International Summer Program
July 11th, 2011, Michael Elbert

ECB & Fed
A comparison
Agenda

- Introduction
- European Central Bank
- Federal Reserve System
- Summary: ECB and FED
Central Banks

• A **central bank**, **reserve bank**, or **monetary authority** is the entity responsible for the monetary policy of a country or of a group of member states. It is a bank that can lend money to other banks in times of need. Its primary responsibility is to maintain the stability of the national currency and money supply, but more active duties include controlling subsidized-loan interest rates, and acting as a lender of last resort to the banking sector during times of financial crisis (private banks often being integral to the national financial system). It may also have supervisory powers, to ensure that banks and other financial institutions do not behave recklessly or fraudulently.

• Most richer countries today have an "independent" central bank, that is, one which operates under rules designed to prevent political interference. Examples include the European Central Bank and the Federal Reserve System in the United States.
Direct Influence of Euro and US-Dollar in the world

English:
- **Eurozone**, the originator in control of the **euro**
- External adopters of the euro
- Currencies pegged to the euro
- Currencies pegged to the euro within a narrow band

- **United States**, the originator in control of the **US dollar**
- External adopters of the US dollar
- Currencies pegged to the US dollar
- Currencies pegged to the US dollar within a narrow band

Note that the Belarusian ruble is pegged to the Euro, Russian Ruble and U.S. Dollar in a currency basket.
## Key Characteristics

<table>
<thead>
<tr>
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<th>EU-17</th>
<th>EU-27</th>
<th>US</th>
<th>Japan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population (millions)</td>
<td>331**</td>
<td>501**</td>
<td>309**</td>
<td>128</td>
</tr>
<tr>
<td>GDP (PPP, € trillions)</td>
<td>9.0</td>
<td>12.5</td>
<td>11.2</td>
<td>3.3</td>
</tr>
<tr>
<td>GDP per capita (PPP, € thousands)</td>
<td>27.1</td>
<td>24.9</td>
<td>36.3</td>
<td>25.6</td>
</tr>
<tr>
<td>Share of world GDP (PPP, %)</td>
<td>15.1</td>
<td>21.3</td>
<td>20.4</td>
<td>6.0</td>
</tr>
<tr>
<td>Exports (goods and services, % of GDP)</td>
<td>19.7</td>
<td>13.4</td>
<td>11.1</td>
<td>13.3</td>
</tr>
<tr>
<td>Gross fixed capital formation (% of GDP)</td>
<td>19.6</td>
<td>19.1</td>
<td>15.7</td>
<td>21.2</td>
</tr>
<tr>
<td>Gross saving (% of GDP)</td>
<td>18.1***</td>
<td>17.7</td>
<td>10.7</td>
<td>22.1</td>
</tr>
</tbody>
</table>

*2009 and ** 2010 figures; *** Euro Area - 16
Sources: for euro area and EU: ECB, Eurostat, national data, IMF and ECB calculations; for the United States and Japan: national sources, IMF.
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ECB – History

See ECB History Video:
http://www.ecb.int/ecb/educational/movies/history/html/index.en.html

1972 – 1979

3 Stages:
Stage 1: 1990 – 1994
Stage 2: 1994 – 1999
Stage 3: Since 1999

1944 – 1973

Collapse of the Bretton Woods System

1979 – 1983

First attempt of European monetary cooperation: Snake in the Tunnel

1983 – 1987

European Monetary System (EMS)

1987 – 1992

Treaty on the European Union

4 Stages:
Stage 1: 1979 – 1983
Stage 2: 1983 – 1987
Stage 4: 1992 – 1993
Convergence Criteria

**Purpose of setting the criteria:** Maintain the price stability within the Eurozone even with the inclusion of new member states.

**Government finance**
- Annual government deficit:
  - Government deficit must not exceed 3% of GDP
  - If not, it is at least required to reach a level close to 3%.
  - Government debt: The ratio of gross government debt to GDP must not exceed 60%.

**Exchange rate:**
- Applicant countries should have joined the exchange-rate mechanism (ERM II) under the European Monetary System (EMS) for 2 consecutive years and should not have devaluated its currency during the period.

