AP MACRO-THE FOREX
MR. LIPMAN

INTERNATIONAL TRADE

& FINANCE

International Trade

Why people trade

Without trade what things would you have to go without?

Everything you don't produce yourself!

(Clothes, car, cell phone, bananas, heath care, etc)

Every country specializes in the production of goods and services and trades it to others for things they cannot produce themselves.

Limiting trade reduces people's choices and makes them worse off.

The Point: More access to trade means more choices and a higher standard of living.

Closed vs. Open Economies

A closed economy focuses only on the domestic price.

An open economy trades for the lowest world price.

Two-way Capital Flows

- Capital moves in both directions
- Differences in individual investor's incentives
- Financial specialization
- Countries can be both creditors and debtors simultaneously

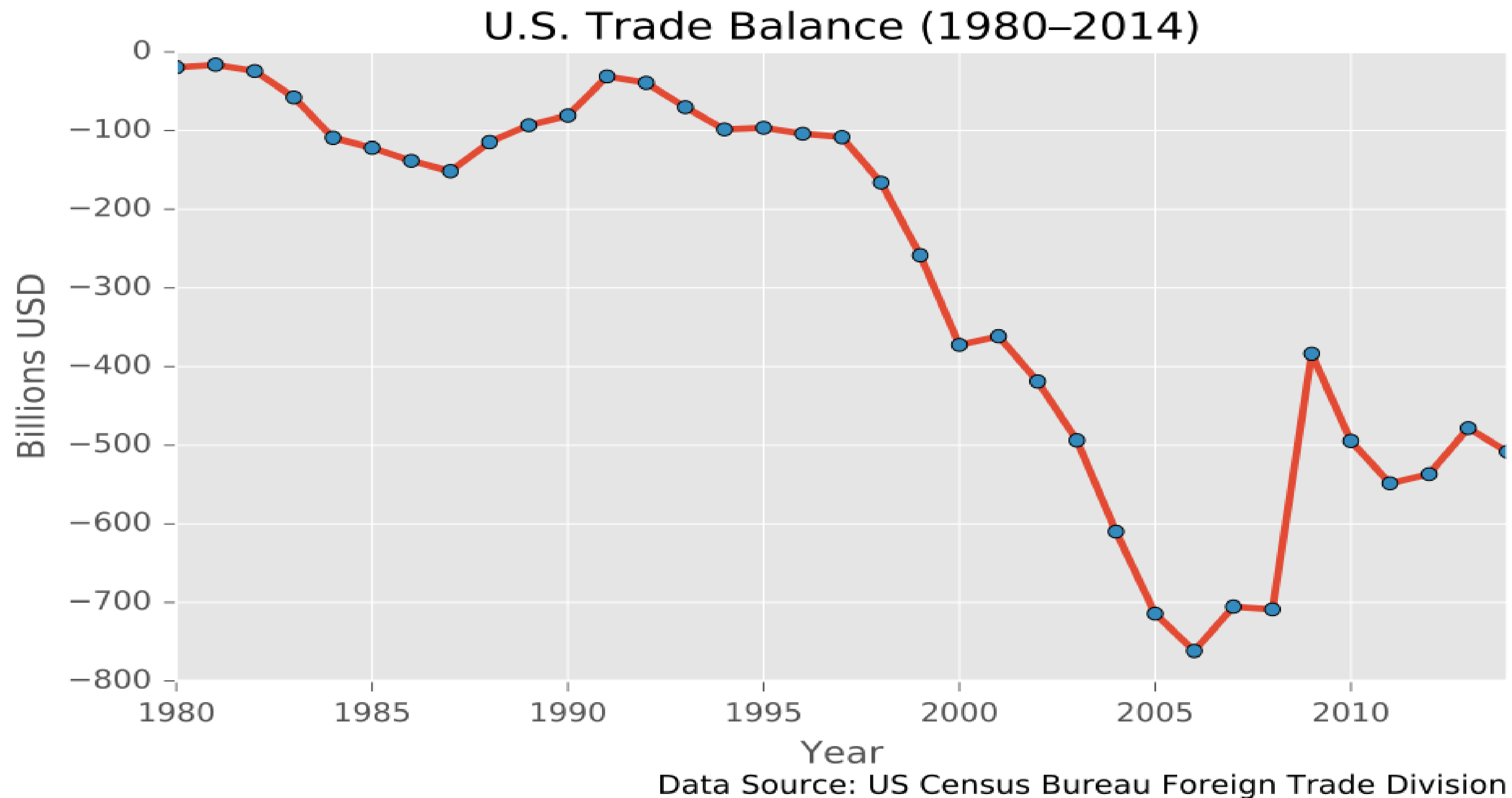
Balance of Trade

Net Exports (X_N) is Exports – Imports

Trade Surplus = Exporting more than is imported

Trade Deficit (aka. trade gap) = Exporting less than is imported

Notice the “reduced” trade debt during the recession of 2008-09 when we bought less imported goods because our economy was so weak.



Balance of Payments (BOP)

Balance of trade includes only goods and services but balance of payments considers ALL international transactions.

The BOP summary is done for a given year & Prepared in the domestic country's currency

Ex. If accounting the BOP of the U.S. it would be in the Dollar.

The balance of payments is made up of two accounts. The current account and the capital account.

The Current Account is made up of three parts:

1. **Trades in Goods and Services (Net Exports)- Difference between a nation's exports of goods and services and its imports**

   Ex: Toys imported from China, US cars exported to Mexico

2. **Investment Income- $ from factors of production including payments made to foreign investors.**

