bank regulators with the clear authority, and therefore explicit support, to act well before technical insolvency to minimize the ultimate resolution costs. The presence of positive equity capital, even if at low levels, when combined with any tier 2 capital, would limit reorganization and liquidation costs.

In the Board's view, most of the remedial actions discussed above can be taken, and have been taken, by bank regulators under the current legal framework. Under current law, however, the actions to be taken are discretionary and dependent upon a showing of unsafe or unsound conditions or a violation of law, and implementation of a supervisory remedial action can be extended over a protracted period of time when the depository institution contests the regulator's determination. In cases in which an institution's capital is deteriorating, the progressive discipline framework described above would establish a systematic program of progressive action based on the capital of the institution, instead of requiring the regulator to determine on a case-by-case basis, as a precondition to remedial action, that an unsafe or unsound practice exists. This program would introduce a greater level of consistency of treatment into the supervisory process, place investors and managers on notice regarding the expected supervisory response to falling capital levels, and reduce the likelihood of protracted administrative actions challenging the regulator's actions.

The Board is in the process of developing the parameters, processes, and procedures for prompt corrective action. One of the principles guiding our efforts is the need to balance rules with discretion. In addition, as is the case for higher capital standards, the Board is mindful of the need for an appropriate transition period before fully implementing such a change in supervisory policy.

Higher capital and prompt corrective action would increase the cost and reduce the availability of credit from insured institutions to riskier borrowers. In effect, our proposal would reduce the incentive that some banks currently have to overinvest in risky credits at loan rates that do not fully reflect the risks involved. This implies that the organizers of speculative and riskier ventures will have to restructure their borrowing plans, including possibly paying more for their credit, or seek financing from noninsured entities. Some borrowers may find their proposals no longer viable. However, it is just such financing by some insured institutions that has caused so many of the current difficulties, and it is one of the objectives of our proposals to cause depositories to reconsider the economics of such credits. As insured institutions reevaluate the risk-return tradeoff, they are likely to be more interested in credit extensions to less risky borrowers, increasing the economic efficiency of our resource allocation.

Despite their tendency to raise the average level of bank asset quality, higher capital requirements and prompt corrective action will not eliminate bank failures. An insurance fund will still be needed, but we believe that, with a fund of reasonable size, the risk to taxpayers should be reduced substantially. As I have noted, higher capital requirements and prompt corrective action imply greater caution in bank asset choices and a higher cushion for the FDIC to absorb bank losses. In addition, an enhanced supervisory approach will not permit deteriorating positions to accumulate.

But until these procedures have been adopted and the banking system has adjusted to them, circumstances could put the existing insurance fund under severe pressure. As Chairman Seidman has indicated, the fund is already operating under stress, as its reserves have declined in recent years and now stand, as a percentage of insured deposits, at their lowest level in history. At the same time, there remain all too many problems in the banking system, problems that have been growing of late as many banks, including many larger banks, have been experiencing a deterioration in the quality of their loan portfolios, particularly real estate loans. It thus seems clear that the insurance fund likely will remain under stress for some time to come. Moreover, pressures would intensify if real estate market conditions were to weaken further or a recession were to develop in the general economy.

It should, however, be clearly underlined that the size or adequacy of the insurance fund does not change the quality of the deposit insurance guarantee made by the federal government; it does allocate the cost of meeting any guarantee between the banking industry that pays the insurance premiums and the taxpayers as a whole. It should, in our view, be the policy of the government to minimize the risk to taxpayers of the deposit insurance guarantee, and we believe that our proposal does that. While some increase in insurance premiums is in all likelihood necessary, we must be concerned that attempts to accomplish this end by substantially higher insurance premiums may well end up—especially if accompanied by higher capital requirements—simply making deposits so unattractive that banks are unable to compete. Avoiding taxpayer costs and maintaining a competitive banking system are just two more reasons why basic deposit insurance reform is so urgent.

Among the deposit insurance reforms that might be considered on the basis of both strengthening the insurance fund and fairness to smaller and regional banks is the assessment of insurance premiums on the foreign branch deposits of U.S. banks. A substantial proportion of the deposits of the largest U.S. banks are booked at branches outside the United States, including offshore centers in the Caribbean. Assessing such deposits could yield significant revenue for the FDIC.

However, assessing deposit insurance premiums on foreign deposits would involve some costs. Such deposits may be quite sensitive to a small decline in their yields. Thus imposing premiums could lead to deposit withdrawals and funding problems at some U.S. banking organizations and possibly inhibit the ability of these organizations to raise capital.

Even if no adjustment is made in the insurance assessment on foreign deposits, held almost solely by large banks, other deposit insurance reforms should be equally applicable to banks of all sizes. No observer is comfortable with the inequities and adverse incentives of an explicit or implicit program that penalizes depositors, creditors, and owners of smaller banks more than those of larger ones. The Board believes that no bank should assume that its scale insulates it from market discipline, nor should any depositor with deposits in excess of the insurance limit at the largest of U.S. banks assume that he or she faces no loss should their bank fail.

Nevertheless, it is clear that there may be some banks, at some particular times, whose collapse and liquidation would be excessively disruptive to the financial system. But it is only under the very special conditions, which should be relatively rare, of significant and unavoidable risk to the financial system that our policies for resolving failed or failing institutions should be relaxed. The benefits from the avoidance of a contagious loss of confidence in the financial system accrue to us all. But included in the cost of such action is the loss of market discipline that would result if large banks and their customers presume a kind of exemption from loss of their funds. The Board's policies of prompt corrective action and higher capital are designed to minimize these costs. Under these policies, the presumption should always be that prompt and predictable supervisory action will be taken. For no bank is ever too large or too small to escape the application of the same prompt corrective action standards applied to other banks. Any bank can be required to rebuild its capital to adequate levels and, if it does not, be required to contract its assets, divest affiliates, cut its dividends, change its management, sell or close offices, and the resultant smaller entity can be merged or sold to another institution with the resources to recapitalize it. If this is not possible, the entity can be placed in conservatorship until it is.

It is, by the way, the largest U.S. banks that would be required under our proposals to raise the most additional capital, both absolutely and proportionally. Most banks with assets of less than $1 billion already meet capital requirements considerably above the fully phased-in Basle Capital Accord minimums. In addition, it bears emphasizing that no deposit insurance reform that truly reduces the subsidy existing in the current system will be costless for banks. The issue really is one of achieving maximum benefit from reform at minimum cost. We believe that our proposals achieve this goal.

It is worth noting that in many foreign countries large banks are considered so important to their economy that it is widely anticipated that authorities in these countries would support these banks during financial crises. In some countries, notably France and Italy, some large banks are owned by the government, another factor that arguably leads market participants to doubt that these banks could fail. Thus the commitment of foreign authorities presumably extends beyond the rather limited levels explicitly incorporated into their deposit insurance systems and may potentially create the same types of problems that the United States faces with institutions deemed "too big to fail."

Virtually all of the major industrial countries have instituted a system of explicit deposit insurance. The character of these systems, however, varies widely, and most of them are more modest in scope than the U.S. system. In many cases, especially in Europe, deposit insurance is not a funded system, but rather an agreement among banks intended to make money available to protect the small depositors at failed banks. Except in Germany and Italy, the ceiling on insured deposits is substantially lower than in the United States. Membership in the insurance system is also voluntary in several countries. Though most banks in these countries join the system, deposit insurance is not viewed as the primary means of support for large banks. As Europe 1992 is implemented, and full cross-border banking becomes a European reality, it is quite likely that the European Community will find itself under pressure to make its deposit insurance system more explicit and more uniform.

I noted earlier that one response of some U.S. banks to the more intense competitive environment has been to draw down their capital buffer. These and other institutions cannot rebuild, strengthen, and maintain the appropriate level of capital unless they are able to adapt to the changing competitive and technological environment. The ability to adapt is crucially dependent on broadening the permissible range of activities for banking organizations. At the same time, we should be sensitive to the implications of the potential extension of the safety net—directly or indirectly—under those markets that banking organizations are authorized to enter.

The Board has for some time held the view that strong insulating fire walls would both protect banks (and taxpayers) from the risk of new activities and limit the extension of the safety net subsidy that would place independent competitors at a disadvantage. However, recent events, including the rapid spread of market pressures to separately regulated and well-capitalized units of Drexel when their holding company was unable to meet its maturing commercial paper obligations, have raised serious questions about the ability of fire walls to insulate one unit of either a holding company or a bank from funding problems of an affiliate or subsidiary. Partially as a result, the Board is in the process of reevaluating both the efficacy and desirability of substantial fire walls between a bank and some of its affiliates or subsidiaries. It is clear that high and thick fire walls reduce synergies and raise costs for financial institutions, a significant problem in increasingly competitive financial markets. If they raise costs and may not be effective, we must question why we are imposing these kinds of fire walls at all. Moreover, higher capital standards and prompt corrective action at the bank go a long way to limit the transference of the bank safety net subsidies to bank affiliates or subsidiaries that fire walls are designed to constrain. And, as such, they should greatly limit the risk of distorted market signals and excessive risktaking over an expanded range of markets, as well as the unfair competition, that might otherwise accompany wider activities by banking organizations.

It may be more realistic to apply more limited fire walls to the new activities. I have in mind here restrictions such as sections 23A and 23B of the Federal Reserve Act, which already limit the financial transactions between a bank and its affiliates, requiring collateral, arms-length transactions, and—except when Treasury securities are used as collateral—quantitative limits based on the bank's capital. Such limitations could also be applied to transactions between a bank and certain bank subsidiaries.

Even with these, or tighter fire walls, the potential for problems in one unit of a firm to affect other units raises the question of the implications of a piecemeal regulatory structure, with no means for ensuring that the activities of the organization as a whole do not impose undue risk on the insured entity and hence either the financial system or the safety net. We believe that, to protect the insured entity, the financial system, and the safety net, some agency should be responsible for oversight of the entire organization.

Authorization to use their expertise over a wider range of markets might well be limited only to those organizations in which the bank or the holding company meets a new higher capital standard. Consequently, the Congress might wish to authorize bank supervisors to grant certain of these activities only to those entities that exceed such a standard. Those institutions that consistently exceed the capital standard perhaps could receive more flexibility in supervisory treatment. For example, a notice requirement could be substituted for formal applications for activities permitted by law and regulation, provided that such acquisitions leave the bank or other appropriate entity's capital in excess of the higher standards. Other reductions in regulatory burden for highly capitalized banks or banking organizations might also be appropriate. Such organizations would, however, still be subject to the same thorough annual examinations.

As you know, the Board has long supported repeal of the provisions of the Glass–Steagall Act that separate commercial and investment banking. We still strongly advocate such repeal because we believe that technology and globalization have continued to blur the distinctions among credit markets and have eroded the franchise value of the classic bank intermediation process. Outdated constraints will only endanger the profitability of banking organizations and their contribution to the American economy. Beyond investment banking, the Board believes that highly capitalized banking firms should be authorized to engage in a wider range of financial activities as a part of the modernization of our financial structure and the maintenance of strong, profitable financial institutions that can compete in world markets. A banking system that cannot adapt to the changing competitive and technological environment will no longer be able to attract and maintain the higher capital level that some of our institutions need to operate without excessive reliance on the safety net.

Firms primarily engaged in the financial activities authorized to banking organizations should likewise be permitted to operate an insured bank. The Congress, of course, will have to give careful consideration to how to handle the activities some of these entities are already engaged in that would not be permitted to banking organizations. More generally, as we expand the range of activities available to banks and their subsidiaries or affiliates, competitive equity suggests the desirability of functional regulation. Under such an approach, each area of activity should be subject to the same regulatory constraints as equivalent or very similar functions at nonbank firms.

As the Congress considers modernization of our banking structure to meet the needs of the twenty-first century, it should not only widen the permissible activities of well-capitalized banking organizations but also eliminate outdated statutes that only increase costs. The McFadden Act forces state member banks and national banks to deliver interstate services only through separately capitalized bank holding company subsidiaries (where permitted by state law) rather than through branches. Such a system reduces the ability of many smaller banks to diversify geographically and raises costs for all banking organizations that operate in more than one state, a curious requirement as we search for ways to make banks more competitive and profitable. The McFadden Act ought to be amended to permit interstate branching by banks.

In summary, events have made it clear that we ought not to permit banks, because of their access to the safety net, to take excessive risk with inadequate capital. Even if we were to ignore the potential taxpayer costs, we ought not to permit a system that is so inconsistent with efficient market behavior. In the process of reform, however, we should be certain we consider carefully the implications for macroeconomic stability. The Board believes that higher capital and prompt corrective action by supervisors to resolve problems will go a long way to eliminate excessive risktaking by insured institutions and would not preclude additional deposit insurance reform, now or later. Moreover, we believe that with such an approach the Congress should feel comfortable with authorizing banking organizations to expand the scope of their financial activities. Indeed, we believe that permitting wider activities is necessary to ensure that such organizations can remain competitive both here and abroad. Increased activities are also required to sustain the profitability needed if banking firms are to attract capital. To limit the risks of safety net transference, some new activities might be made available by banking regulators only to banks with impressive capital positions. We believe that whatever the regulatory form and structure under which new activities are permitted, one agency should have oversight responsibility sufficient to protect the bank from excessive risks taken in other parts of its broader organization. It is also our view that, with these suggested reforms, reliance on stringent fire walls would not be necessary. And the McFadden Act should be amended to permit banks to deliver their services at the lowest possible costs and to more easily diversify their geographic risks. The Board has shared its views with the Treasury as part of our continuing consultations on these matters, especially in the context of their FIRREA-mandated study.

Finally, in considering all proposals, we should remind ourselves that our objective is a strong and stable financial system that can deliver the best services at the lowest cost and compete around the world without taxpayer support. This objective requires the modernization of our financial system and the weaning of some institutions from the unintended benefits that accompany the safety net. Higher capital requirements may well mean a relatively leaner and more efficient banking system, and they will certainly mean one with reduced inclinations toward risk. However, the Board believes that our proposed reforms—including the authorization of wider activities by banking organizations—will go a long way toward ensuring a safer and more efficient financial system and lay the groundwork for other modifications in the safety net in the years ahead. □

Additional statement follows.

Statement by Alan Greenspan, Chairman, Board of Governors of the Federal Reserve System, before the Joint Economic Committee, U.S. Congress, September 19, 1990.

It is a pleasure to be here today to discuss the state of the economy and the appropriate course for policy in the current situation.

When I presented the Federal Reserve's semiannual report on monetary policy to the Congress in July, I noted that the pace of economic activity had slowed considerably this year. Real gross national product rose at only a 1½ percent annual rate, on average, in the first half, and the available indicators suggest that real growth remained slow during the summer. Private employment has been flat over the past two months, and the unemployment rate, which had fluctuated narrowly for several quarters, has edged up since midyear.

Despite the general sluggishness in business activity this year, the underlying trend in inflation has not improved. In fact, the core rate of inflation in consumer prices may have crept higher. Moreover, the chance of a significant break soon in the inflation trend would seem to have diminished in view of the additional pressures from oil prices.

In my July testimony, I noted that the Board members and Reserve Bank presidents expected the economy to expand at a moderate pace over the ensuing year and a half, while prices were anticipated to rise less rapidly than they had earlier this year. Most private forecasters shared that assessment. Regrettably, events in the Middle East have introduced new and substantial risks to the outlook. The higher oil prices already have added to overall price pressures and may have begun to restrain real activity. Besides the effects of the higher oil prices per se, just the enormous uncertainty about how and when the tensions in the Persian Gulf will be resolved undoubtedly is affecting the economy in a negative way.

If we knew how oil prices were going to move in coming months, it would be feasible—at least in principle—to trace out the effects of the 1990 "oil shock" on the U.S. economy. Economic theory supplies an analytical framework, and empirical analyses of past experience provide rough indications of the likely direction and size of the impacts.

Admittedly, even the most sophisticated econometric models are simplified, almost crude, representations of economic reality. They vary in their readings of history and cannot capture completely the scope and complexity of the economy's interrelationships or changes in its structure over time. Moreover, they cannot take into account the political and military unknowns in the current situation. Nonetheless, such models can be employed to identify the directions, and rough orders of magnitude, of the average effects of changes in oil prices. This is certainly a useful first step in policy analysis.

Suppose, for example, that crude oil prices were to average something under $30 per barrel over the next year—roughly in line with what is suggested by current transactions in the spot and futures markets. This would be approximately $10 per barrel above their July level. Representative models suggest that such a $10 per barrel increase in the price of oil would add 1½ to 2 percent to the level of overall consumer prices over the next year. Much of the increase in the overall price level reflects the pass-through of higher costs of crude oil into prices of domestically consumed petroleum products. These direct effects typically appear relatively quickly; indeed, such effects already were evident in yesterday's report on the consumer price index for August and undoubtedly will remain sizable in the September figures as well. Other, less direct, effects will build over time. Prices for competing energy products will be bid up, and those of goods and services that use energy as an input will rise more rapidly than they otherwise would have. A sustained higher oil price also would tend to feed through—with some lag—to wages, as workers seek to offset losses in their real income.

The effects on economic activity work through several channels and are more difficult to sort out. The range of empirical estimates is doubtless wider than for prices, but a representative figure is that a sustained increase of $10 per barrel of oil would reduce the level of real GNP roughly 1 percent within a year. Much of this loss in output arises because—to the extent that the United States is a net importer of oil—a hike in oil prices drains away purchasing power from American energy users to foreign oil producers. Indeed, with imports of petroleum and products currently averaging about 8½ million barrels per day, a $10 per barrel rise in the oil price adds roughly $30 billion to our annual import bill.

Specifically, the higher consumer prices that result from the oil shock cut into the real disposable income of households, which in turn can be expected to reduce their spending. The weaker path for consumption subsequently can be presumed to spill over to business investment as many firms—their profit margins already squeezed by higher energy costs—lower capital spending in response to the reduced demand for their output.

Over time, the oil-producing countries may increase their purchases of U.S.-produced goods and services. In the current situation, the recent fall in the dollar may also provide some stimulus to our exports and restrain our imports. But, in total, the increment to U.S. GNP from higher net exports probably will be smaller than the drop in domestic demand—particularly in the short run. In addition, the weaker dollar adds upward pressure to U.S. import prices and hence raises further concern about inflation and instability.

Domestic energy producers, like their foreign counterparts, benefit from higher oil prices. At least to some extent, they likely will increase spending on exploration and drilling, or other types of investment. Nonetheless, this offset, too, probably will be relatively small in the near term, as producers—not knowing whether the higher oil price will be sustained—are likely to be reluctant to undertake major projects.

Turning from the abstract to the current reality, hard data on the output of goods and services in the period since the invasion of Kuwait are limited, and it is difficult to distinguish the effects of higher oil prices from developments that would have occurred anyway. Clearly, growth is, at best, sluggish. Nonetheless, judging from both hard data and more anecdotal reports, we are not—at least as yet—witnessing a cumulative unwinding of economic activity.

Outlays on new cars and light trucks should be sensitive to the uncertainty shock that the Persian Gulf crisis has imparted, yet they have softened only moderately from the pace of earlier in the summer. In addition, the advance estimates for August suggest that retail sales of other items were about the same in real terms as in the preceding few months. Nonetheless, prospects for consumer demand are highly uncertain, especially in light of the sharp deterioration in consumer sentiment recorded in a variety of surveys since the Middle East crisis began. For example, the indexes compiled by the Survey Research Center at the University of Michigan and by the Conference Board both plummeted in August to their lowest levels since 1983.

As yet, there is no statistical evidence on how prospects for business investment may have changed as a consequence of the oil shock. But the available anecdotal information clearly has taken on a more pessimistic tone over the past several weeks. Notably, the latest information provided to the Federal Reserve Banks by businesses and other contacts suggests a greater caution on the part of firms in the acquisition of capital goods, in some cases because of increased uncertainty. The reports from the District Banks are summarized in the so-called Beige Book, which will be released later today.

It would be surprising if the recent developments did *not* give rise to some pullback by consumers and businesses. But the paucity of hard data makes it difficult to assess the extent of any cutbacks in spending or production that may be under way. It is also difficult to put the information in perspective. For example, the sharp drop in consumer attitudes may be largely a reflexive response to bad news, rather than an objective assessment of the outlook for income and employment. If so, attitudes, and spending in turn, may improve, once the initial shock effect wears off. On the other hand, the surveys may be signalling a more basic weakness in demand that will not be eased by the mere passage of time. The prospects for weakness cascading throughout the economy do not as yet appear compelling, in part because of the tight rein that businesses have been keeping on inventories. Nonetheless, we must remain alert to the possibility of such a development.

Whether an efficacious policy response to current developments would seek higher, lower, or unchanged interest rates will depend on the specifics of the situation, which are shifting day by day. In framing policy, however, we must not lose sight of the fact that there is no policy initiative that can in the end prevent the transfer of wealth, and cut in our standard of living, that stems from higher prices for imported oil. In addition, we must take into account the policy problems that already were present before the oil shock. For example, as I reported to the Congress in July, we made an adjustment to policy at that time in response to evidence, including Federal Reserve surveys, that banks—along with other lenders—had tightened credit. Data since that time have validated the earlier assessment, and, of course, we shall continue to evaluate all of the evidence relating to credit conditions.

Another key issue one must address is how much of any change in short-term rates would carry over to the crucially important *long-term* rates, given the concern in financial markets about prospects for inflation and about future economic developments. It is lower long-term rates, rather than short rates, that can do the most to foster the investment activity that is critical for the future health of the economy. Specifically, lower mortgage rates clearly would be useful in containing the current erosion of real estate markets. Policy actions that are not perceived to be consistent with a stable, noninflationary economic environment could easily be counterproductive over the long haul.

It is the responsibility of monetary policy to look through the uncertainty of the near term and to provide the stable financial environment that is consistent with our longer-run objectives. We shall want, for example, to make sure that money and credit remain on appropriate growth tracks, with due allowance for the special influences affecting the demand for money and its velocity; among those influences are the credit developments to which I referred a moment ago. Indeed, one could argue that the restrained stance of monetary policy over the past few years may have reduced the odds of the oil shock igniting a more general acceleration of prices and a sharp escalation of bond yields.

In any event, the surest way to bring down real long-term interest rates is to reduce the federal budget deficit. As you know, some have expressed concern in recent weeks that a large cut in the FY1991 budget—coming on top of the oil shock—would risk tipping the economy into recession. Such fears are understandable; however, they must be balanced against the benefits that will flow from reducing the federal government's claim on the nation's limited pool of saving. Because the government has been borrowing so much and for so long, it is well past time to scale back its draw on credit markets and to free up more resources for enhancing investment and production by the private sector.

The participants in the Budget Summit are endeavoring to craft a package of sizable deficit reductions. If they succeed and the Congress does enact a credible, long-term, enforceable budget agreement, I would expect long-term interest rates to decline.

In that context, I would presume that the Federal Reserve would move toward ease to accommodate those changes in the capital markets. What adjustment might be necessary, and how it might be timed, cannot be spelled out before the fact. The actions required will depend on current economic conditions, the nature and magnitude of the fiscal package, and the likely timing of its effects.

In the final analysis, no one can guarantee that real growth will proceed smoothly, without a hitch on a quarter-to-quarter basis. I can only offer the assurance that the Federal Reserve will seek, as we have in the past, to foster economic stability and sustainable growth, in the context of continued progress over time toward price stability. □

Announcements

Regulation Z: Amendments

The Federal Reserve Board issued on September 14, 1990, amendments to its Regulation Z (Truth in Lending) relating to home equity lines of credit. The final rules become effective September 19, 1990, but compliance is not mandatory until October 1, 1991.

One of the amendments allows creditors to continue to freeze the home equity line of credit if the rate cap is reached, stipulating that this condition is specified in the contract. The other amendment requires that all repayment phase disclosures be given to consumers when they receive the application for the line of credit.

Regulation K: Extension of Comment Period on Proposed Revisions

The Federal Reserve Board on September 26, 1990, extended the period to receive comments on its proposed revision to Regulation K (International Banking Operations) that would permit U.S. banking organizations to extend the scope of their international activities. Comment must now be received by October 14, 1990, instead of by September 30, 1990.

Revised Brochure *A Guide to Business Credit for Women, Minorities, and Small Businesses*

The Federal Reserve Board announced on September 14, 1990, the availability of a newly revised and retitled brochure designed to assist women, minorities, and small businesses in obtaining startup or additional financing. The publication is entitled *A Guide to Business Credit for Women, Minorities, and Small Businesses.*

The brochure helps to demystify the commercial credit process and provides guidance on how to prepare effectively the necessary loan application documentation. The guide also points out that both the borrower and the lender have certain responsibilities. If a borrower does not obtain the credit at first, he or she is encouraged to find out the reasons why from the lender, and to make the necessary improvements, while realizing that getting credit has always been troublesome if the documentation is not in order. Within the guide, the reader will find some sources for technical assistance and recourses to take if the application is not approved.

Copies of the brochure are available from the Board's Publications Services, mail stop 138, Board of Governors of the Federal Reserve System, Washington, D.C. 20551 or from the District Reserve Banks.

Publication of New Brochure *Home Mortgages: Understanding the Process and Your Rights*

The Federal Reserve Board announced on September 20, 1990, the publication of a new brochure regarding mortgage discrimination entitled *Home Mortgages: Understanding the Process and Your Rights.*

The brochure describes a mortgage, tells how to shop for one and what to look for, outlines the application process, and advises a potential homebuyer on how to register complaints if the consumer thinks that he or she may have been discriminated against. To help a consumer make this determination, the brochure lists some common discrimination practices and states some of the laws that provide consumers with protection regarding homeownership.

Copies of the brochure are available from the Board's Publications Services, mail stop 138, Board of Governors of the Federal Reserve System, Washington, D.C. 20551 or from the District Reserve Banks.

Legal Developments

Final Rule - Revision to Regulation J

The Board of Governors is revising 12 C.F.R. Part 210, Subpart B to its Regulation J (Funds Transfers Through Fedwire), to make it consistent with the new Article 4A of the Uniform Commercial Code, Funds Transfers. The revision sets out the rules governing funds transfers through Fedwire, as well as Commentary to the regulation that constitutes a Board interpretation of the regulation.

Effective January 1, 1991, 12 C.F.R. Part 210, is revised to read as follows:

1. The authority citation for Part 210 is revised to read as follows:

Authority: Federal Reserve Act, sec. 13 (12 U.S.C. 342), sec. 11(i) and (j) (12 U.S.C. 248(i) and (j)), sec. 16 (12 U.S.C. 248(o) and 360), and sec. 19(f) (12 U.S.C. 464); and the Expedited Funds Availability Act (12 U.S.C. 4001 *et seq.*)

2. The heading to Part 210 is revised to read as follows:

Part 210 - Regulation J (Collection of Checks and Other Items by Federal Reserve Banks and Funds Transfers Through Fedwire)

3. Subpart B is revised to read as follows:

Subpart B — Funds Transfers Through Fedwire

Appendix A to Subpart B — Commentary

Appendix B to Subpart B — Article 4A.

Subpart B — Funds Transfers through Fedwire

Section 210.25—Authority, purpose, and scope.

(a) *Authority and purpose.* This Subpart provides rules to govern funds transfers through Fedwire, and has been issued pursuant to the Federal Reserve Act — section 13 (12 U.S.C. 342), paragraph (f) of section 19 (12 U.S.C. 464), paragraph 14 of section 16 (12 U.S.C. 248(o)), and paragraphs (i) and (j) of section 11 (12 U.S.C. 248(i) and (j)) — and other laws and has the force and effect of federal law. This Subpart is not a funds-transfer system rule as defined in Section 4A-501(b) of Article 4A.

(b) *Scope.*

(1) This Subpart incorporates the provisions of Article 4A set forth in Appendix B. In the event of an inconsistency between the provisions of the sections of this Subpart and Appendix B, the provisions of the sections of this Subpart shall prevail.

(2) Except as otherwise provided in paragraphs (3) and (4) below, this Subpart governs the rights and obligations of:

(i) Federal Reserve Banks sending or receiving payment orders;

(ii) senders that send payment orders directly to a Federal Reserve Bank;

(iii) receiving banks that receive payment orders directly from a Federal Reserve Bank;

(iv) beneficiaries that receive payment for payment orders sent to a Federal Reserve Bank by means of credit to an account maintained or used at a Federal Reserve Bank; and

(v) other parties to a funds transfer any part of which is carried out through Fedwire to the same extent as if this Subpart were considered a funds-transfer system rule under Article 4A.

(3) This Subpart governs a funds transfer that is sent through Fedwire, as provided in paragraph (b)(2), even though a portion of the funds transfer is governed by the Electronic Fund Transfer Act, but

the portion of such funds transfer that is governed by the Electronic Fund Transfer Act is not governed by this Subpart.

(4) In the event that any portion of this Subpart establishes rights or obligations with respect to the availability of funds that are also governed by the Expedited Funds Availability Act or the Board's Regulation CC, Availability of Funds and Collection of Checks, those provisions of the Expedited Funds Availability Act or Regulation CC shall apply and the portion of this Subpart, including Article 4A as incorporated herein, shall not apply.

(c) *Operating Circulars.* Each Federal Reserve Bank shall issue an Operating Circular consistent with this Subpart that governs the details of its funds-transfer operations and other matters it deems appropriate. Among other things, the Operating Circular may: set cut-off hours and funds-transfer business days; address available security procedures; specify format and media requirements for payment orders; identify messages that are not payment orders; and impose charges for funds-transfer services.

(d) *Government senders, receiving banks, and beneficiaries.* Except as otherwise expressly provided by the statutes of the United States, the parties specified in paragraphs (b)(ii) - (v) include:

(1) a department, agency, instrumentality, independent establishment, or office of the United States, or a wholly-owned or controlled Government corporation;

(2) an international organization;

(3) a foreign central bank; and

(4) a department, agency, instrumentality, independent establishment, or office of a foreign government, or a wholly-owned or controlled corporation of a foreign government.

Section 210.26—Definitions.

As used in this Subpart, the following definitions apply:

(a) *Article 4A* means Article 4A of the Uniform Commercial Code as set forth in Appendix B.

(b) *As of adjustment* means a debit or credit, for reserve or clearing balance maintenance purposes only, applied to the reserve or clearing balance of a bank that either sends a payment order to a Federal Reserve Bank, or that receives a payment order from a Federal Reserve Bank, in lieu of an interest charge or payment.

(c) *Automated clearing house transfer* means any transfer designated as an automated clearing house transfer in a Federal Reserve Bank Operating Circular.

(d) *Beneficiary's bank* has the same meaning as in Article 4A, except that:

(1) a Federal Reserve Bank need not be identified in the payment order in order to be the beneficiary's bank; and

(2) the term includes a Federal Reserve Bank when that Federal Reserve Bank is the beneficiary of a payment order.

(e) *Fedwire* is the funds-transfer system owned and operated by the Federal Reserve Banks that is used primarily for the transmission and settlement of payment orders governed by this Subpart. Fedwire does not include the system for making automated clearing house transfers.

(f) *Interdistrict transfer* means a funds transfer involving entries to accounts maintained at two Federal Reserve Banks.

(g) *Intradistrict transfer* means a funds transfer involving entries to accounts maintained at one Federal Reserve Bank.

(h) *Off-line bank* means a bank that transmits payment orders to and receives payment orders from a Federal Reserve Bank by telephone orally or by other means other than electronic data transmission.

(i) *Payment order* has the same meaning as in Article 4A, except that the term does not include automated clearing house transfers or any communication designated in a Federal Reserve Bank Operating Circular issued under this Subpart as not being a payment order.

(j) *Sender's account*, receiving bank's account, and *beneficiary's account* mean the reserve, clearing, or other funds deposit account at a Federal Reserve Bank maintained or used by the sender, receiving bank, or beneficiary, respectively.

(k) *Sender's Federal Reserve Bank* and *receiving bank's Federal Reserve Bank* mean the Federal Reserve Bank at which the sender or receiving bank, respectively, maintains or uses an account.

Section 210.27—Reliance on identifying number.

(a) *Reliance by a Federal Reserve Bank on number to identify an intermediary bank or beneficiary's bank.* A Federal Reserve Bank may rely on the number in a payment order that identifies the intermediary bank or beneficiary's bank, even if it identifies a bank different from the bank identified by name in the payment order, if the Federal Reserve Bank does not know of such an inconsistency in identification. A Federal Reserve Bank has no duty to detect any such inconsistency in identification.

(b) *Reliance by a Federal Reserve Bank on number to identify beneficiary.* A Federal Reserve Bank, acting as a beneficiary's bank, may rely on the number in a payment order that identifies the beneficiary, even if it identifies a person different from the person identified by name in the payment order, if the Federal Reserve Bank does not know of such an inconsistency in identification. A Federal Reserve Bank has no duty to detect any such inconsistency in identification.

Section 210.28—Agreement of sender.

(a) *Payment of sender's obligation to a Federal Reserve Bank.* A sender (other than a Federal Reserve Bank), by maintaining or using an account with a Federal Reserve Bank, authorizes the sender's Federal Reserve Bank to obtain payment for the sender's payment orders by debiting the amount of the payment order from the sender's account.
(b) *Overdrafts.*
(1) A sender does not have the right to an overdraft in the sender's account. In the event an overdraft is created, the overdraft shall be due and payable immediately without the need for a demand by the Federal Reserve Bank, at the earliest of the following times:
(i) at the end of the funds-transfer day;
(ii) at the time the Federal Reserve Bank, in its sole discretion, deems itself insecure and gives notice thereof to the sender; or
(iii) at the time the sender suspends payments or is closed.
(2) The sender shall have in its account, at the time the overdraft is due and payable, a balance of actually and finally collected funds sufficient to cover the aggregate amount of all its obligations to the Federal Reserve Bank, whether the obligations result from the execution of a payment order or otherwise.
(3) To secure any overdraft, as well as any other obligation due or to become due to its Federal Reserve Bank, each sender, by sending a payment order to a Federal Reserve Bank that is accepted by the Federal Reserve Bank, grants to the Federal Reserve Bank a security interest in all of the sender's assets in the possession of, or held for the account of, the Federal Reserve Bank. The security interest attaches when an overdraft, or any other obligation to the Federal Reserve Bank, becomes due and payable.
(4) A Federal Reserve Bank may take any action authorized by law to recover the amount of an overdraft that is due and payable, including, but not limited to, the exercise of rights of set off, the realization on any available collateral, and any other rights it may have as a creditor under applicable law.
(c) *Review of payment orders.* A sender, by sending a payment order to a Federal Reserve Bank, agrees that for the purposes of Sections 4A-204(a) and 4A-304 of Article 4A, a reasonable time to notify a Federal Reserve Bank of the relevant facts concerning an unauthorized or erroneously executed payment order is within 30 calendar days after the sender receives notice that the payment order was accepted or executed, or that the sender's account was debited with respect to the payment order.

Section 210.29—Agreement of receiving bank.

(a) *Payment.* A receiving bank (other than a Federal Reserve Bank) that receives a payment order from its Federal Reserve Bank authorizes that Federal Reserve Bank to pay for the payment order by crediting the amount of the payment order to the receiving bank's account.
(b) *Off-line banks.* An off-line bank that does not expressly notify its Federal Reserve Bank in writing that it maintains an account for another bank warrants to that Federal Reserve Bank that the off-line bank does not act as an intermediary bank or a beneficiary's bank with respect to payment orders received through Fedwire for a beneficiary that is a bank.

Section 210.30—Payment orders.

(a) *Rejection.* A sender shall not send a payment order to a Federal Reserve Bank unless authorized to do so by the Federal Reserve Bank. A Federal Reserve Bank may reject, or impose conditions that must be satisfied before it will accept, a payment order for any reason.
(b) *Selection of an intermediary bank.* For an inter-district transfer, a Federal Reserve Bank is authorized and directed to execute a payment order through another Federal Reserve Bank. A sender shall not send a payment order to a Federal Reserve Bank that requires the Federal Reserve Bank to issue a payment order to an intermediary bank (other than a Federal Reserve Bank) unless that intermediary bank is designated in the sender's payment order. A sender shall not send to a Federal Reserve Bank a payment order instructing use by a Federal Reserve Bank of a funds-transfer system or means of transmission other than Fedwire, unless the Federal Reserve Bank agrees with the sender in writing to follow such instructions.
(c) *Same-day execution.* A sender shall not issue a payment order that instructs a Federal Reserve Bank to execute the payment order on a funds-transfer business day that is later than the funds-transfer business day on which the order is received by the Federal Reserve Bank, unless the Federal Reserve Bank agrees with the sender in writing to follow such instructions.

Section 210.31—Payment by a Federal Reserve Bank to a receiving bank or beneficiary.

(a) *Payment to a receiving bank.* Payment of a Federal Reserve Bank's obligation to pay a receiving bank (other than a Federal Reserve Bank) occurs at the earlier of the time when the amount of the payment order is credited to the receiving bank's account or when the payment order is sent to the receiving bank.
(b) *Payment to a beneficiary.* Payment by a Federal Reserve Bank to a beneficiary of a payment order, where the Federal Reserve Bank is the beneficiary's bank, occurs at the earlier of the time when the amount of the payment order is credited to the beneficiary's account or when notice of the credit is sent to the beneficiary.

Section 210.32—Federal Reserve Bank liability; payment of interest.

(a) *Damages.* In connection with its handling of a payment order under this Subpart, a Federal Reserve Bank shall not be liable to a sender, receiving bank, beneficiary, or other Federal Reserve Bank, governed by this Subpart, for any damages other than those payable under Article 4A. A Federal Reserve Bank shall not agree to be liable to a sender, receiving bank, beneficiary, or other Federal Reserve Bank for consequential damages under Section 4A-305(d) of Article 4A.
(b) *Payment of interest.*
(1) A Federal Reserve Bank, in its discretion, may satisfy its obligation, or that of another Federal Reserve Bank, to pay compensation in the form of interest under Article 4A by:
(i) providing an as of adjustment to its sender, its receiving bank, or its beneficiary, as provided in the Federal Reserve Bank's Operating Circular, in an amount equal to the amount on which interest is to be calculated multiplied by the number of days for which interest is to be calculated; or
(ii) paying compensation in the form of interest to its sender, its receiving bank, its beneficiary, or another party to the funds transfer that is entitled to such payment, in an amount that is calculated in accordance with Section 4A-506 of Article 4A.
(2) If the sender or receiving bank that is the recipient of an as of adjustment or an interest payment is not the party entitled to compensation under Article 4A, the sender or receiving bank shall pass through the benefit of the as of adjustment or interest payment by making an interest payment, as of the day the as of adjustment or interest payment is effected, to the party entitled to compensation. The interest payment that is made to the party entitled to compensation shall not be less than the value of the as of adjustment or interest payment that was provided by the Federal Reserve Bank to the sender or receiving bank. The party entitled to compensation may agree to accept compensation in a form other than a direct interest payment, provided that such an alternative form of compensation is not less than the value of the interest payment that otherwise would be made.
(c) *Nonwaiver of right of recovery.* Nothing in this Subpart or any Operating Circular issued hereunder shall constitute, or be construed as constituting, a waiver by a Federal Reserve Bank of a cause of action for recovery under any applicable law of mistake and restitution.

Appendix A to Subpart B — Commentary

The Commentary provides background material to explain the intent of the Board of Governors of the Federal Reserve System (Board) in adopting a particular provision in the Subpart and to help readers interpret that provision. In some comments, examples are offered. The Commentary constitutes an official Board interpretation of Subpart B. Commentary is not provided for every provision of Subpart B, as some provisions are self-explanatory.

Section 210.25—Authority, purpose, and scope.

(a) *Authority and purpose.* Section 210.25(a) states that the purpose of Subpart B is to provide rules to govern funds transfers through Fedwire and recites the Board's rulemaking authority for this Subpart. Subpart B is federal law and is not a "funds-transfer system rule," as defined in Section 4A-501(b) of Article 4A, Funds Transfers, of the Uniform Commercial Code (UCC), as set forth in Appendix B. Certain provisions of Article 4A may not be varied by a funds-transfer system rule, but under Section 4A-107, regulations of the Board and Operating Circulars of the Federal Reserve Banks supersede inconsistent provisions of Article 4A to the extent of the inconsistency. In addition, regulations of the Board may preempt inconsistent provisions of state law. Accordingly, Subpart B of Regulation J supersedes or preempts inconsistent provisions of state law. It does not affect state law governing funds transfers that does not conflict with the provisions of Subpart B, such as Article 4A, as enacted in any state, as it applies to parties to funds transfers through Fedwire whose rights are not governed by Subpart B.

(b) *Scope.*

(1) Subpart B incorporates the provisions of Article 4A set forth in Appendix B. The provisions set forth expressly in the sections of Subpart B supersede or preempt any inconsistent provisions of Article 4A as set forth in Appendix B or as enacted in any state. The official comments to Article 4A are not incorporated in Subpart B or this Commentary to Subpart B, but the official comments may be useful in interpreting Article 4A. Because Section 4A-105 refers to other provisions of the Uniform Commercial Code, e.g., definitions in Article 1 of the UCC, these other provisions of the UCC, as approved by the National Conference of Commissioners on Uniform State Laws and the American Law Institute, from time to time, are also incorporated in Subpart B. Subpart B applies to any party to a Fedwire funds transfer that is in privity with a Federal Reserve Bank. These parties include a sender (bank or nonbank) that sends a payment order directly to a Federal Reserve Bank, a receiving bank that receives a payment order directly from a Federal Reserve Bank, and a beneficiary that receives credit to an account that it uses or maintains at a Federal Reserve Bank for a payment order sent to a Federal Reserve Bank. Other parties to a funds transfer are covered by this Subpart to the same extent that this Subpart would apply to them if this Subpart were a "funds-transfer system rule" under Article 4A that selected Subpart B as the governing law.

(2) The scope of the applicability of a funds-transfer system rule under Article 4A is specified in Section 4A-501(b), and the scope of the choice of law provision is specified in Section 4A-507(c). Under Section 4A-507(c), a choice of law provision is binding on the participants in a funds-transfer system and certain other parties having notice that the funds-transfer system might be used for the funds transfer and of the choice of law provision. The Uniform Commercial Code provides that a person has notice when the person has actual knowledge, receives notification or has reason to know from all the facts and circumstances known to the person at the time in question. (*See* UCC Section 1–201(25).) However, under Sections 4A-507(b) and 4A-507(d), a choice of law by agreement of the parties takes precedence over a choice of law made by funds-transfer system rule.

(3) If originators, receiving banks, and beneficiaries that are not in privity with a Federal Reserve Bank have the notice contemplated by Section 4A-507(c) or if those parties agree to be bound by Subpart B, Subpart B generally would apply to payment orders between those remote parties, including participants in other funds-transfer systems. For example, a funds transfer may be sent from an originator's bank through a funds-transfer system other than Fedwire to a receiving bank which, in turn, sends a payment order through Fedwire to execute the funds transfer. Similarly, a Federal Reserve Bank may execute a payment order through Fedwire to a receiving bank that sends it through a funds-transfer system other than Fedwire to a beneficiary's bank. In the first example, if the originator's bank has notice that Fedwire may be used to effect part of the funds transfer, the sending of the payment order through the other funds-transfer system to the receiving bank will be governed by Subpart B unless the parties to the payment order have agreed otherwise. In the second example, if the beneficiary's bank has notice that Fedwire may be used to effect part of the funds transfer, the sending of the payment order to the beneficiary's bank through the other funds-transfer system will be governed by Subpart B unless the parties have agreed otherwise. In both cases, the other funds-transfer system's rules would also apply to, at a minimum, the portion of these funds transfers going through that funds-transfer system. Because Subpart B is federal law, to the extent of any inconsistency, Subpart B will take precedence over any funds-transfer system rule applicable to the remote sender or receiving bank or to a Federal Reserve Bank. If remote parties to a funds transfer, a portion of which is sent through Fedwire, have expressly selected by agreement a law other than Subpart B under Section 4A-507(b), Subpart B would not take precedence over the choice of law made by the agreement even though the remote parties had notice that Fedwire may be used and of the governing law. (*See* 4A-507(d)). In addition, Subpart B would not apply to a funds transfer sent through another funds-transfer system where no Federal Reserve Bank handles the funds transfer, even though settlement for the funds transfer is made by means of a separate net settlement or funds transfer through Fedwire.

(4) Under Section 4A-108, Article 4A does not apply to a funds transfer, any part of which is governed by the Electronic Fund Transfer Act (15 U.S.C. 1693 *et seq.*). Fedwire funds transfers to or from consumer accounts are exempt from the Electronic Fund Transfer Act and Regulation E (12 C.F.R. Part 205). A funds transfer from a consumer originator or a funds transfer to a consumer beneficiary could be carried out in part through Fedwire and in part through an automated clearing house or other means that is subject to the Electronic Fund Transfer Act or Regulation E. In these cases, Subpart B would not govern the portion of the funds transfer that is governed by the Electronic Fund Transfer

Act or Regulation E. (*See* Commentary to Section 210.26(i) "payment order".)

(5) Finally, Section 4A-404(a) provides that a beneficiary's bank is obliged to pay the amount of a payment order to the beneficiary on the payment date unless acceptance of the payment order occurs on the payment date after the close of the funds-transfer business day of the bank. The Expedited Funds Availability Act provides that funds received by a bank by wire transfer shall be available for withdrawal not later than the banking day after the business day on which such funds are received (12 U.S.C. 4002(a)). That Act also preempts any provision of state law that was not effective on September 1, 1989 that is inconsistent with that Act or its implementing Regulation CC (12 C.F.R. Part 229). Accordingly, the Expedited Funds Availability Act and Regulation CC may preempt Section 4A-404(a) as enacted in any state. In order to ensure that Section 4A-404(a), or other provisions of Article 4A, as incorporated in Subpart B, do not take precedence over provisions of the Expedited Funds Availability Act, this section provides that where Subpart B establishes rights or obligations that are also governed by the Expedited Funds Availability Act or Regulation CC, the Expedited Funds Availability Act or Regulation CC provision shall apply and Subpart B shall not apply.

(c) *Operating Circulars*. The Federal Reserve Banks issue Operating Circulars consistent with this Subpart that contain additional provisions applicable to payment orders sent through Fedwire. Under Section 4A-107, these Operating Circulars supersede inconsistent provisions of Article 4A, as set forth in Appendix B and as enacted in any state. These Operating Circulars are not funds-transfer system rules, but, by their terms, they are binding on all parties covered by this Subpart.

(d) *Government senders, receiving banks, and beneficiaries*. This section clarifies that unless a statute of the United States provides otherwise, Subpart B applies to governmental entities, domestic or foreign, including foreign central banks as specified in paragraph (b)(1).

Section 210.26—Definitions.

Article 4A defines many terms (e.g., "beneficiary," "intermediary bank," "receiving bank," "security procedure") used in this Subpart. These terms are defined or listed in Sections 4A-103 through 4A-105. These terms, such as the term "bank" (defined in Section 4A-105(d)(2)), may differ from comparable terms in Subpart A. As Subpart B incorporates consistent provisions of Article 4A, it incorporates these definitions unless these terms are expressly defined otherwise in Subpart B. This Subpart modifies the definitions of two Article 4A terms, "beneficiary's bank" and "payment order." This Subpart also defines terms not defined in Article 4A.

(a) *Article 4A*. "Article 4A" means the version of that article of the Uniform Commercial Code set forth in Appendix B. It does not refer to the law of any particular state unless the context indicates otherwise. Subject to the express provisions of this Subpart, this version of Article 4A is incorporated into this Subpart and made federal law for transactions covered by this Subpart.

(b) *As of adjustments*. As of adjustments are memorandum items that affect a bank's reserve or clearing balance for the purpose of meeting the required balance, but do not represent funds that can be used for other purposes. As discussed in the Commentary to Section 210.32(b), the Federal Reserve Banks generally provide as of adjustments as a means of effecting interest payments or charges.

(d) *Beneficiary's bank*. The definition of "beneficiary's bank" in Subpart B differs from the Section 4A-103(a)(3) definition. The Subpart B definition clarifies that where a Federal Reserve Bank functions as the beneficiary's bank, it need not be identified in the payment order as the beneficiary's bank and that a Federal Reserve Bank that receives a payment order as beneficiary is also the beneficiary's bank with respect to that payment order.

(e) *Fedwire*. Fedwire refers to the funds-transfer system owned and operated by the Federal Reserve Banks that is governed by this Subpart. The term does not refer to any particular computer, telecommunications facility, or funds transfer, but to the system as a whole, which may include transfers by telephone or by written instrument in particular circumstances. Fedwire does not include the system used for automated clearing house transfers.

(h) *Off-line bank*. Most Fedwire payment orders are transmitted electronically from a sender to a Federal Reserve Bank or from a Federal Reserve Bank to a receiving bank. Banks transmitting payment orders to Federal Reserve Banks electronically are often referred to as on-line banks. Some Fedwire participants, however, transmit payment orders to a Federal Reserve Bank or receive payment orders from a Federal Reserve Bank orally by telephone, or, in unusual circumstances, in writing. A bank that does not use either a terminal or a computer that links it electronically to a terminal or computer at its Federal Reserve Bank to send payment orders through Fedwire is an off-line bank.

(i) *Payment order*.

(1) The definition of "payment order" in Subpart B

differs from the Section 4A-103(a)(1) definition. The Subpart B definition clarifies that, for the purposes of Subpart B, automated clearing house transfers and certain messages that are transmitted through Fedwire are not payment orders. Federal Reserve Banks and banks participating in Fedwire send various types of messages, relating to payment orders or to other matters, through Fedwire that are not intended to be payment orders. Under the Subpart B definition, these messages, and messages involved with automated clearing house transfers, are not "payment orders" and therefore are not governed by this Subpart. The Operating Circulars of the Federal Reserve Banks specify those messages that may be transmitted through Fedwire but that are not payment orders.

(2) In some cases, messages sent through Fedwire, such as certain requests for credit transfer, may be payment orders under Article 4A, but are not treated as payment orders under Subpart B because they are not an instruction to a Federal Reserve Bank to pay money.

(3) This Subpart and Article 4A govern a payment order even though the originator's or beneficiary's account may be a consumer account established primarily for personal, family, or household purposes. Under Section 4A-108, Article 4A does not apply to a funds transfer any part of which is governed by the Electronic Fund Transfer Act. That Act, and Regulation E implementing it, do not apply to funds transfers through Fedwire (*see* 15 U.S.C. 1693a(6)(B) and 12 C.F.R 205.3(b)). Thus, this Subpart applies to all funds transfers through Fedwire even though some such transfers involve originators or beneficiaries that are consumers. (*See also* Section 210.25(b) and accompanying Commentary.)

Section 210.27—Reliance on identifying number.

(a) *Reliance by a Federal Reserve Bank on number to identify intermediary bank or beneficiary's bank.* Section 4A-208 provides that a receiving bank, such as a Federal Reserve Bank, may rely on the routing number of an intermediary bank or the beneficiary's bank specified in a payment order as identifying the appropriate intermediary bank or beneficiary's bank, even if the payment order identifies another bank by name, provided that the receiving bank does not know of the inconsistency. Under Section 4A-208(b)(2), if the sender of the payment order is not a bank, a receiving bank may rely on the number only if the sender had notice before the receiving bank accepted the sender's order that the receiving bank might rely on the number. This section provides this notice to entities that are not banks, such as the Department of the Treasury, that send payment orders directly to a Federal Reserve Bank.

(b) *Reliance by a Federal Reserve Bank on number to identify beneficiary.* Section 4A-207 provides that a beneficiary's bank, such as a Federal Reserve Bank, may rely on the number identifying a beneficiary, such as the beneficiary's account number, specified in a payment order as identifying the appropriate beneficiary, even if the payment order identifies another beneficiary by name, provided that the beneficiary's bank does not know of the inconsistency. Under Section 4A-207(c)(2), if the originator is not a bank, an originator is not obliged to pay for a payment order if the originator did not have notice that the beneficiary's bank might rely on the identifying number and the person paid on the basis of the identifying number was not entitled to receive payment. This section of Subpart B provides this notice to entities that are not banks, such as the Department of the Treasury, that are originators of payment orders sent directly by the originators to a Federal Reserve Bank, where that Federal Reserve Bank or another Federal Reserve Bank is the beneficiary's bank (*see also* Section 4A-402(b), providing that a sender must pay a beneficiary's bank for a payment order accepted by the beneficiary's bank).

Section 210.28—Agreement of sender.

(a) *Payment of sender's obligation to a Federal Reserve Bank.* When a sender issues a payment order to a Federal Reserve Bank and the Federal Reserve Bank issues a conforming order implementing the sender's payment order, under Section 4A-403, the sender is indebted to the Federal Reserve Bank for the amount of the payment order. A sender, other than a Federal Reserve Bank, that maintains or uses an account at a Federal Reserve Bank authorizes the Federal Reserve Bank to debit that account so that the Federal Reserve Bank can obtain payment for the payment order.

(b) *Overdrafts.*

(1) In some cases, debits to a sender's account will create an overdraft in the sender's account. The Board and the Federal Reserve Banks have established policies concerning when a Federal Reserve Bank will permit a bank to incur an overdraft in its account at a Federal Reserve Bank. These policies do not give a bank or other sender a right to an overdraft in its account. Subpart B clarifies that a sender does not have a right to such an overdraft. If an overdraft arises, it becomes immediately due and payable at the earliest of: the end of the funds-transfer business day of the Federal Reserve Bank;

the time the Federal Reserve Bank, in its sole discretion, deems itself insecure and gives notice to the sender; or the time that the sender suspends payments or is closed by governmental action, such as the appointment of a receiver. In some cases, a Federal Reserve Bank extends its Fedwire operations beyond its cut-off hour for that funds-transfer business day. For the purposes of this section, unless otherwise specified by the Federal Reserve Bank making such an extension, an overdraft becomes due and payable at the end of the extended operating hours. An overdraft becomes due and payable prior to a Federal Reserve Bank's cut-off hour if the Federal Reserve Bank deems itself insecure and gives notice to the sender. Notice that the Federal Reserve Bank deems itself insecure may be given in accordance with the provisions on notice in Section 1-201(27) of the UCC, in accordance with any other applicable law or agreement, or by any other reasonable means. An overdraft also becomes due and payable at the time that a bank is closed or suspends payments. For example, an overdraft becomes due and payable if a receiver is appointed for the bank or the bank is prevented from making payments by governmental order. The Federal Reserve Bank need not make demand on the sender for the overdraft to become due and payable.

(2) A sender must cover any overdraft and any other obligation of the sender to the Federal Reserve Bank by the time the overdraft becomes due and payable. By sending a payment order to a Federal Reserve Bank, the sender grants a security interest to the Federal Reserve Bank in any assets of the sender held by, or for the account of, the Federal Reserve Bank in order to secure all obligations due or to become due to the Federal Reserve Bank. The security interest attaches when the overdraft, or other obligation of the sender to the Federal Reserve Bank, becomes due and payable. The security interest does not apply to assets held by the sender as custodian or trustee for the sender's customers or third parties. Once an overdraft is due and payable, a Federal Reserve Bank may exercise its right of set off, liquidate collateral, or take other similar action to satisfy the overdrafting bank's obligation owed to the Federal Reserve Bank.

(c) *Review of payment orders.*

(1) Under Section 4A-204, a receiving bank is required to refund the principal amount of an unauthorized payment order that the sender was not obliged to pay, together with interest on the refundable amount calculated from the date that the receiving bank received payment to the date of the refund. The sender is not entitled to compensation in the form of interest if the sender fails to exercise ordinary care to determine that the order was not authorized and to notify the receiving bank within a reasonable period of time after the sender receives a notice that the payment order was accepted or that the sender's account was debited with respect to the order. Similarly, under Section 4A-304, if a sender of a payment order that was erroneously executed does not notify the bank receiving the payment order within a reasonable time, the bank is not liable to the sender for compensation in the form of interest on any amount refundable to the sender. Section 210.28(d) establishes 30 calendar days as the reasonable period of time for the purposes of these provisions of Article 4A.

(2) Section 4A-505 provides that a customer must object to a debit to its account by a receiving bank within one year after the customer received notification reasonably identifying the payment order. Subpart B does not vary this one-year period.

Section 210.29—Agreement of receiving bank.

(b) *Off-line banks.*

(1) Generally, an on-line bank receiving payment orders or advices of credit for payment orders from a Federal Reserve Bank receives the payment orders or advices electronically a short time after the corresponding payment orders are received by the on-line bank's Federal Reserve Bank. An off-line bank receiving payment orders or advices of credit from a Federal Reserve Bank does not have an electronic connection with the Federal Reserve Bank; therefore, payment orders or advices are transmitted either by telephone on the day the payment order is received by the receiving bank's Federal Reserve Bank, or sent by courier or mail along with the off-line bank's daily account statement, on the funds-transfer business day following the day the payment order is received by the off-line bank's Federal Reserve Bank.

(2) Under Section 4A-302(a)(2), a Federal Reserve Bank must transmit payment orders at a time and by means reasonably necessary to allow payment to the beneficiary on the payment date, or as soon thereafter as is feasible. Therefore, where an off-line receiving bank is an intermediary bank or beneficiary's bank in a payment order, its Federal Reserve Bank attempts to transmit the payment order to the off-line bank by telephone on the day the payment order, is received by the Federal Reserve Bank. A Federal Reserve Bank can generally identify these payment orders from the type code designated in the payment order.

(3) Under Section 4A-404(b), if a payment order instructs payment to the account of the beneficiary,

the beneficiary's bank must notify the beneficiary of the receipt of a payment order before midnight of the next funds-transfer business day following the payment date. Where an off-line bank is the beneficiary of a payment order, telephone notice by a Federal Reserve Bank to the off-line bank of the receipt of the order is not required by Article 4A because the Federal Reserve Bank sends notice to the off-line bank by courier or mail, along with its daily account statement, on the day after the payment order is received by its Federal Reserve Bank. Payment orders for which an off-line bank is the beneficiary of the order are generally designated as settlement transactions.

(4) If an off-line receiving bank maintains an account for another bank, the off-line bank may receive payment orders designated as settlement transactions in its capacity as beneficiary's bank or intermediary bank. A Federal Reserve Bank cannot readily distinguish these payment orders from settlement transactions for which the off-line bank is the beneficiary of the order. If an off-line bank notifies its Federal Reserve Bank that it maintains an account for another bank, the Federal Reserve Bank will attempt to telephone the off-line bank with respect to all settlement transactions received by such bank, whether the off-line bank is the beneficiary, the beneficiary's bank, or an intermediary bank in the payment order. Under this section, an off-line bank that does not expressly notify its Federal Reserve Bank in writing that it maintains an account for another bank warrants to that Federal Reserve Bank that it does not act as an intermediary bank or a beneficiary's bank for a bank beneficiary with respect to payment orders received through Fedwire.

Section 210.30—Payment orders.

(a) *Rejection.*

(1) A sender must make arrangements with its Federal Reserve Bank before it can send payment orders to the Federal Reserve Bank. Federal Reserve Banks reserve the right to reject or impose conditions on the acceptance of payment orders for any reason. For example, a Federal Reserve Bank might reject or impose conditions on accepting a payment order where a sender does not have sufficient funds in its account with the Federal Reserve Bank to cover the amount of the sender's payment order and other obligations of the sender due or to become due to the Federal Reserve Bank. A Federal Reserve Bank may require a sender to execute a written agreement concerning security procedures or other matters before the sender may send payment orders to the Federal Reserve Bank.

(b) *Selection of an intermediary bank.*

(1) Under Section 4A-302, if a receiving bank (other than a beneficiary's bank), such as a Federal Reserve Bank, accepts a payment order, it must issue a payment order that complies with the sender's order. The sender's order may include instructions concerning an intermediary bank to be used that must be followed by a receiving bank (*see* Section 4A- 302(a)(1)). If the sender does not designate any intermediary bank in its payment order, the receiving bank may select an intermediary bank through which the sender's payment order can be expeditiously issued to the beneficiary's bank so long as the receiving bank exercises ordinary care in selecting the intermediary bank (*see* Section 4A-302(b)).

(2) This section provides that in an interdistrict transfer, a Federal Reserve Bank is authorized and directed to select another Federal Reserve Bank as an intermediary bank. A sender may, however, instruct a Federal Reserve Bank to use a particular intermediary bank by designating that bank as the bank to be credited by that Federal Reserve Bank (or the second Federal Reserve Bank in the case of an interdistrict transfer) in its payment order, in which case the Federal Reserve Bank will send the payment order to that bank if that bank receives payment orders through Fedwire. A sender may not instruct a Federal Reserve Bank to use its discretion to select an intermediary bank other than a Federal Reserve Bank or an intermediary bank designated by the sender. In addition, a sender may not instruct a Federal Reserve Bank to use a funds-transfer system or means of transmission other than Fedwire unless the sender and the Federal Reserve Bank agree in writing to the use of the funds-transfer system or means of transmission.

(c) *Same-day execution.* Generally, Fedwire is a same-day value transfer system through which funds may be transferred from the originator to the beneficiary on the same funds-transfer business day. A sender may not send a payment order to a Federal Reserve Bank that specifies an execution date or payment date later than the day on which the payment order is issued, unless the sender of the order and the Federal Reserve Bank agree in writing to the arrangement.

Section 210.31—Payment by a Federal Reserve Bank to a receiving bank or beneficiary.

(a) *Payment to a receiving bank.*

(1) Under Section 4A-402, when a Federal Reserve Bank executes a sender's payment order by issuing a conforming order to a receiving bank that accepts

the payment order, the Federal Reserve Bank must pay the receiving bank the amount of the payment order. Section 210.29(a) authorizes a Federal Reserve Bank to make the payment by crediting the account at the Federal Reserve Bank maintained or used by the receiving bank. Section 210.31(a) provides that the payment occurs when the receiving bank's account is credited or when the payment order is sent by the Federal Reserve Bank to the receiving bank, whichever is earlier. Ordinarily, payment will occur during the funds-transfer business day a short time after the payment order is received, even if the receiving bank is an off-line bank. This credit is final and irrevocable when made and constitutes final settlement under Section 4A-403. Payment does not waive a Federal Reserve Bank's right of recovery under the applicable law of mistake and restitution (*see* Section 210.32(c)), affect a Federal Reserve Bank's right to apply the funds to any obligation due or to become due to the Federal Reserve Bank, or affect legal process or claims by third parties on the funds.

(2) This section on final payment does not apply to settlement for payment orders between Federal Reserve Banks. These payment orders are settled by other means.

(b) *Payment to a beneficiary.* Section 210.31(b) specifies when a Federal Reserve Bank makes payment to a beneficiary for which it is the beneficiary's bank. As in the case of payment to a receiving bank, this payment occurs at the earlier of the time that the Federal Reserve Bank credits the beneficiary's account or sends notice of the credit to the beneficiary, and is final and irrevocable when made.

Section 210.32—Federal Reserve Bank liability; payment of interest.

(a) *Damages.*

(1) Under Section 4A-305(d), damages for failure of a receiving bank to execute a payment order that it was obliged to execute by express agreement are limited to expenses in the transaction and incidental expenses and interest and do not include additional damages, including consequential damages, unless they are provided for in an express written agreement of the receiving bank. This section clarifies that in connection with the handling of payment orders, Federal Reserve Banks may not agree to be liable for consequential damages under this provision and shall not be liable for damages other than those that may be due under Article 4A to parties governed by this Subpart. Any agreement in conflict with these provisions would not be effective, because it would be in violation of Subpart B.

(2) This section does not affect the ability of other parties to a funds transfer to agree to be liable for consequential damages, the liability of a Federal Reserve Bank under Section 4A-404, or the liability to parties governed by Subpart B for claims not based on the handling of a payment order under this Subpart.

(b) *Payment of interest.*

(1) Under Article 4A, a Federal Reserve Bank may be required to pay compensation in the form of interest to another party in connection with its handling of a funds transfer. For example, payment of compensation in the form of interest is required in certain situations pursuant to Sections 4A-204 (relating to refund of payment and duty of customer to report with respect to unauthorized payment order), 4A-209 (relating to acceptance of payment order), 4A-210 (relating to rejection of payment order), 4A-304 (relating to duty of sender to report erroneously executed payment order), 4A-305 (relating to liability for late or improper execution or failure to execute a payment order), 4A-402 (relating to obligation of sender to pay receiving bank), and 4A-404 (relating to obligation of beneficiary's bank to pay and give notice to beneficiary). Under Section 4A-506(a), the amount of such interest may be determined by agreement between the sender and receiving bank or by funds-transfer system rule. If there is no such agreement, under Section 4A-506(b), the amount of interest is based on the federal funds rate. Section 210.32(b) provides two means by which Federal Reserve Banks may provide compensation in the form of interest: through an as of adjustment or through an explicit interest payment.

(2) An as of adjustment is a memorandum credit or debit that is applied to the reserve or clearing balance of the bank that sent the payment order to, or received the payment order from, a Federal Reserve Bank. Federal Reserve Banks generally provide as of adjustments to correct errors and recover float. An as of adjustment differs from a debit or credit to an account in that it does not affect the actual balance of the account; it only affects the balance for reserve or clearing balance computation purposes. These adjustments affect the level of reserve or clearing balances that the bank must fund by other means and are therefore an effective substitute for explicit interest payments.

(3) A party that sent or received a payment order from a Federal Reserve Bank may be unable to make use of an as of adjustment as compensation in lieu of explicit interest. For example, if the sender or receiving bank is not subject to reserve requirements or satisfies its reserve requirements with vault cash, the as of adjustment could not be used to free

other balances for investment. A Federal Reserve Bank may, in its discretion, provide compensation by an explicit interest payment rather than through an as of adjustment. Interest would be calculated in accordance with the procedures specified in Section 4A-506(b). Similarly, compensation in the form of explicit interest will be paid to Government senders, receiving banks, or beneficiaries described in Section 210.25(d) if they are entitled to interest under this Subpart. A Federal Reserve Bank may also, in its discretion, pay explicit interest directly to a remote party to a Fedwire funds transfer that is entitled to interest, rather than providing compensation to its direct sender or receiving bank.
(4) If a bank that received an as of adjustment or explicit interest payment is not the party entitled to interest compensation under Article 4A, the bank must pass the benefit of the as of adjustment or explicit interest payment made to it to the party that is entitled to compensation in the form of interest from a Federal Reserve Bank. The benefit may be passed on either in the form of a direct payment of interest or in the form of a compensating balance, if the party entitled to interest agrees to accept the other form of compensation, and the value of the compensating balance is at least equivalent to the value of the explicit interest that otherwise would have been provided.
(c) *Nonwaiver of right of recovery.* Several sections of Article 4A allow for a party to a funds transfer to make a claim pursuant to the applicable law of mistake and restitution. Nothing in Subpart B or any Operating Circular issued under Subpart B waives any such claim. A Federal Reserve Bank, however, may waive such a claim by express written agreement in order to settle litigation or for other purposes.

APPENDIX B TO SUBPART B—ARTICLE 4A, FUNDS TRANSFERS

Part 1—Subject Matter and Definitions

Section 4A-101.—Short Title

This Article may be cited as Uniform Commercial Code—Funds Transfers.

Section 4A-102.—Subject Matter

Except as otherwise provided in Section 4A-108, this Article applies to funds transfers defined in Section 4A-104.

Section 4A-103.—Payment Order - Definitions

(a) In this Article:
(1) "Payment order" means an instruction of a sender to a receiving bank, transmitted orally, electronically, or in writing, to pay, or to cause another bank to pay, a fixed or determinable amount of money to a beneficiary if:
(i) the instruction does not state a condition to payment to the beneficiary other than time of payment,
(ii) the receiving bank is to be reimbursed by debiting an account of, or otherwise receiving payment from, the sender, and
(iii) the instruction is transmitted by the sender directly to the receiving bank or to an agent, funds-transfer system, or communication system for transmittal to the receiving bank.
(2) "Beneficiary" means the person to be paid by the beneficiary's bank.
(3) "Beneficiary's bank" means the bank identified in a payment order in which an account of the beneficiary is to be credited pursuant to the order or which otherwise is to make payment to the beneficiary if the order does not provide for payment to an account.
(4) "Receiving bank" means the bank to which the sender's instruction is addressed.
(5) "Sender" means the person giving the instruction to the receiving bank.

(b) If an instruction complying with subsection (a)(1) is to make more than one payment to a beneficiary, the instruction is a separate payment order with respect to each payment.
(c) A payment order is issued when it is sent to the receiving bank.

Section 4A-104.—Funds Transfer - Definitions

In this Article:
(a) "Funds transfer" means the series of transactions, beginning with the originator's payment order, made for the purpose of making payment to the beneficiary of the order. The term includes any payment order issued by the originator's bank or an intermediary bank intended to carry out the originator's payment order. A funds transfer is completed by acceptance by the beneficiary's bank of a payment order for the benefit of the beneficiary of the originator's payment order.
(b) "Intermediary bank" means a receiving bank other than the originator's bank or the beneficiary's bank.
(c) "Originator" means the sender of the first payment order in a funds transfer.

(d) "Originator's bank" means

(i) the receiving bank to which the payment order of the originator is issued if the originator is not a bank, or

(ii) the originator if the originator is a bank.

Section 4A-105.—Other Definitions

(a) In this Article:

(1) "Authorized account" means a deposit account of a customer in a bank designated by the customer as a source of payment of payment orders issued by the customer to the bank. If a customer does not so designate an account, any account of the customer is an authorized account if payment of a payment order from that account is not inconsistent with a restriction on the use of that account.

(2) "Bank" means a person engaged in the business of banking and includes a savings bank, savings and loan association, credit union, and trust company. A branch or separate office of a bank is a separate bank for purposes of this Article.

(3) "Customer" means a person, including a bank, having an account with a bank or from whom a bank has agreed to receive payment orders.

(4) "Funds-transfer business day" of a receiving bank means the part of a day during which the receiving bank is open for the receipt, processing, and transmittal of payment orders and cancellations and amendments of payment orders.

(5) "Funds-transfer system" means a wire transfer network, automated clearing house, or other communication system of a clearing house or other association of banks through which a payment order by a bank may be transmitted to the bank to which the order is addressed.

(6) "Good faith" means honesty in fact and the observance of reasonable commercial standards of fair dealing.

(7) "Prove" with respect to a fact means to meet the burden of establishing the fact (Section 1–201(8)).

(b) Other definitions applying to this Article and the sections in which they appear are:

"Acceptance"	Section 4A-209
"Beneficiary"	Section 4A-103
"Beneficiary's bank"	Section 4A-103
"Executed"	Section 4A-301
"Execution date"	Section 4A-301
"Funds transfer"	Section 4A-104
"Funds-transfer system rule"	Section 4A-501
"Intermediary bank"	Section 4A-104
"Originator"	Section 4A-104
"Originator's bank"	Section 4A-104
"Payment by beneficiary's bank to beneficiary"	Section 4A-405
"Payment by originator to beneficiary"	Section 4A-406
"Payment by sender to receiving bank"	Section 4A-403
"Payment date"	Section 4A-401
"Payment order"	Section 4A-103
"Receiving bank"	Section 4A-103
"Security procedure"	Section 4A-201
"Sender"	Section 4A-103

(c) The following definitions in Article 4 apply to this Article:

"Clearing house"	Section 4–104
"Item"	Section 4–104
"Suspends payments"	Section 4–104

(d) In addition Article 1 contains general definitions and principles of construction and interpretation applicable throughout this Article.

