Commercial Bank Operations

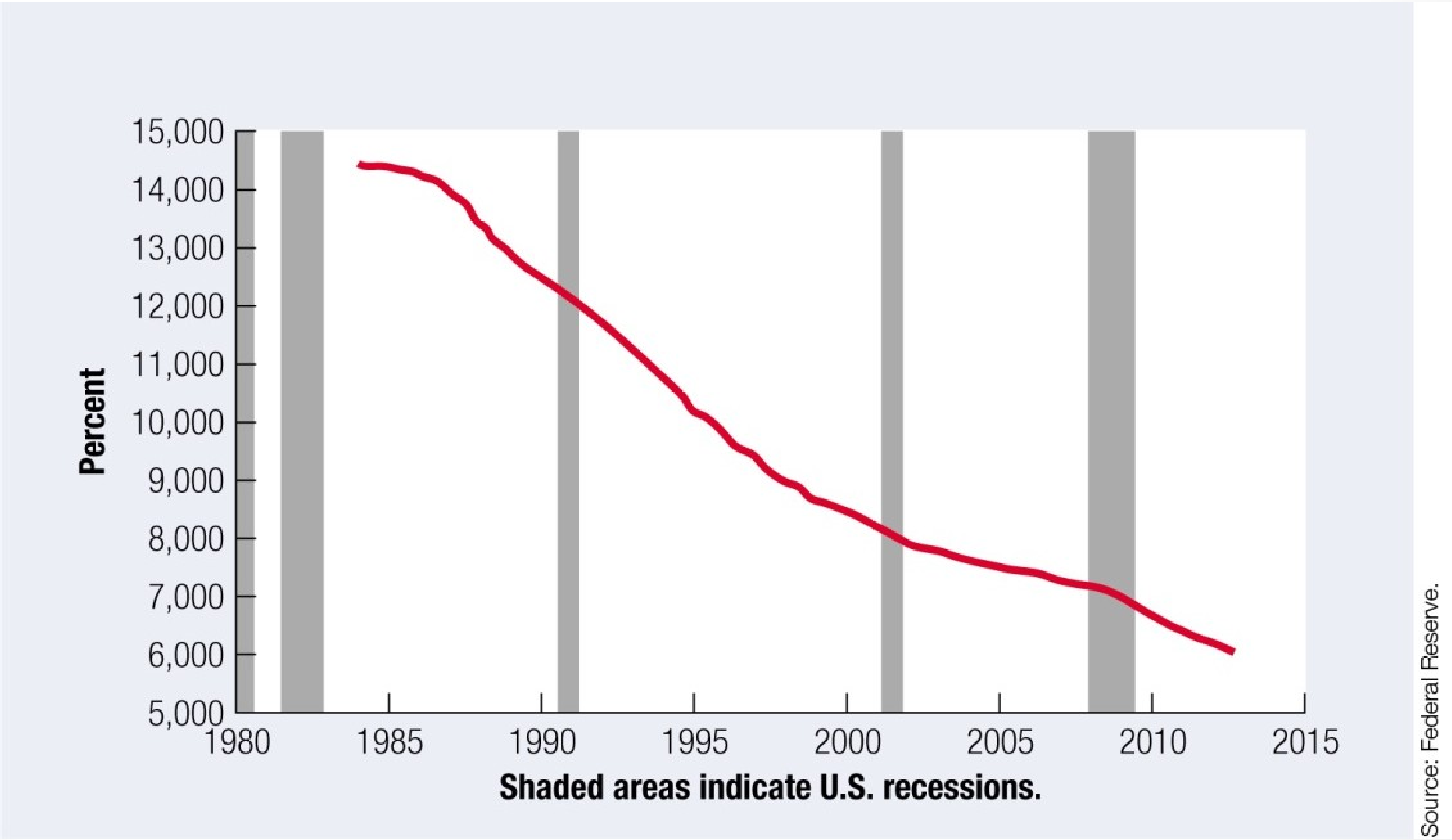
Chapter Objectives

- describe the market structure of commercial banks
- describe the most common sources of funds for commercial banks
- explain the most common uses of funds for commercial banks
- describe typical off-balance sheet activities for commercial banks

Background on Commercial Banks

- Bank Market Structure
- Interstate banking regulations were changed in 1994 to allow banks more freedom to acquire other banks across state lines.
- The number of banks has declined over time, thereby increasing concentration in the banking industry. (Exhibit 17.1)
- Many banks are owned by bank holding companies allowing more flexibility to borrow funds, issue stock, repurchase the company’s own stock, and acquire other firms.

