The International Financial System

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Global Financial Architecture

- Institutions
- Issues
- Exchange-rate system
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Alternative Bank-Industry Linkages

The Equity-Market System

The Bank-Based System

The Bank-Industrial Crossholding System

The State-centered System
Global Financial Architecture

- Institutions
- Issues
- Exchange-rate system

- Reasons for the boom-bust character of capital flows to emerging market economies?
- What measures should be taken to deal with the instability of capital flows?
- Role of IMF? Conditionality?
- Role of World Bank? Conditionality?
- Role of private sector institutions?
- Exchange rate regime?
Exchange-Rate Systems

- Some history
- What is “the international monetary system” today?
- Fixed versus floating exchange rates
- The balance of payments and the adjustment process
- The European Monetary System

History of the World

- Gold, inflation and exchange rates: the first 100 years
- War, depression and competitive devaluation
- Bretton Woods
- 1971 and floating rates
- Currency blocs?
To Fix or To Float, That is the Question

- Independent free float
- Managed float
- Floating revaluations
- Frequent devaluations or revaluations
- Crawling peg
- Tied by formula to inflation index
- Basket peg
- Pegged to one currency
- Absolutely fixed to one currency

Economic circumstances, and
Economic policies

The Balance of Payments

<table>
<thead>
<tr>
<th>Transylvania’s Balance of Payments</th>
<th>Debits</th>
<th>Credits</th>
<th>Trade</th>
<th>Balance</th>
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</thead>
<tbody>
<tr>
<td>Exports (goods sold to foreigners)</td>
<td></td>
<td>11</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Imports (goods bought from foreigners)</td>
<td>-16</td>
<td></td>
<td>16</td>
<td>Balance</td>
</tr>
<tr>
<td>Services, like tourism (and interest paid/received)</td>
<td>-2</td>
<td>3</td>
<td></td>
<td>Current</td>
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<tr>
<td>Aid (a “plug”)</td>
<td>1</td>
<td></td>
<td></td>
<td>Account Balance</td>
</tr>
<tr>
<td>Financial and real assets sold to foreigners (“capital inflows”)</td>
<td>3</td>
<td></td>
<td></td>
<td>Overall</td>
</tr>
<tr>
<td>Financial and real assets bought from foreigners (“capital outflows”)</td>
<td>-2</td>
<td></td>
<td>-2</td>
<td>Balance</td>
</tr>
<tr>
<td>Government’s financial assets sold (Foreign exchange reserves reduced)</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Government’s financial assets bought (Foreign exchange reserves increased)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Errors and Omissions</td>
<td>-1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>-21.00</td>
<td>21.00</td>
<td></td>
<td></td>
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</tbody>
</table>
Trade

- Absolute advantage
- Relative prices and comparative advantage
- “Too poor to trade” fallacy
- Infant industry argument?

Capital Flows

- As automatic, voluntary compensation for trade imbalances
- As autonomous, with trade compensating -- “tails wags dog”
- Round trip capital flows -- trade in intermediation and securities trading services
Reserves

- Intervention--how reserves accumulate
- Borrowed reserves--swap lines, SDRs, etc.

Intervention

*When, why and how successful?*
- The “Balance of Payments deficit”
  1. Trade deficit
  2. Current account deficit
  3. “Overall” deficit
- Deficit as the change in Office Reserves

Question: can there be a balance of payments deficit when a country’s exchange rate is floating? *Without government intervention, credit transactions must equal debit transactions so there cannot be a balance of payments deficit or surplus*
The External Deficit and The Internal Deficit

NATIONAL PRODUCTION = NATIONAL DEMAND

\[ Y = C + G + X - M \]

Also...
\[ Y = C + S + T \]

From these...
\[ C + S + T = C + G + X + T \]

Put the current account surplus on the left:
\[ X - M = S - G + T \]

In other words...
\[ \text{CURRENT ACCOUNT SURPLUS} = \text{NET PRIVATE SECTOR SAVINGS} - \text{NET GOVT DEFICIT} \]

Tools and Targets

- Foreign-exchange intervention
- Money-market intervention (and interaction with monetary policy)
- Fiscal policy--the demand side
- Exchange controls and capital controls
- Tariffs and subsidies
Disequilibrium and Adjustment

- The adjustment process when the exchange rate is fixed
- The adjustment process when the exchange rate is floating

The European Monetary System and the Euro

The Euro has replaced national currencies:
The Exchange Rate Mechanism Of the European Monetary System

Two rules:

- **Parity grid rule:** 2.25% (officially 15%) limit on exchange rate of each country against each other country
  
  Remedy if the limit is approached: intervention in the foreign exchange market

- **Divergence indicator rule:** formula for limit on exchange rate of each country against ECU
  
  Remedy: economic policy changes to bring inflation and monetary conditions back into line with those of the other members

European Monetary Union

- **Stage 1:** Financial integration

- **Stage 2:** Transition to Eurofed

- **Stage 3:** European currency (the “Euro”) issued by Eurofed
1999: Six Convergence Criteria
(“Maastricht Criteria”)

