

Central Banks and Federal Reserve System

Economics 301: Money and Banking

Goals and Learning Outcomes

1 / 16

- 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.

Goals and Learning Outcomes

1 / 16

- 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.

Reading

2 / 16

- Hubbard & O'Brien, Chapter 13.

Inflation Stability

3 / 16

- **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.

Inflation Stability

3 / 16

- **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.

Inflation Stability

3 / 16

- **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.

Inflation Stability

3 / 16

- **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.

Inflation Stability

3 / 16

- **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.

Inflation Stability

3 / 16

- **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.

Inflation Stability

3 / 16

- **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.

Inflation Stability

3 / 16

- **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.

Inflation Stability

3 / 16

- **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

4 / 16

- 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.

Time Consistency Problem

4 / 16

- 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.

Time Consistency Problem

4 / 16

- 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.

Time Consistency Problem

4 / 16

- 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.

Time Consistency Problem

4 / 16

- 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.

Time Consistency Problem

4 / 16

- 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.

Time Consistency Problem

4 / 16

- 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.

Time Consistency Problem

4 / 16

- 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.

High Level of Employment

5 / 16

- 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:
 - Frictional unemployment: unemployment causes by normal turn-over in the labor force, normal job/candidate search costs.
 - Structural unemployment: unemployment caused by permanent decreases in demand for certain types of labor (perhaps due to changes in international trade or technology).
 - Cyclical unemployment: unemployment associated with downturns in the economy.

High Level of Employment

5 / 16

- 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:
 - Frictional unemployment: unemployment causes by normal turn-over in the labor force, normal job/candidate search costs.
 - Structural unemployment: unemployment caused by permanent decreases in demand for certain types of labor (perhaps due to changes in international trade or technology).
 - Cyclical unemployment: unemployment associated with downturns in the economy.

High Level of Employment

5 / 16

- 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:
 - Frictional unemployment: unemployment causes by normal turn-over in the labor force, normal job/candidate search costs.
 - Structural unemployment: unemployment caused by permanent decreases in demand for certain types of labor (perhaps due to changes in international trade or technology).
 - Cyclical unemployment: unemployment associated with downturns in the economy.

High Level of Employment

5 / 16

- 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:
 - Frictional unemployment: unemployment caused by normal turn-over in the labor force, normal job/candidate search costs.
 - Structural unemployment: unemployment caused by permanent decreases in demand for certain types of labor (perhaps due to changes in international trade or technology).
 - Cyclical unemployment: unemployment associated with downturns in the economy.

High Level of Employment

5 / 16

- 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.

High Level of Employment

5 / 16

- 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 causes 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.

High Level of Employment

5 / 16

- 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.

High Level of Employment

5 / 16

- 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

6 / 16

- 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).

Economic Growth

6 / 16

- 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).

Economic Growth

6 / 16

- 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).

Economic Growth

6 / 16

- 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).

Economic Growth

6 / 16

- 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

7 / 16

- 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.

Other Goals

7 / 16

- 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.

Other Goals

7 / 16

- 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.

Other Goals

7 / 16

- 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.

Other Goals

7 / 16

- 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.

Other Goals

7 / 16

- 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.

Other Goals

7 / 16

- 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.

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.

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.

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.

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.

Board of Governors

9 / 16

- 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"

Board of Governors

9 / 16

- 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"

Board of Governors

9 / 16

- 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"

Board of Governors

9 / 16

- 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"

Board of Governors

9 / 16

- 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"

Board of Governors

9 / 16

- 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"

Board of Governors

9 / 16

- 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 Chairs

10/ 16

- **Current chair: Janet Yellen (Appointed by Obama in February 2014)**
- Ben Bernanke (Office: 2006 - 2014)
 - Appointed by G.W. Bush in 2006 and reappointed by Obama in 2010.
- Alan Greenspan (Office: 1987-2006)
 - Appointed by Reagan in 1987. Reappointed by Bush in 1992, Clinton in 1996 and 2000, and by G. W. Bush in 2004.
- Paul Volker (Office: 1997-1983).
 - Appointed in 1979 by Carter, reappointed in 1983 by Reagan.
 - Charged with eliminating a high period of inflation in the U.S.
- George William Miller (Office: 1978-1979)
 - Very short term. Appointed by Carter in 1978, Resigned August 6th, 1979.
- Arthur Burns (Office: 1970-1978)
 - Appointed and reappointed in 1970, 1974 by Richard Nixon.
 - Very high inflation. The CPI rose by 74% during his tenure.

