

EC 380: Lecture 17

Global Finance: Exchange Rate Policies

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Prologue

Recap

- 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 ΔS , ΔD 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

Fixed Exchange Rates

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If the exchange rate is not allowed to vary, then it is called a **hard peg**.

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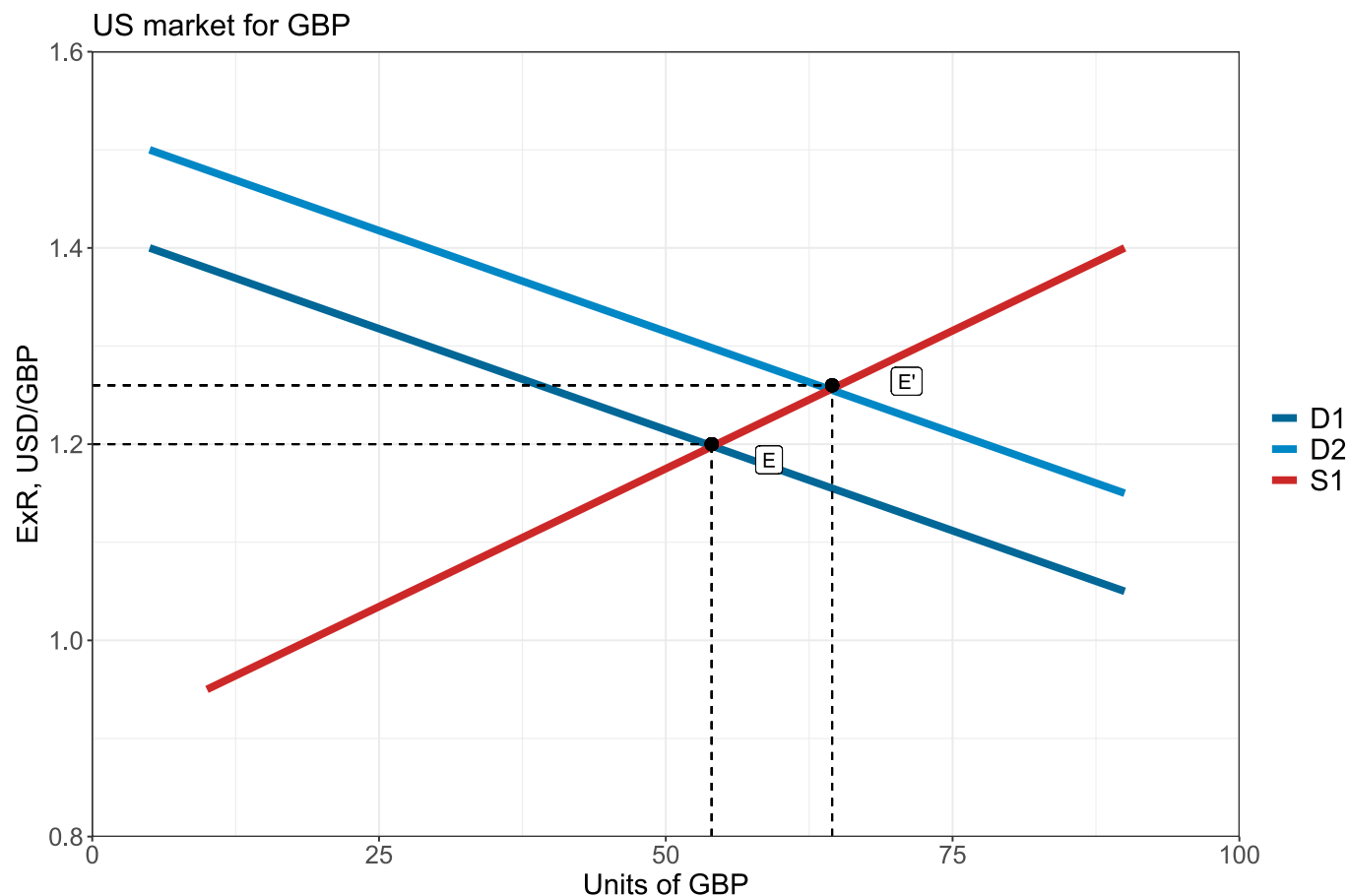
It is the responsibility of the monetary authorities to keep the exchange rate fixed.

Fixed ExR Policy Action

Suppose US & UK both on gold standard and the US demand for GBP \uparrow .

