

# Chapter 3

Banks and Other Financial  
Institutions

A low-angle, upward-looking photograph of several modern skyscrapers with glass facades, reaching towards a clear blue sky. The perspective creates a sense of height and scale.

## INTRODUCTION TO **FINANCE**

MARKETS, INVESTMENTS,  
AND FINANCIAL MANAGEMENT

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# Learning Objectives

- LO 3.1 Describe how financial institutions were impacted by the financial crisis.
- LO 3.2 Identify the major financial institutions and their roles in the financial system.
- LO 3.3 Describe how commercial banking and investment banking differ, and identify the functions of banks and the banking system.



# Learning Objectives

- LO 3.4 Discuss the historical development of the U.S. banking system.
- LO 3.5 Discuss general regulation of the banking system and how depositors' funds are protected.
- LO 3.6 Describe the structure of banks in terms of bank charters, branch banking, and bank holding companies.



# Learning Objectives

- LO 3.7 Describe the bank balance sheet and the major account categories that it contains.
- LO 3.8 Describe bank management practices in terms of bank liquidity and bank solvency, and explain why and how bank capital is managed.
- LO 3.9 Describe characteristics of several foreign banking systems.



## **Section 3.1: Financial Institution Problems During the 2007-2008 Financial Crisis**

- LO 3.1 Describe how financial institutions were impacted by the financial crisis.



# Financial Institution Distress

- Homeowners use mortgage loans to finance a portion of their houses
- Mortgage-backed securities are created by pooling together a package of mortgage loans
- After the housing price bubble burst in mid-2006, mortgage loan defaults increased and the value of mortgage-related securities decreased



# Financial Institution Distress

- Many banks and other financial institutions did not have adequate equity capital to cover the loss in value of mortgage-related securities
- As a result, the Federal Reserve and the U.S. Treasury in 2008 helped weaker institutions sell to, or merge with, relatively-stronger institutions



## **Section 3.2: Types and Roles of Financial Institutions**

- LO 3.2 Identify the major financial institutions and their roles in the financial system.





# Types and Roles

- **Financial Intermediation**

Process by which savings are accumulated in depository institutions and then lent or invested