Federal Reserve Chairs

10/ 16

- Current chair: Janet Yellen (Appointed by Obama in February 2014)
- Ben Bernanke (Office: 2006 - 2014)
 - Appointed by G.W. Bush in 2006 and reappointed by Obama in 2010.
- Alan Greenspan (Office: 1987-2006)
 - Appointed by Reagan in 1987. Reappointed by Bush in 1992, Clinton in 1996 and 2000, and by G. W. Bush in 2004.
- Paul Volker (Office: 1997-1983).
 - Appointed in 1979 by Carter, reappointed in 1983 by Reagan.
 - Charged with eliminating a high period of inflation in the U.S.
- George William Miller (Office: 1978-1979)
 - Very short term. Appointed by Carter in 1978, Resigned August 6th, 1979.
- Arthur Burns (Office: 1970-1978)
 - Appointed and reappointed in 1970, 1974 by Richard Nixon.
 - Very high inflation. The CPI rose by 74% during his tenure.

Federal Reserve Chairs

10/ 16

- Current chair: Janet Yellen (Appointed by Obama in February 2014)
- Ben Bernanke (Office: 2006 - 2014)
 - Appointed by G.W. Bush in 2006 and reappointed by Obama in 2010.
- Alan Greenspan (Office: 1987-2006)
 - Appointed by Reagan in 1987. Reappointed by Bush in 1992, Clinton in 1996 and 2000, and by G. W. Bush in 2004.
- Paul Volker (Office: 1997-1983).
 - Appointed in 1979 by Carter, reappointed in 1983 by Reagan.
 - Charged with eliminating a high period of inflation in the U.S.
- George William Miller (Office: 1978-1979)
 - Very short term. Appointed by Carter in 1978, Resigned August 6th, 1979.
- Arthur Burns (Office: 1970-1978)
 - Appointed and reappointed in 1970, 1974 by Richard Nixon.
 - Very high inflation. The CPI rose by 74% during his tenure.

Federal Reserve Chairs

10/ 16

- Current chair: Janet Yellen (Appointed by Obama in February 2014)
- Ben Bernanke (Office: 2006 - 2014)
 - Appointed by G.W. Bush in 2006 and reappointed by Obama in 2010.
- Alan Greenspan (Office: 1987-2006)
 - Appointed by Reagan in 1987. Reappointed by Bush in 1992, Clinton in 1996 and 2000, and by G. W. Bush in 2004.
- Paul Volker (Office: 1979-1983).
 - Appointed in 1979 by Carter, reappointed in 1983 by Reagan.
 - Charged with eliminating a high period of inflation in the U.S.
- George William Miller (Office: 1978-1979)
 - Very short term. Appointed by Carter in 1978, Resigned August 6th, 1979.
- Arthur Burns (Office: 1970-1978)
 - Appointed and reappointed in 1970, 1974 by Richard Nixon.
 - Very high inflation. The CPI rose by 74% during his tenure.

Federal Reserve Chairs

10/ 16

- Current chair: Janet Yellen (Appointed by Obama in February 2014)
- Ben Bernanke (Office: 2006 - 2014)
 - Appointed by G.W. Bush in 2006 and reappointed by Obama in 2010.
- Alan Greenspan (Office: 1987-2006)
 - Appointed by Reagan in 1987. Reappointed by Bush in 1992, Clinton in 1996 and 2000, and by G. W. Bush in 2004.
- Paul Volker (Office: 1997-1983).
 - Appointed in 1979 by Carter, reappointed in 1983 by Reagan.
 - Charged with eliminating a high period of inflation in the U.S.
- George William Miller (Office: 1978-1979)
 - Very short term. Appointed by Carter in 1978, Resigned August 6th, 1979.
- Arthur Burns (Office: 1970-1978)
 - Appointed and reappointed in 1970, 1974 by Richard Nixon.
 - Very high inflation. The CPI rose by 74% during his tenure.

Federal Reserve Chairs

10/ 16

- Current chair: Janet Yellen (Appointed by Obama in February 2014)
- Ben Bernanke (Office: 2006 - 2014)
 - Appointed by G.W. Bush in 2006 and reappointed by Obama in 2010.
- Alan Greenspan (Office: 1987-2006)
 - Appointed by Reagan in 1987. Reappointed by Bush in 1992, Clinton in 1996 and 2000, and by G. W. Bush in 2004.
- Paul Volker (Office: 1997-1983).
 - Appointed in 1979 by Carter, reappointed in 1983 by Reagan.
 - Charged with eliminating a high period of inflation in the U.S.
- George William Miller (Office: 1978-1979)
 - Very short term. Appointed by Carter in 1978, Resigned August 6th, 1979.
- Arthur Burns (Office: 1970-1978)
 - Appointed and reappointed in 1970, 1974 by Richard Nixon.
 - Very high inflation. The CPI rose by 74% during his tenure.

