

The information in this chapter was last updated in 1993. Since the money market evolves very rapidly, recent developments may have superseded some of the content of this chapter.

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Chapter 1

THE MONEY MARKET

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The major purpose of financial markets is to transfer funds from lenders to borrowers. Financial market participants commonly distinguish between the "capital market" and the "money market," with the latter term generally referring to borrowing and lending for periods of a year or less. The United States money market is very efficient in that it enables large sums of money to be transferred quickly and at a low cost from one economic unit (business, government, bank, etc.) to another for relatively short periods of time.

The need for a money market arises because receipts of economic units do not coincide with their expenditures. These units can hold money balances—that is, transactions balances in the form of currency, demand deposits, or NOW accounts—to insure that planned expenditures can be maintained independently of cash receipts. Holding these balances, however, involves a cost in the form of foregone interest. To minimize this cost, economic units usually seek to hold the minimum money balances required for day-to-day transactions. They supplement these balances with holdings of money market instruments that can be converted to cash quickly and at a relatively low cost and that have low price risk due to their short maturities. Economic units can also meet their short-term cash demands by maintaining access to the money market and raising funds there when required.

Money market instruments are generally characterized by a high degree of safety of principal and are most commonly issued in units of \$1 million or more. Maturities range from one day to one year; the most common are three months or less. Active secondary markets for most of the instruments allow them to be sold prior to maturity. Unlike organized securities or commodities exchanges, the money market has no specific location. It is centered in New York, but since it is primarily a telephone market it is easily accessible from all parts of the nation as well as from foreign financial centers.

The money market encompasses a group of short-term credit market instruments, futures market instruments, and the Federal Reserve's discount window. The table summarizes the instruments of the money market and serves as a guide to the chapters in this book. The major participants in the money market are commercial banks, governments, corporations, government-sponsored enterprises, money market mutual funds, futures market exchanges, brokers and dealers, and the Federal Reserve.

Commercial Banks Banks play three important roles in the money market. First, they borrow in the money market to fund their loan portfolios and to acquire funds to satisfy noninterest-bearing reserve requirements at Federal Reserve Banks. Banks are the major participants in the market for federal funds, which are very short-term—chiefly overnight—loans of immediately available money; that is, funds that can be transferred between banks within a single business day. The funds market efficiently distributes reserves throughout the banking system. The borrowing and lending of reserves takes place at a competitively determined interest rate known as the federal funds rate.

Banks and other depository institutions can also borrow on a short-term basis at the Federal Reserve discount window and pay a rate of interest set by the Federal Reserve called the discount rate. A bank's decision to borrow at the discount window depends on the relation of the discount rate to the federal funds rate, as well as on the administrative arrangements surrounding the use of the window.

Banks also borrow funds in the money market for longer periods by issuing large negotiable certificates of deposit (CDs) and by acquiring funds in the Eurodollar market. A large denomination CD is a certificate issued by a bank as evidence that a certain amount of money has been deposited for a period of time—usually ranging from one to six months—and will be redeemed with interest at maturity. Eurodollars are dollar-denominated deposit liabilities of banks located outside the United States (or of International Banking Facilities in the United States). They can be either large CDs or nonnegotiable time deposits. U.S. banks raise funds in the Eurodollar market through their overseas branches and subsidiaries.

A final way banks raise funds in the money market is through repurchase agreements (RPs). An RP is a sale of securities with a simultaneous agreement by the seller to repurchase them at a later date. (For the lender—that is, the buyer of the securities in such a transaction—the agreement is often called a reverse RP.) In effect this agreement (when properly executed) is a short-term collateralized loan. Most RPs involve U.S. government securities or securities issued by government-sponsored enterprises. Banks are active participants on the borrowing side of the RP market.

A second important role of banks in the money market is as dealers in the market for over-the-counter interest rate derivatives, which has grown rapidly in recent years. Over-the-counter interest rate derivatives set terms for the exchange of cash payments based on subsequent changes in market interest rates. For example, in an interest rate swap, the parties to the agreement exchange cash payments to one another based on movements in specified market interest rates. Banks frequently act as middleman in swap transactions by serving as a counterparty to both sides of the transaction.

The Money Market

Instrument	Principal Borrowers
Federal Funds	Banks
Discount Window	Banks
Negotiable Certificates of Deposit (CDs)	Banks
Eurodollar Time Deposits and CDs	Banks
Repurchase Agreements	Securities dealers, banks, nonfinancial corporations, governments (principal participants)
Treasury Bills	U.S. government
Municipal Notes	State and local governments
Commercial Paper	Nonfinancial and financial businesses
Bankers Acceptances	Nonfinancial and financial businesses
Government-Sponsored Enterprise Securities	Farm Credit System, Federal Home Loan Bank System, Federal National Mortgage Association
Shares in Money Market Instruments	Money market funds, local government investment pools, short-term investment funds
Futures Contracts	Dealers, banks (principal users)
Futures Options	Dealers, banks (principal users)
Swaps	Banks (principal dealers)

A third role of banks in the money market is to provide, in exchange for fees, commitments that help insure that investors in money market securities will be paid on a timely basis. One type of commitment is a backup line of credit to issuers of money market securities, which is typically dependent on the financial condition of the issuer and can be withdrawn if that condition deteriorates. Another type of commitment is a credit enhancement—generally in the form of a letter of credit—that guarantees that the bank will redeem a security upon maturity if the issuer does not. Backup lines of credit and letters of credit are widely used by commercial paper issuers and by issuers of municipal securities.