Section 4A-106.—Time Payment Order is Received

(a) The time of receipt of a payment order or communication canceling or amending a payment order is determined by the rules applicable to receipt of a notice stated in Section 1–201(27). A receiving bank may fix a cut-off time or times on a funds-transfer business day for the receipt and processing of payment orders and communications canceling or amending payment orders. Different cut-off times may apply to payment orders, cancellations, or amendments, or to different categories of payment orders, cancellations, or amendments. A cut-off time may apply to senders generally or different cut-off times may apply to different senders or categories of payment orders. If a payment order or communication canceling or amending a payment order is received after the close of a funds-transfer business day or after the appropriate cut-off time on a funds-transfer business day, the receiving bank may treat the payment order or communication as received at the opening of the next funds-transfer business day.

(b) If this Article refers to an execution date or payment date or states a day on which a receiving bank is required to take action, and the date or day does not fall on a funds-transfer business day, the next day that is a funds-transfer business day is treated as the date or day stated, unless the contrary is stated in this Article.

Section 4A-107.—Federal Reserve Regulations and Operating Circulars

Regulations of the Board of Governors of the Federal Reserve System and operating circulars of the Federal Reserve Banks supersede any inconsistent provision of this Article to the extent of the inconsistency.

Section 4A-108.—Exclusion of Consumer Transactions Governed by Federal Law

This Article does not apply to a funds transfer any part of which is governed by the Electronic Fund Transfer Act of 1978 (Title XX, Public Law 95–630, 92 Stat. 3728, 15 U.S.C. § 1693 *et seq.*) as amended from time to time.

Part 2—Issue and Acceptance of Payment Order

Section 4A-201.—Security Procedure

"Security procedure" means a procedure established by agreement of a customer and a receiving bank for the purpose of:

(i) verifying that a payment order or communication amending or canceling a payment order is that of the customer, or

(ii) detecting error in the transmission or the content of the payment order or communication. A security procedure may require the use of algorithms or other codes, identifying words or numbers, encryption, callback procedures, or similar security devices. Comparison of a signature on a payment order or communication with an authorized specimen signature of the customer is not by itself a security procedure.

Section 4A-202.—Authorized and Verified Payment Orders

(a) A payment order received by the receiving bank is the authorized order of the person identified as sender if that person authorized the order or is otherwise bound by it under the law of agency.

(b) If a bank and its customer have agreed that the authenticity of payment orders issued to the bank in the name of the customer as sender will be verified pursuant to a security procedure, a payment order received by the receiving bank is effective as the order of the customer, whether or not authorized, if:

(i) the security procedure is a commercially reasonable method of providing security against unauthorized payment orders, and

(ii) the bank proves that it accepted the payment order in good faith and in compliance with the security procedure and any written agreement or instruction of the customer restricting acceptance of payment orders issued in the name of the customer. The bank is not required to follow an instruction that violates a written agreement with the customer or notice of which is not received at a time and in a manner affording the bank a reasonable opportunity to act on it before the payment order is accepted.

(c) Commercial reasonableness of a security procedure is a question of law to be determined by considering the wishes of the customer expressed to the bank, the circumstances of the customer known to the bank, including the size, type, and frequency of payment orders normally issued by the customer to the bank, alternative security procedures offered to the customer, and security procedures in general use by customers and receiving banks similarly situated. A security procedure is deemed to be commercially reasonable if:

(i) the security procedure was chosen by the customer after the bank offered, and the customer refused, a security procedure that was commercially reasonable for that customer, and

(ii) the customer expressly agreed in writing to be bound by any payment order, whether or not authorized, issued in its name and accepted by the bank in compliance with the security procedure chosen by the customer.

(d) The term "sender" in this Article includes the customer in whose name a payment order is issued if the order is the authorized order of the customer under subsection (a), or it is effective as the order of the customer under subsection (b).

(e) This section applies to amendments and cancellations of payment orders to the same extent it applies to payment orders.

(f) Except as provided in this section and in Section 4A-203(a)(1), rights and obligations arising under this section or Section 4A-203 may not be varied by agreement.

Section 4A-203.—Unenforceability of Certain Verified Payment Orders

(a) If an accepted payment order is not, under Section 4A-202(a), an authorized order of a customer identified as sender, but is effective as an order of the customer pursuant to Section 4A-202(b), the following rules apply:

(1) By express written agreement, the receiving bank may limit the extent to which it is entitled to enforce or retain payment of the payment order.
(2) The receiving bank is not entitled to enforce or retain payment of the payment order if the customer proves that the order was not caused, directly or indirectly, by a person
(i) entrusted at any time with duties to act for the customer with respect to payment orders or the security procedure, or
(ii) who obtained access to transmitting facilities of the customer or who obtained, from a source controlled by the customer and without authority of the receiving bank, information facilitating breach of the security procedure, regardless of how the information was obtained or whether the customer was at fault. Information includes any access device, computer software, or the like.
(b) This section applies to amendments of payment orders to the same extent it applies to payment order.

Section 4A-204.—Refund of Payment and Duty of Customer to Report With Respect to Unauthorized Payment

(a) If a receiving bank accepts a payment order issued in the name of its customer as sender which is:
(i) not authorized and not effective as the order of the customer under Section 4A-202, or
(ii) not enforceable, in whole or in part, against the customer under Section 4A-203, the bank shall refund any payment of the payment order received from the customer to the extent the bank is not entitled to enforce payment and shall pay interest on the refundable amount calculated from the date the bank received payment to the date of the refund. However, the customer is not entitled to interest from the bank on the amount to be refunded if the customer fails to exercise ordinary care to determine that the order was not authorized by the customer and to notify the bank of the relevant facts within a reasonable time not exceeding 90 days after the date the customer received notification from the bank that the order was accepted or that the customer's account was debited with respect to the order. The bank is not entitled to any recovery from the customer on account of a failure by the customer to give notification as stated in this section.
(b) Reasonable time under subsection (a) may be fixed by agreement as stated in Section 1-204(1), but the obligation of a receiving bank to refund payment as stated in subsection (a) may not otherwise be varied by agreement.

Section 4A-205.—Erroneous Payment Orders

(a) If an accepted payment order was transmitted pursuant to a security procedure for the detection of error and the payment order:
(i) erroneously instructed payment to a beneficiary not intended by the sender,
(ii) erroneously instructed payment in an amount greater than the amount intended by the sender, or
(iii) was an erroneously transmitted duplicate of a payment order previously sent by the sender, the following rules apply:
(1) If the sender proves that the sender or a person acting on behalf of the sender pursuant to Section 4A-206 complied with the security procedure and that the error would have been detected if the receiving bank had also complied, the sender is not obliged to pay the order to the extent stated in paragraphs (2) and (3).
(2) If the funds transfer is completed on the basis of an erroneous payment order described in clause (i) or (iii) of subsection (a), the sender is not obliged to pay the order and the receiving bank is entitled to recover from the beneficiary any amount paid to the beneficiary to the extent allowed by the law governing mistake and restitution.
(3) If the funds transfer is completed on the basis of a payment order described in clause (ii) of subsection (a), the sender is not obliged to pay the order to the extent the amount received by the beneficiary is greater than the amount intended by the sender. In that case, the receiving bank is entitled to recover from the beneficiary the excess amount received to the extent allowed by the law governing mistake and restitution.
(b) If (i) the sender of an erroneous payment order described in subsection (a) is not obliged to pay all or part of the order, and
(ii) the sender receives notification from the receiving bank that the order was accepted by the bank or that the sender's account was debited with respect to the order, the sender has a duty to exercise ordinary care, on the basis of information available to the sender, to discover the error with respect to the order and to advise the bank of the relevant facts within a reasonable time, not exceeding 90 days, after the bank's notification was received by the sender. If the bank proves that the sender failed to perform that duty, the sender is liable to the bank for the loss the bank proves it incurred as a result of the failure, but the liability of the sender may not exceed the amount of the sender's order.

(c) This section applies to amendments to payment orders to the same extent it applies to payment orders.

Section 4A-206.—Transmission of Payment Order Through Funds-Transfer or Other Communication System

(a) If a payment order addressed to a receiving bank is transmitted to a funds-transfer system or other third-party communication system for transmittal to the bank, the system is deemed to be an agent of the sender for the purpose of transmitting the payment order to the bank. If there is a discrepancy between the terms of the payment order transmitted to the system and the terms of the payment order transmitted by the system to the bank, the terms of the payment order of the sender are those transmitted by the system. This section does not apply to a funds-transfer system of the Federal Reserve Banks.
(b) This section applies to cancellations and amendments of payment orders to the same extent it applies to payment orders.

Section 4A-207.—Misdescription of Beneficiary

(a) Subject to subsection (b), if, in a payment order received by the beneficiary's bank, the name, bank account number, or other identification of the beneficiary refers to a nonexistent or unidentifiable person or account, no person has rights as a beneficiary of the order and acceptance of the order cannot occur.
(b) If a payment order received by the beneficiary's bank identifies the beneficiary both by name and by an identifying or bank account number and the name and number identify different persons, the following rules apply:

(1) Except as otherwise provided in subsection (c), if the beneficiary's bank does not know that the name and number refer to different persons, it may rely on the number as the proper identification of the beneficiary of the order. The beneficiary's bank need not determine whether the name and number refer to the same person.

(2) If the beneficiary's bank pays the person identified by name or knows that the name and number identify different persons, no person has rights as beneficiary except the person paid by the beneficiary's bank if that person was entitled to receive payment from the originator of the funds transfer. If no person has rights as beneficiary, acceptance of the order cannot occur.

(c) If (i) a payment order described in subsection (b) is accepted,

(ii) the originator's payment order described the beneficiary inconsistently by name and number, and

(iii) the beneficiary's bank pays the person identified by number as permitted by subsection (b)(1), the following rules apply:

(1) If the originator is a bank, the originator is obliged to pay its order.

(2) If the originator is not a bank and proves that the person identified by number was not entitled to receive payment from the originator, the originator is not obliged to pay its order unless the originator's bank proves that the originator, before acceptance of the originator's order, had notice that payment of a payment order issued by the originator might be made by the beneficiary's bank on the basis of an identifying or bank account number even if it identifies a person different from the named beneficiary. Proof of notice may be made by any admissible evidence. The originator's bank satisfies the burden of proof if it proves that the originator, before the payment order was accepted, signed a writing stating the information to which the notice relates.

(d) In a case governed by subsection (b)(1), if the beneficiary's bank rightfully pays the person identified by number and that person was not entitled to receive payment from the originator, the amount paid may be recovered from that person to the extent allowed by the law governing mistake and restitution as follows:

(1) If the originator is obliged to pay its payment order as stated in subsection (c), the originator has the right to recover.

(2) If the originator is not a bank and is not obliged to pay its payment order, the originator's bank has the right to recover.

Section 4A-208.—Misdescription of Intermediary Bank or Beneficiary's Bank

(a) This subsection applies to a payment order identifying an intermediary bank or the beneficiary's bank only by an identifying number.

(1) The receiving bank may rely on the number as the proper identification of the intermediary or beneficiary's bank and need not determine whether the number identifies a bank.

(2) The sender is obliged to compensate the receiving bank for any loss and expenses incurred by the receiving bank as a result of its reliance on the number in executing or attempting to execute the order.

(b) This subsection applies to a payment order identifying an intermediary bank or the beneficiary's bank both by name and an identifying number if the name and number identify different persons.

(1) If the sender is a bank, the receiving bank may rely on the number as the proper identification of the intermediary or beneficiary's bank if the receiving bank, when it executes the sender's order, does not know that the name and number identify different persons. The receiving bank need not determine whether the name and number refer to the same person or whether the number refers to a bank. The sender is obliged to compensate the receiving bank for any loss and expenses incurred by the receiving bank as a result of its reliance on the number in executing or attempting to execute the order.

(2) If the sender is not a bank and the receiving bank proves that the sender, before the payment order was accepted, had notice that the receiving bank might rely on the number as the proper identification of the intermediary or beneficiary's bank even if it identifies a person different from the bank identified by name, the rights and obligations of the sender and the receiving bank are governed by subsection (b)(1), as though the sender were a bank. Proof of notice may be made by any admissible evidence. The receiving bank satisfies the burden of proof if it proves that the sender, before the payment order was accepted, signed a writing stating the information to which the notice relates.

(3) Regardless of whether the sender is a bank, the receiving bank may rely on the name as the proper identification of the intermediary or beneficiary's bank if the receiving bank, at the time it executes the sender's order, does not know that the name and number identify different persons. The receiving bank need not determine whether the name and number refer to the same person.

(4) If the receiving bank knows that the name and number identify different persons, reliance on either the name or the number in executing the sender's payment order is a breach of the obligation stated in Section 4A-302(a)(1).

Section 4A-209.—Acceptance of Payment Order

(a) Subject to subsection (d), a receiving bank other than the beneficiary's bank accepts a payment order when it executes the order.

(b) Subject to subsections (c) and (d), a beneficiary's bank accepts a payment order at the earliest of the following times:

(1) when the bank (i) pays the beneficiary as stated in Section 4A-405(a) or 4A-405(b), or
(ii) notifies the beneficiary of receipt of the order or that the account of the beneficiary has been credited with respect to the order unless the notice indicates that the bank is rejecting the order or that funds with respect to the order may not be withdrawn or used until receipt of payment from the sender of the order;

(2) when the bank receives payment of the entire amount of the sender's order pursuant to Section 4A-403(a)(1) or 4A-403(a)(2); or

(3) the opening of the next funds-transfer business day of the bank following the payment date of the order if, at that time, the amount of the sender's order is fully covered by a withdrawable credit balance in an authorized account of the sender or the bank has otherwise received full payment from the sender, unless the order was rejected before that time or is rejected within:
(i) one hour after that time, or
(ii) one hour after the opening of the next business day of the sender following the payment date if that time is later. If notice of rejection is received by the sender after the payment date and the authorized account of the sender does not bear interest, the bank is obliged to pay interest to the sender on the amount of the order for the number of days elapsing after the payment date to the day the sender receives notice or learns that the order was not accepted, counting that day as an elapsed day. If the withdrawable credit balance during that period falls below the amount of the order, the amount of interest payable is reduced accordingly.

(c) Acceptance of a payment order cannot occur before the order is received by the receiving bank. Acceptance does not occur under subsection (b)(2) or (b)(3) if the beneficiary of the payment order does not have an account with the receiving bank, the account has been closed, or the receiving bank is not permitted by law to receive credits for the beneficiary's account.

(d) A payment order issued to the originator's bank cannot be accepted until the payment date if the bank is the beneficiary's bank, or the execution date if the bank is not the beneficiary's bank. If the originator's bank executes the originator's payment order before the execution date or pays the beneficiary of the originator's payment order before the payment date and the payment order is subsequently canceled pursuant to Section 4A-211(b), the bank may recover from the beneficiary any payment received to the extent allowed by the law governing mistake and restitution.

Section 4A-210.—Rejection of Payment Order

(a) A payment order is rejected by the receiving bank by a notice of rejection transmitted to the sender orally, electronically, or in writing. A notice of rejection need not use any particular words and is sufficient if it indicates that the receiving bank is rejecting the order or will not execute or pay the order. Rejection is effective when the notice is given if transmission is by a means that is reasonable in the circumstances. If notice of rejection is given by a means that is not reasonable, rejection is effective when the notice is received. If an agreement of the sender and receiving bank establishes the means to be used to reject a payment order,

(i) any means complying with the agreement is reasonable and

(ii) any means not complying is not reasonable unless no significant delay in receipt of the notice resulted from the use of the noncomplying means.

(b) This subsection applies if a receiving bank other than the beneficiary's bank fails to execute a payment order despite the existence on the execution date of a withdrawable credit balance in an authorized account of the sender sufficient to cover the order. If the sender does not receive notice of rejection of the order on the execution date and the authorized account of the sender does not bear interest, the bank is obliged to pay interest to the sender on the amount of the order for the number of days elapsing after the execution date to the earlier of the day the order is canceled pursuant to Section 4A-211(d) or the day the sender receives notice or learns that the order was not executed, counting the final day of the period as an elapsed day. If the withdrawable credit balance during that period falls below the amount of the order, the amount of interest is reduced accordingly.

(c) If a receiving bank suspends payments, all unaccepted payment orders issued to it are deemed rejected at the time the bank suspends payments.

(d) Acceptance of a payment order precludes a later rejection of the order. Rejection of a payment order precludes a later acceptance of the order.

Section 4A-211.—Cancellation and Amendment of Payment Order

(a) A communication of the sender of a payment order canceling or amending the order may be transmitted to the receiving bank orally, electronically, or in writing. If a security procedure is in effect between the sender and the receiving bank, the communication is not effective to cancel or amend the order unless the communication is verified pursuant to the security procedure or the bank agrees to the cancellation or amendment.

(b) Subject to subsection (a), a communication by the sender canceling or amending a payment order is effective to cancel or amend the order if notice of the communication is received at a time and in a manner affording the receiving bank a reasonable opportunity to act on the communication before the bank accepts the payment order.

(c) After a payment order has been accepted, cancellation or amendment of the order is not effective unless the receiving bank agrees or a funds-transfer system rule allows cancellation or amendment without agreement of the bank.

(1) With respect to a payment order accepted by a receiving bank other than the beneficiary's bank, cancellation or amendment is not effective unless a conforming cancellation or amendment of the payment order issued by the receiving bank is also made.

(2) With respect to a payment order accepted by the beneficiary's bank, cancellation or amendment is not effective unless the order was issued in execution of an unauthorized payment order, or because of a mistake by a sender in the funds transfer which resulted in the issuance of a payment order:

(i) that is a duplicate of a payment order previously issued by the sender,

(ii) that orders payment to a beneficiary not entitled to receive payment from the originator, or

(iii) that orders payment in an amount greater than the amount the beneficiary was entitled to receive from the originator. If the payment order is canceled or amended, the beneficiary's bank is entitled to recover from the beneficiary any amount paid to the beneficiary to the extent allowed by the law governing mistake and restitution.

(d) An unaccepted payment order is canceled by operation of law at the close of the fifth funds-transfer business day of the receiving bank after the execution date or payment date of the order.

(e) A canceled payment order cannot be accepted. If an accepted payment order is canceled, the acceptance is nullified and no person has any right or obligation based on the acceptance. Amendment of a payment order is deemed to be cancellation of the original order at the time of amendment and issue of a new payment order in the amended form at the same time.

(f) Unless otherwise provided in an agreement of the parties or in a funds-transfer system rule, if the receiving bank, after accepting a payment order, agrees to cancellation or amendment of the order by the sender or is bound by a funds-transfer system rule allowing cancellation or amendment without the bank's agreement, the sender, whether or not cancellation or amendment is effective, is liable to the bank for any loss and expenses, including reasonable attorney's fees, incurred by the bank as a result of the cancellation or amendment or attempted cancellation or amendment.

(g) A payment order is not revoked by the death or legal incapacity of the sender unless the receiving bank knows of the death or of an adjudication of incapacity by a court of competent jurisdiction and has reasonable opportunity to act before acceptance of the order.

(h) A funds-transfer system rule is not effective to the extent it conflicts with subsection (c)(2).

Section 4A-212.—Liability and Duty of Receiving Bank Regarding Unaccepted Payment Order

If a receiving bank fails to accept a payment order that it is obliged by express agreement to accept, the bank is liable for breach of the agreement to the extent provided in the agreement or in this Article, but does not otherwise have any duty to accept a payment order or, before acceptance, to take any action, or refrain from taking action, with respect to the order except as provided in this Article or by express agreement. Liability based on acceptance arises only when acceptance occurs as stated in Section 4A-209, and liability is limited to that provided in this Article. A receiving bank is not the agent of the sender or beneficiary of the payment order it accepts, or of any other party to the funds transfer, and the bank owes no duty to any party to the funds transfer except as provided in this Article or by express agreement.

Part 3—Execution of Sender's Payment Order by Receiving Bank

Section 4A-301.—Execution and Execution Date

(a) A payment order is "executed" by the receiving bank when it issues a payment order intended to carry out the payment order received by the bank. A payment order received by the beneficiary's bank can be accepted but cannot be executed.

(b) "Execution date" of a payment order means the day on which the receiving bank may properly issue a payment order in execution of the sender's order. The execution date may be determined by instruction of the sender but cannot be earlier than the day the order is received and, unless otherwise determined, is the day the order is received. If the sender's instruction states a payment date, the execution date is the payment date or an earlier date on which execution is reasonably necessary to allow payment to the beneficiary on the payment date.

Section 4A-302.—Obligations of Receiving Bank in Execution of Payment Order

(a) Except as provided in subsections (b) through (d), if the receiving bank accepts a payment order pursuant to Section 4A-209(a), the bank has the following obligations in executing the order:

(1) The receiving bank is obliged to issue, on the execution date, a payment order complying with the sender's order and to follow the sender's instructions concerning:

(i) any intermediary bank or funds-transfer system to be used in carrying out the funds transfer, or

(ii) the means by which payment orders are to be transmitted in the funds transfer. If the originator's bank issues a payment order to an intermediary bank, the originator's bank is obliged to instruct the intermediary bank according to the instruction of the originator. An intermediary bank in the funds transfer is similarly bound by an instruction given to it by the sender of the payment order it accepts.

(2) If the sender's instruction states that the funds transfer is to be carried out telephonically or by wire transfer or otherwise indicates that the funds transfer is to be carried out by the most expeditious means, the receiving bank is obliged to transmit its payment order by the most expeditious available means, and to instruct any intermediary bank accordingly. If a sender's instruction states a payment date, the receiving bank is obliged to transmit its payment order at a time and by means reasonably necessary to allow payment to the beneficiary on the payment date or as soon thereafter as is feasible.

(b) Unless otherwise instructed, a receiving bank executing a payment order may:

(i) use any funds-transfer system if use of that system is reasonable in the circumstances, and

(ii) issue a payment order to the beneficiary's bank or to an intermediary bank through which a payment order conforming to the sender's order can expeditiously be issued to the beneficiary's bank if the receiving bank exercises ordinary care in the selection of the intermediary bank. A receiving bank is not required to follow an instruction of the sender designating a funds-transfer system to be used in carrying out the funds transfer if the receiving bank, in good faith, determines that it is not feasible to follow the instruction or that following the instruction would unduly delay completion of the funds transfer.

(c) Unless subsection (a)(2) applies or the receiving bank is otherwise instructed, the bank may execute a payment order by transmitting its payment order by first class mail or by any means reasonable in the circumstances. If the receiving bank is instructed to execute the sender's order by transmitting its payment order by a particular means, the receiving bank may issue its payment order by the means stated or by any means as expeditious as the means stated.

(d) Unless instructed by the sender,

(i) the receiving bank may not obtain payment of its charges for services and expenses in connection with the execution of the sender's order by issuing a payment order in an amount equal to the amount of the sender's order less the amount of the charges, and

(ii) may not instruct a subsequent receiving bank to obtain payment of its charges in the same manner.

Section 4A-303.—Erroneous Execution of Payment Order

(a) A receiving bank that:

(i) executes the payment order of the sender by issuing a payment order in an amount greater than the amount of the sender's order, or

(ii) issues a payment order in execution of the sender's order and then issues a duplicate order, is entitled to payment of the amount of the sender's order under Section 4A-402(c) if that subsection is otherwise satisfied. The bank is entitled to recover from the beneficiary of the erroneous order the excess payment received to the extent allowed by the law governing mistake and restitution.

(b) A receiving bank that executes the payment order of the sender by issuing a payment order in an amount less than the amount of the sender's order is entitled to payment of the amount of the sender's order under Section 4A-402(c) if:

(i) that subsection is otherwise satisfied and

(ii) the bank corrects its mistake by issuing an additional payment order for the benefit of the beneficiary of the sender's order. If the error is not corrected, the issuer of the erroneous order is entitled to receive or retain payment from the sender of the order it accepted only to the extent of the amount of the erroneous order. This subsection does not apply if the receiving bank executes the sender's payment order by issuing a payment order in an amount less than the amount of the sender's order for the purpose of obtaining payment of its charges for services and expenses pursuant to instruction of the sender.

(c) If a receiving bank executes the payment order of the sender by issuing a payment order to a beneficiary different from the beneficiary of the sender's order and the funds transfer is completed on the basis of that error, the sender of the payment order that was erroneously executed and all previous senders in the funds transfer are not obliged to pay the payment orders they issued. The issuer of the erroneous order is entitled to recover from the beneficiary of the order the payment received to the extent allowed by the law governing mistake and restitution.

Section 4A-304.— Duty of Sender to Report Erroneously Executed Payment Order

If the sender of a payment order that is erroneously executed as stated in Section 4A-303 receives notification from the receiving bank that the order was executed or that the sender's account was debited with respect to the order, the sender has a duty to exercise ordinary care to determine, on the basis of information available to the sender, that the order was erroneously executed and to notify the bank of the relevant facts within a reasonable time not exceeding 90 days after the notification from the bank was received by the sender. If the sender fails to perform that duty, the bank is not obliged to pay interest on any amount refundable to the sender under Section 4A-402(d) for the period before the bank learns of the execution error. The bank is not entitled to any recovery from the sender on account of a failure by the sender to perform the duty stated in this section.

Section 4A-305.—Liability for Late or Improper Execution or Failure to Execute Payment Order

(a) If a funds transfer is completed but execution of a payment order by the receiving bank in breach of Section 4A-302 results in delay in payment to the beneficiary, the bank is obliged to pay interest to either the originator or the beneficiary of the funds transfer for the period of delay caused by the improper execution. Except as provided in subsection (c), additional damages are not recoverable.

(b) If execution of a payment order by a receiving bank in breach of Section 4A-302 results in:

(i) noncompletion of the funds transfer,

(ii) failure to use an intermediary bank designated by the originator, or

(iii) issuance of a payment order that does not comply with the terms of the payment order of the originator, the bank is liable to the originator for its expenses in the funds transfer and for incidental expenses and interest losses, to the extent not covered by subsection (a), resulting from the improper execution. Except as provided in subsection (c), additional damages are not recoverable.

(c) In addition to the amounts payable under subsections (a) and (b), damages, including consequential damages, are recoverable to the extent provided in an express written agreement of the receiving bank.
(d) If a receiving bank fails to execute a payment order it was obliged by express agreement to execute, the receiving bank is liable to the sender for its expenses in the transaction and for incidental expenses and interest losses resulting from the failure to execute. Additional damages, including consequential damages, are recoverable to the extent provided in an express written agreement of the receiving bank, but are not otherwise recoverable.
(e) Reasonable attorney's fees are recoverable if demand for compensation under subsection (a) or (b) is made and refused before an action is brought on the claim. If a claim is made for breach of an agreement under subsection (d) and the agreement does not provide for damages, reasonable attorney's fees are recoverable if demand for compensation under subsection (d) is made and refused before an action is brought on the claim.
(f) Except as stated in this section, the liability of a receiving bank under subsections (a) and (b) may not be varied by agreement.

Part 4 — Payment

Section 4A-401.—Payment Date

"Payment date" of a payment order means the day on which the amount of the order is payable to the beneficiary by the beneficiary's bank. The payment date may be determined by instruction of the sender but cannot be earlier than the day the order is received by the beneficiary's bank and, unless otherwise determined, is the day the order is received by the beneficiary's bank.

Section 4A-402.— Obligation of Sender to Pay Receiving Bank

(a) This section is subject to Sections 4A-205 and 4A-207.
(b) With respect to a payment order issued to the beneficiary's bank, acceptance of the order by the bank obliges the sender to pay the bank the amount of the order, but payment is not due until the payment date of the order.
(c) This subsection is subject to subsection (e) and to Section 4A-303. With respect to a payment order issued to a receiving bank other than the beneficiary's bank, acceptance of the order by the receiving bank obliges the sender to pay the bank the amount of the sender's order. Payment by the sender is not due until the execution date of the sender's order. The obligation of that sender to pay its payment order is excused if the funds transfer is not completed by acceptance by the beneficiary's bank of a payment order instructing payment to the beneficiary of that sender's payment order.
(d) If the sender of a payment order pays the order and was not obliged to pay all or part of the amount paid, the bank receiving payment is obliged to refund payment to the extent the sender was not obliged to pay. Except as provided in Sections 4A-204 and 4A-304, interest is payable on the refundable amount from the date of payment.
(e) If a funds transfer is not completed as stated in subsection (c) and an intermediary bank is obliged to refund payment as stated in subsection (d) but is unable to do so because not permitted by applicable law or because the bank suspends payments, a sender in the funds transfer that executed a payment order in compliance with an instruction, as stated in Section 4A-302(a)(1), to route the funds transfer through that intermediary bank is entitled to receive or retain payment from the sender of the payment order that it accepted. The first sender in the funds transfer that issued an instruction requiring routing through that intermediary bank is subrogated to the right of the bank that paid the intermediary bank to refund as stated in subsection (d).
(f) The right of the sender of a payment order to be excused from the obligation to pay the order as stated in subsection (c) or to receive refund under subsection (d) may not be varied by agreement.

Section 4A-403.—Payment by Sender to Receiving Bank

(a) Payment of the sender's obligation under Section 4A-402 to pay the receiving bank occurs as follows:
(1) If the sender is a bank, payment occurs when the receiving bank receives final settlement of the obligation through a Federal Reserve Bank or through a funds-transfer system.
(2) If the sender is a bank and the sender:
(i) credited an account of the receiving bank with the sender, or
(ii) caused an account of the receiving bank in another bank to be credited, payment occurs when the credit is withdrawn or, if not withdrawn, at midnight of the day on which the credit is withdrawable and the receiving bank learns of that fact.
(3) If the receiving bank debits an account of the sender with the receiving bank, payment occurs when the debit is made to the extent the debit is

covered by a withdrawable credit balance in the account.

(b) If the sender and receiving bank are members of a funds-transfer system that nets obligations multilaterally among participants, the receiving bank receives final settlement when settlement is complete in accordance with the rules of the system. The obligation of the sender to pay the amount of a payment order transmitted through the funds-transfer system may be satisfied, to the extent permitted by the rules of the system, by setting off and applying against the sender's obligation the right of the sender to receive payment from the receiving bank of the amount of any other payment order transmitted to the sender by the receiving bank through the funds-transfer system. The aggregate balance of obligations owed by each sender to each receiving bank in the funds-transfer system may be satisfied, to the extent permitted by the rules of the system, by setting off and applying against that balance the aggregate balance of obligations owed to the sender by other members of the system. The aggregate balance is determined after the right of setoff stated in the second sentence of this subsection has been exercised.

(c) If two banks transmit payment orders to each other under an agreement that settlement of the obligations of each bank to the other under Section 4A-402 will be made at the end of the day or other period, the total amount owed with respect to all orders transmitted by one bank shall be set off against the total amount owed with respect to all orders transmitted by the other bank. To the extent of the setoff, each bank has made payment to the other.

(d) In a case not covered by subsection (a), the time when payment of the sender's obligation under Section 4A-402(b) or 4A-402(c) occurs is governed by applicable principles of law that determine when an obligation is satisfied.

Section 4A-404.—Obligation of Beneficiary's Bank to Pay and Give Notice to Beneficiary

(a) Subject to Sections 4A-211(e), 4A-405(d), and 4A-405(e), if a beneficiary's bank accepts a payment order, the bank is obliged to pay the amount of the order to the beneficiary of the order. Payment is due on the payment date of the order, but if acceptance occurs on the payment date after the close of the funds-transfer business day of the bank, payment is due on the next funds-transfer business day. If the bank refuses to pay after demand by the beneficiary and receipt of notice of particular circumstances that will give rise to consequential damages as a result of nonpayment, the beneficiary may recover damages resulting from the refusal to pay to the extent the bank had notice of the damages, unless the bank proves that it did not pay because of a reasonable doubt concerning the right of the beneficiary to payment.

(b) If a payment order accepted by the beneficiary's bank instructs payment to an account of the beneficiary, the bank is obliged to notify the beneficiary of receipt of the order before midnight of the next funds-transfer business day following the payment date. If the payment order does not instruct payment to an account of the beneficiary, the bank is required to notify the beneficiary only if notice is required by the order. Notice may be given by first class mail or any other means reasonable in the circumstances. If the bank fails to give the required notice, the bank is obliged to pay interest to the beneficiary on the amount of the payment order from the day notice should have been given until the day the beneficiary learned of receipt of the payment order by the bank. No other damages are recoverable. Reasonable attorney's fees are also recoverable if demand for interest is made and refused before an action is brought on the claim.

(c) The right of a beneficiary to receive payment and damages as stated in subsection (a) may not be varied by agreement or a funds-transfer system rule. The right of a beneficiary to be notified as stated in subsection (b) may be varied by agreement of the beneficiary or by a funds-transfer system rule if the beneficiary is notified of the rule before initiation of the funds transfer.

Section 4A-405.—Payment by Beneficiary's Bank to Beneficiary

(a) If the beneficiary's bank credits an account of the beneficiary of a payment order, payment of the bank's obligation under Section 4A-404(a) occurs when and to the extent:

(i) the beneficiary is notified of the right to withdraw the credit,

(ii) the bank lawfully applies the credit to a debt of the beneficiary, or

(iii) funds with respect to the order are otherwise made available to the beneficiary by the bank.

(b) If the beneficiary's bank does not credit an account of the beneficiary of a payment order, the time when payment of the bank's obligation under Section 4A-404(a) occurs is governed by principles of law that determine when an obligation is satisfied.

(c) Except as stated in subsections (d) and (e), if the beneficiary's bank pays the beneficiary of a payment order under a condition to payment or agreement of the beneficiary giving the bank the right to recover payment from the beneficiary if the bank does not receive payment of the order, the condition to payment or agreement is not enforceable.

(d) A funds-transfer system rule may provide that payments made to beneficiaries of funds transfers made through the system are provisional until receipt of payment by the beneficiary's bank of the payment order it accepted. A beneficiary's bank that makes a payment that is provisional under the rule is entitled to refund from the beneficiary if:

(i) the rule requires that both the beneficiary and the originator be given notice of the provisional nature of the payment before the funds transfer is initiated,

(ii) the beneficiary, the beneficiary's bank and the originator's bank agreed to be bound by the rule, and

(iii) the beneficiary's bank did not receive payment of the payment order that it accepted. If the beneficiary is obliged to refund payment to the beneficiary's bank, acceptance of the payment order by the beneficiary's bank is nullified and no payment by the originator of the funds transfer to the beneficiary occurs under Section 4A-406.

(e) This subsection applies to a funds transfer that includes a payment order transmitted over a funds-transfer system that:

(i) nets obligations-multilaterally among participants, and

(ii) has in effect a loss-sharing agreement among participants for the purpose of providing funds necessary to complete settlement of the obligations of one or more participants that do not meet their settlement obligations. If the beneficiary's bank in the funds transfer accepts a payment order and the system fails to complete settlement pursuant to its rules with respect to any payment order in the funds transfer,

(i) the acceptance by the beneficiary's bank is nullified and no person has any right or obligation based on the acceptance,

(ii) the beneficiary's bank is entitled to recover payment from the beneficiary,

(iii) no payment by the originator to the beneficiary occurs under Section 4A-406, and

(iv) subject to Section 4A-402(e), each sender in the funds transfer is excused from its obligation to pay its payment order under Section 4A-402(c) because the funds transfer has not been completed.

Section 4A-406.—Payment by Originator to Beneficiary; Discharge of Underlying Obligation

(a) Subject to Sections 4A-211(e), 4A-405(d), and A-405(e), the originator of a funds transfer pays the beneficiary of the originator's payment order:

(i) at the time a payment order for the benefit of the beneficiary is accepted by the beneficiary's bank in the funds transfer and

(ii) in an amount equal to the amount of the order accepted by the beneficiary's bank, but not more than the amount of the originator's order.

(b) If payment under subsection (a) is made to satisfy an obligation, the obligation is discharged to the same extent discharge would result from payment to the beneficiary of the same amount in money, unless:

(i) the payment under subsection (a) was made by a means prohibited by the contract of the beneficiary with respect to the obligation,

(ii) the beneficiary, within a reasonable time after receiving notice of receipt of the order by the beneficiary's bank, notified the originator of the beneficiary's refusal of the payment,

(iii) funds with respect to the order were not withdrawn by the beneficiary or applied to a debt of the beneficiary, and

(iv) the beneficiary would suffer a loss that could reasonably have been avoided if payment had been made by a means complying with the contract. If payment by the originator does not result in discharge under this section, the originator is subrogated to the rights of the beneficiary to receive payment from the beneficiary's bank under Section 4A-404(a).

(c) For the purpose of determining whether discharge of an obligation occurs under subsection (b), if the beneficiary's bank accepts a payment order in an amount equal to the amount of the originator's payment order less charges of one or more receiving banks in the funds transfer, payment to the beneficiary is deemed to be in the amount of the originator's order unless upon demand by the beneficiary the originator does not pay the beneficiary the amount of the deducted charges.

(d) Rights of the originator or of the beneficiary of a funds transfer under this section may be varied only by agreement of the originator and the beneficiary.

Part 5 — Miscellaneous Provisions

Section 4A-501.—Variation by Agreement and Effect of Funds-Transfer System Rule

(a) Except as otherwise provided in this Article, the rights and obligations of a party to a funds transfer may be varied by agreement of the affected party.

(b) "Funds-transfer system rule" means a rule of an association of banks:

(i) governing transmission of payment orders by means of a funds-transfer system of the association or rights and obligations with respect to those orders, or

(ii) to the extent the rule governs rights and obligations between banks that are parties to a funds transfer in which a Federal Reserve Bank, acting as an intermediary bank, sends a payment order to the beneficiary's bank. Except as otherwise provided in this Article, a funds-transfer system rule governing rights and obligations between participating banks using the system may be effective even if the rule conflicts with this Article and indirectly affects another party to the funds transfer who does not consent to the rule. A funds-transfer system rule may also govern rights and obligations of parties other than participating banks using the system to the extent stated in Sections 4A-404(c), 4A-405(d), and 4A-507(c).

Section 4A-502.—Creditor Process Served on Receiving Bank; Setoff by Beneficiary's Banks

(a) As used in this section, "creditor process" means levy, attachment, garnishment, notice of lien, sequestration, or similar process issued by or on behalf of a creditor or other claimant with respect to an account.

(b) This subsection applies to creditor process with respect to an authorized account of the sender of a payment order if the creditor process is served on the receiving bank. For the purpose of determining rights with respect to the creditor process, if the receiving bank accepts the payment order the balance in the authorized account is deemed to be reduced by the amount of the payment order to the extent the bank did not otherwise receive payment of the order, unless the creditor process is served at a time and in a manner affording the bank a reasonable opportunity to act on it before the bank accepts the payment order.

(c) If a beneficiary's bank has received a payment order for payment to the beneficiary's account in the bank, the following rules apply:

(1) The bank may credit the beneficiary's account. The amount credited may be set off against an obligation owed by the beneficiary to the bank or may be applied to satisfy creditor process served on the bank with respect to the account.

(2) The bank may credit the beneficiary's account and allow withdrawal of the amount credited unless creditor process with respect to the account is served at a time and in a manner affording the bank a reasonable opportunity to act to prevent withdrawal.

(3) If creditor process with respect to the beneficiary's account has been served and the bank has had a reasonable opportunity to act on it, the bank may not reject the payment order except for a reason unrelated to the service of process.

(d) Creditor process with respect to a payment by the originator to the beneficiary pursuant to a funds transfer may be served only on the beneficiary's bank with respect to the debt owed by that bank to the beneficiary. Any other bank served with the creditor process is not obliged to act with respect to the process.

Section 4A-503.—Injunction or Restraining Order With Respect to Funds Transfer

For proper cause and in compliance with applicable law, a court may restrain:

(i) a person from issuing a payment order to initiate a funds transfer,

(ii) an originator's bank from executing the payment order of the originator, or

(iii) the beneficiary's bank from releasing funds to the beneficiary or the beneficiary from withdrawing the funds. A court may not otherwise restrain a person from issuing a payment order, paying or receiving payment of a payment order, or otherwise acting with respect to a funds transfer.

Section 4A-504.—Order in Which Items and Payment Orders May be Charged to Account; Order of Withdrawals from Account

(a) If a receiving bank has received more than one payment order of the sender or one or more payment orders and other items that are payable from the sender's account, the bank may charge the sender's account with respect to the various orders and items in any sequence.

(b) In determining whether a credit to an account has been withdrawn by the holder of the account or applied to a debt of the holder of the account, credits first made to the account are first withdrawn or applied.

Section 4A-505.—Preclusion of Objection to Debit of Customer's Account

If a receiving bank has received payment from its customer with respect to a payment order issued in the name of the customer as sender and accepted by the bank, and the customer received notification reasonably identifying the order, the customer is precluded from asserting that the bank is not entitled to retain the payment unless the customer notifies the bank of the customer's objection to the payment within one year after the notification was received by the customer.

Section 4A-506.—Rate of Interest

(a) If, under this Article, a receiving bank is obliged to pay interest with respect to a payment order issued to the bank, the amount payable may be determined:

(i) by agreement of the sender and receiving bank, or

(ii) by a funds-transfer system rule if the payment order is transmitted through a funds-transfer system.

(b) If the amount of interest is not determined by an greement or rule as stated in subsection (a), the amount is calculated by multiplying the applicable Federal Funds rate by the amount on which interest is payable, and then multiplying the product by the number of days for which interest is payable. The applicable Federal Funds rate is the average of the Federal Funds rates published by the Federal Reserve Bank of New York for each of the days for which interest is payable divided by 360. The Federal Funds rate for any day on which a published rate is not available is the same as the published rate for the next preceding day for which there is a published rate. If a receiving bank that accepted a payment order is required to refund payment to the sender of the order because the funds transfer was not completed, but the failure to complete was not due to any fault by the bank, the interest payable is reduced by a percentage equal to the reserve requirement on deposits of the receiving bank.

Section 4A-507.—Choice of Law

(a) The following rules apply unless the affected parties otherwise agree or subsection (c) applies:

(1) The rights and obligations between the sender of a payment order and the receiving bank are governed by the law of the jurisdiction in which the receiving bank is located.

(2) The rights and obligations between the beneficiary's bank and the beneficiary are governed by the law of the jurisdiction in which the beneficiary's bank is located.

(3) The issue of when payment is made pursuant to a funds transfer by the originator to the beneficiary is governed by the law of the jurisdiction in which the beneficiary's bank is located.

(b) If the parties described in each paragraph of subsection (a) have made an agreement selecting the law of a particular jurisdiction to govern rights and obligations between each other, the law of that jurisdiction governs those rights and obligations, whether or not the payment order or the funds transfer bears a reasonable relation to that jurisdiction.

(c) A funds-transfer system rule may select the law of a particular jurisdiction to govern:

(i) rights and obligations between participating banks with respect to payment orders transmitted or processed through the system, or

(ii) the rights and obligations of some or all parties to a funds transfer any part of which is carried out by means of the system. A choice of law made pursuant to clause (i) is binding on participating banks. A choice of law made pursuant to clause (ii) is binding on the originator, other sender, or a receiving bank having notice that the funds-transfer system might be used in the funds transfer and of the choice of law by the system when the originator, other sender, or receiving bank issued or accepted a payment order. The beneficiary of a funds transfer is bound by the choice of law if, when the funds transfer is initiated, the beneficiary has notice that the funds-transfer system might be used in the funds transfer and of the choice of law by the system. The law of a jurisdiction selected pursuant to this subsection may govern, whether or not that law bears a reasonable relation to the matter in issue.

(d) In the event of inconsistency between an agreement under subsection (b) and a choice-of-law rule under subsection (c), the agreement under subsection (b) prevails.

(e) If a funds transfer is made by use of more than one funds-transfer system and there is inconsistency between choice-of-law rules of the systems, the matter in issue is governed by the law of the selected jurisdiction that has the most significant relationship to the matter in issue.

Final Rule—Amendment to Regulation Z

The Board of Governors is amending 12 C.F.R. Part 226, its Regulation Z (Truth in Lending), to require that creditors wishing to freeze the credit line when the rate cap on a home equity line is reached must expressly provide for this event in their agreements. Creditors that currently include such a provision in their contracts will not be affected by this revision. The Board also is removing from the regulation the provision that would permit delaying the time for providing disclosures about any repayment phase set forth in an agreement. The rules in question relate to the Home Equity Loan Consumer Protection Act of 1988, which requires creditors to provide consumers with information for open-end credit plans secured by the consumer's dwelling, and imposes substantive limitations on these plans. Although the final regulations implementing the law were adopted in June 1989 and became effective in November 1989, in response to litigation, the Board in March 1990 published for comment a proposal dealing with the rate cap provision and the timing of disclosures for the repayment phase.

Effective September 19, 1990, but compliance is optional until October 1, 1991, 12 C.F.R. Part 226 is amended as follows:

1. The authority citation for Part 226 continues to read as follows:

Authority: Sec. 105, Truth in Lending Act, as amended by sec. 605, Pub. L. No. 96-221, 94 Stat. 170 (15 U.S.C. 1604 *et seq.*); Section 1204(c), Competitive Equality Banking Act, Pub. L. No. 100-86, 101 Stat. 552.

2. In Section 226.5b, the introductory text to paragraphs (f), (f)(3), and (f)(3)(vi) is republished and paragraphs (f)(3)(i), (f)(3)(vi)(E), and (f)(3)(vi)(F) are revised and paragraph (f)(3)(vi)(G) is removed to read as follows:

Subpart B—Open-End Credit

Section 226.5b—Requirements for home equity plans.

* * * * *

(f) *Limitations on home equity plans.* No creditor may, by contract or otherwise:

* * * * *

(3) Change any term, except that a creditor may:

(i) Provide in the initial agreement that it may prohibit additional extensions of credit or reduce the credit limit during any period in which the maximum annual percentage rate is reached. A creditor also may provide in the initial agreement that specified changes will occur if a specified event takes place (for example, that the annual percentage rate will increase a specified amount if the consumer leaves the creditor's employment).

* * * * *

(vi) Prohibit additional extensions of credit or reduce the credit limit applicable to an agreement during any period in which:

* * * * *

(E) The priority of the creditor's security interest is adversely affected by government action to the extent that the value of the security interest is less than 120 percent of the credit line; or

(F) The creditor is notified by its regulatory agency that continued advances constitute an unsafe and unsound practice.

* * * * *

3. In Section 226.9, paragraph (c)(3) is revised to read as follows:

Section 226.9—Subsequent disclosure requirements.

* * * * *

(c) *Change in terms.* * * *

(3) *Notice for home equity plans.* If a creditor prohibits additional extensions of credit or reduces the credit limit applicable to a home equity plan pursuant to section 226.5b(f)(3)(i) or 226.5b(f)(3)(vi), the creditor shall mail or deliver written notice of the action to each consumer who will be affected. The notice must be provided not later than three business days after the action is taken and shall contain specific reasons for the action. If the creditor requires the consumer to request reinstatement of credit privileges, the notice also shall state that fact.

* * * * *

4. Appendix G to Part 226 is amended by removing G-14C — Home Equity Sample (Repayment phase disclosed later).

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ORDERS ISSUED UNDER BANK HOLDING COMPANY ACT

Orders Issued Under Section 3 of the Bank Holding Company Act

AmSouth Bancorporation
Birmingham, Alabama

AmSouth Bank of Tennessee
Nashville, Tennessee

Order Approving Acquisition of Bank by Merger and Membership in the Federal Reserve System

AmSouth Bancorporation, Birmingham, Alabama ("AmSouth"), a bank holding company within the meaning of the Bank Holding Company Act ("BHC Act"), has applied for the Board's approval under section 3(a)(3) of the BHC Act to acquire First Bank of Maury County, Columbia, Tennessee ("First Bank"). AmSouth proposes to acquire First Bank by merger, with the successor institution, AmSouth Bank of Tennessee, Nashville, Tennessee ("AmSouth Bank"), becoming a member of the Federal Reserve System.[1] Accordingly, AmSouth has also applied pursuant to section 18(c) of the Federal Deposit Insurance Act (12 U.S.C. § 1828(c)) (the "Bank Merger Act") and section 9 of the Federal Reserve Act (12 U.S.C. § 321) for membership in the Federal Reserve System.

Notice of the applications, affording interested persons an opportunity to submit comments, has been published (55 *Federal Register* 17,820) and given in accordance with the Bank Merger Act and the Board's Rules of Procedure (12 C.F.R. 262.3(b)). As required by the Bank Merger Act, reports on the competitive effects of the merger were requested from the United States Attorney General, the Office of the Comptroller of the Currency, and the Federal Deposit Insurance Corporation. The time for filing comments has expired, and the Board has considered the applications and all the comments received in light of the factors set forth in section 3(c) of the BHC Act (12 U.S.C. § 1842(c)) and in the Bank Merger Act (12 U.S.C. § 1828(c)(5)).

Section 3(d) of the BHC Act (12 U.S.C. § 1842(d)), 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, unless such acquisition is "specifically authorized by statute laws of the state in which [the] bank is located, by language to that effect and not merely by implication." The Board has concluded that the laws of Tennessee expressly authorize the acquisition of Tennessee banks by Alabama bank holding companies.[2] Accordingly, the Board's approval of this application is not barred by the Douglas Amendment.

AmSouth, the largest commercial banking organization in Alabama, controls three subsidiary banks in Alabama with total deposits of $5.8 billion, representing 19.9 percent of all deposits in commercial banks in the state.[3] AmSouth also controls a commercial banking organization in Florida. First Bank is the 196th largest commercial bank in Tennessee, controlling deposits of $14.9 million, representing less than one percent of all deposits in commercial banks in the state. AmSouth Bank will compete in the Nashville, Tennessee area banking market, where AmSouth does not currently operate.[4] Accordingly, the Board has concluded that consummation of this proposal would not have a significantly adverse effect on the concentration of banking resources in Tennessee, or have a significantly adverse effect upon competition in any relevant banking market. The financial and managerial resources and future prospects of AmSouth and its subsidiary banks and of First Bank are also considered satisfactory and consistent with approval.

In considering the convenience and needs of the communities to be served, the Board has taken into account the record of AmSouth's subsidiary banks under the Community Reinvestment Act (12 U.S.C. § 2901 *et seq.*) ("CRA"). The CRA requires the federal financial supervisory agencies to encourage financial institutions to help meet the credit needs of the local communities in which they operate consistent with the safe and sound operation of such institutions. To accomplish this end, the CRA requires the appropriate federal supervisory authority to "assess an institution's record of meeting the credit needs of its entire community, including low- and moderate-income neighborhoods, consistent with the safe and sound operation of the institution," and to take this record into account in its evaluation of bank holding company applications.[5]

In this regard, the Board has received comments filed by the Center for Human Rights, Birmingham, Alabama ("Protestant"), critical of the performance of AmSouth's lead bank, AmSouth, N.A., Birmingham, Alabama ("AmSouth-Birmingham"). Specifically, the Protestant alleges that AmSouth-Birmingham is not meeting the need for mortgage loans in the low- to moderate-income and minority communities of Birmingham.[6]

1. First Bank will merge with AmSouth Bank of Tennessee, Columbia, Tennessee ("Interim Bank"), a bank subsidiary of AmSouth also applying for membership in the Federal Reserve System, that has been established solely to facilitate the acquisition. First Bank, the successor to this merger, will be renamed AmSouth Bank by charter amendment and relocate from Columbia to Nashville, Tennessee.

2. *SouthTrust of Tennessee, Inc.*, 74 *Federal Reserve Bulletin* 779 (1988). The Tennessee Commissioner of Financial Institutions has confirmed that the proposal complies with the provisions of the Tennessee interstate banking statute, including the five-year longevity requirement in Tenn. Code Ann. § 45-12-103(4), and that the laws of Tennessee specifically authorize the proposed acquisition and charter relocations. The State has not approved the proposal, however, and the Board's approval is conditioned upon AmSouth obtaining the necessary approvals from the Tennessee Commissioner.

3. Data are as of March 31, 1990.

4. The Nashville, Tennessee area banking market consists of Davidson, Rutherford, Williamson, and Wilson counties, Tennessee, plus the southern halves of Robertson and Sumner counties, Tennessee.

5. 12 U.S.C. §§ 2902-2903.

6. As evidence to support this allegation, Protestant has relied upon a study which appeared in *The Birmingham News* in August 1989, suggesting that, in recent years, there has been a significant disparity in the home mortgage loans made by Birmingham lenders to high-income and white residents as opposed to low- and moderate-income and minority residents in Birmingham. In the "Report on Loan Discrimination" submitted to Congress by the Board on October 13, 1989, pursuant to section 1220 of the Financial Institutions Reform, Recovery and Enforcement Act of 1989 (the "Report"), the Board

The Board has carefully reviewed the CRA performance record of AmSouth and AmSouth-Birmingham, as well as Protestant's comments and AmSouth's response to those comments, in light of the CRA, the Board's regulations and the Statement of the Federal Financial Supervisory Agencies Regarding the Community Reinvestment Act ("Agency CRA Statement").[7] The Agency CRA Statement provides guidance regarding the types of policies and procedures that the supervisory agencies believe financial institutions should have in place in order to fulfill their responsibilities under the CRA on an ongoing basis, and the procedures that the supervisory agencies will use during the application process to review an institution's CRA compliance performance. The Agency CRA Statement also suggests that decisions by agencies to allow financial institutions to expand will be made pursuant to an analysis of the institution's overall CRA performance, and will be based on the actual record of performance of the institution.[8]

Initially, the Board notes in this case that AmSouth's subsidiary banks—including AmSouth-Birmingham—have each received satisfactory ratings from their primary regulators in the most recent examinations of their CRA performance. The Agency CRA Statement provides that, although CRA examination reports do not provide conclusive evidence of an institution's CRA record, these reports will be given great weight in the applications process.[9]

In addition, AmSouth and AmSouth-Birmingham have put in place various elements outlined in the Agency CRA Statement that contribute to an effective CRA program. Specifically, AmSouth has established a program for reviewing and supervising the CRA programs of its subsidiary banks. This program includes regular review of reports made by each subsidiary bank to AmSouth concerning the bank's CRA program, and annual review of each bank's CRA statement. AmSouth provides information to subsidiary banks regarding evolving areas of emphasis under the CRA, and suggests guidelines to assure that subsidiary banks are meeting their responsibilities to the community under the CRA.

Pursuant to the CRA plan implemented at AmSouth-Birmingham, the CRA officer reports annually to the bank's full board of directors and quarterly to the audit committee of the bank's board of directors. The audit committee then reports to the full board of directors on CRA activities at the next board meeting. AmSouth has also implemented a CRA self-assessment program at AmSouth-Birmingham.

AmSouth-Birmingham provides SBA, FHA, VA, and government-guaranteed student loans. It accepts mortgage loan applications at all branches in its extensive branch network. In addition, AmSouth-Birmingham spearheaded the establishment of the Birmingham Minority Enterprise Small Business Investment Company, which was formed to make loans to expanding minority businesses. A number of the members of AmSouth-Birmingham's board of directors are actively involved in community development activities.

The Board has considered Protestant's allegation that the Home Mortgage Disclosure Act ("HMDA") data for AmSouth-Birmingham in the Birmingham Metropolitan Statistical Area ("MSA") show that AmSouth-Birmingham has failed to comply with the provisions of the CRA. Analysis of the HMDA data shows that for the period 1984 through 1989, with respect to home improvement and one to four family owner-occupied home purchase mortgage loans, AmSouth-Birmingham's lending to middle-income borrowers is relatively equal, regardless of race.[10] AmSouth has also begun interviewing to obtain minority loan originators and processors for its mortgage company subsidiary and is exploring the possibility of purchasing loans from minority loan brokerage firms.

The Board notes that there have been some disparities in the HMDA data for AmSouth-Birmingham's lending to borrowers in low- and moderate-income versus high-income census tracts.[11] AmSouth-Birmingham has taken steps to address this disparity through a number of new mortgage loan programs and through additional outreach efforts. AmSouth-Birmingham is the largest participant in a $25 million mortgage pool sponsored by the City of Birmingham, which is known as the Birmingham Residential Mort-

generally reviewed various public studies of mortgage lending in Atlanta, Cleveland, Detroit and Boston. The Report noted that, while these studies appeared to indicate that disparities existed in home mortgage lending between minority and non-minority areas, they did not provide a basis for definitive conclusions about the existence or extent of racial discrimination in mortgage lending and did not account for certain factors other than discrimination in lending that might account for these disparities—including differences in demand for mortgage loans, differences in the types of mortgage products offered by depository and nondepository institutions, and the tendency of nondepository lenders to dominate the minority mortgage loan market.

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

8. *Id.*

9. 54 *Federal Register* at 13,745.

10. For example, an analysis of home purchase mortgage loans for one-to-four-family owner-occupied units and home improvement loans for 1988 shows that AmSouth-Birmingham made the same number of loans to applicants in middle-income white census tracts as to applicants in middle-income minority census tracts.

11. Although some disparities appear in the HMDA data, an analysis of AmSouth-Birmingham's recent consumer lending activity shows that the loan to deposit ratios are higher for low- and moderate-income census tracts than for middle- or high-income census tracts.

gage Plan.[12] In addition, AmSouth-Birmingham has committed $5 million to the Community Home Buyer's Program, a mortgage loan program offered in conjunction with General Electric Mortgage Insurance Company.[13]

AmSouth-Birmingham also uses specialized marketing efforts to ensure that all segments of the community are aware of its services. For example, AmSouth-Birmingham regularly advertises in newspapers and on radio stations that are targeted to reach minority and low- and moderate-income communities. AmSouth-Birmingham regularly calls upon realtors to acquaint them with products of interest to low- and moderate-income individuals. AmSouth-Birmingham has recently implemented a program assigning each city office a quota of calls to make to ascertain the credit needs of low- and moderate-income individuals and the information obtained as a result of these calls is incorporated into the product development process. The Board expects AmSouth-Birmingham to continue its efforts to improve its outreach and lending record for low- and moderate-income applicants.

The Board believes that, on balance, the CRA record of AmSouth and AmSouth-Birmingham is consistent with approval of this application. The Board expects AmSouth and AmSouth-Birmingham to implement fully their CRA programs and to continue to improve their record of CRA performance. The Board will consider the progress of AmSouth and AmSouth-Birmingham under the CRA in future applications to expand their deposit-taking operations. For the foregoing reasons, and based upon the overall CRA record of AmSouth and AmSouth-Birmingham and other facts of record, the Board concludes that convenience and needs considerations, including the record of performance under the CRA of AmSouth, AmSouth-Birmingham, and AmSouth's other subsidiary banks, are consistent with approval of this application.[14]

12. Ten area financial institutions are participating in the Plan, which is designed to provide affordable mortgages to low- and moderate-income residents in the five county Birmingham metropolitan area. The plan targets homes with a sales price of less than $50,000 and subsidizes the closing costs. Loans under the Plan became available in May 1990. AmSouth-Birmingham has received seven applications, with one loan approved and four pending.

13. This program targets low- and moderate-income families seeking to purchase houses costing $50,000 or less. Borrowers under this program receive pre-purchase education, liberalized lending criteria, a home inspection, and reduced closing costs. This program started in the first quarter 1990, and no loans have yet been extended.

14. Protestant also has requested that the Board hold a public hearing or meeting to assess further facts surrounding AmSouth-Birmingham's CRA performance. Generally under the Board's rules, the Board may, in its discretion, hold a public hearing or meeting on an application to clarify factual issues related to the application and to provide an opportunity for testimony, if appropriate. 12 U.S.C. §§ 262.3(e) and 262.25(d).

The Board has carefully considered the Protestant's request for a public meeting or hearing in this case. 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, and have submitted substantial written comments that have been considered by the Board. In light of these facts, the Board has determined that a public meeting or hearing is not necessary to clarify the factual record in these applications, or otherwise warranted in this case. Accordingly, Protestant's request for a public meeting or hearing on this application is hereby denied.

Interim Bank and AmSouth Bank have also applied under section 9 of the Federal Reserve Act (12 U.S.C. § 321 *et seq.*) to become members of the Federal Reserve System. The Board has considered the factors it is required to consider when approving applications for membership pursuant to section 9 of the Federal Reserve Act (12 U.S.C. § 322) and finds those factors to be consistent with approval.

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

By order of the Board of Governors, effective September 10, 1990.

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

JENNIFER J. JOHNSON
Associate Secretary of the Board

Orders Issued Under Section 4 of the Bank Holding Company Act

The Dai-Ichi Kangyo Bank, Limited Tokyo, Japan

Manufacturers Hanover Corporation New York, New York

Order Approving Application to Engage in Certain Leasing Activities

The Dai-Ichi Kangyo Bank, Limited, Tokyo, Japan ("Dai-Ichi"), and Manufacturers Hanover Corporation, New York, New York ("MHC") (collectively, "Applicants"), both bank holding companies within the meaning of the Bank Holding Company Act ("BHC Act"), have applied under section 4(c)(8) of the BHC Act (12 U.S.C. § 1843(c)(8)) and section 225.23(a) of the Board's Regulation Y (12 C.F.R.

225.23(a)) to engage, through their subsidiary The CIT Group Holdings, Inc., New York, New York ("CIT"), in the leasing of personal property, and acting as agent, broker, or adviser in leasing such property, including lease transactions in which CIT may rely for its compensation on an estimated residual value of the leased property at the expiration of the initial lease term of up to 100 percent of the acquisition cost of the property ("higher residual value leasing").[1]

Notice of the application, affording interested persons an opportunity to submit comments, has been duly published (55 *Federal Register* 22,099 and 34,077 (1990)). 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 4(c)(8) of the BHC Act.

Dai-Ichi is the largest banking organization in the world with $435.0 billion in total consolidated assets.[2] Dai-Ichi owns The Dai-Ichi Kangyo Bank of California, Los Angeles, California, with total assets of $503 million as of June 30, 1990. In addition, Dai-Ichi operates branches in New York, Los Angeles, and Chicago, and agencies in Atlanta and San Francisco. Dai-Ichi also engages in certain nonbanking activities through subsidiaries including CIT, a joint venture subsidiary.

MHC is the eighth largest commercial banking organization in the nation with $59.7 billion in total consolidated assets. MHC operates two banking subsidiaries in New York and Delaware and engages directly and through other subsidiaries in a broad range of nonbanking activities.

CIT engages primarily in commercial finance, leasing, factoring, and sales finance activities, operating approximately 30 subsidiaries with total assets of $10.3 billion. CIT is one of the largest bank-affiliated leasing companies in the United States with a leasing portfolio of $1.4 billion as of December 31, 1989.

In order to approve an application under section 4(c)(8) of the BHC Act, the Board must determine that the proposed activity is "so closely related to banking or managing or controlling banks as to be a proper incident thereto . . . ." 12 U.S.C. § 1843(c)(8).[3] The Board has previously determined by order that the activities of engaging in higher residual value leasing and acting as agent, broker, or adviser with respect to such lease transactions are closely related to banking and permissible for bank holding companies subject to certain limitations.[4] CIT proposes to conduct these activities using the same methods and procedures and subject to the same limitations established by the Board in its previous order regarding these activities. In addition, all leases will be non-operating and, with the exception of the residual value calculation, will otherwise conform to all of the requirements provided in the Board's regulation regarding leasing transactions generally.[5] In particular, CIT would engage in the proposed activities only for leases in which the property to be leased is acquired specifically for the leasing transaction under consideration or was acquired specifically for an earlier leasing transaction. Moreover, Applicants have committed that the proposed lease transactions engaged in by CIT will have a minimum initial lease term of one year, that the maximum lease term will be no more than forty years, and that CIT will sell or re-lease the property within two years of the expiration of the initial lease.

In acting on an application under section 4(c)(8) of the BHC Act, the Board must also consider whether an applicant's performance of the proposed activities "can reasonably be expected to produce benefits to the public, such as greater convenience, increased competition, or gains in efficiency, that outweigh possible adverse effects, such as undue concentration of resources, decreased or unfair competition, conflicts of interests, or unsound banking practices." 12 U.S.C. § 1843(c)(8).

Applicants contend that approval of the proposed activity would provide greater convenience to CIT's customers by allowing it to offer a broader range of leasing terms, would allow CIT to compete more effectively with other lessors, and would result in gains in efficiency and improved services to its leasing customers.

The Board has considered the potential for adverse effects that might be associated with reliance by CIT on high residual values in leasing transactions. In this case, Applicants propose for CIT to engage in these leasing activities subject to limitations previously relied on by the Board which are designed to minimize the possibility of such effects. Applicants have also

1. Manufacturers Hanover Corporation, New York, New York ("MHC") owns 40 percent of CIT. Applicants have not applied to engage in this activity independently or through any other subsidiary. On December 15, 1989, the Board approved Dai-Ichi's application to acquire 60 percent of CIT as a joint venture with MHC. *Dai-Ichi Kangyo Bank, Limited*, 76 *Federal Reserve Bulletin* 75 (1990). CIT currently engages in leasing activities for which it has received prior Board approval under Regulation Y.

2. Asset data are as of March 31, 1990, unless otherwise noted.

3. The Board has previously determined that the activities conducted by CIT are closely related to banking and are permissible for bank holding companies. *Manufacturers Hanover Corporation*, 70 *Federal Reserve Bulletin* 452 (1984).

4. *See Security Pacific Corporation*, 76 *Federal Reserve Bulletin* 462 (1990). On May 25, 1990, the Board issued for comment a proposal to make these leasing activities permissible for bank holding companies generally under Regulation Y. 55 *Federal Register* 22,348 and 23,446. Applicants have committed to conform CIT's leasing activities to any final rule adopted by the Board.

5. *See* 12 C.F.R. 225.25(b)(5).

committed to limit the aggregate amount of CIT's investment in leases with estimated residual values in excess of 25 percent of the acquisition cost of the leased property to no more than 10 percent of Dai-Ichi's total consolidated assets, and to limit the aggregate amount of CIT's investment in leases with estimated residual values in excess of 70 percent of the acquisition cost of the leased property to the lesser of:

(i) 0.5 percent of Dai-Ichi's total consolidated assets, or
(ii) 10 percent of Dai-Ichi's total consolidated shareholders' equity.

In addition, Applicants and CIT have committed that CIT and any of CIT's subsidiaries engaging in the proposed activity will maintain capitalization commensurate with industry standards for comparable leasing activities. The Federal Reserve Bank of San Francisco will monitor the policies and procedures of CIT to assure that these policies and procedures are consistent with the leasing authority granted under this Order.

Based upon the consideration of the foregoing and all of the relevant facts of record, the Board concludes that the balance of the public interest factors that it is required to consider under section 4(c)(8) is favorable in this case.

Accordingly, based on all of the facts of record, and subject to the conditions in this Order and the commitments made by Applicants in this case, 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 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, or to prevent evasion of, the provisions and purposes of the BHC Act and the Board's regulations and orders issued thereunder. This transaction shall not be consummated later than three months after the effective date of this Order, unless such period is extended for good cause by the Board or by the Federal Reserve Bank of San Francisco, pursuant to delegated authority.

By order of the Board of Governors, effective September 17, 1990.

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

JENNIFER J. JOHNSON
Associate Secretary of the Board

Mid Am, Inc.
Bowling Green, Ohio

Order Approving the Acquisition of a Savings Association

Mid Am, Inc., Bowling Green, Ohio ("Mid Am"), a bank holding company within the meaning of the Bank Holding Company Act ("BHC Act"), has applied pursuant to section 4(c)(8) of the BHC Act (12 U.S.C. § 1843(c)(8)) and section 225.23(a) of the Board's Regulation Y (12 C.F.R. 225.23(a)), to acquire Home Savings and Loan Association, Defiance, Ohio ("Home"), a savings association, pursuant to section 225.25(b)(9) of the Board's Regulation Y (12 C.F.R. 225.25(b)(9)).[1]

Mid Am has also requested Board approval of its proposal under section 5(d)(3) of the Federal Deposit Insurance Act ("FDI Act"), as amended by the Financial Institutions Reform, Recovery, and Enforcement Act of 1989 (Pub. L. No. 101–73, § 206, 103 Stat. 183, 199 (1989)) ("FIRREA"), to merge Home into one of Mid Am's existing subsidiary banks, The First National Bank of Northwest Ohio, Bryan, Ohio ("Bryan Bank"), after Mid Am acquires the shares of Home.[2]

Notice of the application, affording interested persons an opportunity to submit comments, has been published (55 *Federal Register* 10,807 (1990)). The time for filing comments has expired, and the Board has considered the application and all comments received in light of the public interest factors set forth in section 4(c)(8) of the BHC Act.

The Board has determined that the operation of a savings association is closely related to banking and permissible for bank holding companies. 12 C.F.R. 225.25(b)(9). In making this determination, the Board required that savings associations acquired by bank holding companies conform their direct and indirect activities to those permissible for bank holding companies under section 4 of the BHC Act. Mid Am has committed to conform all activities of Home to the requirements of section 4 and Regulation Y.[3] In order

1. Home currently operates as a mutual savings association. Prior to the acquisition, Home will convert from mutual to stock form.

2. 12 U.S.C. § 1815(d). Section 5(d)(3) of the FDI Act ("the Oakar Amendment") permits the merger of a savings association owned by a bank holding company into a subsidiary bank owned by the same bank holding company.

3. Upon consummation of this proposal, Mid Am has committed that Home will divest of its real estate agency subsidiary and that Home's insurance subsidiary will terminate its agency activities. In order to receive deferred revenues due under an existing contract, Home's insurance subsidiary will retain its license for two years after consummation of this proposal. During that time the subsidiary will engage only in referring customers to its former insurance underwriter. Home does not engage in any other activities that are not

to approve the application, the Board also is required by section 4(c)(8) of the BHC Act to determine that the ownership and operation of Home by Mid Am "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).

Mid Am, which operates three subsidiary banks, is the 25th largest depository organization in Ohio, controlling deposits of $808.3 million, representing less than 1 percent of the total deposits in the state.[4] Mid Am also engages through several subsidiaries in permissible nonbanking activities. Home, which operates five offices in Ohio, is the 78th largest depository organization in Ohio, controlling deposits of $189.8 million. After consummation of the proposed acquisition, Mid Am would become the 21st largest depository organization in Ohio with aggregate deposits of $998.1 million, representing less than 1 percent of the total deposits in the State. In the Board's view, consummation of the proposal would not have a significantly adverse effect on the concentration of resources in depository institutions in Ohio.