- **Financial Institutions Categories**

Depository Institutions

Contractual Savings Organizations

Securities Firms

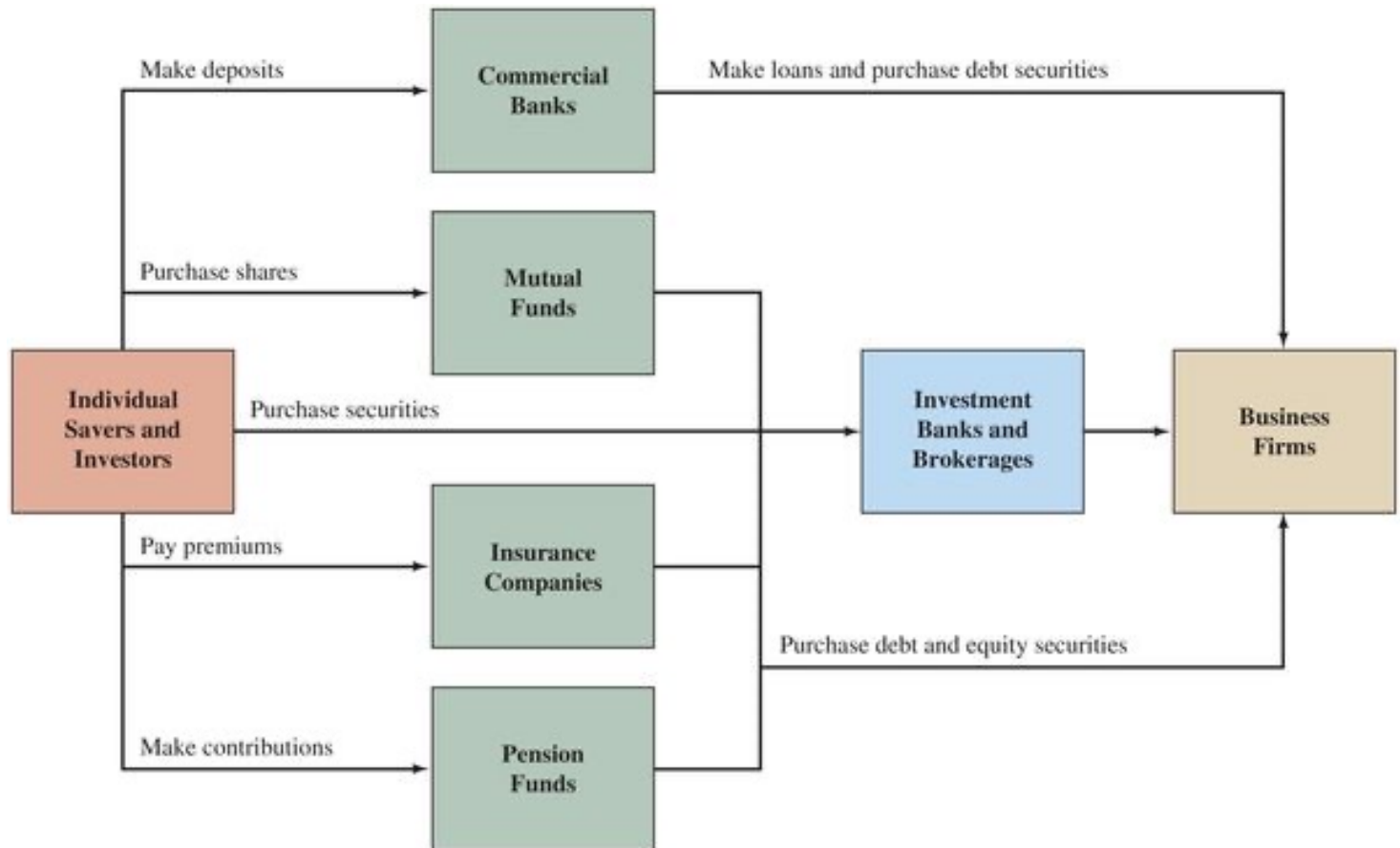
Finance Firms



# Types and Roles

- Figure 3.1 in text shows the types of major financial institutions as well as each institution's primary source of funds
- Figure 3.2 in text depicts the process of directing savings and investments of individuals through financial institutions to business firms

## Figure 3.1 Types of Financial Institutions





# Depository Institutions

- Accept deposits from individuals and then lend pooled deposits to businesses, governments, and individuals
- Four Types
  - Commercial Banks
  - Savings and Loan Associations
  - Savings Banks
  - Credit Unions



# Depository Institutions

- **Commercial Banks**

Depository institutions that accept deposits, issue check-writing accounts, and make loans

- **Thrift Institutions**

Noncommercial bank depository institutions that accumulate individual savings and primarily make consumer and mortgage loans



# Depository (Thrift) Institutions

- **Savings Banks**

Accept the savings of individuals & lend pooled savings to individuals mainly in the form of mortgage loans

- **Savings and Loan Associations**

Accept individual savings and lend pooled savings to individuals (primarily in the form of mortgage loans) and businesses

- **Credit Unions**

Cooperative nonprofit organizations that exist primarily to provide member depositors with consumer credit



# Contractual Savings Organizations

- Organizations collect premiums and contributions from participants and provide insurance against major financial losses and retirement
- Two Types
  - Insurance Companies
  - Pension Funds



# Contractual Savings Organizations

- **Insurance Companies**

Provide financial protection to individuals and businesses for life, property, liability, and health uncertainties

- **Pension Funds**

Receive contributions from employees and/or their employers and invest the proceeds on behalf of the employees for use during their retirement years





# Securities Firms

- Accept and invest individual savings and also facilitate the sale and transfer of securities between investors
- Three Types
  - Investment Companies (Mutual Funds)
  - Investment Banking Firms
  - Brokerage Firms



# Securities Firms

- **Investment Companies**

Sell shares in their firms to individuals and others and invest the pooled proceeds in corporate and government securities

- **Mutual Funds**

Open-end investment companies that can issue an unlimited number of their shares to their investors & use the pooled proceeds to purchase corporate and government securities



# Securities Firms

- **Investment Banking firms**  
Sell or market new securities issued by businesses to individual and institutional investors
- **Brokerage Firms**  
Assist individuals to purchase new or existing securities issues or to sell previously purchased securities



