

Reserve Bank Services

T

he twelve Federal Reserve Banks provide banking services to depository institutions and to the federal government. For depository institutions, they maintain reserve and clearing accounts and provide various payment services including collecting checks, electronically transferring funds, and distributing and receiving currency and coin. For the federal government, they act as fiscal agents. As such, the Reserve Banks maintain the Treasury Department's transaction account; pay Treasury checks; process electronic payments; and issue, transfer, and redeem U.S. government securities.

THE RESERVE BANKS ALSO PERFORM numerous specialized services for the federal government and its agencies, such as redeeming food coupons and monitoring special accounts—Treasury tax and loan accounts—in which tax receipts are held until the Treasury needs funds to make payments.

In creating the Federal Reserve System, Congress intended to eliminate the severe financial crises that had periodically swept the nation. The System was to provide not only an elastic currency—that is, a currency that would expand or shrink in amount as economic conditions warranted—but also an efficient and equitable check-collection system.

Congress's concerns about the nation's financial system centered on the financial panic of 1907. During that episode, cash payments were largely suspended throughout the country because many banks and clearinghouses refused to clear checks drawn on certain other banks. These practices led to the failure of otherwise solvent banks. To address these problems, Congress gave the Federal Reserve the authority to establish a nationwide check-clearing system.

Congress was also concerned that some banks refused to pay the full amount of the check (nonpar collection) and that some charged certain collecting banks fees to pay checks (presentment

fees). To avoid paying presentment fees, many collecting banks routed checks through banks that were not charged presentment fees by payor banks. This practice, called circuitous routing, resulted in extensive delays and inefficiencies in the check-collection system. In 1917, Congress amended the Federal Reserve Act to prohibit banks from charging the Federal Reserve Banks presentment fees; the amended act also authorized nonmember banks as well as member banks to collect checks through the Federal Reserve System.

In passing the Monetary Control Act of 1980, Congress reaffirmed its intention that the Federal Reserve should promote an efficient nationwide payments system. To encourage competition between the Federal Reserve and private-sector providers of payment services, the act requires the Federal Reserve to charge fees for its payment services. The Monetary Control Act also requires all depository institutions, not just member commercial banks, to maintain reserves with the Federal Reserve System and grants them equal access to Federal Reserve payment services.

Congress expanded the role of the Federal Reserve in the payments system again in 1987 when it enacted the Expedited Funds Availability Act. This act gives the Federal Reserve authority to improve the check-collection system by using electronic means to collect checks, by promoting truncation (under which a depository institution or Reserve Bank keeps the paper checks and sends only electronic data to the payor bank to request payment), and by handling all returned checks regardless of the way the check was originally collected. The act also limits the time a depository institution may hold funds before making them available to customers for withdrawal.

THE FEDERAL RESERVE AND THE PAYMENTS SYSTEM

The U.S. payments system is the largest in the world. Each year billions of transactions, valued in the trillions of dollars, are conducted between payors (purchasers of goods, services, or financial assets) and payees (sellers of goods, services, or financial assets). Based on the mandates of Congress, the Federal Reserve is an active intermediary in clearing and settling interbank payments. The Federal Reserve Banks play this role because they maintain reserve or clearing accounts for the majority of deposi-

tory institutions. As a result, they can settle payment transactions efficiently by debiting the accounts of the depository institutions making payments and by crediting the accounts of depository institutions receiving payments. Moreover, the Reserve Banks, as part of the nation's central bank, are immune from liquidity problems (not having sufficient funds to complete payment transactions) and credit problems. Payments received in accounts maintained at the Federal Reserve, therefore, are free of liquidity and default risk.

The Federal Reserve provides a variety of payment services to depository institutions. Its cash services include the distribution of currency and coin and the removal of unfit notes and coins from circulation. Its noncash services include the collection of checks, the processing of electronic funds transfers, and the provision of net settlement services to private clearing arrangements.

