#### EC 380: Lecture 18

#### Global Finance: Exchange Rate Policies

Philip Economides Fall 2022

# Prologue

- FX market mechanisms in the medium run driven by business cycles
- Short run variation in exchange rate attributed to monetary policy and speculation
- Parity relationships allow us to identify breakeven points at which investment decisions are made

#### Today

• ExR Systems and single currency areas

# Topics

- Reasons for holding foreign reserves, main institutions
- Effect of  $\Delta S, \Delta D$  of foreign currency on home currency
- Identify short, medium and long term forces that affect currency value
- Three rules of gold standard
- Compare and contrast various exchange rate systems
- Price changes and real exchange rate interactions
- List conditions necessary to form single currency area

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| Currency Regime        | Countries |
|------------------------|-----------|
| Hard pegs              | 24        |
| Soft pegs              | 88        |
| Managed floating       | 35        |
| Independently floating | 30        |
| Other                  | 13        |
| Total                  | 190       |

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Many developing countries adopted flexible systems in the 1980s and 1990s, easily managed with advent of the computer and internet.

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Restored in a modified form after WWII but has completely disappeared since the 1970s.

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Under pure gold standard, nations keep gold as international reserve.

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- Must fix value of their currency unit in terms of gold.
- Keep supply of domestic money fixed in some constant proportion to their supply of gold.
- Nations must stand ready and willing to provide gold in exchange for their home country currency

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It is the responsibility of the monetary authorities to keep the exchange rate fixed.

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Policymakers must counter weakening dollar and keep  $R_{
m USD\,per\,GBP}$  fixed.



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If the latter happens, the home country may be forced into a devaluation that is accomplished by changing the gold price of its currency.

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- If Japan and China devalue against the dollar, also devalued against Thai currency, and Thai exports suddenly less competitive.

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The simplest way to avoid is peg to a group of currencies. Reduces the importance of any single country's currency.

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May prevent some country-specific problems with a fixed rate but difficult to manage and has been associated with numerous exchange rate crises.

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ExR used so far does not really tell us what a foreign currency is worth.

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Suppose Malaysian inflation is **4%** and US inflation **1%**.

After one year, 4 ringgits that cost one dollar will buy **3% less in Malaysia than the dollar buys in the United States**.

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Volume of textiles that can be purchased in Malaysia with four ringgits and in China with eight yuan is the only thing that matters.

**Real ExR** is market exchange rate adjusted for price differences.

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Italian cheese costs 50% more than American cheese, **real ExR** is **1.5 wheels** of American cheese per wheel of Italian cheese.

Algebra:

#### Real ExR

 $= [(R \times Foreign Price)]/(Domestic Price)]$ 

 $= [(1.25 \text{ per EUR}) \times (300 \text{ EUR per wheel})]/(250 \text{ USD per wheel})]$ 

 $= \frac{(375 \text{ USD per wheel of Italian Cheese})}{(250 \text{ USD per wheel of American cheese})}$ 

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Local supply is cheaper, when establishing **Real ExR**.

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Even though we express parity in EUR to USD, **real exchange rates** suggest USD denominated goods are cheaper due to lower inflation environment.

## **Choosing Exchange Rate System**

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How do different systems influence core elements of a country's macroeconomy?

**Traditional view**: Countries with fixed exchange rate systems were better at controlling inflation but paid a price in the form of slower economic growth.

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Limits placed on ability to manipulate money supply also remove an important monetary policy tool tused to manage economic growth.

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Countries with **flexible rates** have higher average rates of economic growth, but result depends on classification of the fastest growing Asian economies.

When they omit countries who manage flexible rates, no significant difference in growth between countries with relatively fixed and relatively flexible rates.

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If originates in monetary sector (printing new money), fixed rate is better since it imposes discipline on the central bank.

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If the goal set to minimize negative shocks to an economy, then **source of the shock** determines which system should be adopted.

If originates in monetary sector (printing new money), fixed rate is better since it imposes discipline on the central bank.

If originates in the external environment (oil shock), relatively more flexibility enables the country to adapt more easily.

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Nation's currency is one of its strongest symbols of national sovereignty, remarkable set of events.

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Nations that give up their national money do not do so without cost.

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- If control money supply, can influence growth of economy in the short run thru change in money supply.
- Hard for monetary policy of single currency to implement interest rates that suit every member state perfectly.
- Countries give up their ability to alter their exchange rates.
- Expected to implement policies aimed at pushing down prices and wages inside their countries and do not have the option to devalue currencies to make goods cheaper.

#### Conditions for adoption of single currency

• Business cycle must be synchronized

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- Nations involved must be seeking a level of integration that goes beyond simple free trade