**Inflation rate:**
- No more than 1.5 percentage points higher than the three lowest inflation member states of the EU.

**Long-term interest rates:**
- The nominal long-term interest rate must not be more than two percentage points higher than in the three lowest inflation member states.
Eurozone
Benefits of the Euro

- Security of purchasing power
- Removal of transaction costs
- Price transparency
- Elimination of exchange rate risks

**Country A**: € 13,247
**Country B**: € 10,738
1 Central Bank – 17 National Central Banks
Article 130 of the Treaty on the Functioning of the European Union:
“When exercising the powers and carrying out the tasks and duties conferred upon them by the Treaties and the Statute of the ESCB and of the ECB, ...

...neither the ECB,
nor a national central bank,
nor any member of their decision-making bodies

shall seek or take instructions from Union institutions, bodies, offices or agencies, from any government of a Member State or from any other body.”
Tasks of the ECB (1/2)
Tasks of the ECB (2/2)

- Cooperation
- Reporting
- Financial risks
- Advisory function
- Operational hub for “ESCB systems”
- ECB’s foreign reserve assets
- International and European cooperation
- Statutory reports
- Community institutions
- IT systems
- Monitoring
- National authorities
- Benchmarks for management by the NCBs
Tasks of the NCBs

Article 12.1 ESCB Statute: “To the extent deemed possible and appropriate...the ECB shall have recourse to the national central banks to carry out operations which form part of the tasks of the ESCB [Eurosystem].”
Organizational Framework of the Eurosystem

ECB | NCB 1 | NCB 2 | .................................. | NCB 16

Executive Board of ECB (6 Members) | Governors of NCBs

Governing Council (22 Members)

ECB (Co-ordinating role)

NCB 1 | NCB 2 | .................................. | NCB 16
Price Stability – Primary Objective

Article 127 of the Treaty on the Functioning of the European Union:

“The primary objective of the ESCB [Eurosysten] shall be to maintain price stability.

Without prejudice to the objective of price stability, the ESCB [Eurosysten] shall support the general economic policies in the Union with a view to contributing to the achievement of the objectives of the Union as laid down in Article 3 of the Treaty on European Union.”
Price Stability - Definition

Governing Council in October 1998:

“Price stability shall be defined as a year-on-year increase in the Harmonised Index of Consumer Prices (HICP) for the euro area of below 2%. Price stability is to be maintained over the medium term.”

The Governing Council aims to maintain inflation rates at levels below, but close to, 2% over the medium term.
Benefits of Price Stability

Price stability contributes to:

- Recognising changes in relative prices
- The productive use of resources
- Maintaining social cohesion and stability

Avoiding “inflation risk premium”
Reducing the distortionary impact of tax and social security systems
Financial stability
The ECB’s Monetary Policy Strategy

Primary objective: price stability

Governing Council takes monetary policy decisions based on an overall assessment of the risks to price stability

Economic Analysis
Analysis of economic dynamics and shocks

Monetary Analysis
Analysis of monetary trends

Full set of information
The Monetary Policy Instruments

**Standing facilities**
- Deposit facility
- Marginal lending facility

(Rates generally lower than market rates) (Rates generally higher than market rates)

**Open market operations**
- Main refinancing operations
- Longer-term refinancing operations
- Fine-tuning operations
- Structural operations

(Maturity: one week)

**Reserve requirements**
- Reserve base: Deposits, debt securities and money market paper
- Reserve ratio: 2% for the majority of the items to which the reserve base applies
- Remuneration: Reserve holdings will be remunerated at the Eurosystem's rate on its main refinancing operations
The operational framework offers a high degree of flexibility to deal with unforeseen circumstances. The ECB has, for example, used the following non-standard measures:

- Fixed-rate, full-allotment liquidity provision
- Expansion of list of assets eligible as collateral
- Longer-term liquidity provision
- Liquidity provision in foreign currencies
- Outright purchases of specific debt securities
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The Federal Reserve System: Origins

- 1870 to 1907: US had lots of financial panics (bank runs)
- Banking crisis in 1907
  → Federal Reserve Act was found in 1913 including the foundation of Federal Reserve Banks
Federal Reserve Banks