   Ex: Money earned by Japanese car producers in the US

3. **Net Transfers- $ flows from the private & public sectors**

   Ex: donations, aids and grants, official assistance

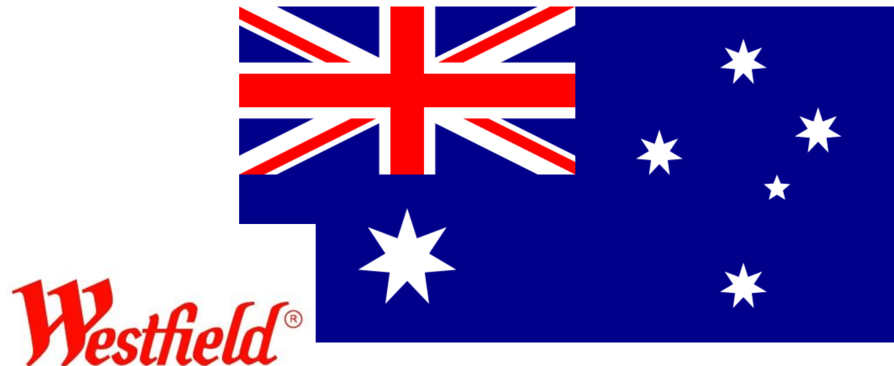
The Capital or (Financial) Account

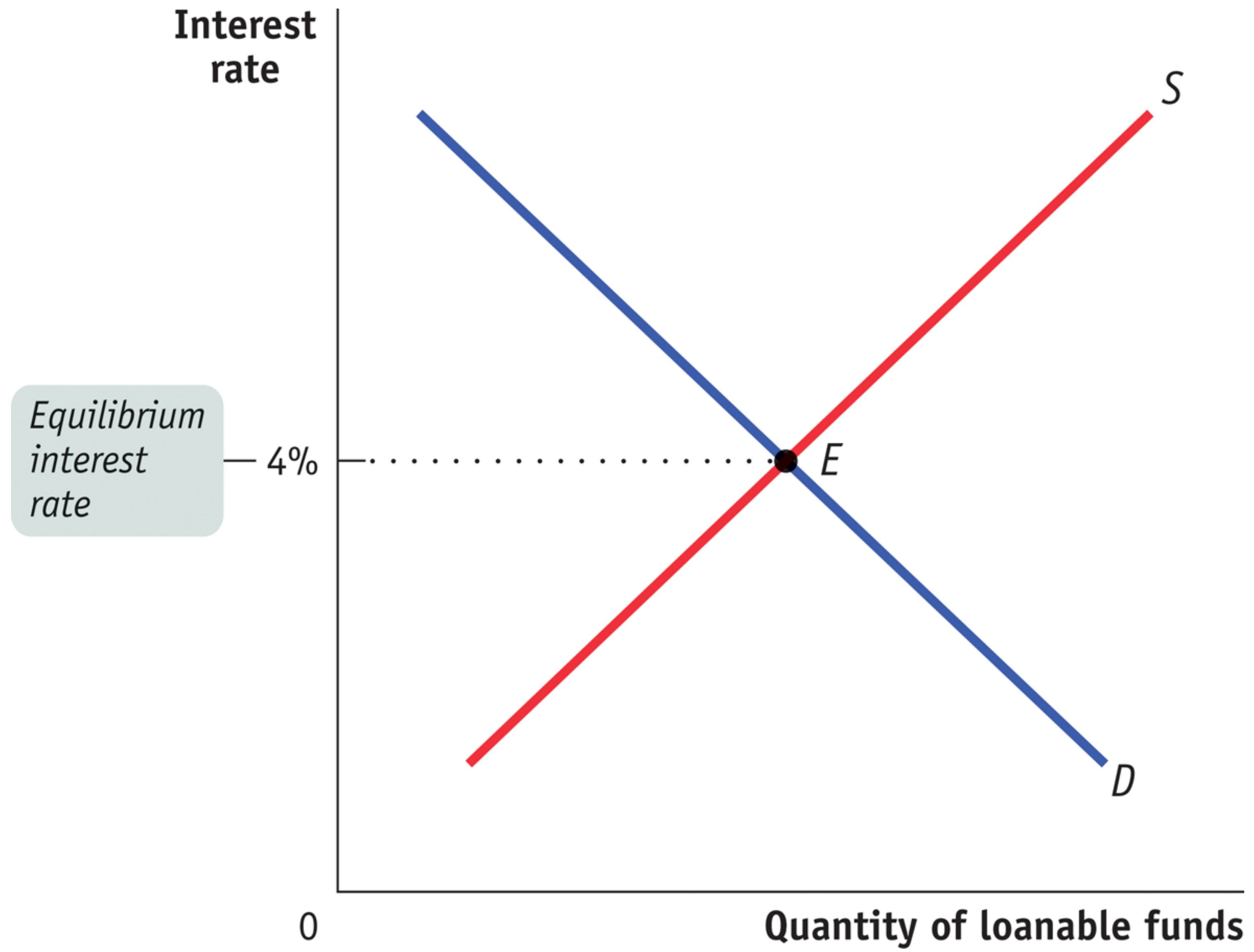
The Capital Account measures the purchase and sale of financial assets abroad.

(Purchases of things that stay in the foreign country).

