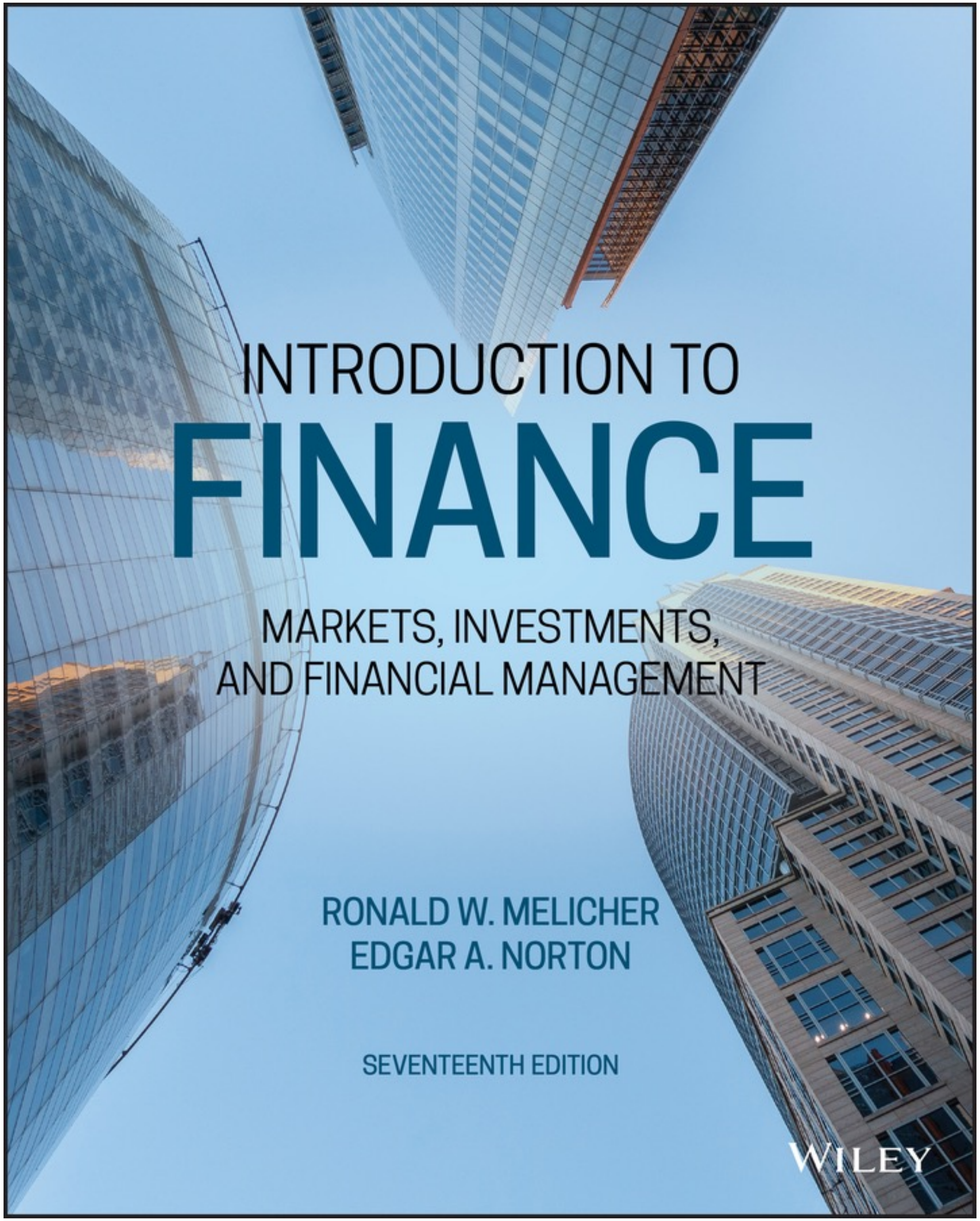
Chapter 4

The Federal Reserve System



Learning Objectives

- LO 4.1 Discuss how the Federal Reserve System (Fed) responded to the recent financial crisis and Great Recession.
- LO 4.2 Identify three weaknesses of the national banking system that existed before the Federal Reserve System was created.
- LO 4.3 Describe the Federal Reserve System and identify the five major components into which it is organized.