Consolidation among Commercial Banks over Time



Bank Sources of Funds

- Deposit Accounts
  - Transaction deposits
  - Savings deposits
  - Time deposits
  - Money market deposit accounts
- Borrowed Funds
  - Federal funds purchased (borrowed)
  - Borrowing from the Federal Reserve banks
  - Repurchase agreements
  - Eurodollar borrowings
- Long-Term Sources of Funds
  - Bonds issued by the bank
  - Bank capital

Bank Sources of Funds

- Transaction Deposits
- A demand deposit account, or checking account, is offered to customers who desire to write checks.
  - A conventional demand deposit account requires a small minimum balance and pays no interest.
  - A negotiable order of withdrawal (NOW) account pays interest and provides checking services.
- Electronic Transactions - Some transactions originating from transaction accounts have become much more efficient as a result of electronic banking. (direct deposit accounts, computer banking, preauthorized debits)

Bank Sources of Funds

- Savings Deposits
  - The traditional savings account is the passbook savings account, which does not permit check writing.
- Time Deposits
  - Deposits that cannot be withdrawn until a specified maturity
  - Certificates of Deposit (or retail CDs) require a specified minimum amount of funds to be deposited for a specified period of time. Recently callable CDs have been issued.
  - Negotiable Certificates of Deposit – Have a specified maturity and require a minimum deposit. Maturities are typically short term, and the minimum deposit is $100,000. A secondary market for NCDs does exist.

Bank Sources of Funds

- Money Market Deposit Accounts
  - Differ from conventional time deposits in that they do not specify a maturity.
  - Provide limited check-writing ability, require a larger minimum balance, and offer a higher yield.
- Federal Funds Purchased
  - Represent a liability to the borrowing bank and an asset to the lending bank. (typically for one to seven days)
  - Intent is to correct short-term fund imbalances by banks.
  - The interest rate charged in the federal funds market is called the federal funds rate.

Bank Sources of Funds

- Borrowing from the Federal Reserve Banks
  - The Federal Reserve district banks regulate certain activities of banks and provide short-term loans to banks.
  - Often referred to as borrowing at the discount window.
  - The interest rate charged is the primary credit lending rate.
  - Mainly used to resolve a temporary shortage of funds.
- Repurchase Agreements
  - Represents the sale of securities with an agreement to repurchase the securities at a specified date and price.
  - Occur through a telecommunications network connecting large banks.

