Appendix A

Federal Reserve Balance Sheet and Reserve Equation

THIS APPENDIX examines the individual factors that affect reserves. Most of these factors, such as changes in the amount of Treasury deposits at Federal Reserve Banks or in the volume of currency in circulation, respond to decisions made outside the Federal Reserve. The Federal Reserve can offset the predictable effects of factors affecting the overall availability of reserves, however, by adjusting another factor—its holdings of securities on its balance sheet. The first section of the appendix explains the consolidated balance sheet of the Federal Reserve Banks. The second section explains a useful accounting relationship called the reserve equation, which takes into account the Federal Reserve's consolidated balance sheet and the Treasury's monetary accounts and specifies all of the factors that affect reserves.

CONSOLIDATED BALANCE SHEET

The consolidated balance sheet of the Federal Reserve Banks is an accounting summary of all phases of Federal Reserve Bank operations. Also known as the statement of condition of the Federal Reserve Banks, the consolidated balance sheet is published by the Federal Reserve Board every Thursday to show the condition of the Reserve Banks as of the previous day. The statement appears the next day (Friday) in many daily newspapers around the country. The example in table A.1 is a condensed form of the statement published on June 30, 1994, for June 29, 1994.

Major Asset Accounts

The *GOLD CERTIFICATE ACCOUNT* (item 1 in the table) comprises certificates that are issued to the Federal Reserve by the Treasury and backed by gold held by the Treasury. In return, the Reserve Banks issue an equal value of credits to the Treasury deposit account (item 9b), computed at the statutory price of $42.22 per fine troy ounce. Through such transactions, the Treasury "monetizes" gold. Because all gold held by the Treasury as of the date of the table has been monetized, the Federal Reserve Banks' gold certificate account of $11.1 billion represents the nation's entire official gold stock. New gold certificate credits may be issued only if the Treasury acquires additional gold or if the statutory price of gold is increased. If the gold stock is reduced, the Treasury must redeem an equal value of gold certificates from the Federal Reserve in exchange for a reduced Treasury deposit at the Federal Reserve.

Closely related to the gold certificate account is the *SPECIAL DRAWING RIGHTS CERTIFICATE ACCOUNT* (item 2). Special drawing rights (SDRs) are a type of asset created by the International Monetary Fund (IMF), after agreement by a large majority of its members, to supplement the members' international reserve assets; SDRs are allocated to the members according to the size of the members' quotas, but without any payment. SDRs received by the U.S. government are, by law, held by the

Table A.1
Consolidated statement of condition of all Federal Reserve Banks, June 29, 1994
Millions of dollars

Account	***Amount***[1]
Assets	
1. Gold certificate account	11,052
2. Special drawing rights certificate account	8,018
3. Coin	302
4. Loans	381
5. Securities	355,841
a. Bought outright	351,563
b. Held under repurchase agreement	4,279
6. Cash items in process of collection	4,998
7. Other assets	32,013
Total assets	*412,606*
Liabilities	
8. Federal Reserve notes	359,698
9. Deposits	37,732
a. Depository institutions	30,864
b. U.S. Treasury, general account	6,435
c. Foreign official accounts	163
d. Other	270
10. Deferred availability cash items	4,541
11. Other liabilities and accrued dividends	3,230
Total liabilities	*405,202*
Capital accounts	
12. Capital paid in	3,523
13. Surplus	3,401
14. Other capital accounts	481
Total liabilities and capital accounts	*412,606*

1. In tables A.1 and A.2, details may not sum to totals because of rounding.

Secretary of the Treasury for the account of the Exchange Stabilization Fund (ESF). From time to time, the ESF monetizes SDRs by issuing SDR certificate credits to the Reserve Banks. These credits are added to the SDR certificate account, and the dollar value of the new SDR certificate credits is added to a special Treasury deposit account (part of item 9d).[1]

COIN (item 3) represents the value of coins issued by the Treasury that the Reserve Banks hold. When the Treasury issues coin, the Federal Reserve credits the Treasury deposit account (item 9b) and increases its own holding of coin (item 3). The public obtains coin, as needed, from depository institutions, which in turn generally acquire it from the Reserve Banks. When depository institutions obtain coin from the Reserve Banks, their reserve deposits with the Reserve Banks (item 9a) are debited.

LOANS (item 4) represent the amount of discount window credit extended by Federal Reserve Banks to depository institutions. The proceeds of such loans are credited to the accounts of depository institutions at the Federal Reserve (item 9a), and the accounts are debited when the loan is repaid.

The Federal Reserve System's portfolio of *SECURITIES* (item 5) contains mainly U.S. government securities, including Treasury bills, notes, and bonds and obligations of federal agencies, acquired originally through open market operations.

CASH ITEMS IN PROCESS OF COLLECTION (CIPC) (item 6) are checks and other cash items (such as interest coupons from municipal securities) that have been deposited with the Reserve Banks for collection on behalf of an institution having an account. This item has a counterpart on the liability side of the statement, *DEFERRED AVAILABILITY CASH ITEMS* (item 10). Items 6 and 10 are both "suspense items"—accounts that reflect a transaction in process. When a Federal Reserve Bank receives a check for collection, CIPC increases. Unless the depository institution receives reserves the same day, the volume of deferred availability cash items also rises.[2] When the institution that brought the check for collection receives credit, its reserve account, in item 9a, is increased, and item 10 is reduced. When the check is actually collected, item 6 and the

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1. Since 1974, the IMF has calculated the daily value of the SDR using a weighted average of exchange rates of the currencies of certain member countries. The Exchange Stabilization Fund values its SDR holdings on this basis and, when monetizing SDRs, determines accordingly the dollar value of the SDR certificate credits issued. As of June 29, 1994—the date of table A.1—the ESF held $1.7 billion of unmonetized SDRs and $8 billion of SDRs that had been monetized with the Federal Reserve.

2. Intraterritory checks (that is, checks involving a payor depository and a payee depository served by the same Federal Reserve office) generally are credited the same day that the Federal Reserve receives the checks. Such payment is affected by directly debiting and crediting the depositories' accounts at the Federal Reserve Bank, and no entry in the two suspense accounts is necessary.

reserve account of the institution on which the check is drawn, in item 9a, are both reduced.

OTHER ASSETS (item 7) consist of the value of Federal Reserve Bank premises, interest accrued, Federal Reserve holdings of foreign currency, and various other items generally of minor importance.