Mid Am and Home compete directly in four banking markets in Ohio. In the Defiance County banking market,[5] Mid Am is the sixth largest of nine depository institutions, controlling $24.7 million in deposits, representing 5.8 percent of deposits of banks and thrift institutions in the market ("market deposits"). Home is the third largest depository institution, controlling $62.5 million in deposits, representing 14.8 percent of market deposits. Upon consummation of this proposal, Mid Am would become the largest depository organization in the Defiance County market, with 30.9 percent of market deposits.[6] The Defiance County banking market is considered highly concentrated, with the four largest depository institutions currently controlling 75.9 percent of the market deposits. After consummation of the proposal, the Herfindahl–Hirschman Index ("HHI") would increase by 334 points, to a level of 2103.[7]

Although this proposal would eliminate some existing competition in the Defiance County banking market, the Board believes that a number of factors mitigate the potential anticompetitive effects of this proposal. First Federal Savings and Loan, Defiance, Ohio ("First Federal"), the largest depository organization in the Defiance County market, actively competes with commercial banks in the market.[8] First Federal is a major provider of consumer and non-real estate commercial loans, in addition to offering a full range of time and demand deposit services. Among the five depository institutions headquartered in the Defiance County market, First Federal held the largest dollar volume of consumer loans and the second largest volume of commercial loans at year-end 1989. First Federal has a separate commercial lending department and holds approximately 16.2 percent of its assets in consumer loans and 5.5 percent in commercial loans.[9] In comparison, the commercial banks operating in the Defiance County market hold, on average, 13.1 percent of their assets in consumer loans and 15.9 percent in commercial loans.

Based on the size, market share, and activities of First Federal in this market, the Board has concluded that it is appropriate to include First Federal's deposits at 100 percent in analyzing the competitive effects of this proposal in the Defiance County market.[10] If 100 percent of the deposits of First Federal are included in the calculation of market concentration, Mid Am would control 27.1 percent of the market deposits upon consummation. The HHI would increase by 186 points

permissible for bank holding companies under section 4(c)(8) of the BHC Act.

4. State deposit data are as of March 31, 1990. Market data are as of June 30, 1989.

5. The Defiance County banking market consists of Defiance County, Ohio, excluding Hicksville Township; Paulding County, Ohio, excluding Carryall Township; Flatrock and Pleasant Townships in Henry County, Ohio; and Monroe and Perry Townships in Putnam County, Ohio.

6. The pre-consummation market share statistics are based on calculations in which the deposits of Home and all other savings associations are included at 50 percent. Upon consummation, Home will be merged with a commercial banking organization, thus, on a *pro forma* basis, the deposits of Home are included at 100 percent, while the deposits of other savings associations continue to be included at 50 percent unless otherwise indicated.

7. Under the revised Department of Justice Merger Guidelines, 49 *Federal Register* 26,823 (1984), a market in which the post-merger HHI is between 1000 and 1800 is considered moderately concentrated. In such markets, the Justice Department is unlikely to challenge a merger if an increase in the HHI is less than 100 points. Any market in which the post-merger HHI is over 1800 is considered highly concentrated, and the Justice Department is likely to challenge a merger that increases the HHI by more than 50 points unless other factors indicate that the merger will not substantially lessen competition. The Justice Department has informed the Board that a bank merger or acquisition generally will not be challenged (in the absence of other factors indicating anticompetitive effects) unless the post-merger HHI market is at least 1800 and the merger increases the HHI by at least 200 points. The Justice Department has stated that the higher than normal HHI thresholds for screening bank mergers for anticompetitive effects implicitly recognizes the competitive effect of limited-purpose lenders and other non-depository financial entities.

8. First Federal controls $132.7 million in deposits, representing 27.1 percent of market deposits.

9. Nationwide, thrift institutions hold, on average, 4.5 percent of their assets in consumer loans and 2.8 percent in commercial loans.

10. The Board has previously indicated that it may be appropriate in light of market factors in a specific market to include thrift deposits at a level greater than 50 percent when analyzing the competitive effects of a proposal. *See, e.g., Fleet Financial Group, Inc.*, 74 *Federal Reserve Bulletin* 62, 64 (1988); *Hartford National Corporation*, 73 *Federal Reserve Bulletin* 720, 721 (1987).

from 1874 to 2060. Eight depository institutions would remain as competitors upon consummation of the proposal including the two largest pre-merger depository institutions. In addition, the Defiance County market is attractive for entry by new banking competitors.[11] Based on the foregoing, the Board has concluded that First Federal exerts a competitive influence that mitigates the anticompetitive effects of this proposal in the Defiance County banking market.

Mid Am and Home also compete directly in the Williams County,[12] Fulton County,[13] and Henry County[14] banking markets in Ohio. The Henry County market is not currently highly concentrated, and would not become so after consummation of this proposal. The HHI in the Williams County market would increase by only 90 points to just above 1800 and would not increase in the Fulton County market. In addition, numerous other depository institutions would continue to compete in each market.[15] On the basis of the foregoing and other facts of record, the Board believes that consummation of this proposal would not have a significantly adverse effect on competition in any relevant banking market.

The financial and managerial resources and future prospects of Mid Am, its bank subsidiaries, and Home are consistent with approval. Upon consummation of this proposal, Mid Am, its bank subsidiaries, and Home would meet applicable capital requirements.

In light of the above considerations, and based on all the facts of record, the Board has determined that consummation of this proposal is not likely to result in any other significantly adverse effects, such as undue concentration of resources, decreased or unfair competition, conflicts of interests, or unsound banking practices. Accordingly, based upon consideration of all the relevant facts, the Board has determined that the balance of the public interest factors that it is required to consider under section 4(c)(8) of the BHC Act is favorable and consistent with approval of Mid Am's application to acquire Home.

Accordingly, the Board has determined that the proposed application pursuant to section 4(c)(8) of the BHC Act should be, and hereby is, approved. This determination is subject to all the conditions set forth in the Board's Regulation Y, including sections 225.4(d) and 225.23, 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.

In considering Mid Am's request for approval of the merger of Home into Bryan Bank pursuant to section 5(d)(3) of the FDI Act, the record in this case shows that:

(1) The aggregate amount of the total assets of all depository institution subsidiaries of Mid Am is $941.6 million, an amount which is not less than 200 percent of the total assets of Home, which currently has $185.5 million in total assets;

(2) Mid Am and all its bank subsidiaries currently meet all applicable capital standards and, upon consummation of the proposed transactions, will continue to meet all applicable capital standards;

(3) The transaction is not in substance the acquisition of a Bank Insurance Fund member bank by a Savings Association Insurance Fund member;

(4) Home had tangible capital of less than 5 percent during the quarter preceding its acquisition by Mid Am;

(5) The transaction, which involves the merger of Home, a savings association located in Ohio, into a bank subsidiary of Mid Am, a bank holding company whose banking subsidiaries' operations are principally conducted in Ohio, would comply with the requirements of section 3(d) of the BHC Act if Home were a state bank which Mid Am was applying to acquire.

Based on the foregoing and all the other facts of record, the Board has determined that the proposed application under section 5(d)(3) of the FDI Act should be, and hereby is, approved. This approval is subject to Mid Am obtaining the required approvals of the appropriate federal and state banking agencies for the proposed merger.

The transactions approved in this Order 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 Cleveland, pursuant to delegated authority.

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

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

JENNIFER J. JOHNSON
Associate Secretary of the Board

11. The Defiance County market encompasses an area in which population growth, *per capita* personal income, and deposit growth exceed the comparable averages of similar Ohio banking markets.

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

13. The Fulton County banking market includes: a majority of Fulton County, Ohio, and the southern halves of Seneca, Ogden, and Fairfield Townships in Lenawee County, Michigan.

14. The Henry County banking market includes Henry County, Ohio, excluding Flatrock and Pleasant Townships.

15. The Henry County, Williams County, and Fulton County markets will have six, seven, and seven other depository institutions, respectively, continuing to compete in these markets after consummation of this proposal.

SouthTrust Corporation
Birmingham, Alabama

Order Approving Application to Acquire a Savings Association

SouthTrust Corporation, Birmingham, Alabama ("SouthTrust"), a bank holding company within the meaning of the Bank Holding Company Act ("BHC Act"), has applied pursuant to section 4(c)(8) of the BHC Act (12 U.S.C. § 1843(c)(8)) and section 225.23(a) of the Board's Regulation Y (12 C.F.R. 225.23(a)), to acquire at least 80 percent of Liberty Savings Bank of South Georgia, F.S.B., Valdosta, Georgia ("Liberty"), a federally chartered savings bank, pursuant to section 225.25(b)(9) of the Board's Regulation Y (12 C.F.R. 225.25(b)(9)).[1]

Notice of the application, affording interested persons an opportunity to submit comments, has been published (55 *Federal Register* 7566 (1990)). The time for filing comments has expired, and the Board has considered the application and all comments received in light of the public interest factors set forth in section 4(c)(8) of the BHC Act.

The Board has determined that the operation of a savings association is closely related to banking and permissible for bank holding companies. 12 C.F.R. 225.25(b)(9). In making this determination, the Board required that savings associations acquired by bank holding companies conform their direct and indirect activities to those activities permissible for bank holding companies under section 4 of the BHC Act. SouthTrust has committed to conform the direct and indirect activities of Liberty to the requirements of section 4(c)(8) of the BHC Act and Regulation Y upon consummation.

In order to approve applications under section 4(c)(8) of the BHC Act, the Board is required to determine that the performance of the proposed activities by SouthTrust "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).

SouthTrust, with total consolidated assets of $8.3 billion, operates 41 banking subsidiaries located in Alabama, Florida, Georgia, South Carolina, and Tennessee.[2] SouthTrust is the second largest commercial banking organization in Alabama, controlling approximately $5.1 billion in commercial bank deposits in Alabama, representing 18.3 percent of the total deposits in commercial banking organizations in the state. SouthTrust operates two banking subsidiaries in Georgia, controlling approximately $51.7 million in deposits, representing less than 1 percent of the total deposits in commercial banks in the state.[3]

Liberty is the 18th largest savings association in Georgia, with approximately $185 million in total deposits, representing slightly more than 1 percent of the total thrift deposits in the state.[4] Upon consummation of the proposed acquisition, SouthTrust would become the 12th largest commercial banking organization in Georgia, controlling approximately $236.7 million in deposits, representing less than 1 percent of total deposits in commercial banking organizations in the state. In the Board's view, consummation of this proposal would not have a significantly adverse effect upon the concentration of banking organizations in Georgia.

SouthTrust and Liberty would compete directly in the Atlanta, Georgia, banking market upon consummation.[5] In the Atlanta banking market, SouthTrust is the 46th largest depository organization, controlling $51.7 million in deposits, representing less than 1 percent of total deposits held by banks and savings associations operating in the market ("market deposits"). Liberty is the 34th largest depository organization, controlling $144.5 million in deposits in the Atlanta banking market, representing less than 1 percent of market deposits. Upon consummation of this proposal, SouthTrust would become the 14th largest depository organization in the market, controlling approximately $196.2 million in deposits, representing less than 1 percent of market deposits.[6] Upon consummation of the proposal, the Herfindahl–Hirschman Index ("HHI") would decrease by five points to 1086 with the Atlanta banking market remaining moderately concentrated.[7] In light of these

1. Prior to the proposed acquisition, Liberty's parent, First Liberty Financial Corporation, Atlanta, Georgia, will cause Liberty to acquire 17 of 34 branches located in northern Georgia counties from an affiliated federal savings association in exchange for Liberty's sole branch in Valdosta, Georgia.

2. Asset data are as of June 30, 1990. State and market banking data are as of June 30, 1989.

3. SouthTrust's recent acquisition of one of its Georgia banking subsidiaries is not included in the state or market data, and, if included, would not change the competitive considerations based on the small deposit size of that bank.

4. The deposit data of Liberty and the competitive considerations in this order reflect Liberty after the restructuring with its affiliated savings association.

5. The Atlanta Metro Area banking market in Georgia includes the counties of Cherokee, Clayton, Cobb, Dekalb, Douglas, Fayette, Forsyth, Fulton, Gwinnett, Henry, Newton, Paulding, Rockdale, and Walton.

6. The pre-consummation market share data are based on calculations in which the deposits of Liberty and all other thrifts are included at 50 percent. Upon consummation of the proposal, Liberty would be affiliated with a commercial banking organization, thus, on a *pro forma* basis, the deposits of Liberty are included at 100 percent, while the deposits of other savings associations continue to be included at 50 percent.

7. Under the revised Department of Justice Merger Guidelines, 49 *Federal Register* 26,823 (1984), a market in which the post-merger HHI is between 1000 and 1800 is considered moderately concentrated. In such markets, the Justice Department is unlikely to challenge a merger if the increase in the HHI is less than 100 points.

and other facts of record, the Board concludes that the acquisition would not have a significantly adverse effect on competition in the Atlanta banking market.

The financial and managerial resources and future prospects of SouthTrust and its bank subsidiaries and of Liberty are also consistent with approval. In assessing the financial factors, the Board believes that bank holding companies must maintain adequate capital at savings associations that they propose to acquire. Upon consummation, SouthTrust and its bank subsidiaries would meet applicable capital requirements, and SouthTrust will cause Liberty to meet all applicable capital requirements. In this regard, SouthTrust has committed that Liberty will have Tier 1 capital, excluding all intangible assets, of at least three percent of its total assets upon consummation of the proposal. In addition, SouthTrust commits that Liberty will meet all current and future minimum capital ratios adopted for savings associations by the Office of Thrift Supervision ("OTS") or the Federal Deposit Insurance Corporation. The record does not indicate that consummation of this proposal is likely to result in any significant adverse effects, such as undue concentration of resources, decreased or unfair competition, conflicts of interests, or unsound banking practices.

The Community Bankers Association of Georgia ("CBA") has protested SouthTrust's application on the grounds that the proposed acquisition of the restructured Liberty violates Georgia law.[8] Georgia law states that any "bank," including a federal savings bank, cannot be acquired unless it has been in existence and continuously operated as a bank for a period of five years.[9] CBA maintains that the reorganization of Liberty before its acquisition by SouthTrust results in an institution that does not meet this condition.[10] The Georgia statute, however, requires only "existence" and "continuous" operations as a bank for the requisite five-year period. Both Liberty and its affiliated savings association have been in existence and continuously operating for a period greater than five years. Accordingly, the Board believes that the proposal complies with the requirements of the Georgia statute.[11]

CBA also alleges that SouthTrust intends to merge Liberty with one of SouthTrust's commercial banks in Georgia, thereby permitting this commercial bank to indirectly acquire as commercial bank branches half of a federal savings association's branches, in violation of state law.[12] At this time, SouthTrust has not proposed to merge Liberty with any of SouthTrust's subsidiary banks. Approval of SouthTrust's application before the Board only authorizes the operation of Liberty as a federal savings association under section 4(c)(8) of the BHC Act. Additional state and federal regulatory approvals would be required before SouthTrust could effect such a merger.[13] Accordingly, the Board believes that issues regarding SouthTrust's future plans for commercial bank branches are more appropriately raised if and when SouthTrust determines to take this action and seeks the required regulatory approvals.

A minister of the Nation of Islam also has protested this application, alleging that SouthTrust's lead banking subsidiary, SouthTrust Bank of Alabama, N.A., Birmingham, Alabama ("Birmingham bank"), is not meeting the credit needs of minority communities in its service area, as required by the Community Reinvestment Act (12 U.S.C. § 2901 *et seq.*) ("CRA").[14] The Board has recently found the CRA record of SouthTrust and its Birmingham bank to be consistent with approval.[15] Accordingly, the Board concludes that this protest does not raise issues sufficient to warrant denial of this application.

Based on the foregoing and all the facts of record including the commitments made by SouthTrust set forth in this Order, the Board has determined that the balance of public interest factors it must consider under section 4(c)(8) of the BHC Act is favorable and consistent with approval of SouthTrust's application to acquire Liberty. Accordingly, the Board has determined that the proposed application should be, and hereby is, approved. This

8. These comments were received after the close of the comment period and SouthTrust has objected to the comments as untimely. The Board has taken into consideration the substance of these comments with respect to this application as authorized under its rules. *See* 12 C.F.R. 262.3(e).

9. Ga. Code Ann. § 7-1-621(d)(2) (1989).

10. As a general matter, a federal savings association's ability to branch within a state is governed by the branching regulations of the OTS which provide that "as a general policy, the [OTS] permits a Federal savings association to branch within the state in which its home office is located . . . ." 12 C.F.R. 556.5. Under the case law, it is well-settled that the OTS has the power to authorize branch facilities and that this mandate grants to the OTS the complete authority to permit intrastate branching by federal associations. *City Federal Savings and Loan Ass'n v. Federal Home Loan Bank Board*, 600 F.2d 681, 685 (7th Cir. 1979); *Independent Bankers Ass'n of America v. Federal Home Loan Bank Board*, 557 F. Supp. 23, 26 (D.D.C. 1982). The OTS has granted conditional approval to the restructuring of Liberty's branches.

11. The Georgia Department of Banking and Finance has approved the acquisition and determined that the CBA protest did not raise issues warranting denial.

12. Ga. Code Ann. § 7-1-606(e) provides that when a bank holding company effects a change in the corporate structure of its banking subsidiaries through merger, consolidation or purchase, the resulting bank may continue to engage in all of the banking activities that were conducted by all of the banks before the changes in their structures. The Supreme Court of Georgia recently has clarified that this exemption to state branching restrictions is not available when the commercial bank subsidiary of a bank holding company acquires only some of the branches of a banking organization located in a different county. *First Nat'l Bank of Commerce v. Community Bankers Ass'n*, No. S90G0355 (Ga. July 10, 1990).

13. *See* Ga. Code Ann. § 7-1-606(e) and the Bank Merger Act (12 U.S.C. § 1828(c)).

14. The Board will review CRA performance in considering applications by bank holding companies to expand their deposit-taking ability through the acquisition of a savings association pursuant to section 4(c)(8) of the BHC Act. *Norwest Corporation*, 76 *Federal Reserve Bulletin* 873 (1990).

15. *SouthTrust Corporation (SouthTrust of Florida)*, 76 *Federal Reserve Bulletin* 647 (1990).

determination is subject to all of the conditions set forth in the Board's Regulation Y, including sections 225.4(d) and 225.23 (12 C.F.R. 225.4(d) and 225.23), and to the Board's authority to require modification or termination of the activities of a bank holding company or any of its subsidiaries as the Board finds necessary to assure compliance with, or to prevent evasion of, the provisions and purposes of the BHC Act and the Board's regulations and orders issued thereunder. This transaction shall not be consummated later than three months after the effective date of this Order, unless such period is extended for good cause by the Board or by the Federal Reserve Bank of Atlanta, pursuant to delegated authority.

By order of the Board of Governors, effective September 20, 1990.

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

JENNIFER J. JOHNSON
Associate Secretary of the Board

ORDERS ISSUED UNDER THE FINANCIAL INSTITUTIONS REFORM, RECOVERY, AND ENFORCEMENT ACT ("FIRREA ORDERS")

Recent orders have been issued by the Staff Director of the Division of Banking Supervision and Regulation and the General Counsel of the Board as listed below. Copies are available upon request to the Freedom of Information Office, Office of the Secretary, Board of Governors of the Federal Reserve System, Washington, D.C. 20551.

Bank Holding Company	Acquired Thrift	Surviving Bank(s)	Approval Date
Banc One Corporation, Columbus, Ohio	Capitol City Federal Savings Association, Austin, Texas	Bank One, Texas, N.A., Dallas, Texas	September 13, 1990
Banc One Corporation, Columbus, Ohio	Empire Federal Savings Bank of America, Buffalo, New York (Texas Branches)	Bank One, Texas, N.A., Dallas, Texas	September 28, 1990
BankAmerica Corporation, San Francisco, California	Merabank Federal Savings Bank, Phoenix, Arizona	Bank of America Arizona, Phoenix, Arizona	September 28, 1990
Barnett Banks, Inc., Jacksonville, Florida	Empire Federal Savings Bank of America, Buffalo, New York (Florida Division)	Barnett Bank of Volusia County, DeLand, Florida Barnett Bank of Central Florida, N.A., Winter Park, Florida Barnett Bank of Lake County, N.A., Eustis, Florida Barnett Bank of Pinellas County, St. Petersburg, Florida Barnett Bank of Tampa, N.A., Tampa, Florida Barnett Bank of Alachua County, N.A., Gainesville, Florida Barnett Bank of North Central Florida, Lake City, Florida	September 28, 1990

FIRREA Orders—Continued

Bank Holding Company	Acquired Thrift	Surviving Bank(s)	Approval Date
Citizens Bancshares, Inc., Salineville, Ohio	Midland-Buckeye Federal Savings and Loan Association, Alliance, Ohio	The Citizens Banking Company, Salineville, Ohio	September 7, 1990
Comerica Incorporated, Detroit, Michigan	Empire Federal Savings Bank of America, Buffalo, New York (Michigan Branches)	Comerica Bank-Detroit, Detroit, Michigan	September 28, 1990
Community First North Dakota Bankshares, Inc., Fargo, North Dakota	Midwest Federal Savings Bank of Minot, Minot, North Dakota (Dickinson Branch)	Community First National Bank & Trust Company of Dickinson, Dickinson, North Dakota	September 21, 1990
Crestar Financial Corporation, Richmond, Virginia	Seasons Federal Savings Bank, Richmond, Virginia	Crestar Bank, Richmond, Virginia	September 28, 1990
Crestar Financial Corporation, Richmond, Virginia	Security Federal Savings Association, Richmond, Virginia	Crestar Bank, Richmond, Virginia	September 28, 1990
Fessenden Bancshares, Inc., Fessenden, North Dakota	Midwest Federal Savings Bank of Minot, Minot, North Dakota (Fargo Branch)	The First National Bank, Fessenden, North Dakota	September 21, 1990
First Affiliated Bancorp, Inc., Watseka, Illinois	Crest Federal Savings and Loan Association, Kankakee, Illinois (West Court Street Branch)	Watseka First National Bank, Watseka, Illinois	September 13, 1990
First Alabama Bancshares, Inc., Montgomery, Alabama	City Federal Savings and Loan Association, Birmingham, Alabama	First Alabama Bank, Montgomery, Alabama	September 13, 1990
First Chicago Corporation, Chicago, Illinois	Great American Federal Savings & Loan Association, Oak Park, Illinois	The First National Bank of Chicago, Chicago, Illinois	September 21, 1990
First Citizens BancShares, Inc., Raleigh, North Carolina	North Carolina Savings and Loan Association, F.A., Charlotte, North Carolina	First Citizens Bank, Raleigh, North Carolina	September 21, 1990
First Empire State Corporation, Buffalo, New York	Key Interim Savings Bank, FSB, Buffalo, New York	Manufacturers and Traders Trust Company, Buffalo, New York	September 28, 1990
First Forest Corporation, Forest, Mississippi	Central Savings Bank, Jackson, Mississippi	Bank of Forest, Forest, Mississippi	September 28, 1990

FIRREA Orders—Continued

Bank Holding Company	Acquired Thrift	Surviving Bank(s)	Approval Date
FirsTier Financial, Inc., Omaha, Nebraska	FirsTier Savings Bank, F.S.B., Omaha, Nebraska (Blair, Fremont, and Kearney Branches)	FirsTier Bank, N.A., Omaha, Nebraska	September 28, 1990
KeyCorp, Albany, New York	Empire Federal Savings Bank of America, Buffalo, New York (Eastern Division)	Key Bank of Eastern New York, N.A., Albany, New York	September 28, 1990
KeyCorp, Albany, New York	Empire Federal Savings Bank of America, Buffalo, New York (Western Division)	Key Bank of Western New York, N.A., Buffalo, New York Key Bank of Central New York, N.A., Syracuse, New York	September 28, 1990
Peoples Heritage Financial Group, Inc., Portland, Maine	Home Owners Savings Bank, F.S.B., Boston, Massachusetts (Maine Branches)	Peoples Heritage Savings Bank, Portland, Maine	September 7, 1990
Rolla Holding Company, Inc., Rolla, North Dakota	Midwest Federal Savings Bank of Minot, Minot, North Dakota (Rolla Branch)	First State Bank Rolla, Rolla, North Dakota	September 21, 1990
SCB Bancorp, Inc., Decatur, Illinois	Gem City Federal Savings and Loan Association, Quincy, Illinois (Decatur Branches)	Soy Capital Bank and Trust Company, Decatur, Illinois	September 7, 1990
Security Pacific Corporation, Los Angeles, California	Mercury Federal Savings and Loan Association, Huntington Beach, California	Security Pacific National Bank, Los Angeles, California	September 21, 1990
UST Corp., Boston, Massachusetts	Home Owners Savings Bank, F.S.B., Boston, Massachusetts (Massachusetts Branches)	United States Trust Company, Boston, Massachusetts	September 7, 1990
Valley Bancshares, Inc., Grand Forks, North Dakota	Midwest Federal Savings Bank of Minot, Minot, North Dakota (Hillsboro Branch)	Valley Bank and Trust Company, Grand Forks, North Dakota	September 21, 1990
Watford City Bancshares, Inc., Watford City, North Dakota	Midwest Federal Savings Bank of Minot, Minot, North Dakota (Williston, Minot, West Minot and Killdeer Branches)	The First International Bank, Watford City, North Dakota	September 21, 1990

Applications Approved Under Bank Holding Company Act

By the Secretary of the Board

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

Section 3

Applicant(s)	Bank(s)	Effective date
Barnett Banks, Inc., Jacksonville, Florida	Barnett Card Services Bank, N.A., Jacksonville, Florida	September 7, 1990

Section 4

Applicant(s)	Bank(s)	Effective date
BankAmerica Corporation, San Francisco, California	BAA Interim Federal Savings Bank, Phoenix, Arizona	September 28, 1990
BankAmerica Corporation, San Francisco, California	Bank of America, Federal Savings Bank, Portland, Oregon	September 7, 1990
Barnett Banks, Inc., Jacksonville, Florida	Barnett Federal Savings Bank, Jacksonville, Florida	September 28, 1990
First Chicago Corporation, Chicago, Illinois	First Chicago Federal Interim Savings Bank, Chicago, Illinois	September 20, 1990
First Empire State Corporation, Buffalo, New York	Manufacturers and Traders Interim Bank, FSB, Buffalo, New York	September 28, 1990
KeyCorp, Albany, New York	Key Interim Savings Bank, FSB, Buffalo, New York Key Eastern Interim Savings Bank, FSB, Albany, New York	September 28, 1990
Security Pacific Corporation, Los Angeles, California	Mercury Federal Interim Savings Association, Los Angeles, California	September 20, 1990
Trans Financial Bancorp, Inc., Bowling Green, Kentucky	Trans Financial Acquisition Corporation, Russellville, Kentucky	September 6, 1990

Applications Approved Under Bank Holding Company Act

By Federal Reserve Banks

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

Section 3

Applicant(s)	Bank(s)	Reserve Bank	Effective date
AmeriWest Corporation, Omaha, Nebraska	United Bancshares of Nebraska, Inc., Omaha, Nebraska	Kansas City	August 29, 1990
Aurora First National Company, Aurora, Nebraska	Antelope Savings Bank, F.A., Aurora, Nebraska	Kansas City	August 24, 1990
Banco Bilbao Vizcaya, S.A., Bilbao, Spain	New Mexico Banquest Investors Corporation, Santa Fe, New Mexico	New York	September 4, 1990
Banc One Corporation, Columbus, Ohio	D.S.B. Bancshares, Inc., Randolph, Wisconsin	Cleveland	August 27, 1990
Bank of Montana System, Great Falls, Montana	Toole County State Bank, Shelby, Montana	Minneapolis	September 18, 1990
Bank of Montreal, Montreal, Quebec, Canada Bankmont Financial Corp., New York, New York Harris Bankcorp, Inc., Chicago, Illinois	Frankfort Bancshares, Inc., Frankfort, Illinois	Chicago	August 30, 1990
Bonduel Bancorp, Inc., Bonduel, Wisconsin	Bonduel State Bank, Bonduel, Wisconsin	Chicago	September 5, 1990
Cathay Bancorp, Inc., Los Angeles, California	Cathay Bank, Los Angeles, California	San Francisco	August 24, 1990
CBR Bancshares Corp., Rogersville, Missouri	Citizens Bank of Rogersville, Rogersville, Missouri	St. Louis	September 12, 1990
Central Community Corporation, Wilmington, Delaware	First State Bank, Temple, Texas	Dallas	September 18, 1990
Chalybeate Springs Corporation, Hughes Springs, Texas	The First National Bank of Hughes Springs, Hughes Springs, Texas	Dallas	August 31, 1990
CNB Bancorp, Attica, Indiana	The Central National Bank and Trust Company, Attica, Indiana	Chicago	August 28, 1990
CNB Bancshares, Inc., Evansville, Indiana	Henderson County State Bank, Henderson, Kentucky	St. Louis	September 5, 1990
Community Bancorporation, Pullman, Washington	Farmers State Bank of Uniontown, Uniontown, Washington	San Francisco	September 6, 1990
Community National Bancorporation of South Carolina, Inc., Columbia, South Carolina	Community National Bank of South Carolina, Columbia, South Carolina	Richmond	September 20, 1990

Section 3—Continued

Applicant(s)	Bank(s)	Reserve Bank	Effective date
Conrad Company, Minneapolis, Minnesota	First National Bank, Cut Bank, Montana	Minneapolis	August 24, 1990
Country Bank Shares, Inc., Milford, Nebraska	Owens Investment Company, Weeping Water, Nebraska	Kansas City	September 6, 1990
C.S.B. Company, Cozad, Nebraska	Pine Ridge Management Inc., Chadron, Nebraska	Kansas City	September 14, 1990
Decatur Bancshares, Inc., Decatur, Arkansas	Decatur State Bank, Decatur, Arkansas	St. Louis	September 21, 1990
Farmers National Bancshares of Bethany, Inc., Bethany, Missouri	Farmers National Bank of Ridgeway, Bethany, Missouri	Kansas City	September 14, 1990
First Canadian Bancorp, Inc., Canadian, Texas	Lipscomb Bancshares, Inc., Higgins, Texas First National Bank in Higgins, Higgins, Texas	Dallas	September 20, 1990
First of America Bank Corporation, Kalamazoo, Michigan First of America Bank Corporation-Indiana, Indianapolis, Indiana	Trustcorp Bank, Columbus, National Association, Columbus, Indiana	Chicago	September 10, 1990
First National Insurance Agency, Inc., Exeter, Nebraska	First National Bank in Exeter, Exeter, Nebraska	Kansas City	August 29, 1990
FNB Newton Bankshares, Inc., Covington, Georgia	Georgia Central Bancshares, Inc., Social Circle, Georgia	Atlanta	September 14, 1990
The Gadsden Corporation, Altoona, Alabama	The Attalla Trust Company, Attalla, Alabama	Atlanta	August 30, 1990
Garfield County Bancshares, Inc., Jordan, Montana	Garfield County Bank, Jordan, Montana	Minneapolis	August 24, 1990
George Gale Foster Corporation, Poughkeepsie, New York	Fishkill National Corporation, Beacon, New York	New York	August 17, 1990
Happy Bancshares, Inc., Canyon, Texas	First State Bank, Happy, Texas	Dallas	August 29, 1990
INB Financial Corporation, Indianapolis, Indiana	The Peoples Savings Bank of Evansville, Indiana, Evansville, Indiana	Chicago	September 12, 1990
Jackson Bancorporation, Jackson, Minnesota	Fairmont Bancorporation, Fairmont, Minnesota Bank Midwest, Minnesota Iowa, N.A., Jackson, Minnesota	Minneapolis	September 19, 1990
JDJ Banco, Inc., Lynch, Nebraska	Nebraska State Bank, Lynch, Nebraska	Kansas City	August 29, 1990
Lowry Facilities, Inc., Clinton, Oklahoma	Oklahoma Bancorporation, Inc., Clinton, Oklahoma	Kansas City	August 28, 1990

Section 3—Continued

Applicant(s)	Bank(s)	Reserve Bank	Effective date
Mercantile Bankshares Corporation, Baltimore, Maryland	The Farmers & Merchants Bank - Eastern Shore, Onley, Virginia	Richmond	September 19, 1990
The Merchants Holding Company, Winona, Minnesota	La Crescent State Bank, La Crescent, Minnesota	Minneapolis	September 7, 1990
Midstates Bancshares, Inc., Omaha, Nebraska	Harlan National Company, Harlan, Iowa First National Company of Missouri Valley, Inc., Missouri Valley, Iowa	Chicago	September 13, 1990
Nichols Financial, Inc., Sunfish Lake, Minnesota	First State Bank of Storden, Storden, Minnesota	Minneapolis	August 24, 1990
Northeast Bancorp, Inc., Summit, South Dakota	Peoples State Bank, Summit, South Dakota	Minneapolis	September 18, 1990
Old National Bancorp, Evansville, Indiana	Security Bank and Trust Company, Mt. Carmel, Illinois	St. Louis	September 14, 1990
Overton Bancorporation, Inc., Dover, Delaware	Overton Park National Bank, Fort Worth, Texas First National Bank Mansfield, Mansfield, Texas	Dallas	August 31, 1990
Pacific Capital Bancorp, Salinas, California	Pajaro Valley Bancorporation, Watsonville, California	San Francisco	September 14, 1990
Rising Sun Bancorp, Rising Sun, Maryland	The National Bank of Rising Sun, Rising Sun, Maryland	Richmond	September 20, 1990
Royal Bancshares, Inc., Elroy, Wisconsin	Lone Rock Investments, Inc., Lone Rock, Wisconsin	Chicago	September 13, 1990
Sand Springs Bancshares, Inc., Tulsa, Oklahoma	Bank of Oklahoma, Sand Springs, Sand Springs, Oklahoma	Kansas City	September 19, 1990
Screven Bancshares, Inc., Sylvania, Georgia	Farmers and Merchants Bank, Sylvania, Georgia	Atlanta	September 18, 1990
Silsbee Financial Corporation, Silsbee, Texas	Silsbee State Bank, Silsbee, Texas	Dallas	September 6, 1990
Soperton Naval Stores, Inc., Soperton, Georgia	Soperton Bancshares, Inc., Soperton, Georgia	Atlanta	September 14, 1990
Southwest Bancshares, Inc., Trumann, Arkansas	First National Bank of Poinsett County, Trumann, Arkansas	St. Louis	September 21, 1990

Section 3—Continued

Applicant(s)	Bank(s)	Reserve Bank	Effective date
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 First Commerce Bancshares, Inc., Lincoln, Nebraska	Minden Exchange Company, Minden, Nebraska	Kansas City	August 24, 1990
Synovus Financial Corp., Columbus, Georgia TB&C Bancshares, Inc., Columbus, Georgia	First Coast Community Bank, Fernandina Beach, Florida	Atlanta	September 14, 1990
Tysons Financial Corporation, Vienna, Virginia	Tysons National Bank (in organization), Vienna, Virginia	Richmond	August 27, 1990
United Missouri Bancshares, Inc., Kansas City, Missouri	Liberty National Bank, Liberty, Missouri	Kansas City	September 10, 1990
Wayne City Bancorp, Inc., Springfield, Illinois	First National Bank of Wayne City, Wayne City, Illinois	St. Louis	September 7, 1990
Weatherford Bancorporation, Inc., Weatherford, Oklahoma	United Community Bank, Weatherford, Oklahoma	Kansas City	September 7, 1990

Section 4

Applicant(s)	Nonbanking Activity/Company	Reserve Bank	Effective date
Amsterdam-Rotterdam Bank N.V., Amsterdam, The Netherlands Stichting Amro, Amsterdam, The Netherlands ABN AMRO Holding, N.V., Amsterdam, The Netherlands Stichting Administratiekantoor ABN AMRO Holding, Amsterdam, The Netherlands Stichting Priorieit ABN-AMRO Holding, Amsterdam, The Netherlands	NSR Asset Management Corporation, New York, New York	Chicago	September 14, 1990
Arkansas Union Bankshares, Inc., Benton, Arkansas	Benton Savings and Loan Association, Benton, Arkansas	St. Louis	August 29, 1990

Section 4—Continued

Applicant(s)	Nonbanking Activity/Company	Reserve Bank	Effective date
Bank of Montreal, Montreal, Quebec, Canada Bankmont Financial Corp., New York, New York Harris Bankcorp, Inc., Chicago, Illinois	Harris Investment Management, Inc., Chicago, Illinois	Chicago	September 5, 1990
Bank Shares, Incorporated, Minneapolis, Minnesota	to continue to furnish employee benefit services to third parties	Minneapolis	August 31, 1990
The Dai-Ichi Kangyo Bank, Limited, Tokyo, Japan	to engage in the solicitation, execution, and clearance of certain futures contracts and options on futures contracts, and in the provision of investment advice with respect to such contracts	San Francisco	September 4, 1990
First Citizens BancShares, Inc., Raleigh, North Carolina	Catawba SavShares, Inc., Charlotte, North Carolina	Richmond	August 28, 1990
Norwest Corporation, Minneapolis, Minnesota	Abramson-Nault-Kreager-Oas Agency, Inc., Duluth, Minnesota	Minneapolis	August 24, 1990
Peoples Heritage Financial Group, Inc., Portland, Maine	PHFG Interim Savings and Loan Association, Portland, Maine	Boston	September 6, 1990
Security Bancshares, Inc., Scott City, Kansas	Crownover Insurance Agency, Oakley, Kansas	Kansas City	September 14, 1990
Sooner Southwest Bankshares, Inc., Bristow, Oklahoma	Southwest Consolidated Life Insurance Company, Phoenix, Arizona	Kansas City	September 26, 1990
The Sumitomo Bank, Limited, Osaka, Japan	SB General Leasing (USA), Inc., Greenwich, Connecticut	San Francisco	September 6, 1990
UST Corp., Boston, Massachusetts	UST Savings Bank, F.S.B., Boston, Massachusetts	Boston	September 6, 1990

Applications Approved Under Bank Merger Act

By Federal Reserve Banks

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

Applicant(s)	Bank(s)	Reserve Bank	Effective date
Peoples Bank of Montross, Montross, Virginia	Newport News Savings Bank, Newport News, Virginia	Richmond	August 24, 1990
Star Bank, Kenton County, Covington, Kentucky	Star Bank, Northern Kentucky, Verona, Kentucky	Cleveland	September 10, 1990

Pending Cases Involving the Board of Governors

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

Kuhns v. Board of Governors, No. 90–1398 (D.C. Cir., filed July 30, 1990). Petition for review of Board order denying request for attorney's fees pursuant to Equal Access to Justice Act.

Laufman v. State of California, et al., No. CIVS-89-1755 EJM-EM (E.D. California, filed April 2, 1990). Action to require bank regulatory agencies to examine or bring enforcement action against bank.

May v. Board of Governors, No. 90–1316 (D.D.C., filed June 5, 1990). Action under Freedom of Information and Privacy Acts. The Board's motion to dismiss was granted on July 17, 1990. Plaintiff's notice of appeal was filed July 27, 1990.

Burke v. Board of Governors, No. 90–9509 (10th Circuit, filed February 27, 1990). Petition for review of Board orders assessing civil money penalties and issuing orders of prohibition.

BancTEXAS Group, Inc. v. Board of Governors, No. CA 3–90–0236-R (N.D. Texas, filed February 2, 1990). Suit for preliminary injunction enjoining the Board from enforcing a temporary order to cease and desist requiring injection of capital into plaintiff's subsidiary banks under the Board's source of strength doctrine. District court granted preliminary injunction on June 5, 1990, in light of 5th Circuit's decision in *MCorp v. Board of Governors*.

Rutledge v. Board of Governors, No. 90–7599 (11th Cir., filed August 21, 1990). Appeal of district court grant of summary judgment for defendants in tort suit challenging Board and Reserve Bank supervisory actions.

Kaimowitz v. Board of Governors, No. 90–3067 (11th Cir., filed January 23, 1990). Petition for review of Board order dated December 22, 1989, approving application by First Union Corporation to acquire Florida National Banks. Petitioner objects to approval on Community Reinvestment Act grounds.

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

Consumers Union of U.S., Inc. v. Board of Governors, No. 90–5186 (D.C. Cir., filed June 29, 1990). Appeal of District Court decision upholding amendments to Regulation Z implementing the Home Equity Loan Consumer Protection Act.

Synovus Financial Corp. v. Board of Governors, No. 89–1394 (D.C. Cir., filed June 21, 1989). Petition for review of Board order permitting relocation of a bank holding company's national bank subsidiary from Alabama to Georgia. Oral argument scheduled for October 11, 1990.

MCorp v. Board of Governors, No. 89–2816 (5th Cir., filed May 2, 1989). Appeal of preliminary injunction against the Board enjoining pending and future enforcement actions against a bank holding company now in bankruptcy. On May 15, 1990, the Fifth Circuit vacated the district court's order enjoining the Board from proceeding with enforcement actions based on section 23A of the Federal Reserve Act, but upheld the district court's order enjoining such actions based on the Board's source-of-strength doctrine. The Board's petition for rehearing was denied on August 5, 1990. On August 29, the Fifth Circuit denied the plaintiff's motion for a stay pending petition for *certiorari*.

Independent Insurance Agents of America v. Board of Governors, No. 89-4030 (2d Cir., filed March 9, 1989). Petition for review of Board order ruling that the non-banking restrictions of section 4 of the Bank Holding Company Act apply only to non-bank subsidiaries of bank holding companies. The Board's order was upheld on November 29, 1989. Petition for *certiorari* filed on April 18, 1990; the Board's opposition to *certiorari* was filed on July 13, 1990.

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

White v. Board of Governors, No. CU-S-88–623-RDF (D. Nev., filed July 29, 1988). Age discrimination complaint. Board's motion to dismiss or for summary judgment pending.

Final Enforcement Orders Issued by the Board of Governors

Northwest Indiana Bancshares, Inc.
Fort Wayne, Indiana

The Federal Reserve Board announced on September 10, 1990, the issuance of an order imposing civil money penalties against seven former directors of

Northwest Indiana Bancshares, Inc., Fort Wayne, Indiana ("Northwest"), for violations of the Bank Holding Company Act and of a cease and desist order issued by the Board against Northwest on February 13, 1984.

Andrew F. Stasio, Jr.
Former Director of Commonwealth Bank
Arlington, Texas

The Federal Reserve Board announced on September 7, 1990, the issuance of an Order of Prohibition against Andrew F. Stasio, Jr., a former director of the Commonwealth Bank, Arlington, Texas, and a former director of the Commonwealth Bancorp, Inc., Arlington, Texas, a registered bank holding company.

ACTION ON PETITION FOR ENFORCEMENT BY THE BOARD OF GOVERNORS

Citicorp
New York, New York

Family Guardian Life Insurance Company
Phoenix, Arizona

Order with Respect to Petition for Enforcement

The Independent Insurance Agents of America, Inc.; National Association of Casualty & Surety Agents; National Association of Life Underwriters, Inc.; National Association of Professional Insurance Agents; National Association of Surety Bond Producers; Professional Insurance Agents of Pennsylvania, Maryland and Delaware, Inc.; and the Delaware Association of Life Underwriters ("Petitioners") have petitioned the Board to initiate enforcement action to require Citicorp, New York, New York, a bank holding company within the meaning of the Bank Holding Company Act ("BHC Act"), to terminate certain insurance activities conducted pursuant to a newly enacted Delaware statute by Family Guardian Life Insurance Company, Phoenix, Arizona ("Family Guardian"), an indirect nonbank subsidiary of Citicorp.[1] The petition contends that the broad insurance agency and underwriting activities authorized by the Delaware statute are not permissible for bank holding companies and their nonbank subsidiaries under section 4(c)(8) of the BHC Act, as amended by the Garn–St Germain Depository Institutions Act of 1982,[2] and are, therefore, not permissible for Family Guardian as a nonbank subsidiary of Citicorp under the Act.

Citicorp currently holds the shares of Family Guardian through Citibank (Delaware), New Castle, Delaware ("Citibank Delaware"), a state-chartered bank that is a wholly-owned subsidiary of Citicorp.[3] Citicorp originally established Family Guardian, with the required Board approval under the BHC Act, to underwrite and sell certain credit-related insurance expressly authorized for bank holding companies by section 4(c)(8)(A) of the BHC Act.[4] On May 31, 1990, Citicorp transferred the voting shares of Family Guardian to Citibank Delaware in order for Family Guardian to transact the broader range of insurance activities authorized under the Delaware statute which was enacted on May 30, 1990. The Delaware statute provides that a state-chartered bank may act as an insurer and transact the business of insurance (other than title insurance) through a separate division of the bank or through a subsidiary of the bank.[5] After its transfer to Citibank Delaware, Family Guardian, with the approval of the Delaware Insurance Commissioner, began to expand the scope of its insurance activities to include insurance underwriting and agency functions that are not permissible for bank holding companies under section 4(c)(8) of the Act.[6]

Citicorp acquired Citibank Delaware pursuant to Delaware's Financial Center Development Act, which allows out-of-state bank holding companies to acquire newly chartered state banks in the state, subject to certain conditions. The banks acquired by out-of-state companies must employ at least 200 residents of Delaware after two years, may have only one branch open to the general public in Delaware, and may not market the bank's products and services in Delaware to the substantial detriment of existing Delaware banks, except to serve and retain existing customers.[7] Although the Delaware statute authorizes state-char-

1. The American Council of Life Insurance, the American Insurance Association, the National Association of Independent Insurers, and the Alliance of American Insurers have, by separate letter, joined in the petition for enforcement.

2. 12 U.S.C. § 1843(c)(8). The Garn–St Germain Depository Institutions Act of 1982 amended section 4(c)(8) of the BHC Act to provide that it is not closely related to banking for a bank holding company to provide insurance as a principal, agent or broker except in seven specific situations.

3. Citibank Delaware engages primarily in leasing and commercial lending activities, and had assets of approximately $1.8 billion as of March 31, 1990.

4. 12 U.S.C. § 1843(c)(8)(A). The insurance activities of Family Guardian prior to its transfer to Citibank Delaware had been authorized by the Board under the first of the seven exceptions specified in the Garn–St Germain Act.

5. House Bill No. 193, House Substitute No. 1 ("House Bill No. 193").

6. As of March 31, 1990, Family Guardian had $203 million in assets and net contingent insurance liabilities outstanding of several billion dollars. At present, the expanded insurance activities of Family Guardian represent an insignificant percentage of its business.

7. Del. Code Ann. tit. 5, §§ 801–07.

tered banks to engage in the general insurance business on a nationwide basis through offices in any state, banks owned by out-of-state holding companies may not market the sale of insurance products in Delaware to the detriment of Delaware banks.[8]

In addition, the Delaware statute requires that the insurance activities must be conducted through a division or department of the bank that must be separately capitalized in accordance with the requirements of the Insurance Code, that must maintain financial records separate and distinct from the other records of the bank, and that must comply with an extensive series of structural, operational, and regulatory requirements designed to treat the insurance division as a distinct corporate entity separate from the bank.[9]

In their petition for enforcement, filed on May 30, 1990, Petitioners argue that Citicorp is not authorized to hold Family Guardian under the BHC Act once it expands its insurance activities beyond those authorized and approved by the Board under section 4(c)(8) of the BHC Act. Petitioners contend that, as a nonbank subsidiary of the holding company, Family Guardian's continued ownership by Citicorp after commencement of the broad insurance activities authorized by the Delaware statute is not permitted under any of the nonbanking provisions of the BHC Act.

In this regard, Petitioners argue that Citicorp may not rely on the Board's existing regulatory exemption in Regulation Y for operating subsidiaries of holding company state banks as authority to retain control of Family Guardian through Citibank Delaware. The operating subsidiary rule states that a state-chartered bank owned by a bank holding company may acquire and retain, without Board approval under the BHC Act, all (but not less than all) of the shares of a company engaged solely in activities in which the parent bank may engage, subject to the same limitations that would apply if the bank were engaging in the activity directly.[10] 12 C.F.R. 225.22(d)(ii). Petitioners argue that the Delaware statute does not in practice permit state banks to conduct insurance activities *directly* because the Delaware statute requires that the state bank conduct general insurance activities only through a division of the bank that has been separated in all material respects from the bank itself. Thus, Petitioners argue, holding company banks may not take advantage of the operating subsidiary rule to establish a subsidiary to conduct these activities.

In the alternative, Petitioners contend that the operating subsidiary regulation itself is inconsistent with the express terms of section 4 of the BHC Act because it permits holding companies to acquire and retain nonbank companies without compliance with the prior approval, activity, and prudential limits of section 4 of the BHC Act.

On June 28, 1990, Citicorp responded to the arguments made in the petition for enforcement. Citicorp contends that Family Guardian's expanded insurance activities are permissible under the operating subsidiary rule in Regulation Y, since the Delaware statute on its face authorizes state-chartered banks to transact the business of insurance and since the requirement that insurance activities be conducted in a separate department is consistent with traditional regulatory practice.

The Board has carefully considered the submissions of Petitioners and Citicorp. As explained below, the Board concludes that the operating subsidiary rule does not authorize Citicorp to retain ownership and control of Family Guardian for purposes of the BHC Act to the extent that Family Guardian takes advantage of the Delaware statute to expand its insurance activities beyond those permissible for bank holding companies and their nonbank subsidiaries under section 4(c)(8) of the Act. Although on its face the Delaware statute authorizes state-chartered banks to provide a full range of insurance services, the Board cannot ignore the fact that this authorization is conditioned on compliance with an unprecedented and comprehensive set of regulatory restrictions, the practical effect of which is to treat the insurance division as a separate corporate entity. For example, the separation has been carried to such an extent that the routine authority of the state bank regulator over the insurance division is restricted, and the insurance division is regulated under the insurance laws as a separate corporate entity from the bank. Thus, in the Board's view, the Delaware statute does not authorize banks to engage in the insurance business directly, as is required by the operating subsidiary rule.

The Board emphasizes that its decision in this case is not based on the view that banking organizations should be prohibited from expanding their powers in order to adapt to the changes in technology and competition in financial markets. The Board has repeatedly called for a comprehensive Congressional review and reform of the laws regulating the activities of banking organizations in the United States in order to establish a structure that would allow for the exercise of broader powers consistent with basic principles of safety and soundness and avoidance of con-

8. House Bill No. 193, Sections 2, 7; Senate Bill No. 415, Section 1; Letter, dated June 1, 1990, from Keith H. Ellis, Delaware State Bank Commissioner to Mr. Richard T. Collins, Vice President, Citicorp.

9. House Bill No. 193, Sections 4–38.

10. In addition, under the rule, the activities may be conducted only at locations at which the bank could conduct the activity.

flicts of interest, undue concentration of resources, and unfair competition. For example, the Board has consistently supported insurance agency authority for banking organizations.[11]

The Board has, however, expressed concern with state initiatives that are designed to attract jobs and revenues to the state by allowing out-of-state banking organizations the ability to avoid federal banking policies by acquiring banks in the state that have the authority to export nonbanking activities not available to the organizations under federal law to the rest of the nation, but not to engage in these activities in the authorizing state itself. The Board has noted that this type of initiative could promote potentially destructive competition among the states with adverse consequences for the national interest in safeguarding the safety and soundness of the nation's financial system and the federal deposit insurance funds.[12]

The Board believes that this case provides further demonstration of the urgent need for Congress to take up the important questions of banking reform and structure. In the Board's view, Congress is clearly the appropriate forum in which to resolve major issues of national banking policy, including the resolution of the issues of safety and soundness and competitive equity associated with state initiatives in the area of bank powers expansion. Initiatives such as that in Delaware, however, necessitate a decision by the Board on aspects of these questions that are within the area of the Board's responsibilities under the BHC Act.

Discussion

As noted, the issue raised by the petition for enforcement is whether Citicorp is authorized under the BHC Act to retain the shares and control of Family Guardian after it begins conducting the broad insurance agency and underwriting business authorized by the Delaware statute. Under the terms of the BHC Act, a bank holding company may not acquire or retain, directly or indirectly, the shares or control of any company (other than a bank) unless the acquisition is authorized by one of the exceptions to this general prohibition specified in the Act.[13]

Citicorp here relies on the state bank operating subsidiary rule in Regulation Y (section 225.22(d)(ii)), which, as noted, provides a regulatory exception to the general nonbanking prohibitions of the BHC Act to allow state banks that are owned by bank holding companies to establish, without prior Board approval under the BHC Act, wholly-owned subsidiaries that engage only in activities that the bank could conduct directly. The Board adopted this rule in 1971 to allow holding company banks to establish operating subsidiaries to engage in activities the bank could conduct directly. At the time that it adopted this provision, the Board recognized that the exemption could become the focus for evasion of the BHC Act. The Board noted, however, "the absence of evidence that acquisitions by holding company banks are resulting in evasions of the BHC Act," but stated that it would review the merits of the decision to adopt this regulatory exemption in light of its experience in administering the BHC Act.[14]

Noting several recent developments, including the enactment of the insurance prohibitions in section 4(c)(8) of the BHC Act and enactment of a number of state statutes that broadly authorize state banks and their subsidiaries to engage in various nontraditional activities, the Board has requested comment on rescinding the operating subsidiary rule as inconsistent with the nonbanking provisions of the BHC Act.[15] The Board held a public hearing on this proposal in 1989, and currently has this rulemaking proceeding under review. The Board believes that it is neither necessary nor appropriate to decide that rulemaking in the context of this petition for enforcement, because the Board finds that the current operating subsidiary rule does not provide Citicorp with authority to retain Family Guardian after it commences insurance activities beyond those permissible under section 4(c)(8)(A) of the BHC Act.

The Board's operating subsidiary rule permits activities for a subsidiary of a state bank "subject to the same limitations as if the parent bank were engaging in

11. *E.g.*, Statement by Governor H. Robert Heller before a Subcommittee of the Committee on Energy and Commerce, U.S. House of Representatives, Sept. 9, 1988. 74 *Federal Reserve Bulletin* 743 (1988).

12. *See, e.g.*, Statement by Chairman Paul A. Volcker before the Committee on Banking, Housing, and Urban Affairs, U.S. Senate, Jan. 21, 1987. 73 *Federal Reserve Bulletin* 199, 202 (1987).

13. Section 4 of the BHC Act provides that, except as set forth in the Act, bank holding companies may not

(1) acquire or retain direct or indirect control of voting shares of "any company which is not a bank," or

(2) engage directly in activities other than banking or managing or controlling banks and other subsidiaries authorized under the Act and those activities permitted under the closely related to banking standards of section 4(c)(8) of the Act. 12 U.S.C. § 1843(a). Indirect control for purposes of this prohibition is defined to include shares held by any subsidiary. *Id.*, § 1841(g)(1). By their terms, the nonbanking prohibitions in section 4 do not limit activities conducted directly within holding company subsidiaries that are banks. *Merchants National Corp.*, 75 *Federal Reserve Bulletin* 388 (1989), *aff'd*, 890 F.2d 1275 (2d Cir. 1989), *petition for cert. filed*, U.S. Supreme Court (April 18, 1990) (No. 89-1620). *See* 53 *Federal Register* 48,915, 48,921-24 (Dec. 5, 1988) for a more detailed legal analysis of the nonbanking provisions of the Act, which is incorporated herein by reference.

14. 36 *Federal Register* 9292 (May 22, 1971).

15. 53 *Federal Register* 48,915 (Dec. 5, 1988).

the activity *directly*." Although one provision of the Delaware statute does state that a bank chartered by Delaware shall have the power to transact the business of insurance in accordance with the state Insurance Code,[16] the statute further mandates that any activity so authorized must be conducted through a separate department or division.[17] In addition, the statute also establishes a comprehensive set of financial, operational, and regulatory limitations that separate virtually every aspect of the insurance division's business from the bank. While no one of these restrictions in itself is necessarily determinative, the cumulative effect of all of these restrictions in the Delaware statute is, in the Board's judgment, to compel the insurance division to function in practice and for all intents and purposes as a distinct corporate entity separate from the bank. In light of this pervasive corporate-like separation, the Delaware statute cannot reasonably be viewed as authorizing a state-chartered bank itself to conduct insurance activities directly, as required by the terms of the operating subsidiary rule in Regulaion Y. Thus, because Family Guardian's parent bank, Citibank Delaware, may not engage in the general insurance business directly within the meaning of the operating subsidiary rule, Citicorp may not rely on that rule as authority for Family Guardian to conduct such activities under the BHC Act.

With regard to structural restrictions, the Delaware statute requires that the insurance division must maintain financial records separate and distinct from other records of the bank.[18] In addition, the bank is prevented from allocating more than 25 percent of its current total capital to the insurance division.[19] Such limits on capital attributed to specific functions typically do not apply to activities conducted within a single entity, but rather to investments in a subsidiary by a parent company.[20] Indeed, this limit on allocation of capital to the insurance business is contained in the provision limiting investments by Delaware banks in securities of other companies.[21]

The Delaware statute also mandates pervasive financial and operational firewalls that insulate the insurance division from the bank. First, the minimum capital that the bank is required to maintain "in its banking or trust company business" under the banking laws may not be used by the insurance division to meet its separate capital requirements under the Insurance Code.[22] Second, under the state statute, the bank is not financially responsible for the insurance division. The statute expressly provides that the assets of the bank are applicable to the payment of the liabilities, obligations, and expenses of the bank only, and not to the liabilities, obligations, and expenses of the insurance department. The liabilities and expenses of the bank may be paid only out of the assets of the bank and not out of the assets of the insurance division.[23] The statute also makes explicit the converse of this requirement: the assets of the insurance division may only be used to pay the liabilities and expenses of that division, which must be paid solely out of the assets of the division.[24]

Third, under the Delaware statute, the bank may transact business with the insurance division only on an arm's length basis—on the same terms and under circumstances substantially the same as for a comparable transaction with a third party.[25] Ordinarily, there is no need for such a requirement for activities that are being conducted within the same entity. Instead, as in section 23B of the Federal Reserve Act,[26] the arm's length requirement has been imposed to regulate transactions between a bank and separate affiliates.

Fourth, the Delaware statute makes clear that the insurance division is to be treated as a "separate corporation" — thus an entity distinct from the bank itself — for regulatory purposes, specifically, for purposes of bank lending limits.[27] Fifth, the statute imposes the same kind of limits on the distribution of earnings from the insurance activities it authorizes as are applicable to dividends paid to stockholders by a separate insurance company.[28] Thus, for this purpose, the bank is treated as a shareholder of the insurance division rather than part of the same entity. Finally, the Delaware statute restricts the use of certain customer information obtained by the bank in connection with a request for an extension of credit.[29]

With respect to regulation of the insurance business, under the Delaware statute, the insurance division is

16. House Bill No. 193, Section 2.
17. *Id.*, Section 4.
18. *Id.*
19. *Id.*, Section 10.
20. *See, e.g.*, 12 C.F.R. 211.5(b), (c)(limitations on investments abroad by banking organizations).
21. Del. Code Ann. tit. 5, § 910.

22. House Bill No. 193, Section 3. The Insurance Code is contained in Title 18 of the Delaware Code Annotated.
23. *Id.*, Section 8. The fact that any insurance policies issued are not direct liabilities of the bank and that only the assets of the insurance division are applicable to the payment of such policies or claims under the policies must be disclosed to all insurance customers. *Id.*, Section 13.
24. *Id.*, Section 22. Although the Delaware statute has no explicit requirement that the insurance division have separate employees from the bank, the fact that the expenses associated with the division's employees may be paid only out of the assets of the division would appear to segregate these employees from those of the bank.
25. *Id.*, Section 4.
26. 12 U.S.C. § 371c-1.
27. House Bill No. 193, Section 9; Synopsis of House Bill No. 193, Section 8.
28. *Id.*, Section 33; Insurance Code, Section 4922(a).
29. House Bill No. 193, Section 4.

treated almost exclusively as a company that is not a bank. Not only must the insurance division conduct the insurance business in accordance with the state Insurance Code,[30] but the statute expressly states that, for purposes of the Insurance Code, the insurance division (but not the bank) is deemed to be "a separately incorporated subsidiary" of the bank "with separate capital accounts, assets and liabilities."[31] Thus, the bank itself is not made subject to the state regulation applicable to insurance companies, but the insurance division is so regulated. Because of this treatment, the insurance division is generally subject to the substantive regulatory provisions of the Insurance Code and to the supervision of the state Insurance Commissioner, including that commissioner's power to examine the operations of the insurance business.[32] More importantly, however, the Delaware statute severely limits the routine supervisory and examination authority of the Bank Commissioner over the insurance division. Specifically, the Bank Commissioner has jurisdiction over the division only when he determines that the insurance activity "is likely to have a materially adverse effect on the safety and soundness of the bank."[33]

Because it is treated as a separately incorporated subsidiary of the bank for purposes of the Insurance Code, the insurance division is subject to the minimum capital requirements of that Code.[34] As pointed out above, the capital of the bank may not be used to satisfy these requirements. In addition, the Delaware statute expressly provides that the assets and liabilities of the bank are not considered in determining the financial condition of the insurance division;[35] and the statute provides that the Insurance Commissioner, not the Bank Commissioner, has the authority to take possession of the business of the insurance division in order to conserve or to liquidate its business.[36] This action can apparently be taken by the insurance supervisor without causing the closing of the bank. Finally, the insurance division is taxed as if it were an independent insurance company; the earnings from the insurance business are expressly exempted from the franchise tax the state imposes on the net income of banks.[37]

The Board recognizes, as Citicorp points out, that under the Delaware statute the insurance division operates under the charter of the bank and is not technically a separate corporation with its own shareholders and board of directors. However, the Board does not believe that formal characteristics alone should be determinative in assessing the scope of the operating subsidiary exception in section 225.22(d)(ii). Indeed, the terms of the regulation itself require that the scope of the activities it permits for subsidiaries of holding company state banks must be determined in light of the practical restrictions on the powers of the parent bank, since the rule prescribes that in conducting a specific function the subsidiary must follow the same limitations as if the bank were engaged in the activity directly. Here, as is evident from the face of the Delaware statute, the limitations imposed on the conduct of the general insurance business so comprehensively and pervasively insulate the insurance division from the bank that it would be unreasonable, in the Board's judgment, to view the bank as directly authorized to offer the expanded services, as is required by the terms of the rule.

Moreover, this conclusion is also consistent with the basic objective that motivated the Board's original adoption of the operating subsidiary rule. As the terms of the rule demonstrate, the rule was meant to allow state banks in holding company systems the operational flexibility of establishing operating subsidiaries to conduct activities the bank performed directly. Historically, the activities of banks have been circumscribed by the chartering authorities in order to protect the safety and soundness of the institutions and to guard against harmful conflicts of interest and unfair competition. The permission granted by the operating subsidiary rule was premised on the Board's belief that this traditional concern for safeguarding the deposit-receiving function would constrain the expansion of bank activities (and thus of the activities of subsidiaries of holding company state banks), so that the activities permitted by the rule would not result in evasions of the purposes of the BHC Act. 36 *Federal Register* 9292 (May 21, 1971).

Here, it is evident from the terms and structure of the Delaware statute that the state, in apparent recognition of the enhanced potential for risks associated with certain aspects of the insurance underwriting business, has not authorized that business for its depository institutions directly, but through a structure that seeks the risk minimization advantages available through the corporate separation of the banking

30. *Id.*
31. *Id.*, Section 17.
32. Insurance Code, Sections 301–34.
33. House Bill No. 193, Section 5.
34. *Id.*, Sections 17, 19; *see* Insurance Code, Section 511(a).
35. House Bill No. 193, Sections 21, 24.
36. *Id.*, Section 38.
37. *Id.*, Sections 14, 16; Del. Code Ann. tit. 5, § 1101(a). The Delaware statute does contain a handful of exceptions for the insurance division from the substantive provisions of the Insurance Code. *E.g.*, House Bill No. 193, Sections 25, 30, 32, 35. However, none of the regulatory provisions relates to an essential element of the structure, operations, or regulation of the division.

and insurance businesses. The entire practical effect of the Delaware statute is to sanction expanded insurance activities only for an entity that in substance is a separate corporation and that is not a bank. The only apparent reason the statute nominally authorizes the bank itself, through a separate division, to conduct the insurance business, rather than authorizing the activity through a separate corporate subsidiary of the bank, is to attempt to bring the state law within the scope of the Board's operating subsidiary rule for the benefit of insurance subsidiaries of state banks that are owned by holding companies. If the statute had required the activity to be conducted only through a separate subsidiary corporation of the bank in order to minimize the risk to the bank and its depositors and the potential for conflicts of interest, unfair competition, and other adverse effects, bank holding companies could not have availed themselves of the statute because of the operating subsidiary rule. Under that rule, a holding company bank may control a nonbank subsidiary only if it engages in activities the parent bank could conduct directly. Accordingly, viewing the state bank operating subsidiary rule as applicable in circumstances such as presented under the Delaware statute frustrates the purposes of the rule and allows a serious evasion of the provisions of the BHC Act.

Given the extraordinary extent to which the Delaware statute isolates the insurance business from the traditional, deposit-receiving operations of state-chartered banks, the Board believes that its treatment of that statute for purposes of the operating subsidiary rule is consistent with its past practice. Although the Board, as Citicorp notes, has in the past not objected to insurance activities conducted in a subsidiary of a holding company bank under state law where the parent bank has engaged in the same activities through a separate department,[38] the relevant state law in those cases did not require that the insurance functions be carried out in a separate department or mandate the insulation of insurance activities from the rest of the bank to the substantial extent directed by the Delaware statute.[39]

Nor is the Board's decision here inconsistent with its prior treatment of statutes in three states that allow savings banks to engage in life insurance activities, since these statutes have only some, but not all, of the operational, structural, and regulatory firewalls embedded in the Delaware statute. Indeed, the Board never decided that subsidiaries of saving banks engaged in the life insurance business under these statutes were permitted to engage in the same activities under section 225.22(d)(ii), but instead elected to defer such a determination.[40] Before the Board resolved the issue, however, Congress, in an amendment to the BHC Act in 1987, expressly authorized savings bank life insurance activities if, among other things, the activities are conducted directly in the bank.[41] Accordingly, the Board has never considered whether an operations subsidiary of such a bank could engage in the activities under the operating subsidiary rule. In any event, although these state laws do require that insurance functions be separated to some degree from the operations of the bank, the insulation prescribed is not as comprehensive and complete as that directed by the Delaware statute.[42]

Banks also conduct a number of traditional functions in separate departments, like dealing in municipal securities and offering trust services. But in each case, the separation of these operations from the rest of the bank required by the applicable regulatory framework does not even approximate the thorough insulation mandated by the Delaware statute.[43]

In sum, the Board finds that Citicorp may not avail itself of the provisions of section 225.22(d)(ii) to retain control of Family Guardian for purposes of the BHC Act to the extent Family Guardian engages in insurance activities not permitted to bank holding companies and their nonbank subsidiaries under section 4(c)(8) of the BHC Act. Accordingly, Family Guardian may not engage in insurance activities authorized under the Delaware statute other than those that are permissible under section 4(c)(8) of the BHC Act and

38. *E.g., Merchants National Corp., supra.*

39. *See, e.g.,* Ind. Code Ann. § 28-1-11-2 (Burns 1986).

40. *First Essex Bancorp, Inc.*, 73 *Federal Reserve Bulletin* 354, 355 (1987), *Neworld Bancorp, Inc.*, 73 *Federal Reserve Bulletin* 357, 358–59 (1987).

41. 12 U.S.C. § 1842(f)(3).

42. For example, under the Massachusetts statute authorizing savings bank life insurance (Mass. Gen. L. Ann. ch. 178), the insurance department must be managed under the general laws relating to savings banks and is subject to the supervision of both the insurance and bank commissioners (*id.*, §§ 6, 26–28), while under the Delaware statute, in contrast, the insurance division operates principally under the Insurance Code and the power of the Bank Commissioner over the division is restricted. In addition, the Massachusetts law lacks many of the key firewall provisions prescribed by the Delaware statute, such as the limitations on the use of the bank's capital for insurance purposes and the requirement of arm's length transactions between the bank and the insurance division.

43. For example, like the insurance division required by the Delaware statute, the municipal securities department of a bank under the securities laws must keep separate records, is regulated separately from the bank, and is subject to limits on transfer of information from the bank. *See* 15 U.S.C. §§ 78c(a)(30), 78o-4; 12 C.F.R. 208.8(j). However, the municipal securities department is not subject to the remaining host of restrictions that the Delaware statute imposes on the insurance division, like the bank's lack of liability for the obligations of the division, the restrictions on the use of the bank's capital for the insurance business, and the restriction of the bank regulator's routine supervisory authority over the insurance division.

for which it has secured the necessary approval under that section.[44]

Therefore, pursuant to the provisions of sections 4(a) and 5(b) of the BHC Act (12 U.S.C. §§ 1843(a), 1844(b)), Citicorp should immediately cause Family Guardian to cease providing any further insurance as principal, agent, or broker, except as authorized and approved by the Board under section 4(c)(8)(A) of the Act.

By order of the Board of Governors, September 5, 1990.

Voting for this action: Chairman Greenspan and Governors Seger, Angell, Kelley, and LaWare. Abstaining from this action: Governor Mullins.

WILLIAM W. WILES
Secretary of the Board

Concurring Statement of Governor Seger

I concur with the result reached by the majority that the proposal by Citibank Delaware to conduct broad insurance activities through Family Guardian Life Insurance Company does not meet the requirements of the Board's Regulation Y dealing with operating subsidiaries of holding company banks. I reach this conclusion for reasons different from those stated by the majority, however.

As a general matter, I do not object to proposals by the states to authorize their state banks to engage directly or through subsidiaries in activities at any location provided that the activities may be conducted within the bank's home state without restriction as well. I believe that states should be permitted to delineate the types of activities that banks may conduct within their borders. One of the virtues of the dual banking system, in my judgment, is that it allows the states to serve as laboratories for the development and expansion of banking services and activities within their boundaries.

My disagreement with the Citicorp arrangement stems from the fact that the state here has severely limited banks owned by out-of-state holding companies from conducting the insurance business within the state. This means that out-of-state banking organizations can use the state bank franchise to operate an insurance business throughout the rest of the country, but may not effectively offer those services within Delaware.

Not only is this kind of state authorization inconsistent with the principles underlying the dual banking system, as I have previously stated in connection with a somewhat similar statute in South Dakota, this kind of expansion of state powers, shows, in my judgment, that the state does not treat the expanded powers as true banking activities for Delaware banks owned by out-of-state banking organizations. In these circumstances, the Board's operating subsidiary rule should not be interpreted to permit such activities.

I note that the majority has not reached the question of the validity of the Board's operating subsidiary rule in deciding this case. I continue to believe that the Board's regulation is appropriate and valid, and believe that this opinion is consistent with my view of the Delaware statute here.

September 5, 1990

Concurring Statement of Governor Angell

I concur with the Board's conclusion in this matter that the Bank Holding Company Act does not permit Citicorp to retain the shares of Family Guardian Life Insurance Company to the extent Family Guardian takes advantage of the recently-enacted Delaware statute to engage in insurance underwriting or agency activities that are not permissible for bank holding companies under section 4(c)(8) of the Act. However, I reach this conclusion on different grounds than the Board. In my view, the expanded insurance activities of Family Guardian are inconsistent with the nonbanking prohibitions in the Act regardless of whether the exception contained in the operating subsidiary rule in Regulation Y applies in this case.