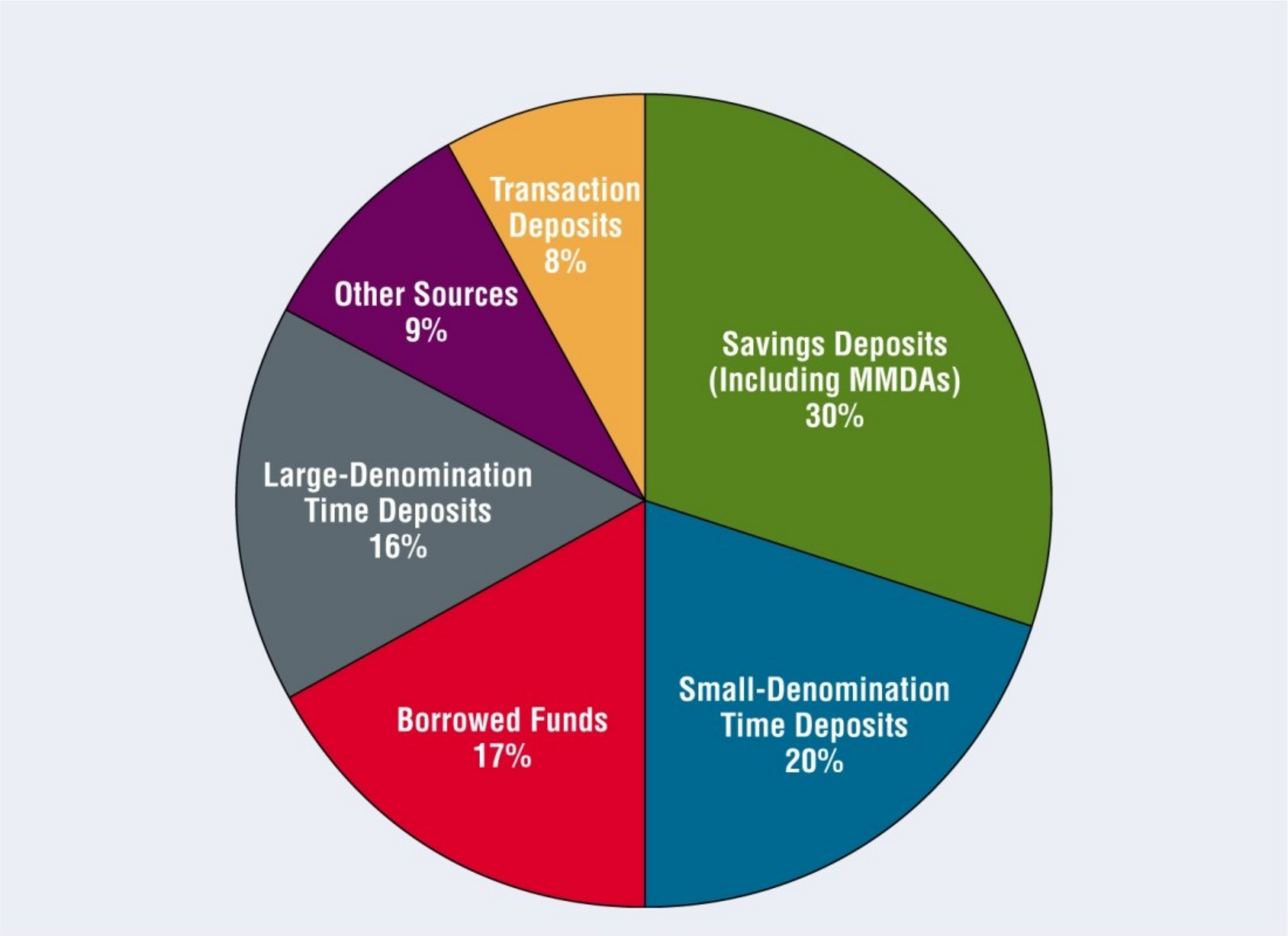
Bank Sources of Funds

- Eurodollar Borrowings
  - May borrow dollars from those banks outside the United States (typically in Europe) that accept dollar-denominated deposits, or Eurodollars.
- Bonds Issued by the Bank
  - Banks own fixed assets such as land, buildings, and equipment which are usually financed with long-term sources such as the issuance of bonds.
  - Common purchasers of these bonds are households and various financial institution.

Bank Sources of Funds

- Bank Capital
  - Represents funds acquired by the issuance of stock or the retention of earnings.
  - A bank’s capital must be sufficient to absorb operating losses in the event that expenses or losses exceed revenues, regardless of the reason for the losses.
  - In 1988, regulators imposed new, risk-based capital requirements that were completely phased in by 1992. Under this system, the required level of capital for each bank depends on its risk.

Bank Sources of Funds (as a Proportion of Total Liabilities)



Source: Federal Reserve.