- Price stability
  - No more than 1.5% over best 3’s average
- Government deficit
  - Public deficit < 3% of GDP
  - Public debt, 60% of GDP
- Exchange rate stability
  - 2 years within EMS bands (+/-15%)
- Long-term interest rates
  - No more than 2% over best 3’s average
- Central bank independence

European Monetary Union: Who’s In?
**EMU: Who’s In?**

![Graph showing how member states match up to Maastricht criteria for general government deficit as % of GDP](chart)

*Probabilities: JP Morgan calculator, based on swap rates, FT, Jan 27, 1997*

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**Implication of EMU**

- Only Eurofed creates money
- Central banks can no longer print money to finance public deficits
- Only a nation’s creditworthiness determines ability to run a fiscal deficit

*Image of a crossed-out euro note*
Credit Ratings of EC Member States

<table>
<thead>
<tr>
<th>Country</th>
<th>Moody’s</th>
<th>S&amp;P</th>
<th>Cost (bp)</th>
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</thead>
<tbody>
<tr>
<td>Austria</td>
<td>Aaa</td>
<td>AAA</td>
<td>0</td>
</tr>
<tr>
<td>France</td>
<td>Aaa</td>
<td>AAA</td>
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</tr>
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<td>Germany</td>
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<td>AAA</td>
<td>0</td>
</tr>
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<td>Netherlands</td>
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<td>AAA</td>
<td>0</td>
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<td>Britain</td>
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<td>AAA</td>
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<td>Belgium</td>
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<td>AA+</td>
<td>50</td>
</tr>
<tr>
<td>Denmark</td>
<td>Aa1</td>
<td>AA+</td>
<td>50</td>
</tr>
<tr>
<td>Italy</td>
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<tr>
<td>Spain</td>
<td>Aa2</td>
<td>AA</td>
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<tr>
<td>Ireland</td>
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<td>AA</td>
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</tr>
<tr>
<td>Portugal</td>
<td>Aa3</td>
<td>AA-</td>
<td>95</td>
</tr>
<tr>
<td>Greece</td>
<td>Baa1</td>
<td>BBB-</td>
<td>260</td>
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</tbody>
</table>

Data: 1997

Conclusion: Fixed Vs Floating Exchange Rates

- The central issue in the choice between fixed and floating exchange rates is one of monetary and economic policy independence
- Factor include:
  - Openness
  - Size
  - Commodity concentration
  - Capital market integration
  - Relative inflation
- When monetary policies are similar and inflation rates converge, a fixed exchange-rate system is possible; otherwise not.
Waiting for Godot: Choices for the Irish Government

- Foreign-exchange intervention
- Money-market intervention (consider interaction with monetary policy)
- Fiscal policy--the demand side
- Tariffs and subsidies
- Exchange controls and capital controls (and jawboning)

Waiting for Godot: Choices for Waterford Foods

“We must decide whether it’s worth covering our DM exposure, given the forward premium and relative interest rates.”
Waiting for Godot: Choices for Waterford Foods

“We must decide whether it’s worth covering our DM exposure, given the forward premium and relative interest rates.”

- What is the probability of a devaluation?
  - Estimate 75% within 3 months
- How much?
  - Estimate 8%
- What should Waterford do?
  - Prob * Amt = 6%
  - 3-mo forward discount = 2%
  - Interest diff = (20%-8.5%)/4=2.875%
Exchange Rate Forecasting

- Analyze
  1. The economic pressures that can provoke a parity change, and
  2. The response of governments to them.
- Three issues:
  1. *How much* adjustment is necessary to eliminate underlying pressures.
  2. *When* the pressures will reach the critical point where an exchange rate change or some other drastic measure has to be taken.
  3. *Whether* the exchange rate will be changed, or whether some other policy measure will be economically and politically feasible.

Forecasting in a Fixed-Rate System

1. Calculate the equilibrium exchange rate given relative money supplies, inflation, economic growth and other factors.
2. Estimate outflow of foreign exchange resulting from current and capital account deficit.
3. Estimate number of months that present policies can be sustained, given the availability of reserves and available borrowing sources versus their rate of depletion.
4. Predict which of limited policy options the government will choose:
   - Exchange controls
   - More foreign debt
   - Deflation through tight monetary and budgetary policies, or
   - Devaluation
**Market Efficiency**

- Exchange rates exhibit behavior that is characteristic of other speculative asset markets
- Exchange rates react quickly to news.
  1. Rates are far more volatile than changes in underlying economic variables.
  2. They are moved by changing expectations, and hence are difficult to forecast.
  3. They change only in response to unanticipated information. In this broad sense they are efficient.
- Testing Efficiency: Since one cannot observe expectations directly, tests of efficiency are joint tests of the model and of market efficiency.

**A Random Walk?**

Random walk: If the market is efficient, today’s spot rate reflects all available information. Every new movement of the spot exchange rate results from new information. By definition, new information cannot be anticipated. Hence each move of the exchange rate must be unexpected, or random.
Unbiased Forward Rate Theory

Corporate Forecasting

Look before you leap!
Contact Info

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