Learning Objectives

- LO 4.4 Identify and describe the policy instruments used by the Fed to carry out monetary policy.
- LO 4.5 Discuss the Fed's supervisory and regulatory functions.
- LO 4.6 Identify important Fed service functions.
- LO 4.7 Identify specific examples of foreign countries that use central banking systems to regulate money supply and implement monetary policy.

Section 4.1: U.S Central Bank Response to the Financial Crisis and Great Recession

- LO 4.1 Discuss how the Federal Reserve System (Fed) responded to the recent financial crisis and Great Recession.

- Federal Reserve System

  U.S. central bank that sets monetary policy and regulates the banking system

Government Efforts to Encourage Home Ownership

- The federal government has historically encouraged home ownership by supporting liquid markets for home mortgages
- When banks and other lenders are able to sell their mortgages in a secondary mortgage market to other investors, the proceeds from the sales can be used to make new mortgage loans

Government Efforts to Encourage Home Ownership

- Three entities were created:
- Federal National Mortgage Association (Fannie Mae)

  Created in 1938 to support the financial markets by purchasing home mortgages from banks so that the proceeds could be lent to other borrowers

Government Efforts to Encourage Home Ownership

- Government National Mortgage Association (Ginnie Mae)

  Created in 1968 to issue its own debt securities to obtain funds that are invested in mortgages made to low to moderate income home purchasers

- Federal Home Loan Mortgage Corporation (Freddie Mac)

  Created in 1970 to support mortgage markets by purchasing and holding mortgage loans

Financial Crisis and Great Recession Developments

- The housing market collapse that began in mid-2006 led to a "Perfect Financial Storm" involving both the 2007-08 financial crisis and the 2008-09 Great Recession
- In 2008, many government officials and business executives felt the U.S. and world financial systems were on the verge of collapse

Federal Reserve System Response

- As mortgage loan defaults increased in 2007-08, the value of mortgage-backed securities decreased
- Fannie Mae and Freddie Mac suffered cash and liquidity crises and had to be rescued by the Federal Reserve

Federal Reserve System Response

- The Fed also helped a number of financially troubled institutions merge with stronger institutions
- In addition to direct intervention, the Fed engaged in quantitative easing actions to help avoid a financial system collapse in 2008, and then later to stimulate economic activity

Section 4.2: The U.S. Banking System Prior to the Fed

- LO 4.2 Identify three weaknesses of the national banking system that existed before the Federal Reserve System was created.

Early Efforts to Create a National Banking System

- The early U.S. banking “system” consisted primarily of state banks and was plagued by unsound banking practices
- National Banking System: Established when National Banking Acts were passed in 1863 and 1864 (see Chapter 3 for a discussion of the 1864 Act)

Early Efforts to Create a National Banking System

- Weaknesses of the National Banking System
  - Inefficient payments system
  - Money supply “inelastic” or “inflexible” to demand changes
  - Liquidity problems due to inefficient lending/borrowing mechanism

Movement to Central Banking

- Central Bank
  Federal government agency that facilitates operation of the financial system and regulates money supply growth
- U.S. Federal Reserve System
  Central bank that sets monetary policy and regulates the U.S. banking system

Movement to Central Banking

- By the late 1800s, opposition to a strong central banking system in the U.S. still existed
- The Federal Reserve Act of 1913 provided a compromise between a system of independently owned banks and a single central bank by providing for a system of a series of central banks representing different geographical regions