Bank Sources of Funds

Distribution of Bank Sources of Funds

- Smaller banks rely on savings deposits while larger banks rely more on short-term borrowings. (Exhibit 17.2)
- Common Uses of Funds by Banks
- Cash
- Bank loans
- Investment in securities
- Federal funds sold (loaned out)
- Repurchase agreements
- Eurodollar loans
- Fixed assets
- Proprietary trading

Bank Sources of Funds

Cash

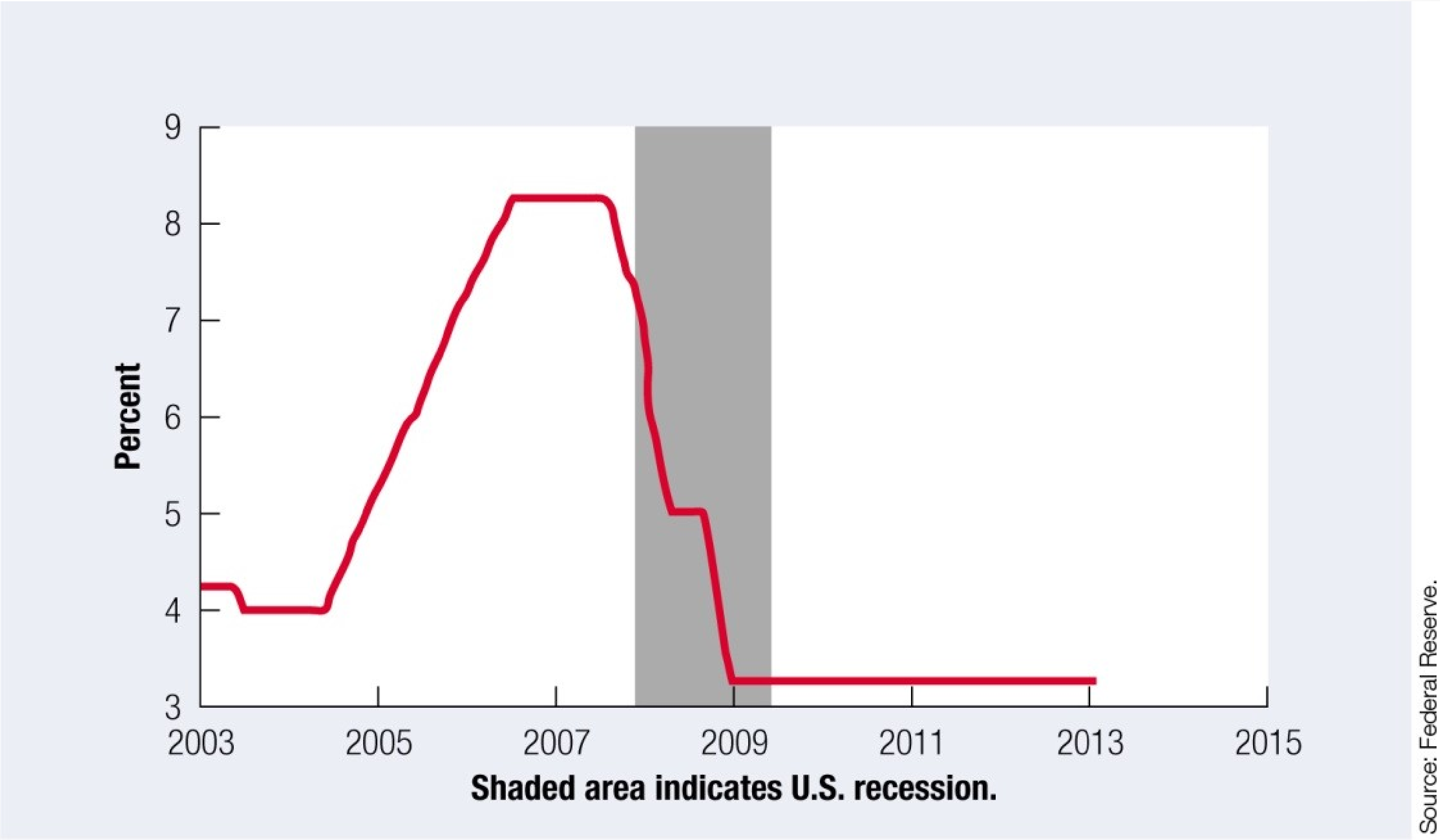
- Banks must hold some cash as reserves to meet the reserve requirements enforced by the Federal Reserve.
- Because banks do not earn income from cash, they hold only as much cash as is necessary to maintain a sufficient degree of liquidity.
- Banks hold cash in their vaults and at their Federal Reserve district bank.