Cash Services: Currency and Coin

An important function of the Federal Reserve System is ensuring that enough currency and coin are in circulation to meet the public's demand. When Congress created the Federal Reserve System, it recognized that the demand for cash by the public and the banking system varies from time to time. This demand increases or decreases directly with the level of economic activity and with the seasons of the year. For example, consumers' demand for currency typically increases during holiday seasons, and farmers' demand increases during planting and harvesting seasons. The additional currency and coin put into circulation to meet seasonal demand is eventually returned to depository institutions by merchants and other business owners. To reduce the excess currency and coin held in their vaults, depository institutions return the excess to their regional Reserve Bank, where it is credited to their accounts. The process is reversed when depository institutions need to replenish or increase their supply of currency and coin.



Virtually all currency in circulation is in the form of Federal Reserve notes. Each of the twelve Federal Reserve Banks is authorized by the Federal Reserve Act to issue currency. Before the Reserve Banks issue currency to the banking system, the currency

must be secured by legally authorized collateral, most of which is in the form of U.S. Treasury and federal agency securities held by the Reserve Banks. The notes are a first lien on the assets of the issuing Reserve Bank and are obligations of the U.S. government. The notes are designed and printed by the Bureau of Engraving and Printing of the Department of the Treasury and are delivered to the Reserve Banks for circulation. The Federal Reserve System pays the Bureau of Engraving and Printing only for the cost of printing the notes.¹

Coin is different from currency in that it is the direct obligation of the Treasury. The Reserve Banks pay the Department of the Treasury's Bureau of the Mint for the face value of the coin received rather than for the cost of the minting.

As currency and coin flow back to the Reserve Banks, each deposit is counted and verified against the amount the depository institution says it contains, and overages or shortages are credited or debited to the institution's account. As currency deposits are verified, notes that are suspected of being counterfeit and those that are too worn for recirculation are separated from the rest. The Reserve Banks hold the fit notes in their vaults along with new notes until they are needed to meet demand. The unfit notes are destroyed, and their face value is deducted from the total amount of Federal Reserve notes outstanding.



Currency and coin are used primarily for small-dollar transactions and thus account for only a small proportion of the total dollar value of all monetary transactions. During 1993, the Federal Reserve System delivered to depository institutions about 21.9 billion notes having a value of \$324.2 billion and received from depository institutions about 21.2 billion notes having a value of \$292.7 billion; 7.4 billion of the returned notes were destroyed. The difference between the amount of currency delivered and the amount received equals the annual increase or decrease in

1. The first U.S. paper money under the Constitution—demand notes—was issued in 1861. All currency issued by the U.S. government since then remains valid. Currency in circulation, other than Federal Reserve notes, includes silver certificates (which have a blue Department of the Treasury seal), United States notes (red seal), and national bank notes (brown seal). Federal Reserve notes (which have a green seal) were first issued in 1914.

depository institutions' demand for currency resulting from economic conditions.

Over the past several decades, the value of currency in circulation has risen dramatically—from \$31.2 billion in 1955 to \$365.3 billion in 1993 (table 7.1). The total number of notes in circulation (15.5 billion at the end of 1993) and the demand for larger denominations (\$20, \$50, and \$100 notes) have also increased (table 7.2). In 1960, these larger denominations constituted 64 percent of the total value of currency in circulation; by the end of 1993, they accounted for 92 percent. Because the dollar is viewed throughout the world as a highly stable and readily negotiable currency, much of the increased demand for notes of larger denomination has arisen outside the United States. Although the exact value of U.S. notes held outside the United States is unknown, various estimates suggest that at least one-half of all U.S. currency circulates abroad and that flows abroad have been increasing in recent years.