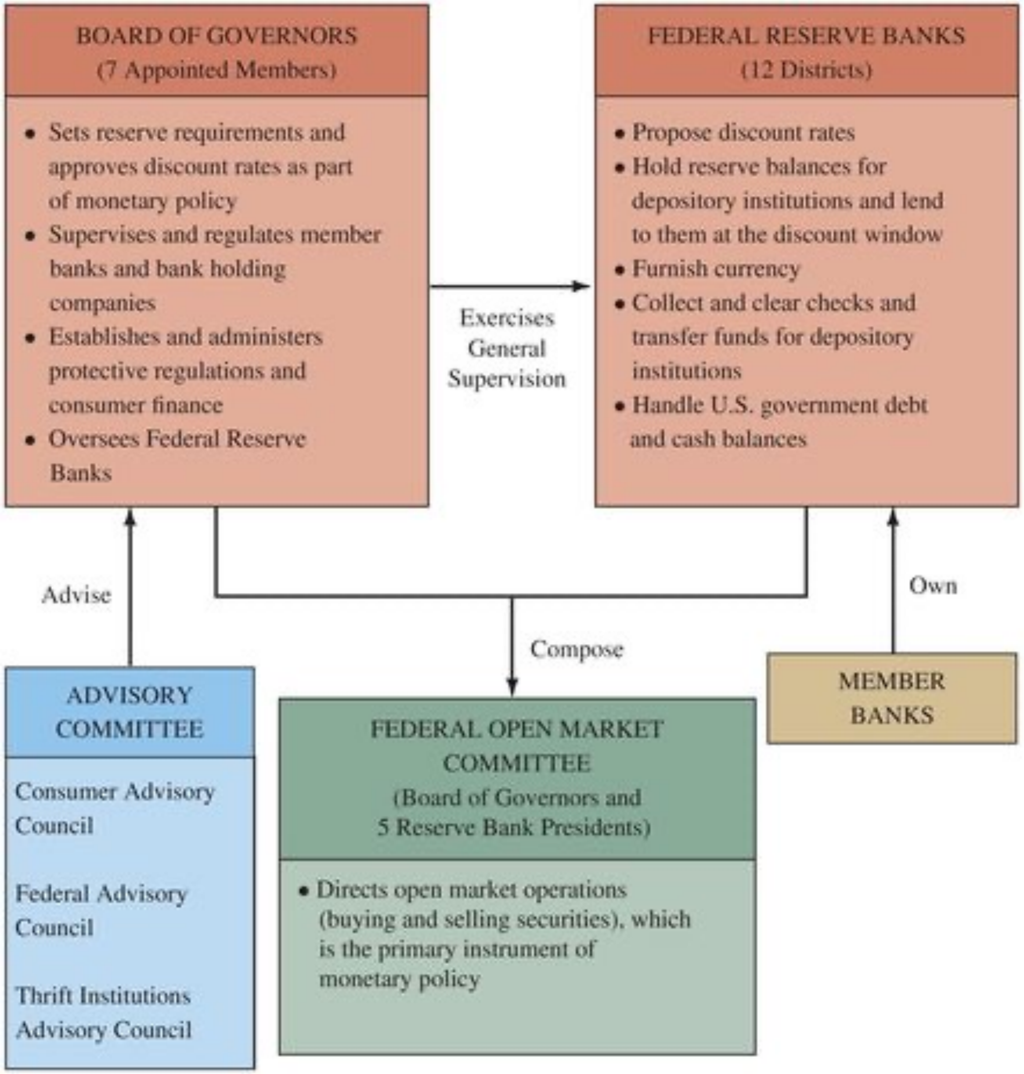
Section 4.3: Structure of the Federal Reserve System

- LO 4.3 Describe the Federal Reserve System and identify the five major components into which it is organized.

Components of the Federal Reserve System

- The Fed System consists of five components:
  - Member Banks
  - Federal Reserve District Banks
  - Board of Governors
  - Federal Open Market Committee
  - Advisory Committees

Figure 4.1 Organization of the Federal Reserve System



Member Banks

- All national banks must be members of the Fed
- State-chartered banks are permitted to join the Fed system
- All member banks must purchase capital stock of the Reserve Bank of their district up to a maximum of 6%
- About one-third of commercial banks are members of the Fed
- Member banks hold about three-fourths of the deposits of all commercial banks

Federal Reserve District Banks

- The Federal Reserve Act of 1913 provided for establishment of twelve Federal Reserve districts with each district served by a Federal Reserve Bank
- In addition to the twelve Reserve Banks, twenty-five branch banks have been established
- The geographically large western Federal Reserve districts have most of the Reserve Branch Banks

Federal Reserve District Banks

District banks:

- Hold reserve balances for depository institutions
- Lend to depository institutions located in their districts at the prevailing discount (interest) rate
- Issue new currency and withdraw damaged currency from circulation
- Collect and clear checks and transfer funds for depository institutions

Federal Reserve District Banks

- Each Reserve Bank has corporate officers and a board of nine directors
- Directors serve terms of three years
- Three directors are appointed each year so that appointments are staggered
- Directors are divided into three groups: Class A, Class B, & Class C