Bank Sources of Funds

Bank Loans

- **Types of Business Loan**
  - **Working capital loan** (sometimes called a self-liquidating loan) - designed to support ongoing business operations.
  - **Term loans** - primarily to finance the purchase of fixed assets such as machinery.
  - **Informal line of credit** - allows the business to borrow up to a specified amount within a specified period of time.
  - **Revolving credit loan** - obligates the bank to offer up to some specified maximum amount of funds over a specified period of time.
  - **Prime rate** - Interest rate charged by banks on loans to their most creditworthy customers. (See Exhibit 17. 3)

Exhibit 17.3 Prime Rate over Time



Bank Sources of Funds

Bank Loans (Cont.)

- **Loan Participations**
  - One bank serves as the lead bank by arranging for the documentation, disbursement, and payment structure of the loan.
  - Other banks supply funds that are channeled to the borrower by the lead bank.
- **Loans Supporting Leveraged Buyouts**
  - A management group or a business relies mostly on debt to purchase the equity of another business.
  - Firms request LBO financing because they perceive that the market value of certain publicly held shares is too low.

Bank Sources of Funds

Bank Loans (Cont.)

- **Collateral Requirements on Business Loans**
  - Commercial banks are increasingly accepting intangible assets (such as patents, brand names, and licenses to franchises and distributorships) as collateral.
- **Lender Liability on Business Loans**
  - In recent years, businesses that previously obtained loans from banks have filed lawsuits claiming that the banks terminated further financing without sufficient notice.
- **Volume of Business Loans**
  - When the economy is strong, businesses are more willing to finance expansion.

Bank Sources of Funds

Bank Loans (Cont.)

- **Types of Consumer Loans**
  - **Installment loans** – Loans to finance purchases of cars and household products.
  - Banks also provide credit cards to consumers who qualify, enabling them to purchase various goods without having to reapply for credit on each purchase.
  - Since the interest rate on credit card loans and personal loans is typically much higher than the cost of funds, many commercial banks have pursued these types of loans as a means of increasing their earnings.

Bank Sources of Funds

Bank Loans (Cont.)

- **Real Estate Loans**
  - For residential real estate loans, the maturity on a mortgage is typically 15 to 30 years, although shorter-term mortgages with a balloon payment are also common.
  - The loan is backed by the residence purchased.
  - Commercial banks also provide commercial real estate loans, such as loans to build shopping malls.

Bank Sources of Funds

Investment in Securities

- **Treasury and Agency Securities**
  - Banks purchase Treasury securities as well as securities issued by agencies of the federal government.
- **Corporate and Municipal Bonds**
  - Although corporate bonds are subject to credit risk, they offer higher return than Treasury or agency securities.
  - Municipal bonds exhibit some degree of risk but can also provide an attractive after-tax return to banks.
- **Mortgage-Backed Securities**
  - Represent packages of mortgages

Bank Sources of Funds

Federal Funds Sold

- Some banks lend funds to other banks in the federal funds market.
- The funds sold, or lent out, will be returned (with interest) at the time specified in the loan agreement.

Repurchase Agreements

- Involves repurchasing the securities it had previously sold.
- Banks can act as the lender (on a repo) by purchasing a corporation’s holdings of Treasury securities and then selling them back at a later date.

Bank Sources of Funds

Eurodollar Loans

- Eurodollar loans are short term and denominated in large amounts, such as $1 million or more.

Fixed Assets

- Banks must maintain some amount of fixed assets, such as office buildings and land, so that they can conduct their business operations.

Proprietary Trading

- Use of bank funds to make investments for their own account.