My view is based on the plain and unambiguous language of section 4 of the Act. This section by its terms prohibits a bank holding company from acquiring or retaining control, directly or indirectly, of any company other than a bank unless that company's activities are authorized under one of the nonbanking exceptions in the Act. Family Guardian, a multimillion dollar insurance underwriting company, is clearly not a bank as defined in the Act, and, under the Act, there is simply no question that Family Guardian is controlled by Citicorp. As the terms of the Act make clear, a company controlled by a bank that is in turn a subsidiary of a bank holding company is indirectly controlled by, and treated as an indirect

44. In any event, even if Citibank Delaware, Family Guardian's parent bank, is viewed as being authorized by the Delaware statute to engage in the general insurance business within the scope of the exemption in section 225.22(d)(ii), the bank cannot be viewed as authorized to engage in such a business in those states (approximately 22) where banks are effectively barred under state law, by licensing requirements or other similar restrictions, from providing insurance activities. Specifically, in a number of these states, banks are precluded from obtaining the license necessary to provide insurance services in that state. Thus it is clear that in those states Family Guardian, under the terms of the regulation, may not provide general insurance services.

subsidiary of, the parent holding company. As a nonbank subsidiary of a bank holding company, Family Guardian is required to limit its activities to those permitted for bank holding companies and their nonbank subsidiaries under the Act. Under the 1982 amendment to section 4(c)(8) of the Act, the Board no longer has the discretion to permit a bank holding company or any of its nonbank subsidiaries to underwrite or sell insurance beyond the seven situations set forth in the statute.

For these reasons, I agree with the Board's decision that Family Guardian must cease any insurance activity other than those previously approved for Family Guardian by the Board under section 4(c)(8) of the Act.

September 5, 1990

Financial and Business Statistics

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

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

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

Monetary and credit aggregates	1989		1990		1990				
	Q3	Q4	Q1	Q2	Apr.	May	June	July r	Aug.
Reserves of depository institutions[2]									
1 Total	.6	5.1	2.4	-1.4	-.4	-9.8	-1.0	-8.2	8.7
2 Required	.5	5.0	2.5	-.9	-1.2	-11.3	2.8	-10.1	8.6
3 Nonborrowed	8.6	7.2	-3.9	-1.0	9.8	-4.1	8.3	-5.8	5.3
4 Monetary base[3]	3.2	4.0	8.5	7.0	7.1	3.5	7.6	6.4	13.2
Concepts of money, liquid assets, and debt[4]									
5 M1	1.8	5.1	4.8	3.5	3.7	-2.8	6.0	-.3	10.7
6 M2	7.0	7.1	6.4	2.9	2.3	-2.2r	2.6r	1.7	6.7
7 M3	4.0	2.0	3.0r	.8	1.1r	-2.4	.9r	.9	4.7
8 L	4.5	3.1r	3.2r	1.4r	2.9r	-6.9r	5.1r	2.5	n.a.
9 Debt	7.1r	7.3r	6.1r	6.7r	6.6r	5.1r	6.7r	7.2	n.a.
Nontransaction components									
10 In M2[5]	8.7	7.7	6.9	2.6r	1.8r	-2.0r	1.5r	2.4	5.4
11 In M3 only[6]	-6.4r	-16.6r	-10.2r	-7.5	-3.9r	-2.9	-6.0r	-2.4	-3.8
Time and savings deposits									
Commercial banks									
12 Savings	.4	7.2	9.5	5.1	2.5	-1.9	9.3	3.7	1.8
13 MMDAs	5.2	12.3	9.1	10.6	10.7	9.9	9.5	8.8	12.0
14 Small-denomination time[7]	11.9	11.3	7.8	12.0	9.4	20.8	18.5	18.9	7.0
15 Large-denomination time[8,9]	2.9	2.7	-1.1r	-2.8r	-5.1r	5.5	2.4	5.1	-9.9
Thrift institutions									
16 Savings	-5.2	.2	1.3	.5	4.3	-2.7	-3.8	-.5	-1.1
17 MMDAs	-6.2	4.7	5.7	2.6	7.1	-16.7	-15.1	-12.6	-5.5
18 Small-denomination time[7]	8.7	-2.5	-3.3	-8.0	-5.7r	-16.0	-20.9	-15.7	-3.9
19 Large-denomination time[8]	-10.7	-28.6	-24.7	-30.5	-35.0	-40.3	-28.7	-36.5	-29.4
Money market mutual funds									
20 General purpose and broker-dealer	37.6	29.1	19.8	-.7	-.4	-19.9	5.6	11.9	32.1
21 Institution-only	36.6	3.3	10.2	11.7	15.9	5.6	.0	17.9	56.2
Debt components[4]									
22 Federal	6.0r	10.2r	6.8r	9.5r	7.4r	7.2r	14.3r	13.2	n.a.
23 Nonfederal	7.4r	6.4r	5.9r	5.9r	6.3r	4.5r	4.4r	5.4	n.a.

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

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

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

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

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

6. Sum of large time deposits, term RPs, term Eurodollars of U.S. residents, and 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. 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.

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

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

1.11 RESERVES OF DEPOSITORY INSTITUTIONS AND RESERVE BANK CREDIT

Millions of dollars

Factors	Monthly averages of daily figures			Weekly averages of daily figures for week ending						
	1990			1990						
	June	July	Aug.	July 18	July 25	Aug. 1	Aug. 8	Aug. 15	Aug. 22	Aug. 29
SUPPLYING RESERVE FUNDS										
1 **Reserve Bank credit**	**278,190**	**279,684**	**280,961**	**279,344**	**278,784**	**277,506**	**281,579**	**280,153**	**281,890**	**280,338**
U.S. government securities[1, 2]										
2 Bought outright-system account	228,752	230,592	231,366	230,347	230,736	231,172	232,027	232,406	230,140	230,240
3 Held under repurchase agreements	930	1,055	2,139	4,416	2,706	0	1,509	423	4,416	2,706
Federal agency obligations[2]										
4 Bought outright	6,446	6,437	6,408	6,446	6,433	6,414	6,414	6,414	6,414	6,398
5 Held under repurchase agreements	294	387	551	240	237	0	426	238	714	894
6 Acceptances	0	0	0	0	0	0	0	0	0	0
Loans to depository institutions[2]										
7 Adjustment credit	237	96	318	35	242	89	32	160	1,148	55
8 Seasonal credit	313	275	433	249	347	434	423	425	438	445
9 Extended credit	339	389	134	380	411	390	448	70	6	10
10 Float	486	674	566	426	819	138	1,056	407	120	846
11 Other Federal Reserve assets	40,394	39,780	39,045	40,511	38,829	38,869	39,245	39,610	38,495	38,745
12 Gold stock	11,065	11,065	11,064	11,065	11,065	11,064	11,064	11,064	11,064	11,064
13 Special drawing rights certificate account	8,518	8,518	8,518	8,518	8,518	8,518	8,518	8,518	8,518	8,518
14 Treasury currency outstanding	20,016	20,093	20,145	20,091	20,105	20,118	20,128	20,139	20,150	20,160
ABSORBING RESERVE FUNDS										
15 Currency in circulation	265,776	268,968	270,536	269,522	268,479	268,180	269,566	270,622	270,835	270,754
16 Treasury cash holdings	582	568	544	573	559	555	550	546	545	536
Deposits, other than reserve balances, with Federal Reserve Banks										
17 Treasury	5,078	5,408	5,415	5,108	5,082	5,328	5,763	5,288	5,501	5,219
18 Foreign	250	243	265	221	251	217	236	242	355	239
19 Service-related balances and adjustments	2,010	2,022	1,873	2,016	2,138	2,000	2,017	1,968	2,132	1,955
20 Other	289	243	236	229	238	308	188	212	266	278
21 Other Federal Reserve liabilities and capital	9,788	9,176	9,219	9,136	9,136	9,207	9,624	9,044	8,990	9,027
22 Reserve balances with Federal Reserve Banks[3]	34,016	32,731	32,600	32,213	32,589	31,410	33,345	31,952	32,998	32,074

Factors	End-of-month figures			Wednesday figures						
	1990			1990						
	June	July	Aug.	July 18	July 25	Aug. 1	Aug. 8	Aug. 15	Aug. 22	Aug. 29
SUPPLYING RESERVE FUNDS										
23 **Reserve Bank credit**	**279,372**	**279,364**	**284,445**	**277,202**	**280,154**	**278,239**	**284,776**	**279,970**	**284,227**	**281,237**
U.S. government securities[1, 2]										
24 Bought outright-system account	231,383	232,313	233,498	229,255	229,431	232,207	233,686	230,477	230,092	230,314
25 Held under repurchase agreements	0	0	2,936	0	1,833	0	2,205	2,960	693	3,206
Federal agency obligations[2]										
26 Bought outright	6,446	6,414	6,377	6,446	6,414	6,414	6,414	6,414	6,414	6,377
27 Held under repurchase agreements	0	0	1,186	0	539	0	936	1,667	186	823
28 Acceptances	0	0	0	0	0	0	0	0	0	0
Loans to depository institutions[2]										
29 Adjustment credit	49	97	50	22	1,515	23	116	819	7,257	71
30 Seasonal credit	374	407	412	242	389	437	422	426	447	448
31 Extended credit	163	437	3	387	425	400	469	4	7	13
32 Float	575	643	−97	539	858	−172	1,145	−857	747	1,199
33 Other Federal Reserve assets	40,382	39,053	40,081	40,312	38,750	38,931	39,384	38,060	38,384	38,787
34 Gold stock	11,065	11,064	11,065	11,065	11,064	11,064	11,064	11,064	11,064	11,065
35 Special drawing rights certificate account	8,518	8,518	8,518	8,518	8,518	8,518	8,518	8,518	8,518	8,518
36 Treasury currency outstanding	20,047	20,118	20,171	20,091	20,105	20,118	20,128	20,139	20,150	20,160
ABSORBING RESERVE FUNDS										
37 Currency in circulation	266,979	268,411	272,690	269,248	268,287	268,755	270,235	271,035	270,693	271,684
38 Treasury cash holdings	580	549	534	559	557	549	546	546	537	530
Deposits, other than reserve balances, with Federal Reserve Banks										
39 Treasury	5,470	6,369	4,453	5,156	5,912	5,940	5,341	5,659	5,438	6,130
40 Foreign	368	279	337	190	228	206	215	246	217	246
41 Service-related balances and adjustments	1,847	2,000	1,953	2,016	2,138	2,000	2,017	1,968	2,132	1,955
42 Other	255	247	219	193	474	239	183	276	233	276
43 Other Federal Reserve liabilities and capital	9,012	9,723	10,504	8,823	8,916	9,334	8,903	8,710	8,657	8,759
44 Reserve balances with Federal Reserve Banks[3]	34,490	31,484	33,509	30,690	33,327	30,916	37,046	31,251	36,052	31,400

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. Beginning with the May 1990 *Bulletin*, this table has been revised to correspond with the H.4.1 statistical release.
3. Excludes required clearing balances and adjustments to compensate for float.

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

1.12 RESERVES AND BORROWINGS Depository Institutions[1]

Millions of dollars

Reserve classification	Monthly averages[9]									
	1987	1988	1989	1990						
	Dec.	Dec.	Dec.	Feb.	Mar.	Apr.	May	June	July	Aug.
1 Reserve balances with Reserve Banks[2]	37,691	37,837	35,436	30,929	33,407	35,409	32,771	33,878	32,946[r]	32,452
2 Total vault cash[3]	26,675	28,204	29,812	32,489	29,581	29,281	29,812	29,632	30,457	30,843
3 Applied vault cash[4]	24,449	25,909	27,374	29,693	27,251	27,103	27,461	27,318	27,996	28,280
4 Surplus vault cash[5]	2,226	2,295	2,439	2,795	2,330	2,178	2,351	2,314	2,460[r]	2,563
5 Total reserves[6]	62,141	63,746	62,810	60,623	60,658	62,512	60,232	61,197	60,943[r]	60,732
6 Required reserves	61,094	62,699	61,888	59,634	59,797	61,615	59,269	60,423	60,081	59,860
7 Excess reserve balances at Reserve Banks[7]	1,046	1,047	922	989	861	897	962	774	862[r]	872
8 Total borrowings at Reserve Banks	777	1,716	265	1,448	2,124	1,628	1,335	881	757	927
9 Seasonal borrowings at Reserve Banks	93	130	84	51	78	122	244	311	389	430
10 Extended credit at Reserve Banks[8]	483	1,244	20	535	1,950	1,403	875	346	280	127
	Biweekly averages of daily figures for weeks ending									
	1990									
	May 2	May 16	May 30	June 13	June 27	July 11	July 25	Aug. 8[r]	Aug. 22	Sept. 5
11 Reserve balances with Reserve Banks[2]	34,887	33,855	31,269	34,385	33,390	33,958	32,390	32,389	32,463	32,491
12 Total vault cash[3]	29,589	28,863	30,852	28,986	30,097	30,264	30,549	30,597	31,379	30,229
13 Applied vault cash[4]	27,259	26,730	28,268	26,803	27,676	27,885	28,094	27,974	28,815	27,721
14 Surplus vault cash[5]	2,331	2,133	2,584	2,184	2,421	2,380	2,455	2,623	2,565	2,507
15 Total reserves[6]	62,145	60,584	59,537	61,188	61,066	61,842	60,484	60,363	61,277	60,213
16 Required reserves	61,040	59,657	58,526	60,709	60,046	60,944	59,609	59,599	60,367	59,304
17 Excess reserve balances at Reserve Banks[7]	1,105	927	1,011	479	1,020	898	875	764	910	909
18 Total borrowings at Reserve Banks	1,155	976	1,723	1,291	566	581	832	908	1,124	638
19 Seasonal borrowings at Reserve Banks	158	221	278	282	329	359	396	429	432	430
20 Extended credit at Reserve Banks[8]	899	673	1,098	559	183	182	298	419	38	8

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 and includes other off-balance sheet "as-of" adjustments.
3. Total "lagged" vault cash held by those depository institutions currently subject to reserve requirements. 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. All vault cash held during the lagged computation period by "bound" institutions (i.e., those whose required reserves exceed their vault cash) plus the amount of vault cash applied during the maintenance period by "nonbound" institutions (i.e., those whose vault cash exceeds their required reserves) to satisfy current reserve requirements.
5. Total vault cash (line 2) less applied vault cash (line 3).
6. Reserve balances with Federal Reserve Banks (line 1) plus applied vault cash (line 3).
7. Total reserves (line 5) less required reserves (line 6).
8. 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 Banks[1]

Averages of daily figures, in millions of dollars

Maturity and source	1990 week ending Monday[2]								
	June 25	July 2	July 9	July 16	July 23	July 30	Aug. 6	Aug. 13	Aug. 20
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	82,754	82,140	90,826	88,646	80,664	79,671	86,516	85,883	89,773
2 For all other maturities	20,214	19,294	19,261	19,161	21,137	19,311	19,270	19,567	19,298
From other depository institutions, foreign banks and foreign official institutions, and U.S. government agencies									
3 For one day or under continuing contract	39,759	37,304	41,114	42,193	40,122	37,516	39,342	41,080	39,250
4 For all other maturities	17,562	17,631	18,030	17,858	19,176	18,779	17,596	16,873	16,866
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	13,068	11,064	11,700	13,311	13,067	13,481	17,406	17,771	18,476
6 For all other maturities	20,437	19,408	19,155	19,735	21,516	21,734	24,262	25,272	24,233
All other customers									
7 For one day or under continuing contract	33,987	32,210	33,925	33,347	33,760	32,907	33,487	30,243	32,148
8 For all other maturities	14,211	13,902	13,691	13,572	13,854	14,737	14,266	14,512	13,522
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	49,258	51,135	47,908	45,724	46,841	46,791	52,042	61,601	54,448
10 To all other specified customers[3]	14,251	13,132	12,916	12,696	13,278	12,576	16,229	16,660	17,025

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. Beginning with the August Bulletin data appearing are the most current available. To obtain data from May 1, 1989, through April 16, 1990, contact the Division of Applications Development and Statistical Services, Financial Statement Reports Section, (202) 452-3349.
3. 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, 4]			
	On 9/27/90	Effective date	Previous rate	On 9/27/90	Effective date	Previous rate	On 9/27/90	Effective date	Previous rate	Effective date
Boston	7	2/24/89	6½	7	2/24/89	6½	8.55	9/20/90	8.6	9/7/90
New York		2/24/89			2/24/89			9/20/90		9/7/90
Philadelphia		2/24/89			2/24/89			9/20/90		9/7/90
Cleveland		2/24/89			2/24/89			9/20/90		9/7/90
Richmond		2/24/89			2/24/89			9/20/90		9/7/90
Atlanta		2/24/89			2/24/89			9/20/90		9/7/90
Chicago		2/24/89			2/24/89			9/20/90		9/7/90
St. Louis		2/24/89			2/24/89			9/20/90		9/7/90
Minneapolis		2/24/89			2/24/89			9/20/90		9/7/90
Kansas City		2/24/89			2/24/89			9/20/90		9/7/90
Dallas		2/27/89			2/27/89			9/20/90		9/7/90
San Francisco	7	2/24/89	6½	7	2/24/89	6½	8.55	9/20/90	8.6	9/7/90

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

Effective date	Range (or level)— All F.R. Banks	F.R. Bank of N.Y.
In effect Dec. 31, 1977	6	6
1978—Jan. 9	6–6½	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 Sept. 27, 1990	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. In the September and October issues of the *Bulletin*, the effective dates for interest rates on extended credit outstanding more than 30 days were reported incorrectly. The correct dates, which are one day later than those published, are June 28, July 12, July 26, and August 9.

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

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

1.15 RESERVE REQUIREMENTS OF DEPOSITORY INSTITUTIONS[1]

Percent of deposits

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

1. Reserve requirements in effect on Dec. 31, 1989. Required reserves must be held in the form of deposits with Federal Reserve Banks or vault cash. Nonmember institutions may maintain reserve balances with a Federal Reserve Bank indirectly on a pass-through basis with certain approved institutions. For previous reserve requirements, see earlier editions of the *Annual Report* or the *Federal Reserve Bulletin*. Under provisions of the Monetary Control Act, depository institutions include commercial banks, mutual savings banks, savings and loan associations, credit unions, agencies and branches of foreign banks, and Edge corporations.

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

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

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

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

1.17 FEDERAL RESERVE OPEN MARKET TRANSACTIONS[1]

Millions of dollars

Type of transaction	1987	1988	1989	1990 Jan.	Feb.	Mar.	Apr.	May	June	July
U.S. TREASURY SECURITIES										
Outright transactions (excluding matched transactions)										
Treasury bills										
1 Gross purchases	18,983	8,223	14,284	423	108	543	5,796	3,365	1,732	287
2 Gross sales	6,051	587	12,818	1,489	3,384	0	0	0	0	0
3 Exchange	239,740	241,876	228,710	15,960	18,113	19,051	17,286	22,894	16,279	16,159
4 Redemptions	9,029	2,200	12,730	1,000	400	0	0	0	0	0
Others within 1 year										
5 Gross purchases	3,659	2,176	327	0	0	100	0	0	50	0
6 Gross sales	300	0	0	0	0	0	0	0	0	0
7 Maturity shift	21,504	23,854	28,848	1,201	2,845	1,876	993	4,387	1,314	1,321
8 Exchange	−20,388	−24,588	−25,783	−2,489	−5,418	0	−4,304	−2,771	0	−3,577
9 Redemptions	70	0	500	0	0	0	0	0	0	0
1 to 5 years										
10 Gross purchases	10,231	5,485	1,436	0	0	100	100	0	0	0
11 Gross sales	452	800	490	0	0	0	0	0	0	0
12 Maturity shift	−17,975	−17,720	−25,534	−1,163	−1,713	−1,876	−739	−3,607	−1,314	−1,234
13 Exchange	18,938	22,515	23,250	2,373	4,743	0	4,081	2,521	0	3,577
5 to 10 years										
14 Gross purchases	2,441	1,579	287	0	0	0	0	0	0	0
15 Gross sales	0	175	29	0	0	0	0	0	0	0
16 Maturity shift	−3,529	−5,946	−2,231	−38	−451	0	−254	−530	0	−87
17 Exchange	950	1,797	1,934	116	450	0	223	0	0	0
Over 10 years										
18 Gross purchases	1,858	1,398	284	0	0	0	0	0	0	0
19 Gross sales	0	0	0	0	0	0	0	0	0	0
20 Maturity shift	0	−188	−1,086	0	−681	0	0	−250	0	0
21 Exchange	500	275	600	0	226	0	0	250	0	0
All maturities										
22 Gross purchases	37,170	18,863	16,617	423	108	743	5,896	3,365	1,782	287
23 Gross sales	6,803	1,562	13,337	1,489	3,384	0	0	0	0	0
24 Redemptions	9,099	2,200	13,230	1,000	400	0	0	0	0	0
Matched transactions										
25 Gross sales	950,923	1,168,484	1,323,480	127,729	116,220	99,104	97,970	121,596	107,896	95,144
26 Gross purchases	950,935	1,168,142	1,326,542	121,411	120,637	97,128	98,643	121,218	110,042	95,787
Repurchase agreements[2]										
27 Gross purchases	314,621	152,613	129,518	16,185	0	8,050	6,409	3,959	11,242	13,106
28 Gross sales	324,666	151,497	132,688	17,777	0	6,627	7,832	3,959	11,242	11,447
29 Net change in U.S. government securities	11,234	15,872	−10,055	−9,976	741	190	5,146	2,987	3,928	2,590
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	276	587	442	0	0	0	78	0	0	33
Repurchase agreements[2]										
33 Gross purchases	80,353	57,259	38,835	1,741	0	1,966	2,595	2,314	3,221	4,697
34 Gross sales	81,350	56,471	40,411	2,266	0	1,457	3,104	2,314	3,221	4,137
35 Net change in federal agency obligations	−1,274	198	−2,018	−525	0	509	−587	0	0	527
36 Total net change in System Open Market Account	**9,961**	**16,070**	**−12,073**	**−10,501**	**741**	**699**	**4,559**	**2,987**	**3,928**	**3,117**

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 1990					End of month 1990		
	Aug. 1	Aug. 8	Aug. 15	Aug. 22	Aug. 29	June	July	Aug.
	Consolidated condition statement							
ASSETS								
1 Gold certificate account	11,064	11,064	11,064	11,064	11,065	11,065	11,064	11,065
2 Special drawing rights certificate account	8,518	8,518	8,518	8,518	8,518	8,518	8,518	8,518
3 Coin	477	484	493	503	495	470	476	491
Loans								
4 To depository institutions	861	1,006	1,250	7,711	531	586	942	465
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	0	0	0	0	0	0	0	0
7 Bought outright	6,414	6,414	6,414	6,414	6,377	6,446	6,414	6,377
8 *Held under repurchase agreements*	0	936	1,666	186	823	0	0	1,186
U.S. Treasury securities								
Bought outright								
9 Bills	109,662	111,141	107,932	107,547	107,769	108,838	109,768	110,953
10 Notes	91,782	91,782	91,582	91,582	91,582	91,782	91,782	91,582
11 Bonds	30,763	30,763	30,963	30,963	30,963	30,763	30,763	30,963
12 Total bought outright[2]	232,207	233,686	230,477	230,092	230,314	231,383	232,313	233,498
13 *Held under repurchase agreements*	0	2,205	2,959	693	3,206	0	0	2,936
14 Total U.S. Treasury securities	232,207	235,891	233,436	230,785	233,520	231,383	232,313	236,434
15 Total loans and securities	**239,481**	**244,247**	**242,765**	**245,096**	**241,251**	**238,415**	**239,668**	**244,461**
16 Items in process of collection	6,296	6,252	5,512	5,698	5,896	7,586	9,103	5,726
17 Bank premises	831	831	832	833	831	827	831	836
Other assets								
18 Denominated in foreign currencies[3]	32,562	32,586	32,615	32,666	32,695	34,225	32,561	34,059
19 All other[4]	5,707	6,022	4,981	4,934	5,274	5,248	6,577	5,230
20 Total assets	**304,936**	**310,005**	**306,781**	**309,311**	**306,025**	**306,354**	**308,798**	**310,386**
LIABILITIES								
21 Federal Reserve notes	249,663	251,137	251,936	251,583	252,549	247,983	249,319	253,544
Deposits								
22 To depository institutions	33,429	39,011	33,780	38,099	33,334	36,336	34,651	35,592
23 U.S. Treasury—General account	5,940	5,341	5,659	5,438	6,130	5,470	6,369	4,453
24 Foreign—Official accounts	206	215	245	217	246	368	279	337
25 Other	239	183	276	233	276	255	247	219
26 Total deposits	**39,813**	**44,750**	**39,961**	**43,987**	**39,985**	**42,429**	**41,546**	**40,600**
27 Deferred credit items	6,126	5,215	6,177	5,084	4,732	6,930	8,210	5,738
28 Other liabilities and accrued dividends[5]	3,523	3,719	3,514	3,445	3,559	3,810	3,554	4,288
29 Total liabilities	**299,125**	**304,821**	**301,588**	**304,100**	**300,824**	**301,152**	**302,629**	**304,169**
CAPITAL ACCOUNTS								
30 Capital paid in	2,375	2,378	2,387	2,387	2,396	2,344	2,359	2,399
31 Surplus	2,243	2,243	2,243	2,243	2,243	2,243	2,243	2,243
32 Other capital accounts	1,192	563	564	582	562	616	1,566	1,579
33 Total liabilities and capital accounts	**304,936**	**310,005**	**306,781**	**309,311**	**306,025**	**306,354**	**308,798**	**310,386**
34 MEMO: Marketable U.S. Treasury securities held in custody for foreign and international accounts	227,484	229,058	230,056	233,391	233,637	228,260	228,317	236,408
	Federal Reserve note statement							
35 Federal Reserve notes outstanding issued to bank	290,756	290,931	291,471	292,935	293,783	288,487	290,791	293,807
36 LESS: Held by bank	41,093	39,794	39,535	41,352	41,234	40,504	41,472	40,263
37 Federal Reserve notes, net	249,663	251,137	251,936	251,583	252,549	247,983	249,319	253,544
Collateral held against notes net:								
38 Gold certificate account	11,064	11,064	11,064	11,064	11,065	11,065	11,064	11,065
39 Special drawing rights certificate account	8,518	8,518	8,518	8,518	8,518	8,518	8,518	8,518
40 Other eligible assets	0	0	0	0	0	0	0	0
41 U.S. Treasury and agency securities	230,081	231,555	232,354	232,001	232,966	228,400	229,737	233,961
42 Total collateral	**249,663**	**251,137**	**251,936**	**251,583**	**252,549**	**247,983**	**249,319**	**253,544**

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

1.19 FEDERAL RESERVE BANKS Maturity Distribution of Loan and Security Holding

Millions of dollars

Type and maturity groupings	Wednesday					End of month		
	1990					1990		
	Aug. 1	Aug. 8	Aug. 15	Aug. 22	Aug. 29	June 29	July 31	Aug. 31
1 Loans—Total	861	1,006	1,250	7,711	531	586	942	465
2 Within 15 days	564	721	971	7,633	432	415	723	221
3 16 days to 90 days	297	286	278	78	100	171	218	243
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	232,207	235,891	233,437	230,785	233,520	231,383	232,313	233,498
10 Within 15 days[1]	14,456	17,128	13,949	11,986	14,178	9,655	9,872	2,820
11 16 days to 90 days	51,603	51,475	48,975	51,895	54,753	57,872	56,294	60,563
12 91 days to 1 year	69,706	70,846	73,345	69,738	67,422	68,356	69,706	72,709
13 Over 1 year to 5 years	58,239	58,239	59,460	59,460	59,460	57,482	58,239	59,700
14 Over 5 years to 10 years	11,801	11,801	13,170	13,170	13,170	11,617	11,801	13,170
15 Over 10 years	26,402	26,402	24,536	24,536	24,536	26,402	26,402	24,536
16 Federal agency obligations—Total	6,414	7,350	8,080	6,600	7,200	6,446	6,414	6,377
17 Within 15 days[1]	0	936	1,764	563	1,133	223	115	310
18 16 days to 90 days	712	811	714	434	497	672	712	497
19 91 days to 1 year	1,583	1,484	1,544	1,544	1,616	1,406	1,468	1,616
20 Over 1 year to 5 years	2,820	2,820	2,760	2,760	2,655	2,846	2,820	2,655
21 Over 5 years to 10 years	1,110	1,110	1,110	1,110	1,110	1,109	1,110	1,110
22 Over 10 years	188	188	188	188	188	188	188	188

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

NOTE: Components may not add to totals because of rounding.

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

Billions of dollars, averages of daily figures

Item	1986 Dec.	1987 Dec.	1988 Dec.	1989 Dec.	1990 Jan.	1990 Feb.	1990 Mar.	1990 Apr.	1990 May	1990 June	1990 July	1990 Aug.
ADJUSTED FOR CHANGES IN RESERVE REQUIREMENTS[2]	Seasonally adjusted											
1 **Total reserves**[3]	**58.02**	**58.59**	**60.59**	**60.03**	**59.90**	**60.22**	**60.30**	**60.28**	**59.78**	**59.73**	**59.32**	**59.75**
2 Nonborrowed reserves[4]	57.20	57.82	58.88	59.77	59.46	58.77	58.17	58.65	58.45	58.85	58.56	58.82
3 Nonborrowed reserves plus extended credit[5]	57.50	58.30	60.12	59.79	59.48	59.30	60.12	60.05	59.32	59.20	58.84	58.95
4 Required reserves	56.65	57.55	59.55	59.11	58.88	59.23	59.44	59.38	58.82	58.96	58.46	58.88
5 Monetary base[6]	241.43	258.06	275.24	284.95	287.51	289.71	291.82	293.54	294.40	296.28	297.86	301.13
ADJUSTED FOR CHANGES IN RESERVE REQUIREMENTS[2]	Not seasonally adjusted											
6 **Total reserves**[7]	**59.46**	**60.07**	**62.22**	**61.67**	**61.58**	**59.20**	**59.23**	**61.05**	**58.74**	**59.61**	**59.47**	**59.22**
7 Nonborrowed reserves	58.64	59.30	60.50	61.40	61.14	57.75	57.11	59.42	57.41	58.73	58.71	58.29
8 Nonborrowed reserves plus extended credit[5]	58.94	59.78	61.75	61.42	61.17	58.29	59.06	60.82	58.28	59.07	58.99	58.42
9 Required reserves[8]	58.09	59.03	61.17	60.75	60.56	58.21	58.37	60.15	57.78	58.84	58.61	58.34
10 Monetary base[9]	245.17	262.00	279.54	289.45	288.67	286.50	288.86	293.35	293.52	297.37	299.90	301.47
NOT ADJUSTED FOR CHANGES IN RESERVE REQUIREMENTS[10]												
11 **Total reserves**[11]	**59.56**	**62.14**	**63.75**	**62.81**	**62.93**	**60.62**	**60.66**	**62.51**	**60.23**	**61.20**	**60.94**	**60.73**
12 Nonborrowed reserves	58.73	61.36	62.03	62.54	62.49	59.17	58.53	60.88	58.90	60.32	60.19r	59.81
13 Nonborrowed reserves plus extended credit[5]	59.04	61.85	63.27	62.56	62.52	59.71	60.49	62.29	59.77	60.66	60.47r	59.93
14 Required reserves	58.19	61.09	62.70	61.89	61.91	59.63	59.80	61.62	59.27	60.42	60.08	59.86
15 Monetary base[12]	247.62	266.06	283.00	292.55	292.13	290.02	292.38	296.87	297.03	300.99	303.39	305.01
16 Excess reserves[13]	1.37	1.05	1.05	0.92	1.02	0.99	0.86	0.90	0.96	0.77	0.86	0.87
17 Borrowings from the Federal Reserve	0.83	0.78	1.72	0.27	0.44	1.45	2.12	1.63	1.33	0.88	0.76	0.93

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 reflect adjustments for discontinuities or "breaks" associated with regulatory changes in reserve requirements.

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

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

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

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

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

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

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

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

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

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

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

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

Billions of dollars, averages of daily figures

Item[2]	1986 Dec.	1987 Dec.	1988 Dec.	1989 Dec.	1990 May	June	July	Aug.
				Seasonally adjusted				
1 M1	724.7	750.4	787.5	794.8	805.4	809.4	809.2r	816.4
2 M2	2,814.2	2,913.2	3,072.4	3,221.6	3,271.8r	3,279.0r	3,283.7r	3,302.1
3 M3	3,494.5	3,678.7	3,918.3r	4,044.3r	4,065.8r	4,069.0r	4,072.2r	4,088.0
4 L	4,135.5	4,338.9	4,675.9r	4,881.5r	4,900.3r	4,921.1r	4,931.4	n.a.
5 Debt	7,636.2r	8,345.1r	9,107.6r	9,788.9r	10,052.5r	10,108.4r	10,169.2	n.a.
M1 components								
6 Currency[3]	180.6	196.7	211.8	221.9	231.6	233.4	235.4	238.4
7 Travelers checks[4]	6.5	7.0	7.5	7.4	7.7	7.7	7.7	8.0
8 Demand deposits[5]	302.1	287.0	287.0	279.7	274.5	274.5	274.8	278.0
9 Other checkable deposits[6]	235.5	259.7	281.3	285.7	291.5	293.8	291.3r	292.0
Nontransactions components								
10 In M2[7]	2,089.6	2,162.8	2,284.9	2,426.8	2,466.4r	2,469.5r	2,474.5	2,485.7
11 In M3 only[8]	680.3	765.5	845.9	822.6r	794.0r	790.0r	788.4r	785.9
Time and Savings accounts								
Commercial banks								
12 Savings deposits	155.8	178.3	192.0	188.5	193.5	195.0	195.6	195.9
13 Money market deposit accounts	377.7	356.4	350.2	351.5	365.3	368.2	370.9r	374.6
14 Small time deposits[9]	366.3	388.1	447.5	528.6	550.8	559.3	568.1r	571.4
15 Large time deposits[10, 11]	289.8	326.9	368.2	401.5	397.0r	397.8r	399.5	396.2
Thrift institutions								
16 Savings deposits	214.3	236.6	235.9	220.5	221.5	220.8	220.7r	220.5
17 Money market deposit accounts	193.3	167.4	150.1	132.2	134.7	133.0	131.6	131.0
18 Small time deposits[9]	489.9	529.7	583.5	613.7	598.2	587.8	580.1r	578.2
19 Large time deposits[10]	150.0	161.9	172.9	156.8	138.2	134.9	130.8	127.6
Money market mutual funds								
20 General purpose and broker-dealer	208.7	222.0	240.9	312.4	320.4	321.9	325.1	333.8
21 Institution-only	83.8	89.0	87.1	102.3	107.3	107.3	108.9	114.0
Debt components								
22 Federal debt	1,806.1r	1,957.9r	2,114.2r	2,266.7r	2,343.0r	2,370.9r	2,397.0	n.a.
23 Nonfederal debt	5,830.1r	6,387.2r	6,993.4r	7,522.1r	7,709.5r	7,737.5r	7,772.2	n.a.
				Not seasonally adjusted				
24 M1	740.5	766.4	804.5	812.1	796.4	810.0	812.2r	814.2
25 M2	2,826.5	2,925.6	3,085.2	3,234.5	3,256.8r	3,276.1r	3,289.3r	3,302.1
26 M3	3,508.8	3,692.7	3,932.5	4,058.3r	4,050.1r	4,062.7r	4,071.2r	4,088.1
27 L	4,151.5	4,355.2	4,692.7	4,899.2r	4,887.9r	4,912.4r	4,919.1	n.a.
28 Debt	7,619.0r	8,329.1r	9,093.2r	9,774.3r	10,006.6r	10,064.7r	10,126.3	n.a.
M1 components								
29 Currency[3]	183.0	199.3	214.8	225.3	231.7	234.8	237.1	239.2
30 Travelers checks[4]	6.0	6.5	6.9	6.9	7.5	8.1	8.6	8.9
31 Demand deposits[5]	314.0	298.6	298.9	291.6	268.5	274.8	277.0	276.7
32 Other checkable deposits[6]	237.5	262.0	283.8	288.4	288.7	292.3	289.4r	289.4
Nontransactions components								
33 In M2[7]	2,086.0	2,159.2	2,280.8	2,422.4	2,460.4r	2,466.2r	2,477.2r	2,487.9
34 In M3 only[8]	682.3	767.0	847.3	823.8r	793.3r	786.5r	781.9r	786.0
Time and Savings accounts								
Commercial banks								
35 Savings deposits	154.4	176.9	190.6	187.2	194.0	196.1	197.3r	196.3
36 Money market deposit accounts	379.8	359.0	353.2	355.0	361.0	365.8	368.1r	372.9
37 Small time deposits[9]	366.1	387.3	446.0	526.4	549.7	560.4	569.7	572.5
38 Large time deposits[10, 11]	289.2	325.8	366.9	399.8	397.4r	397.3r	397.3	396.8
Thrift institutions								
39 Savings deposits	212.7	234.9	234.2	219.0	221.8	222.3	223.0	221.0
40 Money market deposit accounts	192.9	167.5	150.6	132.8	133.8	132.5	131.2	131.2
41 Small time deposits[9]	489.8	529.1	582.4	612.3	596.5	586.8	581.6r	578.6
42 Large time deposits[10]	150.7	162.9	174.2	158.3	137.5	133.5	129.4r	127.0
Money market mutual funds								
43 General purpose and broker-dealer	208.0	221.5	240.5	312.2	319.6	319.8	322.3	332.8
44 Institution-only	84.4	89.6	87.6	102.9	106.7	106.1	108.1	113.2
Repurchase agreements and Eurodollars								
45 Overnight	82.3	83.2	83.3	77.4	83.9r	82.5r	83.9	82.7
46 Term	164.3	197.1	227.7	178.0r	163.3r	163.0r	161.1r	164.6
Debt components								
47 Federal debt	1,803.9	1,955.6	2,111.8	2,264.5r	2,336.8r	2,359.0r	2,382.7	n.a.
48 Nonfederal debt	5,815.1r	6,373.5r	6,981.4r	7,509.8r	7,669.8r	7,705.7r	7,743.6	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 Money 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 depository institutions 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 all depository 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. Data are derived from 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, term Eurodollars of U.S. residents, and money market fund balances (institution-only), less a consolidation adjustment that represents the estimated amount of overnight RPs and Eurodollars held by institution-only money market funds.

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

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

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

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	1987	1988	1989	1990 Jan.	1990 Feb.	1990 Mar.	1990 Apr.	1990 May	1990 June
DEBITS TO	Seasonally adjusted								
Demand deposits[3]									
1 All insured banks	217,116.2	226,888.4	272,793.1	286,425.2	299,450.2	285,111.5	274,403.6	273,186.2	301,578.2
2 Major New York City banks	104,496.3	107,547.3	121,894.2	123,744.6	132,031.4	132,470.3	124,988.2	123,314.6	131,042.7
3 Other banks	112,619.8	119,341.2	150,898.9	162,680.5	167,418.8	152,641.2	149,415.4	149,871.6	170,535.5
4 ATS-NOW accounts[4]	2,402.7	2,757.7	3,501.8	3,910.4	4,115.7	4,075.7	3,993.3	4,165.6	4,004.2
5 Savings deposits[5]	526.5	579.2	636.6	609.2	587.3	617.6	583.1	601.1	566.6
DEPOSIT TURNOVER									
Demand deposits[3]									
6 All insured banks	612.1	641.2	781.0	820.0	851.4	813.3	780.8	791.9	866.2
7 Major New York City banks	2,670.6	2,903.5	3,401.6	3,422.4	3,677.3	3,760.2	3,551.5	3,590.9	3,742.8
8 Other banks	357.0	376.8	481.5	519.5	530.1	484.0	472.5	482.5	544.6
9 ATS-NOW accounts[4]	13.8	14.7	18.3	19.8	20.6	20.2	19.7	20.5	19.5
10 Savings deposits[5]	3.1	3.1	3.5	3.3	3.1	3.2	3.0	3.2	2.9
DEBITS TO	Not seasonally adjusted								
Demand deposits[3]									
11 All insured banks	217,125.1	227,010.7	271,957.3	303,668.0	270,852.7	291,868.6	276,077.5	282,747.7	302,181.4
12 Major New York City banks	104,518.8	107,565.0	122,241.8	131,796.0	119,305.2	137,029.5	125,750.6	125,532.4	130,332.7
13 Other banks	112,606.2	119,445.7	149,715.5	171,872.0	151,547.5	154,839.2	150,326.9	157,215.3	171,848.6
14 ATS-NOW accounts[4]	2,404.8	2,754.7	3,496.5	4,263.7	3,721.3	4,030.4	4,285.8	4,066.2	4,098.2
15 MMDA[6]	1,954.2	2,430.1	2,790.6	3,075.9	2,551.2	2,714.9	2,848.4	3,016.4	2,992.1
16 Savings deposits[5]	526.8	578.0	635.8	629.3	518.7	594.2	646.8	592.6	567.8
DEPOSIT TURNOVER									
Demand deposits[3]									
17 All insured banks	612.3	641.7	779.0	847.9	791.8	850.4	784.4	834.7	866.5
18 Major New York City banks	2,674.9	2,901.4	3,415.4	3,433.3	3,314.9	3,836.2	3,564.6	3,796.3	3,797.6
19 Other banks	356.9	377.1	477.8	537.5	495.2	503.6	474.7	514.3	546.6
20 ATS-NOW accounts[4]	13.8	14.7	18.3	21.1	18.7	20.0	20.5	20.3	20.1
21 MMDA[6]	5.3	6.9	8.3	8.7	7.2	7.6	7.9	8.4	8.2
22 Savings deposits[5]	3.1	3.1	3.5	3.4	2.8	3.1	3.4	3.1	2.9

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

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

2. Annual averages of monthly figures.
3. Represents accounts of individuals, partnerships, and corporations and of states and political subdivisions.
4. Accounts authorized for negotiable orders of withdrawal (NOW) and accounts authorized for automatic transfer to demand deposits (ATS). ATS data are available beginning December 1978.
5. Excludes ATS and NOW accounts, MMDA and special club accounts, such as Christmas and vacation clubs.
6. Money market deposit accounts.

1.23 LOANS AND SECURITIES All Commercial Banks[1]

Billions of dollars; averages of Wednesday figures

Category	1989[r]				1990[r]							
	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
	Seasonally adjusted											
1 **Total loans and securities[2]**	**2,546.2**	**2,570.5**	**2,585.8**	**2,588.8**	**2,594.4**	**2,614.3**	**2,635.6**	**2,646.7**	**2,653.8**	**2,669.4**	**2,684.7**	**2,707.8**
2 U.S. government securities	379.3	390.9	396.0	396.1	404.7	414.5	422.3	427.3	430.6	438.5	440.6	441.3
3 Other securities	183.6	181.4	179.9	180.8	180.4	180.5	180.1	180.0	178.3	177.9	177.8	179.2
4 Total loans and leases[2]	1,983.3	1,998.2	2,009.9	2,011.9	2,009.3	2,019.4	2,033.2	2,039.4	2,045.0	2,053.0	2,066.4	2,087.3
5 Commercial and industrial	638.2	642.0	645.0	641.6	637.9	638.8	644.4	649.0	648.6	651.6	651.7	653.1
6 Bankers acceptances held[3]	7.5	7.9	7.6	7.4	7.3	7.6	7.6	7.5	7.6	7.9	7.6	7.3
7 Other commercial and industrial	630.8	634.1	637.4	634.2	630.6	631.2	636.8	641.5	641.0	643.7	644.2	645.8
8 U.S. addressees[4]	626.9	629.9	632.4	628.8	623.1	625.4	630.6	635.5	636.4	638.8	641.6	643.2
9 Non-U.S. addressees[4]	3.8	4.2	5.0	5.4	7.6	5.8	6.2	6.0	4.5	4.9	2.6	2.5
10 Real estate	739.1	746.7	754.0	761.1	765.9	774.7	781.8	786.9	794.6	800.1	808.0	811.9
11 Individual	370.8	372.4	374.4	375.8	378.3	379.5	379.9	378.8	379.8	378.4	378.3	380.1
12 Security	39.5	40.7	40.9	38.8	39.3	40.0	37.1	36.1	34.8	35.3	38.8	46.0
13 Nonbank financial institutions	31.7	33.2	33.9	33.0	32.5	32.9	33.8	33.9	33.9	34.4	34.8	35.7
14 Agricultural	30.4	30.5	30.5	30.7	30.9	30.8	30.6	30.4	30.0	29.5	29.3	29.2
15 State and political subdivisions	41.7	41.3	40.8	40.1	38.6	38.9	38.4	38.2	37.9	37.4	36.6	36.0
16 Foreign banks	8.1	9.1	8.3	8.9	8.1	7.8	8.4	8.8	8.7	7.4	7.0	8.0
17 Foreign official institutions	4.2	3.8	3.7	3.6	3.2	3.1	3.0	3.2	3.2	3.2	3.2	3.2
18 Lease financing receivables	31.4	31.9	31.9	31.8	32.1	32.2	32.6	32.3	32.5	32.3	32.6	32.7
19 All other loans	48.0	46.6	46.4	46.5	42.5	40.6	43.2	41.8	40.9	43.3	46.1	51.5
	Not seasonally adjusted											
20 **Total loans and securities[2]**	**2,544.8**	**2,570.8**	**2,587.9**	**2,596.8**	**2,600.1**	**2,616.7**	**2,629.9**	**2,647.0**	**2,653.4**	**2,669.5**	**2,678.9**	**2,701.4**
21 U.S. government securities	378.4	388.2	396.1	397.2	406.4	419.0	423.8	427.2	429.6	435.6	438.1	442.1
22 Other securities	183.8	182.3	181.2	181.8	180.9	180.3	179.7	179.4	177.7	177.2	176.4	179.3
23 Total loans and leases[2]	1,982.6	2,000.2	2,010.6	2,017.9	2,012.8	2,017.3	2,026.4	2,040.4	2,046.1	2,056.7	2,064.4	2,080.0
24 Commercial and industrial	634.3	639.4	642.2	641.6	636.4	639.5	646.0	653.3	652.7	654.0	652.1	650.6
25 Bankers acceptances held[3]	7.5	8.1	7.7	7.5	7.4	7.7	7.4	7.3	7.5	7.8	7.3	7.4
26 Other commercial and industrial	626.8	631.3	634.5	634.0	629.1	631.8	638.6	645.9	645.2	646.2	644.8	643.2
27 U.S. addressees[4]	621.2	625.7	629.1	628.8	624.1	627.0	633.9	641.3	640.6	641.8	640.3	638.7
28 Non-U.S. addressees[4]	5.5	5.6	5.4	5.2	4.9	4.8	4.7	4.6	4.6	4.4	4.5	4.5
29 Real estate	741.2	748.0	755.7	761.9	766.0	772.1	779.1	784.9	793.5	800.0	808.7	813.6
30 Individual	372.7	373.5	375.8	380.3	381.8	378.7	376.6	376.0	377.3	376.7	376.7	380.3
31 Security	38.6	39.7	39.7	37.9	37.8	39.5	38.1	38.5	35.3	37.4	38.8	45.3
32 Nonbank financial institutions	31.4	32.8	34.2	34.1	33.2	32.5	33.0	33.7	33.9	34.7	35.0	35.5
33 Agricultural	31.4	31.2	30.8	30.6	30.4	29.9	29.5	29.5	29.7	29.9	30.0	30.0
34 State and political subdivisions	41.6	41.2	40.6	39.7	39.5	39.3	38.6	38.2	37.8	37.2	36.2	35.8
35 Foreign banks	8.3	9.4	8.5	8.7	8.2	7.8	7.8	8.4	8.7	7.6	7.1	7.9
36 Foreign official institutions	4.2	3.8	3.7	3.6	3.2	3.1	3.0	3.2	3.2	3.2	3.2	3.2
37 Lease financing receivables	31.3	31.8	31.9	31.9	32.5	32.4	32.5	32.4	32.5	32.2	32.3	32.5
38 All other loans	47.7	49.3	47.5	47.7	43.8	42.6	42.1	42.4	41.6	43.9	44.1	45.4

1. Data have been revised because of benchmarking and seasonal adjustment revisions beginning January 1973. These data also appear in the Board's G.7 (407) release. For address, see inside front cover.
2. Excludes loans to commercial banks in the United States.
3. Includes nonfinancial commercial paper held.
4. United States includes the 50 states and the District of Columbia.

1.24 MAJOR NONDEPOSIT FUNDS OF COMMERCIAL BANKS[1]

Monthly averages, billions of dollars

Source	1989				1990							
	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May^r	June^r	July^r	Aug.
Seasonally adjusted												
1 Total nondeposit funds[2]	247.0	254.7	256.5	257.3^r	258.1^r	267.6^r	271.4^r	268.7^r	270.5	271.9	283.3	282.9
2 Net balances due to related foreign offices[3]	11.1	10.2	8.6	7.4	10.9	14.7	17.3	16.6^r	24.4	14.7	16.7	16.7
3 Borrowings from other than commercial banks in United States[4]	235.9	244.5	247.9	249.9^r	247.2^r	252.9^r	254.1^r	252.1^r	246.1	257.2	266.6	266.2
4 Domestically chartered banks	189.9	196.5	198.3	200.4	196.9	201.4	198.5	194.2	189.1	199.1	205.0	203.8
5 Foreign-related banks	46.0	48.0	49.6	49.4^r	50.4^r	51.5^r	55.6^r	58.0^r	57.0	58.1	61.6	62.4
Not seasonally adjusted												
6 Total nondeposit funds[2]	243.6	249.9	255.4	250.7^r	254.6^r	270.8^r	277.2^r	271.6^r	279.1	276.8	278.7	282.0
7 Net balances due to related foreign offices[3]	11.7	9.6	9.7	9.7	10.5	14.3	16.2	14.3^r	26.3	15.4	14.7	16.9
8 Domestically chartered banks	−14.3	−15.0	−15.5	−19.2	−14.5	−11.1	−11.5	−10.7	−1.4	−6.3	−6.1	−3.6
9 Foreign-related banks	26.0	24.6	25.2	28.9	25.0	25.4	27.7	25.0	27.7	21.7	20.8	20.6
10 Borrowings from other than commercial banks in United States[4]	231.9	240.3	245.8	241.0^r	244.1^r	256.4^r	261.1^r	257.2^r	252.8	261.4	264.0	265.1
11 Domestically chartered banks	186.9	193.5	198.5	194.0	192.9	203.3	204.3	198.2	194.9	200.9	202.0	203.3
12 Federal funds and security RP borrowings[5]	183.9	190.4	196.1	191.5	190.3	199.6	199.9	194.5	191.5	197.7	199.1	199.6
13 Other[6]	3.0	3.0	2.4	2.5	2.7	3.7	4.5	3.7	3.4	3.2	2.9	3.6
14 Foreign-related banks[6]	45.0	46.8	47.2	47.0^r	51.2^r	53.1^r	56.8^r	59.0^r	57.9	60.6	62.0	61.8
MEMO												
Gross large time deposits[7]												
15 Seasonally adjusted	460.0	461.4	464.0	464.3	462.7	460.6	457.3	455.1	454.7	452.7	454.0	450.8
16 Not seasonally adjusted	461.5	462.6	464.4	462.7	460.4	460.3	460.2	455.1	455.2	452.2	451.8	451.4
U.S. Treasury demand balances at commercial banks[8]												
17 Seasonally adjusted	22.8	21.5	20.4	21.1	20.2	17.8	19.2	21.2	18.6	20.4	14.9	33.2
18 Not seasonally adjusted	24.9	20.6	14.7	19.6	23.2	22.0	16.7	20.0	25.2	20.9	15.2	23.5

1. Data have been revised because of benchmarking and seasonal adjustment revisions beginning January 1973. Commercial banks are those in the 50 states and the District of Columbia with national or state charters plus agencies and branches of foreign banks, New York investment companies majority owned by foreign banks, and Edge Act corporations owned by domestically chartered and foreign banks.

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

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

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

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

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

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

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

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

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

Billions of dollars

Account	1989			1990							
	Oct.[r]	Nov.[r]	Dec.[r]	Jan.[r]	Feb.[r]	Mar.[r]	Apr.[r]	May[r]	June[r]	July[r]	Aug.
ALL COMMERCIAL BANKING INSTITUTIONS[2]											
1 Loans and securities	2,739.3	2,774.7	2,780.1	2,796.0	2,809.2	2,821.2	2,838.3	2,845.9	2,870.9	2,876.4	2,895.8
2 Investment securities	546.8	551.0	550.5	563.9	571.2	576.8	582.5	585.9	587.7	587.5	595.8
3 U.S. government securities	371.6	376.5	375.1	389.8	398.0	405.9	412.6	416.9	419.9	420.1	427.1
4 Other	175.2	174.5	175.5	174.1	173.2	170.8	169.9	169.0	167.8	167.4	168.7
5 Trading account assets	25.8	26.8	22.8	31.8	30.2	26.0	23.9	21.4	23.7	27.2	29.2
6 Total loans	2,166.7	2,196.9	2,206.8	2,200.4	2,207.8	2,218.5	2,231.9	2,238.7	2,259.6	2,261.6	2,270.7
7 Interbank loans	169.3	185.4	187.0	187.4	187.5	191.6	190.6	192.8	202.7	199.9	198.4
8 Loans excluding interbank	1,997.4	2,011.6	2,019.8	2,013.0	2,020.3	2,026.9	2,041.3	2,045.9	2,056.9	2,061.7	2,072.4
9 Commercial and industrial	638.7	641.6	643.2	636.4	642.4	646.2	653.3	650.9	654.1	648.7	646.3
10 Real estate	749.3	758.3	762.8	767.6	774.0	781.6	786.7	796.7	801.3	810.2	813.3
11 Individual	374.0	376.5	382.3	381.7	378.6	375.5	377.5	377.3	378.5	377.7	382.2
12 All other	235.3	235.2	231.5	227.3	225.3	223.6	223.8	220.9	222.9	225.0	230.6
13 Total cash assets	209.6	231.5	255.7	218.9	224.9	212.9	211.6	239.9	222.9	214.1	211.0
14 Reserves with Federal Reserve Banks	28.4	38.7	42.8	24.6	29.5	32.0	31.6	27.8	32.0	30.1	30.3
15 Cash in vault	27.8	30.7	31.6	28.0	27.8	27.7	28.5	29.9	28.9	28.7	30.2
16 Cash items in process of collection	77.5	84.4	99.1	89.9	91.6	80.0	80.0	100.6	86.1	79.5	77.4
17 Demand balances at U.S. depository institutions	28.2	28.5	32.3	29.6	30.8	27.4	26.3	32.0	27.6	27.4	27.5
18 Other cash assets	47.6	49.2	49.9	46.8	45.2	45.8	45.2	49.7	48.3	48.4	45.6
19 Other assets	206.3	203.3	209.9	218.1	212.9	209.1	206.0	199.5	211.1	207.1	216.3
20 Total assets/total liabilities and capital	**3,155.2**	**3,209.5**	**3,245.8**	**3,233.0**	**3,247.0**	**3,243.2**	**3,255.9**	**3,285.4**	**3,304.9**	**3,297.5**	**3,323.1**
21 Deposits	2,198.2	2,225.7	2,270.0	2,247.1	2,262.4	2,251.3	2,257.3	2,293.1	2,280.6	2,289.7	2,295.2
22 Transaction deposits	585.5	600.8	642.0	612.2	616.6	594.3	601.0	618.4	599.6	591.5	590.5
23 Savings deposits	525.7	535.7	538.2	540.8	546.3	551.8	548.7	554.4	556.3	561.3	565.7
24 Time deposits	1,086.9	1,089.2	1,089.7	1,094.2	1,099.5	1,105.3	1,107.5	1,120.3	1,124.7	1,136.8	1,139.0
25 Borrowings	528.7	543.9	531.0	552.8	542.2	545.4	564.7	548.2	578.7	564.4	576.2
26 Other liabilities	219.3	229.5	233.5	221.8	229.3	230.8	218.0	227.8	227.2	224.3	231.7
27 Residual (assets less liabilities)	209.0	210.4	211.3	211.4	213.2	215.7	215.8	216.2	218.4	219.1	220.0
MEMO											
28 U.S. government securities (including trading account)	390.4	396.2	391.0	414.7	421.2	423.8	427.8	430.0	433.8	438.9	444.3
29 Other securities (including trading account)	182.2	181.6	182.3	180.9	180.2	179.0	178.6	177.2	177.6	175.9	180.8
DOMESTICALLY CHARTERED COMMERCIAL BANKS[3]											
30 Loans and securities	2,514.1	2,534.1	2,542.4	2,557.9	2,566.3	2,570.5	2,581.8	2,585.1	2,602.9	2,610.3	2,627.6
31 Investment securities	522.7	524.6	524.4	536.2	543.1	547.2	551.5	557.5	557.3	556.8	565.5
32 U.S. government securities	360.2	363.9	363.8	376.6	384.4	391.2	397.6	404.0	405.5	405.5	413.0
33 Other	162.5	160.7	160.5	159.6	158.7	156.0	154.0	153.5	151.9	151.4	152.5
34 Trading account assets	25.8	26.8	22.8	31.8	30.2	26.0	23.9	21.4	23.7	27.2	29.2
35 Total loans	1,965.6	1,982.7	1,995.2	1,989.9	1,993.0	1,997.3	2,006.4	2,006.2	2,021.9	2,026.3	2,032.9
36 Interbank loans	139.2	147.3	150.3	150.0	148.5	148.3	149.1	144.4	153.6	151.6	151.3
37 Loans excluding interbank	1,826.3	1,835.5	1,844.9	1,839.9	1,844.6	1,849.0	1,857.3	1,861.7	1,868.3	1,874.7	1,881.6
38 Commercial and industrial	516.1	516.7	517.7	513.8	518.3	519.4	523.4	520.4	519.2	516.9	513.4
39 Real estate	721.4	728.6	733.0	735.9	741.1	747.8	751.8	761.2	765.3	773.5	776.1
40 Individual	374.0	376.5	382.3	381.7	378.6	375.5	377.5	377.3	378.5	377.7	382.2
41 All other	214.8	213.7	211.8	208.5	206.5	206.3	204.6	202.8	205.3	206.7	209.9
42 Total cash assets	187.6	205.5	230.5	195.7	199.9	187.3	186.8	210.7	194.8	186.5	184.2
43 Reserves with Federal Reserve Banks	26.7	37.9	41.7	22.7	27.5	29.8	29.8	26.6	30.8	28.8	28.1
44 Cash in vault	27.8	30.7	31.5	28.0	27.8	27.7	28.5	29.8	28.8	28.7	30.2
45 Cash items in process of collection	76.3	82.5	97.7	88.5	90.2	78.5	78.7	99.2	84.1	78.1	75.8
46 Demand balances at U.S. depository institutions	26.3	26.6	30.4	27.6	28.7	25.6	24.6	30.0	25.9	25.6	25.1
47 Other cash assets	30.5	27.9	29.2	28.9	25.7	25.7	25.2	25.1	25.2	25.3	25.0
48 Other assets	129.6	136.0	140.7	143.6	140.2	136.4	133.8	136.3	141.8	138.4	144.3
49 Total assets/liabilities and capital	**2,831.3**	**2,875.7**	**2,913.6**	**2,897.2**	**2,906.5**	**2,894.2**	**2,902.4**	**2,932.0**	**2,939.6**	**2,935.3**	**2,956.1**
50 Deposits	2,115.8	2,143.3	2,186.8	2,164.5	2,179.9	2,169.4	2,174.6	2,210.6	2,197.8	2,207.7	2,213.3
51 Transaction deposits	576.0	591.2	632.1	601.9	606.3	584.5	591.2	608.3	589.0	581.1	579.9
52 Savings deposits	523.1	532.9	535.4	537.9	543.4	548.8	545.7	551.4	553.3	558.3	562.7
53 Time deposits	1,016.8	1,019.2	1,019.3	1,024.7	1,030.2	1,036.1	1,037.6	1,050.9	1,055.4	1,068.2	1,070.7
54 Borrowings	393.8	405.2	398.4	405.3	394.2	393.1	405.4	391.7	409.9	395.6	403.5
55 Other liabilities	116.5	120.6	120.9	119.9	123.1	119.9	110.5	117.3	117.2	116.8	123.2
56 Residual (assets less liabilities)	205.2	206.6	207.4	207.5	209.3	211.8	212.0	212.3	214.6	215.3	216.1
MEMO											
57 Real estate loans, revolving	48.4	49.2	50.0	51.1	51.4	52.0	53.1	54.0	55.0	56.1	57.4
58 Real estate loans, other	673.0	679.4	683.0	684.8	689.7	695.8	698.7	707.2	710.3	717.4	718.8

1. Data have been revised because of benchmarking beginning January 1989. Back data are available from the Banking and Monetary Statistics section, Board of Governors of the Federal Reserve System, Washington, D.C., 20551. These data also appear in the Board's weekly H.8 (510) release.