Major Liability Accounts

FEDERAL RESERVE NOTES (item 8) are the principal type of U.S. currency in circulation. These notes represented almost 89 percent of total Reserve Bank liabilities at the end of June 1994.[3]

DEPOSITS of all kinds at Reserve Banks are reported in item 9:

- *DEPOSITS OF DEPOSITORY INSTITUTIONS* (item 9a) take the form of reserve balances and service-related balances. Service-related balances are balances some depository institutions elect to maintain at Federal Reserve Banks for clearing purposes; these balances earn interest credits that can be used to defray the costs of various Federal Reserve services used by an institution. Reserve balances are considerably larger in volume than service-related balances and, with certain holdings of vault cash, constitute the reserves available to the depository system for satisfying reserve requirements.
- The second largest category of Reserve Bank deposit liabilities is *DEPOSITS OF THE U.S. TREASURY* (item 9b). The Treasury draws on these accounts to make payments by check or direct deposit for all major types of federal spending. When these payments clear, depository reserve balances rise and Treasury deposits fall. The Treasury's accounts at Reserve Banks are replenished primarily by transfers of funds from accounts held at depository institutions, in which the Treasury initially deposits its receipts from taxes and from the sale of securities. When such transfers are made, reserve balances are debited and Treasury deposits are credited.
- *DEPOSITS OF FOREIGN CENTRAL BANKS AND GOVERNMENTS* (item 9c) are the third category of deposit liabilities at the Reserve Banks. Such deposits are maintained with the Federal Reserve Bank of New York, but all the Reserve Banks share in the deposit liability. These deposits represent working balances held by foreign authorities for purposes of international settlement.
- The fourth category, *OTHER DEPOSIT LIABILITIES* (item 9d), includes deposits of some U.S. government agencies and of international organizations of which the United States is a member, as well as miscellaneous deposits.

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3. Although each Reserve Bank may hold as assets Federal Reserve notes issued by other Reserve Banks, such notes cancel out in a consolidated statement of condition for the System as a whole and thus do not appear in the table.

As mentioned above, *DEFERRED AVAILABILITY CASH ITEMS* (item 10) arise because Reserve Banks do not give immediate credit to the account of a depositing institution for all checks presented to the Reserve Banks for collection. In many cases, credit is deferred according to schedules that allow some time for checks to be delivered to the institutions on which they are drawn. After this interval, the institution’s reserve balance is automatically credited, and the total of deferred availability cash items is reduced. Because the time actually taken to collect a check may be longer than that allowed in the schedule, the depositing institution’s reserve balance may be credited before the reserve balance of the institution on which the check is drawn is debited.

The difference between the asset account (cash items in process of collection) and the liability account (deferred availability cash items) is called Federal Reserve “float” and represents checks and other items that, although not yet collected by the Reserve Banks, have already been credited to the reserve balances of the institutions that deposited them. Float measures the amount of Federal Reserve credit granted to depository institutions (item 9a) that is generated by the Federal Reserve’s involvement in the national process of check collection.

OTHER LIABILITIES AND ACCRUED DIVIDENDS (item 11) consist of unearned discounts, discounts on securities, and miscellaneous accounts payable.

Capital Accounts

A bank that is a member of the Federal Reserve System must, under the Federal Reserve Act, subscribe to the capital stock of the Reserve Bank of its District. The total amount of a member bank’s subscription is equal to 6 percent of its current capital stock and surplus. Of this amount, one-half is *CAPITAL PAID IN* (item 12) and one-half is subject to call by the Board of Governors. These shares, unlike ordinary stock in private banks or corporations, do not carry voting power to control the policies of the Reserve Banks. Member institutions are entitled by statute to a cumulative dividend of 6 percent per year on the value of their paid-in stock. Holdings of Reserve Bank stock may not be transferred, nor may the shares be used as collateral for loans.

The *SURPLUS ACCOUNT* (item 13) represents retained net earnings of the Reserve Banks, and the *OTHER CAPITAL ACCOUNTS* (item 14) reflect the unallocated net earnings for the current year to the date of the statement. The Reserve Banks may draw on their surplus to meet deficits and to pay dividends in years when operations result in loss, but they may not otherwise distribute it to the stockholding member banks. The Federal Reserve for some years has retained sufficient earnings to equate its surplus to capital paid in; the balance of net Federal Reserve earnings is turned over to the Treasury.

THE RESERVE EQUATION

Shown in table A.2, the “reserve equation” specifies all the factors that can influence the supply of reserves. Thus, it provides a useful framework for analyzing how the quantity of reserves is determined. Factors 1 through 7 in the equation determine reserve balances of depository institutions that are held at Reserve Banks during the current reserve maintenance period. Factors 1 through 3 are the sources of funds that could end up as reserve balances with the Federal Reserve Banks. Factors 4 through 7 are the uses other than reserve balances that could absorb reserve funds. Factor 8, reserve balances, is the remaining use for such reserve funds. Indeed, the amount of reserve balances is determined here as the difference between total supply of such reserve funds and total uses, other than reserve balances, absorbing such reserve funds.

Most of the factors in the equation appear on the consolidated balance sheet of the Federal Reserve Banks. In the reserve equation, reserve balances are separated from service-related balances and adjustments (factor 6c), rather than combined in deposits of depository institutions (item 9a on the balance sheet). Similarly, Federal Reserve float (factor 1c in the reserve equation) is defined as cash items in process of collection (item 6 in the balance sheet) less deferred availability cash items (item 10) plus minor technical adjustments. A convenient rule of thumb is that items from the asset side of the Reserve Bank balance sheet enter the equation as sources (which supply potential reserve funds) and that liabilities enter as uses (which absorb potential reserve funds).

The equation for determining reserve balances also incorporates the Treasury’s monetary accounts, which reflect the Treasury’s holdings of gold, currency, and coin as well as its issuance of currency and coin. The first steps in incorporating these accounts into the reserve equation are to (1) add unmonetized gold and Treasury currency holdings (including coin) to both sides of the balance sheet and (2) subtract coin held by the Federal Reserve from both sides of the balance sheet. Certain items on the resulting balance sheet are then combined to give the remaining sources and uses of reserve balances.

Gold stock (a source, factor 2a) consists of the gold certificate account plus unmonetized gold. Currency in circulation (a use, factor 4) consists of Federal Reserve notes and Treasury currency outstanding less coin and currency held by the Treasury and coin held by Federal Reserve Banks. (Federal Reserve notes held by Reserve Banks are already netted out in the consolidated balance sheet of the Reserve Banks.) Another use, Treasury cash holdings (factor 5), consists of unmonetized gold plus coin and currency held by the Treasury. (Because coin and currency held by the Treasury are netted out of currency in circulation, they must be included in this use of reserve funds.)