# Finance Firms

- Provide loans directly to consumers and businesses and help borrowers obtain mortgage loans on real property
- Two Types
  - Finance Companies
  - Mortgage Banking Firms



# Finance Firms

- **Finance Companies**

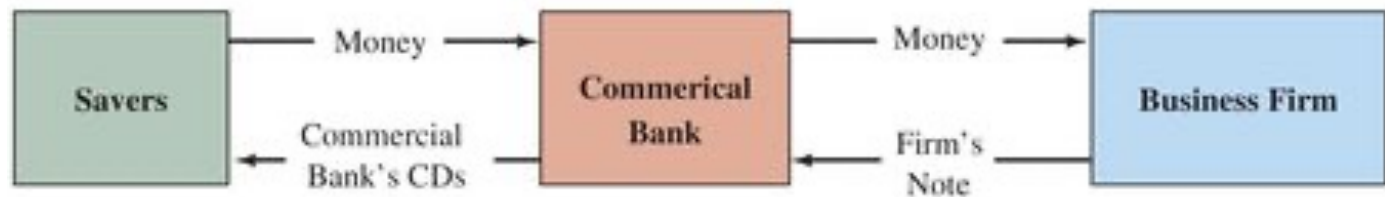
Provide loans directly to consumers and businesses or aid individuals in obtaining financing of durable goods and homes

- **Mortgage Banking Firms**

Originate mortgage loans on homes and other real property by bringing together borrowers and institutional investors

## Figure 3.2 Role of Financial Institutions in Directing Savings to Business Firms

Indirect Transfers: Commercial Bank



Indirect Transfers: Investment Bank





## Section 3.3: Overview of the Banking System

- LO 3.3 Describe how commercial banking and investment banking differ, and identify the functions of banks and the banking system.