- 12 Districts:
- Each is a Private Non-Profit Organization and Chartered Banks
- Owned by commercial bank “members”
- Overseen by both
  - Board of Directors
  - Board of Governors in Washington

Alaska and Hawaii are part of the San Francisco District
Organizational Framework of the Federal Reserve System
The Board of Governors

• Structure
  – 7 Governors including a Chairman and Vice Chairman
  – Serve 14 year terms
  – Appointed by the US-president

• Functions
  – Analyze financial and economic conditions
  – Administer credit protection laws
  – Supervise and regulate the Reserve Banks
  – With Reserve Banks, regulate and supervise the financial system
  – Collect and publish statistics

Ben Bernanke, Chairman
Federal Open Market Committee

• FOMC Membership:
  – 7 Governors
  – President of the Federal Reserve Bank of NY
  – 4 of the remaining 12 Reserve Bank Presidents in rotation

• Function:
  – Set the Federal Funds Rate
Tasks of the Federal Reserve System

• Government’s Bank
  – Issue currency
  – Maintain the Treasury’s account
  – Manage the Treasury debt

• Bankers’ Bank
  – Hold Reserve Deposits
  – Operate the Payments System
  – Make Discount Loans at the Discount Rate
  – Supervise and regulate financial institutions
  – Collect Data
Federal Reserve Bank of NY

New York Fed Only:

- Auction Treasury Securities
- Foreign Government Services
- Monetary Policy Operations
- **Fedwire**: Large Value Interbank Funds Transfer System
Main Objectives of the Fed

There are 3 equal objectives:

• Price stability
  • not defined, but widely viewed as 1-2% comfort zone
• Maximum employment
• Moderate long-term interest rates
The Monetary Policy Instruments

• Open market operations
  ✓ Buying and selling of government bonds on the open market
• Discount window
  ✓ Instrument that allows MFIs (Monetary Financial Institutions) to borrow money from the Fed usually on a short-term basis
• Reserve requirements
  ✓ sets the minimum reserves each MFI must of customer deposits and notes
New Monetary Policy Instruments –
A Response to Financial Crisis 2008

• Term auction facility
• Term securities lending facility
• Primary dealer credit facility
• Interest on reserves
• Term deposit facility
• Asset Backed Commercial Paper Money Market Mutual Fund Liquidity Facility (AMLF)
• Commercial Paper Funding Facility
Assessing the FED’s Structure

• Independence from Political Influence
  – Long terms
  – Irreversible Policy Decisions
  – Budgetary Independence

• Decision-making by Committee
  – 12 voting members

Two events provide the foundation for Fed independence:
1. In 1935 political appointees were removed from the FOMC
2. In 1951 President Truman supported the Fed’s refusal to purchase Treasury securities that the Secretary of the Treasury requested they buy
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# Summary – ECB and FED