Table A.2
Reserve equation, June 29, 1994
Weekly averages, millions of dollars

Factor	*Week ending June 29, 1994*	*Change from week ending June 30, 1993*
Sources (factors supplying reserve funds)	428,927	27,070
1. Reserve Bank credit	387,351	26,280
a. Security holdings	353,993	26,570
b. Loans	385	-2
c. Float	535	-105
d. Other assets	32,439	-184
2. Monetary reserves		
a. Gold stock	11,052	-5
b. Special drawing rights certificate account	8,018	0
3. Treasury currency outstanding	22,507	796
LESS:		
Uses other than reserve balances		
(factors absorbing reserve funds)	404,126	28,485
4. Currency in circulation	379,126	36,280
5. Treasury cash holdings	355	-93
6. Deposits, other than reserve balances, with Federal Reserve Banks	13,887	-9,159
a. Treasury deposits	7,561	-8,695
b. Foreign deposits	182	-36
c. Service-related balances and adjustments	5,870	-410
d. Other deposits	274	-18
7. Miscellaneous accounts, liabilities, and capital	10,758	1,457
EQUALS:		
8. Reserve balances with Federal Reserve Banks	24,801	-1,415
PLUS:		
9. Vault cash used to satisfy reserve requirements	33,571	2,539
EQUALS:		
10. Total reserves	58,372	1,124
a. Nonborrowed reserves	57,804	867
b. Borrowed reserves	568	257

Sources of Reserve Funds

When the source factors increase, they provide reserve funds. For example, an increase in factor 1, Reserve Bank credit—composed of the System's holdings of securities, discount window loans, Federal Reserve float, and other assets—would augment reserve balances if all other items in the reserve equation stayed the same. A decrease in Reserve Bank credit (or any other source factor) would reduce reserve balances, other things being unchanged.

Reserve Bank credit is the largest factor on the sources side of the reserve equation, as table A.2 shows. By far the most important component of Reserve Bank credit is the System's portfolio of securities (factor 1a), which accounted for around 90 percent of Reserve Bank credit as of June 29, 1994. Securities holdings are the principal factor in the reserve equation over which the Federal Reserve has direct control. Requests to borrow reserves at the discount window—another component of Reserve Bank credit—take place at the initiative of depository institutions.

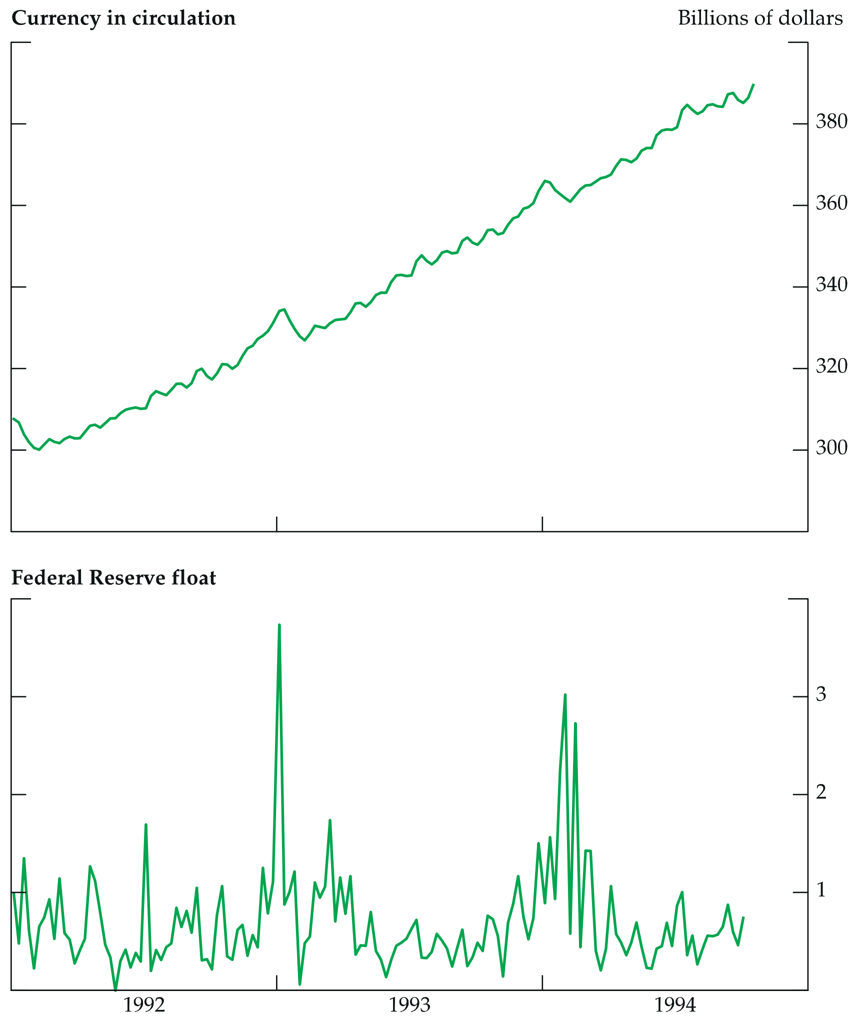
The significance of the float component (factor 1c) hinges not so much on the total amount of reserve funds it might provide, which is usually small compared with other components of Reserve Bank credit, as on the size and frequency of changes in its level. Float sometimes varies erratically from day to day, especially in winter, when bad weather may hinder the shipment of checks. Because of this volatility, it can be difficult to predict.

Uses of Reserve Funds

An increase in any of the use factors other than reserve balances (factors 4, 5, 6, or 7) absorbs funds that otherwise could be held as reserve balances. For example, if other items were unchanged, a rise in currency in circulation (factor 4) would be accompanied by a decline in reserve balances, as depository institutions drew down such accounts to pay the Federal Reserve for currency received from the System.

Currency in circulation is the largest single factor absorbing potential reserve funds. The public's demands for currency depend principally on the volume of spending, which varies with both long-run growth and cyclical movements of the U.S. economy. However, some evidence suggests that a substantial share of total currency outstanding is held outside the United States. Foreign demands for U.S. currency appear to increase in times of political and economic uncertainty abroad. Seasonal swings in demands for currency are also sizable, especially around major holidays (see chart A.1). In the last two months of a year, the increase in currency in circulation absorbs several billion dollars of reserves. In the following two months, much of this bulge returns from circulation. One of the original reasons for creating the Federal Reserve System was

Chart A.1
Seasonal variation in currency in circulation and Federal Reserve float



Note. Weekly averages of daily data.

to provide a means of accommodating such seasonal increases in the public's currency holdings (by supplying reserve funds) and to avoid the often undesirable contraction of bank reserves and deposits that would otherwise occur.

Both Treasury deposits (factor 6a) and service-related balances and adjustments of depository institutions (factor 6c) also absorb potential reserve funds. Week-to-week changes in these items can be sizable even though their levels are relatively low.