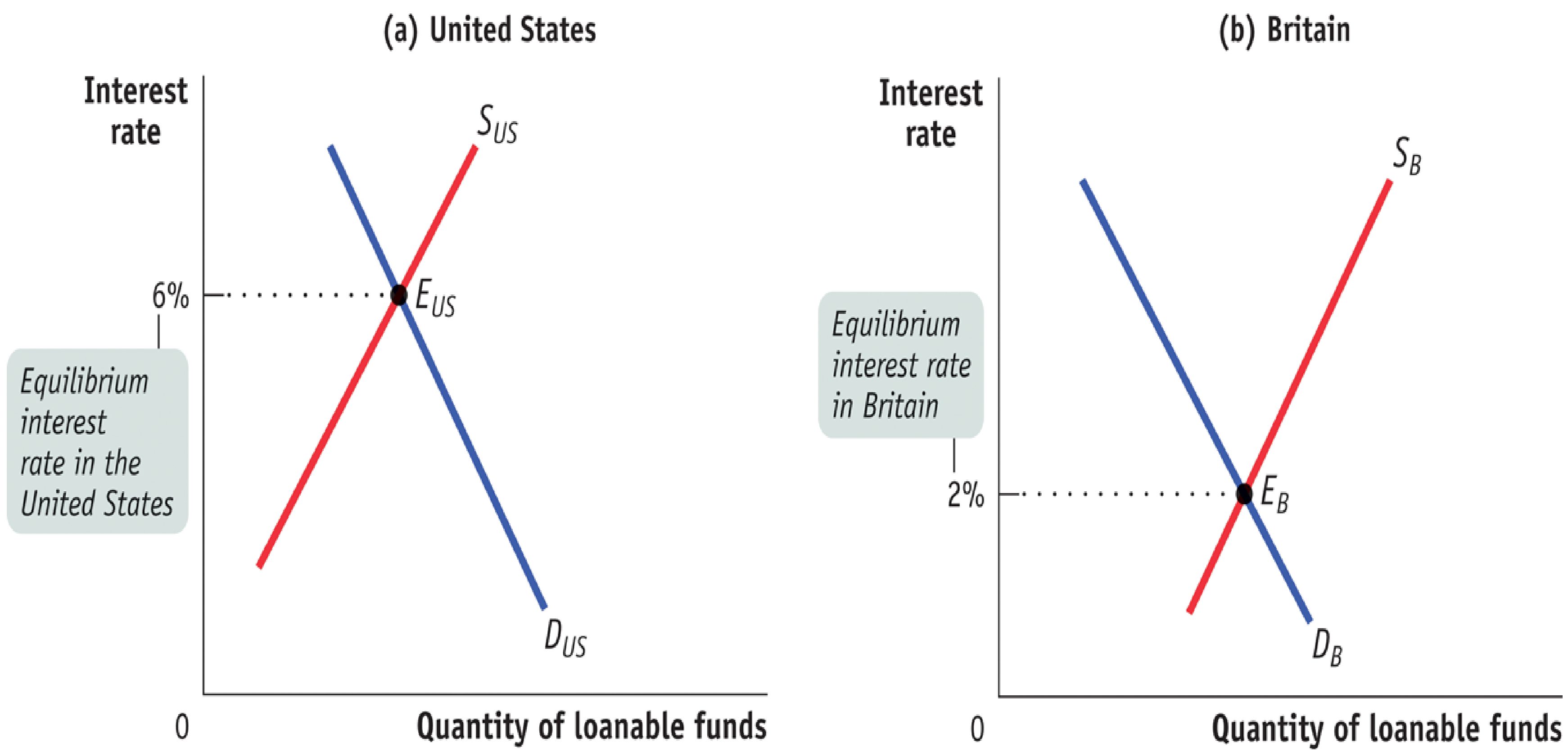
Examples:

- **US company buys a hotel in Russia**
- **A Korean company sells a factory in Ohio**
- **Australian company owns local Mall**





The Loanable Funds Model Revisited



Loanable Funds Markets in Two Countries…Where Would Most $ Go?

Current or Capital Account?

Identify if examples are counted in the current or capital account and determine if it is a credit or debit for the US.

1. **Bill, an American, invests $20 million in a ski resort in Canada**
2. **A Korean company sells vests to the US Military**
3. **A US company, Boeing, sells twenty 747s to France**
4. **A Chinese company buys a shopping mall in San Diego**
5. **An illegal immigrant sends a portion of his earning to his family**
6. **An German investor buys $50,000 US Treasury Bonds**
7. **Italian tourists spend 5 million in the US while American tourists spend 8 million in Italy.**

Practice Questions & Answers

1. **U.S. income increases relative to other countries. Does the BOP move toward a deficit or a surplus?**
   - **U.S. citizens have more disposable income**
   - **Americans import more**
   - **Net exports (X_n) decrease**

   The current account balance decreases and moves toward a deficit.

2. **If the U.S. dollar depreciates relative to other countries does the BOP move to a deficit or a surplus?**
   - **US exports are desirable**
   - **America exports more**
   - **Net exports (X_n) increase**

   The current account balance decreases and moves toward a surplus.

