EC 380: Lecture 15

Global Finance: Exchange Rates LR

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Prologue

Recap

Previously

- National accounts and CA balance interconnected
- Deficit is not a sign of economic/geopolitical weakness
- A deficit implies borrowing from abroad, but investments can be very fruitful

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Today

- Exchange Rate Adjustments (SR + LR)

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Normally we see the rates that do not account for transaction fees.

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We cannot comment pesos being worth little though, since nominal wages in pesos may be high.

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When a home currency is able to purchase more units of a foreign currency, the home currency is said to have **appreciated in value**.

When instead the amount of foreign currency that one can buy with a single unit of home currency declines, the home currency is said to have **depreciated in value**.

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Check how you would calculate GBP:USD exchange rate

Currency Exchanges

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> Traders (importers and exporters) and investors routinely transact in foreign currencies, either receiving or making payments in another country's money. Tourists are included in this category because they hold foreign exchange in order to buy foreign goods and services.

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> Arbitrage conveys the idea of buying something where it is relatively cheap and selling it where it is relatively expensive. Arbitrageurs borrow money where interest rates are relatively low and lend it where rates are relatively high.

Keeps interest rates from diverging too far and also constitutes one of the primary linkages between national economies.

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> Speculators are businesses that buy or sell a currency because they expect its price to rise or fall. They have no need for foreign exchange to buy goods or services or financial assets; rather, they hope to realize profits or avoid losses through correctly anticipating changes in a currency's market value.

If speculators view a currency as overvalued, they will sell it and drive down its value. If they guess wrong, however, they can lose a lot of money.

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Speculation against currency can be **destabilizing**, sometimes leads to grossly over- or undervalued currency, major problem for that country.

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- Retail customers
- Commercial banks
- Foreign exchange brokers
- Central banks

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Usually buy and sell through a commercial bank.

Commercial banks: Hold inventories of foreign currencies as part of services offered to customers. Usually have relationship with several foreign banks where they hold their balances of foreign currencies.

When a surplus accumulates or a shortage develops, the banks trade with each other to adjust their holdings.

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> An individual or firm that needs foreign exchange calls its bank. The bank quotes a price at which it will sell the currency. The price is based on either (i) bank having account with bank in the country where currency used, or (ii) rate from foreign exchange broker. Broker keeps track of buyers and sellers of currencies and acts as deal maker.

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Contracts defined in nominal foreign currency amounts face an **uncertainty** regarding how much these costs will scale or deflate upon reaching a payment date.

Exchange Rate Risk

Market answer: **forward exchange rates**

> The forward exchange rate sets the price of a currency that will be delivered in the future and these transactions take place on the forward market. Spot market represents any buying and selling taking place in the present.