The use of the dollar outside the United States does not affect the supply of currency and coin needed to support domestic eco-

Table 7.1
Value of currency and coin in circulation, selected years, 1955–93
 Millions of dollars

<i>Year</i>	<i>Currency</i>	<i>Coin</i>	<i>Total</i>
1955	29,242	1,916	31,158
1960	30,442	2,426	32,868
1965	38,029	4,027	42,056
1970	45,915	5,986	51,901
1975	68,059	8,285	76,344
1980	109,515	11,641	121,156
1985	182,003	15,456	197,459
1990	268,206	18,765	286,971
1991	288,453	19,263	307,716
1992	314,752	19,948	334,700
1993	344,465	20,804	365,269

Table 7.2
Estimated value of Federal Reserve notes in circulation by denomination,
selected years, 1960–93
 Billions of dollars

Year	Denomination, in dollars								Total
	1	2	5	10	20	50	100	Other¹	
1960	1.5	.1	2.2	6.7	10.5	2.8	6.0	.6	30.4
1970	2.1	.1	2.9	8.4	16.6	4.4	10.9	.5	45.9
1980	3.1	.7	4.1	11.0	36.4	12.2	41.6	.4	109.5
1990	5.1	.8	6.3	12.6	69.0	33.9	140.2	.3	268.2
1993	5.7	.9	6.9	13.2	74.9	40.9	201.5	.3	344.3

1. Other denominations include the \$500, \$1,000, \$5,000, and \$10,000 notes in circulation. No denominations larger than \$100 have been printed since 1946 nor issued since July 1969. A great majority of these larger notes outstanding are held by private collectors, currency dealers, or financial institutions for promotion and display.

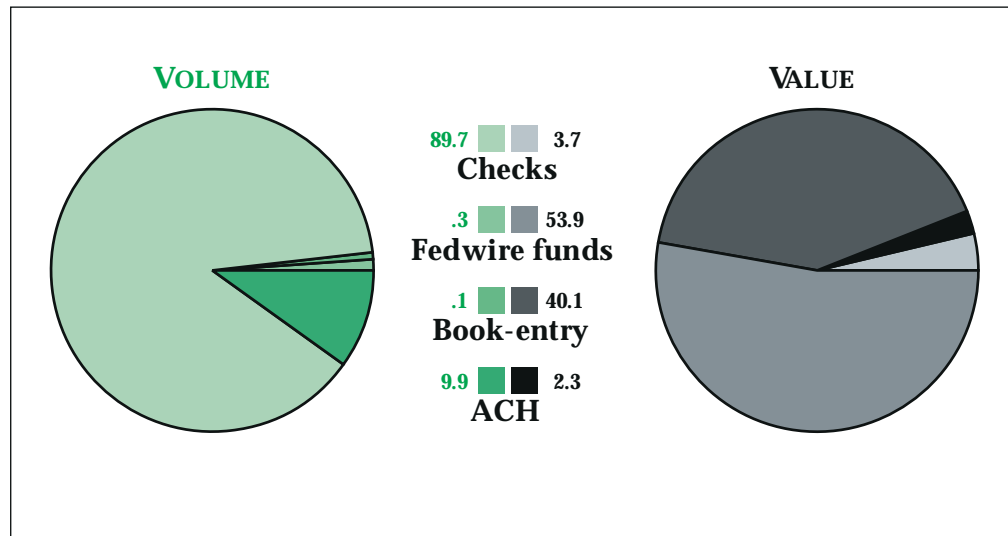
conomic activity. As noted earlier, the Federal Reserve supplies currency and coin in amounts sufficient to meet the demand of the U.S. public.

Noncash-Transaction Services

Although cash is convenient and is commonly used for small-dollar transactions, noncash payment instruments—such as checks and electronic funds transfers—are generally preferred for larger-value transactions. Figures for the noncash services provided by the Federal Reserve give a general picture of the use of noncash transactions in 1993 (chart 7.1). Notably, checks continue to account for the largest share of noncash payments by number (about 90 percent in 1993) but for a minor share in terms of value (less than 4 percent). Fedwire funds transfers, in contrast, accounted for less than 1 percent of the number of noncash transactions processed by the Federal Reserve in 1993 but nearly 55 percent of the value. The use of the automated clearinghouse has been growing rapidly since its inception in the 1970s, but transaction volume is still only a fraction of check volume.

