

Exchange Rates

BFI Lecture 11.2.

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- 1 What Are Foreign Exchange Rates?
- 2 How Is the Foreign Exchange Rate Determined?
- 3 Equilibrium: The Interest Rate Parity Condition

The Foreign Exchange Market

What is a foreign exchange market?

Definition: A foreign exchange market

A market where funds are converted from one currency to another

Why do firms and citizen need this conversion?

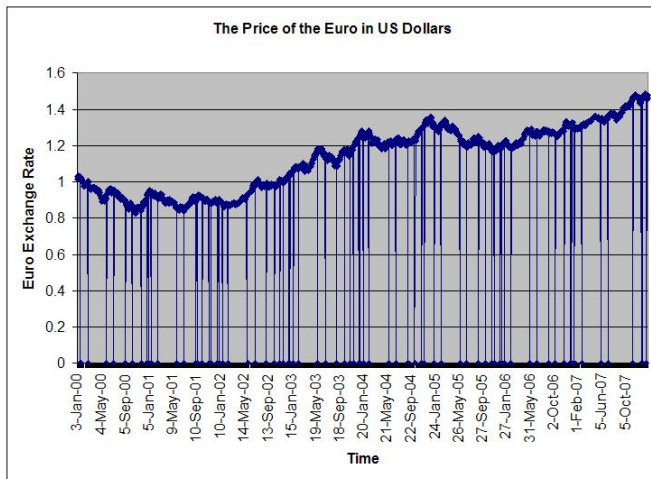
- to transfer funds from one country to another
- for safety reasons

Definition: A foreign exchange rate

A price of one currency in terms of another

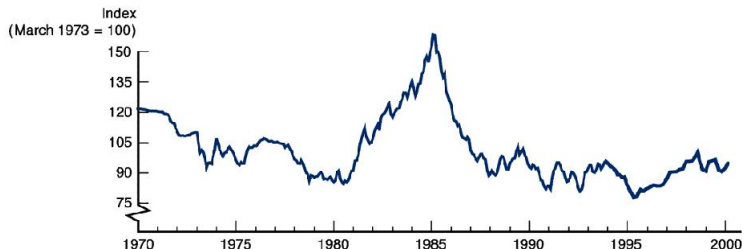
The Foreign Exchange Market - Graphs

What is the Euro-Dollar exchange rate for 2000-2008?



The Foreign Exchange Market - Graphs

How is the US dollar moving in terms of other currencies?



- Why do we care? What do these graphs mean?
- What happens when the Euro becomes expensive? For citizens, and for firms...

How Does the Foreign Exchange Market Work?

An over-the-counter market

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- You go to Italy and buy furniture, invest in real estate, buy a factory, etc.

How Is the Foreign Exchange Rate Determined?

Four main factors for demand shifts

What shifts demand for domestic/foreign goods?

- ① Price levels in CR (or US) and in EU
- ② Home bias in consumption
- ③ Productivity (cost) improvement
- ④ Tariffs and quotas

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Common factor: demand for domestic/foreign goods

Factors Determining the Changes in Exchange Rates

The long-run perspective

SUMMARY Table 1 Factors That Affect Exchange Rates in the Long Run

Factor	Change in Factor	Response of the Exchange Rate, E^*
Domestic price level [†]	↑	↓
Trade barriers [†]	↑	↑
Import demand	↑	↓
Export demand	↑	↑
Productivity [†]	↑	↑

Factors Determining the Changes in Exchange Rates

Special attention to expected returns on assets

Recall the exchange rate transmission channel of monetary policy:

$$M_s \uparrow \Rightarrow i_r \downarrow \Rightarrow E \downarrow \Rightarrow NX \uparrow \Rightarrow Y \uparrow$$

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What happens when $E\text{Return}^{US} \uparrow$?

The Interest Rate Parity Condition

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Set $EReturn^{US} = 0$. \Rightarrow

The Interest Rate Parity Condition

$$i^{US} = i^{EU} - \frac{E_{t+1} - E_t}{E_t}$$

This condition determines equilibrium on the foreign exchange market.

Equilibrium on the Foreign Exchange Market

A graphical illustration