Total Reserves

Reserve balances with Federal Reserve Banks (factor 8) constitute only one component of the total reserves available to depository institutions;

vault cash (factor 9) must be added to reserve balances to derive total reserves (line 10 in table A.2). Vault cash held during the previous computation period is eligible to satisfy reserve requirements in the current reserve maintenance period. However, not all such vault cash is actually counted as reserves. Many institutions hold vault cash in excess of their reserve requirements; such surplus holdings in the lagged computation period are not included in the vault cash component of total reserves (factor 9), which consists only of that portion of vault cash held during the previous computation period that is used to satisfy reserve requirements in the current maintenance period.[4] Total reserves increased $1,124 million from June 29, 1993, to June 29, 1994; nonborrowed reserves increased $867 million, while borrowing from the Federal Reserve by depository institutions increased $257 million. ■

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4. Before November 12, 1992, vault cash that was held two computation periods before the current maintenance period was used to satisfy current period reserve requirements. The lag has been shortened to smooth fluctuations in required reserve balances.

Appendix B

Federal Reserve Regulations

Regulation	Subject	Purpose
A	Extensions of Credit by Federal Reserve Banks	Governs borrowing by depository institutions at the Federal Reserve discount window
B	Equal Credit Opportunity	Prohibits lenders from discriminating against credit applicants, establishes guidelines for gathering and evaluating credit information, and requires written notification when credit is denied
C	Home Mortgage Disclosure	Requires certain mortgage lenders to disclose data regarding their lending patterns
D	Reserve Requirements of Depository Institutions	Sets uniform requirements for all depository institutions to maintain reserve balances either with their Federal Reserve Bank or as cash in their vaults
E	Electronic Funds Transfers	Establishes the rights, liabilities, and responsibilities of parties in electronic funds transfers and protects consumers when they use such systems
F	Limitations on Interbank Liabilities	Prescribes standards to limit the risks posed by obligations of insured depository institutions to other depository institutions

Regulation	Subject	Purpose
G	Securities Credit by Persons other than Banks, Brokers, or Dealers	Governs extension of credit by parties other than banks, brokers, or dealers to finance the purchase or the carrying of margin securities; see also regulations T, U, and X
H	Membership of State Banking Institutions in the Federal Reserve System	Defines the requirements for membership by state-chartered banks in the Federal Reserve System and establishes minimum levels for the ratio of capital to assets to be maintained by state member banks
I	Issue and Cancellation of Capital Stock of Federal Reserve Banks	Sets forth stock-subscription requirements for all banks joining the Federal Reserve System
J	Collection of Checks and Other Items by Federal Reserve Banks and Funds Transfers through Fedwire	Establishes procedures, duties, and responsibilities among (1) Federal Reserve Banks, (2) the senders and payors of checks and other items, and (3) the senders and recipients of wire transfers of funds
K	International Banking Operations	Governs the international banking operations of U.S. banking organizations and the operations of foreign banks in the United States
L	Management Official Interlocks	Restricts the management relationships that an official in one depository institution may have with other depository institutions
M	Consumer Leasing	Implements the consumer leasing provisions of the Truth in Lending Act by requiring meaningful disclosure of leasing terms

Regulation	*Subject*	*Purpose*
N	Relations with Foreign Banks and Bankers	Governs relationships and transactions between Federal Reserve Banks and foreign banks, bankers, or governments
O	Loans to Executive Officers, Directors, and Principal Shareholders of Member Banks	Restricts credit that a member bank may extend to its executive officers, directors, and principal shareholders and their related interests
P	Minimum Security Devices and Procedures for Federal Reserve Banks and State Member Banks	Sets requirements for a security program that state-chartered member banks must establish to discourage robberies, burglaries, and larcenies
Q	Prohibition against Payment of Interest on Demand Deposits	Prohibits member banks from paying interest on demand deposits (for example, checking accounts)
R	Relationships with Dealers in Securities under Section 32 of the Banking Act of 1933	Restricts employment relations between securities dealers and member banks to avoid conflict of interest, collusion, or undue influence on member bank investment policies or advice to customers
S	Reimbursement to Financial Institutions for Assembling or Providing Financial Records	Establishes rates and conditions for reimbursement to financial institutions for providing customer records to a government authority
T	Credit by Brokers and Dealers	Governs extension of credit by securities brokers and dealers, including all members of national securities exchanges; see also regulations G, U, and X

Regulation	Subject	Purpose
U	Credit by Banks for Purchasing or Carrying Margin Stocks	Governs extension of credit by banks to finance the purchase or the carrying of margin securities; see also regulations G, T, and X
V	Loan Guarantees for Defense Production (Dormant)	Facilitates the financing of contracts deemed necessary to national defense production
W	Vacant	
X	Borrowers of Securities Credit	Extends to borrowers who are subject to U.S. laws the provisions of regulations G, T, and U for obtaining credit within or outside the United States for the purpose of purchasing securities
Y	Bank Holding Companies and Change in Bank Control	Governs the bank and nonbank expansion of bank holding companies, the divestiture of impermissible nonbank interests, and the acquisition of a bank by individuals
Z	Truth in Lending	Prescribes uniform methods for computing the cost of credit, for disclosing credit terms, and for resolving errors on certain types of credit accounts
AA	Unfair or Deceptive Acts or Practices	Establishes consumer complaint procedures and defines unfair or deceptive practices in extending credit to consumers
BB	Community Reinvestment	Implements the Community Reinvestment Act and encourages banks to help meet the credit needs of their communities

Regulation	Subject	Purpose
CC	Availability of Funds and Collection of Checks	Governs the availability of funds deposited in checking accounts and the collection and return of checks
DD	Truth in Savings	Requires depository institutions to provide disclosures to enable consumers to make meaningful comparisons of deposit accounts
EE	Netting Eligibility for Financial Institutions	Defines financial institutions to be covered by statutory provisions regarding netting contracts—that is, contracts in which the parties agree to pay or receive the net, rather than the gross, payment due

Appendix C

Glossary of Terms

THIS GLOSSARY gives basic definitions of terms used in the text. Readers seeking more comprehensive explanations may want to consult sources listed in “Selected Readings” in this volume and textbooks in economics, banking, and finance.

agreement corporation Corporation chartered by a state to engage in international banking; so named because the corporation enters into an “agreement” with the Board of Governors to limit its activities to those permitted an Edge Act corporation.

automated clearinghouse (ACH) Electronic clearing and settlement system for exchanging electronic transactions among participating depository institutions; such electronic transactions are substitutes for paper checks and are typically used to make recurring payments such as payroll or loan payments. The Federal Reserve Banks operate an automated clearinghouse, as do some private-sector firms.