Foreign Exchange
(aka. FOREX)
Module 42

Exchange Rate = Relative Price of Currencies

Exports and Imports

1. US sells cars to Mexico
2. Mexico buys tractors from Canada
3. Canada sells syrup to the U.S.

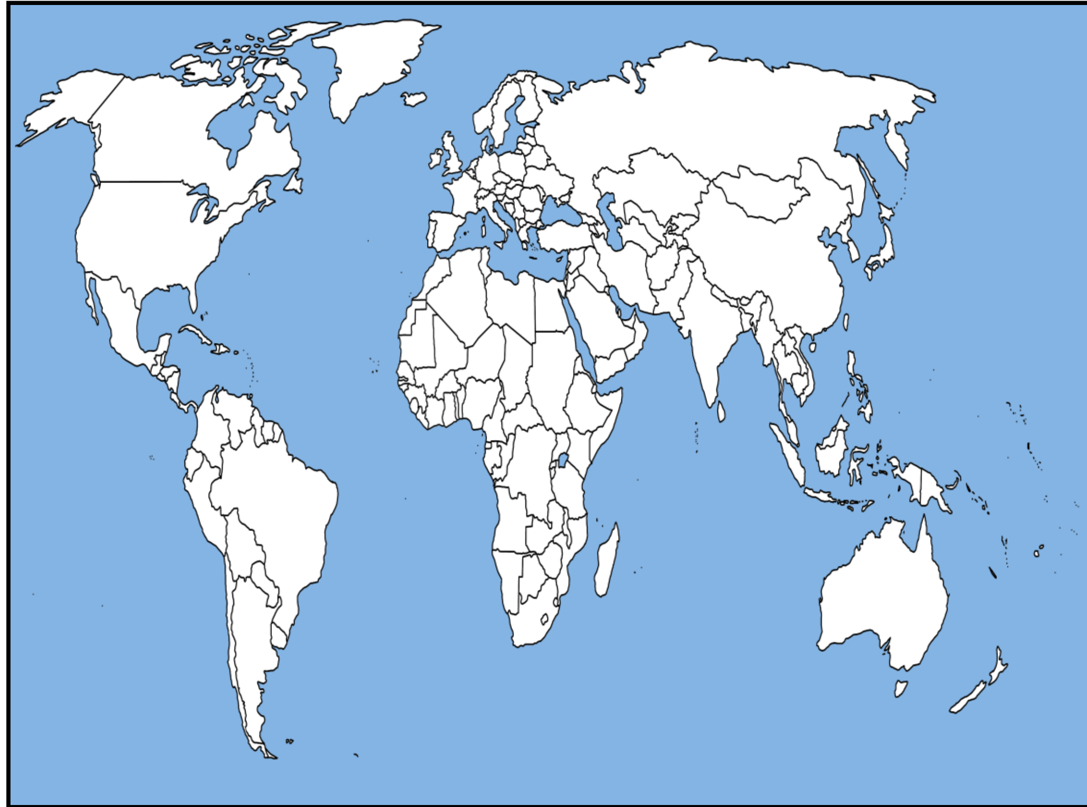
For all these transactions, there are different national currencies.

Each country must be paid in their own currency

The buyer (importer) must exchange their currency for that of the sellers (exporter).

The turnover in FOREX markets is almost $4 trillion (USD) a day

Currency Codes
USD = US Dollar
EUR = Euro
JPY = Japanese Yen
GBP = British Pound
CHF = Swiss Franc
CAD = Canadian Dollar
AUD = Australian Dollar
NZD = New Zealand Dollar



In the FOREX market only look at two countries/currencies at a time

Ex: US Dollars and British Pounds

Examine price of one currency in terms of the other currency. Ex:$2 = £1

Exchange Rate will depend on which currency you are converting.

The price of one US Dollar in terms of Pounds is

1 Dollar = £1/$2 = £.5

The price of one Pound in terms of Dollars is

1 Pound = $2/£1 = $2

Depreciation

- The loss of value of a country's currency with respect to a foreign currency

- If the dollar losses value compared to another country’s currency

- More units of dollars are needed to buy a single unit of the other currency.

- The dollar is said to be “Weaker”

Appreciation

- The increase of value of a country's currency with respect to a foreign currency

- If the dollar gains value compared to another country’s currency

- Less units of dollars are needed to buy a single unit of the other currency.