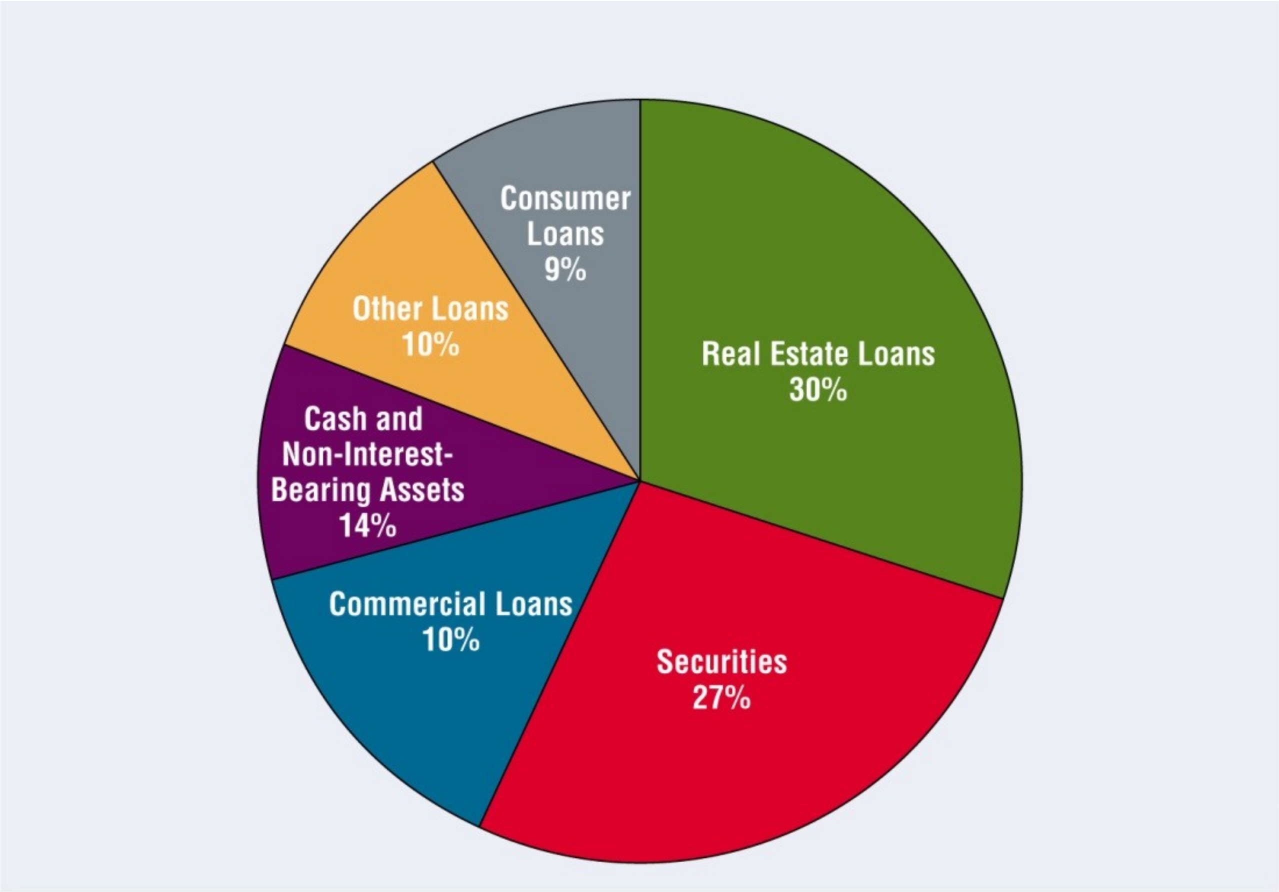
Bank Sources of Funds

Summary of Bank Uses of Funds (Exhibit 17.4)

- Loans make up about 59 percent of bank assets
- Securities account for 27 percent of bank assets

- **Commercial Bank Balance Sheet**
  - Each commercial bank determines its own composition of liabilities and assets, which determines its specific operations. (Exhibits 17.5 & 17.6)