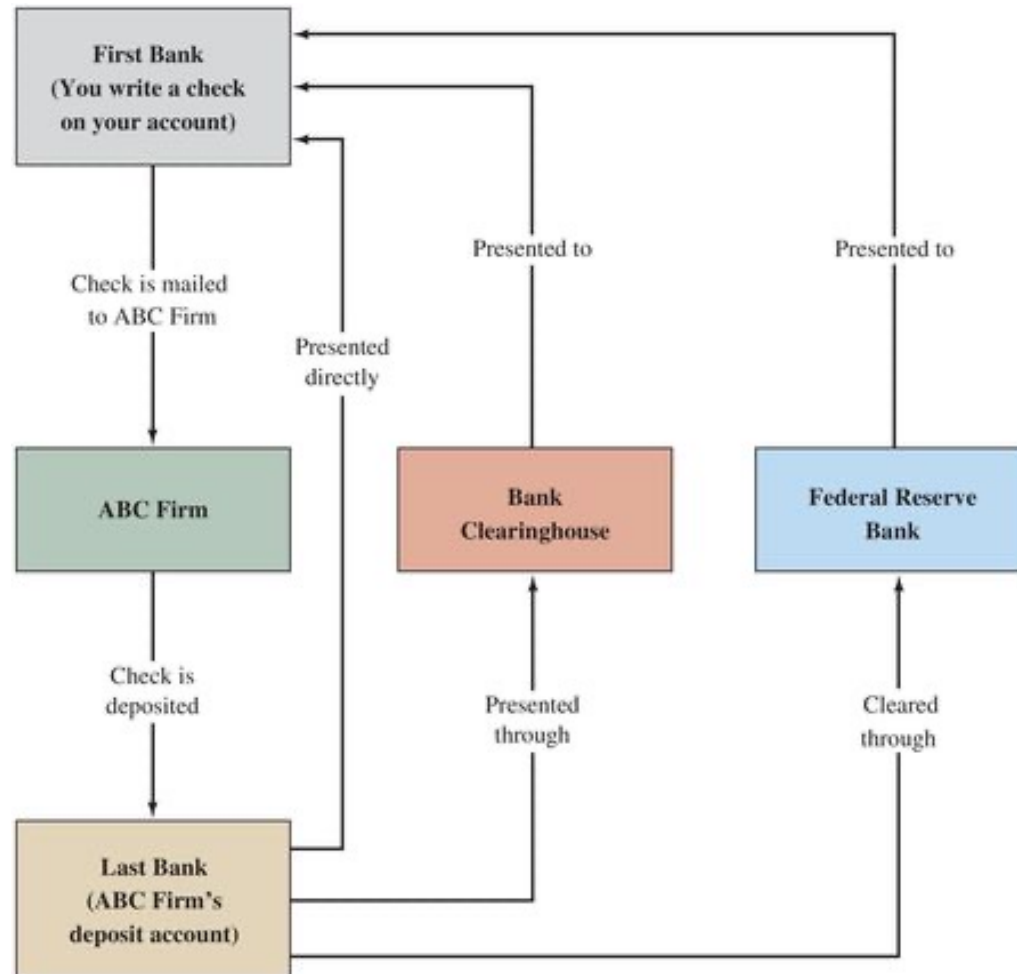


# Banking System

- **Commercial Bank**  
Accepts deposits, makes loans, and issues check-writing accounts
- **Investment Bank**  
Helps businesses sell their securities to raise financial capital
- **Universal Bank**  
Bank that engages in both commercial banking and investment banking activities



# Figure 3.3 Commercial Banking and Investment Banking Intermediation Activities





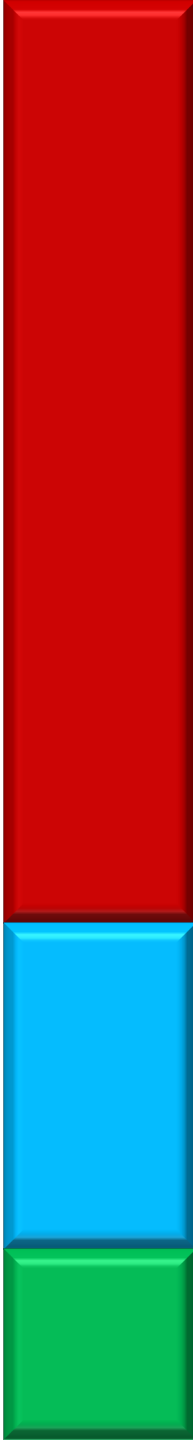
# Commercial Banking Intermediation Activities

1. *Savers* deposit money in a *Commercial Bank* and receive, in return, Certificates of Deposit (or have savings accounts set up for them)
2. The *Commercial Bank* lends money to a *Business Firm* and receives, in return, the firm's note which is a promise to repay the loan



# Investment Banking Intermediation Activities

1. *Savers* provide money to an *Investment Bank* and receive, in return, the securities (e.g., bonds) issued by a *Business Firm*
2. The *Investment Bank* either first purchases the *Business Firm's* securities (e.g., bonds) and resells them to *Savers*, or just “markets” the securities to *Savers*



# Legislation Involving Both Commercial and Investment Banking

- **Glass-Steagall Act of 1933:**  
Provided for separation of commercial banking and investment banking activities in the U.S.
- **Gramm-Leach-Bliley Act of 1999:**  
Repealed the separation of commercial banking and investment banking activities provided for in the Glass-Steagall Act



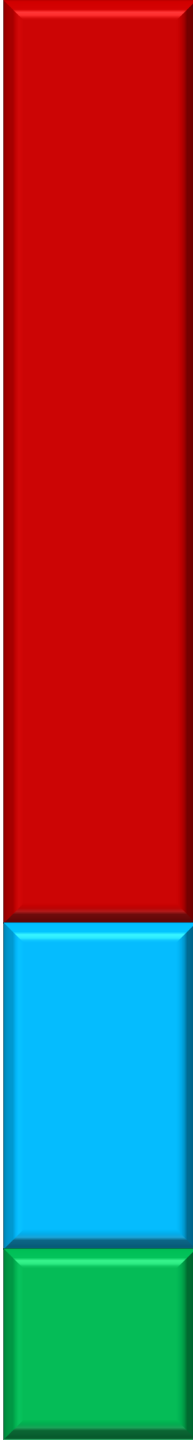
# Functions of Banks and the Banking System

Five Functions:

1. Accepting deposits
2. Granting loans
3. Issuing checkable deposit accounts
4. Clearing checks
5. Creating deposit money

Some Banks Perform a Sixth Function:

6. Raising financial capital for businesses  
(if involved in investment banking)



# Traditional Methods for Processing or Clearing Checks Through the Banking System

A “check” can be:

- Presented directly to the bank on which it was written
- Presented through a bank clearinghouse and then to the bank on which it was written
- Cleared through a Federal Reserve Bank and then presented to the bank on which it was written



## **Section 3.4: Historical Development of the U.S. Banking System**

- LO 3.4 Discuss the historical development of the U.S. banking system.



