

Exchange Rate Systems and Policies

Prof. Ian Giddy
New York University

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

The Balance of Payments

Transylvania's Balance of Payments


	Debits	Credits	
Exports (goods sold to foreigners)		11	Trade Balance
Imports (goods bought from foreigners)	-16		-5
Services, like tourism (and interest paid/received)	-2	3	Current Account Balance
Aid (a "plug")	1		-3
Financial and real assets sold to foreigners ("capital inflows")		3	Overall Balance
Financial and real assets bought from foreigners ("capital outflows")	-2		-2
Government's financial assets sold (Foreign exchange reserves reduced)		3	
Government's financial assets bought (Foreign exchange reserves increased)	3		
Errors and Omissions	-1		
Total	-21.00	21.00	

Trade

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

Capital Flows

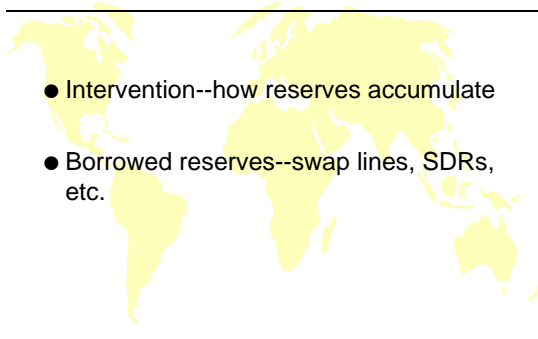
- As automatic, voluntary compensation for trade imbalances
- As autonomous, with trade compensating -- "tails wags dog"
- Round trip capital flows -- trade in intermediation and securities trading services



Copyright ©1997 Ian H. Giddy Exchange Rate Systems and Policies 7

Reserves

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



Copyright ©1997 Ian H. Giddy Exchange Rate Systems and Policies 8

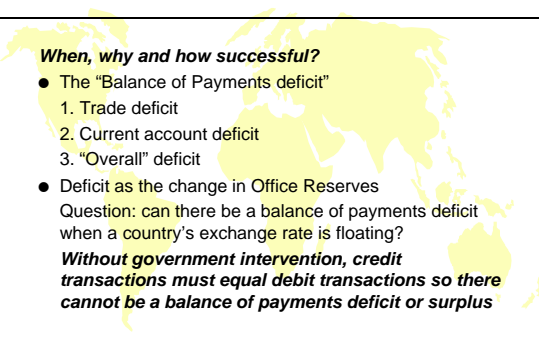
Intervention

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



Copyright ©1997 Ian H. Giddy Exchange Rate Systems and Policies 9

The External Deficit and The Internal Deficit

NATIONAL PRODUCTION = NATIONAL DEMAND

$$Y = C + I + G + (X - M)$$

Also... $Y = C + S + T$

From these... $C + S + T = C + I + G + (X - T)$

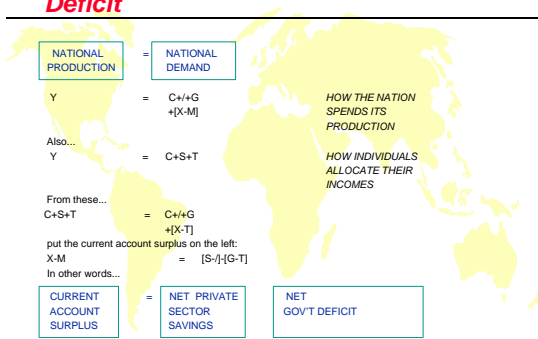
put the current account surplus on the left:
 $X - M = (S - I) - (G - T)$

In other words...