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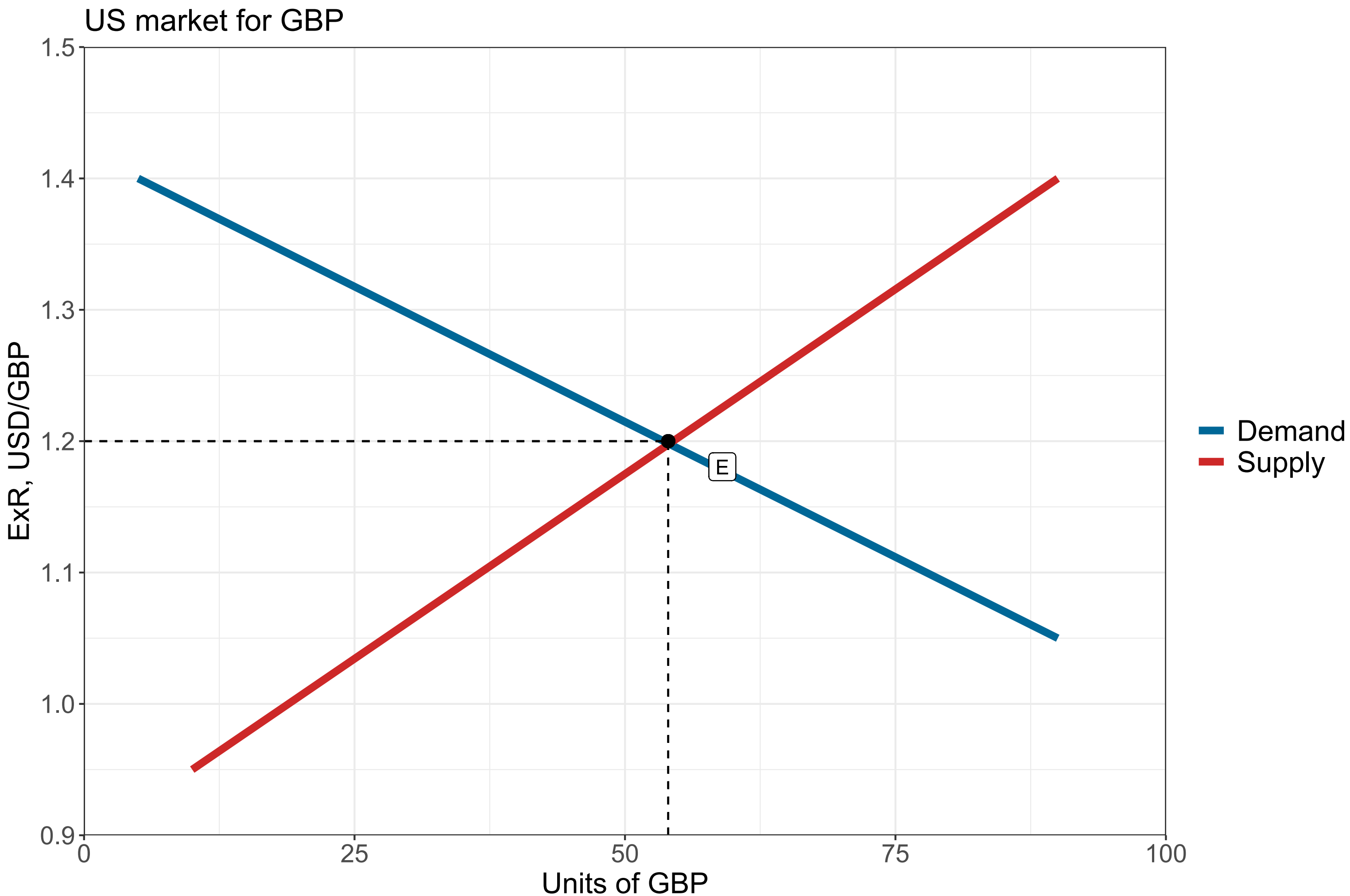