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

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

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

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

Millions of dollars, Wednesday figures

Account	1990								
	July 4	July 11	July 18	July 25	Aug. 1	Aug. 8	Aug. 15	Aug. 22	Aug. 29
1 Cash and balances due from depository institutions	125,786	109,748	107,704	105,938	123,886	106,361	119,362	107,130	103,510
2 **Total loans, leases, and securities, net**	**1,301,304[r]**	**1,295,270[r]**	**1,305,428[r]**	**1,301,031[r]**	**1,318,974**	**1,313,635**	**1,336,988**	**1,318,957**	**1,308,980**
3 U.S. Treasury and government agency	176,680	176,636	180,024	178,155	181,389	178,830	182,470	181,098	182,880
4 Trading account	16,182	16,123	19,744	18,727	19,705	16,508	19,683	17,478	17,153
5 Investment account	160,499	160,513	160,280	159,428	161,683	162,322	162,787	163,621	165,726
6 Mortgage-backed securities[2]	79,567[r]	79,914[r]	79,700[r]	79,797[r]	80,250	81,086	80,829	80,642	82,184
All other maturing in									
7 One year or less	21,934[r]	21,784[r]	21,251[r]	20,252[r]	19,816	18,706	18,500	18,408	18,429
8 Over one through five years	34,876[r]	34,892[r]	35,234[r]	35,642[r]	37,089	37,763	38,979	39,743	40,095
9 Over five years	24,121[r]	23,922[r]	24,095[r]	23,738[r]	24,528	24,767	24,478	24,827	25,018
10 Other securities	62,221	62,214	62,061	61,745	63,030	61,991	61,849	62,141	62,323
11 Trading account	1,149	1,061	830	709	1,813	708	772	981	946
12 Investment account	61,072	61,153	61,231	61,036	61,216	61,283	61,078	61,160	61,376
13 States and political subdivisions, by maturity	32,477	32,363	32,340	32,311	32,138	32,155	32,121	32,057	32,032
14 One year or less	3,466	3,529[r]	3,520[r]	3,531[r]	3,616	3,632	3,667	3,686	3,699
15 Over one year	29,011	28,834[r]	28,820[r]	28,780[r]	28,522	28,524	28,454	28,371	28,333
16 Other bonds, corporate stocks, and securities	28,595	28,790	28,891	28,725	29,079	29,128	28,957	29,103	29,345
17 Other trading account assets	7,847	8,232	7,995	7,800	8,103	9,388	10,257	9,769	10,723
18 Federal funds sold[3]	77,109	74,190	78,089	78,580	87,589	85,450	98,368	83,717	75,566
19 To commercial banks	58,799	55,242	56,283	56,049	59,363	56,821	68,717	55,767	51,126
20 To nonbank brokers and dealers in securities	13,948	14,640	17,196	17,967	22,540	22,973	23,528	22,373	19,439
21 To others	4,362	4,308	4,610	4,564	5,686	5,656	6,123	5,578	5,001
22 Other loans and leases, gross	1,016,702[r]	1,013,093[r]	1,016,445[r]	1,013,853[r]	1,017,802	1,016,867	1,022,975	1,021,122	1,016,607
23 Other loans, gross	990,008[r]	986,428[r]	989,577[r]	987,014[r]	991,008	990,065	996,133	994,211	989,527
24 Commercial and industrial	322,743[r]	321,643[r]	320,987[r]	319,455[r]	320,402	319,906	321,833	319,751	317,459
25 Bankers acceptances and commercial paper	1,598	1,557	1,604	1,596	1,549	1,612	1,698	1,609	1,563
26 All other	321,145[r]	320,085[r]	319,383[r]	317,859[r]	318,853	318,293	320,134	318,142	315,896
27 U.S. addressees	319,721[r]	318,553[r]	317,987[r]	316,407[r]	317,350	316,857	318,724	316,726	314,504
28 Non-U.S. addressees	1,424	1,532	1,396	1,452	1,503	1,436	1,411	1,416	1,392
29 Real estate loans	375,543[r]	376,161[r]	376,837[r]	377,444[r]	378,635	379,192	380,304	380,154	379,229
30 Revolving, home equity	30,168	30,325	30,446	30,459	30,643	30,751	30,923	31,085	31,252
31 All other	345,375[r]	345,836[r]	346,391[r]	346,985[r]	347,992	348,441	349,380	349,070	347,977
32 To individuals for personal expenditures	172,341	172,326	172,555	173,039	173,280	173,374	173,724	174,320	174,632
33 To depository and financial institutions	49,618	49,839	50,994	49,630	49,841	49,446	52,317	51,748	51,512
34 Commercial banks in the United States	21,947	21,704	23,087	23,044	21,915	21,781	23,071	23,499	23,996
35 Banks in foreign countries	4,318	4,236	4,081	3,539	3,957	3,650	4,921	4,907	4,158
36 Nonbank depository and other financial institutions	23,353	23,900	23,826	23,047	23,969	24,015	24,325	23,342	23,358
37 For purchasing and carrying securities	13,729	13,512	14,558	14,924	14,848	15,139	14,234	15,434	14,262
38 To finance agricultural production	6,128	6,160	6,167	6,174	6,140	6,157	6,178	6,103	6,085
39 To states and political subdivisions	23,182	22,869	22,788	22,712	22,658	22,633	22,560	22,528	22,454
40 To foreign governments and official institutions	1,439	1,477	1,532	1,455	1,480	1,409	1,591	1,404	1,449
41 All other	25,285	22,441	23,159	22,180	23,724	22,809	23,392	22,768	22,445
42 Lease financing receivables	26,694	26,666	26,868[r]	26,839[r]	26,794	26,802	26,842	26,911	27,080
43 LESS: Unearned income	4,431[r]	4,432[r]	4,446[r]	4,442	4,405	4,416	4,426	4,444	4,451
44 Loan and lease reserve[4]	34,825	34,664	34,740	34,661	34,534	34,476	34,505	34,446	34,668
45 Other loans and leases, net	977,446[r]	973,997[r]	977,259[r]	974,750[r]	978,862	977,975	984,044	982,231	977,488
46 All other assets	138,845[r]	135,176[r]	130,405[r]	128,356[r]	131,012	129,955	134,164	131,921	133,698
47 **Total assets**	**1,565,935[r]**	**1,540,193**	**1,543,536**	**1,535,326**	**1,573,872**	**1,549,951**	**1,590,514**	**1,558,008**	**1,546,188**
48 Demand deposits	249,546[r]	222,619[r]	225,342[r]	215,038[r]	242,856	215,571	244,622	213,516	213,287
49 Individuals, partnerships, and corporations	199,839[r]	179,914[r]	178,207[r]	171,276[r]	190,311	175,623	195,530	172,258	171,109
50 States and political subdivisions	6,767	5,732	6,222	6,280	7,393	5,610	6,081	5,956	5,404
51 U.S. government	2,164	3,108	4,258	2,660	2,414	1,392	2,608	1,261	1,440
52 Depository institutions in the United States	24,938	19,891	20,709	20,003	25,325	18,683	24,929	18,604	18,840
53 Banks in foreign countries	6,312	5,521	5,902	5,611	6,650	4,968	6,231	6,363	6,202
54 Foreign governments and official institutions	706	681	702	586	961	681	1,375	857	809
55 Certified and officers' checks	8,820	7,772	9,342	8,622	9,801	8,614	7,868	8,216	9,482
56 Transaction balances other than demand deposits	83,192	79,539	78,418	77,466	80,364	80,295	79,805	78,324	77,478
57 Nontransaction balances	753,626	753,295	753,090	752,162	753,999	754,155	758,425	753,907	752,688
58 Individuals, partnerships, and corporations	716,723	716,334	716,364	715,254	716,754	717,231	721,393	716,765	715,236
59 States and political subdivisions	29,277	29,319	29,083	29,045	29,116	29,218	29,304	29,359	29,676
60 U.S. government	829	829	841	841	1,168	881	887	884	888
61 Depository institutions in the United States	6,299	6,330	6,336	6,552	6,488	6,368	6,366	6,446	6,429
62 Foreign governments, official institutions, and banks	497	482	465	470	473	456	475	452	459
63 Liabilities for borrowed money	285,040[r]	291,164	291,396	293,387	297,080	299,683	310,734	312,008	299,696
64 Borrowings from Federal Reserve Banks	20	0	0	1,490	0	100	785	6,837	0
65 Treasury tax-and-loan notes	2,313	3,923	7,953	12,030[r]	10,007	12,448	14,864	21,735	22,394
66 All other liabilities for borrowed money[5]	282,706[r]	287,242	283,443	279,866[r]	287,072	287,136	295,085	283,436	277,302
67 Other liabilities and subordinated notes and debentures	90,390	88,670	90,656	92,807	94,968	95,288	92,234	95,175	97,744
68 **Total liabilities**	**1,461,793[r]**	**1,435,288[r]**	**1,438,903[r]**	**1,430,860[r]**	**1,469,265**	**1,444,992**	**1,485,820**	**1,452,930**	**1,440,893**
69 Residual (total assets minus total liabilities)[6]	104,142[r]	104,905[r]	104,633[r]	104,466[r]	104,607	104,959	104,694	105,078	105,294
MEMO									
70 Total loans and leases (gross) and investments adjusted[7]	1,259,814[r]	1,257,420[r]	1,265,244[r]	1,261,041[r]	1,276,635	1,273,925	1,284,131	1,278,582	1,272,977
71 Total loans and leases (gross) adjusted[7]	1,013,065[r]	1,010,338[r]	1,015,164[r]	1,013,340[r]	1,024,113	1,023,715	1,029,555	1,025,573	1,017,051
72 Time deposits in amounts of $100,000 or more	214,143	214,470	214,936	214,729	214,461	213,908	213,799	212,889	212,279
73 U.S. Treasury securities maturing in one year or less	19,280	20,212	20,679	19,707	19,416	18,394	17,858	17,455	17,475
74 Loans sold outright to affiliates—total[8]	300	290	298	298	253	256	254	257	266
75 Commercial and industrial	144	140	145	145	137	140	138	135	144
76 Other	155	150	153	154	116	116	116	122	122
77 Nontransaction savings deposits (including MMDAs)	287,077	286,132	285,271[r]	284,606	286,787	287,356	291,492	287,758	287,387

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. Includes U.S. government-issued or guaranteed certificates of participation in pools of residential mortgages.
3. Includes securities purchased under agreements to resell.
4. Includes allocated transfer risk reserve.
5. Includes federal funds purchased and securities sold under agreements to repurchase; for information on these liabilities at banks with assets of $1 billion or more on Dec. 31, 1977, see table 1.13.
6. This is not a measure of equity capital for use in capital-adequacy analysis or for other analytic uses.
7. Exclusive of loans and federal funds transactions with domestic commercial banks.
8. 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	1990								
	July 4	July 11	July 18	July 25	Aug. 1	Aug. 8	Aug. 15	Aug. 22	Aug. 29
1 Cash balances due from depository institutions	24,753	22,098	22,354	23,013	30,759	23,366	30,190	28,032	21,286
2 **Total loans, leases, and securities, net**[2]	**219,993**	**215,469**	**220,749**	**220,615**	**228,069**	**225,680**	**236,058**	**230,061**	**222,178**
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	22,309	22,592	22,668	22,672	22,646	22,684	23,046	22,896	23,381
6 Mortgage-backed securities[4]	11,242	11,307	11,289	11,294	11,294	11,471	11,492	10,890	11,329
All other maturing in									
7 One year or less	3,033	3,134	3,226	3,226	3,180	3,070	3,270	3,272	3,265
8 Over one through five years	3,776	3,832	3,834	3,812	3,810	3,805	3,924	4,488	4,545
9 Over five years	4,259	4,319	4,319	4,339	4,362	4,338	4,360	4,246	4,241
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	12,960	13,174	13,143	13,199	13,333	13,454	13,258	13,424	13,576
13 States and political subdivisions, by maturity	6,199	6,174	6,167	6,210	6,207	6,194	6,209	6,163	6,116
14 One year or less	547	547	552	596	598	596	628	628	615
15 Over one year	5,652	5,627	5,616	5,614	5,609	5,597	5,581	5,536	5,500
16 Other bonds, corporate stocks, and securities	6,761	7,001	6,976	6,989	7,126	7,260	7,050	7,261	7,461
17 Other trading account assets[3]	0	0	0	0	0	0	0	0	0
Loans and leases									
18 Federal funds sold[5]	21,209	17,345	19,842	21,002	26,368	24,288	32,245	24,420	19,855
19 To commercial banks	13,415	9,769	10,500	10,777	13,072	12,088	17,834	12,000	9,507
20 To nonbank brokers and dealers in securities	5,526	5,401	7,150	7,913	10,470	9,443	11,882	9,898	8,026
21 To others	2,267	2,175	2,192	2,312	2,826	2,756	2,528	2,523	2,322
22 Other loans and leases, gross	179,997	178,575	181,267	179,905	181,599	181,011	183,307	185,130	181,451
23 Other loans, gross	174,480	173,076	175,668	174,320	176,031	175,422	177,680	179,436	175,766
24 Commercial and industrial	56,943	57,037	57,678	57,293	58,469	58,286	59,463	58,995	58,288
25 Bankers acceptances and commercial paper	108	116	111	116	122	117	128	130	124
26 All other	56,835	56,921	57,567	57,177	58,346	58,169	59,335	58,866	58,163
27 U.S. addressees	56,153	56,140	56,876	56,470	57,600	57,457	58,687	58,218	57,514
28 Non-U.S. addressees	682	781	691	706	747	713	648	647	649
29 Real estate loans	62,603	62,639	62,901	62,753	62,859	63,016	62,975	62,816	62,463
30 Revolving, home equity	4,091	4,093	4,098	4,115	4,125	4,132	4,141	4,145	4,151
31 All other	58,512	58,546	58,803	58,638	58,734	58,884	58,834	58,672	58,312
32 To individuals for personal expenditures	19,747	19,794	19,819	19,883	19,771	19,731	19,829	19,893	19,863
33 To depository and financial institutions	18,948	18,925	19,157	18,830	18,689	17,951	19,865	21,010	19,763
34 Commercial banks in the United States	7,817	7,342	7,564	7,761	7,251	6,863	7,537	8,876	8,439
35 Banks in foreign countries	3,260	3,354	3,168	2,765	2,973	2,736	3,809	3,961	3,246
36 Nonbank depository and other financial institutions	7,871	8,228	8,424	8,304	8,465	8,352	8,519	8,172	8,078
37 For purchasing and carrying securities	4,421	4,117	4,977	5,101	5,327	5,622	4,490	6,039	4,990
38 To finance agricultural production	140	135	145	133	136	146	157	147	146
39 To states and political subdivisions	4,933	4,859	4,822	4,779	4,734	4,720	4,668	4,648	4,592
40 To foreign governments and official institutions	272	330	396	310	342	267	448	267	339
41 All other	6,472	5,238	5,772	5,238	5,704	5,683	5,784	5,620	5,322
42 Lease financing receivables	5,516	5,499	5,599	5,585	5,568	5,589	5,627	5,694	5,685
43 LESS: Unearned income	1,806	1,812	1,834	1,837	1,826	1,829	1,835	1,858	1,869
44 Loan and lease reserve	14,676	14,405	14,337	14,326	14,051	13,928	13,963	13,951	14,218
45 Other loans and leases, net[6]	163,515	162,358	165,096	163,741	165,722	165,254	167,509	169,320	165,364
46 All other assets[7]	56,619	56,792	58,965	56,114	57,946	54,729	58,062	57,591	59,099
47 **Total assets**	**301,366**	**294,360**	**302,068**	**299,742**	**316,774**	**303,775**	**324,311**	**315,683**	**302,562**
Deposits									
48 Demand deposits	53,687	45,506	49,478	45,401	55,134	44,751	58,835	47,894	45,519
49 Individuals, partnerships, and corporations	39,732	33,028	33,638	31,096	36,853	32,363	41,742	33,485	30,876
50 States and political subdivisions	1,025	629	911	736	813	614	657	655	466
51 U.S. government	214	574	683	441	288	197	338	152	186
52 Depository institutions in the United States	4,782	4,183	5,154	5,188	7,806	3,900	7,722	4,628	4,571
53 Banks in foreign countries	5,046	4,334	4,628	4,302	5,330	3,728	4,934	5,154	5,036
54 Foreign governments and official institutions	560	551	554	448	836	553	1,216	738	681
55 Certified and officers' checks	2,329	2,206	3,911	3,191	3,209	3,397	2,226	3,082	3,703
56 Transaction balances other than demand deposits (ATS, NOW, Super NOW, telephone transfers)	9,040	8,753	8,660	8,514	8,832	8,737	8,779	8,571	8,489
57 Nontransaction balances	118,212	116,805	117,186	116,567	117,472	116,647	119,678	116,813	116,135
58 Individuals, partnerships, and corporations	109,912	108,477	108,938	108,271	109,254	108,521	111,570	108,796	108,150
59 States and political subdivisions	6,171	6,179	6,117	6,157	6,058	6,022	6,012	5,945	5,891
60 U.S. government	36	41	40	39	37	37	41	41	41
61 Depository institutions in the United States	1,883	1,906	1,902	1,900	1,929	1,877	1,856	1,856	1,870
62 Foreign governments, official institutions, and banks	209	202	189	199	194	189	199	175	182
63 Liabilities for borrowed money	62,600	66,092	66,347	67,419	72,464	69,674	76,139	79,253	70,446
64 Borrowings from Federal Reserve Banks	0	0	0	1,000	0	0	0	6,232	0
65 Treasury tax-and-loan notes	411	747	1,691	2,534	2,045	2,640	3,040	4,688	4,638
66 All other liabilities for borrowed money[8]	62,188	65,345	64,656	63,885	70,419	67,033	73,099	68,332	65,807
67 Other liabilities and subordinated notes and debentures	32,726	31,796	35,205	36,532	37,171	38,050	35,298	37,610	36,612
68 **Total liabilities**	**276,265**	**268,952**	**276,876**	**274,433**	**291,074**	**277,859**	**298,730**	**290,143**	**277,201**
69 Residual (total assets minus total liabilities)[9]	25,100	25,408	25,191	25,309	25,700	25,916	25,580	25,541	25,362
MEMO									
70 Total loans and leases (gross) and investments adjusted[2,10]	215,242	214,575	218,856	218,241	223,623	222,486	226,484	224,995	220,317
71 Total loans and leases (gross) adjusted[10]	179,972	178,809	183,045	182,369	187,644	186,348	190,180	188,675	183,360
72 Time deposits in amounts of $100,000 or more	39,934	39,178	39,619	39,666	39,617	39,215	39,628	38,643	38,116
73 U.S. Treasury securities maturing in one year or less	2,301	2,611	2,891	2,897	2,683	2,394	2,516	2,524	2,644

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	1990								
	July 4r	July 11r	July 18r	July 25r	Aug. 1	Aug. 8	Aug. 15	Aug. 22	Aug. 29
1 Cash and due from depository institutions	13,731	14,202	13,810	14,408	13,975	15,706	14,755	15,019	14,262
2 Total loans and securities	156,844	156,591	156,167	155,717	154,212	157,005	158,374	160,027	158,445
3 U.S. Treasury and government agency securities	10,198	10,112	10,166	10,642	10,629	10,189	10,524	10,591	10,258
4 Other securities	7,192	7,203	7,061	7,160	7,217	7,292	7,263	7,272	7,266
5 Federal funds sold[2]	9,041	10,376	8,369	8,771	7,157	7,994	8,053	8,418	8,267
6 To commercial banks in the United States	7,740	9,310	7,053	7,674	6,126	6,788	6,996	7,264	7,290
7 To others	1,301	1,066	1,316	1,097	1,031	1,206	1,057	1,154	977
8 Other loans, gross	130,413	128,900	130,571	129,144	129,209	131,530	132,534	133,746	132,654
9 Commercial and industrial	77,378	75,817	76,484	75,167	75,351	75,773	77,540	77,064	76,032
10 Bankers acceptances and commercial paper	2,648	2,435	2,108	1,995	2,129	2,234	2,282	2,149	2,358
11 All other	74,730	73,382	74,376	73,172	73,222	73,539	75,258	74,915	73,674
12 U.S. addressees	73,382	72,089	73,047	71,860	71,908	72,212	73,913	73,531	72,340
13 Non-U.S. addressees	1,348	1,293	1,329	1,312	1,314	1,327	1,345	1,384	1,334
14 Loans secured by real estate[3]	23,450	23,569	23,684	23,831	24,061	24,169	24,149	24,214	24,276
15 To financial institutions	26,053	26,019	26,342	26,476	26,465	27,580	26,425	27,237	27,831
16 Commercial banks in the United States	19,983	19,714	20,240	20,534	20,504	21,457	20,239	20,918	20,839
17 Banks in foreign countries	1,232	1,353	1,244	1,117	1,028	1,163	1,320	1,503	1,923
18 Nonbank financial institutions	4,838	4,952	4,858	4,825	4,933	4,960	4,866	4,816	5,069
19 To foreign governments and official institutions	225	223	212	212	208	227	209	208	214
20 For purchasing and carrying securities	1,704	1,456	2,178	1,831	1,663	2,174	2,887	3,473	2,892
21 All other[3]	1,603	1,816	1,671	1,627	1,461	1,607	1,324	1,550	1,409
22 Other assets (claims on nonrelated parties)	34,000	33,561	33,682	33,885	33,752	33,783	33,249	33,257	32,824
23 Net due from related institutions	14,918	14,218	14,180	12,423	17,175	15,693	19,522	14,844	14,157
24 Total assets	219,492	218,573	217,839	216,435	219,118	222,188	225,902	223,146	219,690
25 *Deposits or credit balances due to other* than directly related institutions	50,005	49,923	50,233	49,155	48,819	49,237	49,467	49,701	48,813
26 Transaction accounts and credit balances[4]	4,207	4,014	4,323	3,999	4,348	4,332	4,465	4,321	4,125
27 Individuals, partnerships, and corporations	2,818	2,729	2,820	2,717	2,840	2,778	2,864	2,908	2,796
28 Other	1,389	1,285	1,503	1,282	1,508	1,554	1,601	1,413	1,329
29 Nontransaction accounts[5]	45,798	45,909	45,910	45,156	44,471	44,905	45,002	45,380	44,688
30 Individuals, partnerships, and corporations	38,199	38,086	38,124	37,154	36,600	36,614	36,241	35,968	35,812
31 Other	7,599	7,823	7,786	8,002	7,871	8,291	8,761	9,412	8,876
32 Borrowings from other than directly related institutions	108,974	108,563	111,500	106,600	111,850	112,504	116,905	114,867	109,576
33 Federal funds purchased[6]	52,086	51,954	53,016	50,036	56,535	51,947	56,843	53,245	49,921
34 From commercial banks in the United States	25,766	23,474	26,559	23,895	29,059	25,886	32,304	27,323	25,291
35 From others	26,320	28,480	26,457	26,141	27,476	26,061	24,539	25,922	24,630
36 Other liabilities for borrowed money	56,888	56,609	58,484	56,564	55,315	60,557	60,062	61,622	59,655
37 To commercial banks in the United States	32,319	32,032	32,432	32,542	31,749	33,314	34,374	33,980	33,679
38 To others	24,569	24,577	26,052	24,022	23,566	27,243	25,688	27,642	25,976
39 Other liabilities to nonrelated parties	32,970	32,750	32,865	32,737	33,773	33,273	33,996	33,118	32,946
40 Net due to related institutions	27,542	27,337	23,239	27,943	24,674	27,174	25,532	25,460	28,354
41 Total liabilities	219,492	218,573	217,839	216,435	219,118	222,188	225,902	223,146	219,690
MEMO									
42 Total loans (gross) and securities adjusted[7]	129,121	127,567	128,874	127,509	127,582	128,760	131,139	131,845	130,316
43 Total loans (gross) adjusted[7]	111,731	110,252	111,647	109,707	109,736	111,279	113,352	113,982	112,792

1. Effective Jan. 4, 1989, the reporting panel includes a new group of large U.S. branches and agencies of foreign banks. Earlier data included 65 U.S. branches and agencies of foreign banks that included those branches and agencies with assets of $750 million or more on June 30, 1980, plus those branches and agencies that had reached the $750 million asset level on Dec. 31, 1984. These data also appear in the Board's H.4.2 (504) release. For address, see inside front cover.
2. Includes securities purchased under agreements to resell.
3. Effective Jan. 4, 1989, loans secured by real estate are being reported as a separate component of Other loans, gross. Formerly, these loans were included in "All other", line 21.
4. Includes credit balances, demand deposits, and other checkable deposits.
5. Includes savings deposits, money market deposit accounts, and time deposits.
6. Includes securities sold under agreements to repurchase.
7. Exclusive of loans to and federal funds sold to commercial banks in the United States.

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

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

Type of holder	Commercial banks									
	1985 Dec.	1986 Dec.	1987 Dec.	1988 Dec.	1989				1990	
					Mar.	June	Sept.	Dec.	Mar.	June
1 **All holders—Individuals, partnerships, and corporations**	**321.0**	**363.6**	**343.5**	**354.7**	**330.4**	**329.3**	**337.3**	**352.2**	**328.7**	**334.3r**
2 Financial business	32.3	41.4	36.3	38.6	36.3	33.0	33.7	33.8	34.1	34.9r
3 Nonfinancial business	178.5	202.0	191.9	201.2	182.2	185.9	190.4	202.5	183.3	186.5r
4 Consumer	85.5	91.1	90.0	88.3	87.4	86.6	87.9	90.3	86.6	86.4r
5 Foreign	3.5	3.3	3.4	3.7	3.7	2.9	2.9	3.1	3.0	3.1r
6 Other	21.2	25.8	21.9	22.8	20.7	21.0	22.4	22.5	21.7	23.5r
	Weekly reporting banks									
	1985 Dec.	1986 Dec.	1987 Dec.	1988 Dec.	1989				1990	
					Mar.	June	Sept.	Dec.	Mar.	June
7 **All holders—Individuals, partnerships, and corporations**	**168.6**	**195.1**	**183.8**	**198.3**	**181.9**	**182.2**	**186.6**	**196.7**	**183.7**	**186.3**
8 Financial business	25.9	32.5	28.6	30.5	27.2	25.4	26.3	27.6	25.6	25.0
9 Nonfinancial business	94.5	106.4	100.0	108.7	98.6	99.8	101.6	108.8	100.1	101.7
10 Consumer	33.2	37.5	39.1	42.6	41.1	42.4	43.0	44.1	42.4	43.3
11 Foreign	3.1	3.3	3.3	3.6	3.3	2.9	2.8	3.0	2.8	2.9
12 Other	12.0	15.4	12.7	12.9	11.7	11.7	12.9	13.2	12.8	13.3

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.

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.

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.

3. 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	1985 Dec.	1986 Dec.	1987 Dec.	1988 Dec.	1989 Dec.	1990 Feb.	1990 Mar.	1990 Apr.	1990 May	1990 June[r]	1990 July
	Commercial paper (seasonally adjusted unless noted otherwise)										
1 All issuers	**298,779**	**329,991**	**358,056**	**457,297**	**529,055**	**540,148**	**546,786**	**544,481**	**538,686**	**537,023**	**545,849**
Financial companies[1]											
Dealer-placed paper[2]											
2 Total	78,443	101,072	102,844	160,094	187,084	185,391	184,097	185,107	186,155	191,463	199,466
3 Bank-related (not seasonally adjusted)[3]	1,602	2,265	1,428	1,248	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Directly placed paper[4]											
4 Total	135,320	151,820	173,980	194,537	212,210	215,650	215,501	213,843	209,203	202,101	202,829
5 Bank-related (not seasonally adjusted)[3]	44,778	40,860	43,173	43,155	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
6 Nonfinancial companies[5]	85,016	77,099	81,232	102,666	129,761	139,107	147,188	145,531	143,328	143,459	143,554
	Bankers dollar acceptances (not seasonally adjusted)[6]										
7 Total	**68,413**	**64,974**	**70,565**	**66,631**	**62,972**	**57,852**	**55,865**	**53,945**	**54,766**	**53,750**	**52,006**
Holder											
8 Accepting banks	11,197	13,423	10,943	9,086	9,433	10,351	9,574	9,200	9,000	9,972	9,628
9 Own bills	9,471	11,707	9,464	8,022	8,510	8,907	8,386	7,850	7,632	8,639	8,395
10 Bills bought	1,726	1,716	1,479	1,064	924	1,444	1,188	1,350	1,368	1,332	1,233
Federal Reserve Banks											
11 Own account	0	0	0	0	0	0	0	0	0	0	0
12 Foreign correspondents	937	1,317	965	1,493	1,066	1,123	1,180	1,141	1,291	1,507	1,571
13 Others	56,279	50,234	58,658	56,052	52,473	46,379	45,111	43,604	44,475	42,271	40,806
Basis											
14 Imports into United States	15,147	14,670	16,483	14,984	15,651	14,522	14,418	13,413	13,993	14,801	13,691
15 Exports from United States	13,204	12,960	15,227	14,410	13,683	12,567	12,161	12,610	12,727	12,511	12,186
16 All other	40,062	37,344	38,855	37,237	33,638	30,764	29,286	27,922	28,046	26,438	26,129

1. Institutions engaged primarily in activities such as, but not limited to, commercial savings, and mortgage banking; sales, personal, and mortgage financing; factoring, finance leasing, and other business lending; insurance underwriting; and other investment activities.
2. Includes all financial company paper sold by dealers in the open market.
3. Beginning January 1989, bank-related series have been discontinued.
4. As reported by financial companies that place their paper directly with investors.
5. Includes public utilities and firms engaged primarily in such activities as communications, construction, manufacturing, mining, wholesale and retail trade, transportation, and services.
6. *Beginning* January 1988, the number of respondents in the bankers acceptance survey were reduced from 155 to 111 institutions—those with $100 million or more in total acceptances. The panel is revised every January and currently has about 100 respondents. The current reporting group accounts for over 90 percent of total acceptances activity.

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

Percent per year

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

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

1.35 INTEREST RATES Money and Capital Markets

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

Instrument	1987	1988	1989	1990								
				May	June	July	Aug.	Aug. 3	Aug. 10	Aug. 17	Aug. 24	Aug. 31
MONEY MARKET RATES												
1 Federal funds[1,2]	6.66	7.57	9.21	8.18	8.29	8.15	8.13	8.03	8.07	8.13	8.30	8.08
2 Discount window borrowing[1,2,3]	5.66	6.20	6.93	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00
Commercial paper[4,5]												
3 1-month	6.74	7.58	9.11	8.24	8.21	8.09	7.99	7.89	7.92	8.01	8.07	8.03
4 3-month	6.82	7.66	8.99	8.25	8.14	7.99	7.88	7.78	7.77	7.85	7.98	7.96
5 6-month	6.85	7.68	8.80	8.23	8.06	7.90	7.77	7.67	7.64	7.71	7.90	7.89
Finance paper, directly placed[4,5]												
6 1-month	6.61	7.44	8.99	8.14	8.12	7.99	7.88	7.79	7.78	7.89	7.95	7.94
7 3-month	6.54	7.38	8.72	8.12	8.01	7.87	7.69	7.62	7.57	7.68	7.79	7.78
8 6-month	6.37	7.14	8.16	8.04	7.79	7.66	7.46	7.42	7.40	7.38	7.53	7.56
Bankers acceptances[5,6]												
9 3-month	6.75	7.56	8.87	8.12	8.00	7.86	7.75	7.62	7.65	7.75	7.90	7.80
10 6-month	6.78	7.60	8.67	8.08	7.89	7.73	7.64	7.46	7.51	7.60	7.83	7.73
Certificates of deposit, secondary market[7]												
11 1-month	6.75	7.59	9.11	8.25	8.20	8.09	7.98	7.90	7.90	7.97	8.08	8.02
12 3-month	6.87	7.73	9.09	8.35	8.23	8.10	7.97	7.89	7.87	7.94	8.09	8.04
13 6-month	7.01	7.91	9.08	8.48	8.28	8.12	7.99	7.89	7.87	7.93	8.13	8.10
14 Eurodollar deposits, 3-month[8]	7.07	7.85	9.16	8.35	8.23	8.09	7.99	7.91	7.88	7.91	8.04	8.14
U.S. Treasury bills[5]												
Secondary market[9]												
15 3-month	5.78	6.67	8.11	7.74	7.73	7.62	7.45	7.43	7.37	7.45	7.54	7.46
16 6-month	6.03	6.91	8.03	7.76	7.63	7.52	7.38	7.29	7.29	7.37	7.49	7.44
17 1-year	6.33	7.13	7.92	7.73	7.53	7.40	7.26	7.16	7.18	7.22	7.39	7.32
Auction average[10]												
18 3-month	5.82	6.68	8.12	7.78	7.74	7.66	7.44	7.50	7.23	7.41	7.55	7.49
19 6-month	6.05	6.92	8.04	7.82	7.64	7.57	7.36	7.37	7.19	7.31	7.45	7.48
20 1-year	6.33	7.17	7.91	8.05	7.65	7.52	7.37	7.34	n.a.	n.a.	n.a.	7.40
CAPITAL MARKET RATES												
U.S. Treasury notes and bonds[11]												
Constant maturities[12]												
21 1-year	6.77	7.65	8.53	8.32	8.10	7.94	7.78	7.67	7.70	7.73	7.93	7.85
22 2-year	7.42	8.10	8.57	8.64	8.35	8.16	8.06	7.88	7.98	8.00	8.23	8.16
23 3-year	7.68	8.26	8.55	8.69	8.40	8.26	8.22	8.01	8.15	8.15	8.38	8.33
24 5-year	7.94	8.47	8.50	8.74	8.43	8.33	8.44	8.12	8.36	8.39	8.62	8.56
25 7-year	8.23	8.71	8.52	8.78	8.52	8.46	8.64	8.28	8.60	8.60	8.81	8.79
26 10-year	8.39	8.85	8.49	8.76	8.48	8.47	8.75	8.37	8.72	8.71	8.92	8.88
27 30-year	8.59	8.96	8.45	8.73	8.46	8.50	8.86	8.44	8.82	8.84	9.03	9.00
Composite[13]												
28 Over 10 years (long-term)	8.64	8.98	8.58	8.90	8.62	8.64	8.97	8.54	8.93	8.96	9.14	9.11
State and local notes and bonds												
Moody's series[14]												
29 Aaa	7.14	7.36	7.00	6.97	6.88	6.96	6.99	6.90	6.95	6.95	6.97	7.19
30 Baa	8.17	7.83	7.40	7.37	7.11	7.13	7.21	7.08	7.12	7.25	7.13	7.47
31 *Bond Buyer* series[15]	7.63	7.68	7.23	7.35	7.24	7.19	7.32	7.08	7.22	7.26	7.56	7.47
Corporate bonds												
Seasoned issues[16]												
32 All industries	9.91	10.18	9.66	9.87	9.67	9.65	9.84	9.59	9.77	9.80	9.94	9.98
33 Aaa	9.38	9.71	9.26	9.47	9.26	9.24	9.41	9.19	9.34	9.37	9.50	9.56
34 Aa	9.68	9.94	9.46	9.70	9.49	9.47	9.63	9.41	9.56	9.63	9.71	9.75
35 A	9.99	10.24	9.74	9.89	9.70	9.69	9.89	9.64	9.84	9.85	9.99	10.03
36 Baa	10.58	10.83	10.18	10.41	10.22	10.20	10.41	10.14	10.34	10.36	10.54	10.56
37 A-rated, recently offered utility bonds[17]	9.96	10.20	9.79	10.04	9.85	9.96	10.29	10.07	10.22	10.34	10.50	10.31
MEMO: Dividend/price ratio[18]												
38 Preferred stocks	8.37	9.23	9.05	9.04	9.01	8.94	8.97	8.90	8.99	8.87	9.05	9.02
39 Common stocks	3.08	3.64	3.45	3.44	3.36	3.37	3.65	3.43	3.61	3.59	3.85	3.76

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

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

1.36 STOCK MARKET Selected Statistics

Indicator	1987	1988	1989	1989 Dec.	1990 Jan.	1990 Feb.	1990 Mar.	1990 Apr.	1990 May	1990 June	1990 July	1990 Aug.
	Prices and trading (averages of daily figures)											
Common stock prices												
1 New York Stock Exchange (Dec. 31, 1965 = 50)	161.78	149.97	180.13	192.67	187.96	182.55	186.26	185.61	191.35	196.68	196.61	181.45
2 Industrial	195.31	180.83	228.04	230.12	225.79	220.60	226.14	226.86	234.85	242.42	245.86	226.73
3 Transportation	140.52	134.09	174.90	177.25	173.67	166.69	175.08	173.54	173.53	177.37	173.18	147.41
4 Utility	74.29	72.22	94.33	99.73	95.69	92.15	92.99	91.92	93.29	93.65	89.85	85.81
5 Finance	146.48	127.41	162.01	155.63	150.11	142.68	143.14	138.57	142.94	147.93	143.11	128.14
6 Standard & Poor's Corporation (1941-43 = 10)[1]	287.00	265.88	323.05	348.57	339.97	330.45	338.47	338.18	350.25	360.39	360.03	330.75
7 American Stock Exchange (Aug. 31, 1973 = 50)[2]	316.78	295.08	356.67	373.87	367.40	355.30	360.77	353.32	353.82	361.62	359.09	333.49
Volume of trading (thousands of shares)												
8 New York Stock Exchange	188,922	161,386	165,568	160,671	172,420	155,960	149,240	140,062	163,486	153,634	160,490	174,446
9 American Stock Exchange	13,832	9,955	13,124	13,298	14,831	13,735	15,133	13,961	14,005	12,421	12,529	15,881
	Customer financing (end-of-period balances, in millions of dollars)											
10 **Margin credit at broker-dealers[3]**	**31,990**	**32,740**	**34,320**	**34,320**	**32,640**	**31,480**	**30,760**	**31,060**	**31,600**	**31,720**	**32,130**	**30,350**
Free credit balances at brokers[4]												
11 Margin-account[5]	4,750	5,660	7,040	7,040	6,755	6,575	6,525	6,465	6,215	6,490	6,385	7,140
12 Cash-account	15,640	16,595	18,505	18,505	17,370	16,200	16,510	15,375	15,470	15,625	17,035	16,745

Indicator	Mar. 11, 1968	June 8, 1968	May 6, 1970	Dec. 6, 1971	Nov. 24, 1972	Jan. 3, 1974
	Margin requirements (percent of market value and effective date)[6]					
13 Margin stocks	70	80	65	55	65	50
14 Convertible bonds	50	60	50	50	50	50
15 Short sales	70	80	65	55	65	50

1. Effective July 1976, includes a new financial group, banks and insurance companies. With this change the index includes 400 industrial stocks (formerly 425), 20 transportation (formerly 15 rail), 40 public utility (formerly 60), and 40 financial.
2. Beginning July 5, 1983, the American Stock Exchange rebased its index effectively cutting previous readings in half.
3. Beginning July 1983, under the revised Regulation T, margin credit at broker-dealers includes credit extended against stocks, convertible bonds, stocks acquired through exercise of subscription rights, corporate bonds, and government securities. Separate reporting of data for margin stocks, convertible bonds, and subscription issues was discontinued in April 1984.
4. Free credit balances are in accounts with no unfulfilled commitments to the brokers and are subject to withdrawal by customers on demand.
5. New series beginning June 1984.
6. These regulations, adopted by the Board of Governors pursuant to the Securities Exchange Act of 1934, limit the amount of credit to purchase and carry "margin securities" (as defined in the regulations) when such credit is collateralized by securities. Margin requirements on securities other than options are the difference between the market value (100 percent) and the maximum loan value of collateral as prescribed by the Board. Regulation T was adopted effective Oct. 15, 1934; Regulation U, effective May 1, 1936; Regulation G, effective Mar. 11, 1968; and Regulation X, effective Nov. 1, 1971.

On Jan. 1, 1977, the Board of Governors for the first time established in Regulation T the initial margin required for writing options on securities, setting it at 30 percent of the current market-value of the stock underlying the option. On Sept. 30, 1985, the Board changed the required initial margin, allowing it to be the same as the option maintenance margin required by the appropriate exchange or self-regulatory organization; such maintenance margin rules must be approved by the Securities and Exchange Commission. Effective Jan. 31, 1986, the SEC approved new maintenance margin rules, permitting margins to be the price of the option plus 15 percent of the market value of the stock underlying the option.

1.37 SELECTED FINANCIAL INSTITUTIONS Selected Assets and Liabilities

Millions of dollars, end of period

Account	1987	1988	1989				1990					
			Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
	SAIF-insured institutions											
1 **Assets**	**1,250,855**	**1,350,500**	**1,298,682**	**1,286,710**	**1,277,191**	**1,249,055r**	**1,236,543r**	**1,225,221r**	**1,223,365r**	**1,210,424**		
2 Mortgages	721,593	764,513	755,427	748,780	745,091	733,729r	727,527r	721,513r	717,687r	715,488		
3 Mortgage-backed securities	201,828	214,587	188,493	181,464	176,386	170,532r	169,459r	167,303r	167,692r	166,164		
4 Contra-assets to mortgage assets[1]	42,344	37,950	27,085	25,950	24,976	25,457r	24,161r	22,815r	23,093r	21,978		
5 Commercial loans	23,163	33,889	32,936	32,572	32,344	32,150r	31,919r	31,777r	31,072r	30,932		
6 Consumer loans	57,902	61,922	60,405	59,722	59,372	58,685r	57,303r	56,804r	56,785r	56,623		
7 Contra-assets to non-mortgage loans[2]	3,467	3,056	3,129	3,107	3,194	3,592r	2,218r	2,248r	2,432r	2,230		
8 Cash and investment securities	169,717	186,986	169,526	172,727	172,465	166,053r	160,513r	157,307	162,304r	153,349	n.a.	n.a.
9 Other[3]	122,462	129,610	122,109	120,501	119,704	116,955r	116,201r	115,580r	113,349r	112,077		
10 ***Liabilities and net worth***	**1,250,855**	**1,350,500**	**1,298,682**	**1,286,710**	**1,277,191**	**1,249,055r**	**1,236,543r**	**1,225,221r**	**1,223,365r**	**1,210,424**		
11 Savings capital	932,616	971,700	958,901	948,500	946,655	945,656r	933,842r	926,436r	929,912r	916,058		
12 Borrowed money	249,917	299,400	281,684	275,979	268,462	252,230r	252,942r	248,034r	246,875r	246,647		
13 FHLBB	116,363	134,168	133,633	130,514	127,671	124,577r	121,732	120,633	117,489r	115,620		
14 Other	133,554	165,232	148,051	145,465	140,791	127,653r	131,210r	127,401r	129,386r	131,027		
15 Other	21,941	24,216	29,742	30,971	31,991	27,556r	26,988r	28,116r	26,003r	27,340		
16 Net worth	n.a.	n.a.	28,355	31,260	30,083	23,612r	23,051r	22,637r	20,575r	20,393		
	SAIF-insured federal savings banks											
17 **Assets**	**284,270**	**425,966**	**500,937**	**502,484**	**499,995**	**498,522**	**497,412**	**489,113**				
18 Mortgages	161,926	230,734	283,162	283,652	282,510	283,844	280,922	275,727				
19 Mortgage-backed securities	45,826	64,957	72,478	72,332	71,204	70,499	70,386	69,740				
20 Contra-assets to mortgage assets[1]	9,100	13,140	13,801	13,506	13,216	13,548	10,234	9,503				
21 Commercial loans	6,504	16,731	18,256	18,299	18,172	18,143	18,470	18,079				
22 Consumer loans	17,696	24,222	28,762	28,322	28,079	28,212	28,509	26,517				
23 Contra-assets to non-mortgage loans[2]	678	889	1,073	1,048	1,082	1,193	620	634				
24 Finance leases plus interest	591	880	1,092	1,085	1,092	1,101	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
25 Cash and investment	35,347	61,029	64,073	65,193	65,191	64,538	62,730	61,767				
26 Other	24,069	35,412	40,659	40,799	40,852	39,981	40,317	40,710				
27 **Liabilities and net worth**	**284,270**	**425,966**	**500,937**	**502,484**	**499,995**	**498,522**	**497,412**	**489,113**				
28 Savings capital	203,196	298,197	353,474	355,923	355,874	360,547	360,285	353,385				
29 Borrowed money	60,716	99,286	115,627	114,231	111,369	108,448	109,028	106,237				
30 FHLBB	29,617	46,265	57,941	57,793	56,842	57,032	55,862	55,081				
31 Other	31,099	53,021	57,686	56,438	54,527	51,416	53,166	51,156				
32 Other	5,324	8,075	9,904	10,317	10,749	9,041	9,885	10,330				
33 Net worth	15,034	20,218	25,952	25,983	25,958	22,716	17,810	18,827				

1.37—Continued

Account	1987	1988	1989 Sept.	1989 Oct.	1989 Nov.	1989 Dec.	1990 Jan.	1990 Feb.	1990 Mar.	1990 Apr.	1990 May	1990 June
	Credit unions[4]											
34 **Total assets/liabilities and capital**	n.a.	**174,593**	**181,812**	**181,527**	**182,856**	**183,688**	**183,301**	**186,119**	**192,718**	**193,208**	**195,020**	n.a.
35 Federal	n.a.	114,566	118,746	118,887	119,682	120,666	120,489	122,885	126,690	127,250	128,648	n.a.
36 State	n.a.	60,027	63,066	62,640	63,174	63,022	62,812	63,234	66,028	65,958	66,372	n.a.
37 Loans outstanding	n.a.	113,191	122,522	122,997	122,899	122,608	122,332	121,968	121,660	122,616	123,205	n.a.
38 Federal	n.a.	73,766	80,548	80,570	80,601	80,272	80,041	79,715	79,407	80,205	80,550	n.a.
39 State	n.a.	39,425	41,874	42,427	42,298	42,336	42,291	42,253	42,253	42,411	42,655	n.a.
40 Savings	n.a.	159,010	164,050	164,695	165,533	167,371	166,629	168,609	175,942	175,745	176,701	n.a.
41 Federal	n.a.	104,431	106,633	107,588	108,319	109,653	109,818	111,246	115,714	115,554	116,402	n.a.
42 State	n.a.	54,579	57,417	57,107	57,214	57,718	56,811	57,363	60,228	60,191	60,299	n.a.
	Life insurance companies											
43 **Assets**	**1,044,459**	**1,166,870**	**1,266,773**	**1,276,181**	**1,289,467**	**1,303,691**	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Securities												
44 Government	84,426	84,051	82,867	83,727	83,609	84,381	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
45 United States[5]	57,078	58,564	56,684	57,726	57,290	58,169	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
46 State and local	10,681	9,136	9,037	9,019	9,280	9,191	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
47 Foreign[6]	16,667	16,351	17,146	16,982	17,039	17,021	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
48 Business	569,199	660,416	742,537	748,075	758,803	777,415	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
49 Bonds	472,684	556,043	621,856	628,695	637,690	642,445	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
50 Stocks	96,515	104,373	120,681	119,380	121,113	134,970	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
51 Mortgages	203,545	232,863	240,189	242,391	243,728	246,345	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
52 Real estate	34,172	37,371	38,942	39,343	39,339	39,368	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
53 Policy loans	53,626	54,236	56,403	56,727	56,916	57,141	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
54 Other assets	89,586	93,358	105,835	105,918	107,072	110,284	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

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. Data include all federally insured credit unions, both federal and state chartered, serving natural persons.
5. Direct and guaranteed obligations. Excludes federal agency issues not guaranteed, which are shown in the table under "Business" securities.
6. Issues of foreign governments and their subdivisions and bonds of the International Bank for Reconstruction and Development.

NOTE. *SAIF-insured institutions:* Estimates by the OTS for all institutions insured by the SAIF and based on the OTS thrift Financial Report.
SAIF-insured federal savings banks: Estimates by the OTS for federal savings banks insured by the SAIF and based on the OTS thrift Financial Report.
Credit unions: Estimates by the National Credit Union Administration for federally chartered and federally insured state-chartered credit unions serving natural persons.
Life insurance companies: Estimates of the American Council of Life Insurance for all life insurance companies in the United States. Annual figures are annual-statement asset values, with bonds carried on an amortized basis and stocks at year-end market value. Adjustments for interest due and accrued and for differences between market and book values are not made on each item separately but are included, in total, in "other assets."
As of June 1989 Savings bank data are no longer available.

1.38 FEDERAL FISCAL AND FINANCING OPERATIONS

Millions of dollars

Type of account or operation	Fiscal year 1987	Fiscal year 1988	Fiscal year 1989	Calendar year 1990 Mar.	Apr.	May	June	July	Aug.
U.S. budget[1]									
1 Receipts, total	854,143	908,166	990,701	64,819	139,624	69,212	110,614	72,357	78,486
2 On-budget	640,741	666,675	727,035	38,990	106,775	45,514	83,717	50,446	56,284
3 Off-budget	213,402	241,491	263,666	25,829	32,849	23,698	26,897	21,911	22,202
4 Outlays, total	1,003,830	1,063,318	1,142,714r	118,165	97,865	111,769	121,747r	98,291	131,240
5 On-budget	809,998	860,627	931,493r	97,642	79,749	91,818	105,787r	79,844	89,751
6 Off-budget	193,832	202,691	211,221	20,523	18,116	19,951	15,960	18,447	41,489
7 Surplus, or deficit (−), total	−149,687	−155,152	−152,013r	−53,346	41,760	−42,558	−11,133r	−25,934	−52,754
8 On-budget	−169,257	−193,952	−204,458r	−58,652	27,027	−46,305	−22,070r	−29,398	−33,467
9 Off-budget	19,570	38,800	52,445	5,306	14,733	3,747	10,937	3,464	−19,287
Source of financing (total)									
10 Borrowing from the public	151,717	166,139	140,811	56,090	−5,935	23,380	23,520	24,230r	47,329
11 Operating cash (decrease, or increase (−))	−5,052	−7,962	3,425	1,123	−20,830	25,594	−20,916	9,862	2,433
12 Other[2]	3,022	−3,025	7,777r	−3,867	−14,995	−6,416	8,529r	−8,158r	2,992
MEMO									
13 Treasury operating balance (level, end of period)	36,436	44,398	40,973	18,466	39,296	13,702	34,618	24,756	22,323
14 Federal Reserve Banks	9,120	13,023	13,452	4,832	5,205	4,426	5,470	6,369	4,453
15 Tax and loan accounts	27,316	31,375	27,521	13,634	34,091	9,276	29,148	18,387	17,869

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

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

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

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

Millions of dollars

Source or type	Fiscal year 1988	Fiscal year 1989	Calendar year 1988 H2	1989 H1	1989 H2	1990 H1	1990 June	1990 July	1990 Aug.
RECEIPTS									
1 **All sources**	**908,166**	**990,701**	**449,330**	**527,574**	**470,329**	**548,977**	**110,614**	**72,357**	**78,486**
2 Individual income taxes, net	401,181	445,690	200,300	233,572	218,661	243,529	49,639	33,290	36,434
3 Withheld	341,435	361,386	179,600	174,230	193,296	190,219	31,469	32,211	34,610
4 Presidential Election Campaign Fund	33	32	4	28	3	30	5	31	−29
5 Nonwithheld	132,199	154,839	29,880	121,563	33,303	118,241	19,573	2,783	3,451
6 Refunds	72,487	70,567	9,186	62,251	7,943	64,962	1,408	1,734	1,598
Corporation income taxes									
7 Gross receipts	109,683	117,015	56,409	61,585	52,269	58,830	19,513	3,364	2,564
8 Refunds	15,487	13,723	7,250	7,259	6,842	8,326	944	1,307	956
9 Social insurance taxes and contributions, net	334,335	359,416	157,603	200,127	162,574	210,476	34,326	29,610	32,047
10 Employment taxes and contributions[2]	305,093	332,859	144,983	184,569	152,407	195,269	33,694	27,554	27,919
11 Self-employment taxes and contributions[3]	17,691	18,504	3,032	16,371	1,947	19,017	2,934	0	0
12 Unemployment insurance	24,584	22,011	10,359	13,279	7,909	12,929	252	1,701	3,712
13 Other net receipts[4]	4,659	4,547	2,262	2,277	2,260	2,278	380	355	416
14 Excise taxes	35,604	34,386	19,299	16,814	16,844	18,188	3,566	3,053	2,745
15 Customs deposits	15,411	16,334	8,107	7,918	8,667	8,096	1,387	1,505	1,627
16 Estate and gift taxes	7,594	8,745	4,054	4,583	4,451	6,442	852	924	883
17 Miscellaneous receipts[5]	19,909	22,839	10,809	10,235	13,703	11,742	2,276	1,917	3,142
OUTLAYS									
18 **All types**	**1,063,318**	**1,142,714**[r]	**552,726**	**565,422**	**587,656**[r]	**641,269**[r]	**121,747**[r]	**98,291**	**131,240**
19 National defense	290,361	303,551	150,496	148,098	149,613	152,733	27,870	22,717	28,664
20 International affairs	10,471	9,596	2,627	6,567	6,029	6,770	578	28	1,039
21 General science, space, and technology	10,841	12,891	5,852	6,238	7,091	6,974	1,253	1,283	1,333
22 Energy	2,297	3,745	1,966	2,221	1,597	1,504	230	211	207
23 Natural resources and environment	14,625	16,084	9,072	7,022	9,183	7,343	1,233	1,375	1,388
24 Agriculture	17,210	16,948	6,911	9,619	4,132	7,450	170	417	98
25 Commerce and housing credit	18,828	27,810	19,836	4,129	22,295[r]	38,788	17,880	5,142	3,045
26 Transportation	27,272	27,623	14,922	12,953	14,982	13,754	2,421	2,683	2,734
27 Community and regional development	5,294	5,755	2,690	1,833	4,879	3,987	552	606	614
28 Education, training, employment, and social services	31,938	35,697	16,162	18,083	18,663	19,537	3,092	2,198	3,417
29 Health	44,490	48,391	23,360	24,078	25,339	29,488	5,249	5,103	5,585
30 Social security and medicare	297,828	317,506	149,017	162,195	162,322	175,997	32,538	30,226	49,891
31 Income security	129,332	136,765	64,978	70,937	67,950	78,456	11,023	11,786	13,475
32 Veterans benefits and services	29,406	30,066	15,797	14,891	14,864	15,217	3,742	1,269	3,624
33 Administration of justice	8,436	9,396	4,361	4,801	4,963	4,983	859	921	866
34 General government	9,518	8,940	5,137	3,858	4,760	4,916	1,388	807	691
35 General-purpose fiscal assistance	1,816	n.a.	0	0	n.a.	n.a.	n.a.	n.a.	n.a.
36 Net interest[6]	151,748	169,314	78,317	86,009	87,927	91,155	14,493	15,153	17,556
37 Undistributed offsetting receipts[7]	−36,967	−37,212	−18,771	−18,131	−18,935	−17,688	−2,730	−3,634	−2,987

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

SOURCES. U.S. Department of the Treasury, *Monthly Treasury Statement of Receipts and Outlays of the U.S. Government*, and the U.S. Office of Management and Budget, *Budget of the U.S. Government, Fiscal Year 1990*.

1.40 FEDERAL DEBT SUBJECT TO STATUTORY LIMITATION

Billions of dollars

Item	1988			1989				1990	
	June 30	Sept. 30	Dec. 31	Mar. 31	June 30	Sept. 30	Dec. 31	Mar. 31	June 30
1 **Federal debt outstanding**	**2,555.1**	**2,614.6**	**2,707.3**	**2,763.6**	**2,824.0**	**2,881.1**	**2,975.5**	**3,081.9**	**3,175.5**
2 Public debt securities	2,547.7	2,602.2	2,684.4	2,740.9	2,799.9	2,857.4	2,953.0	3,052.0	3,143.8
3 Held by public	2,013.4	2,051.7	2,095.2	2,133.4	2,142.1	2,180.7	2,245.2	2,329.3	2,368.8r
4 Held by agencies	534.2	550.4	589.2	607.5	657.8	676.7	707.8	722.7r	775.0r
5 Agency securities	7.4	12.4	22.9	22.7	24.0	23.7	22.5	29.9	31.7r
6 Held by public	7.0	12.2	22.6	22.3	23.6	23.5	22.4	29.8	31.6r
7 Held by agencies	.5	.2	.3	.4	.5	.1	.1	.2	.2r
8 **Debt subject to statutory limit**	**2,532.2**	**2,586.9**	**2,669.1**	**2,725.6**	**2,784.6**	**2,829.8**	**2,921.7**	**2,988.9**	**3,077.0**
9 Public debt securities	2,532.1	2,586.7	2,668.9	2,725.5	2,784.3	2,829.5	2,921.4	2,988.6	3,076.6
10 Other debt[1]	.1	.1	.2	.2	.2	.3	.3	.3	.4
11 MEMO: Statutory debt limit	2,800.0	2,800.0	2,800.0	2,800.0	2,800.0	2,870.0	3,122.7	3,122.7	3,122.7

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	1986	1987	1988	1989	1989		1990	
					Q3	Q4	Q1	Q2
1 **Total gross public debt**	**2,214.8**	**2,431.7**	**2,684.4**	**2,953.0**	**2,857.4**	**2,953.0**	**3,052.0**	**3,143.8**
By type								
2 Interest-bearing debt	2,212.0	2,428.9	2,663.1	2,931.8	2,836.3	2,931.8	3,029.5	3,121.5
3 Marketable	1,619.0	1,724.7	1,821.3	1,945.4	1,892.8	1,945.4	1,995.3	2,028.0
4 Bills	426.7	389.5	414.0	430.6	406.6	430.6	453.1	453.5
5 Notes	927.5	1,037.9	1,083.6	1,151.5	1,133.2	1,151.5	1,169.4	1,192.7
6 Bonds	249.8	282.5	308.9	348.2	338.0	348.2	357.9	366.8
7 Nonmarketable[1]	593.1	704.2	841.8	986.4	943.5	986.4	1,034.2	1,093.5
8 State and local government series	110.5	139.3	151.5	163.3	158.6	163.3	163.5	164.3
9 Foreign issues[2]	4.7	4.0	6.6	6.8	6.8	6.8	37.1	36.4
10 Government	4.7	4.0	6.6	6.8	6.8	6.8	37.1	36.4
11 Public	.0	.0	.0	.0	.0	.0	.0	.0
12 Savings bonds and notes	90.6	99.2	107.6	115.7	114.0	115.7	118.0	120.1
13 Government account series[3]	386.9	461.3	575.6	695.6	663.7	695.6	705.1	758.7
14 Non-interest-bearing debt	2.8	2.8	21.3	21.2	21.1	21.2	22.4	22.3
By holder[4]								
15 U.S. government agencies and trust funds	403.1	477.6	589.2	707.8	676.7	707.8	722.7r	775.0
16 Federal Reserve Banks	211.3	222.6	238.4	228.4	220.6	228.4	219.3	231.4
17 Private investors	1,602.0	1,731.4	1,858.5	2,015.8	1,958.3	2,015.8	2,115.1	n.a.
18 Commercial banks	203.5	201.5	193.8	180.6	174.8	180.6	182.0	n.a.
19 Money market funds	28.0	14.6	11.8	14.4	12.9	14.4	31.3	n.a.
20 Insurance companies	105.6	104.9	107.3	107.9	105.8	107.9	108.0	n.a.
21 Other companies	68.8	84.6	87.1	93.8	93.5	93.8	95.0	n.a.
22 State and local Treasurys	262.8	284.6	313.6	337.1	332.2	337.1	338.0	n.a.
Individuals								
23 Savings bonds	92.3	101.1	109.6	117.7	115.7	117.7	119.9	121.6
24 Other securities	70.4	71.3	79.2	93.8	93.5	93.8	95.0	n.a.
25 Foreign and international[5]	263.4	299.7	362.2	393.4	394.6	393.4	386.9	392.7
26 Other miscellaneous investors[6]	506.6	569.1	593.9	674.3	632.4	674.3	754.9	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 and the *Treasury Bulletin.*

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

Par value; averages of daily figures, in millions of dollars

Item	1990			1990								
	June	July	Aug.	July 4	July 11	July 18	July 25	Aug. 1	Aug. 8	Aug. 15	Aug. 22	Aug. 29
IMMEDIATE TRANSACTIONS[2]												
By type of security												
U.S. government securities												
1 Bills	**0**	**135,618**	**150,589**	**119,178**	**129,894**	**138,088**	**125,145**	**165,104**	**180,990**	**142,351**	**126,730**	**165,575**
Coupon securities												
2 Maturing in less than 3.5 years	0	124,839	162,366	88,882	92,887	155,363	126,754	151,200	254,307	144,551	131,341	146,503
3 Maturing in 3.5 to 7.5 years	0	119,918	120,685	92,141	113,869	158,472	101,401	123,264	182,708	109,405	105,121	100,355
4 Maturing in 7.5 to 15 years	0	45,979	67,972	30,854	45,445	53,610	42,822	52,395	103,473	80,974	50,396	52,945
5 Maturing in 15 years or more	0	69,519	76,686	48,648	79,579	89,930	52,709	68,094	115,514	98,123	60,166	52,514
Federal agency securities												
Debt												
6 Maturing in less than 3.5 years	0	22,963	19,543	24,422	17,902	24,191	21,329	28,705	18,522	16,011	17,029	22,775
7 Maturing in 3.5 to 7.5 years	0	3,382	2,772	3,193	2,379	3,606	4,679	2,877	3,483	3,303	2,788	2,087
8 Maturing in 7.5 years or more	0	5,019	3,894	2,771	7,395	6,228	3,762	3,793	4,451	4,372	3,673	3,761
Mortgage-backed												
9 Pass-throughs	0	35,119	34,383	26,151	45,196	30,744	28,734	42,700	32,996	33,747	36,272	36,023
10 All others[3]	0	7,323	6,981	5,497	7,845	7,566	5,987	9,407	7,954	6,791	7,184	6,544
By type of counterparty												
Primary dealers and brokers												
11 U.S. government securities												
Federal agency	0	309,875	360,883	232,168	289,540	367,849	287,973	348,483	539,401	353,942	299,091	307,981
12 Debt securities	0	10,909	8,240	8,940	11,470	12,304	9,953	11,138	8,761	8,265	6,746	8,551
13 Mortgage backed securities	0	20,070	19,092	15,272	27,728	13,520	17,757	25,175	17,640	17,576	21,023	20,579
Customers												
14 U.S. government securities												
Federal agency	0	185,997	217,415	147,535	172,134	227,614	160,858	211,574	297,591	221,462	174,663	209,911
15 Debt securities	0	20,455	17,969	21,446	16,206	21,721	19,817	24,237	17,695	15,421	16,744	20,072
16 Mortgage-backed securities	0	22,372	22,272	16,376	25,313	24,790	16,964	26,932	23,310	22,962	22,433	21,988
FUTURE AND FORWARD TRANSACTIONS[4]												
By type of deliverable security												
U.S. government securities												
17 Bills	0	14,786	22,805	9,079	13,585	13,324	17,709	18,743	41,056	14,016	20,133	21,121
Coupon securities												
18 Maturing in less than 3.5 years	0	6,441	8,400	3,761	5,601	9,623	4,955	7,380	12,096	7,893	6,399	9,282
19 Maturing in 3.5 to 7.5 years	0	3,078	3,405	3,731	3,249	4,117	2,550	1,738	4,284	2,633	2,984	4,476
20 Maturing in 7.5 to 15 years	0	4,140	6,829	3,160	5,425	3,749	4,037	3,886	10,686	6,898	5,654	6,031
21 Maturing in 15 years or more	0	30,248	50,736	22,320	27,383	37,757	27,594	33,704	71,756	54,946	45,408	43,631
Federal agency securities												
Debt												
22 Maturing in less than 3.5 years	0	452	236	386	509	717	450	101	48	437	108	447
23 Maturing in 3.5 to 7.5 years	0	163	393	65	173	153	88	331	162	928	580	60
24 Maturing in 7.5 years or more	0	775	102	87	2,797	114	321	155	95	154	104	70
Mortgage-backed												
25 Pass-throughs	0	40,660	42,167	19,266	47,711	59,994	33,966	32,094	42,653	55,723	43,127	38,132
26 All others[3]	0	7,332	7,223	6,815	9,128	5,809	8,061	6,469	9,843	7,594	7,553	5,358
OPTION TRANSACTIONS[6]												
By type of underlying securities												
U.S. government securities												
27 Bills	0	26	109	152	0	10	12	0	0	1	250	250
Coupon securities												
28 Maturing in less than 3.5 years	0	1,978	3,382	1,728	1,447	2,927	1,154	2,675	3,347	3,255	3,365	3,811
29 Maturing in 3.5 to 7.5 years	0	1,665	1,442	1,065	1,272	2,775	1,073	1,956	2,983	748	866	934
30 Maturing in 7.5 to 15 years	0	954	1,550	818	650	927	1,290	1,051	2,111	1,666	1,549	1,175
31 Maturing in 15 years or more	0	8,099	14,110	7,475	8,732	8,413	5,966	10,047	16,422	13,568	13,968	16,332
Federal agency securities												
Debt												
32 Maturing in less than 3.5 years	0	19	11	0	0	58	15	15	6	0	0	40
33 Maturing in 3.5 to 7.5 years	0	0	0	0	0	0	0	0	0	0	0	0
34 Maturing in 7.5 years or more	0	11	35	0	0	0	50	0	0	50	80	0
Mortgage-backed												
35 Pass-throughs	0	2,394	2,600	1,565	3,437	2,896	1,515	2,183	3,162	3,409	2,745	1,802
36 All others[3]	0	0	0	0	0	0	2	0	0	0	0	0

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. Immediate, forward, and future transactions are reported at principal value, which does not include accrued interest; option transactions are reported at the face value of the underlying securities.

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

3. Includes securities such as CMOs, REMICs; IOs, and POs.

4. Futures transactions are standardized agreements arranged on an exchange. Forward transactions are agreements made in the over-the-counter market that specify delayed delivery. All futures transactions are included regardless of time to delivery. Forward contracts for U.S. government securities and federal agency debt securities are included when the time to delivery is more than five days. Forward contracts for mortgage-backed securities are included when the time to delivery is more than thirty days.

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

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

Averages of daily figures, in millions of dollars

	Item	1990 June	1990 July	1990 Aug.	1990 July 4	July 11	July 18	July 25	Aug. 1	Aug. 8	Aug. 15	Aug. 22	Aug. 29
					Positions[2]								
	NET IMMEDIATE[3]												
	By type of security												
	U.S. government securities												
1	Bills	0	**3,032**	**0**	**646**	**−15**	**2,777**	**4,630**	**6,610**	**6,517**	**9,520**	**6,587**	**4,975**
	Coupon securities												
2	Maturing in less than 3.5 years	0	3,183	0	3,401	2,535	2,142	3,147	5,050	7,415	6,879	1,538	6,286
3	Maturing in 3.5 to 7.5 years	0	3,781	0	5,815	5,821	5,386	1,815	466	−1,681	−3,352	−4,255	−1,683
4	Maturing in 7.5 to 15 years	0	−6,018	0	−4,665	−5,798	−5,507	−6,578	−7,117	−4,837	−5,312	−5,178	−7,079
5	Maturing in 15 years or more	0	−10,969	0	−12,681	−11,756	−11,708	−9,251	−10,051	−12,406	−10,398	−12,494	−13,375
	Federal agency securities												
	Debt												
6	Maturing in less than 3.5 years	0	3,166	0	2,381	2,856	2,967	3,257	4,175	4,837	4,828	3,447	3,849
7	Maturing in 3.5 to 7.5 years	0	1,446	0	1,687	1,537	1,375	1,323	1,403	1,235	1,080	1,545	1,723
8	Maturing in 7.5 years or more	0	2,899	0	1,918	3,177	3,157	2,753	3,098	2,690	2,535	1,947	2,342
	Mortgage-backed												
9	Pass-throughs	0	17,146	0	11,066	16,326	18,951	17,521	19,612	19,038	19,894	15,815	12,592
10	All others[4]	0	0	0	0	0	0	0	0	0	0	0	0
	Other money market instruments												
11	Certificates of deposit	0	2,877	0	2,290	2,632	2,785	2,791	3,761	3,436	2,795	2,879	3,180
12	Commercial paper	0	6,146	0	4,877	6,015	6,961	5,133	7,375	9,049	7,846	5,984	6,541
13	Bankers' acceptances	0	1,030	0	891	1,105	1,026	1,069	994	1,169	1,508	1,133	1,002
	FUTURE AND FORWARD[5]												
	By type of deliverable security												
	U.S. government securities												
14	Bills	0	−8,317	0	−7,266	−2,792	−8,495	−10,205	−13,051	−18,829	−18,715	−15,794	−10,246
	Coupon securities												
15	Maturing in less than 3.5 years	0	−771	0	−1,532	−1,055	−285	−1,186	−16	−551	−680	−678	−578
16	Maturing in 3.5 to 7.5 years	0	−1,909	0	−1,815	−1,789	−1,774	−2,071	−2,078	−2,465	−1,865	−1,116	−1,659
17	Maturing in 7.5 to 15 years	0	−798	0	−1,579	−910	−880	−181	−769	143	137	668	565
18	Maturing in 15 years or more	0	−5,098	0	−4,558	−5,954	−4,823	−4,046	−6,006	−3,406	−2,508	−1,621	−1,928
	Federal agency securities												
	Debt												
19	Maturing in less than 3.5 years	0	−69	0	186	−45	−136	−147	−99	45	148	115	397
20	Maturing in 3.5 to 7.5 years	0	−104	0	−19	−133	−143	−66	−126	−17	282	−2	70
21	Maturing in 7.5 years or more	0	162	0	−57	766	−20	19	−17	−42	−139	6	−47
	Mortgage-backed												
22	Pass-throughs	0	−11,755	0	−7,479	−12,184	−13,760	−11,847	−11,658	−8,732	−11,313	−6,190	−5,320
23	All others[4]	0	0	0	0	0	0	0	0	0	0	0	0
	Other money market instruments												
24	Certificates of deposit	0	35,615	0	53,686	40,137	37,568	24,023	29,540	43,378	33,875	63,054	55,075
25	Commercial paper	0	0	0	0	0	0	0	0	0	0	0	−13
26	Bankers' acceptances	0	0	0	0	0	0	0	0	0	0	0	0
					Financing[6]								
	Reverse repurchase agreements												
27	Overnight and continuing	0	148,001	0	138,747	153,651	147,648	138,614	158,942	153,860	161,066	160,550	152,563
28	Term	0	217,735	0	198,007	206,992	222,169	223,649	231,348	250,444	212,011	224,848	234,528
	Reverse repurchase agreements												
29	Overnight and continuing	0	223,111	0	193,997	220,581	237,309	220,314	232,171	233,845	241,163	237,704	225,955
30	Term	0	179,589	0	170,695	170,056	177,821	187,301	189,706	210,937	177,140	184,504	193,893
	Securities borrowed												
31	Overnight and continuing	0	42,585	0	43,040	36,302	44,531	44,485	45,126	43,148	42,080	47,678	47,948
32	Term	0	13,238	0	12,721	11,420	13,798	15,080	12,902	13,036	12,394	13,838	14,973
	Securities lent												
33	Overnight and continuing	0	19,830	0	21,709	19,248	20,622	19,393	18,843	18,518	18,220	19,650	20,810
34	Term	0	1,290	0	709	619	1,073	2,924	807	539	335	829	203
	Collateralized loans												
35	Overnight and continuing	0	4,503r	0	5,345	4,913	3,781	4,044	4,839	5,918	4,119	5,000	4,369
36	Term	0	824r	0	0	0	1,719	1,592	394	249	1,580	503	461
	MEMO: Matched book[7]												
	Reverse repurchases												
37	Overnight and continuing	0	92,712	0	86,093	88,860	95,031	89,864	102,235	99,169	101,014	105,318	95,007
38	Term	0	177,648	0	158,115	168,019	180,244	185,162	190,108	204,184	167,985	180,166	189,082
	Repurchases												
39	Overnight and continuing	0	124,806r	0	110,718r	119,303	130,444	124,188	134,759	129,610	127,391	137,781	127,388
40	Term	0	139,661	0	123,275	126,395	140,124	150,978	152,319	170,604	135,251	144,808	149,716

1. Data for positions and financing are obtained from reports submitted to the Federal Reserve Bank of New York by the U.S. government securities dealers on its published list of primary dealers. Data for positions and financing are averages of close-of- business Wednesday weekly data.
2. Securities positions are reported at market value.
3. Net immediate positions include securities purchased or sold (other than mortgage-backed agency securities) that have been delivered or are scheduled to be delivered in five business days or less and "when-issued" securities settle on the issue date of offering. Net immediate positions of mortgage-backed securities include securities purchased or sold that have been delivered or are scheduled to be delivered in thirty days or less.
4. Includes securities such as CMOs, REMICs, IOs, and POs.
5. Futures positions are standardized contracts arranged on an exchange. Forward positions reflect agreements made in the over-the-counter market that specify delayed delivery. All futures positions are included regardless of time to delivery. Forward contracts for U.S. government securities and for federal agency debt securities are included when the time to delivery is more than five business days. Forward contracts for mortgage-backed securities are included when the time to delivery is more than thirty days.
6. Overnight financing refers to agreements made on one business day that mature on the next business day; continuing contracts are agreements that remain in effect for more than one business day but have no specific maturity and can be terminated without a requirement for advance notice by either party; term agreements have a fixed maturity of more than one business day.
7. Matched-book data reflect financial intermediation activity in which the borrowing and lending transactions are matched. Matched-book data are included in the financing breakdowns listed above. The reverse repurchase and repurchase numbers are not always equal due to the "matching" of securities of different values or types of collateralization.

1.44 FEDERAL AND FEDERALLY SPONSORED CREDIT AGENCIES Debt Outstanding

Millions of dollars, end of period

Agency	1986	1987	1988	1989	1990 Mar.	1990 Apr.	1990 May	1990 June	1990 July
1 **Federal and federally sponsored agencies**	**307,361**	**341,386**	**381,498**	**411,805**	**420,247**	**423,481**	**424,082**	**422,261**	**0**
2 Federal agencies	36,958	37,981	35,668	35,664	42,492	42,526	42,482	42,015r	41,978
3 Defense Department[1]	33	13	8	7	7	7	7	7	7
4 Export-Import Bank[2,3]	14,211	11,978	11,033	10,985	11,017	11,017	11,017	11,150r	11,150
5 Federal Housing Administration[4]	138	183	150	328	318	352	365	394	281
6 Government National Mortgage Association participation certificates[5]	2,165	1,615	0	0	0	0	0	0	0
7 Postal Service[6]	3,104	6,103	6,142	6,445	6,445	6,445	6,148	6,148	6,148
8 Tennessee Valley Authority	17,222	18,089	18,335	17,899	17,899	24,705	24,945	24,316	24,392
9 United States Railway Association[6]	85	0	0	0	0	0	0	0	0
10 Federally sponsored agencies[7]	270,553	303,405	345,830	375,407	377,755	380,955	381,600	380,245	0
11 Federal Home Loan Banks	88,758	115,727	135,836	136,087	131,526	127,401	125,515	123,021	119,692
12 Federal Home Loan Mortgage Corporation	13,589	17,645	22,797	26,148	26,152	28,789	30,444	31,049	27,716
13 Federal National Mortgage Association	93,563	97,057	105,459	116,064	116,815	117,357	118,108	117,964	118,356
14 Farm Credit Banks[8]	62,478	55,275	53,127	54,864	53,732	53,700	53,795	53,451	53,175
15 Student Loan Marketing Association[9]	12,171	16,503	22,073	28,705	30,988	31,664	31,696	32,392	0
16 Financing Corporation[10]	0	1,200	5,850	8,170	8,170	8,170	8,170	8,170	8,170
17 Farm Credit Financial Assistance Corporation[11]	0	0	690	847	847	847	847	1,172	1,172
18 Resolution Funding Corporation[12]	0	0	0	4,522	9,524	13,026	13,026	13,026	18,052
MEMO									
19 **Federal Financing Bank debt[13]**	**157,510**	**152,417**	**142,850**	**134,873**	**135,448**	**136,957**	**141,536**	**157,685**	**162,443**
Lending to federal and federally sponsored agencies									
20 Export-Import Bank[3]	14,205	11,972	11,027	10,979	11,011	11,011	11,011	11,144	11,144
21 Postal Service[6]	2,854	5,853	5,892	6,195	6,195	6,195	5,898	5,898	5,898
22 Student Loan Marketing Association	4,970	4,940	4,910	4,880	4,880	4,880	4,880	4,880	4,880
23 Tennessee Valley Authority	15,797	16,709	16,955	16,519	15,325	15,325	15,565	14,936	15,012
24 United States Railway Association[6]	85	0	0	0	0	0	0	0	0
Other Lending[14]									
25 Farmers Home Administration	65,374	59,674	58,496	53,311	52,726	51,916	51,591	51,901	52,171
26 Rural Electrification Administration	21,680	21,191	19,246	19,265	19,221	19,191	19,182	19,168	19,066
27 Other	32,545	32,078	26,324	23,724	23,724	28,439	33,409	49,758	54,272

1. Consists of mortgages assumed by the Defense Department between 1957 and 1963 under family housing and homeowners assistance programs.
2. Includes participation certificates reclassified as debt beginning Oct. 1, 1976.
3. Off-budget Aug. 17, 1974, through Sept. 30, 1976; on-budget thereafter.
4. Consists of debentures issued in payment of Federal Housing Administration insurance claims. Once issued, these securities may be sold privately on the securities market.
5. Certificates of participation issued before fiscal 1969 by the Government National Mortgage Association acting as trustee for the Farmers Home Administration; Department of Health, Education, and Welfare; Department of Housing and Urban Development; Small Business Administration; and the Veterans Administration.
6. Off-budget.
7. Includes outstanding noncontingent liabilities: notes, bonds, and debentures. Some data are estimated.
8. Excludes borrowing by the Farm Credit Financial Assistance Corporation, shown in line 17.
9. Before late 1981, the Association obtained financing through the Federal Financing Bank (FFB). Borrowing excludes that obtained from the FFB, which is shown on line 21.
10. The Financing Corporation, established in August 1987 to recapitalize the Federal Savings and Loan Insurance Corporation, undertook its first borrowing in October 1987.
11. The Farm Credit Financial Assistance Corporation (established in January 1988 to provide assistance to the Farm Credit System) undertook its first borrowing in July 1988.
12. The Resolution Funding Corporation, established by the Financial Institutions Reform, Recovery, and Enforcement Act of 1989, undertook its first borrowing in October 1989.
13. Includes FFB purchases of agency assets and guaranteed loans; the latter contain loans guaranteed by numerous agencies with the guarantees of any particular agency being generally small. The Farmers Home Administration item consists exclusively of agency assets, while the Rural Electrification Administration entry contains both agency assets and guaranteed loans.
14. The FFB, which began operations in 1974, is authorized to purchase or sell obligations issued, sold, or guaranteed by other federal agencies. Since FFB incurs debt solely for the purpose of lending to other agencies, its debt is not included in the main portion of the table in order to avoid double counting.

