# 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:
  - $1. \ \, {\rm Frictional\ unemployment:\ unemployment\ causes\ by\ normal\ turn-over} \\ \ \, {\rm in\ the\ labor\ force,\ normal\ job/candidate\ search\ costs.} \\$
  - 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 Federal Reserve Districts

## Structure of the Federal Reserve

- 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 14 years.
  - One chairman with a 4 year renewable term.
- Federal Open Market Committee
  - Board of governors
  - President of the New York Fed
  - Four presidents of the other regional feds (rotate).
- Federal Reserve Districts
  - Twelve Federal Reserve Districts, each with a federal reserve bank.
  - 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.
  - Fiscal authority has demonstrated inability.