Bank for International Settlements (BIS) International organization established in 1930 and based in Basle, Switzerland, that serves as a forum for central banks for collecting information, developing analyses, and cooperating on a wide range of policy-related matters.

bank holding company Company that owns, or has controlling interest in, one or more banks. A company that owns more than one bank is known as a multibank holding company. (A bank holding company may also own another bank holding company, which in turn owns or controls a bank; the company at the top of the ownership chain is called the top holder.) The Board of Governors is responsible for regulating and supervising bank holding companies, even if the bank owned by the holding company is under the primary supervision of a different federal agency (the Comptroller of the Currency or the Federal Deposit Insurance Corporation).

banking organization A top holder bank holding company (consolidated to include all of its subsidiary banks and nonbank subsidiaries) or an independent bank (a bank that is not owned or controlled by a bank holding company).

bank regulation Actions to make, issue, and enforce specific rules and regulations governing the structure and conduct of banking, under the authority of legislation.

bank supervision Oversight of individual banks to ensure that they are operated prudently and in accordance with applicable statutes and regulations.

Board of Governors Central, governmental agency of the Federal Reserve System, located in Washington, D.C., and composed of seven members, who are appointed by the President and confirmed by the Senate. The Board of Governors is responsible for domestic and international economic analysis; with other components of the System, for the conduct of monetary policy; for supervision and regulation of certain banking organizations; for operation of much of the nation's payments system; and for administration of most of the nation's laws that protect consumers in credit transactions.

book-entry securities Securities that are recorded in electronic records, called book entries, rather than as paper certificates. Ownership of U.S. government book-entry securities is transferred over Fedwire. (*Compare* **definitive securities**.)

borrowed reserves Reserves that eligible depository institutions obtain by borrowing from the Federal Reserve through the discount window.

Call Report Informal name for Report of Condition and Income.

capital In banking, the funds invested in (as opposed to deposited in) a bank.

capital market The market in which corporate equity and longer-term debt securities (those maturing in more than one year) are issued and traded. (*Compare* **money market**.)

cash Currency plus coin.

central bank Principal monetary authority of a nation, which performs several key functions, including issuing currency and regulating the supply of credit in the economy. The Federal Reserve is the central bank of the United States.

check clearing The movement of a check from the depository institution at which it was deposited back to the institution on which it was written, the movement of funds in the opposite direction, and the corresponding credit and debit to the involved accounts. The Federal Reserve operates a nationwide check-clearing system.

check truncation Practice of holding a paper check at the bank at which it was deposited (or at an intermediary bank) and electronically forwarding the essential information on the check to the bank on which it was written. A truncated check is not returned to the writer.

clearing General term that may refer to check clearing or to the process of matching trades between the sellers and buyers of securities and other financial instruments and contracts.

commercial bank Bank that offers a broad range of deposit accounts, including checking, savings, and time deposits, and extends loans to individuals and businesses. Commercial banks can be contrasted with investment banking firms, such as brokerage firms, which generally are involved in arranging for the sale of corporate or municipal securities. (*Also compare* **savings bank**.)

commercial paper Short-term, unsecured promissory note issued by a commercial firm, a financial company, or a foreign government.

Consumer Advisory Council Statutory group composed of thirty members who represent the interests of a broad range of consumers and creditors. The council meets with the Board of Governors three times a year on matters concerning consumers and the consumer protection laws administered by the Board.

corporate bond Interest-bearing or discounted debt obligation issued by a private corporation rather than by a government or a government agency.

correspondent bank Bank that accepts the deposits of, and performs services for, another bank (called a respondent bank); in most cases, the two banks are in different cities.

credit aggregate A term sometimes used instead of debt aggregate.

credit union Financial cooperative organization of individuals who have a common bond, such as place of employment or residence or membership in a labor union. Credit unions accept deposits from members, pay interest (in the form of dividends) on the deposits out of earnings, and use their funds mainly to provide consumer installment loans to members.

currency Paper money.

debt aggregate Term used informally for domestic nonfinancial sector debt, which is an aggregate measure through which the Federal Reserve monitors debt in the economy; includes outstanding credit market debt of federal, state, and local governments and of private nonfinancial sectors (including mortgages and other kinds of consumer credit and bank loans, corporate bonds, commercial paper, bankers acceptances, and other debt instruments).

definitive securities Securities that are recorded on engraved paper certificates payable to the bearers or to specific, registered owners. (*Compare* **book-entry securities**.)

demand deposit A deposit that may be withdrawn at any time without prior written notice to the depository institution. A checking account is the most common form of demand deposit.

depository institution Financial institution that obtains its funds mainly through deposits from the public; includes commercial banks, savings and loan associations, savings banks, and credit unions. (Sometimes called a depository intermediary.)

discounting Practice of deducting the interest on a loan from the principal amount before giving the borrowed funds to the borrower; the borrower receives the principal amount less the interest due over the term of the loan but repays the principal amount.

discount rate Interest rate at which an eligible depository institution may borrow funds, typically for a short period, directly from a Federal Reserve Bank. The law requires that the board of directors of each Reserve Bank establish the discount rate every fourteen days subject to the approval of the Board of Governors.

discount window (the window) Figurative expression for Federal Reserve facility for extending credit directly to eligible depository institutions (those that hold transaction deposits or nonpersonal time deposits); so named because in the early days of the Federal Reserve System, bankers would come to a Reserve Bank teller window to obtain credit.

discount window credit Credit extended by a Federal Reserve Bank to an eligible depository institution. All discount window borrowing must be secured by collateral.

- **adjustment credit** Discount window credit extended to help depository institutions handle temporary liquidity problems arising from short-term fluctuations in assets and liabilities.
- **seasonal credit** Discount window credit, typically extended to small depository institutions that have difficulty raising funds in national money markets, to help meet temporary needs for funds resulting from regular, seasonal fluctuations in loans and deposits.
- **extended credit** Discount window credit extended to help depository institutions resolve longer-term liquidity problems resulting from exceptional circumstances.

Domestic Trading Desk (the Desk) Trading desk at the Federal Reserve Bank of New York through which open market purchases and sales of government securities and certain other securities are made.

easing Federal Reserve action to increase the amount of credit available to the public through the banking system; undertaken when the economy needs to be stimulated. (*Compare* **tightening**.)

Edge Act corporation Corporation chartered by the Federal Reserve to engage in international banking. The Board of Governors acts on applications to establish Edge Act corporations and also examines the corporations and their subsidiaries. Named after Senator Walter Edge of New Jersey, who sponsored the original legislation to permit formation of such organizations. (*Compare* **agreement corporation.**)

elastic currency Currency that can, by the actions of the central monetary authority, expand or shrink in amount as economic conditions warrant.

electronic funds transfer (EFT) Transfer of funds electronically rather than by check or cash. The Federal Reserve's Fedwire and automated clearinghouse services are EFT systems.