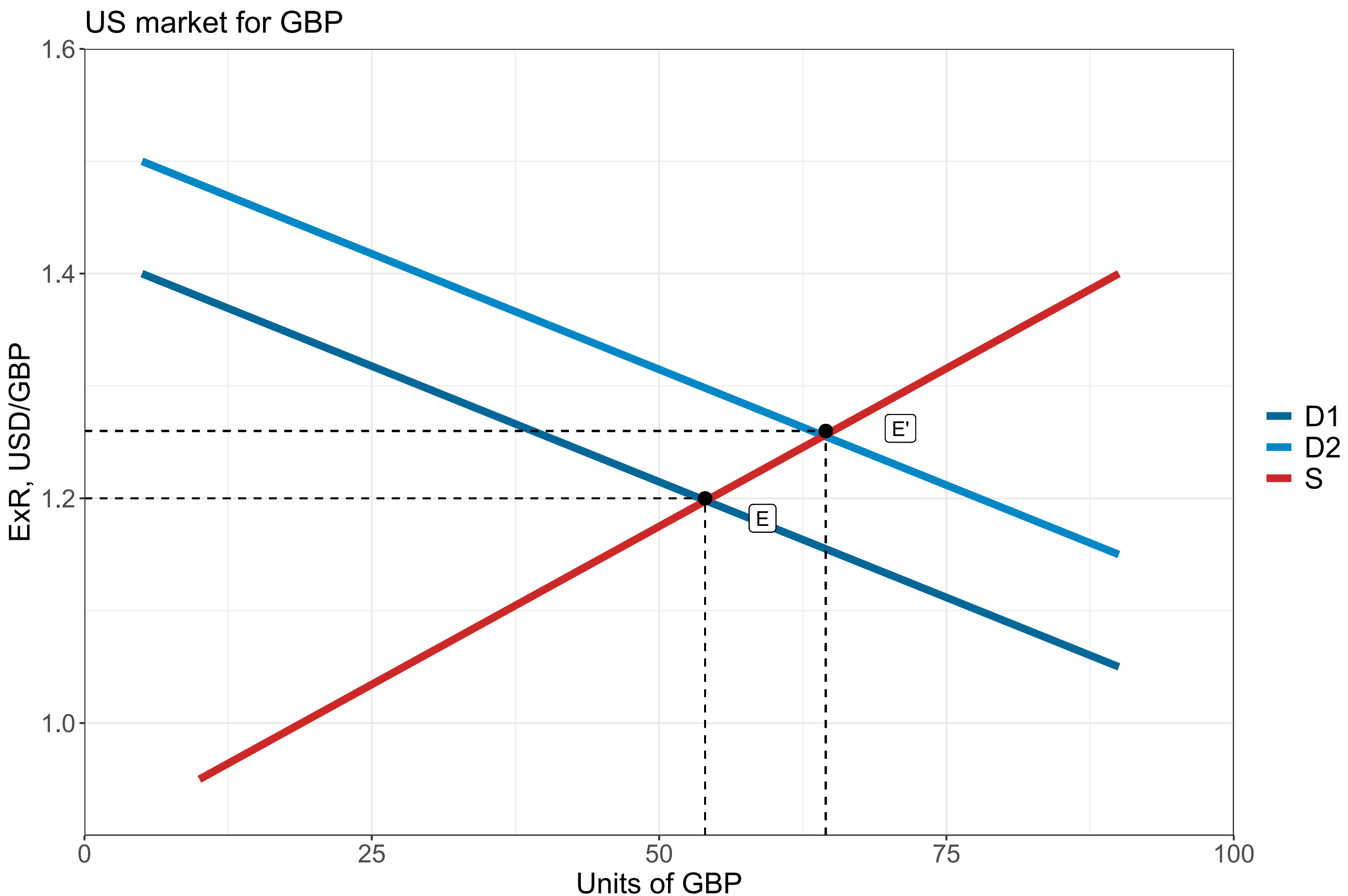
We begin with assumption that exchange rates are **completely flexible**.

