

# Central Banks and Federal Reserve System

Economics 301: Money and Banking

## 1

### 1.1 Goals

#### Goals and Learning Outcomes

- Goals:
  - Learn about possible objectives for monetary policy.
  - Learn about structure of Federal Reserve System.
- Learning Outcomes:
  - LO6: Explain the structure of the Federal Reserve System and the mechanisms in which it controls the money supply.

### 1.2 Reading

#### Reading

- Hubbard & O'Brien, Chapter 13.

## 2 Goals of Monetary Policy

### 2.1 Inflation Stability

#### Inflation Stability

- **Inflation Stability:** Overriding goal of most central banks is to maintain a low and stable rate of inflation.
- Why Stability?
  - When overall price level changes unpredictably, it is difficult to interpret changes in prices of individual goods, services, and assets.
  - Leads to sub-optimal decisions for risk averse people, less efficient financial system.
  - Stability essential for long-term planning.

- Why inflation?
  - Unexpected deflation redistributes wealth from borrowers to lenders.
  - Unexpected inflation redistributes wealth from lenders to borrowers.
  - Expectations for deflation decreases current demand for products and services.

### **Time Consistency Problem**

- Central bank's desire for price stability may take back seat to concerns over low production, unemployment, etc.
- If central bank regularly abandons long-run price stability objective - people begin to expect that.
- Decreases central bank's credibility.
- Increases uncertainty, risk, and produces a less efficient economy and financial system.
- Time Consistency Problem of parenting:
  - Long-term policy - don't reward bad behavior.
  - Short-term concern - give kid what he wants to shut him up.
- Kydland and Prescott argue, the *less* a government does to stabilize the economy, the *more* stable it will be.

## **2.2 Other Goals**

### **High Level of Employment**

- Reasons to aim for a high level of employment:
  - High unemployment leads to idle workers, idle resources, lower GDP.
  - Employment statistics computed on a monthly basis by the Bureau of Labor Statistics.
  - Social cost of unemployment.
- Three types of unemployment:
  1. Frictional unemployment: unemployment caused by normal turn-over in the labor force, normal job/candidate search costs.
  2. Structural unemployment: unemployment caused by permanent decreases in demand for certain types of labor (perhaps due to changes in international trade or technology).
  3. Cyclical unemployment: unemployment associated with downturns in the economy.

## Economic Growth

- Closely related to goals of high employment / high output.
- This policy implies a long-run goal, not growth from quarter to quarter.
- Policies that promote:
  - Firms to invest in new capital, higher future production possibilities.
  - Consumers to save more (in equilibrium saving = investment).

## Other Goals

- Financial market stability: financial crisis interferes with the financial market's function to channel saving to people with productive investment opportunities.
- Interest rate stability:
  - Encourages minimal uncertainty regarding bond market capital gains.
  - Encourages long-run investment in capital.
- Stability in foreign exchange markets:
  - Rises in the value of the dollar hurts exporting industries.
  - Decreases in the value of the dollar hurts consumers, industries that depend on foreign factors of production.

## Hierarchical and Dual Mandates

- **Hierarchical mandate:** explicit statement by a central bank that inflation stability is their first priority.
- Examples: Bank of England, Bank of Canada, European Central Bank, Reserve Bank of New Zealand.
- **Dual mandate:** central banks whose rules allow for multiple objectives.
- United States Federal Reserve has a dual mandate: promote long-run output growth and inflation stability.
- Dual mandates can lead to time consistency problems.