Governments The U.S. Treasury and state and local governments raise large sums in the money market. The Treasury raises funds in the money market by selling short-term obligations of the U.S. government called Treasury bills. Bills have the largest volume outstanding and the most active secondary market of any money market instrument. Because bills are generally considered to be free of default risk, while other money market instruments have some default risk, bills typically have the lowest interest rate at a given maturity. State and local governments raise funds in the money market through the sale of both fixed- and variable-rate securities. A key feature of state and local securities is that their interest income is generally exempt from federal income taxes, which makes them particularly attractive to investors in high income tax brackets.

Corporations Nonfinancial and nonbank financial businesses raise funds in the money market primarily by issuing commercial paper, which is a short-term unsecured promissory note. In recent years an increasing number of firms have gained access to this market, and commercial paper has grown at a rapid pace. Business enterprises—generally those involved in international trade—also raise funds in the money market through bankers acceptances. A bankers acceptance is a time draft drawn on and accepted by a bank (after which the draft becomes an unconditional liability of the bank). In a typical bankers acceptance a bank accepts a time draft from an importer and then discounts it (gives the importer slightly less than the face value of the draft). The importer then uses the proceeds to pay the exporter. The bank may hold the acceptance itself or rediscount (sell) it in the secondary market.

Government-Sponsored Enterprises Government-sponsored enterprises are a group of privately owned financial intermediaries with certain unique ties to the federal government. These agencies borrow funds in the financial markets and channel these funds primarily to the farming and housing sectors of the economy. They raise a substantial part of their funds in the money market.

Money Market Mutual Funds and Other Short-Term Investment Pools

Short-term investment pools are a highly specialized group of money market intermediaries that includes money market mutual funds, local government investment pools, and short-term investment funds of bank trust departments. These intermediaries purchase large pools of money market instruments and sell shares in these instruments to investors. In doing so they enable individuals and other small investors to earn the yields available on money market instruments. These pools, which were virtually nonexistent before the mid-1970s, have grown to be one of the largest financial intermediaries in the United States.

Futures Exchanges Money market futures contracts and futures options are traded on organized exchanges which set and enforce trading rules. A money market futures contract is a standardized agreement to buy or sell a money market security at a particular price on a specified future date. There are actively traded contracts for 13-week Treasury bills, three-month Eurodollar time deposits, and one-month Eurodollar time deposits. There is also a futures contract based on a 30-day average of the daily federal funds rate.

A money market futures option gives the holder the right, but not the obligation, to buy or sell a money market futures contract at a set price on or before a specified date. Options are currently traded on three-month Treasury bill futures, three-month Eurodollar futures, and one-month Eurodollar futures.

Dealers and Brokers The smooth functioning of the money market depends critically on brokers and dealers, who play a key role in marketing new issues of money market instruments and in providing secondary markets where outstanding issues can be sold prior to maturity. Dealers use RPs to finance their inventories of securities. Dealers also act as intermediaries between other participants in the RP market by making loans to those wishing to borrow in the market and borrowing from those wishing to lend in the market.

Brokers match buyers and sellers of money market instruments on a commission basis. Brokers play a major role in linking borrowers and lenders in the federal funds market and are also active in a number of other markets as intermediaries in trades between dealers.

Federal Reserve The Federal Reserve is a key participant in the money market. The Federal Reserve controls the supply of reserves available to banks and other depository institutions primarily through the purchase and sale of Treasury bills, either outright in the bill market or on a temporary basis in the market for repurchase agreements. By controlling the supply of reserves, the Federal Reserve is able to influence the federal funds rate. Movements in this rate, in turn, can have pervasive effects on other money market rates. The Federal Reserve's purchases and sales of Treasury bills—called "open market operations"—are carried out by the Open Market Trading Desk at the Federal Reserve Bank of New York. The Trading Desk frequently engages in billions of dollars of open market operations in a single day.

The Federal Reserve can also influence reserves and money market rates through its administration of the discount window and the discount rate. Under certain Federal Reserve operating procedures, changes in the discount rate have a strong direct effect on the funds rate and other money market rates. Because of their roles in the implementation of monetary policy, the discount window and the discount rate are of widespread interest in the financial markets.

This book provides detailed descriptions of the various money market instruments and the markets in which they are used. Where possible, the book tries to explain the historical forces that led to the development of an instrument, influenced its pattern of growth, and led to new forms of the instrument. A major focus in the book is the Federal Reserve, which, in addition to its monetary policy role, plays an important role as a regulator in a number of the markets.

Much of the discussion in the book deals with the period from the late 1960s through the 1980s, which was one of particularly rapid change in the money market. Factors underlying this change include high and volatile interest rates, major changes in government regulations affecting the markets, and rapid technological change in the computer and telecommunications industries. These developments strongly influenced the pattern of growth of many money market instruments and stimulated the development of several new instruments.