Eurocurrency deposits A generic term referring to deposits in a bank located in a country other than the one of issue of the currency in which the deposit is denominated. Despite its name, not all Eurocurrency is money deposited in European banking offices or denominated in European currencies.

Eurodollar deposits Dollar-denominated deposits in banks and other financial institutions outside the United States; includes deposits at banks not only in Europe, but in all parts of the world.

exchange market intervention Purchase or sale of the currencies of other nations by a central bank for the purpose of influencing foreign exchange rates or maintaining orderly foreign exchange markets.

Federal Advisory Council Advisory group made up of one representative (in most cases a banker) from each of the twelve Federal Reserve Districts. Established by the Federal Reserve Act, the council meets periodically with the Board of Governors to discuss business and financial conditions and to make recommendations.

federal agency securities Interest-bearing obligations issued by certain federal and federally sponsored agencies, including the Federal Home Loan Banks, the Federal Farm Credit Banks, the Federal National Mortgage Association, and the Tennessee Valley Authority. Some federal agency securities are backed by the U.S. government, while others are backed only by the issuing agency.

Federal Financial Institutions Examination Council (FFIEC) Group of representatives of the federal banking regulatory agencies—the Board of Governors, the Office of Thrift Supervision, the Federal Deposit Insurance Corporation, the Office of the Comptroller of the Currency, and the National Credit Union Administration—established to maintain uniform standards for examining and supervising federally insured depository institutions, bank holding companies, and savings and loan holding companies.

federal funds Short-term transactions in immediately available funds between depository institutions and certain other institutions that maintain accounts with the Federal Reserve; usually not collateralized.

federal funds rate Rate charged by a depository institution on an overnight sale of federal funds to another depository institution; rate may vary from day to day and from bank to bank.

Federal Open Market Committee (FOMC, or **the Committee)** Twelve-member committee made up of the seven members of the Board of Governors; the president of the Federal Reserve Bank of New York; and, on a rotating basis, the presidents of four other Reserve Banks. The FOMC meets eight times a year to set Federal Reserve guidelines regarding the purchase and sale of government securities in the open market as a means of influencing the volume of bank credit and money in the economy. It also establishes policy relating to System operations in the foreign exchange markets.

Federal Reserve Act of 1913 Federal legislation that established the Federal Reserve System.

Federal Reserve Bank One of the twelve operating arms of the Federal Reserve System, located throughout the nation, that together with their twenty-five Branches carry out various System functions, including operating a nationwide payments system, distributing the nation’s currency and coin, supervising and regulating member banks and bank holding companies, and serving as banker for the U.S. Treasury.

Federal Reserve District (Reserve District, or **District)** One of the twelve geographic regions served by a Federal Reserve Bank.

Federal Reserve float Float is checkbook money that appears on the books of both the check writer (the payor) and the check receiver (the payee) while a check is being processed. Federal Reserve float is float present during the Federal Reserve's check-collection process. To promote efficiency in the payments system and provide certainty about the date that deposited funds will become available to the receiving depository institution (and the payee), the Federal Reserve credits the reserve accounts of banks that deposit checks according to a fixed schedule. However, processing certain checks and collecting funds from the banks on which these checks are written may take more time than the schedule allows. Therefore, the accounts of some banks may be credited before the Federal Reserve is able to collect payment from other banks, resulting in Federal Reserve float.

Federal Reserve note Currency issued by the Federal Reserve. Nearly all the nation's circulating currency is in the form of Federal Reserve notes, which are printed by the Bureau of Engraving and Printing, a part of the U.S. Department of the Treasury. Federal Reserve notes are, by law, obligations of the U.S. government.

Federal Reserve Regulatory Service Monthly subscription service that details all statutes and regulations for which the Federal Reserve has responsibility and that keeps subscribers informed of all interpretations, Board of Governors rulings, staff opinions and commentaries, and procedural rules under which the Board operates.

Federal Reserve System The central bank of the United States, created by Congress and made up of a seven-member Board of Governors in Washington, D.C., twelve regional Federal Reserve Banks, and their twenty-five Branches.

Fedwire Electronic funds transfer network operated by the Federal Reserve. Fedwire is usually used to transfer large amounts of funds and U.S. government securities from one institution's account at the Federal Reserve to another institution's account. It is also used by the U.S. Department of the Treasury and other federal agencies to collect and disburse funds.

financial institution Institution that uses its funds chiefly to purchase financial assets, such as loans or securities (as opposed to tangible assets, such as real estate). Financial institutions can be separated into two major groups according to the nature of the principal claims they issue: nondepositories (sometimes called nondepository intermediaries), such as life insurance and property–casualty insurance companies and pension funds, whose claims are the policies they sell or their promise to provide income after retirement; and depository institutions (also called depository intermediaries), such as commercial banks, savings and loan associations, savings banks, and credit unions, which obtain funds mainly by accepting deposits from the public.

fiscal agency services Services performed by the Federal Reserve Banks for the U.S. government, including maintaining accounts for the U.S. Department of the Treasury, paying checks drawn on the Treasury, and selling and redeeming savings bonds and other government securities.

fiscal policy Federal government policy regarding taxation and spending, set by Congress and the Administration.

flexible exchange rates Arrangements in which the rate of exchange between countries' currencies (the foreign exchange rate) is allowed to fluctuate in response to market forces of supply and demand.

foreign currency operations Transactions in the foreign exchange markets involving the purchase of the currency of one nation with that of another. Also called foreign exchange transactions.

Foreign Exchange Desk Trading desk at the Federal Reserve Bank of New York through which transactions in the foreign exchange markets are conducted. The desk undertakes operations for the account of the Federal Open Market Committee and, as agent, for the U.S. Department of the Treasury and for the central banks of other nations.

foreign exchange markets Markets in which foreign currencies are purchased and sold.

foreign exchange rate Price of the currency of one nation in terms of the currency of another nation.

Full Employment and Balanced Growth Act of 1978 (Humphrey–Hawkins Act) Federal legislation that, among other things, specifies the primary objectives of U.S. economic policy—maximum employment, stable prices, and moderate long-term interst rates.

funds transfer Movement of funds between an originating financial institution and a receiving financial institution.

government securities Securities issued by the U.S. Treasury or federal agencies.

gross domestic product (GDP) Total value of goods and services produced by labor and property located in the United States during a specific period. In 1991, GDP became the U.S. government's primary measure of economic activity in the nation, replacing gross national product (GNP), which is the total value of goods and services produced by labor and property supplied by U.S. residents (but not necessarily located within the country).