CURRENT ACCOUNT SURPLUS	=	NET PRIVATE SECTOR SAVINGS	-	NET GOV'T DEFICIT
-------------------------	---	----------------------------	---	-------------------

HOW THE NATION SPENDS ITS PRODUCTION

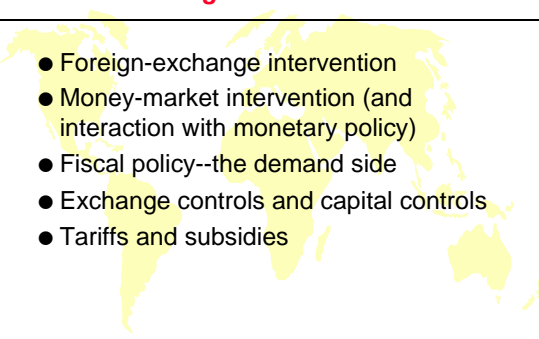
HOW INDIVIDUALS ALLOCATE THEIR INCOMES



Copyright ©1997 Ian H. Giddy Exchange Rate Systems and Policies 10

Tools and Targets

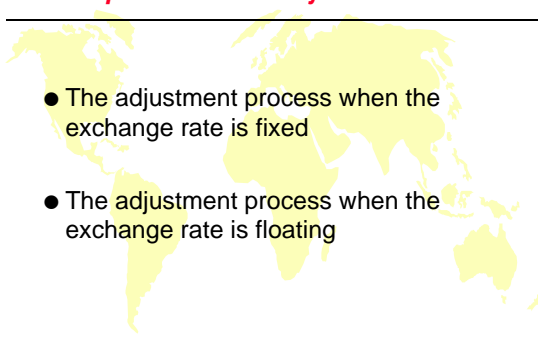
- Foreign-exchange intervention
- Money-market intervention (and interaction with monetary policy)
- Fiscal policy--the demand side
- Exchange controls and capital controls
- Tariffs and subsidies



Copyright ©1997 Ian H. Giddy Exchange Rate Systems and Policies 11

Disequilibrium and Adjustment

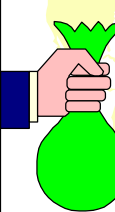
- The adjustment process when the exchange rate is fixed
- The adjustment process when the exchange rate is floating



Copyright ©1997 Ian H. Giddy Exchange Rate Systems and Policies 12

The European Monetary System and the Ecu

The ECU is a grab-bag of currencies...



Currency	Fixed amount of currency in the ECU	Weighting in the ECU (July 1996)
BEF/LUF	3.431	8.69
DKR	0.1976	2.68
FFR	1.332	20.56
DEM	0.6242	32.58
IRL	0.00855	1.09
LIT	151.8	7.86
HFL	0.2198	10.23
GBP	0.08794	10.85
DRA	1.440	0.48
ESP	6.885	4.27
ESC	1.393	0.71

Data: 1996

Copyright ©1997 Ian H. Giddy Exchange Rate Systems and Policies 13

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

Copyright ©1997 Ian H. Giddy Exchange Rate Systems and Policies 14

European Monetary Union

- Stage 1: Financial integration
- Stage 2: Transition to Eurofed
- Stage 3: European currency (the "Euro") issued by Eurofed

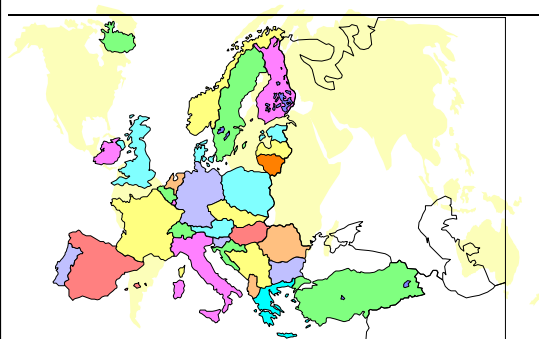
Copyright ©1997 Ian H. Giddy Exchange Rate Systems and Policies 15

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

Copyright ©1997 Ian H. Giddy Exchange Rate Systems and Policies 16

Europe 1999: Who's In?