# Early Historical Developments

## Before the Civil War

- Early Chartered Banks
- First Bank of the United States
- Second Bank of the United States
- State Banks from 1836 to the Civil War

## Entry of Thrift Institutions





## **Section 3.5: Regulation of the Banking System**

- LO 3.5 Discuss general regulation of the banking system and how depositors' funds are protected.



# General Banking Legislation

## Laws Regulating the Banking System

- National Banking Act of 1864
- Federal Reserve Act of 1913
- Banking Act of 1933 (Glass-Steagall Act)
- Depository Institutions Deregulation and Monetary Control Act of 1980



# General Banking Legislation

## Laws Regulating the Banking System

- Garn-St. Germain Depository Institutions Act of 1982
- Gramm-Leach-Bliley Act of 1999
- Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010



# DODD-FRANK ACT OF 2010

- The Act was designed to promote financial stability by improving accountability and transparency in the financial system
- Making the Act comprehensive resulted in a 2300-page document that became very difficult to implement
- Of concern was the possibility of *financial systemic risk* where a few banks could lead to the collapse of an entire system



# Savings and Loan 1980s-1990s Crisis

- **What happened?**

Mid-1980s to Mid-1990s: Over 2,000 savings and loan associations (S&Ls) were closed or merged into other institutions

- **Why did it happen?**

S&Ls failed due to:

1. mismanagement
2. greed that led to fraudulent activities on the part of some officers and managers



# Nature of S&L Business Activities

- S&Ls borrow short-term by accepting the deposits of savers and paying interest on the savings
- S&Ls, in turn, provide long-term mortgage loans to help finance homes
- The result is loan illiquidity and financing cost risk associated with rising short-term interest rates



# Changing S&L Business Activities

- Deregulation caused additional S&L operating difficulties
- In early 1980s, S&Ls were permitted to invest in a range of high-yielding investments including speculative office/commercial buildings and “junk” (low quality) bonds issued by businesses
- S&L managements were ill prepared for deregulation resulting in mismanagement
- Greed also resulted in fraudulent behavior on the part of some officers and managers



# Protection of Depositors' Funds

- The Federal Deposit Insurance Corporation (FDIC) was created in 1933 to protect deposits in banks
- The Federal Savings and Loan Insurance Corporation (FSLIC) was created to protect deposits in S&Ls [replaced by SAIF in 1989]
- The National Credit Union Share Insurance Fund (NCUSIF) was created to protect deposits in credit unions





# Protection of Depositors' Funds

- Deposit account insurance has been increased over time--it reached \$100,000 in 1980 and currently is \$250,000
- Bank Insurance Fund: Collects annual insurance premiums from commercial banks to create the pool of funds available to FDIC for covering insured depositors
- Federal Deposit Insurance Corporation Improvement Act of 1991: Provides for differences in deposit premiums based on the relative riskiness of banks



## Section 3.6: Structure of Banks

- LO 3.6 Describe the structure of banks in terms of bank charters, branch banking, and bank holding companies.



# Bank Charters

- **Dual Banking System**  
Commercial banks can obtain charters either from the federal government or a state government
- **Federally Chartered Banks**  
Must have “national” in their titles and be members of the Federal Reserve System and the Federal Deposit Insurance Corporation



# Branch Banking

- **Unit Banking**

Exists when a bank can have only one full-service office

- **Limited Branch Banking**

Allows additional banking offices within a defined distance of a bank's main office

- **Statewide Branch Banking**

Allows banks to operate offices throughout a state



# Bank Holding Companies

- **Holding Company**  
A firm that owns and controls other organizations or firms
- **One Bank Holding Company**  
Permits a firm (OBHC) to own and control only one bank
- **Multibank Holding Company**  
Permits a firm (MBHC) to own and control two or more banks



# Bank Holding Company Act of 1956

- The Act defined bank holding companies, established control over MBHC expansions, and required divestment of MBHC existing non-banking activities
- The *Banking Holding Company Amendments of 1970* brought the OBHCs under the provisions of the 1956 Act
- The 1970 amendments allowed bank holding companies to acquire companies with activities closely related to banking, such as credit card operations, insurance, and data processing services



## Section 3.7: The Bank Balance Sheet

- LO 3.7 Describe the bank balance sheet and the major account categories that it contains.