Chart 7.1
Federal Reserve Noncash Services, 1993

Percent



Check Processing

In 1993, an estimated 59 billion checks were written in the United States. About one-quarter of these checks were deposited in the same institution on which they were drawn (called “on-us” checks). Checks not drawn on the institution at which they were deposited are called interbank checks. In 1993, more than 40 percent of interbank checks were collected through the Federal Reserve, and the remainder were handled through private clearing arrangements.

Handling interbank checks requires a mechanism for exchanging them and providing for the related movement of funds (or settlement) among the banks and other depository institutions that are involved. When a depository institution receives checks drawn on other institutions, it may send the checks for collection to those institutions directly, deliver them physically to the institutions at a local clearinghouse, or purchase the collection services of a correspondent institution or a Federal Reserve office.

For checks collected through the Federal Reserve, the account of the collecting institution is credited for the value of the deposited checks in accordance with the availability schedules maintained by the Reserve Banks. These schedules reflect the time normally

needed for the Federal Reserve to receive payments from the institutions on which the checks are drawn. Credit is usually given on the day of deposit or the next business day. In 1993, the Federal Reserve collected 19 billion checks with a value of \$14.1 trillion (table 7.3).

Since it was established, the Federal Reserve has worked with the private sector to improve the efficiency and cost-effectiveness of the check-collection system. In the 1940s, the Federal Reserve and the banking industry developed routing numbers. These numbers are still printed on checks to identify the institution on which a check is drawn and to which the check must be sent for payment. In the 1950s, they developed and implemented the magnetic ink character recognition (MICR) system for encoding pertinent data on checks so that the data could be read electronically. This development contributed significantly to the automation of check processing.

Table 7.3
Number and value of commercial checks collected
by the Federal Reserve, selected years, 1920–93¹
 Number in millions; value in millions of dollars

<i>Year</i>	<i>Number</i>	<i>Value</i>
1920	424	149,784
1930	905	324,883
1940	1,184	280,436
1950	1,955	856,953
1960	3,419	1,154,121
1970	7,158	3,331,733
1980	15,716	8,038,026
1990	18,598	12,519,171
1993	19,009	14,066,518

1. In 1993, the Federal Reserve System, acting as fiscal agent for the U.S. Treasury, also paid 480 million checks and 192 million postal money orders.

In the 1970s, the Federal Reserve introduced a regional check-processing program to further improve the efficiency of check clearing. The program expanded the number of check-processing facilities, which enabled the Federal Reserve to collect significantly more checks faster. At the end of 1994, the Federal Reserve maintained forty-six check-clearing centers. These centers are located at each of the Reserve Banks (except the Federal Reserve Bank of New York), the twenty-five Reserve Bank Branches, and



the ten regional check-processing centers (see chapter 1). Each center serves a specific geographical area.

In the mid-1980s, the Federal Reserve began to encourage the conversion of paper checks to electronic records in order to improve the efficiency of the check-collection process. Consequently, the Federal Reserve has actively promoted check truncation, which could significantly

*A*utomated check-processing equipment facilitates the rapid processing of payments.

streamline the system. The Federal Reserve has also actively supported research to develop check image processing, which permits the image of a paper check to be captured, processed, and stored on electronic media for retrieval when needed.

Until the late 1980s, depository institutions were allowed to hold deposited funds for an unlimited time before making them available for withdrawal. Some banks continued to use circuitous routes to clear checks to avoid presentment fees, and depositors could not be sure when their funds would be available. In 1987, Congress enacted the Expedited Funds Availability Act (EFAA), which limits the time that banks can hold funds from checks deposited into customer accounts before the funds are made available for withdrawal. The law was implemented in September 1988 through the Board of Governors' Regulation CC, Availability of Funds and Collection of Checks, which also establishes rules designed to speed the return of unpaid checks.