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<thead>
<tr>
<th></th>
<th>Eurosystem</th>
<th>Federal Reserve System</th>
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<tbody>
<tr>
<td><strong>Established/ Made independent</strong></td>
<td>1998</td>
<td>1914</td>
</tr>
<tr>
<td><strong>Monetary policy decision-making body</strong></td>
<td>Governing Council, comprising 22 members:</td>
<td>Federal Open Market Committee (FOMC), 12 members:</td>
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<tr>
<td></td>
<td>the ECB Executive Board (6 members) and the</td>
<td>7 Board Governors, President of the New York</td>
</tr>
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<td></td>
<td>Governors of the 16 NCBs of the Eurosystem</td>
<td>Fed, and 4 of the 11 other reserve banks Fed</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Presidents on rotating basis; 19 participants</td>
</tr>
<tr>
<td><strong>Appointment of policy makers</strong></td>
<td>President and Governing Council members</td>
<td>Governors (14 year terms)/ Chairman (4 year</td>
</tr>
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<td></td>
<td>appointed for 8 years by national governments;</td>
<td>term) appointed by the President and</td>
</tr>
<tr>
<td></td>
<td>ratified by European Parliament</td>
<td>approved by the Congress; Bank Presidents</td>
</tr>
<tr>
<td></td>
<td></td>
<td>selected by Bank directors (largely local</td>
</tr>
<tr>
<td></td>
<td></td>
<td>banking/business community)</td>
</tr>
<tr>
<td><strong>Independence from political influence</strong></td>
<td>Yes. Enshrined in the Maastricht Treaty</td>
<td>Yes. Fed is a “creature of the Congress” and</td>
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<td></td>
<td></td>
<td>must report regularly, but enjoys substantial</td>
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<td></td>
<td></td>
<td>independence by long-standing tradition</td>
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<td>Monetary policy objective(s)/ Mandate</td>
<td><strong>Eurosystem</strong></td>
<td><strong>Federal Reserve System</strong></td>
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<tr>
<td>Price stability is the primary objective as set in the Maastricht Treaty. The ECB has quantified this as medium-term inflation goal of “below but close to 2%”</td>
<td>Price stability is the primary objective as set in the Maastricht Treaty. The ECB has quantified this as medium-term inflation goal of “below but close to 2%”</td>
<td>Multiple objectives: to promote maximum employment, price stability, and moderate long-term interest rates. Price stability not defined, but widely viewed as 1-2% comfort zone (skewed toward upper portion) for core PCE inflation</td>
</tr>
<tr>
<td>Monetary policy strategy</td>
<td>Two pillar strategy. First pillar focuses on shorter-term economic and price developments (“economic pillar”); Second pillar focuses on longer-term inflation outlook based on monetary analysis</td>
<td>Focus on economic forecasts; rates adjusted to optimise expected outcomes and minimise risks of deviating from those outcomes (factoring in costs of those deviations). Preference for gradualism unless risks dictate more aggressive action</td>
</tr>
<tr>
<td>Decision-making style</td>
<td>Consensual, with the President assuming the role of moderator; dissents are rare</td>
<td>Consensual (less so under Bernanke than Greenspan), with Chairman clearly first among equals. Dissents are infrequent, multiple dissents are very rare</td>
</tr>
<tr>
<td>Role of monetary aggregates and asset prices</td>
<td>Both play a significant role</td>
<td>Neither plays a significant role independent of their effects on growth and inflation</td>
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<tr>
<td>Accountability and transparency</td>
<td></td>
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<td><strong>Eurosystme</strong></td>
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<tr>
<td>a. Immediate press conference after Council meetings with introductory statement and Q&amp;A (2:30 pm local time)</td>
<td></td>
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<tr>
<td>b. Annual Report to EU institutions and presentations to the European Parliament</td>
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<td>c. Monthly Bulletin published</td>
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<td></td>
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<tr>
<td>d. Speeches</td>
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<tr>
<td><strong>Federal Reserve System</strong></td>
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</tr>
<tr>
<td>a. Immediate announcement following the FOMC, with voting record (2:15 pm local time)</td>
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<tr>
<td>b. Meeting minutes three weeks later</td>
<td></td>
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<tr>
<td>c. Full transcripts of meetings five years later</td>
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<td></td>
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<tr>
<td>d. Frequent speeches by FOMC participants</td>
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<td></td>
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<tr>
<td>e. Semi-annual monetary policy report to Congress; other hearings</td>
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Conclusion

<table>
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<tr>
<th>Rule-based</th>
<th>Discretionary</th>
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<tbody>
<tr>
<td>= one response to every economic situation</td>
<td>= come to a decision case-by-case</td>
</tr>
<tr>
<td>+ consistency</td>
<td>+ flexible</td>
</tr>
<tr>
<td>+ plausibility</td>
<td>+ best reaction !?</td>
</tr>
<tr>
<td>+ predictable</td>
<td></td>
</tr>
<tr>
<td>+ quick decisions !?</td>
<td></td>
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<thead>
<tr>
<th>ECB &amp; €</th>
<th>Fed &amp; $</th>
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<tbody>
<tr>
<td>- a new central bank and currency</td>
<td>- an established central bank and currency</td>
</tr>
<tr>
<td>- a heterogeneous area</td>
<td>- a homogeneous area</td>
</tr>
</tbody>
</table>
Thanks for Your Attention!