Federal Reserve Chairs

10/ 16

- Current chair: Janet Yellen (Appointed by Obama in February 2014)
- Ben Bernanke (Office: 2006 - 2014)
 - Appointed by G.W. Bush in 2006 and reappointed by Obama in 2010.
- Alan Greenspan (Office: 1987-2006)
 - Appointed by Reagan in 1987. Reappointed by Bush in 1992, Clinton in 1996 and 2000, and by G. W. Bush in 2004.
- Paul Volker (Office: 1979-1983).
 - Appointed in 1979 by Carter, reappointed in 1983 by Reagan.
 - Charged with eliminating a high period of inflation in the U.S.
- George William Miller (Office: 1978-1979)
 - Very short term. Appointed by Carter in 1978, Resigned August 6th, 1979.
- Arthur Burns (Office: 1970-1978)
 - Appointed and reappointed in 1970, 1974 by Richard Nixon.
 - Very high inflation. The CPI rose by 74% during his tenure.

Federal Reserve Chairs

10/ 16

- Current chair: Janet Yellen (Appointed by Obama in February 2014)
- Ben Bernanke (Office: 2006 - 2014)
 - Appointed by G.W. Bush in 2006 and reappointed by Obama in 2010.
- Alan Greenspan (Office: 1987-2006)
 - Appointed by Reagan in 1987. Reappointed by Bush in 1992, Clinton in 1996 and 2000, and by G. W. Bush in 2004.
- Paul Volker (Office: 1979-1983).
 - Appointed in 1979 by Carter, reappointed in 1983 by Reagan.
 - Charged with eliminating a high period of inflation in the U.S.
- George William Miller (Office: 1978-1979)
 - Very short term. Appointed by Carter in 1978, Resigned August 6th, 1979.
- Arthur Burns (Office: 1970-1978)
 - Appointed and reappointed in 1970, 1974 by Richard Nixon.
 - Very high inflation. The CPI rose by 74% during his tenure.

Federal Reserve Chairs

10 / 16

- Current chair: Janet Yellen (Appointed by Obama in February 2014)
- Ben Bernanke (Office: 2006 - 2014)
 - Appointed by G.W. Bush in 2006 and reappointed by Obama in 2010.
- Alan Greenspan (Office: 1987-2006)
 - Appointed by Reagan in 1987. Reappointed by Bush in 1992, Clinton in 1996 and 2000, and by G. W. Bush in 2004.
- Paul Volker (Office: 1979-1983).
 - Appointed in 1979 by Carter, reappointed in 1983 by Reagan.
 - Charged with eliminating a high period of inflation in the U.S.
- George William Miller (Office: 1978-1979)
 - Very short term. Appointed by Carter in 1978, Resigned August 6th, 1979.
- Arthur Burns (Office: 1970-1978)
 - Appointed and reappointed in 1970, 1974 by Richard Nixon.
 - Very high inflation. The CPI rose by 74% during his tenure.

Federal Reserve Chairs

10 / 16

- Current chair: Janet Yellen (Appointed by Obama in February 2014)
- Ben Bernanke (Office: 2006 - 2014)
 - Appointed by G.W. Bush in 2006 and reappointed by Obama in 2010.
- Alan Greenspan (Office: 1987-2006)
 - Appointed by Reagan in 1987. Reappointed by Bush in 1992, Clinton in 1996 and 2000, and by G. W. Bush in 2004.
- Paul Volker (Office: 1979-1983).
 - Appointed in 1979 by Carter, reappointed in 1983 by Reagan.
 - Charged with eliminating a high period of inflation in the U.S.
- George William Miller (Office: 1978-1979)
 - Very short term. Appointed by Carter in 1978, Resigned August 6th, 1979.
- Arthur Burns (Office: 1970-1978)
 - Appointed and reappointed in 1970, 1974 by Richard Nixon.
 - Very high inflation. The CPI rose by 74% during his tenure.

Federal Reserve Chairs

10/ 16

- Current chair: Janet Yellen (Appointed by Obama in February 2014)
- Ben Bernanke (Office: 2006 - 2014)
 - Appointed by G.W. Bush in 2006 and reappointed by Obama in 2010.
- Alan Greenspan (Office: 1987-2006)
 - Appointed by Reagan in 1987. Reappointed by Bush in 1992, Clinton in 1996 and 2000, and by G. W. Bush in 2004.
- Paul Volker (Office: 1979-1983).
 - Appointed in 1979 by Carter, reappointed in 1983 by Reagan.
 - Charged with eliminating a high period of inflation in the U.S.
- George William Miller (Office: 1978-1979)
 - Very short term. Appointed by Carter in 1978, Resigned August 6th, 1979.
- Arthur Burns (Office: 1970-1978)
 - Appointed and reappointed in 1970, 1974 by Richard Nixon.
 - Very high inflation. The CPI rose by 74% during his tenure.