The EFAA requires that funds be made available for deposits of cash, Treasury checks, and cashier's checks no later than the business day after the banking day of deposit. Regulation CC extends this next-day availability to U.S. Postal Service money orders and to checks drawn on a Federal Reserve Bank or a Federal Home Loan Bank. For the majority of other check deposits, the location of the paying bank in relation to the bank in which the check was deposited determines the availability of funds.

According to Regulation CC, the bank into which a local check is deposited must make the funds available for withdrawal by the second business day after the day of deposit. (A local check is a



check deposited in a bank in the same Federal Reserve check-processing region as the paying bank.) Proceeds of a nonlocal check—that is, one deposited in a bank in a different check-processing region from the paying bank—must be available for withdrawal by the fifth business day after deposit. In certain circumstances, such as when the bank has reasonable cause to believe the check is uncollectible or when an

account is new, the bank may delay the availability of the funds. In such a case, the bank must notify the customer, explain the delay, and indicate when the funds will be available.

In late 1992, the Federal Reserve modified Regulation CC to permit all depository institutions to demand payment in same-day funds from payor institutions without paying presentment fees, provided certain conditions are met by collecting banks. This modification, called same-day settlement, grants depository institutions the right to obtain payment for checks that is similar to the right of the Federal Reserve. As depository institutions take advantage of that right, an increasing number of checks will be presented directly to the banks on which they are drawn.

Electronic Funds Transfer

Electronic funds transfer (EFT) is a faster and more secure method of payment than either cash or check. The Federal Reserve Banks provide two types of services for electronically transferring funds: Fedwire and the Automated Clearinghouse (ACH). Through the Fedwire service, depository institutions typically transfer large-dollar payments (the average value of a Fedwire transfer in 1993 was approximately \$3 million). Depository institutions generally use the ACH for small-dollar payments.

Fedwire allows depository institutions to transfer funds on their own behalf or on behalf of their customers. Such transfers result from trades of federal funds and other interbank transactions, purchases and sales of securities, and time-sensitive payments. The Department of the Treasury and other federal agencies also use the Fedwire to disburse and collect funds. In 1993, the Reserve Banks processed 70 million Fedwire payments having a total value of \$208 trillion (table 7.4).

Fedwire funds transfers are processed individually. Sophisticated data-communications and data-processing systems ensure that each transfer is authorized by the sender and that it is not altered while it is under the control of the Federal Reserve. Although a few banks continue to initiate Fedwire payments by telephone, more than 99 percent of all Fedwire funds transfers are initiated on-line through personal or mainframe computers. Fedwire funds transfers are processed in seconds. When the Federal Reserve processes a funds transfer, it electronically debits the account of the sending institution and credits the account of the receiving institution. The Federal Reserve guarantees the payment to the bank receiving the transfer and assumes any risk if the bank sending the payment has insufficient funds in its Federal Reserve account to complete the transfer.

Table 7.4
Number and value of Fedwire funds transactions processed
by the Federal Reserve, selected years, 1920–93
 Number in millions; value in millions of dollars

<i>Year</i>	<i>Number</i>	<i>Value</i>
1920	.5	30,857
1930	2.0	198,881
1940	.8	92,106
1950	1.0	509,168
1960	3.0	2,428,083
1970	7.0	12,332,001
1980	43.0	78,594,862
1990	63.0	199,067,200
1993	70.0	207,629,814

Fedwire also allows depository institutions to transfer the ownership of U.S. Treasury securities and the securities of various federal agencies, such as the Federal National Mortgage Association and the Federal Home Loan Mortgage Corporation, for themselves and for their customers. Most of these securities are held in safekeeping by the Reserve Banks as book entries (as electronic records of securities holdings rather than as paper certificates).