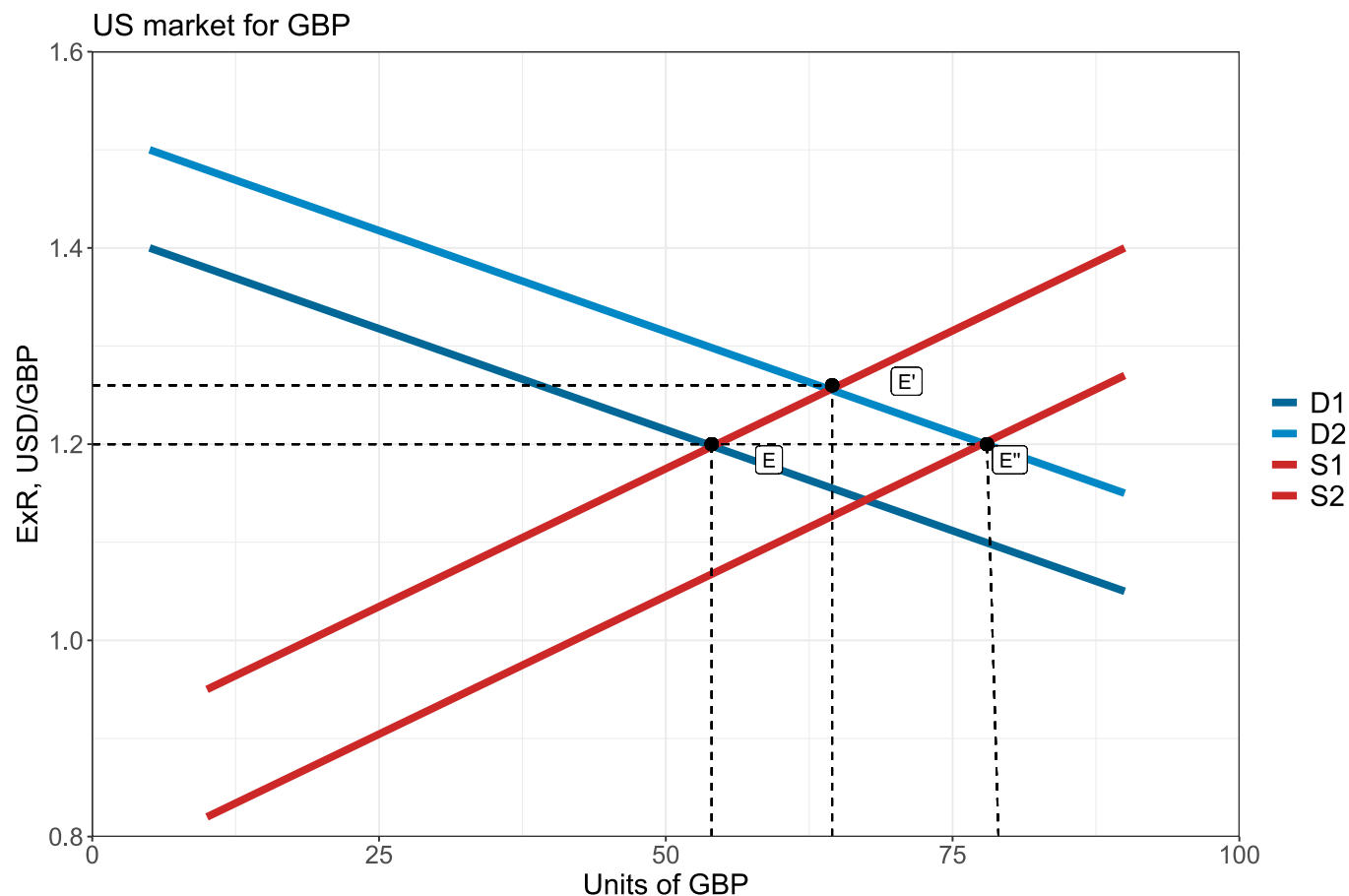
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Fixed ExR Policy Action

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

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Italian cheese costs one-third more than American cheese, **real ExR** is **1.33 wheels** of American cheese per wheel of Italian cheese.

Real Exchange Rate

Algebra:

$$\begin{aligned} & \text{Real ExR} \\ &= [(R \times \text{Foreign Price})]/(\text{Domestic Price}) \\ &= [(1.20 \text{ per EUR}) \times (200 \text{ EUR per wheel})]/(180 \text{ USD per wheel}) \\ &= \frac{(240 \text{ USD per wheel of Italian Cheese})}{(180 \text{ USD per wheel of American cheese})} \\ &= 1\frac{1}{3} \text{ wheels of American cheese per wheel of Italian cheese} \end{aligned}$$

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Whether wine or cheese, process is the same, as you'll see in your homework.

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Even though we express parity in EUR to USD, **real exchange rates** suggest appreciated EUR value and slightly greater buying power with the dollar due to lower inflation.

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

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

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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 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.

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- Regional policies capable of addressing the imbalances that may develop
- Nations involved must be seeking a level of integration that goes beyond simple free trade