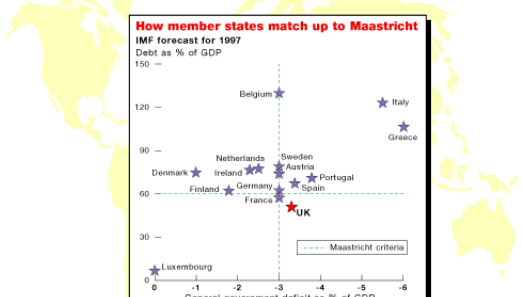


Copyright ©1997 Ian H. Giddy Exchange Rate Systems and Policies 17

EMU: Who's In?

How member states match up to Maastricht

IMF forecast for 1997




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

Copyright ©1997 Ian H. Giddy Exchange Rate Systems and Policies 18

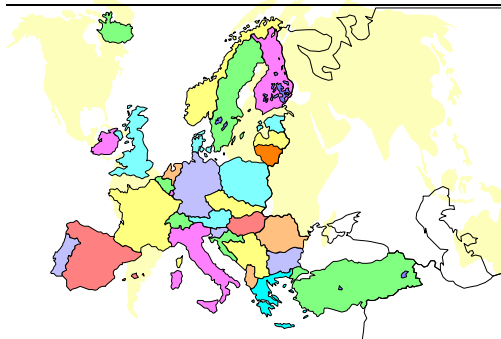
Implication of EMU

- 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



Copyright ©1997 Ian H. Giddy Exchange Rate Systems and Policies 21

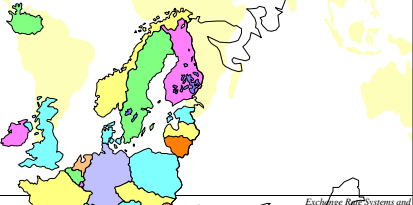
The Baltics



Copyright ©1997 Ian H. Giddy Exchange Rate Systems and Policies 22

Baltics: Exchange Rate Policies

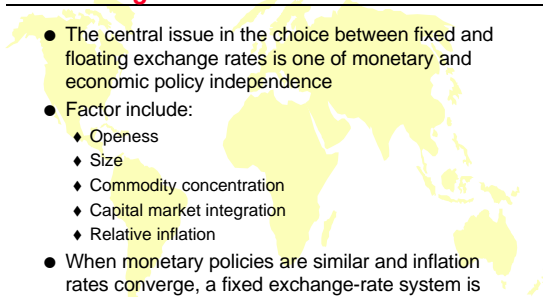
- Estonia: Currency Board vs Euro
- Latvia: Fixed vs SDR
- Lithuania: Currency Board vs US\$



Copyright ©1997 Ian H. Giddy Exchange Rate Systems and Policies 23

Conclusion: Fixed Vs Floating Exchange Rates

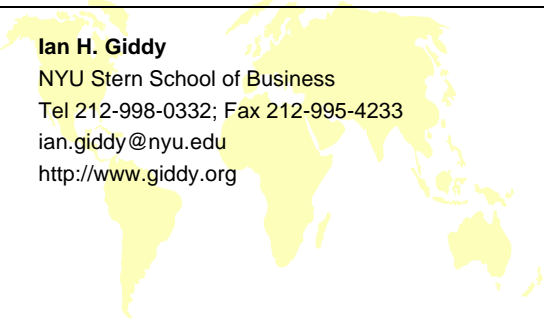
- The central issue in the choice between fixed and floating exchange rates is one of monetary and economic policy independence
- Factor include:
 - ◆ Openness
 - ◆ Size
 - ◆ Commodity concentration
 - ◆ Capital market integration
 - ◆ Relative inflation
- When monetary policies are similar and inflation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



Copyright ©1997 Ian H. Giddy Exchange Rate Systems and Policies 25

www.giddy.org

Ian H. Giddy
 NYU Stern School of Business
 Tel 212-998-0332; Fax 212-995-4233
 ian.giddy@nyu.edu
 http://www.giddy.org



Copyright ©1997 Ian H. Giddy Exchange Rate Systems and Policies 31