The Federal Reserve Banks safekeep and transfer U.S. government securities in their capacity as fiscal agents for the U.S. Treasury. They carry out these functions for government agencies as a service to depository institutions. In 1993, 12.7 million book-entry securities transfers with a value of \$154 trillion were transferred using Fedwire (table 7.5).

Fedwire book-entry securities transfers are processed individually, in much the same way that Fedwire funds transfers are processed. When the Federal Reserve receives a request to transfer a security, it determines that the security is held in safekeeping for the institution requesting the transfer and withdraws the security from the institution's safekeeping account. It then electronically credits the proceeds of the sale to the account of the depository institution, deposits the book-entry security into the safekeeping account of the receiving institution, and electronically debits that institution's account for the purchase price. The Federal Reserve guarantees payments to institutions sending book-entry securities transfers.

Table 7.5
Number and value of book-entry securities transfers processed by the Federal Reserve, selected years, 1970–93
 Number in millions; value in millions of dollars

<i>Year</i>	<i>Number</i>	<i>Value</i>
1970	.3	258,200
1980	4.1	13,354,100
1990	11.5	101,262,260
1993	12.7	154,433,803

Because of the difficulty in synchronizing the flow of payments over Fedwire, depository institutions sometimes do not have sufficient funds in their accounts to cover all payments at the time they are processed. To protect itself against the risk of nonpayment, the Federal Reserve sets limits on the amount of credit it will extend to a depository institution during the business day, may require institutions to post collateral, and assesses fees to depository institutions for intraday loans.

The Automated Clearinghouse (ACH) is another electronic funds transfer system, developed jointly by the private sector and the Federal Reserve in the early 1970s as a more efficient alternative to checks. Since then, the ACH has evolved into a nationwide mechanism that processes electronically originated credit and debit transfers. For example, ACH credit transfers are used to make direct deposit payroll payments and corporate payments to contractors and vendors. ACH debit transfers are used by consumers to make payments on insurance premiums, mortgages, loans, and other bills and by businesses to concentrate funds at a primary bank and to make payments to other businesses. In 1993, the Federal Reserve processed 2.1 billion ACH payments with a value of \$8.7 trillion (table 7.6).

Unlike Fedwire funds transfers, which are processed individually and settled immediately at the time of processing, ACH payments are transmitted in batches to a Federal Reserve processing center by a depository institution. Transfers are generally processed one or two days before the settlement date and are delivered to receiving depository institutions several times a day as they are pro-

Table 7.6
Number and value of ACH transactions processed by the Federal Reserve, selected years, 1975–93

Number in millions; value in millions of dollars

<i>Year</i>	<i>Number</i>	<i>Value</i>
1975	6	92,868
1980	227	286,600
1990	1,435	4,660,476
1993	2,100	8,747,318

cessed. The Federal Reserve provides ACH services to all depository institutions. Some private-sector processors also provide ACH services to their participants. Private-sector processors deliver ACH payments to depository institutions other than their participants through the Federal Reserve.

Both the government and the commercial sectors use ACH payments. Compared with checks, ACH transfers are less costly and provide greater certainty of payment to the receiver; they also eliminate float because payors' and payees' accounts are debited and credited simultaneously. Initially, the federal government was the dominant user and promoted its use for social security and payroll payments. Since the early 1980s, commercial ACH volume has grown rapidly and, in 1993, accounted for more than 70 percent of total ACH volume (table 7.7).

Net Settlement Services

A large number of payments are cleared privately by groups of depository institutions that agree to a common set of rules. Check clearinghouses, which exist in most major cities in the United States, permit collecting institutions to present checks directly to payor institutions without using intermediaries. The New York

Table 7.7
ACH volume by type, selected years 1975–93
Number in millions

<i>Year</i>	<i>Number of commercial payments</i>	<i>Number of government payments</i>	<i>Ratio of government to total (percent)</i>
1975 ¹	5.8	.2	3
1980 ¹	64.5	162.5	72
1990	915.3	519.5	36
1993	1,544.8	554.6	26

1. Estimate.

Clearing House Association operates a large-dollar funds transfer system, called the Clearing House Interbank Payments System, which is used principally to exchange large-dollar, international payments. Some private networks also exchange securities transactions, automated clearinghouse transactions, automated teller machine (ATM) transactions, and credit card transactions.