Federal Reserve District Banks: Directors and Officers

- Class A Directors:
  Represent member banks of the district
- Class B Directors:
  Represent nonbanking interests (commerce, agriculture, & industry)
- Class C Directors:
  Appointed by the Fed Board of Governors (may not be in banking)

Fed Board of Governors (BOG)

- Sets reserve requirements and approves discount rates as part of monetary policy
- Supervises and regulates member banks and bank holding companies
- Establishes & administers protective regulations and consumer finance
- Oversees Federal Reserve Banks

Federal Open Market Committee

- Comprised of the Fed Board of Governors and Five Reserve Bank Presidents
- Directs open market operations (buying and selling of U.S. government securities), which are the primary instruments of monetary policy

Advisory Committees

- Federal Advisory Council: provides advice and general information on banking-related issues to the BOG
- Consumer Advisory Council: provides advice relating to consumer matters
- Thrift Institutions Advisory Council: provides advice on issues that directly affect thrift institutions

Chairs of the Fed Board of Governors Since Early 1950s

- William McChesney Martin Jr. (1951-1970)
- Arthur Burns (1970-1978)
- G. William Miller (1978-1979)
- Paul Volcker (1979-1987)
- Alan Greenspan (1987-2006)
- Ben Bernanke (2006-2014)
- Janet Yellen (2014-2018)
- Jerome Powell (2018-present)

Four Recent Past Chairs of the Fed Board of Governors

- **Paul Volcker (Chair, 1979-1987)**
  Under his guidance, a restrictive Fed policy was successful in bringing down the double-digit inflation of the 1970s and beginning of the 1980s.

Four Recent Past Chairs of the Fed Board of Governors

- **Alan Greenspan (Chair, 1987-2006)** Under his guidance, the U.S. generally benefited from an easy monetary policy, low inflation, real economic growth, relatively low interest rates, and relatively high stock prices.

Four Recent Past Chairs of the Fed Board of Governors

- **Ben Bernanke (Chair, 2006-2014)** Became Fed Chair in February, 2006, a few months before the housing price bubble burst and the economy started slowing down. He was responsible for setting monetary policy that helped guide the U.S. through the 2007-2008 financial crisis and the 2008-09 Great Recession.

Four Recent Past Chairs of the Fed Board of Governors

- **Janet Yellen (Chair, 2014-2018)**

  Became Fed Chair in February, 2014 and inherited from Ben Bernanke the Fed's easy monetary policy developed to address the 2007-2009 financial and economic crises. Under Janet Yellen's leadership, the Fed increased its target for the federal funds rate from 0.00-.25% (a level maintained for nearly eight years) to .25-.50% in December, 2015. A second quarter-point increase occurred in 2016, with three more quarter-point increases in 2017.

Current Chair of the Fed Board of Governors

- **Jerome Powell (Chair, 2018-present)**

  Became Fed Chair in February, 2018 and inherited from Janet Yellen a Fed policy of trying to increase short term interest rates to more normal historical levels. Jerome Powell oversaw four additional quarter point increases in 2018 with the last being a target of 2.25%-2.50%. The Fed goals of maintaining reasonable economic growth and controlling inflation to 2% remained.

Section 4.4: Monetary Policy Functions and Instruments

- LO 4.4 Identify and describe the policy instruments used by the Fed to carry out monetary policy.

Overview of Fed Operations

- Dynamic Actions:

  Fed actions that stimulate or repress economic activity or the level of prices
- Defensive Activities:

  Fed activities that offset unexpected monetary developments and contribute to the smooth functioning of the economy
- Accommodative Function:

  Fed efforts to meet credit needs of individuals and institutions, clearing checks, and supporting depository institutions

Monetary Policy and Instruments

- Monetary policy is formulated by the Fed to regulate money supply growth (as well as the cost and availability of money)
- Basic Policy Instruments
  - Changing Reserve Requirements
  - Changing the Discount Rate
  - Conducting Open-Market Operations
- Nontraditional Monetary Policy
  - Quantitative Easing