Exhibit 17.4 Bank Uses of Funds (as a Proportion of Total Assets)

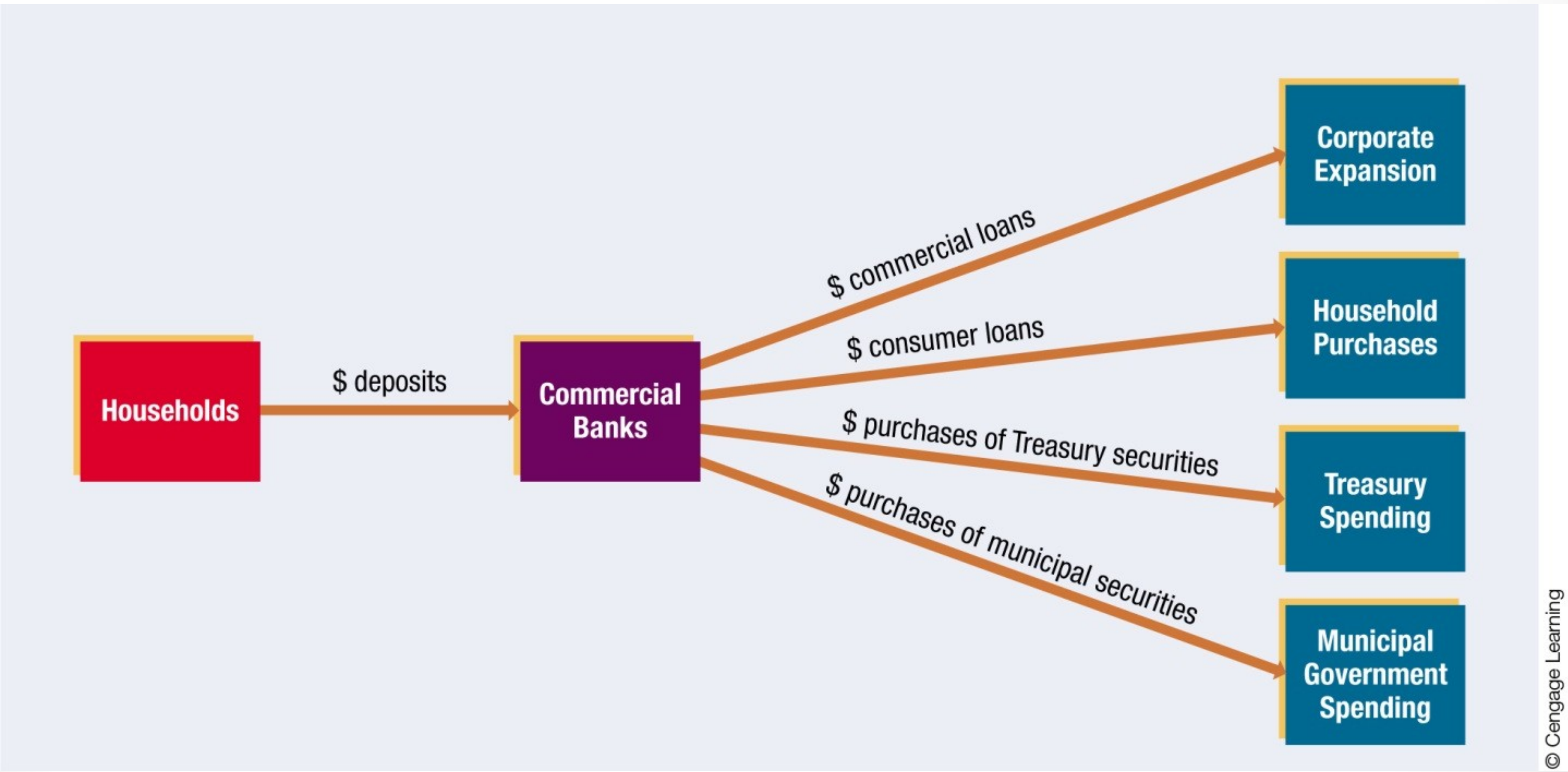


Source: Federal Reserve.