Group of Seven (G-7) International group made up of seven leading industrial nations—Canada, France, Germany, Italy, Japan, the United Kingdom, and the United States—whose finance ministers and central bank governors meet occasionally to discuss economic policy.

Humphrey–Hawkins Act Informal name for the Full Employment and Balanced Growth Act of 1978, from the names of the act's original sponsors.

interest rate risk Risk of gain or loss in the value of a portfolio as a result of changes in market interest rates.

International Monetary Fund (IMF) International organization established for lending funds to member nations to promote international monetary cooperation among nations, to facilitate the expansion and balanced growth of international trade, and to finance temporary balance of payments deficits, usually in conjunction with macroeconomic adjustment programs.

liquidity Quality that makes an asset easily convertible into cash with relatively little loss of value in the conversion process. Sometimes used more broadly to encompass credit in hand and promises of credit to meet needs for cash.

liquidity risk In banking, risk that a depository institution will not have sufficient cash or liquid assets to meet borrower and depositor demand.

M1 Measure of the U.S. money stock that consists of currency held by the public, travelers checks, demand deposits, and other checkable deposits, including NOW (negotiable order of withdrawal) and ATS (automatic transfer service) account balances and share draft account balances at credit unions.

M2 Measure of the U.S. money stock that consists of M1, certain overnight repurchase agreements and certain overnight Eurodollars, savings deposits (including money market deposit accounts), time deposits in amounts of less than $100,000, and balances in money market mutual funds (other than those restricted to institutional investors).

M3 Measure of the U.S. money stock that consists of M2, time deposits of $100,000 or more at all depository institutions, term repurchase agreements in amounts of $100,000 or more, certain term Eurodollars, and balances in money market mutual funds restricted to institutional investors.

margin requirement “Buying on margin” refers to buying stocks or securities with borrowed money (usually borrowed from a brokerage firm or bank). The margin requirement is the minimum amount (expressed as a percentage) the buyer must put up (rather than borrow). The Federal Reserve sets margin requirements.

market interest rates Rates of interest paid on deposits and other investments, determined by the interaction of the supply of and demand for funds in the money market.

matched sale–purchase transaction Transaction in which the Federal Reserve sells a government security to a dealer or a foreign central bank and agrees to buy back the security on a specified date (usually within seven days) at the same price (the reverse of a repurchase agreement). Such transactions allow the Federal Reserve to temporarily absorb excess reserves from the banking system, limiting the ability of banks to make new loans and investments.

member bank Depository institution that is a member of the Federal Reserve System. All federally chartered banks are automatically members of the System; state-chartered banks may elect to join the System.

monetary aggregates Aggregate measures through which the Federal Reserve monitors the nation’s monetary assets: M1, M2, and M3.

monetary policy A central bank’s actions to influence the availability and cost of money and credit, as a means of helping to promote national economic goals. Tools of monetary policy include open market operations, discount policy, and reserve requirements.

monetize Action by a central bank to purchase an object that is not money (for example, gold) that has the net effect of increasing bank reserves and permitting an increase in the money stock.

money Anything that serves as a generally accepted medium of exchange, a standard of value, and a means of saving or storing purchasing power. In the United States, currency (the bulk of which is Federal Reserve notes) and funds in checking and similar accounts at depository institutions are examples of money.

money market Figurative expression for the informal network of dealers and investors over which short-term debt securities are purchased and sold. Money market securities generally are highly liquid securities that mature in less than one year, typically less than ninety days. (*Compare* **capital market**.)

money stock Total quantity of money available for transactions and investment; measures of the U.S. money stock include M1, M2, and M3. (Also referred to as the money supply, or simply money.)

mutual savings bank Savings bank owned by its depositors (contrasted with a stock savings bank, which issues common stock to the public).

national bank A commercial bank that is chartered by the Comptroller of the Currency; by law, national banks are members of the Federal Reserve System.

nominal interest rates Current stated rates of interest paid or earned. (*Compare* **real interest rates**.)

nonborrowed reserves Portion of total reserves in the banking system that have not been borrowed by depository institutions through the Federal Reserve's discount window. The Federal Reserve influences the supply of nonborrowed reserves by buying and selling securities through the Domestic Trading Desk.

nonmember bank Depository institution that is not a member of the Federal Reserve System; specifically a state-chartered commercial bank that has elected not to join the System.

nonpersonal time deposit Time deposit held by a depositor other than an individual (for example, a corporation).

official foreign exchange reserves Assets denominated in foreign currencies held by the Federal Reserve and the U.S. Treasury.

open market Freely competitive market.

open market operations Purchases and sales of government securities and certain other securities in the open market, through the Domestic Trading Desk at the Federal Reserve Bank of New York as directed by the Federal Open Market Committee, to influence the volume of money and credit in the economy. Purchases inject reserves into the banking system and stimulate growth of money and credit; sales do the opposite.

outright transaction "Permanent" sale, purchase, or redemption of securities by the Federal Reserve in the open market, to adjust the supply of reserves in the economy over the longer run. (Contrasts with transactions intended to adjust the supply of reserves only temporarily, including **repurchase agreements** and **matched sale–purchase transactions**.)

over the counter Figurative term for the means of trading securities that are not listed on an organized stock exchange such as the New York Stock Exchange. Over-the-counter trading is done by broker–dealers who communicate by telephone and computer networks.

paper General term for short-term debt instruments such as commercial paper.

payments system Collective term for mechanisms (both paper-backed and electronic) for moving funds, payments, and money among financial institutions throughout the nation. The Federal Reserve plays a major role in the nation's payments system through distribution of currency and coin, processing of checks, electronic transfer of funds, and the operation of automated clearinghouses that transfer funds electronically among depository institutions; various private organizations also perform payments system functions.

portfolio Collection of loans or assets, classified by type of borrower or asset. For example, a bank's portfolio might include loans, investment securities, and assets managed in trust; the loan portfolio might include commercial, mortgage, and consumer installment loans.

presentment fee Fee that a bank receiving a check imposes on the bank collecting payment.

real interest rates Interest rates adjusted for the expected erosion of purchasing power resulting from inflation. Technically defined as nominal interest rates minus the expected rate of inflation.

reciprocal currency (swap) networks Short-term reciprocal arrangements among the Federal Reserve, the central banks of certain other nations, and the Bank for International Settlements. By drawing on a swap the Federal Reserve, in effect, can obtain foreign currency to purchase dollars in the foreign exchange markets, thereby increasing the demand for dollars and the foreign exchange value of the dollar. Likewise, the Federal Reserve can temporarily provide dollars to other central banks by means of swap arrangements.

