

Lecture Notes for Chapter 6

## **International Financial Markets and Institutions**

Chapter 6

### **Aspects of the international monetary system**

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# Road Map

- 1 Outline: Course aims, summary of finance, international issues
- 2 Preliminaries: Conventions, notation, and basic concepts

## **Part A** Currency markets

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- 3 The spot market for foreign exchange
- 4 The forward market for foreign exchange

## **Part B** The behaviour of exchange rates

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- 5 Balance of payments
- 6 Aspects of the international monetary system
- 7 The behaviour of spot and forward exchange rates
- 8 Portfolio theories of exchange rate behaviour
- 9 Currency crises

## **Part C** Markets for exchange-rate derivatives and the hedging decision

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- 10 The market for currency futures
- 11 The market for currency options

## **Part D** Summary and Revision

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**12**      Summary of international finance

**13**      Revision classes

## 13.1 Overview

- Evolution of the international monetary system
- Euro

## **13.2 Evolution of the international monetary system**

1. Bimetallism: before 1875
2. Classical gold standard: 1875-1914
3. Interwar period: 1915-1944
4. Bretton Woods: 1945-1972
5. Flexible exchange rate regime: since 1973

### 13.2.1 Bimetallism: before 1875

- Bimetallism—double-standard—free coinage for both gold and silver.
- Exchange rate between currencies determined by either their gold or silver contents.
  - E.g.: GBP/FRF determined by the ratio of gold content of the two currencies even though Great Britain was on the Gold standard and France was on a bimetallic standard.
- Gresham's Law: bad money drives out good
  - The value of a silver coin in France relative to a gold coin was fixed officially. So if the supply of gold increased, gold coins would be overvalued—people would rather hold the overvalued coin, driving silver coins out of circulation.

### 13.2.2 Classical Gold Standard: 1875—1914

- The first true Gold standard was established in Great Britain in 1821—notes from the Bank of England were made fully redeemable for gold.
- The United States adopted the Gold standard in 1875.
- An *international* Gold standard is when (in the most economically important countries):
  1. gold alone is assured of unrestricted coinage
  2. there is 2-way convertibility between gold and national currencies at a stable ratio
  3. gold maybe freely exported or imported

Key points—an international gold standard implies:

- stable exchange rates

Suppose  $\text{GBP } 6 = 1 \text{ ounce of gold}$  and  $\text{FRF } 12 = 1 \text{ ounce of gold}$ .

What happens if the exchange rate is  $\text{FRF/GBP } 1.8$  ?

GBP is undervalued in the FX market. But you can trade in gold too!

Start of with GBP 500

Buy gold from the Bank of England

You get

$$\frac{\text{GBP}500}{\text{GBP/ounce}6} = 83.33\text{ounces}$$

Ship the gold to France and sell it to the Bank of France and get

$$\text{ounces}500/6 \times \text{FRF/ounce}12 = \text{FRF}1000$$

Now convert your FRF back into GBP



You get

$$\text{FRF}1000 \times \frac{1}{\text{FRF/GBP}1.8} = \text{GBP}555.56$$

As long as your shipping costs are less than GBP 55.56 you can make a riskfree profit!

If shipping costs are zero, there will be a net outflow of gold from England to France until the official exchange rate reverts back to FRF/GBP 2.

- no imbalances in BOP across countries

Suppose GB exports more to France than it imports—a current account surplus and a capital account deficit.

There will be a net flow of gold into GB (you have to pay for goods and services!).

That will lead to a higher price level in GB compared with France—the supply of gold has gone up in GB.

Higher prices in GB relative to France makes its exports to France more expensive and France's imports to GB cheaper.

The GB current account surplus will fall.

### 13.2.3 Interwar period: 1915-1944

WWI killed off the gold standard. Attempts were made to revive it but they failed because countries would manage the circulation of notes and coins to offset the impact of gold flows on exchange rates—*sterilization or neutralization policy*.

### 13.2.4 Bretton Woods System

July 1944, Bretton Woods, New Hampshire

Creation of IMF and World Bank

Allow movement of FX rates between *support points*—exchange rates at which non-US central banks purchased or sold their currency for USD to ensure the FX rate did not move beyond these points.

In return for *pegging* their currencies to the USD the US fixed the price of the USD to gold.

### 13.2.5 The flexible exchange rate regime:1973—present

Jan 1976, The Jamaica Agreement:

1. Flexible exchange rates regimes—central banks can intervene to iron out unwarranted volatilities.
2. Gold was officially abandoned as an international reserve
3. Non-oil exporting countries and less-developed countries were given greater access to IMF funds.

## 13.3 The Euro and European Monetary Union

- Jan 1, 1999 —launch of the Euro—each national currency was irrevocably fixed to the EUR
- Euro-11: Austria, Belgium, Finland, France, Germany, Ireland, Italy, Luxembourg, the Netherlands, Portugal, Spain
- 2001: Greece joined
- Non-joiners: Denmark, Sweden, UK
- Jan 1, 2002—Euro notes and coins introduced
- Jan 1, 2007, Slovenia joined Eurozone
- Jan 1, 2008, Cyprus (Greek Cyprus) and Malta joined Eurozone

- Eastern European Countries in the EU but not the Eurozone: Bulgaria, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania and Slovakia
- Monetary policy: European Central Bank (ECB)—main role is to maintain price stability
- European System of Central Banks (ESCB)—national central banks of the Euro-15.

### 13.3.1 Benefits of monetary union

- Reduced transaction costs
- Elimination of FX risk
- More price transparency
- More trade between member countries
- More capital flows between member countries



### 13.3.2 Costs of monetary union

- Drop in world paper and pulp prices—hurts the Finnish economy, but no one else inside the Euro-15. This is an example of an *asymmetric shock*.
- If Finland had its own currency—could lower interest rates to stimulate the economy and try and offset the impact of the shock.
- As one of the Euro-15, Finland cannot do that.
- The ECB's monetary policy cannot address asymmetric shocks.
- If wages and price levels can adjust in Finland, then this could help deal with a negative asymmetric shock.
- Finns could also leave Finland for other EU countries—how realistic is that?

### 13.3.3 The theory of optimum currency areas—R.Mundell

- The greater the level of economic and financial integration of a country with a group of other countries, the greater the benefits of monetary union and the lower the costs.
- More Economic integration means: more trade between countries and more mobility of capital and labour.
- More financial integration means: more portfolio diversification across countries.
- Mundell's model takes the level of economic and financial integration as fixed.

- Being part of the same currency area might increase economic and financial integration—so even if a common currency seems like a bad idea at first, after some time it may be ok.
- Open questions: does currency union lead to increased economic and financial integration and if so how quickly?