# Representative Distribution of Bank Assets

- Cash and Balances Due from Depository Institutions (about 7% of total assets)
- Securities (about 18% of total assets)
- Loans (about 59% of total assets)
- Other Assets (about 16% of total assets)





# Types of Bank Loans

- Loans Secured by Real Estate
- Loans to Depository Institutions
- Commercial and Industrial Loans
- Loans to Individuals
- Other Loans



# **Representative Distribution of Bank Liabilities and Stockholders' Equity**

- Deposits (about 68% of total)
- Other Liabilities (about 24% of total)
- Stockholders' Equity (about 8% of total)



# Types of Bank Deposits

- Transaction Accounts
  - Demand Deposits
  - NOW Accounts
- Nontransactional Accounts
  - Time Deposits
  - Savings Deposits
- Foreign Deposits



## Section 3.8: Bank Management

- LO 3.8 Describe bank management practices in terms of bank liquidity and bank solvency, and explain why and how bank capital is managed.



# Basic Concepts

- **Bank Liquidity**  
Reflects ability to meet depositor withdrawals and to pay off other liabilities when due
- **Bank Solvency**  
Reflects ability to keep the value of a bank's assets greater than its liabilities



# Liquidity Management

- **Asset Management**  
Maintaining “primary reserves” and “secondary reserves” to help meet depositor withdrawal demands and other liabilities when due
- **Liability Management**  
Adjusting interest rates on rate sensitive liabilities like CDs to help maintain a desired level of liquidity



# Capital Management: Three Ratios

- **Common Equity Capital Ratio**

$(\text{Common Equity} / \text{Total Assets}) \times 100$

- **Tier 1 Ratio**

$(\text{Common Equity} + \text{Noncumulative preferred stock} + \text{Trust-Preferred Securities} - \text{Intangible Assets}) / \text{Risk-Adjusted Assets}$

**Where:** asset accounts are risk-weighted from low risk (0.00) for cash & government securities to high risk (1.00) for ordinary loans to arrive at total risk-adjusted assets



# Capital Management: Three Ratios

- **Total Capital Ratio:**

(Tier 1 Capital + Tier 2 Capital)/Risk-Adjusted Assets

**Where:** Tier 2 Capital equals a bank's loan-loss reserve amount + other qualifying securities (e.g., subordinated debt and perpetual preferred stock) + net unrealized gains on marketable securities





# Capital Management Ratio Examples

- **Basic Information:** a bank has total assets = \$100 million; risk-adjusted assets = \$80 million; common equity = \$4.5 million; trust-preferred securities = \$0.5 million; loan loss reserve = \$1 million; and subordinated debt = \$1.5 million
- **Common Equity Capital Ratio**  
 $= (\$4.5 \text{ million}) / \$100 \text{ million} = 4.5\%$



# Capital Management Ratio Examples

- **Tier 1 Ratio**  
$$= (\$4.5 \text{ million} + \$0.5 \text{ million}) / \$80 \text{ million} = \$5 \text{ million} / \$80 \text{ million} = 6.3\%$$
- **Total Capital Ratio**  
$$= (\$5 \text{ million} + \$1 \text{ million} + \$1.5 \text{ million}) / \$80 \text{ million} = \$7.5 \text{ million} / \$80 \text{ million} = 9.4\%$$



## **Section 3.9: International Banking and Foreign Systems**

- LO 3.9 Describe characteristics of several foreign banking systems.



# Basic Concepts and Terms

- **International Banking**  
Exists when banks operate in more than one country
- **International Banking Act of 1978**  
Provided more consistent regulation of banks across countries
- **Banking Developments**  
Germany and the United States are examples of universal banking countries



# Web Links

- [www.citibank.com](http://www.citibank.com)
- [www.chase.com](http://www.chase.com)
- [www.stlouisfed.org](http://www.stlouisfed.org)
- [www.federalreserve.gov](http://www.federalreserve.gov)
- [www.sba.gov](http://www.sba.gov)