Report of Condition and Income Financial report that all banks, bank holding companies, savings and loan associations, Edge Act and agreement corporations, and certain other types of organizations must file with a federal regulatory agency. Informally termed a Call Report.

repurchase agreement (RP, or **repo)** Transaction in which one party purchases, from another party, a government security for immediate delivery and simultaneously agrees to deliver back the security at a predetermined price on a specified future date; may be an overnight RP or a term RP. RPs allow the Federal Reserve to inject reserves temporarily into the banking system, by adding to the level of nonborrowed reserves, and to withdraw these reserves as soon as the need has passed.

required clearing balance Amount kept by a depository institution in an account at a Federal Reserve Bank, in addition to its required reserve balance, to ensure that it can meet its daily transaction obligations without overdrawing its required reserve account and thereby incurring a penalty. Required clearing balances earn credits that can be used to pay for services provided by the Federal Reserve.

required reserve ratio Percentage of reservable liabilities that depository institutions must set aside in the form of reserves.

reservable liabilities Bank deposits subject to reserve requirements. Transaction deposits, nonpersonal time deposits, and Eurocurrency liabilities are all reservable deposits; the required reserve ratios for nonpersonal time deposits and Eurocurrency liabilities were set at zero in December 1990.

reserve requirements Requirements set by the Board of Governors for the amounts that certain financial institutions must set aside in the form of reserves. Reserve requirements act as a control on the expansion of money and credit and may be raised or lowered within limits specified by law (lowering reserve requirements allows more bank lending and money growth; raising requirements, less lending and money growth).

reserves A depository institution's vault cash (up to the level of its required reserves) plus balances in its reserve account (not including funds applied to its required clearing balance).

- **required reserves** Funds that a depository institution is required to maintain as vault cash or on deposit with a Federal Reserve Bank; required amount varies according to required reserve ratios set by the Board of Governors and the volume of reservable liabilities held by the institution.

- **required reserve balance** Portion of its required reserves that a depository institution must hold in an account at a Federal Reserve Bank

- **excess reserves** Amount of reserves held by an institution in excess of its reserve requirement and required clearing balance.

■ **savings bank** Depository institution historically engaged primarily in accepting consumer savings deposits and in originating and investing in securities and residential mortgage loans; now may offer checking-type deposits and make a wider range of loans.

savings bond A nonmarketable debt obligation of the U.S. government, issued in denominations of $50 to $10,000, that is sold to the public through depository institutions and Federal Reserve Banks.

savings and loan association (s&l) Historically, depository institution that accepted deposits mainly from individuals and invested heavily in residential mortgage loans; although still primarily residential lenders, s&ls may now offer checking-type deposits and make a wider range of loans.

securities Paper certificates (definitive securities) or electronic records (book-entry securities) evidencing ownership of equity (stocks) or debt obligations (bonds).

settlement In banking, the process of recording the debit and credit positions of two parties in a transfer of funds. Also, the delivery of securities by a seller and the payment by the buyer.

shock Unanticipated or unusual event that has a noticeable impact on the economy or a financial system.

special drawing rights (SDRs) Type of international reserve asset created by the International Monetary Fund and allocated, on occasion, to the nations that are members of the IMF.

state bank Bank that is chartered by a state; may or may not be a member of the Federal Reserve System.

subsidiary Company in which another corporation (called the parent corporation) owns controlling stock interest or voting control.

System Open Market Account The Federal Reserve's portfolio of government (and certain other) securities from which it conducts open market operations under the overall supervision of the Manager of the System Open Market Account, subject to the policies and rules of the Federal Open Market Committee.

systemic risk Risk that a disruption (at a firm, in a market segment, to a settlement system, or in a similar setting) will cause widespread difficulties at other firms, in other market segments, or in the financial system as a whole.

thrift institution A general term encompassing savings banks, savings and loan associations, and credit unions.

Thrift Institutions Advisory Council Group established by the Board of Governors after passage of the Depository Institutions Deregulation and Monetary Control Act of 1980 to obtain information and opinions on the needs and problems of thrift institutions. Made up of representatives of savings and loan associations, savings banks, and credit unions.

tightening Federal Reserve action to reduce the amount of credit available to the public through the banking system; undertaken when inflation is a concern. (*Compare* **easing**.)

time deposit Funds deposited in an account that has a fixed term to maturity and technically cannot be withdrawn before maturity without advance notice (for example, a certificate of deposit). Most time deposits earn interest.

transaction deposit A checking account or similar deposit account from which transfers of funds can be made. Demand deposit accounts, NOW (negotiable order of withdrawal) accounts, ATS (automatic transfer service) accounts, and credit union share draft accounts are examples of transaction accounts.

Treasury Direct Service provided to the U.S. Department of the Treasury whereby Federal Reserve Banks hold book-entry Treasury securities purchased by individuals.

Treasury tax and loan (TT&L) accounts Interest-bearing checking accounts that the U.S. Department of the Treasury maintains at depository institutions, primarily commercial banks, to hold deposits of federal taxes paid by businesses and individuals. The Federal Reserve Banks monitor the accounts and, on daily instructions from cash managers at the Treasury Department, transfer funds to the department's account at the Federal Reserve to cover the government's daily operating expenses.

■ **U.S. Treasury securities** Interest-bearing obligations of the U.S. government issued by the U.S. Department of the Treasury as a means of borrowing money to meet government expenditures not covered by tax revenues. There are three types of marketable Treasury securities—bills, notes, and bonds.

- **Treasury bill (T-bill)** Short-term U.S. Treasury security having a maturity of up to one year and issued in denominations of $10,000 to $1 million. T-bills are sold at a discount: Investors purchase a bill at a price lower than the face value (for example, the investor might buy a $10,000 bill for $9,700); the return is the difference between the price paid and the amount received when the bill is sold or it matures (if held to maturity, the return on the T-bill in the example would be $300). T-bills are the type of security most frequently used in Federal Reserve open market operations.
- **Treasury note** Intermediate-term security having a maturity of one to ten years and issued in denominations of $1,000 or more. Notes pay interest semiannually, and the principal is payable at maturity.
- **Treasury bond** Long-term security having a maturity of ten years or longer and issued in denominations of $1,000 or more. A thirty-year bond is sometimes referred to as a long bond. Bonds pay interest semiannually, and the principal is payable at maturity.

The Treasury Department also issues several types of nonmarketable securities, including savings bonds.

- **vault cash** Cash kept on hand in a depository institution's vault to meet day-to-day business needs, such as cashing checks for customers; can be counted as a portion of the institution's required reserves.

- **wire transfer** Electronic transfer of funds; usually involves large dollar payments.

Appendix D

Selected Readings

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