1.45 NEW SECURITY ISSUES Tax-Exempt State and Local Governments

Millions of dollars

Type of issue or issuer, or use	1987	1988	1989	1990 Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
1 **All issues, new and refunding**[1]	**102,407**	**114,522**	**113,646**	**6,694**	**6,329**	**9,880**	**8,582**	**12,032**	**13,625**	**8,731r**	**10,035**
Type of issue											
2 General obligation	30,589	30,312	35,774	2,675	3,010	3,199	3,386	3,166	4,426	2,847	3,358
3 Revenue	71,818	84,210	77,873	4,019	3,319	6,681	5,196	8,866	9,199	5,884	6,677
Type of issuer											
4 State	10,102	8,830	11,819	712	1,196	707	1,387	1,003	1,090	1,442	1,610
5 Special district and statutory authority[2]	65,460	74,409	71,022	4,744	3,277	6,247	4,366	7,485	8,556	5,670	6,692
6 Municipalities, counties, and townships	26,845	31,193	30,805	1,238	1,856	2,926	2,243	3,544	3,977	1,742	2,195
7 **Issues for new capital, total**	**56,789**	**79,665**	**84,062**	**6,263**	**5,635**	**6,667**	**7,744**	**10,486**	**10,974**	**7,442**	**9,346**
Use of proceeds											
8 Education	9,524	15,021	15,133	1,374	1,420	1,018	1,054	1,694	2,612	2,212	1,389
9 Transportation	3,677	6,825	6,870	98	511	1,158	1,215	1,375	1,592	789	931
10 Utilities and conservation	7,912	8,496	11,427	1,747	718	502	991	1,232	2,159	719	1,015
11 Social welfare	11,106	19,027	16,703	1,017	432	1,425	2,664	2,628	2,199	2,012	3,506
12 Industrial aid	7,474	5,624	5,036	200	115	432	232	681	693	434	495
13 Other purposes	18,020	24,672	28,894	1,827	2,439	2,132	2,426	2,155	4,366	2,688	3,161

1. Par amounts of long-term issues based on date of sale.
2. Includes school districts beginning 1986.

SOURCES. Investment Dealer's Digest beginning April 1990. 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	1987	1988	1989	1989 Dec.	1990 Jan.	Feb.	Mar.	Apr.	May	June	July
1 **All issues**[1]	**392,674r**	**410,811r**	**376,488r**	**21,877**	**15,144r**	**13,811**	**21,199r**	**15,496r**	**25,159r**	**28,734r**	**19,852**
2 **Bonds**[2]	**326,166r**	**353,010r**	**318,617r**	**17,932**	**12,866r**	**10,892**	**17,405r**	**13,740r**	**22,808r**	**25,861r**	**17,605**
Type of offering											
3 Public, domestic	209,790r	202,132r	181,230r	16,306	10,814r	9,985	15,498r	12,819r	19,658r	22,650r	14,300
4 Private placement, domestic[3]	92,070	127,700	114,629	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5. Sold abroad	24,306	23,178	22,758	1,626	2,052	907	1,907	921	3,150	3,211r	3,305
Industry group											
6 Manufacturing	60,657r	70,574r	76,345r	4,285	2,036	2,488	3,396r	3,762r	2,540r	3,729r	1,545
7 Commercial and miscellaneous	49,773	62,104	49,307	347	655	157r	263	683	1,171	2,999r	1,542
8 Transportation	11,974	10,075	10,050	1,083	35	53	386	194	927	1,001	270
9 Public utility	23,004	19,318	17,056	1,201	1,043	1,057	317	435	1,004	2,561	655
10 Communication	7,340	5,952	8,503	577	23	35	704	500	326	411	113
11 Real estate and financial	173,418	184,990	157,355r	10,397	9,075r	7,103	12,340	8,167	16,840r	15,160r	13,480
12 **Stocks**[2]	**66,508**	**57,802**	**57,870**	**3,945**	**2,278**	**2,919**	**3,794**	**1,756**	**2,351**	**2,873**	**2,247**
Type											
13 Preferred	10,123	6,544	6,194	626	50	167	1,028	193	665	310	350
14 Common	43,225	35,911	26,030	3,319	2,228	2,752	2,767	1,564	1,686	2,565	1,897
15 Private placement[3]	13,157	15,346	25,647	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Industry group											
16 Manufacturing	13,880	7,608	9,308	279	835	431	521	253	86	265	348
17 Commercial and miscellaneous	12,888	8,449	7,446	1,045	248	1,017	552	666	706	750	507
18 Transportation	2,439	1,535	1,929	0	0	0	0	0	22	21	0
19 Public utility	4,322	1,898	3,090	244	106	582	533	219	471	0	173
20 Communication	1,458	515	1,904	0	0	0	0	0	380	29	0
21 Real estate and financial	31,521	37,798	34,028	2,377	1,090	889	2,188	619	686	1,799	862

1. Figures which represent gross proceeds of issues maturing in more than one year, are principal amount or number of units multiplied by offering price. Excludes secondary offerings, employee stock plans, investment companies other than closed-end, intracorporate transactions, equities sold abroad, and Yankee bonds. Stock data include ownership securities issued by limited partnerships.
2. Monthly data include only public offerings.
3. Data are not available on a monthly basis. Before 1987, annual totals include underwritten issues only.

SOURCES. IDD Information Services, Inc., the Board of Governors of the Federal Reserve System, and before 1989, the U.S. Securities and Exchange Commission.

1.47 OPEN-END INVESTMENT COMPANIES Net Sales and Asset Position

Millions of dollars

Item	1988	1989	1989	1990						
			Dec.	Jan.	Feb.	Mar.	Apr.	May	June[r]	July
INVESTMENT COMPANIES[1]										
1 **Sales of own shares[2]**	**271,237**	**306,445**	**30,982**	**35,620**	**26,118**	**28,817**	**29,788**	**27,431**	**28,301**	**29,470**
2 Redemptions of own shares[3]	267,451	272,165	24,967	27,331	20,978	23,777	27,306	23,337	23,340	22,957
3 Net sales	3,786	34,280	6,015	8,289	5,140	5,040	2,482	4,094	4,961	6,513
4 **Assets[4]**	**472,297**	**553,871**	**553,871**	**535,165**	**542,725**	**549,638**	**542,061**	**574,302**	**582,190**	**586,681**
5 Cash position[5]	45,090	44,780	44,780	48,865	51,356	50,454	55,213	52,741	49,861	51,944
6 Other	427,207	509,091	509,091	486,300	491,369	499,184	486,848	521,560	532,329	534,737

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	1987	1988	1989	1988		1989				1990	
				Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2[r]
1 Corporate profits with inventory valuation and capital consumption adjustment	308.3	337.6	311.6	334.4	349.6	327.3	321.4	306.7	290.9	296.8	306.6
2 Profits before tax	275.3	316.7	307.7	320.4	331.1	335.1	314.6	291.4	289.8	296.9	299.3
3 Profits tax liability	126.9	136.2	135.1	137.9	142.1	148.3	140.8	127.8	123.5	129.9	133.1
4 Profits after tax	148.4	180.5	172.6	182.5	189.1	186.7	173.8	163.6	166.3	167.1	166.1
5 Dividends	98.2	110.0	123.5	111.8	115.3	119.1	122.1	125.0	127.7	130.3	133.0
6 Undistributed profits	50.2	70.5	49.1	70.8	73.8	67.6	51.7	38.6	38.6	36.8	33.2
7 Inventory valuation	-19.4	-27.0	-21.7	-33.3	-22.5	-43.0	-23.1	-6.1	-14.5	-11.4	-0.5
8 Capital consumption adjustment	52.4	47.8	25.5	47.3	40.9	35.2	29.9	21.4	15.6	11.3	7.7

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	1988	1989	1990	1989				1990			
				Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
1 **Total nonfarm business**	**455.49**	**507.40**	**534.76**	**487.43**	**502.05**	**514.95**	**519.58**	**532.45**	**535.49**	**532.47**	**538.61**
Manufacturing											
2 Durable goods industries	77.04	82.56	84.69	80.20	82.44	83.60	83.41	86.35	84.34	83.63	84.45
3 Nondurable goods industries	86.41	101.24	107.75	92.53	98.47	102.40	108.47	105.02	110.82	108.74	106.42
Nonmanufacturing											
4 Mining	9.29	9.21	9.96	8.94	9.24	9.24	9.38	9.58	9.84	10.23	10.19
Transportation											
5 Railroad	5.52	6.26	5.89	6.02	5.81	6.36	6.80	6.45	6.66	5.34	5.10
6 Air	5.63	6.73	9.09	5.67	6.84	8.89	5.75	9.35	9.36	9.77	7.88
7 Other	5.48	5.85	6.13	6.15	5.78	5.78	5.69	6.33	5.84	5.50	6.83
Public utilities											
8 Electric	40.90	44.81	43.79	43.56	46.37	44.44	44.66	43.37	42.62	43.85	45.33
9 Gas and other	19.47	21.47	22.12	22.53	21.72	20.75	21.15	22.34	21.65	22.35	22.13
10 Commercial and other[2]	205.76	229.28	245.34	221.82	225.39	233.50	234.25	243.66	244.37	243.05	250.27

▲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	1985	1986	1987	1988	1989				1990	
				Q4	Q1	Q2	Q3	Q4	Q1	Q2
ASSETS										
Accounts receivable, gross[2]										
1 Consumer	111.9	134.7	141.1	146.2	139.1	143.9	146.3	140.8	137.9	138.6
2 Business	157.5	173.4	207.4	236.5	243.3	250.9	246.8	256.0	262.9	274.8
3 Real estate	28.0	32.6	39.5	43.5	45.1	47.1	48.7	48.9	52.1	55.4
4 Total	297.4	340.6	388.1	426.2	427.5	441.9	441.8	445.8	452.8	468.8
Less:										
5 Reserves for unearned income	39.2	41.5	45.3	50.0	51.0	52.2	52.9	52.0	51.9	54.3
6 Reserves for losses	4.9	5.8	6.8	7.3	7.4	7.5	7.7	7.7	7.9	8.2
7 Accounts receivable, net	253.3	293.3	336.0	368.9	369.2	382.2	381.3	386.1	393.0	406.3
8 All other	45.3	58.6	58.3	72.4	75.1	81.4	85.2	91.6	92.5	95.5
9 Total assets	**298.6**	**351.9**	**394.2**	**441.3**	**444.3**	**463.6**	**466.4**	**477.6**	**485.5**	**501.9**
LIABILITIES										
10 Bank loans	18.0	18.6	16.4	15.4	11.3	12.1	12.2	14.5	13.9	15.8
11 Commercial paper	99.2	117.8	128.4	142.0	147.8	149.0	147.2	149.5	152.9	152.4
Debt										
12 Other short-term	12.7	17.5	28.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
13 Long-term	94.4	117.5	137.1	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
14 Due to parent	n.a.	n.a.	n.a.	50.6	56.9	59.8	60.3	63.8	70.5	72.8
15 Not elsewhere classified	n.a.	n.a.	n.a.	137.9	133.6	140.5	145.1	147.8	145.7	153.0
16 All other liabilities	41.5	44.1	52.8	59.8	58.1	63.5	61.8	62.6	61.7	66.1
17 Capital, surplus, and undivided profits	32.8	36.4	31.5	35.6	36.6	38.8	39.8	39.4	40.7	41.8
18 Total liabilities and capital	**298.6**	**351.9**	**394.2**	**441.3**	**444.3**	**463.6**	**466.4**	**477.6**	**485.5**	**501.9**

1. Components may not add to totals because of rounding.
2. Excludes pools of securitized assets.

1.52 DOMESTIC FINANCE COMPANIES Business Credit Outstanding and Net Change[1]

Millions of dollars, seasonally adjusted

Type	1987	1988	1989	1990					
				Feb.	Mar.	Apr.	May	June	July
1 Total	**205,992**	**234,578**	**258,504**	**259,015**	**261,662**	**262,379**	**266,859**	**273,786**	**277,416**
Retail financing of installment sales									
2 Automotive	36,139	36,957	39,139	39,125	39,264	39,550	39,245	39,716	38,931
3 Equipment	25,075	28,199	29,674	29,483	29,789	30,115	30,635	30,491	30,623
4 Pools of securitized assets[2]	n.a.	n.a.	698	681	704	662	622	642	600
Wholesale									
5 Automotive	30,070	32,357	33,074	29,491	29,963	29,672	29,896	31,815	33,158
6 Equipment	5,578	5,954	6,896	9,155	9,408	9,372	9,429	9,495	9,929
7 All other	8,329	9,312	9,918	9,877	10,030	9,961	9,892	10,043	9,722
8 Pools of securitized assets[2]	n.a.	n.a.	0	0	0	0	0	0	0
Leasing									
9 Automotive	22,097	24,875	27,074	27,161	28,325	28,528	28,878	29,575	30,210
10 Equipment	43,493	57,658	68,112	69,335	68,755	69,473	72,715	74,916	76,316
11 Pools of securitized assets[2]	n.a.	n.a.	1,247	1,377	1,433	1,646	1,597	1,547	1,760
12 Loans on commercial accounts receivable and factored commercial accounts receivable	18,170	18,103	19,081	19,155	19,426	18,716	18,700	19,869	20,077
13 All other business credit	17,042	21,162	23,590	24,176	24,565	24,685	25,250	25,677	26,089
	Net change (during period)								
14 Total	**33,866**	**22,434**	**22,580**	**−452**	**2,647**	**717**	**4,480**	**6,927**	**3,630**
Retail financing of installment sales									
15 Automotive	9,925	819	2,182	−127	140	286	−305	471	−785
16 Equipment	2,056	1,386	1,475	−207	306	327	520	−144	132
17 Pools of securitized assets[2]	n.a.	n.a.	−26	−39	23	−42	−40	20	−42
Wholesale									
18 Automotive	7,158	2,288	716	−972	472	−291	224	1,919	1,343
19 Equipment	250	377	940	−28	254	−37	57	67	434
20 All other	1,293	983	605	−66	153	−69	−69	151	−321
21 Pools of securitized assets[2]	n.a.	n.a.	0	0	0	0	0	0	0
Leasing									
22 Automotive	2,174	2,777	2,201	183	1,164	203	351	696	636
23 Equipment	5,271	9,752	9,187	431	−580	718	3,243	2,201	1,400
24 Pools of securitized assets[2]	n.a.	n.a.	526	135	56	213	−49	−50	213
25 Loans on commercial accounts receivable and factored commercial accounts receivable	2,245	−65	979	180	272	−711	−16	1,169	208
26 All other business credit	3,498	4,119	3,796	59	388	120	565	427	412

1. These data also appear in the Board's G.20 (422) release. For address, see inside front cover.
2. Data on pools of securitized assets are not seasonally adjusted.

1.53 MORTGAGE MARKETS

Millions of dollars; exceptions noted.

Item	1987	1988	1989	1990 Feb.	Mar.	Apr.	May	June	July	Aug.
	Terms and yields in primary and secondary markets									
PRIMARY MARKETS										
Conventional mortgages on new homes										
Terms[1]										
1 Purchase price (thousands of dollars)	137.0	150.0	159.6	148.9	138.2	155.5	162.1	149.8	163.5	161.5
2 Amount of loan (thousands of dollars)	100.5	110.5	117.0	109.0	100.9	114.6	119.7	111.8	120.9	118.3
3 Loan/price ratio (percent)	75.2	75.5	74.5	74.6	74.7	75.4	75.0	76.4	75.3	74.5
4 Maturity (years)	27.8	28.0	28.1	27.4	26.6	26.6	28.1	26.9	28.0	27.2
5 Fees and charges (percent of loan amount)[2]	2.26	2.19	2.06	1.87	1.96	2.00	2.41	1.96	1.93	2.07
6 Contract rate (percent per year)	8.94	8.81	9.76	9.56	9.70	9.83	9.87	9.80	9.75	9.75
Yield (percent per year)										
7 OTS series[3]	9.31	9.18	10.11	9.88	10.03	10.17	10.28	10.13	10.08	10.11
8 HUD series[4]	10.17	10.30	10.21	10.12	10.20	10.46	10.19	10.12	9.94	10.12
SECONDARY MARKETS										
Yield (percent per year)										
9 FHA mortgages (HUD series)[5]	10.16	10.49	10.24	10.22	10.30	10.75	10.23	10.18	10.11	10.28
10 GNMA securities[6]	9.44	9.83	9.71	9.44	9.53	9.77	9.77	9.54	9.48	9.63
	Activity in secondary markets									
FEDERAL NATIONAL MORTGAGE ASSOCIATION										
Mortgage holdings (end of period)										
11 Total	95,030	101,329	104,974	111,628	112,353	112,463	112,791	112,855	113,378	113,507
12 FHA/VA-insured	21,660	19,762	19,640	20,614	20,688	20,707	20,723	20,830	21,059	21,101
13 Conventional	73,370	81,567	85,335	91,014	91,665	91,756	92,068	92,025	92,319	92,406
Mortgage transactions (during period)										
14 Purchases	20,531	23,110	22,518	1,537	1,945	1,705	1,630	1,802	2,304	2,134
Mortgage commitments[7]										
15 Contracted (during period)	25,415	23,435	27,409	3,216	3,789	5,700	n.a.	n.a.	n.a.	n.a.
16 Outstanding (end of period)	4,886	2,148	6,037	4,977	6,765	10,534	n.a.	n.a.	n.a.	n.a.
FEDERAL HOME LOAN MORTGAGE CORPORATION										
Mortgage holdings (end of period)[8]										
17 Total	12,802	15,105	20,105	20,112	19,823	19,730	19,874	19,979	n.a.	n.a.
18 FHA/VA	686	620	590	572	561	555	556	550	n.a.	n.a.
19 Conventional	12,116	14,485	19,516	19,540	19,261	19,174	19,319	19,429	n.a.	n.a.
Mortgage transactions (during period)										
20 Purchases	76,845	44,077	78,588	5,676	6,301	5,719	6,064	5,856	n.a.	n.a.
21 Sales	75,082	39,780	73,446	5,796	6,503	5,687	5,792	5,546r	4,177	4,705
Mortgage commitments[9]										
22 Contracted (during period)	71,467	66,026	88,519	5,922	6,119	10,441	8,502	11,183	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	1987	1988	1989	1989 Q2	1989 Q3	1989 Q4	1990 Q1	1990 Q2p
1	**All holders**	**2,971,019**	**3,264,348r**	**3,540,084r**	**3,402,082r**	**3,473,550r**	**3,540,084r**	**3,601,132r**	**3,657,741**
2	1- to 4-family	1,958,400	2,186,292r	2,404,311r	2,287,645r	2,347,566r	2,404,311r	2,450,291r	2,492,784
3	Multifamily	272,500	289,128r	305,582r	299,449r	302,374r	305,582r	310,273r	314,360
4	Commercial	651,323	702,113r	744,856r	728,212r	737,299r	744,856r	755,857r	765,489
5	Farm	88,797	86,816r	85,336r	86,777r	86,311r	85,336r	84,710r	85,109
6	Selected financial institutions	1,657,937	1,826,668r	1,919,243r	1,891,210r	1,913,914r	1,919,243r	1,924,635r	1,924,617
7	Commercial banks[2]	592,449	669,237	763,533	715,262	742,096	763,533	783,100	803,660
8	1- to 4-family	275,613	317,585	368,567	338,799	355,084	368,567	376,616	388,018
9	Multifamily	32,756	33,158	37,990	36,022	37,201	37,990	39,202	40,271
10	Commercial	269,648	302,989	340,285	324,083	333,272	340,285	350,473	358,367
11	Farm	14,432	15,505	16,691	16,358	16,539	16,691	16,809	17,003
12	Savings institutions[3]	860,467	924,606r	910,254r	938,714r	932,373r	910,254r	892,022r	867,640
13	1- to 4-family	602,408	671,722r	669,220r	687,000r	683,148r	669,220r	658,440r	639,985
14	Multifamily	106,359	110,775r	106,014r	110,067r	108,447r	106,014r	103,860r	101,112
15	Commercial	150,943	141,433r	134,370r	140,977r	140,096r	134,370r	129,103r	125,944
16	Farm	757	676r	650r	670r	682r	650r	619r	599
17	Life insurance companies	205,021	232,825	245,456	237,234	239,445	245,456	249,513	253,317
18	1- to 4-family	12,676	15,299	13,827	12,814	13,290	13,827	14,173	14,479
19	Multifamily	21,644	23,583	27,195	25,232	26,372	27,195	28,182	29,155
20	Commercial	160,874	184,273	194,871	189,623	190,152	194,871	197,621	200,139
21	Farm	9,828	9,671	9,563	9,565	9,632	9,563	9,537	9,544
22	Finance companies[4]	29,716	37,846	45,476	41,824	43,157	45,476	45,808	47,104
23	Federal and related agencies	192,721	200,570	209,472	202,056	205,809	209,472	216,059r	230,511
24	Government National Mortgage Association	444	26	23	24	24	23	22	21
25	1- to 4-family	25	26	23	24	24	23	22	21
26	Multifamily	419	0	0	0	0	0	0	0
27	Farmers Home Administration[5]	0	0	0	0	0	0	7,143r	17,944
28	1- to 4-family	18,169	18,347	18,422	18,391	18,405	18,422	18,419	18,433
29	Multifamily	8,044	8,513	9,054	8,778	8,916	9,054	9,199	9,351
30	Commercial	6,603	5,343	4,443	3,885	4,366	4,443	4,510	4,418
31	Farm	10,235	9,815	9,257	9,657	9,430	9,257	8,997	8,826
32	Federal Housing and Veterans Administration	5,574	5,973	6,061	6,424	6,023	6,061	6,268	6,284
33	1- to 4-family	2,557	2,672	2,850	2,827	2,900	2,850	2,977	3,041
34	Multifamily	3,017	3,301	3,211	3,597	3,123	3,211	3,291	3,243
35	Federal National Mortgage Association	96,649	103,013	110,721	103,309	107,052	110,721	112,353	114,592
36	1- to 4-family	89,666	95,833	102,295	95,714	99,168	102,295	103,300	105,026
37	Multifamily	6,983	7,180	8,426	7,595	7,884	8,426	9,053	9,566
38	Federal Land Banks	34,131	32,115	29,640	31,467	30,943	29,640	29,325	30,517
39	1- to 4-family	2,008	1,890	1,210	1,851	1,821	1,210	1,197	1,957
40	Farm	32,123	30,225	28,430	29,616	29,122	28,430	28,128	28,559
41	Federal Home Loan Mortgage Corporation	12,872	17,425	21,851	20,121	20,650	21,851	19,823	20,126
42	1- to 4-family	11,430	15,077	18,248	17,382	17,659	18,248	16,772	16,918
43	Multifamily	1,442	2,348	3,603	2,739	2,992	3,603	3,051	3,208
44	Mortgage pools or trusts[6]	718,297	810,887	943,932	864,885	899,435	943,932	981,265	1,011,982
45	Government National Mortgage Association	317,555	340,527	369,867	353,759	361,291	369,867	378,292	384,289
46	1- to 4-family	309,806	331,257	358,142	342,545	349,838	358,142	366,300	372,051
47	Multifamily	7,749	9,270	11,725	11,214	11,453	11,725	11,992	12,237
48	Federal Home Loan Mortgage Corporation	212,634	226,406	272,870	245,242	257,938	272,870	281,736	291,863
49	1- to 4-family	205,977	219,988	266,060	238,446	251,232	266,060	274,084	283,822
50	Multifamily	6,657	6,418	6,810	6,796	6,706	6,810	7,652	8,041
51	Federal National Mortgage Association	139,960	178,250	228,232	196,501	208,894	228,232	246,391	259,664
52	1- to 4-family	137,988	172,331	219,577	188,774	200,302	219,577	237,916	250,663
53	Multifamily	1,972	5,919	8,655	7,727	8,592	8,655	8,475	9,002
54	Farmers Home Administration[5]	245	104	80	85	82	80	75	71
55	1- to 4-family	121	26	21	23	22	21	20	18
56	Multifamily	0	0	0	0	0	0	0	0
57	Commercial	63	38	26	26	26	26	25	23
58	Farm	61	40	33	36	35	33	31	30
59	Individuals and others[7]	402,064	426,223	467,438	443,931	454,392	467,438	479,172	490,631
60	1- to 4-family	242,053	258,639	292,967	273,757	283,445	292,967	301,573	310,747
61	Multifamily	75,458	78,663	82,899	79,681	80,689	82,899	84,873	86,468
62	Commercial	63,192	68,037	70,861	69,618	69,387	70,861	72,136	72,868
63	Farm	21,361	20,884	20,711	20,875	20,871	20,711	20,589	20,548

1. Based on data from various institutional and governmental sources, with some quarters estimated in part by the Federal Reserve. Multifamily debt refers to loans on structures of five or more units.
2. Includes loans held by nondeposit trust companies but not bank trust departments.
3. Includes savings banks and savings and loan associations. Beginning 1987:1, data reported by FSLIC-insured institutions include loans in process and other contra assets (credit balance accounts that must be subtracted from the corresponding gross asset categories to yield net asset levels).
4. Assumed to be entirely 1- to 4-family loans.
5. FmHA-guaranteed securities sold to the Federal Financing Bank were reallocated from FmHA mortgage pools to FmHA mortgage holdings in 1986:4, because of accounting changes by the Farmers Home Administration.
6. Outstanding principal balances of mortgage pools backing securities insured or guaranteed by the agency indicated. Includes private pools which are not shown as a separate line item.
7. Other holders include mortgage companies, real estate investment trusts, state and local credit agencies, state and local retirement funds, noninsured pension funds, credit unions, and other U.S. agencies.

1.55 CONSUMER INSTALLMENT CREDIT[1] Total Outstanding, and Net Change, seasonally adjusted

Millions of dollars, amounts outstanding, end of period

Holder, and type of credit	1988	1989	1989		1990						
			Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June[r]	July
	Seasonally adjusted										
1 **Total**	**664,701**	**716,624**	**713,903**	**716,624**	**717,829**	**717,869**	**720,445**	**720,835**	**724,485**	**724,601**	**729,066**
2 Automobile	284,556	290,770	290,972	290,770	290,904	289,629	290,932	288,936	288,931	287,168	286,634
3 Revolving	174,057	197,110	194,679	197,110	199,146	199,927	202,263	203,965	207,153	208,362	212,128
4 Mobile home	25,201	22,343	22,197	22,343	22,604	22,633	22,708	22,702	22,815	22,733	22,766
5 Other	180,887	206,401	206,055	206,401	205,175	205,680	204,543	205,232	205,585	206,338	207,539
	Not seasonally adjusted										
6 **Total**	**674,719**	**727,561**	**715,145**	**727,561**	**721,026**	**717,062**	**713,138**	**715,801**	**720,045**	**722,953**	**726,933**
By major holder											
7 Commercial banks	324,792	343,865	337,285	343,865	342,266	339,418	334,645	337,576	339,328	335,998	339,657
8 Finance companies	146,212	140,832	142,802	140,832	140,740	139,115	137,857	138,174	138,384	138,642	138,796
9 Credit unions	88,340	90,875	90,965	90,875	90,452	90,127	89,556	89,689	89,913	90,137	90,288
10 Retailers[2]	48,302	42,638	37,906	42,638	39,959	37,904	37,302	37,207	37,347	37,382	36,804
11 Savings institutions	63,399	57,228	58,236	57,228	55,425	54,771	54,095	53,606	53,301	52,902	52,503
12 Gasoline companies	3,674	3,935	3,853	3,935	4,013	3,803	3,792	3,928	4,024	4,192	4,396
13 Pools of securitized assets[2]	n.a.	48,188	44,098	48,188	48,171	51,924	55,891	55,621	57,748	63,700	64,489
By major type of credit[3]											
14 Automobile	284,328	290,421	292,543	290,421	288,984	288,036	286,539	286,220	287,140	287,254	287,322
15 Commercial banks	123,392	126,613	128,111	126,613	127,075	127,149	126,289	126,483	127,056	126,988	127,509
16 Finance companies	97,245	82,721	85,725	82,721	81,918	80,227	79,523	79,295	78,927	78,273	77,716
17 Pools of securitized assets[2]	n.a.	18,191	15,376	18,191	17,827	18,931	19,563	19,406	20,151	21,043	21,239
18 Revolving	183,909	208,188	194,640	208,188	203,288	200,147	199,937	201,783	204,854	206,820	209,582
19 Commercial banks	123,020	130,956	122,728	130,956	128,384	124,821	122,024	124,039	125,433	122,116	124,602
20 Retailers	43,697	37,967	33,432	37,967	35,359	33,378	32,794	32,721	32,857	32,884	32,325
21 Gasoline companies	3,674	3,935	3,853	3,935	4,013	3,803	3,792	3,928	4,024	4,192	4,396
22 Pools of securitized assets[2]	n.a.	22,977	22,186	22,977	23,450	26,204	29,542	29,403	30,913	36,076	36,786
23 Mobile home	25,143	22,283	22,319	22,283	22,717	22,726	22,426	22,484	22,610	22,644	22,843
24 Commercial banks	9,025	9,155	9,144	9,155	9,109	9,162	9,142	9,231	9,295	9,296	9,443
25 Finance companies	7,191	4,716	4,682	4,716	5,411	5,410	5,178	5,168	5,224	5,266	5,328
26 Other	181,339	206,669	205,643	206,669	206,037	206,153	204,236	205,314	205,441	206,235	207,186
27 Commercial banks	69,355	77,141	77,302	77,141	77,698	78,286	77,190	77,823	77,544	77,598	78,103
28 Finance companies	41,776	53,395	52,395	53,395	53,411	53,478	53,156	53,711	54,233	55,103	55,752
29 Retailers	4,605	4,671	4,474	4,671	4,600	4,526	4,508	4,486	4,490	4,498	4,479
30 Pools of securitized assets[2]	n.a.	7,020	6,536	7,020	6,894	6,789	6,786	6,812	6,684	6,581	6,464

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

3. Totals include estimates for certain holders for which only consumer credit totals are available.

1.56 TERMS OF CONSUMER INSTALLMENT CREDIT[1]

Percent unless noted otherwise

Item	1987	1988	1989	1990 Jan.	Feb.	Mar.	Apr.	May	June	July
INTEREST RATES										
Commercial banks[2]										
1 48-month new car[3]	10.45	10.85	12.07	n.a.	11.80	n.a.	n.a.	11.82	n.a.	n.a.
2 24-month personal	14.22	14.68	15.44	n.a.	15.27	n.a.	n.a.	15.41	n.a.	n.a.
3 120-month mobile home[3]	13.38	13.54	14.11	n.a.	13.91	n.a.	n.a.	14.09	n.a.	n.a.
4 Credit card	17.92	17.78	18.02	n.a.	18.12	n.a.	n.a.	18.14	n.a.	n.a.
Auto finance companies										
5 New car	10.73	12.60	12.62	12.64	12.67	12.31	12.21	12.23	12.58	12.68
6 Used car	14.60	15.11	16.18	15.77	15.91	15.97	16.02	16.03	16.00	15.96
OTHER TERMS[4]										
Maturity (months)										
7 New car	53.5	56.2	54.2	54.7	54.7	54.3	54.2	54.5	54.8	54.9
8 Used car	45.2	46.7	46.6	45.5	46.4	46.4	46.5	46.1	46.2	46.2
Loan-to-value ratio										
9 New car	93	94	91	89	88	88	87	87	87	86
10 Used car	98	98	97	95	96	95	96	96	95	96
Amount financed (dollars)										
11 New car	11,203	11,663	12,001	12,381	12,053	12,216	12,089	12,064	12,108	12,125
12 Used car	7,420	7,824	7,954	8,040	8,065	8,132	8,105	8,169	8,296	8,401

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. /sl1.56-bul-tel/btJql! 53.5 56.2 54.2 54.7 54.7 54.3 54.2 54.5 54.8 54.9 45.2 46.7 46.6 45.5 46.4 46.4 46.5 46.1 46.2 46.2 93 94 91 89 88 88 87 87 87 86 98 98

1.57 FUNDS RAISED IN U.S. CREDIT MARKETS

Billions of dollars; quarterly data are at seasonally adjusted annual rates.

Transaction category, sector	1985	1986	1987[r]	1988[r]	1989[r]	1988	1989				1990	
						Q4[r]	Q1[r]	Q2[r]	Q3[r]	Q4[r]	Q1[r]	Q2
	Nonfinancial sectors											
1 Total net borrowing by domestic nonfinancial sectors	**848.1[r]**	**836.9[r]**	**687.0**	**760.8**	**676.5**	**694.9**	**746.7**	**666.5**	**673.3**	**619.5**	**749.9**	**598.1**
By sector and instrument												
2 U.S. government	223.6	215.0	144.9	157.5	150.2	144.8	147.3	100.1	168.4	185.0	247.6	216.7
3 Treasury securities	223.7	214.7	143.4	140.0	150.0	103.2	148.5	95.0	166.8	189.6	218.1	211.4
4 Agency issues and mortgages	−.1	.4	1.5	17.4	.2	41.6	−1.2	5.1	1.6	−4.6	29.6	5.4
5 Private domestic nonfinancial sectors	624.5[r]	621.9[r]	542.1	603.3	526.3	550.1	599.4	566.3	504.9	434.5	502.3	381.4
6 Debt capital instruments	451.2[r]	465.8[r]	453.2	459.2	379.7	439.0	412.8	390.1	369.2	346.8	362.3	284.4
7 Tax-exempt obligations	135.4	22.7	49.3	49.8	30.4	56.8	39.7	28.7	34.1	19.1	13.5	21.6
8 Corporate bonds	73.5[r]	126.8[r]	79.4	102.9	73.6	87.1	58.2	86.5	62.7	87.2	42.3	60.2
9 Mortgages	242.2	316.3	324.5	306.5	275.7	295.1	314.9	275.0	272.4	240.5	306.5	202.6
10 *Home mortgages*	156.8	218.7	234.9	231.0	218.0	212.0	225.5	211.3	221.0	214.3	238.4	144.1
11 Multifamily residential	29.8	33.5	24.4	16.7	16.4	19.2	23.1	21.4	11.8	9.5	21.5	17.1
12 Commercial	62.2	73.6	71.6	60.8	42.7	63.9	68.6	41.5	40.9	19.9	47.9	42.2
13 Farm	−6.6	−9.5	−6.4	−2.1	−1.5	.0	−2.3	.9	−1.3	−3.2	−1.4	−.8
14 Other debt instruments	173.3[r]	156.1[r]	88.9	144.1	146.6	111.1	186.6	176.2	135.7	87.7	139.9	97.0
15 Consumer credit	82.5	58.0	33.5	50.2	39.1	51.2	38.2	36.9	37.1	44.1	14.6	9.8
16 Bank loans n.e.c.	40.6[r]	66.9[r]	10.0	39.8	39.9	22.2	55.9	45.1	50.8	7.7	21.2	17.4
17 Open market paper	14.6	−9.3	2.3	11.9	20.4	39.0	32.3	39.5	16.9	−6.9	69.7	−6.0
18 Other	35.6	40.5	43.2	42.2	47.1	−1.3	60.2	54.7	30.9	42.8	34.5	75.8
19 By borrowing sector	624.5[r]	621.9[r]	542.1	603.3	526.3	550.1	599.4	566.3	504.9	434.5	502.3	381.4
20 State and local governments	90.9	36.2	48.8	45.6	29.6	53.0	40.1	33.3	28.6	16.5	9.0	14.9
21 Households	284.5[r]	293.0[r]	302.2	314.9	284.8	288.5	293.2	263.7	290.8	291.3	294.8	197.8
22 Nonfinancial business	249.1[r]	292.7[r]	191.0	242.8	211.9	208.6	266.0	269.4	185.4	126.7	198.5	168.7
23 *Farm*	−14.5	−16.3	−10.6	−7.5	1.6	−14.5	4.7	−5.0	−2.1	8.9	4.3	6.2
24 Nonfarm noncorporate	129.3	99.2[r]	77.9	65.7	50.8	57.3	71.0	56.9	40.2	35.0	32.5	55.9
25 Corporate	134.3[r]	209.7[r]	123.7	184.6	159.5	165.8	190.3	217.4	147.3	82.9	161.6	106.6
26 Foreign net borrowing in United States	1.2	9.7	4.5	6.3	10.9	9.9	3.2	−6.9	30.4	16.9	−3.3	46.3
27 Bonds	3.8	3.1	7.4	6.9	5.3	5.7	2.5	11.5	8.1	−1.0	28.3	27.0
28 Bank loans n.e.c.	−2.8	−1.0	−3.6	−1.8	−.1	−3.8	3.2	−3.2	3.7	−4.3	−6.7	−5.2
29 Open market paper	6.2	11.5	2.1	8.7	13.3	14.3	16.9	−6.6	20.7	22.2	−16.5	23.0
30 U.S. government loans	−6.0	−3.9	−1.4	−7.5	−7.5	−6.3	−19.4	−8.7	−2.1	.1	−8.3	1.4
31 *Total domestic plus foreign*	**849.3[r]**	**846.6[r]**	**691.5**	**767.1**	**687.4**	**704.8**	**749.9**	**659.6**	**703.6**	**636.4**	**746.6**	**644.4**
	Financial sectors											
32 Total net borrowing by financial sectors	**201.3**	**285.1[r]**	**300.2**	**247.6**	**205.5**	**306.1**	**356.6**	**154.1**	**123.9**	**187.3**	**201.7**	**150.1**
By instrument												
33 U.S. government related	101.5	154.1[r]	171.8	119.8	151.0	149.0	194.0	128.8	124.8	156.4	175.5	145.2
34 Sponsored credit agency securities	20.6	15.2	30.2	44.9	25.2	62.8	70.0	22.5	13.2	−4.7	14.5	17.3
35 Mortgage pool securities	79.9	139.2[r]	142.3	74.9	125.8	86.3	124.0	106.3	111.6	161.1	161.0	127.8
36 Loans from U.S. government	1.1	−.4	−.8	.0	.0	.0	.0	.0	.0	.0	.0	.0
37 Private financial sectors	99.7	131.0	128.4	127.8	54.5	157.1	162.6	25.3	−.9	30.9	26.2	5.0
38 *Corporate bonds*	50.9	82.9	78.9	51.7	36.8	45.5	52.3	28.5	26.7	39.6	41.6	69.0
39 Mortgages	.1	.1	.4	.3	.0	1.2	.3	.0	.3	−.4	−.7	.0
40 Bank loans n.e.c.	2.6	4.0	−3.2	1.4	1.8	1.8	1.0	−.1	2.0	4.2	−2.2	−5.7
41 Open market paper	32.0	24.2	27.9	54.8	26.9	74.9	50.1	10.1	11.0	36.3	9.4	−27.7
42 Loans from Federal Home Loan Banks	14.2	19.8	24.4	19.7	−11.0	33.7	58.9	−13.1	−41.0	−48.8	−21.8	−30.7
By sector												
43 Total	**201.3**	**285.1[r]**	**300.2**	**247.6**	**205.5**	**306.1**	**356.6**	**154.1**	**123.9**	**187.3**	**201.7**	**150.1**
44 Sponsored credit agencies	21.7	14.9	29.5	44.9	25.2	62.8	70.0	22.5	13.2	−4.7	14.5	17.3
45 *Mortgage pools*	79.9	139.2[r]	142.3	74.9	125.8	86.3	124.0	106.3	111.6	161.1	161.0	127.8
46 Private financial sectors	99.7	131.0	128.4	127.8	54.5	157.1	162.6	25.3	−.9	30.9	26.2	5.0
47 Commercial banks	−4.9	−3.6	6.2	−3.0	−1.4	6.6	−11.1	2.5	3.5	−.7	−4.9	3.3
48 Bank affiliates	16.6	15.2	14.3	5.2	6.2	1.5	9.4	2.9	16.5	−3.9	−12.8	−32.7
49 Savings and loan associations	17.3	20.9	19.6	19.9	−14.1	31.3	60.8	−16.3	−44.7	−56.2	−15.9	−41.1
50 *Mutual savings banks*	1.5	4.2	8.1	1.9	−1.4	3.7	−4.1	.0	−2.3	.7	−8.3	4.7
51 Finance companies	57.7[r]	54.7[r]	40.8	67.7	46.3	67.0	68.8	40.4	23.5	52.6	33.8	22.6
52 REITs	−.1[r]	.8[r]	.3	3.5	−1.9	14.5	−1.8	−2.8	−3.1	.1	−.5	−2.4
53 SCO Issuers	11.5	39.0	39.1	32.5	20.8	32.5	40.6	−1.4	5.7	38.2	34.7	50.5

1.57—Continued

Transaction category, sector	1985	1986	1987^{r}	1988^{r}	1989^{r}	1988 Q4^{r}	1989 Q1^{r}	1989 Q2^{r}	1989 Q3^{r}	1989 Q4^{r}	1990 Q1^{r}	1990 Q2
	All sectors											
54 **Total net borrowing**	**1,050.6^{r}**	**1,131.7^{r}**	**991.7**	**1,014.7**	**892.9**	**1,010.9**	**1,106.5**	**813.7**	**827.5**	**823.7**	**948.3**	**794.5**
55 U.S. government securities	324.2	369.5^{r}	317.5	277.2	301.2	293.8	341.3	228.9	293.2	341.4	423.1	361.9
56 State and local obligations	135.4	22.7	49.3	49.8	30.4	56.8	39.7	28.7	34.1	19.1	13.5	21.6
57 Corporate and foreign bonds	128.2^{r}	212.8^{r}	165.7	161.5	115.7	138.3	113.0	126.5	97.6	125.7	112.1	156.2
58 Mortgages	242.2	316.4	324.9	306.7	275.7	296.2	315.2	275.0	272.7	240.1	305.7	202.6
59 Consumer credit	82.5	58.0	33.5	50.2	39.1	51.2	38.2	36.9	37.1	44.1	14.6	9.8
60 Bank loans n.e.c.	40.3^{r}	69.9^{r}	3.2	39.4	41.5	20.2	60.2	41.9	56.5	7.5	12.2	6.5
61 Open market paper	52.8	26.4	32.3	75.4	60.6	128.2	99.3	42.9	48.5	51.6	62.7	−10.7
62 Other loans	45.0	56.1	65.5	54.4	28.6	26.1	99.7	32.9	−12.2	−6.0	4.3	46.6
63 MEMO: U.S. government, cash balance	14.4	.0	−7.9	10.4	−5.9	−2.8	−14.3	20.7	−22.7	−7.3	21.5	−51.0
Totals net of changes in U.S. government cash balances												
64 Net borrowing by domestic nonfinancial	833.7^{r}	836.9^{r}	694.9	750.4	682.4	697.7	761.0	645.8	696.0	626.8	728.4	649.2
65 Net borrowing by U.S. government	209.3	215.0	152.8	147.1	156.1	147.6	161.6	79.4	191.1	192.4	226.2	267.8
	External corporate equity funds raised in United States											
66 **Total net share issues**	**17.2^{r}**	**86.8^{r}**	**10.9**	**−124.2**	**−60.7**	**−173.0**	**−164.7**	**−38.1**	**−54.6**	**14.6**	**−8.3**	**55.7**
67 Mutual funds	84.4	159.0	73.9	1.1	41.3	9.8	1.0	34.0	57.9	72.4	53.1	76.5
68 All other	−67.2^{r}	−72.2^{r}	−63.0	−125.3	−102.0	−182.8	−165.7	−72.1	−112.5	−57.8	−61.4	−20.8
69 Nonfinancial corporations	−84.5^{r}	−85.0^{r}	−75.5	−129.5	−124.2	−194.5	−172.3	−98.7	−146.3	−79.3	−69.0	−48.0
70 Financial corporations	13.6^{r}	11.6^{r}	14.6	3.3	5.5	5.0	2.1	9.2	6.3	4.3	6.4	5.5
71 Foreign shares purchased in United States	3.7	1.2	−2.1	.9	16.7	6.8	4.5	17.4	27.5	17.2	1.2	21.7

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	1985	1986[r]	1987[r]	1988[r]	1989[r]	1988	1989				1990	
						Q4[r]	Q1[r]	Q2[r]	Q3[r]	Q4[r]	Q1[r]	Q2
1 **Total funds advanced in credit markets to domestic nonfinancial sectors**	**848.1[r]**	**836.9**	**687.0**	**760.8**	**676.5**	**694.9**	**746.7**	**666.5**	**673.3**	**619.5**	**749.9**	**598.1**
By public agencies and foreign												
2 Total net advances	202.0	280.2	248.8	210.7	187.6	230.2	312.8	15.5	218.3	203.8	234.5	284.1
3 U.S. government securities	45.9	69.4	70.1	85.2	30.7	114.5	83.1	−103.3	115.7	27.1	16.9	96.1
4 Residential mortgages	94.6	136.3	139.1	86.3	137.9	97.7	126.0	119.7	127.7	178.3	181.1	178.7
5 FHLB advances to thrifts	14.2	19.8	24.4	19.7	−11.0	33.7	58.9	−13.1	−41.0	−48.8	−21.8	−30.7
6 Other loans and securities	47.3	54.7	15.1	19.4	30.0	−15.6	44.8	12.1	15.8	47.1	58.3	39.9
Total advanced, by sector												
7 U.S. government	17.8	9.7	−7.9	−9.4	−2.4	−28.7	−.2	−6.0	−9.3	5.7	35.1	53.3
8 Sponsored credit agencies	103.5	153.3	169.3	112.0	125.3	146.8	188.2	28.0	126.4	158.4	183.3	138.5
9 Monetary authorities	18.4	19.4	24.7	10.5	−7.3	13.1	8.1	−1.6	−31.2	−4.6	−6.7	39.7
10 Foreign	62.3	97.8	62.7	97.6	72.1	99.0	116.7	−4.9	132.4	44.2	22.8	52.6
Agency and foreign borrowing not in line 1												
11 Sponsored credit agencies and mortgage pools	101.5	154.1	171.8	119.8	151.0	149.0	194.0	128.8	124.8	156.4	175.5	145.2
12 Foreign	1.2	9.7	4.5	6.3	10.9	9.9	3.2	−6.9	30.4	16.9	−3.3	46.3
Private domestic funds advanced												
13 Total net advances	748.8[r]	720.5	614.5	676.2	650.8	623.6	631.1	772.9	610.1	589.0	687.6	505.5
14 U.S. government securities	278.2	300.1	247.4	192.1	270.5	179.4	258.2	332.2	177.4	314.3	406.2	265.8
15 State and local obligations	135.4	22.7	49.3	49.8	30.4	56.8	39.7	28.7	34.1	19.1	13.5	21.6
16 Corporate and foreign bonds	40.6[r]	89.7	66.9	91.3	66.0	68.5	36.8	91.1	65.6	70.4	54.5	70.8
17 Residential mortgages	91.8	115.9	120.2	161.3	96.5	133.5	122.6	113.0	105.1	45.5	78.8	−17.5
18 Other mortgages and loans	216.9[r]	212.0	155.2	201.4	176.4	219.2	232.8	194.8	187.0	91.0	112.8	134.2
19 LESS: Federal Home Loan Bank advances	14.2	19.8	24.4	19.7	−11.0	33.7	58.9	−13.1	−41.0	−48.8	−21.8	−30.7
Private financial intermediation												
20 Credit market funds advanced by private financial institutions	578.0[r]	730.0	528.4	562.3	522.5	621.4	517.4	581.5	361.7	629.2	365.6	309.9
21 Commercial banking	188.4[r]	198.1	135.4	156.3	177.3	144.5	180.4	160.9	183.7	184.3	187.9	127.4
22 Savings institutions	87.9	107.6	136.8	120.4	−91.3	96.2	46.1	−71.7	−138.1	−201.6	−26.6	−177.1
23 Insurance and pension funds	150.1[r]	160.1	179.7	198.7	189.7	209.7	195.7	198.2	156.9	207.8	146.9	195.1
24 Other finance	151.6	264.2	76.6	86.9	246.8	171.0	95.1	294.2	159.2	438.7	57.3	164.6
25 Sources of funds	578.0[r]	730.0	528.4	562.3	522.5	621.4	517.4	581.5	361.7	629.2	365.6	309.9
26 Private domestic deposits and RPs	212.1[r]	277.1	162.8	229.2	223.7	197.5	136.5	278.1	275.4	204.9	122.2	63.3
27 Credit market borrowing	99.7	131.0	128.4	127.8	54.5	157.1	162.6	25.3	−.9	30.9	26.2	5.0
28 Other sources	266.1[r]	321.8	237.1	205.3	244.3	266.9	218.3	278.1	87.2	393.5	217.3	241.7
29 Foreign funds	19.7	12.9	43.7	9.3	−11.7	35.3	−3.8	−43.0	30.5	−30.3	50.0	−18.4
30 Treasury balances	10.3	1.7	−5.8	7.3	−3.4	.5	−12.6	13.9	−19.9	5.0	11.9	−27.1
31 Insurance and pension reserves	131.7[r]	119.9	135.4	177.6	143.8	215.7	179.5	119.5	96.9	179.2	131.1	173.4
32 Other, net	104.4[r]	187.3	63.9	11.0	115.6	15.4	55.2	187.6	−20.2	239.6	24.3	113.8
Private domestic nonfinancial investors												
33 Direct lending in credit markets	270.5[r]	121.5	214.6	241.7	182.8	159.3	276.4	216.7	247.5	−9.4	348.1	200.5
34 U.S. government securities	157.8	27.0	86.0	129.0	136.0	82.3	195.1	160.2	188.8	.0	290.9	105.1
35 State and local obligations	37.7	−19.9	61.8	53.5	28.3	57.9	56.7	4.4	39.6	12.3	2.5	3.5
36 Corporate and foreign bonds	3.8[r]	52.9	23.3	−9.4	−12.6	−32.5	−27.9	8.8	−32.1	.7	31.2	45.1
37 Open market paper	51.6[r]	9.9	15.8	36.4	4.1	33.8	44.6	7.6	20.8	−56.7	6.3	24.9
38 Other	19.6	51.7	27.6	32.2	27.1	17.8	7.8	35.8	30.4	34.3	17.1	21.9
39 Deposits and currency	222.8[r]	297.5	179.3	232.8	239.8	153.3	177.8	301.3	250.0	230.2	146.8	88.5
40 Currency	12.4	14.4	19.0	14.7	11.7	7.6	17.8	12.8	6.0	10.1	25.9	22.6
41 Checkable deposits	41.4[r]	96.4	−.9	12.9	1.7	20.2	−31.6	−40.3	16.3	62.2	−9.2	−53.6
42 Small time and savings accounts	138.5	120.6	76.0	122.4	100.5	56.5	20.7	111.6	162.2	107.4	104.6	134.9
43 Money market fund shares	7.2[r]	43.2	28.9	20.2	85.2	60.9	39.4	119.2	116.7	65.6	72.8	5.8
44 Large time deposits	7.4	−3.2	37.2	40.8	23.1	37.0	68.5	61.1	−23.8	−13.4	−31.3	−41.2
45 Security RPs	17.7	20.2	21.6	32.9	13.3	22.9	39.4	26.6	3.9	−16.9	−14.8	17.4
46 Deposits in foreign countries	−1.7[r]	5.9	−2.5	−11.2	4.4	−51.8	23.5	10.4	−31.3	15.2	−1.3	2.6
47 **Total of credit market instruments, deposits, and currency**	**493.3[r]**	**419.0**	**393.9**	**474.5**	**422.7**	**312.5**	**454.2**	**518.1**	**497.5**	**220.8**	**495.0**	**288.9**
48 Public holdings as percent of total	23.8	33.1	36.0	27.5	27.3	32.7	41.7	2.3	31.0	32.0	31.4	44.1
49 Private financial intermediation (in percent)	77.2[r]	101.3	86.0	83.2	80.3	99.6	82.0	75.2	59.3	106.8	53.2	61.3
50 Total foreign funds	82.0	110.7	106.4	106.9	60.4	134.3	112.9	−47.9	162.9	13.9	72.7	34.2
MEMO: Corporate equities not included above												
51 **Total net issues**	**17.2[r]**	**86.8**	**10.9**	**−124.2**	**−60.7**	**−173.0**	**−164.7**	**−38.1**	**−54.6**	**14.6**	**−8.3**	**55.7**
52 Mutual fund shares	84.4	159.0	73.9	1.1	41.3	9.8	1.0	34.0	57.9	72.4	53.1	76.5
53 Other equities	−67.2[r]	−72.2	−63.0	−125.3	−102.0	−182.8	−165.7	−72.1	−112.5	−57.8	−61.4	−20.8
54 *Acquisitions by financial institutions*	46.9[r]	50.9	32.0	−2.9	7.2	17.3	−.2	−14.1	−17.9	60.9	36.7	71.0
55 Other net purchases	−29.7[r]	35.9	−21.2	−121.4	−67.9	−190.3	−164.5	−24.0	−36.7	−46.3	−45.0	−15.4

NOTES BY LINE NUMBER.

1. Line 1 of table 1.57.
2. Sum of lines 3–6 or 7–10.
6. Includes farm and commercial mortgages.
11. *Credit market funds raised by federally sponsored credit agencies, and net* issues of federally related mortgage pool securities.
13. Line 1 less line 2 plus line 11 and 12. Also line 20 less line 27 plus line 33. Also sum of lines 28 and 47 less lines 40 and 46.
18. Includes farm and commercial mortgages.
26. Line 39 less lines 40 and 46.
27. Excludes equity issues and investment company shares. Includes line 19.
29. Foreign deposits at commercial banks, bank borrowings from foreign branches, and liabilities of foreign banking agencies to foreign affiliates, less claims on foreign affiliates and deposits by banking in foreign banks.
30. Demand deposits and note balances at commercial banks.
31. Excludes net investment of these reserves in corporate equities.
32. Mainly retained earnings and net miscellaneous liabilities.
33. Line 13 less line 20 plus line 27.
34–38. Lines 14–18 less amounts acquired by private finance plus amounts borrowed by private finance. Line 38 includes mortgages.
40. Mainly an offset to line 9.
47. Lines 33 plus 39, or line 13 less line 28 plus 40 and 46.
48. Line 2/line 1.
49. Line 20/line 13.
50. Sum of lines 10 and 29.
51, 53. Includes issues by financial institutions.

NOTE. Full statements for sectors and transaction types in flows and in amounts *outstanding may be obtained from Flow of Funds Section, Division of Research* and Statistics, Board of Governors of the Federal Reserve System, Washington, D.C. 20551.

1.59 SUMMARY OF CREDIT MARKET DEBT OUTSTANDING

Billions of dollars; period-end levels.

Transaction category, sector	1985	1986	1987[r]	1988[r]	1988	1989				1990	
					Q4[r]	Q1	Q2[r]	Q3[r]	Q4[r]	Q1[r]	Q2
	Nonfinancial sectors										
1 **Total credit market debt owed by domestic nonfinancial sectors**	**6,804.5[r]**	**7,646.3[r]**	**8,343.9**	**9,096.0**	**9,096.0**	**9,267.7[r]**	**9,438.6**	**9,603.6**	**9,803.5**	**9,972.6**	**10,126.6**
By sector and instrument											
2 U.S. government	1,600.4	1,815.4	1,960.3	2,117.8	2,117.8	2,155.7	2,165.7	2,204.7	2,268.0	2,359.5	2,397.3
3 Treasury securities	1,597.1	1,811.7	1,955.2	2,095.2	2,095.2	2,133.4	2,142.1	2,180.7	2,245.2	2,329.3	2,365.8
4 Agency issues and mortgages	3.3	3.6	5.2	22.6	22.6	22.3	23.6	24.0	22.8	30.2	31.6
5 Private domestic nonfinancial sectors	5,204.1[r]	5,831.0[r]	6,383.6	6,978.2	6,978.2	7,111.9[r]	7,272.9	7,398.9	7,535.5	7,613.1	7,729.3
6 Debt capital instruments	3,485.2[r]	3,962.7[r]	4,427.9	4,886.4	4,886.4	4,989.1[r]	5,091.4	5,189.9	5,283.2	5,356.3	5,432.2
7 Tax-exempt obligations	655.5	679.1	728.4	790.8	790.8	798.6[r]	804.9	816.4	821.2	822.5	826.8
8 Corporate bonds	542.6[r]	669.4[r]	748.8	851.7	851.7	866.2[r]	887.9	903.5	925.3	935.9	951.0
9 Mortgages	2,287.1	2,614.2	2,950.7	3,243.8	3,243.8	3,324.2[r]	3,398.6	3,470.0	3,536.6	3,597.9	3,654.5
10 Home mortgages	1,490.2	1,720.8	1,943.1	2,173.9	2,173.9	2,229.0[r]	2,287.6	2,347.6	2,404.3	2,450.3	2,492.8
11 Multifamily residential	213.0	246.2	270.0	286.7	286.7	293.1[r]	298.3	301.2	304.4	309.2	313.3
12 Commercial	478.1	551.4	648.7	696.4	696.4	716.2[r]	725.9	734.9	742.6	753.7	763.3
13 Farm	105.9	95.8	88.9	86.8	86.8	86.0	86.8	86.3	85.3	84.7	85.1
14 Other debt instruments	1,718.9[r]	1,868.2[r]	1,955.7	2,091.9	2,091.9	2,122.8[r]	2,181.5	2,208.9	2,252.3	2,256.9	2,297.1
15 Consumer credit	601.8	659.8	693.2	743.5	743.5	741.7	756.7	771.0	790.6	774.3	783.3
16 Bank loans n.e.c.	602.3[r]	666.0[r]	673.3	713.1	713.1	725.6[r]	740.3	750.7	763.0	756.6	764.8
17 Open market paper	72.2	62.9	73.8	85.7	85.7	96.1	110.1	113.3	107.1	126.0	128.7
18 Other	442.6	479.6	515.3	549.6	549.6	559.4	574.4	574.0	591.7	599.9	620.3
19 By borrowing sector	5,204.1[r]	5,831.0[r]	6,383.6	6,978.2	6,978.2	7,111.9[r]	7,272.9	7,398.9	7,535.5	7,613.1	7,729.3
20 State and local governments	473.9	510.1	558.9	604.5	604.5	612.4[r]	619.9	629.9	634.1	634.3	636.8
21 Households	2,296.0[r]	2,596.1[r]	2,879.1	3,191.5	3,191.5	3,257.9[r]	3,330.5	3,411.3	3,501.5	3,542.8	3,600.1
22 Nonfinancial business	2,434.2[r]	2,724.8[r]	2,945.6	3,182.2	3,182.2	3,241.6[r]	3,322.5	3,357.6	3,399.9	3,436.0	3,492.4
23 Farm	173.4	156.6	145.5	137.6	137.6	136.7	139.5	139.2	139.2	138.2	143.8
24 Nonfarm noncorporate	898.3	997.6[r]	1,075.4	1,145.1	1,145.1	1,163.9[r]	1,177.6	1,183.0	1,195.9	1,205.1	1,218.6
25 Corporate	1,362.4[r]	1,570.6[r]	1,724.6	1,899.5	1,899.5	1,941.0[r]	2,005.3	2,035.4	2,064.8	2,092.8	2,130.0
26 Foreign credit market debt held in United States	236.7[r]	238.3[r]	244.6	253.9	253.9	254.0[r]	252.2	257.7	261.6	260.5	273.0
27 Bonds	71.8	74.9	82.3	89.2	89.2	90.4[r]	92.1	94.2	94.5	102.1	107.5
28 Bank loans n.e.c.	27.9	26.9	23.3	21.5	21.5	21.6	21.5	22.6	21.4	19.0	18.5
29 Open market paper	33.9	37.4	41.2	49.9	49.9	54.4	52.7	57.5	63.0	59.3	65.1
30 U.S. government loans	103.0[r]	99.1[r]	97.7	93.2	93.2	87.5[r]	85.8	83.4	82.7	80.1	81.9
31 **Total domestic plus foreign**	**7,041.1[r]**	**7,884.7[r]**	**8,588.5**	**9,349.9**	**9,349.9**	**9,521.7[r]**	**9,690.7**	**9,861.3**	**10,065.1**	**10,233.1**	**10,399.7**
	Financial sectors										
32 **Total credit market debt owed by financial sectors**	**1,213.2**	**1,529.8[r]**	**1,836.8**	**2,084.4**	**2,084.4**	**2,191.3**	**2,234.1**	**2,263.8**	**2,322.4**	**2,358.6**	**2,400.0**
By instrument											
33 U.S. government related	632.7	810.3[r]	978.6	1,098.4	1,098.4	1,140.8	1,169.5	1,203.6	1,249.3	1,287.5	1,319.7
34 Sponsored credit agency securities	257.8	273.0	303.2	348.1	348.1	364.3	369.0	370.4	373.3	376.0	378.9
35 Mortgage pool securities	368.9	531.6[r]	670.4	745.3	745.3	771.5	795.6	828.2	871.0	906.5	935.9
36 Loans from U.S. government	6.1	5.7	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
37 Private financial sectors	580.5	719.5	858.2	986.1	986.1	1,050.5	1,064.6	1,060.2	1,073.0	1,071.1	1,080.3
38 Corporate bonds	204.5	287.4	366.3	418.0	418.0	458.6	466.1	472.7	482.7	492.6	510.4
39 Mortgages	2.7	2.7	3.1	3.4	3.4	3.5	3.5	3.5	3.4	3.2	3.3
40 Bank loans n.e.c.	32.1	36.1	32.8	34.2	34.2	32.2	33.8	34.1	36.0	33.2	33.5
41 Open market paper	252.4	284.6	322.9	377.7	377.7	392.5	399.4	398.8	409.1	409.1	406.8
42 Loans from Federal Home Loan Banks	88.8	108.6	133.1	152.8	152.8	163.8	161.9	151.1	141.8	132.9	126.3
43 **Total, by sector**	**1,213.2**	**1,529.8[r]**	**1,836.8**	**2,084.4**	**2,084.4**	**2,191.3**	**2,234.1**	**2,263.8**	**2,322.4**	**2,358.6**	**2,400.0**
44 Sponsored credit agencies	263.9	278.7	308.2	353.1	353.1	369.3	374.0	375.4	378.3	381.0	383.8
45 Mortgage pools	368.9	531.6[r]	670.4	745.3	745.3	771.5	795.6	828.2	871.0	906.5	935.9
46 Private financial sectors	580.5	719.5	858.2	986.1	986.1	1,050.5	1,064.6	1,060.2	1,073.0	1,071.1	1,080.3
47 Commercial banks	79.2	75.6	81.8	78.8	78.8	73.3	75.7	77.0	77.4	73.4	76.1
48 Bank affiliates	106.2	116.8	131.1	136.2	136.2	140.0	141.2	144.0	142.5	140.8	133.0
49 Savings and loan associations	98.9	119.8	139.4	159.3	159.3	170.1	167.9	155.7	145.2	137.0	128.7
50 Mutual savings banks	4.4	8.6	16.7	18.6	18.6	17.8	17.7	17.5	17.2	15.4	16.3
51 Finance companies	261.2	328.1	378.8	446.1	446.1	464.3	478.0	481.2	496.2	501.3	510.9
52 REITs	5.6	6.5	7.3	11.4	11.4	11.1	10.6	10.0	10.1	10.1	9.7
53 SCO issuers	25.0	64.0	103.1	135.7	135.7	173.8	173.5	174.9	184.4	193.1	205.7
	All sectors										
54 **Total credit market debt**	**8,254.4[r]**	**9,414.4[r]**	**10,425.3**	**11,434.3**	**11,434.3**	**11,712.9[r]**	**11,924.8**	**12,125.1**	**12,387.4**	**12,591.7**	**12,799.7**
55 U.S. government securities	2,227.0	2,620.0[r]	2,933.9	3,211.1	3,211.1	3,291.5	3,330.3	3,403.3	3,512.4	3,642.0	3,712.1
56 State and local obligations	655.5	679.1	728.4	790.8	790.8	798.6[r]	804.9	816.4	821.2	822.5	826.8
57 Corporate and foreign bonds	818.9[r]	1,031.7[r]	1,197.4	1,358.9	1,358.9	1,415.2[r]	1,446.1	1,470.5	1,502.6	1,530.7	1,568.9
58 Mortgages	2,289.8	2,617.0	2,953.8	3,247.2	3,247.2	3,327.7[r]	3,402.1	3,473.6	3,540.1	3,601.1	3,657.7
59 Consumer credit	601.8	659.8	693.2	743.5	743.5	741.7	756.7	771.0	790.6	774.3	783.3
60 Bank loans n.e.c.	662.4[r]	729.0[r]	729.5	768.9	768.9	779.5[r]	795.6	807.4	820.3	808.9	816.9
61 Open market paper	358.5	384.9	437.9	513.4	513.4	543.0[r]	562.2	569.6	579.2	594.5	600.5
62 Other loans	640.5[r]	693.1[r]	751.1	800.5	800.5	815.7[r]	827.0	813.4	821.1	817.8	833.6

1.60 SUMMARY OF CREDIT MARKET CLAIMS, BY HOLDER

Billions of dollars, except as noted; period-end levels.

Transaction category, or sector	1985[r]	1986[r]	1987[r]	1988[r]	1988	1989				1990	
					Q4[r]	Q1[r]	Q2[r]	Q3[r]	Q4[r]	Q1[r]	Q2
1 **Total funds advanced in credit markets to domestic nonfinancial sectors**	**6,804.5**	**7,646.3**	**8,343.9**	**9,096.0**	**9,096.0**	**9,267.7**	**9,438.6**	**9,603.6**	**9,803.5**	**9,972.6**	**10,126.6**
By public agencies and foreign											
2 Total held	1,474.0	1,779.4	2,006.6	2,199.7	2,199.7	2,257.0	2,266.9	2,323.3	2,386.5	2,428.9	2,504.7
3 U.S. government securities	435.4	509.8	570.9	651.5	651.5	666.1	646.1	674.5	689.4	686.4	714.0
4 Residential mortgages	518.2	678.5	814.1	900.4	900.4	927.2	954.4	991.1	1,038.4	1,078.9	1,120.8
5 FHLB advances to thrifts	88.8	108.6	133.1	152.8	152.8	163.8	161.9	151.1	141.8	132.9	126.3
6 Other loans and securities	431.6	482.4	488.6	495.1	495.1	500.0	504.5	506.6	517.0	530.7	543.6
7 Total held, by type of lender	1,474.0	1,779.4	2,006.6	2,199.7	2,199.7	2,257.0	2,266.9	2,323.3	2,386.5	2,428.9	2,504.7
8 U.S. government	248.6	255.3	240.0	217.6	217.6	212.9	211.5	207.8	207.1	216.6	231.1
9 Sponsored credit agencies and mortgage pools	659.8	835.9	1,001.0	1,113.0	1,113.0	1,151.1	1,157.8	1,193.5	1,238.2	1,275.4	1,309.5
10 Monetary authority	186.0	205.5	230.1	240.6	240.6	235.4	238.4	227.6	233.3	224.4	237.8
11 Foreign	379.5	482.8	535.5	628.5	628.5	657.6	659.2	694.5	707.9	712.5	726.3
Agency and foreign debt not in line 1											
12 Sponsored credit agencies and mortgage pools	632.7	810.3	978.6	1,098.4	1,098.4	1,140.8	1,169.5	1,203.6	1,249.3	1,287.5	1,319.7
13 Foreign	236.7	238.3	244.6	253.9	253.9	254.0	252.2	257.7	261.6	260.5	273.0
Private domestic holdings											
14 Total private holdings	6,199.9	6,915.6	7,560.4	8,248.5	8,248.5	8,405.4	8,593.3	8,741.5	8,927.9	9,091.7	9,214.7
15 U.S. government securities	1,791.6	2,110.1	2,363.0	2,559.7	2,559.7	2,625.4	2,684.1	2,728.8	2,823.0	2,955.5	2,998.1
16 State and local obligations	655.5	679.1	728.4	790.8	790.8	798.6	804.9	816.4	821.2	822.5	826.8
17 Corporate and foreign bonds	517.3	606.6	674.3	765.6	765.6	776.5	797.7	814.5	831.6	846.8	862.5
18 Residential mortgages	1,185.1	1,288.5	1,399.0	1,560.2	1,560.2	1,594.9	1,631.5	1,657.7	1,670.4	1,680.6	1,685.2
19 Other mortgages and loans	2,139.3	2,339.8	2,528.7	2,724.9	2,724.9	2,773.7	2,836.9	2,875.2	2,923.5	2,919.1	2,968.4
20 LESS: Federal Home Loan Bank advances	88.8	108.6	133.1	152.8	152.8	163.8	161.9	151.1	141.8	132.9	126.3
Private financial intermediation											
21 Credit market claims held by private financial institutions	5,289.4	6,018.0	6,564.5	7,128.6	7,128.6	7,273.3	7,430.5	7,518.2	7,674.1	7,760.9	7,851.6
22 Commercial banking	1,989.5	2,187.6	2,323.0	2,479.3	2,479.3	2,501.4	2,549.0	2,599.6	2,656.6	2,680.4	2,721.1
23 Savings institutions	1,191.2	1,297.9	1,445.5	1,567.7	1,567.7	1,570.6	1,561.0	1,530.3	1,480.3	1,461.2	1,425.4
24 Insurance and pension funds	1,365.3	1,525.4	1,705.1	1,903.8	1,903.8	1,957.8	2,004.9	2,042.7	2,093.4	2,135.7	2,181.4
25 Other finance	743.4	1,007.1	1,091.0	1,177.9	1,177.9	1,243.5	1,315.6	1,345.5	1,443.8	1,483.6	1,523.7
26 Sources of funds	5,289.4	6,018.0	6,564.5	7,128.6	7,128.6	7,273.3	7,430.5	7,518.2	7,674.1	7,760.9	7,851.6
27 Private domestic deposits and RPs	2,926.1	3,199.0	3,354.2	3,599.1	3,599.1	3,629.1	3,680.0	3,741.3	3,822.8	3,849.8	3,843.9
28 Credit market debt	580.5	719.5	858.2	986.1	986.1	1,050.5	1,064.6	1,060.2	1,073.0	1,071.1	1,080.3
29 Other sources	1,782.9	2,099.5	2,352.1	2,543.5	2,543.5	2,593.7	2,685.9	2,716.6	2,778.3	2,840.0	2,927.4
30 Foreign funds	5.6	18.6	62.3	71.5	71.5	61.8	50.0	55.7	59.9	62.8	58.2
31 Treasury balances	25.8	27.5	21.6	29.0	29.0	13.5	34.4	30.3	25.6	16.7	29.1
32 Insurance and pension reserves	1,289.3	1,398.5	1,527.8	1,692.5	1,692.5	1,741.8	1,774.0	1,793.2	1,829.9	1,867.1	1,918.3
33 Other, net	462.1	655.0	740.3	750.5	750.5	776.6	827.5	837.4	862.9	893.3	921.8
Private domestic nonfinancial investors											
34 Credit market claims	1,491.0	1,617.0	1,854.1	2,106.0	2,106.0	2,182.6	2,227.4	2,283.6	2,326.8	2,401.9	2,443.4
35 U.S. government securities	803.3	848.7	936.7	1,072.2	1,072.2	1,099.1	1,119.8	1,166.6	1,201.0	1,279.7	1,286.3
36 Tax-exempt obligations	231.5	212.6	274.4	340.9	340.9	348.9	353.6	363.1	369.2	363.0	367.0
37 Corporate and foreign bonds	37.1	90.5	114.0	100.4	100.4	123.6	125.1	121.2	117.2	125.4	136.7
38 Open market paper	135.2	145.1	178.5	218.0	218.0	225.1	233.5	235.9	227.4	219.0	232.6
39 Other	283.8	320.1	350.4	374.4	374.4	386.0	395.3	396.8	412.1	414.7	420.9
40 Deposits and currency	3,116.8	3,410.1	3,583.9	3,832.3	3,832.3	3,865.5	3,927.1	3,977.2	4,072.1	4,098.1	4,103.5
41 Currency	171.9	186.3	205.4	220.1	220.1	220.7	226.4	224.4	231.8	234.4	242.6
42 Checkable deposits	420.3	516.6	515.4	527.2	527.2	494.6	495.8	487.2	528.9	501.9	499.0
43 Small time and savings accounts	1,831.9	1,948.3	2,017.1	2,156.2	2,156.2	2,168.9	2,189.3	2,224.4	2,256.7	2,290.4	2,316.9
44 Money market fund shares	225.6	268.9	297.8	318.0	318.0	342.7	362.1	391.0	403.3	436.7	426.3
45 Large time deposits	339.9	336.7	373.9	414.7	414.7	430.8	435.7	440.0	437.8	429.2	407.1
46 Security RPs	108.3	128.5	150.1	182.9	182.9	192.1	197.1	198.6	196.2	191.6	194.5
47 Deposits in foreign countries	18.8	24.8	24.3	13.1	13.1	15.8	20.7	11.4	17.6	13.9	17.0
48 **Total of credit market instruments, deposits, and currency**	**4,607.8**	**5,027.2**	**5,438.0**	**5,938.2**	**5,938.2**	**6,048.1**	**6,154.5**	**6,260.8**	**6,399.0**	**6,500.0**	**6,546.9**
49 Public holdings as percent of total	20.9	22.6	23.4	23.5	23.5	23.7	23.4	23.6	23.7	23.7	24.1
50 Private financial intermediation (in percent)	85.3	87.0	86.8	86.4	86.4	86.5	86.5	86.0	86.0	85.4	85.2
51 Total foreign funds	385.1	501.3	597.8	700.1	700.1	719.5	709.3	750.2	767.8	775.3	784.5
MEMO: Corporate equities not included above											
52 **Total market value**	**2,823.9**	**3,360.6**	**3,325.0**	**3,619.8**	**3,619.8**	**3,730.8**	**4,071.3**	**4,398.7**	**4,382.1**	**4,172.4**	**4,339.8**
53 Mutual fund shares	240.2	413.5	460.1	478.3	478.3	486.3	514.8	543.9	555.1	550.3	587.9
54 Other equities	2,583.7	2,947.1	2,864.9	3,141.6	3,141.6	3,244.5	3,556.5	3,854.8	3,827.0	3,622.1	3,751.9
55 Holdings by financial institutions	800.3	974.6	1,039.5	1,176.1	1,176.1	1,241.6	1,354.4	1,490.5	1,497.8	1,438.4	1,539.8
56 Other holdings	2,023.6	2,385.9	2,285.5	2,443.7	2,443.7	2,489.2	2,716.9	2,908.2	2,884.3	2,734.0	2,800.0

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

1977 = 100; monthly and quarterly data are seasonally adjusted. Exceptions noted.