Federal Reserve Chairs

10/ 16

- Current chair: Janet Yellen (Appointed by Obama in February 2014)
- Ben Bernanke (Office: 2006 - 2014)
 - Appointed by G.W. Bush in 2006 and reappointed by Obama in 2010.
- Alan Greenspan (Office: 1987-2006)
 - Appointed by Reagan in 1987. Reappointed by Bush in 1992, Clinton in 1996 and 2000, and by G. W. Bush in 2004.
- Paul Volker (Office: 1979-1983).
 - Appointed in 1979 by Carter, reappointed in 1983 by Reagan.
 - Charged with eliminating a high period of inflation in the U.S.
- George William Miller (Office: 1978-1979)
 - Very short term. Appointed by Carter in 1978, Resigned August 6th, 1979.
- Arthur Burns (Office: 1970-1978)
 - Appointed and reappointed in 1970, 1974 by Richard Nixon.
 - Very high inflation. The CPI rose by 74% during his tenure.

Federal Reserve Chairs

10 / 16

- Current chair: Janet Yellen (Appointed by Obama in February 2014)
- Ben Bernanke (Office: 2006 - 2014)
 - Appointed by G.W. Bush in 2006 and reappointed by Obama in 2010.
- Alan Greenspan (Office: 1987-2006)
 - Appointed by Reagan in 1987. Reappointed by Bush in 1992, Clinton in 1996 and 2000, and by G. W. Bush in 2004.
- Paul Volker (Office: 1997-1983).
 - Appointed in 1979 by Carter, reappointed in 1983 by Reagan.
 - Charged with eliminating a high period of inflation in the U.S.
- George William Miller (Office: 1978-1979)
 - Very short term. Appointed by Carter in 1978, Resigned August 6th, 1979.
- Arthur Burns (Office: 1970-1978)
 - Appointed and reappointed in 1970, 1974 by Richard Nixon.
 - Very high inflation. The CPI rose by 74% during his tenure.

Federal Open Market Committee

11/ 16

- 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 Open Market Committee

11/ 16

- 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 Open Market Committee

11/ 16

- 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 Open Market Committee

11/ 16

- 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 Open Market Committee

11/ 16

- 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 Open Market Committee

11/ 16

- 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

12 / 16

- Twelve Federal Reserve Districts, each with a federal reserve bank.
- Federal Reserve
- New York Fed implements monetary policy.

Federal Reserve Districts

12/ 16

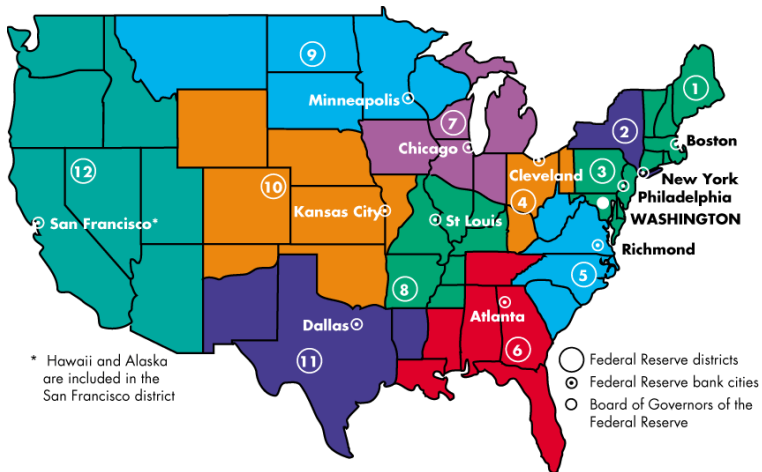
- Twelve Federal Reserve Districts, each with a federal reserve bank.
- Federal Reserve
- New York Fed implements monetary policy.

Federal Reserve Districts

12/ 16

- Twelve Federal Reserve Districts, each with a federal reserve bank.
- Federal Reserve
- New York Fed implements monetary policy.

Federal Reserve Districts



Federal Reserve Districts



Functions of Federal Reserve Banks

15 / 16

- 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.

Functions of Federal Reserve Banks

15 / 16

- 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.

Functions of Federal Reserve Banks

15 / 16

- 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.

Functions of Federal Reserve Banks

15 / 16

- 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.

Functions of Federal Reserve Banks

15 / 16

- 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.

Functions of Federal Reserve Banks

15 / 16

- 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.

Functions of Federal Reserve Banks

15 / 16

- 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.

Central Bank Independence

16 / 16

- 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.

Central Bank Independence

16/ 16

- 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.

Central Bank Independence

16 / 16

- 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.

Central Bank Independence

16 / 16

- 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.

Central Bank Independence

16 / 16

- 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.

Central Bank Independence

16 / 16

- 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.

Central Bank Independence

16 / 16

- 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.

Central Bank Independence

16 / 16

- 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.