Private clearing arrangements track the value of payments exchanged among their members and, at a cutoff time, calculate the net position of each member. Those members that have made more payments than they have received owe funds to the clearing arrangement, and those that have received more payments than they have made are due funds from the clearing arrangement. The sum of the participants' net debit and credit positions equals zero because the arrangements are closed systems.

In support of such arrangements, the Federal Reserve provides net settlement services to depository institution participants. Two types of settlement services are available. In one case, the agent for the participant gives the Federal Reserve a statement indicating the net debit and credit positions of each participant, and the Federal Reserve posts the appropriate entries to the participating institutions' Federal Reserve accounts. In the other case, the agent for the participants informs each participant of its net position. Institutions in net debit positions send Fedwire funds transfers to the clearing arrangement's net settlement account at the Reserve Bank. When the account is fully funded, the agent sends Fedwire funds transfers to the accounts of the participants in net credit positions.

Depository institutions participating in large-dollar private-sector clearing arrangements that make more payments to other participants than they receive may have very large settlement obligations each day. If one of these institutions were unable to settle its obligation, other institutions participating in the arrangement also might be unable to settle. The risk that one participant in a privately operated clearing arrangement will not be able to settle its obligation is called systemic risk. To protect the payments system, the Federal Reserve sets standards to ensure the integrity of large-dollar clearing arrangements and to limit the systemic risk that they create.

OTHER FEDERAL RESERVE BANK SERVICES

The Federal Reserve Banks provide definitive securities services to depository institutions. These services include safekeeping of physical (as opposed to book-entry) securities, through storage of the securities in a Reserve Bank vault, and collection of matured coupons and bonds by presenting them to the place at which they are payable. The demand for definitive securities services has been declining since the early 1980s, when federal tax legislation effectively reduced the supply of definitive securities. As a result of this decreased demand, the Federal Reserve Banks now keep only those definitive securities that are pledged by depository institutions as collateral to secure their borrowings from the Federal Reserve or to comply with federal regulations.

FISCAL AGENCY FUNCTIONS

As fiscal agents of the United States, the Federal Reserve Banks function as the federal government's bank and perform several services for the Treasury. These services include the following:

- Maintaining the Treasury's funds account
- Clearing Treasury checks drawn on that account
- Conducting nationwide auctions of Treasury securities
- Issuing, servicing, and redeeming Treasury securities.

Federal Reserve Banks also perform fiscal agency services for various federal and federally sponsored agencies. The Treasury and other government agencies reimburse the Federal Reserve Banks for the expenses incurred in providing these services.

One service performed by the Reserve Banks on behalf of the Treasury is the daily monitoring of federal tax receipts. Taxes paid by businesses and individuals flow into special, interest-earning accounts, called Treasury tax and loan (TT&L) accounts, at more than 12,000 depository institutions (TT&L depositories) nationwide. The TT&L depositories accept tax payments directly from employers and individuals and report the amount received to a Federal Reserve office. The TT&L balances that are not protected by deposit insurance are fully collateralized at all times, and the Reserve Banks monitor them for compliance with collateral re-

quirements. Each day the Federal Reserve Banks report the total amount in TT&L accounts to the Treasury's cash managers, who in turn decide what portion of the tax receipts is needed to cover the government's daily operating expenses. The managers notify the Reserve Banks of that amount, and the Reserve Banks transfer the needed funds from the TT&L accounts to the Treasury's account at the Federal Reserve.