Measure	1987	1988	1989	1989	1990							
				Dec.	Jan.	Feb.	Mar.	Apr.	May	June[r]	July[r]	Aug.
1 **Industrial production (1987 = 100)**[1]	**100.0**	**105.4**	**108.1**	**108.6**	**107.5**	**108.5**	**108.9**	**108.8**	**109.4**	**110.0**	**110.0**	**109.8**
Market groupings												
2 Products, total (1987 = 100)	100.0	105.3	108.6	109.7	108.4	109.4	110.1	109.8	110.5	111.0	110.7	110.6
3 Final, total (1987 = 100)	100.0	105.6	109.1	110.3	108.5	109.7	110.7	110.4	111.2	111.7	111.4	111.2
4 Consumer goods (1987 = 100)	100.0	104.0	106.7	108.3	106.0	107.0	107.5	107.2	107.4	108.1	107.5	107.7
5 Equipment (1987 = 100)	100.0	107.6	112.3	112.9	111.8	113.3	114.9	114.7	116.2	116.5	116.4	115.8
6 Intermediate (1987 = 100)	100.0	104.4	106.8	107.9	108.0	108.4	108.2	108.0	108.3[r]	108.5	108.4	108.8
7 Materials (1987 = 100)	100.0	105.6	107.4	106.9	106.2	107.1	107.1	107.3	107.7[r]	108.5	109.0	108.6
Industry groupings												
8 Manufacturing (1987 = 100)	100.0	105.8	108.9	108.8	108.1	109.6	109.8	109.5	110.3	110.7	110.8	110.6
Capacity utilization (percent)[2]												
9 Manufacturing	81.4	83.9	83.9	82.8	82.0	83.0	82.9	82.5	82.8	82.9	82.7	82.4
10 Construction contracts (1982 = 100)[3]	164.8	166.4	171.3[r]	166.0	158.0	154.0	157.0	147.0	155.0	153.0	148.0	146.0
11 Nonagricultural employment, total[4]	123.9	128.0	131.6	132.6[r]	133.0[r]	133.3[r]	133.5[r]	133.6[r]	134.1[r]	134.4	134.3	134.2
12 Goods-producing, total	101.5	103.7	105.3	103.6[r]	103.5[r]	104.1[r]	103.8[r]	103.4[r]	103.5[r]	103.4	103.1	102.7
13 Manufacturing, total	96.7	98.6	99.6	98.0[r]	97.4[r]	97.8[r]	97.6[r]	97.5[r]	97.4[r]	97.3	97.2	96.9
14 Manufacturing, production- worker	91.9	93.9	94.8	92.8[r]	92.0[r]	92.5[r]	92.4[r]	92.3[r]	92.1[r]	92.0	92.0	91.7
15 Service-producing	133.3	138.2	142.7	144.8[r]	145.3[r]	145.6	146.0[r]	146.2[r]	147.0[r]	147.4	147.3	147.4
16 Personal income, total	234.3	253.2	272.7	279.7	281.9	283.8	285.8	286.7	287.7	289.0	290.7	n.a.
17 Wages and salary disbursements	226.4	244.6	258.9	263.9	264.9	266.9	268.6	269.9	271.0	272.6	274.2	n.a.
18 Manufacturing	183.8	196.5	203.1	202.5	201.1	203.0	204.6	204.2	205.9	206.8	207.3	n.a.
19 Disposable personal income[5]	213.6	228.0	240.6	277.2	279.9	281.7	283.9	283.9	284.8	286.5	288.0	n.a.
20 Retail sales[6]	213.6	228.0	240.6	242.8	249.6	249.7	248.7	246.3	246.1	248.9	249.9	248.5
Prices[7]												
21 Consumer (1982–84 = 100)	113.6	118.3	124.0	126.1	127.4	128.0	128.7	128.9	129.2	129.9	130.4	131.6
22 Producer finished goods (1982 = 100)	105.4	108.0	113.6	115.4	117.6	117.4	117.2	117.2[r]	117.7	117.9	118.0	119.2

1. A major revision of the industrial production index and the capacity utilization rates was released in April 1990. See "Industrial Production: 1989 Developments and Historical Revision" in the *Federal Reserve Bulletin*, vol. 76 (April 1990), pp. 187–204.
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 latest month are preliminary and the prior three months have been revised. See "Recent Developments in Industrial Capacity and Utilization," *Federal Reserve Bulletin*, vol. 76 (June 1990), pp. 411–35.

2.11 LABOR FORCE, EMPLOYMENT, AND UNEMPLOYMENT

Thousands of persons; monthly data are seasonally adjusted. Exceptions noted.

Category	1987	1988	1989	1990[r]							
				Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
HOUSEHOLD SURVEY DATA											
1 **Noninstitutional population**[1]	**185,010**	**186,837**	**188,601**	**189,506**	**189,607**	**189,717**	**189,844**	**189,983**	**190,122**	**190,275**	**190,411**
2 Labor force (including Armed Forces)[1]	122,122	123,893	126,077	126,610	126,825	127,017	127,061	127,159	126,981	126,906	126,810
3 Civilian labor force	119,865	121,669	123,869	124,397	124,630	124,829	124,886	125,004	124,836	124,767	124,660
Employment											
4 Nonagricultural industries[2]	109,232	111,800	114,142	114,728	114,957	115,133	114,983	115,045	115,041	114,867	114,521
5 Agriculture	3,208	3,169	3,199	3,134	3,079	3,200	3,133	3,305	3,348	3,085	3,137
Unemployment											
6 Number	7,425	6,701	6,528	6,535	6,594	6,495	6,770	6,653	6,447	6,814	7,003
7 Rate (percent of civilian labor force)	6.2	5.5	5.3	5.3	5.3	5.2	5.4	5.3	5.2	5.5	5.6
8 Not in labor force	62,888	62,944	62,524	62,896	62,782	62,700	62,783	62,824	63,141	63,369	63,601
ESTABLISHMENT SURVEY DATA											
9 **Nonagricultural payroll employment**[3]	**102,200**	**105,584**	**108,573**	**109,654**	**109,958**	**110,122**	**110,177**	**110,617**	**110,829**	**110,740**	**110,665**
10 Manufacturing	19,024	19,403	19,611	19,171	19,244	19,217	19,190	19,167	19,148	19,126	19,081
11 Mining	717	721	722	723	727	729	734	738	744	743	736
12 Contract construction	4,967	5,125	5,302	5,294	5,368	5,313	5,256	5,286	5,270	5,231	5,191
13 Transportation and public utilities	5,372	5,548	5,703	5,790	5,804	5,808	5,809	5,833	5,846	5,840	5,849
14 Trade	24,327	25,139	25,807	26,163	26,115	26,125	26,141	26,164	26,205	26,224	26,214
15 Finance	6,547	6,676	6,814	6,794	6,817	6,821	6,823	6,838	6,844	6,843	6,852
16 Service	24,236	25,600	26,889	27,721	27,842	27,950	27,969	28,094	28,225	28,284	28,356
17 Government	17,010	17,372	17,726	17,998	18,041	18,159	18,255	18,497	18,547	18,449	18,386

1. Persons 16 years of age and over. Monthly figures, which are based on sample data, relate to the calendar week that contains the 12th day; annual data are averages of monthly figures. By definition, seasonality does not exist in population figures. Based on data from *Employment and Earnings* (U.S. Department of Labor).

2. Includes self-employed, unpaid family, and domestic service workers.

3. Data include all full- and part-time employees who worked during, or received pay for, the pay period that includes the 12th day of the month, and exclude proprietors, self-employed persons, domestic servants, unpaid family workers, and members of the Armed Forces. Data are adjusted to the March 1984 benchmark and only seasonally adjusted data are available at this time. Based on data from *Employment and Earnings* (U.S. Department of Labor).

2.12 OUTPUT, CAPACITY, AND CAPACITY UTILIZATION[1]

Seasonally adjusted

Series	1989		1990		1989		1990		1989		1990	
	Q3	Q4	Q1	Q2[r]	Q3	Q4	Q1	Q2	Q3	Q4[r]	Q1	Q2[r]
	Output (1987 = 100)				Capacity (percent of 1987 output)				Utilization rate (percent)			
1 **Total industry**	**108.1**	**108.1**	**108.3**	**109.4**	**128.8**	**129.5**	**130.3**	**131.2**	**84.0**	**83.5**	**83.1**	**83.4**
2 Mining	100.8	100.6	101.3	102.6	116.7	116.1	115.7	115.2	86.4	86.7	87.6	89.0
3 Utilities	106.2	110.6	105.7	107.6	125.5	125.7	126.0	126.4	84.6	88.0	83.9	85.2
4 **Manufacturing**	**108.9**	**108.7**	**109.2**	**110.2**	**130.2**	**131.1**	**132.1**	**133.2**	**83.7**	**82.9**	**82.6**	**82.7**
5 Primary processing	106.4	106.1	106.4	106.3	122.7	123.4	124.2	124.9	86.7	85.9	85.7	85.1
6 Advanced processing	110.1	109.9	110.5	112.0	133.7	134.7	135.8	137.0	82.4	81.6	81.4	81.8

Series	Previous cycle[2]		Latest cycle[3]		1989		1990							
	High	Low	High	Low	Aug.	Dec.	Jan.	Feb.	Mar.	Apr.	May[r]	June[r]	July[r]	Aug.[p]
	Capacity utilization rate (percent)													
7 **Total industry**	**89.2**	**72.6**	**87.3**	**71.8**	**84.0**	**83.7**	**82.7**	**83.2**	**83.4**	**83.1**	**83.4**	**83.6**	**83.5**	**83.1**
8 Mining	94.4	88.4	96.6	80.6	86.4	86.3	87.8	87.3	87.5	89.2	88.7	89.1	89.7	87.8
9 Utilities	95.6	82.5	88.3	76.2	84.7	92.3	84.8	82.5	84.2	84.5	84.7	86.3	85.9	86.9
10 **Manufacturing**	**88.9**	**70.8**	**87.3**	**70.0**	**83.8**	**82.8**	**82.0**	**83.0**	**82.9**	**82.5**	**82.8**	**82.9**	**82.7**	**82.4**
11 Primary processing	92.2	68.9	89.7	66.8	86.9	85.2	85.7	86.1	85.2	85.0	84.9	85.5	85.8	85.5
12 Advanced processing	87.5	72.0	86.3	71.4	82.4	81.8	80.5	81.7	82.0	81.5	82.0	81.9	81.5	81.1

1. These data also appear in the Board's G.17 (419) release. For address, see inside front cover. For a detailed description of the series, see "Recent Developments in Industrial Capacity and Utilization," *Federal Reserve Bulletin*, vol. 76 (June 1990), pages 411–35.

2. Monthly high 1973; monthly low 1975.

3. Monthly highs 1978 through 1980; monthly lows 1982.

2.13 INDUSTRIAL PRODUCTION Indexes and Gross Value[1]

Monthly data are seasonally adjusted

Groups	1987 proportion	1989 avg.	1989 Aug.	1989 Sept.	1989 Oct.	1989 Nov.	1989 Dec.	1990 Jan.	1990 Feb.	1990 Mar.	1990 Apr.	1990 May[r]	1990 June[r]	1990 July[r]	1990 Aug.[p]
			Index (1987 = 100)												
MAJOR MARKET															
1 **Total index**	**100.0**	**108.1**	**108.2**	**108.2**	**107.7**	**108.1**	**108.6**	**107.5**	**108.5**	**108.9**	**108.8**	**109.4**	**110.0**	**110.0**	**109.8**
2 **Products**	**60.8**	**108.6**	**108.5**	**108.8**	**108.1**	**108.9**	**109.7**	**108.4**	**109.4**	**110.1**	**109.8**	**110.5**	**111.0**	**110.7**	**110.6**
3 **Final products**	**46.0**	**109.1**	**109.1**	**109.6**	**108.5**	**109.4**	**110.3**	**108.5**	**109.7**	**110.7**	**110.4**	**111.2**	**111.7**	**111.4**	**111.2**
4 Consumer goods	26.0	106.7	105.6	106.3	107.3	107.4	108.3	106.0	107.0	107.5	107.2	107.4	108.1	107.5	107.7
5 Durable consumer goods	5.6	107.9	105.8	107.6	106.8	105.7	106.8	99.4	106.2	110.8	107.3	109.3	112.1	109.2	107.7
6 Automotive products	2.5	106.9	103.2	104.9	102.9	102.4	104.5	85.2	99.3	109.3	102.4	107.0	112.2	107.4	105.3
7 Autos and trucks	1.5	105.7	101.1	103.1	99.7	98.4	100.1	66.3	92.7	107.7	95.8	105.6	112.9	104.8	101.5
8 Autos, consumer	.9	101.2	95.1	102.0	100.7	92.8	92.6	62.1	86.9	100.5	87.7	96.8	103.8	98.0	97.2
9 Trucks, consumer	.6	113.3	111.3	105.0	98.2	108.0	112.6	73.3	102.3	120.0	109.3	120.4	128.3	116.2	108.8
10 Auto parts and allied goods	1.0	108.7	106.3	107.4	107.6	108.2	111.2	113.6	109.4	111.6	112.2	108.9	111.2	111.3	110.9
11 Other	3.1	108.7	107.9	109.8	109.8	108.4	108.6	110.6	111.6	112.0	111.2	111.1	112.0	110.7	109.7
12 Appliances, A/C, and TV	.8	106.7	106.5	109.3	107.6	102.0	101.0	108.4	107.8	108.1	104.4	103.6	107.5	101.9	100.7
13 Carpeting and furniture	.9	101.5	98.1	100.9	101.1	100.4	102.0	103.7	104.7	105.9	107.5	107.6	107.8	108.6	108.3
14 Miscellaneous home goods	1.4	114.5	114.8	115.8	116.6	117.1	117.1	116.2	118.2	118.0	117.3	117.5	117.2	116.9	115.5
15 Nondurable consumer goods	20.4	106.4	105.6	106.0	107.4	107.8	108.7	107.8	107.2	106.6	107.1	106.9	107.0	107.0	107.6
16 Foods and tobacco	9.1	104.2	103.3	103.7	105.6	105.8	106.4	105.5	106.2	105.8	105.6	105.2	104.9	104.9	105.4
17 Clothing	2.6	101.6	100.3	101.6	101.9	100.1	99.4	100.6	99.6	97.0	96.0	96.4	95.8	96.1	96.0
18 Chemical products	3.5	109.4	110.1	107.8	110.3	111.3	110.3	112.7	112.0	111.0	113.5	113.0	112.0	110.5	110.8
19 Paper products	2.5	114.3	114.1	116.2	117.2	118.1	116.9	116.2	117.6	116.4	118.1	118.6	118.3	120.2	121.4
20 Energy	2.7	106.7	104.7	106.0	106.0	108.0	115.2	107.9	101.5	103.1	104.1	104.1	107.3	107.8	109.1
21 Fuels	.7	102.8	102.3	103.4	103.1	103.0	100.5	105.1	106.6	101.8	101.6	98.2	102.6	105.7	105.4
22 Residential utilities	2.0	108.1	105.6	106.9	107.0	109.8	120.7	109.0	99.6	103.6	105.0	106.3	109.1	108.5	110.5
23 **Equipment, total**	**20.0**	**112.3**	**113.6**	**113.8**	**110.1**	**112.0**	**112.9**	**111.8**	**113.3**	**114.9**	**114.7**	**116.2**	**116.5**	**116.4**	**115.8**
24 Business equipment	13.9	119.1	120.4	120.7	116.0	118.7	119.9	118.0	120.1	122.2	121.6	123.5	123.9	123.8	123.6
25 Information processing and related	5.6	121.7	122.0	123.7	119.9	123.5	124.0	124.0	124.7	126.0	126.4	126.6	125.5	126.0	125.8
26 Office and computing	1.9	137.2	139.3	141.8	132.8	141.0	142.7	142.7	144.3	147.2	149.3	148.9	148.1	149.3	149.9
27 Industrial	4.0	113.8	113.8	113.8	112.4	113.4	112.8	113.5	113.4	113.9	114.2	115.8	115.5	116.8	116.2
28 Transit	2.5	123.8	128.4	127.0	112.9	117.0	123.4	111.4	122.7	130.6	126.2	132.5	136.8	133.7	134.0
29 Autos and trucks	1.2	103.9	101.6	103.1	97.6	98.0	97.6	69.6	91.7	104.5	95.2	105.7	112.3	103.7	....
30 Other	1.9	116.5	118.6	119.1	116.3	117.8	118.5	118.7	117.4	117.8	117.6	119.4	119.9	119.2	118.9
31 Defense and space equipment	5.4	97.4	98.9	98.9	96.6	96.7	96.6	97.5	97.6	97.5	97.3	97.6	97.5	98.0	97.4
32 Oil and gas well drilling	.6	93.7	95.3	97.3	97.3	99.9	100.3	98.3	100.1	106.0	114.3	118.6	122.7	115.8	106.4
33 Manufactured homes	.2	92.3	89.5	87.5	87.9	89.4	91.6	91.6	94.3	92.9	89.7	91.3	92.8	90.0	92.8
34 **Intermediate products, total**	**14.7**	**106.8**	**106.4**	**106.3**	**106.9**	**107.3**	**107.9**	**108.0**	**108.4**	**108.2**	**108.0**	**108.3**	**108.5**	**108.4**	**108.8**
35 Construction supplies	6.0	106.1	105.5	105.2	106.3	107.0	107.4	107.9	108.2	107.3	106.4	105.5	106.0	105.4	105.3
36 Business supplies	8.7	107.3	106.9	107.0	107.3	107.5	108.2	108.0	108.5	108.9	109.1	110.2	110.3	110.5	111.2
37 **Materials, total**	**39.2**	**107.4**	**107.8**	**107.4**	**107.1**	**107.0**	**106.9**	**106.2**	**107.1**	**107.1**	**107.3**	**107.7**	**108.5**	**109.0**	**108.6**
38 Durable goods materials	19.4	111.6	112.0	112.0	110.8	110.8	110.4	109.4	110.8	110.9	110.9	112.5	113.7	113.9	113.9
39 Durable consumer parts	4.2	109.0	109.2	108.8	106.9	105.7	102.5	96.5	102.8	104.5	103.2	108.5	108.5	108.4	109.7
40 Equipment parts	7.3	114.7	115.6	115.5	114.4	115.3	115.8	116.5	117.6	117.6	117.4	118.1	118.9	119.0	118.8
41 Other	7.9	110.2	110.4	110.6	109.5	109.4	109.5	109.7	108.7	108.1	108.9	109.6	111.6	112.0	111.6
42 Basic metal materials	2.8	112.1	113.0	112.9	111.0	108.6	109.3	108.5	109.9	107.5	110.2	109.2	113.4	113.9	114.2
43 Nondurable goods materials	9.0	105.3	105.7	104.2	106.1	104.9	104.3	105.4	105.8	105.2	106.1	105.2	106.2	107.1	106.3
44 Textile materials	1.2	99.8	102.1	99.6	98.6	96.1	95.8	94.6	96.2	94.9	95.6	97.4	99.4	98.5	97.7
45 Pulp and paper materials	1.9	103.8	103.6	104.1	107.7	104.6	103.7	105.0	105.3	103.0	106.0	104.5	104.8	107.6	106.8
46 Chemical materials	3.8	106.4	107.3	104.5	106.8	105.8	103.8	105.8	107.3	107.5	107.4	105.4	107.3	107.8	107.1
47 Other	2.1	107.6	107.0	106.5	107.5	108.4	110.4	110.9	108.8	108.7	109.8	109.8	109.0	110.0	109.2
48 Energy materials	10.9	101.4	101.7	101.6	101.3	101.9	102.7	101.2	101.7	102.0	101.8	101.1	101.3	102.1	101.1
49 Primary energy	7.2	99.9	102.5	100.7	99.8	100.5	99.0	101.1	102.1	101.2	100.3	100.1	99.9	101.3	99.5
50 Converted fuel materials	3.7	104.3	100.4	103.6	104.2	104.5	110.0	101.4	100.9	103.4	104.6	102.9	104.1	103.6	104.1
SPECIAL AGGREGATES															
51 Total excluding autos and trucks	97.3	108.2	108.4	108.4	108.0	108.4	108.9	108.6	108.9	109.0	109.2	109.5	109.9	110.2	110.0
52 Total excluding motor vehicles and parts	95.3	108.3	108.5	108.5	108.1	108.6	109.1	109.0	109.2	109.2	109.5	109.7	110.1	110.4	110.2
53 Total excluding office and computing machines	97.5	107.4	107.5	107.4	107.1	107.3	107.7	106.6	107.6	108.0	107.8	108.4	109.0	109.0	108.8
54 Consumer goods excluding autos and trucks	24.5	106.8	105.9	106.5	107.7	107.9	108.8	108.4	107.8	107.5	107.9	107.6	107.8	107.7	108.0
55 Consumer goods excluding energy	23.3	106.7	105.8	106.4	107.4	107.3	107.5	105.8	107.6	108.0	107.5	107.8	108.1	107.5	107.5
56 Business equipment excluding autos and trucks	12.7	120.6	122.3	122.4	117.8	120.7	122.1	122.8	122.9	124.0	124.2	125.3	125.0	125.8	125.5
57 Business equipment excluding office and computing equipment	12.0	116.2	117.4	117.3	113.3	115.0	116.2	114.0	116.2	118.2	117.2	119.4	119.9	119.7	119.3
58 Materials excluding energy	28.4	109.6	110.0	109.5	109.3	108.9	108.4	108.1	109.2	109.1	109.4	110.2	111.3	111.7	111.5

2.13 INDUSTRIAL PRODUCTION Indexes and Gross Value[1]—Continued

Groups	SIC code	1987 proportion	1989 avg.	1989 Aug.	1989 Sept.	1989 Oct.	1989 Nov.	1989 Dec.	1990 Jan.	1990 Feb.	1990 Mar.	1990 Apr.	1990 May^r	1990 June^r	1990 July^r	1990 Aug.^p
				Index (1987 = 100)												
MAJOR INDUSTRY																
1 **Total index**	....	**100.0**	**108.1**	**108.2**	**108.2**	**107.7**	**108.1**	**108.6**	**107.5**	**108.5**	**108.9**	**108.8**	**109.4**	**110.0**	**110.0**	**109.8**
2 **Manufacturing**	....	**84.4**	**108.9**	**109.1**	**109.1**	**108.4**	**108.9**	**108.8**	**108.1**	**109.6**	**109.8**	**109.5**	**110.3**	**110.7**	**110.8**	**110.6**
3 **Primary processing**	....	**26.7**	**106.4**	**106.6**	**105.8**	**106.6**	**106.2**	**105.3**	**106.2**	**106.9**	**106.0**	**105.9**	**106.1**	**107.0**	**107.6**	**107.5**
4 **Advanced processing**	....	**57.7**	**110.1**	**110.2**	**110.6**	**109.3**	**110.1**	**110.4**	**109.0**	**110.9**	**111.7**	**111.3**	**112.4**	**112.5**	**112.2**	**112.1**
5 **Durable**	....	**47.3**	**110.9**	**111.3**	**111.5**	**109.4**	**110.1**	**110.4**	**108.6**	**110.7**	**111.9**	**111.1**	**112.6**	**113.2**	**112.9**	**112.6**
6 Lumber and products	24	2.0	103.0	102.4	102.6	103.2	104.8	106.4	106.0	104.3	105.0	103.3	101.7	101.6	101.1	101.3
7 Furniture and fixtures	25	1.4	105.3	104.5	105.7	105.6	104.4	105.1	105.1	104.8	105.9	107.6	108.0	108.7	108.7	108.6
8 Clay, glass, and stone products	32	2.5	108.0	107.8	106.5	107.7	108.2	108.6	110.0	108.0	107.7	105.1	106.4	106.1	105.4	105.1
9 Primary metals	33	3.3	109.2	111.7	109.9	108.6	104.8	102.6	105.0	107.9	105.4	106.4	106.2	109.6	109.4	110.6
10 Iron and steel	331,2	1.9	109.3	109.8	109.7	109.2	104.1	100.3	104.6	110.6	106.1	106.7	105.5	110.5	109.7	112.6
11 Raw steel	....	.1	108.5	106.8	102.9	106.4	100.6	97.6	109.9	109.0	105.9	104.9	107.6	111.8	113.8	117.1
12 Nonferrous	333–6,9	1.4	109.0	114.0	109.8	107.6	105.8	105.8	105.6	104.0	104.3	105.9	107.1	108.3	108.9	107.8
13 Fabricated metal products	34	5.4	107.2	106.5	106.0	105.9	106.9	106.3	105.1	105.6	105.5	105.0	107.1	106.8	107.7	107.4
14 Nonelectrical machinery	35	8.6	121.8	121.8	123.4	119.0	122.9	123.8	123.7	124.2	125.2	125.7	126.9	126.6	127.3	126.6
15 Office and computing machines	357	2.5	137.2	139.3	141.8	132.8	141.0	142.7	142.7	144.3	147.3	149.3	149.0	148.2	149.3	149.9
16 Electrical machinery	36	8.6	109.5	110.6	110.8	110.2	110.1	110.1	110.1	111.0	112.3	111.3	112.4	112.7	111.9	111.8
17 Transportation equipment	37	9.8	107.2	107.8	108.0	102.1	102.8	104.4	94.7	103.5	107.9	105.1	109.0	110.9	109.1	108.6
18 Motor vehicles and parts	371	4.7	104.9	102.7	103.2	99.7	99.0	98.7	76.8	94.1	103.5	95.8	104.0	108.0	103.0	102.2
19 Autos and light trucks	....	2.3	105.0	100.2	102.9	99.9	97.6	99.0	65.7	91.8	106.7	94.6	104.3	111.6	103.8	100.9
20 Aerospace and miscellaneous transportation equipment	372–6,9	5.1	109.3	112.4	112.3	104.3	106.3	109.6	111.0	111.9	111.9	113.4	113.5	113.5	114.7	114.3
21 Instruments	38	3.3	116.4	116.4	116.2	116.1	115.6	114.8	116.0	116.2	115.7	115.8	116.5	115.0	115.7	115.4
22 Miscellaneous manufacturers	39	1.2	114.9	116.5	116.2	116.9	117.0	116.4	117.0	118.1	118.6	118.6	119.1	119.6	119.9	119.7
23 **Nondurable**	....	**37.2**	**106.4**	**106.2**	**106.0**	**107.2**	**107.3**	**106.7**	**107.5**	**108.3**	**107.2**	**107.5**	**107.4**	**107.6**	**108.1**	**108.1**
24 Foods	20	8.8	105.5	104.8	105.4	106.8	107.4	108.0	106.8	107.4	107.1	107.0	106.8	106.6	106.8	107.2
25 Tobacco products	21	1.0	99.7	95.0	93.3	99.7	98.8	98.5	101.3	102.3	100.0	98.8	97.2	95.6	97.7	96.7
26 Textile mill products	22	1.8	101.9	101.5	101.5	101.9	99.3	99.8	100.6	103.0	99.8	100.9	102.7	103.6	103.8	103.0
27 Apparel products	23	2.4	104.3	104.7	104.5	103.9	103.7	102.6	102.4	102.1	99.8	98.7	99.2	99.3	99.7	99.3
28 Paper and products	26	3.6	103.2	103.0	102.2	105.3	104.1	103.4	103.8	105.0	102.8	105.3	104.0	104.2	107.5	106.7
29 Printing and publishing	27	6.4	108.5	107.8	109.4	109.3	109.6	109.6	110.7	112.1	111.4	112.0	112.8	112.2	112.4	113.0
30 Chemicals and products	28	8.6	108.5	109.6	107.5	109.4	109.8	107.6	109.9	110.5	109.5	110.3	109.2	109.9	109.4	109.5
31 Petroleum products	29	1.3	106.1	107.0	108.7	106.9	109.3	104.3	108.6	112.0	109.1	106.8	104.6	106.0	109.0	108.4
32 Rubber and plastic products	30	3.0	108.9	109.0	108.5	108.8	109.1	110.1	110.7	109.1	109.8	109.0	110.9	112.8	113.1	112.5
33 Leather and products	31	.3	103.7	103.2	103.5	102.2	99.4	103.0	104.3	102.9	103.3	102.6	103.5	102.0	103.4	102.3
34 **Mining**	....	**7.9**	**100.5**	**100.7**	**101.6**	**100.7**	**101.2**	**100.1**	**101.7**	**101.0**	**101.1**	**102.9**	**102.2**	**102.6**	**103.2**	**100.8**
35 Metal	10	.3	141.4	144.3	145.4	143.2	145.9	155.5	144.8	143.4	141.4	152.7	148.7	155.3	156.9	155.1
36 Coal	11,12	1.2	105.7	103.1	109.6	109.9	108.1	103.5	114.1	111.9	112.9	114.2	110.0	113.5	118.5	109.4
37 Oil and gas extraction	13	5.7	95.5	96.3	95.9	94.3	95.5	94.0	94.4	94.1	94.6	95.7	96.0	95.0	94.8	93.7
38 Stone and earth minerals	14	.7	113.9	113.3	114.1	118.0	115.8	119.7	121.2	120.0	116.5	120.2	119.9	122.5	121.7	120.0
39 **Utilities**	....	**7.6**	**107.1**	**106.2**	**105.9**	**107.4**	**108.3**	**116.1**	**106.8**	**104.0**	**106.2**	**106.7**	**107.1**	**109.2**	**108.7**	**110.1**
40 Electric	491,3PT	6.0	108.1	108.1	107.1	109.7	109.5	116.3	108.3	107.1	109.7	109.7	110.3	112.5	112.0	113.7
41 Gas	492,3PT	1.6	103.0	99.2	101.0	99.1	103.9	115.6	101.2	92.3	93.3	95.5	95.2	96.9	96.5	96.7
SPECIAL AGGREGATES																
42 Manufacturing excluding motor vehicles and parts	....	79.8	109.2	109.5	109.5	108.9	109.4	109.3	109.9	110.5	110.2	110.3	110.7	110.9	111.2	111.8
43 Manufacturing excluding office and computing machines	....	82.0	108.1	108.2	108.1	107.7	107.9	107.7	107.1	108.6	108.7	108.3	109.2	109.6	109.6	109.5
		Gross value (billions of 1982 dollars, annual rates)														
MAJOR MARKET																
44 **Products, total**	....	**1734.8**	**1,889.8**	**1,883.7**	**1,894.3**	**1,878.3**	**1,896.9**	**1,905.5**	**1,863.6**	**1,903.3**	**1,922.6**	**1,906.2**	**1,922.2**	**1,935.5**	**1,930.3**	**1,927.1**
45 Final	....	1350.9	1,480.1	1,475.3	1,486.2	1,465.6	1,482.8	1,492.5	1,447.9	1,488.3	1,507.5	1,493.9	1,506.0	1,522.7	1,517.3	1,513.3
46 Consumer goods	....	833.4	884.6	870.1	878.8	883.2	889.0	898.6	864.3	888.6	893.4	883.9	885.9	897.8	892.5	888.3
47 Equipment	....	517.5	595.5	605.3	607.5	582.4	593.8	594.0	583.6	599.8	614.1	610.0	620.1	624.9	624.8	625.0
48 Intermediate	....	384.0	409.7	408.4	408.1	412.7	414.1	413.0	415.7	415.0	415.1	412.3	416.2	412.7	413.0	413.8

1. These data also appear in the Board's G.17 (419) release. For requests see address inside front cover.

A major revision of the industrial production index and the capacity utilization rates was released in April 1990. See "Industrial Production: 1989 Developments and Historical Revision," *Federal Reserve Bulletin*, vol. 76 (April 1990), pp. 187–204.

2.14 HOUSING AND CONSTRUCTION

Monthly figures are at seasonally adjusted annual rates except as noted.

Item	1987	1988	1989	1989 Oct.	1989 Nov.	1989 Dec.	1990 Jan.	1990 Feb.	1990 Mar.	1990 Apr.	1990 May	1990 June	1990 July
	Private residential real estate activity (thousands of units)												
NEW UNITS													
1 Permits authorized	1,535	1,456	1,339	1,362	1,364	1,416	1,739	1,297	1,232	1,108	1,065	1,108	1,082
2 1-family	1,024	994	932	959	984	984	985	974	912	813	802	796	780
3 2-or-more-family	511	462	407	403	380	432	754	323	320	295	263	312	302
4 Started	1,621	1,488	1,376	1,423	1,347	1,273	1,568	1,488	1,307	1,216	1,206	1,189	1,147
5 1-family	1,146	1,081	1,003	1,023	1,010	931	1,099	1,154	996	898	897	889	868
6 2-or-more-family	474	407	373	400	337	342	469	334	311	318	309	300	279
7 Under construction, end of period[1]	987	919	850	894	881	886	892	900	887	876	857[r]	845	834
8 1-family	591	570	535	565	558	567	571	575	567	559	546[r]	540	532
9 2-or-more-family	397	350	315	329	323	319	321	325	320	317	311	305	302
10 Completed	1,669	1,530	1,423	1,317	1,486	1,302	1,443	1,351	1,378	1,295	1,363[r]	1,291	1,280
11 1-family	1,123	1,085	1,026	987	1,078	933	1,031	1,041	1,037	942	1,008[r]	943	962
12 2-or-more-family	546	445	396	330	408	369	412	310	341	353	355	348	318
13 Mobile homes shipped	233	218	198	190	189	189	195	200	193	189	191	191	184
Merchant builder activity in 1-family units													
14 Number sold	672	675	650	636	687	633	613	606	558	533	536	561	548
15 Number for sale, end of period[1]	366	367	362	363	363	362	365	366	363	363	359	353	349
Price (thousands of dollars)[2]													
Median													
16 Units sold	104.7	113.3	120.4	123.0	125.0	125.2	125.0	126.9	119.4	130.0	125.0	127.0	121.0
Average													
17 Units sold	127.9	139.0	148.3	147.8	151.4	154.3	151.7	150.9	144.6	153.4	150.7[r]	152.1	150.5
EXISTING UNITS (1-family)													
18 Number sold	3,530	3,594	3,439	3,490	3,560	3,560	3,520	3,400	3,400	3,330	3,300	3,330	3,330
Price of units sold (thousands of dollars)[2]													
19 Median	85.6	89.2	93.0	92.4	93.1	92.5	96.3	95.2	96.3	95.6	95.6	97.5	98.3
20 Average	106.2	112.5	118.0	116.7	117.9	118.1	120.0	118.3	119.5	117.8	118.7	121.1	122.0
	Value of new construction[3] (millions of dollars)												
CONSTRUCTION													
21 Total put in place	**410,209**	**422,076**	**432,068**	**429,277**	**433,381**	**431,995**	**445,959**	**455,571**	**457,272**	**448,841**	**444,587[r]**	**440,407**	**442,220**
22 Private	319,641	327,102	333,514	332,131	329,847	325,011	338,078	343,118	347,366	344,324	336,596[r]	331,614	333,621
23 Residential	194,656	198,101	196,551	192,087	190,855	189,636	200,149	203,013	206,868	205,092	198,059[r]	191,254	190,505
24 Nonresidential, total	124,985	129,001	136,963	140,044	138,992	135,375	137,929	140,105	140,498	139,232	138,537[r]	140,360	143,116
Buildings													
25 Industrial	13,707	14,931	18,506	19,175	19,134	18,863	19,680	21,072	21,086	21,152	21,014[r]	20,464	22,386
26 Commercial	55,448	58,104	59,389	61,353	59,627	57,090	57,376	58,748	57,210	55,770	54,614[r]	56,402	56,503
27 Other	15,464	17,278	17,848	17,868	18,160	16,612	17,706	16,964	17,646	18,290	18,423	19,189	19,998
28 Public utilities and other	40,366	38,688	41,220	41,648	42,071	42,810	43,167	43,321	44,556	44,020	44,486[r]	44,305	44,229
29 Public	90,566	94,971	98,551	97,146	103,534	106,984	107,881	112,453	109,906	104,517	107,991[r]	108,793	108,600
30 Military	4,327	3,579	3,520	2,076	3,664	3,552	3,838	3,886	5,099	3,702	3,947	4,133	4,260
31 Highway	26,958	30,140	29,502	28,426	30,376	33,450	31,901	37,018	32,374	29,826	30,630[r]	30,166	29,103
32 Conservation and development	5,519	4,726	4,969	4,953	4,916	5,371	5,192	5,559	4,996	5,014	5,494[r]	3,935	4,378
33 Other	53,762	56,526	60,560	61,691	64,578	64,611	66,950	65,990	67,437	65,975	67,920[r]	70,559	70,859

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 Aug. 1990[1]
	1989 Aug.	1990 Aug.	1989		1990		1990					
			Sept.	Dec.	Mar.	June	Apr.	May	June	July	Aug.	
Consumer Prices[2] (1982–84=100)												
1 **All items**	**4.7**	**5.6**	**2.3**	**4.9**	**8.5**	**3.5**	**.2**	**.2**	**.5**	**.4**	**.8**	**131.6**
2 Food	5.4	5.6	3.6	5.5	11.4	2.1	−.2	.0	.8	.4	.3	132.9
3 Energy items	5.1	6.8	−12.6	3.9	14.8	−2.0	−.4	−.7	.6	−.7	4.3	103.6
4 All items less food and energy	4.4	5.5	3.5	4.7	7.5	3.9	.2	.3	.4	.6	.5	136.4
5 Commodities	3.1	3.7	1.3	3.4	7.8	.7	.0	.1	.1	.3	.0	123.2
6 Services	5.1	6.4	4.5	5.7	7.2	5.5	.4	.4	.6	.7	.8	144.0
Producer Prices (1982=100)												
7 Finished goods	4.3	5.1	.4	5.0	7.1	.3	−.2r	.1r	.2	−.1	1.3	119.2
8 Consumer foods	4.5	5.3	.7	12.4	10.6	−2.9	−.9	.6	−.4	.0	.8	125.0
9 Consumer energy	4.1	17.0	−15.3	−5.3	24.7	−14.3	−.7r	−2.2r	−.9	−.5	9.5	74.4
10 Other consumer goods	4.5	3.5	2.3	4.2	3.5	5.1	.2r	.4r	.7	−.2	.2	128.9
11 Capital equipment	3.9	3.3	4.4	2.0	4.0	1.7	.1r	−.1r	.4	.3	.3	122.9
12 Intermediate materials[3]	3.6	2.1	−.7	−.4	2.5	−1.1	.0	−.1	−.2	−.1	1.5	114.4
13 Excluding energy	3.4	.7	−.7	−1.0	1.0	.7	.2	.1	−.1	.1	.3	120.8
Crude materials												
14 Foods	−.4	3.2	−2.2	19.2	9.1	−11.5	−.6r	−2.8r	.4	1.0	−.9	113.5
15 Energy	11.2	18.5	−7.0	13.2	.5	−38.9	−7.0r	1.4r	−6.2	−.1	25.5	87.1
16 Other	2.0	2.4	.6	−15.3	4.0	10.9	2.5r	.7r	−.6	.9	1.8	139.9

1. Not seasonally adjusted.
2. Figures for consumer prices are those for all urban consumers and reflect a rental equivalence measure of homeownership after 1982.
3. Excludes intermediate materials for food manufacturing and manufactured animal feeds.

SOURCE. Bureau of Labor Statistics.

2.16 GROSS NATIONAL PRODUCT AND INCOME

Billions of current dollars except as noted; quarterly data are at seasonally adjusted annual rates.

Account	1987	1988	1989	1989			1990	
				Q2	Q3	Q4	Q1	Q2[r]
GROSS NATIONAL PRODUCT								
1 **Total**	**4,515.6**	**4,873.7**	**5,200.8**	**5,174.0**	**5,238.6**	**5,289.3**	**5,375.4**	**5,443.3**
By source								
2 Personal consumption expenditures	3,009.4	3,238.2	3,450.1	3,425.9	3,484.3	3,518.5	3,588.1	3,622.7
3 Durable goods	423.4	457.5	474.6	473.6	487.1	471.2	492.1	478.4
4 Nondurable goods	1,001.3	1,060.0	1,130.0	1,127.1	1,137.3	1,148.8	1,174.7	1,179.0
5 Services	1,584.7	1,720.7	1,845.5	1,825.1	1,859.8	1,898.5	1,921.3	1,965.3
6 Gross private domestic investment	699.5	747.1	771.2	776.7	775.8	762.7	747.2	759.0
7 Fixed investment	671.2	720.8	742.9	744.0	746.9	737.7	758.9	745.6
8 Nonresidential	444.9	488.4	511.9	511.4	518.1	511.8	523.1	516.5
9 Structures	133.7	139.9	146.2	144.2	147.0	147.1	148.8	147.2
10 Producers' durable equipment	311.2	348.4	365.7	367.2	371.0	364.7	374.3	369.3
11 Residential structures	226.3	232.5	231.0	232.7	228.9	225.9	235.9	229.1
12 Change in business inventories	28.3	26.2	28.3	32.7	28.9	25.0	−11.8	13.4
13 Nonfarm	32.3	29.8	23.3	26.1	26.2	24.1	−17.0	13.0
14 Net exports of goods and services	−114.7	−74.1	−46.1	−51.3	−49.3	−35.3	−30.0	−24.9
15 Exports	449.6	552.0	626.2	628.8	623.7	642.8	661.3	659.7
16 Imports	564.3	626.1	672.3	680.0	673.0	678.1	691.3	684.6
17 Government purchases of goods and services	921.4	962.5	1,025.6	1,022.7	1,027.8	1,043.3	1,070.1	1,086.4
18 Federal	381.3	380.3	400.0	402.5	399.2	399.9	410.6	421.9
19 State and local	540.2	582.3	625.6	620.2	628.6	643.4	659.6	664.6
By major type of product								
20 Final sales, total	4,487.3	4,847.5	5,172.5	5,141.3	5,209.7	5,264.3	5,387.2	5,429.9
21 Goods	1,788.4	1,935.1	2,072.7	2,079.4	2,090.2	2,085.9	2,111.0	2,146.6
22 Durable	780.5	860.2	906.7	904.6	922.1	907.4	919.9	930.1
23 Nondurable	1,007.9	1,074.9	1,166.1	1,174.9	1,168.1	1,178.6	1,191.2	1,216.4
24 Services	2,292.4	2,488.6	2,671.2	2,639.2	2,693.3	2,747.5	2,791.3	2,834.2
25 Structures	434.9	450.0	456.9	455.3	455.0	455.9	473.0	462.5
26 Change in business inventories	28.3	26.2	28.3	32.7	28.9	25.0	−11.8	13.4
27 Durable goods	22.9	19.9	11.9	8.4	6.6	13.2	−21.6	0.0
28 Nondurable goods	5.4	6.4	16.4	24.3	22.2	11.9	9.8	13.4
MEMO								
29 **Total GNP in 1982 dollars**	**3,845.3**	**4,016.9**	**4,117.7**	**4,112.2**	**4,129.7**	**4,133.2**	**4,150.6**	**4,155.1**
NATIONAL INCOME								
30 **Total**	**3,660.3**	**3,984.9**	**4,223.3**	**4,216.8**	**4,232.1**	**4,267.1**	**4,350.3**	**4,411.3**
31 Compensation of employees	2,686.4	2,905.1	3,079.0	3,062.6	3,095.2	3,128.6	3,180.4	3,232.5
32 Wages and salaries	2,249.7	2,431.1	2,573.2	2,560.0	2,586.6	2,612.7	2,651.6	2,696.3
33 Government and government enterprises	419.4	446.6	476.6	473.2	479.9	486.7	497.1	505.7
34 Other	1,830.3	1,984.5	2,096.6	2,086.9	2,106.7	2,126.0	2,154.5	2,190.6
35 Supplement to wages and salaries	436.6	474.0	505.8	502.6	508.6	515.9	528.8	536.1
36 Employer contributions for social insurance	227.2	248.5	263.9	262.6	265.1	268.4	276.0	279.7
37 Other labor income	209.4	225.5	241.9	239.9	243.5	247.5	252.8	256.4
38 Proprietors' income[1]	323.4	354.2	379.3	379.6	368.1	381.7	404.0	401.7
39 Business and professional[1]	280.6	310.5	330.7	329.1	329.5	336.0	346.6	350.8
40 Farm[1]	42.8	43.7	48.6	50.5	38.7	45.7	57.4	51.0
41 Rental income of persons[2]	13.7	16.3	8.2	9.7	5.8	4.1	5.5	4.3
42 Corporate profits[1]	308.3	337.6	311.6	321.4	306.7	290.9	296.8	306.6
43 Profits before tax[3]	275.3	316.7	307.7	314.6	291.4	289.8	296.9	299.3
44 Inventory valuation adjustment	−19.4	−27.0	−21.7	−23.1	−6.1	−14.5	−11.4	−0.5
45 Capital consumption adjustment	52.4	47.8	25.5	29.9	21.4	15.6	11.3	7.7
46 Net interest	328.6	371.8	445.1	443.4	456.2	461.7	463.6	466.2

1. With inventory valuation and capital consumption adjustments.
2. With capital consumption adjustment.
3. For after-tax profits, dividends, and the like, see table 1.48.

SOURCE. *Survey of Current Business* (Department of Commerce).

2.17 PERSONAL INCOME AND SAVING

Billions of current dollars; quarterly data are at seasonally adjusted annual rates. Exceptions noted.

Account	1987	1988	1989	1989 Q2	1989 Q3	1989 Q4	1990 Q1	1990 Q2[r]
PERSONAL INCOME AND SAVING								
1 **Total personal income**	**3,766.4**	**4,070.8**	**4,384.3**	**4,362.9**	**4,402.8**	**4,469.2**	**4,562.8**	**4,622.2**
2 Wage and salary disbursements	2,249.7	2,431.1	2,573.2	2,560.0	2,586.6	2,612.7	2,651.6	2,696.3
3 Commodity-producing industries	649.9	696.4	720.6	719.3	722.3	721.4	724.6	731.1
4 Manufacturing	490.3	524.0	541.8	541.4	543.2	540.9	541.2	548.1
5 Distributive industries	531.8	572.0	604.7	602.6	607.1	614.6	627.0	637.3
6 Service industries	648.5	716.2	771.4	764.9	777.4	790.0	802.9	822.2
7 Government and government enterprises	419.4	446.6	476.6	473.2	479.9	486.7	497.1	505.7
8 Other labor income	209.4	225.5	241.9	239.9	243.5	247.5	252.8	256.4
9 Proprietors' income[1]	323.4	354.2	379.3	379.6	368.1	381.7	404.0	401.7
10 Business and professional[1]	280.6	310.5	330.7	329.1	329.5	336.0	346.6	350.8
11 Farm[1]	42.8	43.7	48.6	50.5	38.7	45.7	57.4	51.0
12 Rental income of persons[2]	13.7	16.3	8.2	9.7	5.8	4.1	5.5	4.3
13 Dividends	91.8	102.2	114.4	113.2	115.7	118.2	120.5	122.9
14 Personal interest income	501.3	547.9	643.2	642.1	655.2	664.9	670.5	678.0
15 Transfer payments	549.9	587.7	636.9	630.2	641.8	655.9	680.9	686.7
16 Old-age survivors, disability, and health insurance benefits	282.9	300.5	325.3	321.9	328.3	334.1	347.2	347.6
17 LESS: Personal contributions for social insurance	172.9	194.1	212.8	212.0	214.0	215.8	222.9	224.1
18 EQUALS: Personal income	3,766.4	4,070.8	4,384.3	4,362.9	4,402.8	4,469.2	4,562.8	4,622.2
19 LESS: Personal tax and nontax payments	571.6	591.6	658.8	665.5	659.5	669.6	675.1	696.5
20 EQUALS: Disposable personal income	3,194.7	3,479.2	3,725.5	3,697.3	3,743.4	3,799.6	3,887.7	3,925.7
21 LESS: Personal outlays	3,102.2	3,333.6	3,553.7	3,528.5	3,588.8	3,625.5	3,696.4	3,730.6
22 EQUALS: Personal saving	92.5	145.6	171.8	168.9	154.5	174.1	191.3	195.1
MEMO								
Per capita (1982 dollars)								
23 Gross national product	15,759.4	16,302.4	16,550.2	16,554.8	16,578.5	16,546.0	16,575.9	16,554.2
24 Personal consumption expenditures	10,310.7	10,578.3	10,678.5	10,649.4	10,739.9	10,688.2	10,692.1	10,672.5
25 Disposable personal income	10,946.0	11,368.0	11,531.0	11,492.0	11,538.0	11,541.0	11,586.0	11,564.0
26 *Saving rate (percent)*	2.9	4.2	4.6	4.6	4.1	4.6	4.9	5.0
GROSS SAVING								
27 **Gross saving**	**555.5**	**656.1**	**691.5**	**697.9**	**692.4**	**674.8**	**664.8**	**679.3**
28 Gross private saving	662.6	751.3	779.3	770.3	776.0	786.4	795.0	806.7
29 Personal saving	92.5	145.6	171.8	168.9	154.5	174.1	191.3	195.1
30 Undistributed corporate profits[1]	83.2	91.4	53.0	58.5	53.9	39.8	36.7	40.5
31 Corporate inventory valuation adjustment	-19.4	-27.0	-21.7	-23.1	-6.1	-14.5	-11.4	-0.5
Capital consumption allowances								
32 Corporate	303.2	322.1	346.4	341.1	351.6	356.5	356.7	359.7
33 Noncorporate	183.8	192.2	208.0	201.8	215.9	216.0	210.3	211.4
34 Government surplus, or deficit (−), national income and product accounts	-107.1	-95.3	-87.8	-72.4	-83.6	-111.6	-130.2	-127.3
35 Federal	-158.2	-141.7	-134.3	-122.7	-131.7	-150.1	-168.3	-166.0
36 State and local	51.0	46.5	46.4	50.3	48.1	38.5	38.1	38.6
37 **Gross investment**	**544.9**	**627.8**	**674.4**	**677.6**	**676.1**	**671.8**	**665.6**	**676.1**
38 Gross private domestic	699.5	747.1	771.2	776.7	775.8	762.7	747.2	759.0
39 Net foreign	-154.6	-119.2	-96.8	-99.1	-99.7	-90.9	-81.6	-82.9
40 **Statistical discrepancy**	**-10.6**	**-28.2**	**-17.0**	**-20.3**	**-16.2**	**-3.0**	**.7**	**-3.2**

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	1987	1988	1989	1989 Q1	1989 Q2	1989 Q3	1989 Q4	1990 Q1
1 Balance on current account	−162,315	−128,862	−110,035	−27,104	−28,649	−27,591	−26,692	−22,941
2 Not seasonally adjusted	....	....	....	−22,961	−27,528	−31,620	−27,926	−19,164
3 Merchandise trade balance[2]	−159,500	−126,986	−114,864	−28,093	−28,222	−29,803	−28,746	−26,371
4 Merchandise exports	250,266	320,337	360,465	88,267	91,111	89,349	91,738	96,044
5 Merchandise imports	−409,766	−447,323	−475,329	−116,360	−119,333	−119,152	−120,484	−122,415
6 Military transactions, net	−3,530	−5,452	−6,319	−1,763	−1,667	−1,114	−1,776	−1,370
7 Investment income, net	5,326	1,610	−913	465	−1,957	17	561	608
8 Other service transactions, net	9,964	16,971	26,783	5,842	6,203	6,839	7,900	7,681
9 Remittances, pensions, and other transfers	−4,299	−4,261	−3,758	−999	−962	−909	−889	−874
10 U.S. government grants	−10,276	−10,744	−10,963	−2,556	−2,044	−2,621	−3,742	−2,615
11 Change in U.S. government assets, other than official reserve assets, net (increase, −)	997	2,969	1,185	962	−303	574	−47	−486
12 Change in U.S. official reserve assets (increase, −)	9,149	−3,912	−25,293	−4,000	−12,095	−5,996	−3,202	−3,177
13 Gold	0	0	0	0	0	0	0	0
14 Special drawing rights (SDRs)	−509	127	−535	−188	68	−211	−204	−247
15 Reserve position in International Monetary Fund	2,070	1,025	471	316	−159	337	−23	234
16 Foreign currencies	7,588	−5,064	−25,229	−4,128	−12,004	−6,122	−2,975	−3,164
17 Change in U.S. private assets abroad (increase, −)	−73,092	−83,232	−102,953	−29,821	11,017	−38,654	−45,496	33,172
18 Bank-reported claims[3]	−42,119	−56,322	−50,684	−23,586	26,829	−21,269	−32,658	45,655
19 Nonbank-reported claims	5,324	−2,847	1,391	1,851	−2,384	1,877	47	0
20 U.S. purchase of foreign securities, net	−5,251	−7,846	−21,938	−2,062	−6,144	−9,623	−4,109	−4,871
21 U.S. direct investments abroad, net	−31,046	−16,217	−31,722	−6,024	−7,284	−9,639	−8,776	−7,612
22 Change in foreign official assets in United States (increase, +)	45,210	39,515	8,823	7,797	−4,961	13,003	−7,016	−8,825
23 U.S. Treasury securities	43,238	41,741	333	4,630	−9,726	12,771	−7,342	−5,874
24 Other U.S. government obligations	1,564	1,309	1,383	721	−97	190	569	−531
25 Other U.S. government liabilities[4]	−2,503	−710	332	−200	470	−350	412	−368
26 Other U.S. liabilities reported by U.S. banks[3]	3,918	−319	4,940	2,191	3,820	−251	−820	−1,926
27 Other foreign official assets[5]	−1,007	−2,506	1,835	455	572	643	165	−126
28 Change in foreign private assets in United States (increase, +)	173,260	181,926	205,829	60,605	7,755	61,133	76,336	−18,665
29 U.S. bank-reported liabilities[3]	89,026	70,235	61,199	17,486	−20,806	27,845	36,674	−28,125
30 U.S. nonbank-reported liabilities	2,863	6,664	2,867	3,717	−407	−2,175	1,732	0
31 Foreign private purchases of U.S. Treasury securities, net	−7,643	20,239	29,951	9,323	2,339	12,618	5,671	−864
32 Foreign purchases of other U.S. securities, net	42,120	26,353	39,568	8,731	9,574	10,470	10,793	2,732
33 Foreign direct investments in United States, net	46,894	58,435	72,244	21,348	17,055	12,375	21,466	7,592
34 Allocation of SDRs	0	0	0	0	0	0	0	0
35 Discrepancy	6,790	−8,404	22,443	−8,439	27,236	−2,469	6,117	20,922
36 Owing to seasonal adjustments	....	....	....	3,093	−1,697	−4,953	3,560	3,116
37 Statistical discrepancy in recorded data before seasonal adjustment	6,790	−8,404	22,443	−11,532	28,933	2,484	2,558	17,806
MEMO								
Changes in official assets								
38 U.S. official reserve assets (increase, −)	9,149	−3,912	−25,293	−4,000	−12,095	−5,996	−3,202	−3,177
39 Foreign official assets in United States (increase, +) excluding line 25	47,713	40,225	8,491	7,997	−5,431	13,353	−7,428	−8,457
40 Change in Organization of Petroleum Exporting Countries official assets in United States (part of line 22 above)	−9,956	−2,996	10,713	7,100	460	4,532	−1,379	2,976

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	1987	1988	1989	1990						
				Jan.	Feb.	Mar.	Apr.	May	June[r]	July[p]
1 EXPORTS of domestic and foreign merchandise excluding grant-aid shipments, f.a.s. value	254,073	322,427	363,812	31,372	31,576	33,266	32,058	32,774	34,221	32,026
GENERAL IMPORTS including merchandise for immediate consumption plus entries into bonded warehouses										
2 Customs value	406,241	440,952	473,211	41,570	38,672	41,636	39,364	40,543	39,561	41,357
Trade balance										
3 **Customs value**	**−152,169**	**−118,526**	**−109,399**	**−10,198**	**−7,096**	**−8,370**	**−7,306**	**−7,770**	**−5,340**	**−9,330**

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	1987	1988	1989	1990						
				Feb.	Mar.	Apr.	May	June	July	Aug.[p]
1 **Total**	**45,798**	**47,802**	**74,609**	**74,173**	**76,303**	**76,283**	**77,028**	**77,298**	**77,906**	**78,909**
2 Gold stock, including Exchange Stabilization Fund[1]	11,078	11,057	11,059	11,059	11,060	11,060	11,065	11,065	11,064	11,065
3 Special drawing rights[2,3]	10,283	9,637	9,951	10,216	10,092	10,103	10,396	10,490	10,699	10,780
4 Reserve position in International Monetary Fund[2]	11,349	9,745	9,048	8,985	8,727	8,687	8,764	8,449	8,686	8,890
5 Foreign currencies[4]	13,088	17,363	44,551	43,913	46,424	46,433	46,803	47,294	47,457	48,174

1. Gold held under earmark at Federal Reserve Banks for foreign and international accounts is not included in the gold stock of the United States; see table 3.13. Gold stock is valued at $42.22 per fine troy ounce.
2. Beginning July 1974, the IMF adopted a technique for valuing the SDR based on a weighted average of exchange rates for the currencies of member countries. From July 1974 through December 1980, 16 currencies were used; from January 1981, 5 currencies have been used. The U.S. SDR holdings and reserve position in the IMF also are valued on this basis beginning July 1974.
3. Includes allocations by the International Monetary Fund of SDRs as follows: $867 million on Jan. 1, 1970; $717 million on Jan. 1, 1971; $710 million on Jan. 1, 1972; $1,139 million on Jan. 1, 1979; $1,152 million on Jan. 1, 1980; and $1,093 million on Jan. 1, 1981; plus transactions in SDRs.
4. Valued at current market exchange rates.

3.13 FOREIGN OFFICIAL ASSETS HELD AT FEDERAL RESERVE BANKS[1]

Millions of dollars, end of period

Assets	1987	1988	1989	1990						
				Feb.	Mar.	Apr.	May	June	July	Aug.[p]
1 Deposits	244	347	589	309	300	402	309	368	279	337
Assets held in custody										
2 U.S. Treasury securities[2]	195,126	232,547	224,911	221,798	250,447	252,759	253,691	255,651	256,585	261,051
3 Earmarked gold[3]	13,919	13,636	13,456	13,458	13,458	13,458	13,460	13,433	13,422	13,412

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 at face value.
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	1987	1988	1989	1990 Jan.	Feb.	Mar.	Apr.	May	June	July
				All foreign countries						
1 **Total, all currencies**	**518,618**	**505,595**	**545,366**	**549,368**	**553,815**	**535,059**	**535,886**	**541,439**	**524,010**	**531,421**
2 Claims on United States	138,034	169,111	198,835	192,688	188,700	176,096	177,104	182,224	179,258r	174,583
3 Parent bank	105,845	129,856	157,092	149,285	145,156	135,172	133,573	140,751	138,384r	133,682
4 Other banks in United States	16,416	14,918	17,042	17,840	18,064	15,511	17,965	15,647	15,166	15,239
5 Nonbanks	15,773	24,337	24,701	25,563	25,480	25,413	25,566	25,826	25,708r	25,662
6 Claims on foreigners	342,520	299,728	300,575	307,937	313,934	308,117	307,470	306,058	293,730r	305,010
7 Other branches of parent bank	122,155	107,179	113,810	120,359	122,457	120,488	118,835	116,640	108,464r	115,525
8 Banks	108,859	96,932	90,703	91,712	94,065	89,837	90,812	90,422	85,780r	86,007
9 Public borrowers	21,832	17,163	16,456	15,392	15,148	15,973	16,217	16,172	16,323r	16,703
10 Nonbank foreigners	89,674	78,454	79,606	80,474	82,264	81,819	81,606	82,824	83,163r	86,775
11 Other assets	38,064	36,756	45,956	48,743	51,181	50,846	51,312	53,157	51,022	51,828
12 **Total payable in U.S. dollars**	**350,107**	**357,573**	**382,717r**	**375,315**	**375,511**	**358,543**	**360,224**	**363,128**	**350,310r**	**346,338**
13 Claims on United States	132,023	163,456	191,184	184,782	180,738	168,833	169,996	173,887	171,551r	166,294
14 Parent bank	103,251	126,929	152,294	144,055	139,920	130,350	129,162	135,211	133,167r	128,066
15 Other banks in United States	14,657	14,167	16,386	17,018	17,187	14,992	17,209	14,818	14,575	14,375
16 Nonbanks	14,115	22,360	22,504	23,709	23,631	23,491	23,625	23,858	23,809	23,853
17 Claims on foreigners	202,428	177,685	169,690	167,722	172,132	167,616	168,419	167,630	158,652	157,915
18 Other branches of parent bank	88,284	80,736	82,949	86,114	87,403	85,028	84,930	83,381	76,410r	79,413
19 Banks	63,707	54,884	48,396	45,385	46,582	43,408	43,814	44,449	42,918r	39,019
20 Public borrowers	14,730	12,131	10,961	10,332	10,529	11,110	11,191	10,912	10,956r	10,652
21 Nonbank foreigners	35,707	29,934	27,384	25,891	27,618	28,070	28,484	28,888	28,368r	28,831
22 Other assets	15,656	16,432	21,843r	22,811	22,641	22,094	21,809	21,611	20,107	22,129
				United Kingdom						
23 **Total, all currencies**	**158,695**	**156,835**	**161,947**	**166,915**	**169,727**	**167,162**	**173,127**	**177,947**	**167,885**	**175,257**
24 Claims on United States	32,518	40,089	39,212	41,208	40,161	38,809	42,366	43,247	39,904r	40,418
25 Parent bank	27,350	34,243	35,847	37,292	36,311	34,648	37,572	39,089	35,924	36,564
26 Other banks in United States	1,259	1,123	1,058	1,441	1,365	1,301	1,262	747	730	894
27 Nonbanks	3,909	4,723	2,307	2,475	2,485	2,860	3,532	3,411	3,250r	2,960
28 Claims on foreigners	115,700	106,388	107,657	109,837	110,911	109,227	111,175	114,800	108,080r	114,259
29 Other branches of parent bank	39,903	35,625	37,728	37,701	38,410	39,636	41,613	43,358	38,068	41,186
30 Banks	36,735	36,765	36,159	37,668	36,488	34,803	35,224	35,730	34,194	35,085
31 Public borrowers	4,752	4,019	3,293	3,128	3,076	3,857	3,980	3,943	3,740	3,619
32 Nonbank foreigners	34,310	29,979	30,477	31,340	32,937	30,931	30,358	31,769	32,078r	34,369
33 Other assets	10,477	10,358	15,078	15,870	18,655	19,126	19,586	19,900	19,901	20,580
34 **Total payable in U.S. dollars**	**100,574**	**103,503**	**103,427**	**103,038**	**103,752**	**101,024**	**107,483**	**110,186**	**100,887**	**103,050**
35 Claims on United States	30,439	38,012	36,404	38,261	37,006	35,752	39,091	39,374	36,158	36,230
36 Parent bank	26,304	33,252	34,329	35,731	34,462	32,697	35,663	36,712	33,509	33,716
37 Other banks in United States	1,044	964	843	1,118	1,036	1,122	1,041	521	552	681
38 Nonbanks	3,091	3,796	1,232	1,412	1,508	1,933	2,387	2,141	2,097	1,833
39 Claims on foreigners	64,560	60,472	59,062	56,939	58,763	57,166	60,165	63,025	57,802	58,283
40 Other branches of parent bank	28,635	28,474	29,872	28,655	30,224	30,421	32,885	34,441	30,050	31,225
41 Banks	19,188	18,494	16,579	16,399	15,984	13,748	14,141	14,635	14,625	13,621
42 Public borrowers	3,313	2,840	2,371	2,321	2,266	3,074	3,131	3,114	2,942	2,839
43 Nonbank foreigners	13,424	10,664	10,240	9,564	10,289	9,923	10,008	10,835	10,185	10,598
44 Other assets	5,575	5,019	7,961	7,838	7,983	8,106	8,227	7,787	6,927	8,537
				Bahamas and Caymans						
45 **Total, all currencies**	**160,321**	**170,639**	**176,006**	**167,385**	**164,908**	**155,145**	**150,767**	**154,851**	**154,354**	**145,813**
46 Claims on United States	85,318	105,320	124,205	117,177	114,263	105,466	102,184	105,617	107,244	99,918
47 Parent bank	60,048	73,409	87,882	79,525	76,475	70,535	65,084	69,807	72,115	64,748
48 Other banks in United States	14,277	13,145	15,071	15,403	15,827	13,564	15,902	14,079	13,603	13,412
49 Nonbanks	10,993	18,766	21,252	22,249	21,961	21,367	21,198	21,731	21,526	21,758
50 Claims on foreigners	70,162	58,393	44,168	42,610	43,162	42,393	41,467	42,147	39,812	38,393
51 Other branches of parent bank	21,277	17,954	11,309	13,371	14,409	13,171	13,306	12,917	11,906	11,947
52 Banks	33,751	28,268	22,611	20,119	19,595	19,370	18,499	19,947	18,492	16,761
53 Public borrowers	7,428	5,830	5,217	4,764	4,753	4,684	4,490	4,350	4,393	4,307
54 Nonbank foreigners	7,706	6,341	5,031	4,356	4,405	5,168	5,172	4,933	5,021	5,378
55 Other assets	4,841	6,926	7,633	7,598	7,483	7,286	7,116	7,087	7,298	7,502
56 **Total payable in U.S. dollars**	**151,434**	**163,518**	**170,780**	**160,832**	**159,484**	**150,061**	**145,994**	**149,467**	**149,943**	**140,966**

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	1987	1988	1989	1990 Jan.	Feb.	Mar.	Apr.	May	June	July
				All foreign countries						
57 **Total, all currencies**	**518,618**	**505,595**	**545,366**	**549,368**	**553,815**	**535,059**	**535,886**	**541,439**	**524,010**	**531,421**
58 Negotiable CDs	30,929	28,511	23,500	23,510	23,620	21,767	24,113	25,452	23,504	21,810
59 To United States	161,390	185,577	197,239	178,452	181,164	173,675	168,669	169,791	169,769r	163,117
60 Parent bank	87,606	114,720	138,412r	117,318	119,967	114,170	109,642	109,831	113,151r	105,243
61 Other banks in United States	20,355	14,737	11,704	11,850	11,990	10,799	11,782	10,272	9,092	9,454
62 Nonbanks	53,429	56,120	47,123r	49,284	49,207	48,706	47,245	49,688	47,526	48,420
63 To foreigners	304,803	270,923	296,850	315,991	317,318	309,756	313,446	315,058	299,951r	314,503
64 Other branches of parent bank	124,601	111,267	119,591	126,965	126,786	124,084	120,405	120,722	113,653r	119,476
65 Banks	87,274	72,842	76,452	82,042	77,449	75,017	77,875	78,681	73,896r	77,940
66 Official institutions	19,564	15,183	16,750	19,004	20,637	17,704	20,683	19,710	17,637r	19,718
67 Nonbank foreigners	73,364	71,631	84,057	87,980	92,446	92,951	94,483	95,945	94,765r	97,369
68 Other liabilities	21,496	20,584	27,777	31,415	31,713	29,861	29,658	31,138	30,786r	31,991
69 **Total payable in U.S. dollars**	**361,438**	**367,483**	**396,613r**	**385,010**	**385,634**	**369,306**	**368,626**	**369,505**	**358,681**	**355,785**
70 Negotiable CDs	26,768	24,045	19,619	18,512	18,783	17,084	19,601	20,579	18,928	16,524
71 To United States	148,442	173,190	187,286	167,754	169,669	162,606	157,579	157,851	158,173r	150,785
72 Parent bank	81,783	107,150	132,563r	111,328	113,487	108,128	103,252	103,389	106,818r	98,770
73 Other banks in United States	18,951	13,468	10,519	10,560	10,684	9,296	10,415	8,855	7,741	7,884
74 Nonbanks	47,708	52,572	44,204r	45,866	45,498	45,182	43,912	45,607	43,614	44,131
75 To foreigners	177,711	160,766	176,460	185,192	183,378	176,939	178,035	177,888	168,642r	174,616
76 Other branches of parent bank	90,469	84,021	87,636	91,736	90,360	86,908	84,090	84,415	78,646r	81,332
77 Banks	35,065	28,493	30,537	32,551	28,741	27,639	29,207	28,265	27,434r	28,045
78 Official institutions	12,409	8,224	9,873	11,063	11,740	9,248	11,909	11,480	9,066r	10,613
79 Nonbank foreigners	39,768	40,028	48,414	49,842	52,537	53,144	52,829	53,728	53,496r	54,626
80 Other liabilities	8,517	9,482	13,248r	13,552	13,804	12,677	13,411	13,187	12,938r	13,860
				United Kingdom						
81 **Total, all currencies**	**158,695**	**156,835**	**161,947**	**166,915**	**169,727**	**167,162**	**173,127**	**177,947**	**167,885**	**175,257**
82 Negotiable CDs	26,988	24,528	20,056	19,791	19,656	18,266	20,535	21,846	19,672	17,800
83 To United States	23,470	36,784	36,036	31,893	32,686	32,780	33,931	33,755	32,291r	32,320
84 Parent bank	13,223	27,849	29,726	23,256	23,752	22,970	23,339	23,179	23,158r	21,952
85 Other banks in United States	1,536	2,037	1,256	1,545	2,115	1,827	1,841	1,847	1,615	1,626
86 Nonbanks	8,711	6,898	5,054	7,092	6,819	7,983	8,751	8,729	7,518	8,742
87 To foreigners	98,689	86,026	92,307	99,720	101,565	101,160	103,362	106,138	99,279r	107,533
88 Other branches of parent bank	33,078	26,812	27,397	29,216	28,074	29,848	28,581	29,193	26,506r	28,944
89 Banks	34,290	30,609	29,780	33,568	32,110	29,116	31,026	31,580	28,575r	32,420
90 Official institutions	11,015	7,873	8,551	9,368	10,758	9,184	10,829	11,409	10,263r	11,314
91 Nonbank foreigners	20,306	20,732	26,579	27,568	30,623	33,012	32,926	33,956	33,935r	34,855
92 Other liabilities	9,548	9,497	13,548	15,511	15,820	14,956	15,299	16,208	16,643r	17,604
93 **Total payable in U.S. dollars**	**102,550**	**105,907**	**108,178**	**106,676**	**106,416**	**103,544**	**109,708**	**110,595**	**101,530**	**104,375**
94 Negotiable CDs	24,926	22,063	18,143	16,931	16,910	15,660	17,936	19,012	17,233	14,836
95 To United States	17,752	32,588	33,056	28,542	28,817	29,383	30,386	29,666	28,160r	27,967
96 Parent bank	12,026	26,404	28,812	22,428	22,513	22,219	22,446	22,339	22,190r	21,208
97 Other banks in United States	1,308	1,752	1,065	1,217	1,807	1,552	1,553	1,456	1,325	1,175
98 Nonbanks	4,418	4,432	3,179	4,897	4,497	5,612	6,387	5,871	4,645	5,584
99 To foreigners	55,919	47,083	50,517	54,574	53,751	52,095	54,371	55,163	49,672r	54,591
100 Other branches of parent bank	22,334	18,561	18,384	19,660	18,556	19,182	18,799	18,589	16,199r	17,408
101 Banks	15,580	13,407	12,244	14,701	11,920	9,976	11,233	11,007	9,911r	11,251
102 Official institutions	7,530	4,348	5,454	5,649	6,717	5,192	6,703	7,264	5,305r	6,515
103 Nonbank foreigners	10,475	10,767	14,435	14,564	16,558	17,745	17,636	18,303	18,257r	19,417
104 Other liabilities	3,953	4,173	6,462	6,629	6,938	6,406	7,015	6,754	6,465r	6,981
				Bahamas and Caymans						
105 **Total, all currencies**	**160,321**	**170,639**	**176,006**	**167,385**	**164,908**	**155,145**	**150,767**	**154,851**	**154,354**	**145,813**
106 Negotiable CDs	885	953	678	681	671	522	524	528	535	548
107 To United States	113,950	122,332	124,859	114,829	113,137	108,003	101,024	103,655	103,592	95,746
108 Parent bank	53,239	62,894	75,188r	65,380	64,085	61,528	55,311	57,136	58,880	51,257
109 Other banks in United States	17,224	11,494	8,883	8,677	8,198	7,310	8,544	6,991	5,984	6,228
110 Nonbanks	43,487	47,944	40,788r	40,772	40,854	39,165	37,169	39,528	38,728	38,261
111 To foreigners	43,815	45,161	47,382	48,974	48,726	44,314	46,741	48,410	47,613	47,010
112 Other branches of parent bank	19,185	23,686	23,414	24,911	25,110	20,778	22,446	25,535	24,184	24,560
113 Banks	10,769	8,336	8,823	8,439	8,059	7,983	8,617	8,154	8,969	8,120
114 Official institutions	1,504	1,074	1,097	1,528	1,290	1,078	1,247	962	960	999
115 Nonbank foreigners	12,357	12,065	14,048	14,096	14,267	14,475	14,431	13,759	13,500	13,331
116 Other liabilities	1,671	2,193	3,087	2,901	2,374	2,306	2,478	2,258	2,614	2,509
117 **Total payable in U.S. dollars**	**152,927**	**162,950**	**171,250**	**162,141**	**160,212**	**150,758**	**146,259**	**149,707**	**149,680**	**140,377**