Monetary Policy Instruments

- Reserve Requirements
  Fed sets reserve requirements for depository institutions
- Discount (Primary Credit) Rate Policy
  Fed sets interest rate at which it will lend to depository institutions
- Open-Market Operations
  Fed buys/sells government securities to change bank reserves

Reserve Requirements: Basic Concepts

- Fractional Reserve System

  Reserves that must be held with Fed equal to a certain percentage of bank deposits

- Bank Reserves

  Vault cash and deposits held at Federal Reserve Banks

- Required Reserves

  Minimum amount of total reserves a depository institution must hold

Reserve Requirements: Basic Concepts

- Required Reserves Ratio
  Percentage of deposits that must be held as reserves
- Excess Reserves
  Amount by which total reserves are greater than required reserves

Discount Rate Policy

- Fed Discount Rate

  Interest rate that a bank or other depository institution must pay to borrow from its regional Federal Reserve Bank
- Primary Credit Rate

  Interest rate used in practice to reflect the discount rate charged by Reserve Banks for loans to depository institutions
- Forms of Borrowing

  Borrowing institution may receive an “advance” (loan) or may “discount” (sell) to the Reserve Bank its “eligible paper”

Open-Market Operations

- Open-Market Operations

  Buying and selling of securities in the "open market" by the Fed to alter bank reserves and the supply of money

- Fed's Assets

  Primarily held in the form of U.S. Treasury, government agency, and mortgage-backed securities

- Original Federal Reserve Act

  Did not provide for open-market operations

Quantitative Easing: A New Monetary Policy Tool

- Quantitative Easing (QE): nontraditional monetary policy designed to stimulate economic activity
- Fed purchases financial assets from banks and other financial institutions with newly created money resulting in larger bank excess reserves and increased money supply and liquidity

Quantitative Easing: A New Monetary Policy Tool

- Quantitative Easing (QE1) was begun in late-2008 when the Fed began buying large amounts of mortgage-backed securities and Treasury securities from financial institutions
- QE2 was initiated in 2010 and QE3 in 2012 in an effort to stimulate economic activity

Implementation of Monetary Policy

- Monetary policy can focus either on:
  1. Trying to control the rate of change or growth in the money supply (e.g., M1)

     OR

  2. Targeting a level for a specific type of interest rate (e.g., federal funds rate)
- Federal Funds Rate

  Interest rate on overnight loans from banks with excess reserves to banks who have deficit reserves

Section 4.5: Fed Supervisory and Regulatory Functions

- LO 4.5 Discuss the Fed’s supervisory and regulatory functions.

Fed Supervisory Responsibilities

- On-site examination of commercial banks
- Function shared with:
  --Office of the Comptroller of the Currency (OCC)
  --Federal Deposit Insurance Corporation (FDIC)
  --state regulatory agencies

Supervision and Regulation of Non-Commercial Banks

- Credit Unions
  Regulated by the National Credit Union Administration (NCUA)
- Savings & Loan Associations and Savings Banks
  Regulated by the Office of Thrift Supervision (OTS)

Fed Regulatory Responsibilities

- Consumer Credit Protection Act of 1968

  Act requires clear explanation of consumer credit costs and prohibits overly high-priced credit transactions

- Regulation Z

  Enacts Truth in Lending section of the Consumer Credit Protection Act with intent to make consumers able to compare costs of alternate forms of credit

Section 4.6: Fed Service Functions

- LO 4.6 Identify important Fed service functions.

Fed Service Responsibilities

- The Payments Mechanism

  Necessary for the monetary system to carry out the financial function of transferring money.

  Involves:

  – Regulating amount of coin & currency
  – Check clearance and collection
  – Check routing
- Transfer of Credit
- Electronic Funds Transfers

Section 4.7: Central Banks in Other Countries

- LO 4.7 Identify specific examples of foreign countries that use central banking systems to regulate money supply and implement monetary policy.

Foreign Country Central Banks

- United Kingdom

  Bank of England (BOE)--created much earlier than the Fed

- Japan

  Bank of Japan (BOJ)--created in 1947

- European Monetary Union

  European Central Bank (ECB)--created in 1999

  – Conducts monetary policy for the European countries that have adopted the euro as their common currency

Web Links

- www.federalreserve.gov
- www.stlouisfed.org
- www.frbsf.org
- www.minneapolisfed.org
- www.ecb.int