FX Market: Flexible



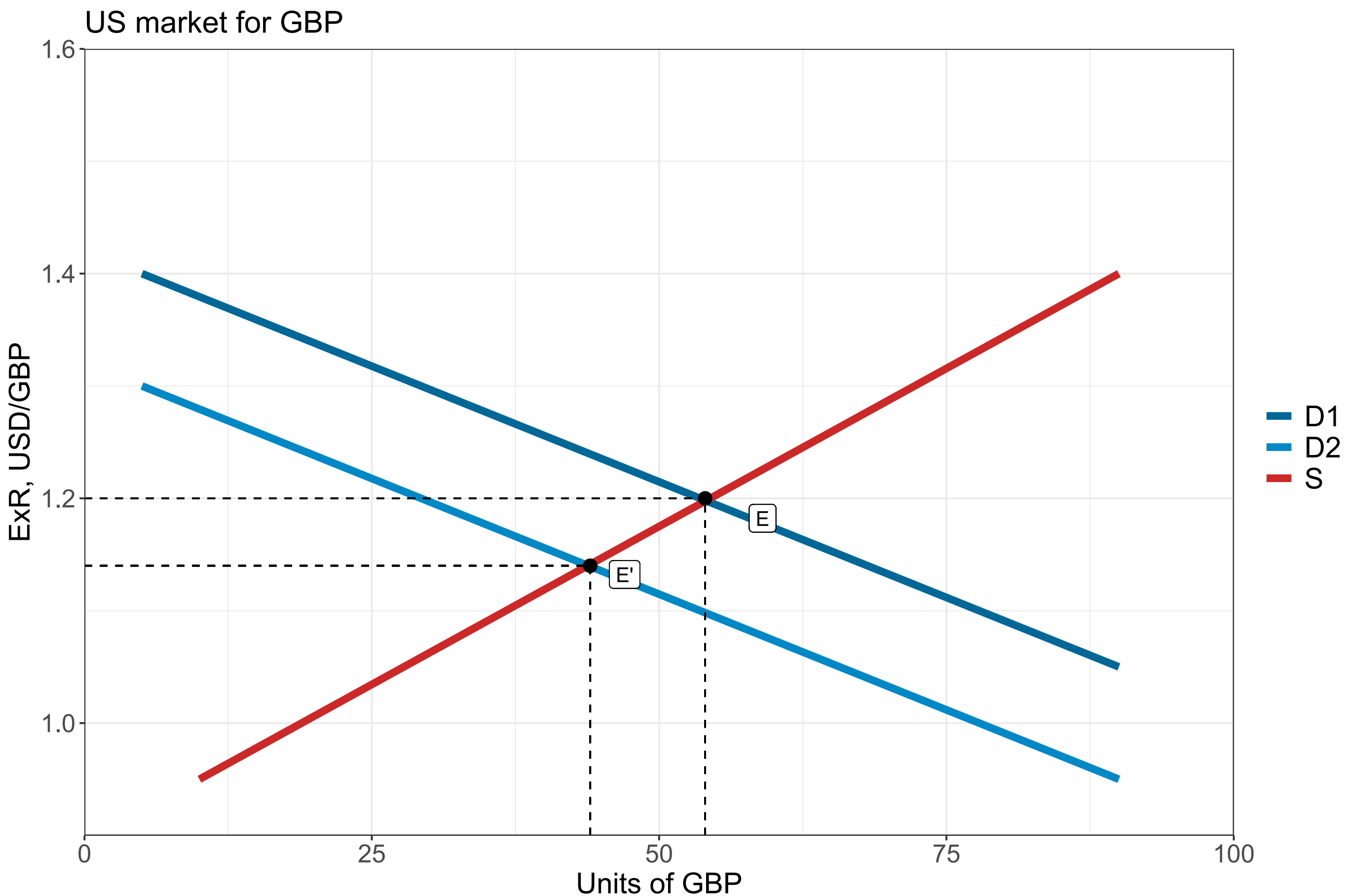
FX Market: Flexible

Increased demand for GBP in USA (D1 $\rightarrow$ D2)



FX Market: Flexible

Decreased demand for GBP in USA (D2 $\leftarrow$ D1)



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This concept of equal purchasing power internationally for the same basket of goods is called **purchasing power parity (PPP)**.

In the short run, differences in purchasing power for the same bundle of goods exists.

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Demand for pound falls until purchasing power parity is achieved.

PPP Example

A few unrealistic assumptions.

- Requires that goods flow costlessly across international borders and that all goods and services can be traded.

In reality, there are transportation costs involved with moving goods and some goods and services are not traded. Merchant who buys 800 GBP of goods in UK and sells for 1600 USD in the US loses some of 600 USD profit to shipping, insurance, and other transaction costs.

- Bank fees for a currency broker when buying the needed pounds.

- Some of the goods and services are non-tradable, arbitrage is not possible.

PPP Example

Also, few nations have eliminated all their **barriers to the entry** of foreign goods and services.

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Evidence shows PPP exerts its influence over exchange rates **only in the long run**.

Over time, lower transport costs, minimized import rules and regulations.

Summary

Recap

- Exchange rates determine price of foreign goods
- Numerous reasons to hold foreign reserves
- Shifts in exchange rates often mirror changes in demand and supply of currencies
- PPP holds only in LR

Next Time

- SR, Medium exchange rates and parity relationships