3.15 SELECTED U.S. LIABILITIES TO FOREIGN OFFICIAL INSTITUTIONS

Millions of dollars, end of period

Item	1988	1989	1990 Jan.	1990 Feb.	1990 Mar.	1990 Apr.	1990 May	1990 June	1990 July[p]
1 **Total**[1]	**299,782**	**308,303**	**305,433**	**300,030**	**297,493**	**303,790**	**303,830**[r]	**305,803**[r]	**308,143**
By type									
2 Liabilities reported by banks in the United States[2]	31,519	36,486	34,303	33,633	35,208	36,372	36,413[r]	37,341[r]	38,086
3 U.S. Treasury bills and certificates[3]	103,722	76,985	76,157	73,099	73,039	69,454	72,322	71,804	72,694
U.S. Treasury bonds and notes									
4 Marketable	149,056	176,084	176,411	174,986	171,130	176,694	173,837	175,385	176,066
5 Nonmarketable[4]	523	568	572	576	580	3,596	3,620	3,644	3,668
6 U.S. securities other than U.S. Treasury securities[5]	14,962	18,180	17,990	17,736	17,536	17,674	17,638	17,629	17,629
By area									
7 Western Europe[1]	125,620[r]	135,475	136,260[r]	134,626[r]	137,387[r]	143,392[r]	144,158[r]	149,624[r]	151,665
8 Canada	9,584	9,553	9,368	7,976	8,386	7,880	6,621	7,036	8,486
9 Latin America and Caribbean	10,099	8,809	7,943	8,327	9,229	9,137	9,217	10,280[r]	9,750
10 Asia	145,608	147,064	143,966	140,924	134,700	136,519	135,108	129,910	129,332
11 Africa	1,369	995	817	990	902	861	1,040	904	883
12 Other countries[6]	7,501	6,406	7,077	7,187	6,889	6,000	7,685	8,050	8,029

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	1986	1987	1988	1989 Sept.	1989 Dec.	1990 Mar.	1990 June
1 Banks' own liabilities	29,702	55,438	74,980	73,755	67,805	63,105	68,140
2 Banks' own claims	26,180	51,271	68,983	70,328	65,127	60,999	66,626
3 Deposits	14,129	18,861	25,100	22,960	20,489	21,456	21,046
4 Other claims	12,052	32,410	43,884	47,368	44,638	39,543	45,580
5 Claims of banks' domestic customers[2]	2,507	551	364	2,558	3,102	1,190	928

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	1987	1988	1989	1990 Jan.	Feb.	Mar.	Apr.	May[r]	June[r]	July[p]
1 **All foreigners**	**618,874**	**685,339**	**736,112**	**705,383**	**696,813**	**704,185**	**702,299**	**715,313**	**706,022**	**719,881**
2 Banks' own liabilities	470,070	514,532	576,732	544,172	538,567	541,694	546,652	552,138	542,754	554,527
3 Demand deposits	22,383	21,863	22,090	19,982	20,894	20,518	21,143	20,578	20,413	19,813
4 Time deposits[2]	148,374	152,164	168,744	159,144	156,304	154,725	148,779	150,972	150,820	154,203
5 Other[3]	51,677	51,366	67,569	62,807	58,484	60,433	66,017	65,233	65,004	66,286
6 Own foreign offices[4]	247,635	289,138	318,330	302,238	302,884	306,017	310,713	315,356	306,518	314,225
7 Banks' custody liabilities[5]	148,804	170,807	159,380	161,211	158,246	162,492	155,647	163,175	163,267	165,354
8 U.S. Treasury bills and certificates[6]	101,743	115,056	91,100	90,703	88,032	88,015	83,644	88,908	90,082	91,975
9 Other negotiable and readily transferable instruments[7]	16,776	16,426	19,526	18,658	18,655	21,031	18,055	18,531	17,865	17,519
10 Other	30,285	39,325	48,754	51,851	51,560	53,446	53,948	55,737	55,320	55,860
11 **Nonmonetary international and regional organizations[8]**	**4,464**	**3,224**	**4,772**	**4,671**	**3,765**	**4,896**	**5,727**	**4,558**	**4,997**	**4,112**
12 Banks' own liabilities	2,702	2,527	3,156	3,071	2,218	3,334	3,781	2,913	3,598	2,790
13 Demand deposits	124	71	96	36	55	156	52	28	29	64
14 Time deposits[2]	1,538	1,183	927	1,042	624	1,137	2,025	773	1,416	1,038
15 Other[3]	1,040	1,272	2,133	1,993	1,539	2,041	1,704	2,112	2,154	1,689
16 Banks' custody liabilities[5]	1,761	698	1,616	1,599	1,547	1,562	1,947	1,645	1,399	1,322
17 U.S. Treasury bills and certificates[6]	265	57	197	102	160	191	190	174	147	148
18 Other negotiable and readily transferable instruments[7]	1,497	641	1,417	1,497	1,387	1,371	1,740	1,463	1,253	1,159
19 Other	0	0	2	0	0	0	17	8	0	15
20 **Official institutions[9]**	**120,667**	**135,241**	**113,471**	**110,459**	**106,732**	**108,247**	**105,826**	**108,735**	**109,145**	**110,780**
21 Banks' own liabilities	28,703	27,109	31,098	30,755	30,443	31,366	33,594	33,061	33,249	34,339
22 Demand deposits	1,757	1,917	2,196	1,601	1,654	1,826	2,066	1,644	1,613	1,610
23 Time deposits[2]	12,843	9,767	10,550	9,769	10,658	9,704	10,889	11,178	10,102	11,199
24 Other[3]	14,103	15,425	18,351	19,385	18,132	19,836	20,639	20,238	21,533	21,530
25 Banks' custody liabilities[5]	91,965	108,132	82,373	79,704	76,289	76,881	72,231	75,674	75,896	76,440
26 U.S. Treasury bills and certificates[6]	88,829	103,722	76,985	76,157	73,099	73,039	69,454	72,322	71,804	72,694
27 Other negotiable and readily transferable instruments[7]	2,990	4,130	5,028	3,459	2,892	3,671	2,605	3,158	3,650	3,596
28 Other	146	280	361	88	298	171	173	195	443	150
29 **Banks[10]**	**414,280**	**459,523**	**514,251**	**491,782**	**484,881**	**490,793**	**492,534**	**503,103**	**495,599**	**508,150**
30 Banks' own liabilities	371,665	409,501	453,737	427,414	421,392	422,578	425,874	432,404	423,508	434,729
31 Unaffiliated foreign banks	124,030	120,362	135,407	125,175	118,508	116,561	115,161	117,048	116,990	120,504
32 Demand deposits	10,898	9,948	10,339	9,523	10,072	9,625	9,864	9,673	9,503	9,236
33 Time deposits[2]	79,717	80,189	90,557	79,518	74,873	75,296	68,692	70,999	72,819	75,043
34 Other[3]	33,415	30,226	34,511	36,133	33,563	31,640	36,605	36,377	34,668	36,224
35 Own foreign offices[4]	247,635	289,138	318,330	302,238	302,884	306,017	310,713	315,356	306,518	314,225
36 Banks' custody liabilities[5]	42,615	50,022	60,514	64,369	63,489	68,215	66,660	70,699	72,091	73,421
37 U.S. Treasury bills and certificates[6]	9,134	7,602	9,367	9,614	9,342	9,359	9,374	11,578	13,501	13,961
38 Other negotiable and readily transferable instruments[7]	5,392	5,725	5,124	5,090	4,918	7,611	5,437	5,616	5,757	5,770
39 Other	28,089	36,694	46,023	49,665	49,229	51,244	51,850	53,504	52,833	53,690
40 **Other foreigners**	**79,463**	**87,351**	**103,618**	**98,471**	**101,434**	**100,248**	**98,212**	**98,917**	**96,281**	**96,839**
41 Banks' own liabilities	67,000	75,396	88,742	82,932	84,513	84,415	83,404	83,760	82,400	82,668
42 Demand deposits	9,604	9,928	9,458	8,821	9,114	8,911	9,160	9,232	9,268	8,902
43 Time deposits[2]	54,277	61,025	66,711	68,815	70,148	68,588	67,174	68,022	66,484	66,923
44 Other[3]	3,119	4,443	12,573	5,295	5,251	6,915	7,069	6,506	6,648	6,843
45 Banks' custody liabilities[5]	12,463	11,956	14,877	15,539	16,921	15,834	14,809	15,157	13,881	14,170
46 U.S. Treasury bills and certificates[6]	3,515	3,675	4,551	4,830	5,431	5,425	4,627	4,834	4,631	5,173
47 Other negotiable and readily transferable instruments[7]	6,898	5,929	7,958	8,612	9,457	8,378	8,273	8,293	7,205	6,993
48 Other	2,050	2,351	2,368	2,098	2,033	2,031	1,909	2,030	2,044	2,004
49 MEMO: Negotiable time certificates of deposit in custody for foreigners	7,314	6,425	7,203	8,576	8,457	7,634	7,183	7,282	6,429	5,911

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	1987	1988	1989	1990						
				Jan.	Feb.	Mar.	Apr.	May	June	July[p]
1 **Total**	**618,874**	**685,339**	**736,112**	**705,383**	**696,813**	**704,185**	**702,299**	**715,313[r]**	**706,022[r]**	**719,881**
2 **Foreign countries**	**614,411**	**682,115**	**731,340**	**700,713**	**693,048**	**699,289**	**696,572**	**710,755[r]**	**701,024[r]**	**715,768**
3 Europe	234,641	231,912	237,453	231,067	224,715	224,907	229,675	236,417[r]	233,138[r]	235,818
4 Austria	920	1,155	1,233	1,422	1,817	1,764	1,549	1,373	1,531	1,527
5 Belgium-Luxembourg	9,347	10,022	10,611	11,357	11,400	11,978	10,128	9,507	9,276[r]	10,533
6 Denmark	760	2,200	1,415	1,240	1,244	1,760	2,271	2,152	2,411	2,552
7 Finland	377	285	570	684	614	431	464	314	387	485
8 France	29,835	24,777	26,903	22,992	21,850	21,921	24,263	23,103	23,569[r]	23,139
9 Germany	7,022	6,772	7,578	7,584	8,718	7,488	8,763	8,030[r]	8,071[r]	7,334
10 Greece	689	672	1,017	1,092	1,024	906	879	860	833	873
11 Italy	12,073	14,599	16,169	13,051	11,977	12,728	14,138	16,347	16,790[r]	17,096
12 Netherlands	5,014	5,316	6,613	7,733	8,226	9,454	7,731	8,166	7,624	5,967
13 Norway	1,362	1,559	2,401	1,256	997	2,619	1,454	1,582	2,443	1,792
14 Portugal	801	903	2,407	2,381	2,285	2,385	2,354	2,359	3,082	3,073
15 Spain	2,621	5,494	4,364	5,424	4,280	4,911	4,230	4,535	4,427	4,913
16 Sweden	1,379	1,284	1,491	2,303	1,468	1,574	1,889	1,855[r]	1,769	1,586
17 Switzerland	33,766	34,199	34,496	33,283	33,036	33,964	33,244	35,260[r]	35,283[r]	34,387
18 Turkey	703	1,012	1,818	1,048	886	1,039	1,432	1,641	1,596	1,654
19 United Kingdom	116,852	111,811	102,362	102,282	99,749	96,718	99,376	104,624[r]	98,320[r]	100,856
20 Yugoslavia	710	529	1,474	1,349	1,402	1,613	1,599	1,934	2,169	2,435
21 Other Western Europe[1]	9,798	8,598	13,563	13,220	12,088	10,214	12,039	11,089[r]	11,822[r]	13,783
22 U.S.S.R	32	138	350	229	376	141	446	158	75[r]	257
23 Other Eastern Europe[2]	582	591	619	1,138	1,277	1,299	1,427	1,529[r]	1,661[r]	1,576
24 Canada	30,095	21,062	18,864	19,246	21,329	18,536	19,483	19,880[r]	19,939	20,029
25 Latin America and Caribbean	220,372	271,146	310,514	300,601	305,620	314,575	308,616	315,664[r]	312,612[r]	317,406
26 Argentina	5,006	7,804	7,304	7,380	7,496	8,036	8,235	8,346[r]	8,004[r]	8,160
27 Bahamas	74,767	86,863	98,932	95,513	94,627	98,003	89,895	98,648[r]	99,166[r]	99,237
28 Bermuda	2,344	2,621	2,884	2,539	2,239	2,308	2,807	2,514	3,110[r]	2,825
29 Brazil	4,005	5,314	6,334	6,679	7,128	7,280	6,729	6,088[r]	6,096[r]	6,128
30 British West Indies	81,494	113,840	138,263	131,959	135,940	141,075	143,264	142,127[r]	136,974[r]	142,187
31 Chile	2,210	2,936	3,212	3,052	3,134	3,261	3,418	3,517	3,462[r]	3,538
32 Colombia	4,204	4,374	4,653	4,435	4,610	4,510	4,404	4,471	4,507	4,470
33 Cuba	12	10	10	31	10	9	9	10	11	28
34 Ecuador	1,082	1,379	1,391	1,232	1,325	1,337	1,334	1,367	1,372	1,348
35 Guatemala	1,082	1,195	1,312	1,338	1,362	1,403	1,451	1,473	1,473	1,522
36 Jamaica	160	269	209	204	217	245	224	215	224	220
37 Mexico	14,480	15,185	15,399	14,773	15,802	15,246	15,066	15,116[r]	16,159[r]	15,966
38 Netherlands Antilles	4,975	6,420	6,310	6,192	6,470	6,412	6,460	6,806	6,649	7,023
39 Panama	7,414	4,353	4,361	4,543	4,743	4,766	4,749	4,539	4,507[r]	4,383
40 Peru	1,275	1,671	1,984	1,927	1,975	1,836	1,703	1,533	1,474	1,404
41 Uruguay	1,582	1,898	2,284	2,419	2,397	2,513	2,575	2,560	2,520	2,559
42 Venezuela	9,048	9,147	9,468	9,832	9,615	9,871	9,636	9,717	10,240	9,610
43 Other	5,234	5,868	6,205	6,554	6,530	6,464	6,657	6,617[r]	6,664[r]	6,798
44 Asia	121,288	147,838	156,128	141,600	132,085	132,744	130,903	129,015[r]	125,976[r]	133,625
China										
45 Mainland	1,162	1,895	1,772	1,681	1,470	1,573	1,840	1,781	1,868	1,821
46 Taiwan	21,503	26,058	19,565	19,151	17,901	15,552	15,413	15,173[r]	10,969[r]	12,610
47 Hong Kong	10,180	12,248	12,395	11,824	11,115	11,569	12,231	12,858[r]	12,303[r]	13,244
48 India	582	699	780	907	762	1,033	1,013	1,148	966	908
49 Indonesia	1,404	1,180	1,281	1,061	1,174	1,545	1,560	1,192	1,522	1,367
50 Israel	1,292	1,461	1,243	1,039	894	1,497	1,310	1,226	1,202[r]	1,112
51 Japan	54,322	74,015	81,183	70,223	65,127	66,078	65,549	62,056[r]	62,334[r]	65,979
52 Korea	1,637	2,541	3,214	2,617	2,562	2,320	2,109	2,011	2,063	2,111
53 Philippines	1,085	1,163	1,764	1,150	1,263	1,198	1,191	1,187	1,332	1,314
54 Thailand	1,345	1,236	2,093	2,381	2,524	1,930	1,595	1,973	2,125	2,745
55 Middle-East oil-exporting countries[3]	13,988	12,083	13,369	13,262	12,558	12,450	11,626	13,048	13,034[r]	14,062
56 Other	12,788	13,260	17,468	16,305	14,735	15,999	15,466	15,362	16,258[r]	16,352
57 Africa	3,945	3,991	3,823	3,627	3,778	3,644	3,722	3,778	3,660	3,411
58 Egypt	1,151	911	686	640	722	601	595	646	593	583
59 Morocco	194	68	78	86	95	80	111	86	81	95
60 South Africa	202	437	205	257	261	277	236	241	318	239
61 Zaire	67	85	86	82	77	74	70	66	41[r]	38
62 Oil-exporting countries[4]	1,014	1,017	1,120	993	1,110	1,048	936	1,016	889[r]	874
63 Other	1,316	1,474	1,648	1,570	1,513	1,563	1,775	1,722	1,737[r]	1,583
64 Other countries	4,070	6,165	4,559	4,571	5,521	4,883	4,173	6,002	5,699	5,479
65 Australia	3,327	5,293	3,867	3,891	4,798	3,994	3,469	5,250	5,052	4,891
66 All other	744	872	692	680	723	889	703	751	647	588
67 Nonmonetary international and regional organizations	4,464	3,224	4,772	4,671	3,765	4,896	5,727	4,558	4,997	4,112
68 International[5]	2,830	2,503	3,825	3,599	2,765	3,634	4,147	3,393	3,862	2,981
69 Latin American regional	1,272	589	684	857	655	949	1,123	912	920	812
70 Other regional[6]	362	133	263	214	345	313	457	253	215	319

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	1987	1988	1989	1990 Jan.	1990 Feb.	1990 Mar.	1990 Apr.	1990 May[r]	1990 June[r]	1990 July[p]
1 **Total**	**459,877**	**491,165**	**533,763**	**511,739**	**499,176**	**489,951**	**490,778**	**490,276[r]**	**490,169**	**490,297**
2 **Foreign countries**	**456,472**	**489,094**	**530,324**	**507,246**	**495,102**	**486,158**	**486,385**	**485,691[r]**	**486,175**	**486,007**
3 Europe	*102,348*	*116,928*	*118,885*	*105,603*	*104,162*	*104,191*	*104,989*	*103,415*	*102,232*	*102,114*
4 Austria	793	483	415	658	429	500	592	420[r]	537	399
5 Belgium-Luxembourg	9,397	8,515	6,478	6,668	7,063	6,358	6,330	6,765[r]	5,411	6,744
6 Denmark	717	483	582	664	635	608	750	1,004	590	503
7 Finland	1,010	1,065	1,027	1,224	1,218	1,153	1,025	931	1,035	1,120
8 France	13,548	13,243	16,146	15,839	16,392	15,631	16,087	16,224	14,794	13,746
9 Germany	2,039	2,329	2,865	1,990	2,762	2,783	2,476	3,045	2,943	2,591
10 Greece	462	433	788	735	773	664	622	597	514	529
11 Italy	7,460	7,936	6,662	4,934	5,377	5,010	4,230	4,758	5,126	4,618
12 Netherlands	2,619	2,541	1,904	1,659	1,567	2,182	2,027	1,968	2,041	1,762
13 Norway	934	455	609	600	672	777	918	741	725	657
14 Portugal	477	261	376	309	288	273	381	407	540	543
15 Spain	1,853	1,823	1,930	2,790	2,040	2,240	1,726	1,887	2,074	2,115
16 Sweden	2,254	1,977	1,773	2,718	2,158	2,236	2,206	2,711	2,609	3,351
17 Switzerland	2,718	3,895	6,141	4,835	4,922	5,056	4,826	4,999	5,249	4,297
18 Turkey	1,680	1,233	1,071	1,087	1,088	1,123	1,120	1,138	1,230	1,186
19 United Kingdom	50,823	65,706	65,388	54,462	52,121	52,993	55,439	52,163	53,379	54,588
20 Yugoslavia	1,700	1,390	1,329	1,243	1,158	1,157	1,121	1,128	1,095	1,070
21 Other Western Europe[2]	619	1,152	1,302	1,133	1,271	1,183	970	786	804	960
22 U.S.S.R.	389	1,255	1,179	1,192	1,322	1,356	1,322	945	754	565
23 Other Eastern Europe[3]	852	754	921	864	905	907	820	800	782	769
24 Canada	25,368	18,889	15,427	16,694	16,768	15,082	15,199	16,320	16,482	16,391
25 Latin America and Caribbean	214,789	214,264	230,353	224,116	220,258	212,902	202,614	207,467[r]	210,288	202,059
26 Argentina	11,996	11,826	9,270	12,117	8,718	8,189	8,025	7,689	7,599	7,165
27 Bahamas	64,587	66,954	77,921	70,102	71,891	69,095	63,927	70,296	66,538	66,855
28 Bermuda	471	483	1,315	485	401	425	443	774	1,830	2,047
29 Brazil	25,897	25,735	23,749	23,503	23,210	21,884	21,848	21,793[r]	20,699	20,412
30 British West Indies	50,042	55,888	68,664	70,889	70,048	72,329	67,610	67,554[r]	74,564	66,198
31 Chile	6,308	5,217	4,353	4,212	4,208	4,079	3,714	3,630[r]	3,453	3,488
32 Colombia	2,740	2,944	2,784	2,530	2,610	2,720	2,649	2,624	2,596	2,541
33 Cuba	1	1	1	0	0	0	0	0	0	1
34 Ecuador	2,286	2,075	1,688	1,588	1,570	1,536	1,527	1,503	1,523	1,515
35 Guatemala[4]	144	198	197	213	200	208	207	206	188	197
36 Jamaica[4]	188	212	297	284	274	265	260	260	258	262
37 Mexico	29,532	24,637	23,381	22,027	21,400	16,798	17,080	16,360[r]	16,507	16,963
38 Netherlands Antilles	980	1,306	1,921	1,764	1,702	1,692	1,759	1,630	1,722	1,873
39 Panama	4,744	2,521	1,740	1,748	1,688	1,732	1,743	1,643[r]	1,598	1,491
40 Peru	1,329	1,013	771	750	752	733	721	679	683	661
41 Uruguay	963	910	928	932	935	926	886	876	842	843
42 Venezuela	10,843	10,733	9,647	9,289	8,956	8,528	8,423	8,251[r]	8,139	8,065
43 Other Latin America and Caribbean	1,738	1,612	1,726	1,682	1,695	1,764	1,790	1,697[r]	1,547	1,484
44 Asia	106,096	130,881	157,416	152,452	145,033	145,675	155,435	150,042[r]	148,799	158,008
China										
Mainland	968	762	634	620	619	599	674	517	519	620
46 Taiwan	4,592	4,184	2,776	2,157	1,824	2,016	1,890	1,941	1,946	1,580
47 Hong Kong	8,218	10,143	11,128	7,696	6,605	7,418	8,965	9,553	9,271	9,375
48 India	510	560	621	625	892	721	588	579	802	849
49 Indonesia	580	674	651	641	611	604	560	599	801	831
50 Israel	1,363	1,136	813	749	752	737	721	738[r]	775	932
51 Japan	68,658	90,149	111,270	113,387	108,352	108,527	117,487	108,170[r]	107,598	114,439
52 Korea	5,148	5,213	5,296	5,156	4,880	5,016	4,991	5,141	5,057	5,445
53 Philippines	2,071	1,876	1,344	1,297	1,163	1,204	1,221	1,351	1,357	1,342
54 Thailand	496	848	1,140	1,172	1,052	992	1,070	1,202	1,279	1,267
55 Middle East oil-exporting countries[5]	4,858	6,213	10,149	8,663	9,250	8,774	8,376	9,577	10,816	12,347
56 Other Asia	8,635	9,122	11,594	10,290	9,035	9,066	8,894	10,674	8,576	8,981
57 Africa	4,742	5,718	5,890	5,935	5,967	5,984	5,953	5,913[r]	5,785	5,557
58 Egypt	521	507	502	470	493	474	491	488	469	421
59 Morocco	542	511	559	575	588	581	596	587[r]	565	544
60 South Africa	1,507	1,681	1,628	1,619	1,629	1,648	1,632	1,639	1,568	1,560
61 Zaire	15	17	16	16	17	25	19	20	21	20
62 Oil-exporting countries[6]	1,003	1,523	1,648	1,667	1,749	1,749	1,705	1,665	1,653	1,604
63 Other	1,153	1,479	1,537	1,588	1,491	1,507	1,509	1,515	1,510	1,408
64 Other countries	3,129	2,413	2,354	2,446	2,914	2,324	2,195	2,535	2,590	1,878
65 Australia	2,100	1,520	1,781	1,815	2,015	1,632	1,551	1,657	1,712	1,422
66 All other	1,029	894	573	631	900	692	644	878	878	456
67 Nonmonetary international and regional organizations[7]	3,404	2,071	3,439	4,493	4,074	3,794	4,393	4,585	3,994	4,291

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	1987	1988	1989	1990						
				Jan.	Feb.	Mar.	Apr.	May[r]	June[r]	July[p]
1 **Total**	**497,635**	**538,689**	**590,251**	....	....	**543,114**	....	....	**549,059**	....
2 Banks' own claims on foreigners	459,877	491,165	533,763	511,739	499,176	489,951	490,778	490,276	490,169	490,297
3 Foreign public borrowers	64,605	62,658	59,877	58,969	56,909	53,920	53,497	52,490	50,788	49,340
4 Own foreign offices[2]	224,727	257,436	295,948	289,826	283,970	274,861	274,326	274,931	279,652	274,632
5 Unaffiliated foreign banks	127,609	129,425	134,848	123,647	120,114	123,003	125,138	125,567	121,182	128,779
6 Deposits	60,687	65,898	78,005	69,522	67,121	69,977	71,770	71,993	67,998	72,761
7 Other	66,922	63,527	56,843	54,125	52,993	53,027	53,368	53,575	53,183	56,017
8 All other foreigners	42,936	41,646	43,090	39,297	38,184	38,167	37,817	37,288	38,548	37,547
9 Claims of banks' domestic customers[3]	37,758	47,524	56,488	....	....	53,163	....	....	58,890	....
10 Deposits	3,692	8,289	12,834	....	....	16,788	....	....	15,499	....
11 Negotiable and readily transferable instruments[4]	26,696	25,700	29,063	....	....	22,020	....	....	27,451	....
12 Outstanding collections and other claims	7,370	13,535	14,591	....	....	14,354	....	....	15,940	....
13 MEMO: Customer liability on acceptances	23,107	19,596	12,753	....	....	13,563	....	....	12,943	....
Dollar deposits in banks abroad, reported by nonbanking business enterprises in the United States[5]	40,909	45,502	45,309	43,932	45,263	41,809	38,923[r]	41,071	39,657	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	1986	1987	1988	1989		1990	
				Sept.	Dec.	Mar.	June[p]
1 **Total**	**232,295**	**235,130**	**233,184**	**234,112**	**237,474**	**213,670**	**211,062**
By borrower							
2 Maturity of 1 year or less[2]	160,555	163,997	172,634	169,279	177,223	160,087	157,458
3 Foreign public borrowers	24,842	25,889	26,562	24,102	23,483	22,725	19,421
4 All other foreigners	135,714	138,108	146,071	145,178	153,741	137,362	138,037
5 Maturity over 1 year[2]	71,740	71,133	60,550	64,832	60,251	53,584	53,603
6 Foreign public borrowers	39,103	38,625	35,291	39,537	35,822	30,050	31,069
7 All other foreigners	32,637	32,507	25,259	25,295	24,429	23,533	22,534
By area							
Maturity of 1 year or less[2]							
8 Europe	61,784	59,027	55,909	53,122	53,300	48,368	49,101
9 Canada	5,895	5,680	6,282	6,236	5,886	5,694	5,579
10 Latin America and Caribbean	56,271	56,535	57,991	52,227	52,929	46,719	44,323
11 Asia	29,457	35,919	46,224	50,445	57,766	51,744	50,729
12 Africa	2,882	2,833	3,337	3,514	3,225	3,165	2,991
13 All other[3]	4,267	4,003	2,891	3,735	4,118	4,396	4,734
Maturity of over 1 year[2]							
14 Europe	6,737	6,696	4,666	6,065	4,595	4,407	4,326
15 Canada	1,925	2,661	1,922	2,459	2,353	2,702	2,860
16 Latin America and Caribbean	56,719	53,817	47,547	49,046	45,844	37,668	35,924
17 Asia	4,043	3,830	3,613	4,203	4,142	5,479	7,036
18 Africa	1,539	1,747	2,301	2,475	2,633	2,764	2,739
19 All other[3]	777	2,381	501	584	684	564	718

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	1986	1987	1988			1989				1990	
				June	Sept.	Dec.	Mar.	June	Sept.	Dec.	Mar.	June[p]
1	**Total**	**386.5**	**382.4**	**351.9**	**354.0**	**346.3**	**346.1**	**340.0**	**346.2[r]**	**338.2[r]**	**336.2[r]**	**324.3**
2	G-10 countries and Switzerland	156.6	159.7	150.7	148.7	152.7	145.4	145.1	146.4	152.7	146.9[r]	139.4
3	Belgium-Luxembourg	8.4	10.0	9.2	9.5	9.0	8.6	7.8	6.9	6.3	6.6	6.2
4	France	13.6	13.7	10.9	10.3	10.5	11.2	10.8	11.1	11.7	10.5	10.3
5	Germany	11.6	12.6	10.6	9.2	10.3	10.2	10.6	10.4	10.5	11.2	11.2
6	Italy	9.0	7.5	6.3	5.6	6.8	5.2	6.1	6.8	7.4	6.0	5.5
7	Netherlands	4.6	4.1	3.2	2.9	2.7	2.8	2.8	2.4	3.1	3.1	2.7
8	Sweden	2.4	2.1	1.9	1.9	1.8	2.3	1.8	2.0	2.0	2.1	2.3
9	Switzerland	5.8	5.6	5.6	5.2	5.4	5.1	5.4	6.1	7.1	6.3	6.4
10	United Kingdom	70.9	68.8	70.4	67.6	66.2	65.6	64.5	63.7	67.0	63.8	59.7
11	Canada	5.2	5.5	5.3	4.9	5.0	4.0	5.1	5.9	5.4	4.8	5.1
12	Japan	25.1	29.8	27.3	31.6	34.9	30.5	30.2	31.0	32.2	32.5	29.9
13	Other developed countries	26.1	26.4	24.0	23.0	21.0	21.1	21.2	21.0	20.7	23.1	22.6
14	Austria	1.7	1.9	1.6	1.6	1.5	1.4	1.7	1.5	1.5	1.5	1.5
15	Denmark	1.7	1.7	1.1	1.2	1.1	1.1	1.4	1.1	1.1	1.1	1.1
16	Finland	1.4	1.2	1.2	1.3	1.1	1.0	1.0	1.1	1.0	1.1	.9
17	Greece	2.3	2.0	2.1	2.1	1.8	2.1	2.3	2.4	2.5	2.6	2.7
18	Norway	2.4	2.2	1.9	2.0	1.8	1.6	1.8	1.4	1.4	1.7	1.4
19	Portugal	.9	.6	.4	.4	.4	.4	.6	.4	.4	.4	.8
20	Spain	5.8	8.0	7.2	6.3	6.2	6.6	6.2	6.9	7.1	8.3	7.9
21	Turkey	2.0	2.0	1.8	1.6	1.5	1.3	1.1	1.2	1.2	1.3	1.4
22	Other Western Europe	1.5	1.6	1.7	1.9	1.3	1.1	1.1	1.0	.7	1.0[r]	1.1
23	South Africa	3.0	2.9	2.8	2.7	2.4	2.2	2.1	2.1	2.0	2.0	1.9
24	Australia	3.4	2.4	2.2	1.8	1.8	2.4	1.9	2.1	1.6	2.1	1.9
25	OPEC countries[3]	19.4	17.4	17.0	17.9	16.6	16.2	16.1	16.2	17.1	15.3[r]	15.4
26	Ecuador	2.2	1.9	1.8	1.8	1.7	1.6	1.5	1.5	1.3	1.2	1.2
27	Venezuela	8.7	8.1	8.0	7.9	7.9	7.9	7.5	7.4	7.0	6.1	6.0
28	Indonesia	2.5	1.9	1.8	1.8	1.7	1.7	1.9	2.0	2.0	2.1	2.0
29	Middle East countries	4.3	3.6	3.5	4.6	3.4	3.3	3.4	3.5	5.0	4.1[r]	4.4
30	African countries	1.8	1.9	1.9	1.9	1.9	1.7	1.6	1.9	1.7	1.8	1.8
31	Non-OPEC developing countries	99.6	97.8	91.8	87.2	85.3	85.9	83.4	81.2	77.5	71.1[r]	69.5
	Latin America											
32	Argentina	9.5	9.5	9.5	9.3	9.0	8.5	7.9	7.6	6.3	5.5	5.1
33	Brazil	25.3	24.7	23.7	22.4	22.4	22.8	22.1	20.9	19.0	17.5	17.2
34	Chile	7.1	6.9	6.4	6.3	5.6	5.7	5.2	4.9	4.6	4.3	3.7
35	Colombia	2.1	2.0	2.2	2.1	2.1	1.9	1.7	1.6	1.8	1.8	1.7
36	Mexico	24.0	23.5	21.1	20.4	18.8	18.3	17.7	17.2	17.7	15.2	14.8
37	Peru	1.4	1.1	.9	.8	.8	.7	.6	.6	.6	.5	.5
38	Other Latin America	3.1	2.8	2.6	2.5	2.6	2.7	2.6	2.9	2.8	2.7	2.4
	Asia											
	China											
39	Mainland	.4	.3	.4	.2	.3	.5	.3	.3	.3	.3	.2
40	Taiwan	4.9	8.2	4.9	3.2	3.7	4.9	5.2	5.0	4.5	3.8	3.6
41	India	1.2	1.9	2.3	2.0	2.1	2.6	2.4	2.7	3.1	3.5	3.6
42	Israel	1.5	1.0	1.0	1.0	1.2	.9	.8	.7	.7	.6	.6
43	Korea (South)	6.7	5.0	5.9	6.0	6.1	6.1	6.6	6.5	5.9	5.3	5.6
44	Malaysia	2.1	1.5	1.5	1.7	1.6	1.7	1.6	1.7	1.7	1.8	1.8
45	Philippines	5.4	5.2	4.9	4.7	4.5	4.4	4.4	4.0	4.1	3.7	3.9
46	Thailand	.9	.7	1.1	1.2	1.1	1.0	1.0	1.3	1.3	1.1	1.3
47	Other Asia	.7	.7	.8	.8	.9	.8	.8	1.0	1.0	1.2	1.1
	Africa											
48	Egypt	.7	.6	.6	.5	.4	.5	.6	.5	.4	.4	.5
49	Morocco	.9	.9	.9	.8	.9	.9	.9	.8	.9	.9	.9
50	Zaire	.1	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0
51	Other Africa[4]	1.6	1.3	1.2	1.2	1.1	1.1	1.1	1.0	1.0	.9	.9
52	Eastern Europe	3.5	3.2	3.3	3.1	3.6	3.5	3.4	3.5	3.5	3.4	3.0
53	U.S.S.R.	.1	.3	.4	.4	.7	.7	.6	.8	.7	.8	.4
54	Yugoslavia	2.0	1.8	1.9	1.8	1.8	1.7	1.7	1.7	1.6	1.4	1.4
55	Other	1.4	1.1	1.0	1.0	1.1	1.1	1.1	1.1	1.3	1.3	1.2
56	Offshore banking centers	61.5	54.5	43.0	47.3	44.2	48.5	43.1	49.2[r]	36.6[r]	43.0	38.9
57	Bahamas	22.4	17.3	8.9	12.9	11.0	15.8	11.0	11.4[r]	5.5[r]	9.3	8.5
58	Bermuda	.6	.6	1.0	.9	.9	1.1	.7	1.3	1.7	.9	2.2
59	Cayman Islands and other British West Indies	12.3	13.5	10.3	11.9	12.9	12.0	10.8	15.3	8.9	10.9	7.3
60	Netherlands Antilles	1.8	1.2	1.2	1.2	1.0	.9	1.0	1.1	2.3	2.6	2.3
61	Panama[5]	4.0	3.7	3.0	2.6	2.5	2.2	1.9	1.5	1.4	1.3	1.4
62	Lebanon	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
63	Hong Kong	11.1	11.2	11.6	10.5	9.6	9.6	10.4	10.7	9.7	9.8	10.0
64	Singapore	9.2	7.0	6.9	7.0	6.1	6.8	7.3	7.8	7.0	8.0	7.0
65	Others[6]	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
66	Miscellaneous and unallocated[7]	19.8	23.2	22.2	26.7	22.6	25.0	27.4	28.5	29.8	33.1	35.3

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	1986	1987	1988	1988 Dec.	1989 Mar.	1989 June	1989 Sept.	1989 Dec.	1990 Mar.
1	**Total**	**25,587**	**28,302**	**33,646**	**33,646**	**37,384**	**36,998**	**35,584**	**37,406**	**37,306[r]**
2	Payable in dollars	21,749	22,785	28,040	28,040	31,594	31,925	30,746	32,588	33,004[r]
3	Payable in foreign currencies	3,838	5,517	5,606	5,606	5,790	5,073	4,838	4,819	4,303[r]
	By type									
4	Financial liabilities	12,133	12,424	15,130	15,130	17,453	17,124	16,268	17,524	16,749[r]
5	Payable in dollars	9,609	8,643	11,243	11,243	13,373	13,265	12,440	13,631	13,523[r]
6	Payable in foreign currencies	2,524	3,781	3,888	3,888	4,080	3,860	3,829	3,893	3,226[r]
7	Commercial liabilities	13,454	15,878	18,516	18,516	19,931	19,874	19,315	19,882	20,557[r]
8	Trade payables	6,450	7,305	6,466	6,466	7,030	6,350	6,812	7,206	7,117[r]
9	Advance receipts and other liabilities	7,004	8,573	12,050	12,050	12,901	13,524	12,503	12,676	13,440
10	Payable in dollars	12,140	14,142	16,797	16,797	18,220	18,661	18,306	18,957	19,481[r]
11	Payable in foreign currencies	1,314	1,737	1,719	1,719	1,711	1,213	1,009	925	1,076
	By area or country									
	Financial liabilities									
12	Europe	7,917	8,320	9,918	9,918	12,571	11,404	10,374	10,697	9,897[r]
13	Belgium-Luxembourg	270	213	289	289	320	357	308	340	333
14	France	661	382	319	319	224	278	262	243	208[r]
15	Germany	368	551	699	699	741	838	809	736	532[r]
16	Netherlands	542	866	879	879	873	834	853	946	865
17	Switzerland	646	558	1,033	1,033	954	978	839	578	595
18	United Kingdom	5,140	5,557	6,533	6,533	9,266	7,939	7,087	7,582	7,021[r]
19	Canada	399	360	663	663	616	544	599	583	481
20	Latin America and Caribbean	1,944	1,189	1,239	1,239	677	1,216	1,315	1,226	1,764
21	Bahamas	614	318	184	184	189	165	186	157	237
22	Bermuda	4	0	0	0	0	0	0	17	0
23	Brazil	32	25	0	0	0	0	0	0	0
24	British West Indies	1,146	778	645	645	471	621	698	594	1,046
25	Mexico	22	13	1	1	15	17	4	6	5
26	Venezuela	0	0	0	0	0	0	0	0	0
27	Asia	1,805	2,451	3,306	3,306	3,583	3,860	3,878	4,916	4,503
28	Japan	1,398	2,042	2,563	2,563	2,825	3,100	3,130	4,064	3,445
29	Middle East oil-exporting countries[2]	8	8	3	3	1	12	2	2	3
30	Africa	1	4	1	1	5	3	4	2	3
31	Oil-exporting countries[3]	1	1	0	0	3	2	2	0	0
32	All other[4]	67	100	2	2	2	97	97	100	102
	Commercial liabilities									
33	Europe	4,446	5,516	7,351	7,351	7,965	7,778	8,319	8,867	9,096[r]
34	Belgium-Luxembourg	101	132	170	170	134	114	137	178	233
35	France	352	426	455	455	579	535	806	872	881[r]
36	Germany	715	909	1,699	1,699	1,373	1,190	1,183	1,362	1,143
37	Netherlands	424	423	591	591	670	688	548	699	688
38	Switzerland	385	559	417	417	459	447	531	621	583
39	United Kingdom	1,341	1,599	2,065	2,065	2,585	2,709	2,703	2,599	2,906
40	Canada	1,405	1,301	1,217	1,217	1,163	1,133	1,189	1,066	1,124
41	Latin America and Caribbean	924	864	1,118	1,118	1,267	1,611	1,053	1,127	1,263[r]
42	Bahamas	32	18	49	49	35	34	27	41	37
43	Bermuda	156	168	286	286	426	388	305	308	516
44	Brazil	61	46	95	95	103	541	113	100	116[r]
45	British West Indies	49	19	34	34	31	42	30	27	18
46	Mexico	217	189	179	179	198	179	187	243	208
47	Venezuela	216	162	177	177	179	131	107	154	85[r]
48	Asia	5,080	6,565	6,923	6,923	7,330	6,957	7,038	6,953	6,819[r]
49	Japan	2,042	2,578	3,097	3,097	3,059	2,708	2,674	2,772	2,624
50	Middle East oil-exporting countries[2,5]	1,679	1,964	1,386	1,386	1,526	1,431	1,406	1,346	1,340[r]
51	Africa	619	574	578	578	706	752	639	838	738[r]
52	Oil-exporting countries[3]	197	135	202	202	272	253	246	300	248
53	All other[4]	980	1,057	1,328	1,328	1,500	1,642	1,077	1,031	1,517

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	1986	1987	1988	1988	1989				1990
					Dec.	Mar.	June	Sept.	Dec.	Mar.
1	**Total**	**36,265**	**30,964**	**33,842**	**33,842**	**31,608**	**34,282**	**32,022**	**31,011**	**29,927r**
2	Payable in dollars	33,867	28,502	31,507	31,507	29,293	32,088	29,797	28,683	27,269r
3	Payable in foreign currencies	2,399	2,462	2,335	2,335	2,315	2,193	2,225	2,328	2,657r
	By type									
4	Financial claims	26,273	20,363	21,843	21,843	19,616	21,808	19,116	17,326	16,732r
5	Deposits	19,916	14,894	15,792	15,792	14,456	16,734	12,442	10,360	10,452r
6	Payable in dollars	19,331	13,765	14,693	14,693	13,542	15,814	11,577	9,434	9,609r
7	Payable in foreign currencies	585	1,128	1,099	1,099	914	921	865	926	843r
8	Other financial claims	6,357	5,470	6,051	6,051	5,160	5,074	6,673	6,966	6,280r
9	Payable in dollars	5,005	4,656	5,320	5,320	4,267	4,362	5,812	6,170	5,039r
10	Payable in foreign currencies	1,352	814	731	731	893	713	862	796	1,241
11	Commercial claims	9,992	10,600	11,999	11,999	11,992	12,473	12,906	13,685	13,194r
12	Trade receivables	8,783	9,535	10,924	10,924	10,730	11,042	11,421	12,073	11,602r
13	Advance payments and other claims	1,209	1,065	1,075	1,075	1,262	1,432	1,485	1,612	1,593
14	Payable in dollars	9,530	10,081	11,494	11,494	11,485	11,913	12,408	13,079	12,622r
15	Payable in foreign currencies	462	519	505	505	507	560	498	606	573
	By area or country									
	Financial claims									
16	Europe	10,744	9,531	10,276	10,276	8,848	8,614	7,507	6,830	7,139r
17	Belgium-Luxembourg	41	7	18	18	22	161	166	13	22
18	France	138	332	226	226	233	198	209	153	200r
19	Germany	116	102	138	138	171	199	147	194	501
20	Netherlands	151	350	348	348	384	297	292	303	315r
21	Switzerland	185	65	217	217	260	67	111	90	124
22	United Kingdom	9,855	8,467	8,977	8,977	7,469	7,378	6,340	5,848	5,262
23	Canada	4,808	2,844	2,339	2,339	2,210	2,617	2,428	1,916	1,807
24	Latin America and Caribbean	9,291	7,012	8,122	8,122	7,465	9,351	8,278	7,428	6,935r
25	Bahamas	2,628	1,994	1,838	1,838	2,171	1,881	1,707	1,513	1,616r
26	Bermuda	6	7	19	19	25	33	33	7	4
27	Brazil	86	63	47	47	49	78	70	224	79
28	British West Indies	6,078	4,433	5,733	5,733	4,799	6,949	6,080	5,273	4,822r
29	Mexico	174	172	151	151	117	114	105	94	152
30	Venezuela	21	19	21	21	25	31	36	20	21
31	Asia	1,317	879	830	830	951	1,109	801	829	763r
32	Japan	999	605	561	561	627	640	440	439	416
33	Middle East oil-exporting countries[2]	7	8	5	5	8	8	7	8	7
34	Africa	85	65	106	106	89	80	75	140	67
35	Oil-exporting countries[3]	28	7	10	10	8	8	8	12	11
36	All other[4]	28	33	170	170	52	37	27	183	21r
	Commercial claims									
37	Europe	3,725	4,180	5,051	5,051	4,984	5,290	5,423	6,140	6,018
38	Belgium-Luxembourg	133	178	178	178	202	205	220	241	219
39	France	431	650	661	661	760	770	824	948	952r
40	Germany	444	562	623	623	657	675	688	666	690
41	Netherlands	164	133	208	208	161	413	396	478	450r
42	Switzerland	217	185	327	327	251	231	222	305	270
43	United Kingdom	999	1,073	1,323	1,323	1,300	1,371	1,396	1,550	1,689
44	Canada	934	936	974	974	1,114	1,181	1,278	1,045	1,091r
45	Latin America and Caribbean	1,857	1,930	2,237	2,237	2,114	2,100	2,131	2,163	2,043r
46	Bahamas	28	19	36	36	34	13	10	57	22
47	Bermuda	193	170	230	230	234	238	270	323	242
48	Brazil	234	226	298	298	277	314	232	285	225r
49	British West Indies	39	26	22	22	23	30	33	36	38
50	Mexico	412	368	460	460	482	438	508	507	523r
51	Venezuela	237	283	226	226	213	229	188	148	187r
52	Asia	2,755	2,915	2,973	2,973	3,097	3,145	3,301	3,532	3,254r
53	Japan	881	1,158	943	943	1,042	998	1,177	1,184	1,060r
54	Middle East oil-exporting countries[2]	563	450	445	445	428	430	406	509	420r
55	Africa	500	401	434	434	386	407	390	419	425r
56	Oil-exporting countries[3]	139	144	122	122	95	111	80	108	89
57	All other[4]	222	238	331	331	297	350	381	386	365r

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	1988	1989	1990 Jan.–July	1990 Jan.	Feb.	Mar.	Apr.	May	June	July p
						U.S. corporate securities				
STOCKS										
1 Foreign purchases	181,185	213,160	106,345	13,747	13,463	16,430	11,457	15,231	18,511r	17,505
2 Foreign sales	183,185	203,537	111,771	14,130	13,692	19,117	12,356	17,717	18,584r	16,175
3 **Net purchases, or sales (–)**	**–2,000**	**9,623**	**–5,426**	**–383**	**–229**	**–2,687**	**–899**	**–2,486**	**–72r**	**1,330**
4 **Foreign countries**	**–1,825**	**9,857**	**–5,553**	**–353**	**–230**	**–2,733**	**–937**	**–2,543**	**–36r**	**1,278**
5 Europe	–3,350	278	–3,633	–183	–144	–990	–666	–1,048	–590r	–12
6 France	–281	–708	–572	–155	–157	7	–85	–189	32	–25
7 Germany	218	–830	–9	41	3	105	6	–57	–66	–41
8 Netherlands	–535	167	–167	–18	–38	48	–25	–20	–83	–30
9 Switzerland	–2,243	–3,468	–1,859	–240	–242	–441	–221	–347	–198r	–170
10 United Kingdom	–954	3,729	–969	–275	183	–720	–99	–200	–114r	255
11 Canada	1,087	–845	–339	–140	51	–163	–212	–101	88r	137
12 Latin America and Caribbean	1,238	3,089	–539	–111	–178	–208	–27	90	–14	–90
13 Middle East[1]	–2,474	3,531	–957	–27	93	–425	116	–593	–85	–36
14 Other Asia	1,365	3,405	–80	231	–30	–921	–55	–904	543	1,056
15 Japan	1,922	3,340	–180	166	–104	–764	–92	–750	512	851
16 Africa	188	131	–28	2	–34	1	–2	0	–7	13
17 Other countries	121	268	22	–125	12	–27	–91	13	30	211
18 **Nonmonetary international and regional organizations**	**–176**	**–234**	**127**	**–30**	**1**	**46**	**38**	**57**	**–37**	**52**
BONDS[2]										
19 Foreign purchases	86,381	120,540	69,208	9,464	10,297	9,248	8,355	8,467	12,572r	10,805
20 Foreign sales	58,417	86,510	53,432	7,810	7,780	8,061	7,499	6,347	8,456r	7,480
21 **Net purchases, or sales (–)**	**27,964**	**34,031**	**15,776**	**1,654**	**2,517**	**1,186**	**856**	**2,120**	**4,116r**	**3,326**
22 **Foreign countries**	**28,506**	**33,678**	**16,067**	**2,054**	**2,491**	**1,026**	**850**	**2,195**	**4,084r**	**3,368**
23 Europe	17,239	19,848	9,462	1,135	245	915	1,008	781	3,380r	1,998
24 France	143	372	528	118	9	5	–58	108	293	54
25 Germany	1,344	–238	–345	–114	–253	–15	–40	–39	82	33
26 Netherlands	1,514	850	67	–43	15	–11	–2	33	37	37
27 Switzerland	505	–165	1,044	157	58	–69	59	83	186	570
28 United Kingdom	13,084	18,459	8,175	1,132	475	1,009	1,158	495	2,761r	1,145
29 Canada	711	1,116	1,749	178	474	183	353	198	292	70
30 Latin America and Caribbean	1,931	3,686	3,459	493	883	313	411	508	578	273
31 Middle East[1]	–178	–182	370	87	100	36	–2	251	–120	17
32 Other Asia	8,900	9,063	944	152	796	–461	–993	440	11	999
33 Japan	7,686	6,331	940	170	1,103	–419	–1,044	331	–131	930
34 Africa	–8	56	83	3	36	–8	48	8	2	–4
35 Other countries	–89	91	1	5	–43	48	24	9	–59	15
36 **Nonmonetary international and regional organizations**	**–542**	**353**	**–291**	**–399**	**27**	**160**	**6**	**–76**	**32**	**–42**
						Foreign securities				
37 Stocks, net purchases, or sales (–)[3]	–1,959	–12,832	–7,468	772	–981	–90	–872	–2,421	–2,759r	–1,117
38 Foreign purchases	75,356	109,789	75,756	12,983	10,481	11,765	8,360	9,772	11,020	11,375
39 Foreign sales[3]	77,315	122,621	83,224	12,211	11,461	11,855	9,233	12,193	13,779r	12,492
40 Bonds, net purchases, or sales (–)	–7,434	–6,049	–15,215	556	–159	–9,605	–1,830	–1,837	–2,030r	–310
41 Foreign purchases	218,521	234,215	156,707	18,512	20,671	22,375	20,184	25,879	25,658	23,428
42 Foreign sales	225,955	240,264	171,922	17,955	20,830	31,981	22,015	27,716	27,688r	23,738
43 **Net purchases, or sales (–), of stocks and bonds**	**–9,393**	**–18,881**	**–22,683**	**1,328**	**–1,139**	**–9,695**	**–2,702**	**–4,259**	**–4,789r**	**–1,426**
44 **Foreign countries**	**–9,873**	**–18,914**	**–20,800**	**1,220**	**–1,229**	**–8,094**	**–2,852**	**–4,054**	**–4,336r**	**–1,456**
45 Europe	–7,864	–17,728	–6,706	1,398	–1,226	–305	–669	–1,888	–3,649r	–368
46 Canada	–3,747	–4,180	–4,591	–58	–144	–1,323	–1,797	–721	–219r	–329
47 Latin America and Caribbean	1,384	426	–6,146	33	161	–6,648	–171	282	418	–222
48 Asia	979	2,722	–2,445	111	–307	693	–341	–1,403	–1,073r	–124
49 Africa	–54	93	–103	–14	9	–1	–28	6	8	–83
50 Other countries	–571	–246	–810	–249	277	–511	154	–331	180	–330
51 **Nonmonetary international and regional organizations**	**480**	**33**	**–1,883**	**108**	**89**	**–1,601**	**150**	**–205**	**–453**	**30**

1. Comprises oil-exporting countries as follows: Bahrain, Iran, Iraq, Kuwait, Oman, Qatar, Saudi Arabia, and United Arab Emirates (Trucial States).
2. Includes state and local government securities, and securities of U.S. government agencies and corporations. Also includes issues of new debt securities sold abroad by U.S. corporations organized to finance direct investments abroad.
3. As a result of the merger of a U.S. and U.K. company in July 1989, the former stockholders of the U.S. company received $5,453 million in shares of the new combined U.K. company. This transaction is not reflected in the data above.

3.25 MARKETABLE U.S. TREASURY BONDS AND NOTES Foreign Transactions

Millions of dollars

Country or area	1988	1989	1990 Jan.–July	1990 Jan.	Feb.	Mar.	Apr.	May	June	July[p]
	Transactions, net purchases or sales (−) during period[1]									
1 **Estimated total[2]**	**48,832**	**54,607**	**2,384**	**819**	**1,454**	**−8,793**	**3,081**	**−2,505**	**3,394**	**4,936**
2 Foreign countries[2]	48,170	52,705	3,871	1,090	1,795	−8,597	4,071	−2,915	3,088	5,338
3 Europe[2]	14,319	35,939	9,639	1,238	2,191	−2,374	5,998	−4,247	3,178	3,656
4 Belgium-Luxembourg	923	1,048	575	144	−337	−256	458	115	270	180
5 Germany[2]	−5,268	7,904	859	−216	1,672	−475	633	306	−1,061	−1
6 Netherlands	−356	−1,141	−1,145	−330	−1,400	−411	749	−263	313	196
7 Sweden	−323	886	311	−71	270	−22	763	−727	−34	133
8 Switzerland[2]	−1,074	1,097	−499	−284	−5	−251	422	−189	606	−799
9 United Kingdom	9,640	20,198	3,109	150	1,627	−298	2,250	−3,533	1,862	1,051
10 Other Western Europe	10,786	5,968	6,420	1,845	363	−664	714	43	1,223	2,896
11 Eastern Europe	−10	−21	6	0	0	0	6	0	0	0
12 Canada	3,761	701	−3,920	−542	−2,137	−1,383	110	−1,752	367	1,418
13 Latin America and Caribbean	713	490	5,889	−333	91	672	2,134	478	914	1,934
14 Venezuela	−109	311	−49	−107	−48	38	−49	71	48	−1
15 Other Latin America and Caribbean	1,130	−297	3,204	262	16	270	−35	610	1,021	1,060
16 Netherlands Antilles	−308	475	2,735	−488	123	365	2,218	−204	−154	874
17 Asia	27,603	14,021	−7,048	447	2,287	−5,119	−3,872	2,725	−1,838	−1,677
18 Japan	21,750	2,404	−8,170	837	852	−5,630	−6,102	2,933	−1,221	161
19 Africa	−13	116	36	9	13	−43	−4	−8	52	17
20 All other	1,786	1,439	−726	273	−650	−351	−294	−110	416	−9
21 Nonmonetary international and regional organizations	661	1,902	−1,486	−272	−341	−196	−991	410	305	−402
22 International	1,106	1,473	−986	−360	−286	−92	−528	403	462	−585
23 Latin America regional	−31	231	16	38	−11	−26	74	25	−109	25
Memo										
24 Foreign countries[2]	48,170	52,705	3,871	1,090	1,795	−8,597	4,071	−2,915	3,088	5,338
25 Official institutions	26,624	27,028	−17	328	−1,425	−3,856	5,564	−2,857	1,548	681
26 Other foreign[2]	21,546	25,677	3,888	763	3,220	−4,741	−1,493	−58	1,540	4,658
Oil-exporting countries										
27 Middle East[3]	1,963	8,148	852	916	970	1,020	668	−188	−439	−2,095
28 Africa[4]	1	−1	−0	−1	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 Sept. 30, 1990 Percent	Rate on Sept. 30, 1990 Month effective	Country	Rate on Sept. 30, 1990 Percent	Rate on Sept. 30, 1990 Month effective	Country	Rate on Sept. 30, 1990 Percent	Rate on Sept. 30, 1990 Month effective
Austria	6.5	Oct. 1989	France[1]	9.5	Apr. 1990	Norway	8.0	June 1983
Belgium	10.25	Oct. 1989	Germany, Fed. Rep. of	6.0	Oct. 1989	Switzerland	6.0	Oct. 1989
Canada	12.65	Sept. 1990	Italy	12.5	May 1990	United Kingdom[2]	....	....
Denmark	10.5	Oct. 1989	Japan	6.0	Aug. 1990			
			Netherlands	7.0	Oct. 1989			

1. As of the end of February 1981, the rate is that at which the Bank of France discounts Treasury bills for 7 to 10 days.
2. Minimum lending rate suspended as of Aug. 20, 1981.

NOTE. Rates shown are mainly those at which the central bank either discounts or makes advances against eligible commercial paper and/or government commercial banks or brokers. For countries with more than one rate applicable to such discounts or advances, the rate shown is the one at which it is understood the central bank transacts the largest proportion of its credit operations.

3.27 FOREIGN SHORT-TERM INTEREST RATES

Percent per year, averages of daily figures

Country, or type	1987	1988	1989	1990 Mar.	1990 Apr.	1990 May	1990 June	1990 July	1990 Aug.[r]	1990 Sept.
1 Eurodollars	7.07	7.85	9.16	8.37	8.44	8.35	8.23	8.09	7.99	8.05
2 United Kingdom	9.65	10.28	13.87	15.23	15.17	15.11	14.95	14.92	14.95	14.88
3 Canada	8.38	9.63	12.20	13.35	13.59	13.77	13.76	13.58	13.13	12.64
4 Germany	3.97	4.28	7.04	8.42	8.20	8.27	8.24	8.17	8.36	8.37
5 Switzerland	3.67	2.94	6.83	8.88	9.01	8.78	8.71	8.81	8.71	8.12
6 Netherlands	5.24	4.72	7.28	8.70	8.46	8.37	8.26	8.16	8.44	8.42
7 France	8.14	7.80	9.27	10.56	9.92	9.70	9.94	9.91	10.03	10.24
8 Italy	11.15	11.04	12.44	13.03	12.11	12.09	11.33	11.38	11.49	10.69
9 Belgium	7.01	6.69	8.65	10.39	10.19	9.90	9.63	9.30	9.30	9.05
10 Japan	3.87	3.96	4.73	6.33	6.62	6.84	6.86	7.02	7.15	7.41

NOTE. Rates are for 3-month interbank loans except for Canada, finance company paper; Belgium, 3-month Treasury bills; and Japan, Gensaki rate.

3.28 FOREIGN EXCHANGE RATES[1]

Currency units per dollar

Country/currency	1987	1988	1989	1990 Apr.	1990 May	1990 June	1990 July	1990 Aug.[r]	1990 Sept.
1 Australia/dollar[2]	70.137	78.409	79.186	76.366	76.106	77.903	79.076	80.871	82.463
2 Austria/schilling	12.649	12.357	13.236	11.862	11.699	11.843	11.520	11.044	11.044
3 Belgium/franc	37.358	36.785	39.409	34.868	34.325	34.602	33.715	32.280	32.274
4 Canada/dollar	1.3259	1.2306	1.1842	1.1641	1.1747	1.1730	1.1570	1.1448	1.1590
5 China, P.R./yuan	3.7314	3.7314	3.7673	4.7339	4.7339	4.7339	4.7339	4.7339	4.7343
6 Denmark/krone	6.8478	6.7412	7.3210	6.4305	6.3349	6.4080	6.2339	6.0033	5.9959
7 Finland/markka	4.4037	4.1933	4.2963	3.9923	3.9270	3.9561	3.8386	3.7051	3.7091
8 France/franc	6.0122	5.9595	6.3802	5.6638	5.5989	5.6613	5.4924	5.2680	5.2583
9 Germany/deutsche mark	1.7981	1.7570	1.8808	1.6863	1.6630	1.6832	1.6375	1.5702	1.5702
10 Greece/drachma	135.47	142.00	162.60	163.77	163.82	164.78	160.59	154.82	154.83
11 Hong Kong/dollar	7.7986	7.8072	7.8008	7.7966	7.7877	7.7855	7.7704	7.7707	7.7653
12 India/rupee	12.943	13.900	16.213	17.294	17.325	17.421	17.412	17.347	17.823
13 Ireland/punt[2]	148.79	152.49	141.80	158.97	161.21	159.28	163.75	170.86	170.89
14 Italy/lira	1,297.03	1,302.39	1,372.28	1,238.38	1,221.93	1,235.60	1,199.65	1,157.07	1,172.41
15 Japan/yen	144.60	128.17	138.07	158.46	154.04	153.70	149.04	147.46	138.53
16 Malaysia/ringgit	2.5186	2.6190	2.7079	2.7264	2.7024	2.7104	2.7051	2.6956	2.6949
17 Netherlands/guilder	2.0264	1.9778	2.1219	1.8984	1.8704	1.8946	1.8452	1.7692	1.7698
18 New Zealand/dollar[2]	59.328	65.560	59.354	57.883	57.293	58.254	59.147	61.294	62.159
19 Norway/krone	6.7409	6.5243	6.9131	6.5457	6.4477	6.4700	6.2925	6.0810	6.0725
20 Portugal/escudo	141.20	144.27	157.53	149.29	147.08	147.90	143.93	138.71	139.09
21 Singapore/dollar	2.1059	2.0133	1.9511	1.8783	1.8589	1.8471	1.8193	1.7905	1.7675
22 South Africa/rand	2.0385	2.2770	2.6214	2.6552	2.6468	2.6592	2.6253	2.5734	2.5718
23 South Korea/won	825.94	734.52	674.29	708.76	711.85	718.07	718.75	718.26	718.18
24 Spain/peseta	123.54	116.53	118.44	107.00	103.98	103.91	100.41	96.90	98.54
25 Sri Lanka/rupee	29.472	31.820	35.947	40.018	40.023	40.018	40.018	40.007	39.947
26 Sweden/krona	6.3469	6.1370	6.4559	6.1160	6.0560	6.0896	5.9470	5.7754	5.7643
27 Switzerland/franc	1.4918	1.4643	1.6369	1.4866	1.4198	1.4250	1.3924	1.3076	1.3070
28 Taiwan/dollar	31.753	28.636	26.407	26.369	26.961	27.391	27.163	27.291	27.302
29 Thailand/baht	25.775	25.312	25.725	26.024	25.928	25.876	25.706	25.579	25.381
30 United Kingdom/pound[2]	163.98	178.13	163.82	163.72	167.74	171.03	180.98	190.13	188.13
MEMO									
31 United States/dollar[3]	96.94	92.72	98.60	93.51	92.04	92.43	89.68	86.55	86.10

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.

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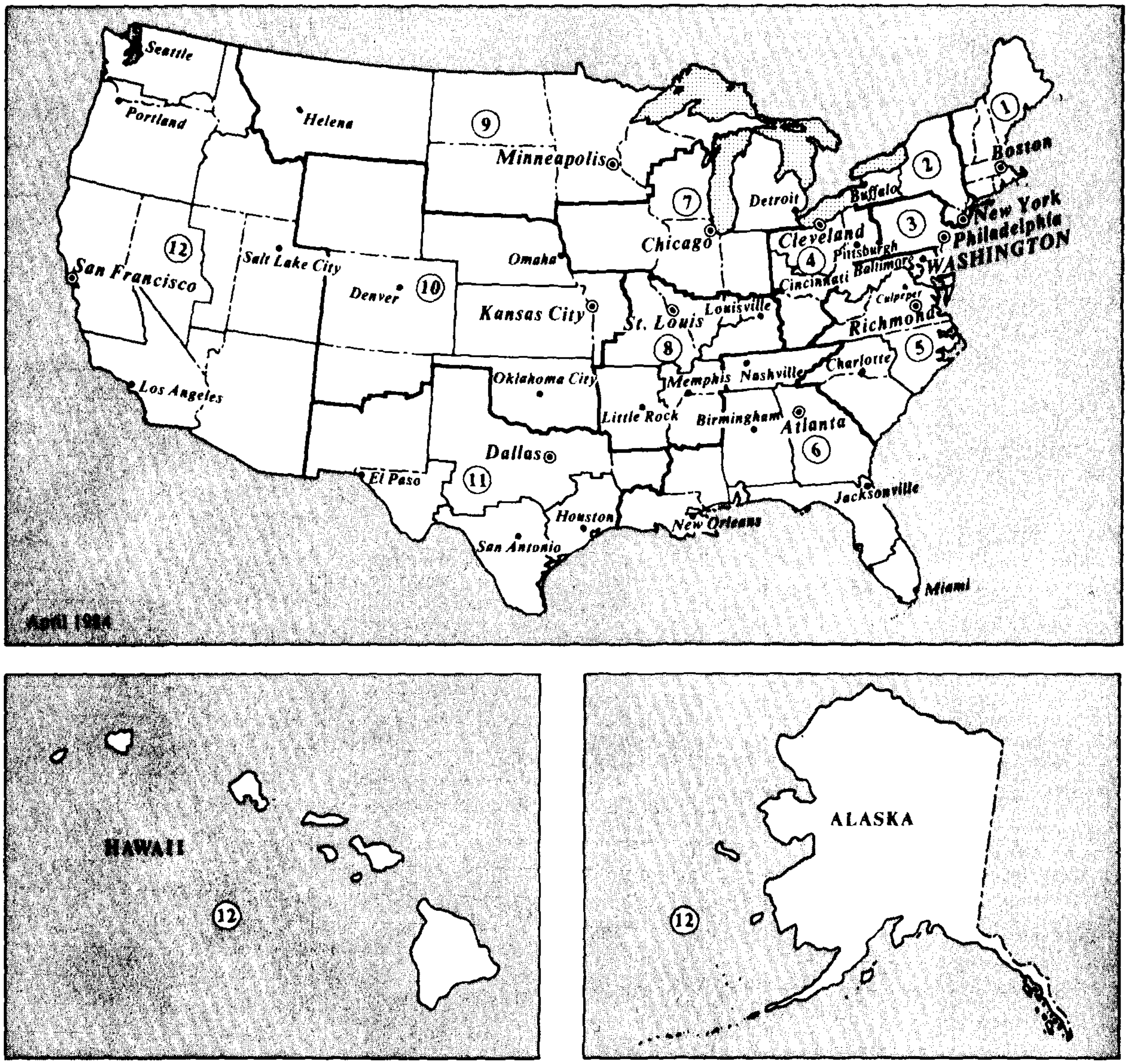
*Additional offices of these Banks are located at Lewiston, Maine 04240; Windsor Locks, Connecticut 06096; Cranford, New Jersey 07016; Jericho, New York 11753; Utica at Oriskany, New York 13424; Columbus, Ohio 43216; Columbia, South Carolina 29210; Charleston, West Virginia 25311; Des Moines, Iowa 50306; Indianapolis, Indiana 46204; and Milwaukee, Wisconsin 53202.

1. Senior Vice President.
2. Executive Vice President.

The Federal Reserve System

Boundaries of Federal Reserve Districts and Their Branch Territories



LEGEND

- Boundaries of Federal Reserve Districts
- Boundaries of Federal Reserve Branch Territories
- Board of Governors of the Federal Reserve System
- Federal Reserve Bank Cities
- Federal Reserve Branch Cities
- Federal Reserve Bank Facility