The Reserve Banks also handle the weekly, monthly, and quarterly auctions of Treasury securities, through which the Treasury raises money to finance government spending and to refinance the debt. The Reserve Banks announce the sales, accept the bids (called tenders), communicate the bids to the Treasury, issue the securities in book-entry form once the Treasury has chosen the successful bids, collect payment from the successful bidders, and deposit the money in the Treasury's funds account at the Federal Reserve. The Reserve Banks, on behalf of the Treasury and some other government agencies, also deliver new book-entry securities, service securities that are outstanding, and redeem securities that have matured.



The Federal Reserve Banks provide another unique securities service for the Treasury: They maintain a separate safekeeping system, called Treasury Direct, which holds book-entry Treasury securities purchased by individuals who wish to hold their securities directly with the Treasury instead of with a depository institution. Individuals purchase Treasury securities directly but instruct that the securities be delivered to their Treasury Direct account. Once the securities are deposited there, any interest or principal payments owed to the account holder are directly deposited to the account holder's account at a depository institution by the ACH. At year-end 1993, 1.2 million investor accounts were maintained on the Treasury Direct system, and the securities holdings had a par value of more than \$60 billion.

The Federal Reserve Banks also issue, service, and redeem tens of millions of U.S. savings bonds each year on behalf of the Treasury. As authorized by the Treasury, they also qualify depository institutions and corporations as issuing agents and paying agents for savings bonds.



The federal government disburses funds to the public from the account it maintains with the Federal Reserve. These disbursements can be made as Fedwire funds transfers, ACH payments, or checks. Fedwire disbursements are typically associated with, but not limited to, the redemption of Treasury securities. Certain recurring payments, such as social security benefits and government employee salaries, are increasingly processed by the ACH and electronically deposited directly to the recipients' accounts at their depository institutions. Other government payments, such as income tax refunds, are usually made using Treasury checks drawn on the Treasury's funds account at the Federal Reserve.

INTERNATIONAL SERVICES

As the central bank of the United States, the Federal Reserve performs services for foreign central banks and for international organizations, such as the International Monetary Fund, the International Bank for Reconstruction and Development (informally called the World Bank), and the Bank for International Settlements. These services are generally provided by the Federal Reserve Bank of New York.

At the Federal Reserve Bank of New York, a foreign official institution can establish a non-interest-bearing funds account (in U.S. dollars), safekeeping accounts for book-entry and definitive securities, and an account for safekeeping gold. Some foreign official institutions channel a portion of their daily receipts and payments in U.S. dollars through their funds accounts at the Federal Reserve Bank of New York. If the account contains excess funds, the foreign official institution may request the Bank to invest these funds until they are needed. Conversely, if the account needs additional funds, the foreign institution may instruct the Bank to sell some securities it holds in safekeeping there.

The securities services available to foreign official institutions are identical to those offered to U.S. depository institutions by the Federal Reserve, except that the Federal Reserve does not limit the safekeeping of definitive securities for foreign official institutions to those pledged as collateral. The Federal Reserve Bank of New York also holds in its vaults billions of dollars in gold owned by foreign official institutions.



G *old owned by foreign official institutions held in the vault of the Federal Reserve Bank of New York.*

At the request of a foreign official institution, the Federal Reserve Bank of New York will buy or sell foreign currencies in exchange for U.S. dollars and will debit or credit the institution's funds account accordingly. Also upon request, the Bank will purchase or sell a U.S. government security on behalf of the foreign institution and will make the corresponding entries to the securities and funds accounts that the institution maintains with the Federal Reserve. The Bank charges for the services it provides to foreign official institutions.

As fiscal agent for international organizations, the Federal Reserve Banks make principal and interest payments for securities issued by many of these organizations. The Federal Reserve Bank of New York maintains accounts for some international organizations and receives and makes payments in U.S. dollars on their behalf; it also invests funds for international organizations according to either specific directions or standing instructions. ■