## 3 Structure of Federal Reserve

### 3.1 Board of Governors

#### Board of Governors

- Seven members appointed by the president and confirmed by the senate.
- Each has a 14 year term. A new seat comes up every 2 years.
- No re-appointments, unless finishing an incomplete term.
- One chair person, one vice chair person, each with a 4 year renewable term.
- Chair and vice chair are appointed from Board of Governors by president / approved by senate
- Chair person's salary = \$201,700 (set by congress)
- By law, appointments must result in "fair representation of the financial, agricultural, industrial, and commercial interests and geographical divisions of the country"

#### Federal Reserve Chair: Current

**Jerome Powell** Appointed by Pres. Donald Trump in 2018



#### Federal Reserve Chair: Past

**Janet Yellen**

- In office: 2014-2018
- Appointed by Pres. Barack Obama in 2014



**Federal Reserve Chair: Past  
Alan Greenspan**

- In office: 1987-2006
- Appointed by Pres. Ronald Reagan in 1987
- Reappointed by Pres. George Bush in 1992
- Reappointed by Pres. Clinton twice in 1996 and 2000
- Reappointed by Pres. George W. Bush in 2004



**Federal Reserve Chair: Past  
Paul Volcker**

- In office: 1983-1987
- Appointed by Pres. Jimmy Carter in 1979
- Reappointed by Pres. Ronald Reagan in 1983

- In his tenure, raised interest rates to historical levels to combat historically high inflation



**Federal Reserve Chair: Past  
George William Miller**

- Who?
- In office: 1978-1979
- Appointed by Pres. Jimmy Carter in 1978
- Resigned in 1979



**Federal Reserve Chair: Past  
Arthur Burns**

- In office: 1970-1978
- Appointed by Pres. Richard Nixon in 1970
- Reappointed by Pres. Richard Nixon in 1974
- Very high inflation. The CPI rose by 74% during his tenure.



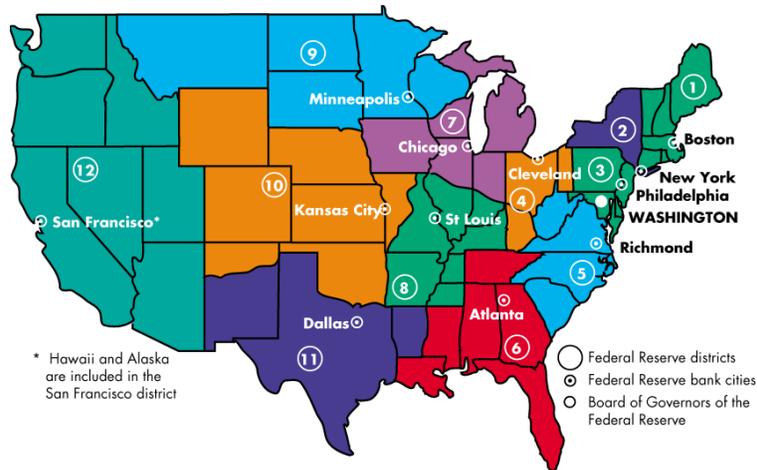
### Federal Open Market Committee

- Board of governors
- President of the New York Federal Reserve district bank
- Four presidents of the other regional Federal Reserve district banks (rotate)
- This group of 12 makes decisions for monetary policy
- Meet every six weeks
- Website: <https://www.federalreserve.gov/monetarypolicy/fomccalendars.htm> (Includes meeting schedule, official statements, subsequent press conferences, meeting minutes)

### Federal Reserve Districts

- Federal Reserve Board of Governors (part of federal government)
- Twelve Federal Reserve Districts, each with a federal reserve bank
- Federal Reserve District Banks are **not** part of the government
- Private corporations owned by member banks
- New York Fed implements monetary policy

### Federal Reserve Districts



## Federal Reserve Districts



## 3.2 Federal Reserve Banks

### Functions of Federal Reserve Banks

- Check clearing services.
- Issue new currency.
- Withdraw damaged currency.
- Provide discount loans to banks in their district.
- Evaluate proposals for bank mergers and expansion of services.
- Collect data and report on local and national economic conditions.
- Hold reserve deposits for banks in their district.

### 3.3 Central Bank Independence

#### Central Bank Independence

- Federal Reserve is largely independent from whims of politicians.
- Board of governors have long terms (14 years).
- Fed does not use tax dollars - they actually earn around \$40 billion / year.
- Legislation that structures Fed was written by Congress, they can change it.
- Case for independence:
  - Policy that results in successfully meeting long-term goals, may have negative short-run consequences.
  - Possible pressure to finance Federal Government budget deficits.