Balance Sheet of Hornet Bank as of June 30, 2013

ASSETS	DOLLAR AMOUNT (IN MILLIONS)	PROPORTION OF TOTAL ASSETS	LIABILITIES AND STOCKHOLDERS' EQUITY	DOLLAR AMOUNT (IN MILLIONS)	PROPORTION OF TOTAL LIABILITIES AND STOCK-HOLDERS' EQUITY
Cash (includes required reserves)	$ 50	5%	Demand deposits	$ 250	25%
Commercial loans	400	40%	NOW accounts	60	6%
Consumer loans	250	25%	Money market deposit accounts	200	20%
Treasury securities	80	8%	Short-term CDs	250	25%
Corporate securities	120	12%	CDs with maturities beyond one year	120	12%
Federal funds sold (lent out)	10	1%	Federal funds purchased (borrowed)	0	0%
Repurchase agreements	20	2%	Long-term debt	30	3%
Eurodollar loans	0	0%			
Fixed assets	70	7%	Common stock issued	50	5%
			Retained earnings	40	4%
TOTAL ASSETS	$1,000	100%	TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY	$1,000	100%

How Commercial Banks Finance Economic Growth



Off-Balance Sheet Activities

- Loan commitments
- Standby letters of credit
- Forward contracts on currencies
- Interest rate swap contracts
- Credit default swap contracts

Off-Balance Sheet Activities

Loan Commitments

- An obligation by a bank to provide a specified loan amount to a particular firm upon the firm's request.
- Note issuance facility (NIF) - Type of loan commitment, in which the bank agrees to purchase the commercial paper of a firm if the firm cannot place its paper in the market at an acceptable interest rate.

Standby Letters of Credit

- Backs a customer's obligation to a third party.

Off-Balance Sheet Activities

Forward Contracts on Currencies

- An agreement between a customer and a bank to exchange one currency for another on a particular future date at a specified exchange rate.

Interest Rate Swap Contracts

- Two parties agree to periodically exchange interest payments on a specified notional amount of principal.
- The bank receives a transaction fee for its services.

Credit Default Swap Contracts

- Privately negotiated contracts that protect investors against the risk of default on particular debt securities.

International Banking

International Expansion

- The most common way for U.S. commercial banks to expand internationally is by establishing branches, full-service banking offices that can compete directly with other banks located in a particular area.
- U.S. banks have recently established foreign subsidiaries wherever they expect more foreign expansion by U.S. firms.

Impact of the Euro on Global Competition

- Simplifies transactions and reduces exposure to exchange risk
- May also encourage firms to engage in stock and bond offerings to support European businesses

International Banking

International Exposure

- With European countries such as Greece, Spain, and Portugal experiencing weak economies and large budget deficits, banks with large loans to these countries are exposed to the possibility of loan defaults.

SUMMARY

- Commercial banks have consolidated over time in an effort to achieve economies of scale and to become more efficient. Consequently, there are less than half as many banks today as there were in 1985, and consolidation is still occurring. Commercial banks have also acquired many other types of financial service firms in recent years.
- The most common sources of commercial bank funds are deposit accounts, borrowed funds, and long-term sources of funds. The common types of deposit accounts are transaction deposits, savings deposits, time deposits, and money market deposit accounts. These accounts vary in terms of liquidity (for the depositor) and the interest rates offered. Commercial banks can solve temporary deficiencies in funds by borrowing from other banks (federal funds market), from the Federal Reserve, or from other sources by issuing short-term securities such as repurchase agreements. When banks need long-term funds to support expansion, they may use retained earnings, issue new stock, or issue new bonds.

SUMMARY (Cont.)

- The most common uses of funds by commercial banks are bank loans and investment in securities. Banks can use excess funds by providing loans to other banks or by purchasing short-term securities.
- Banks engage in off-balance sheet activities such as loan commitments, standby letters of credit, forward contracts, and swap contracts. These types of activities generate fees for commercial banks. However, they also reflect commitments by the banks, which can expose them to more risk.