- The dollar is said to be “Stronger”

FOREX is based upon Supply and Demand

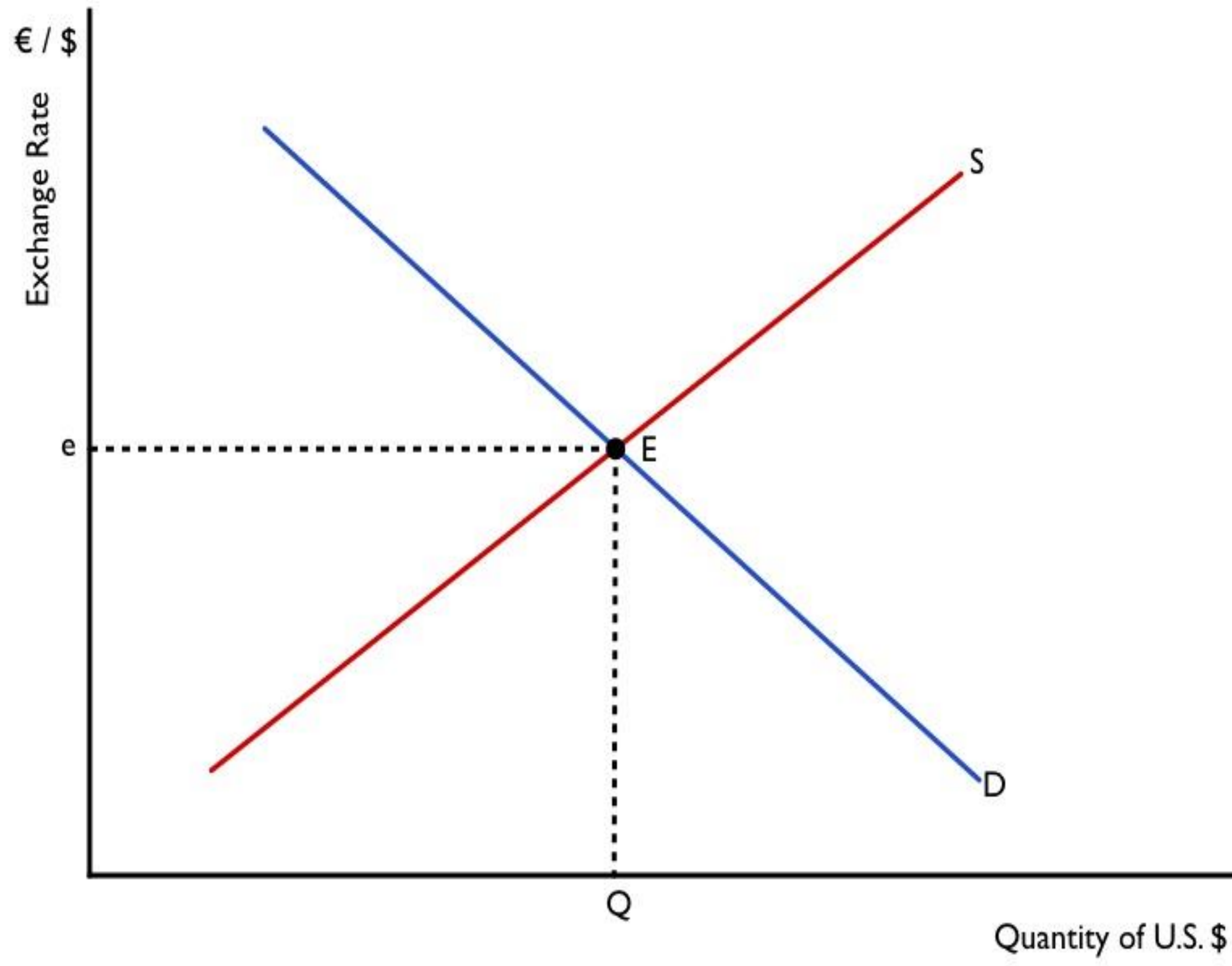
Imagine a huge table with all the different currencies from every country

This is the Foreign Exchange Market!

If you demand one currency, you must supply your currency.

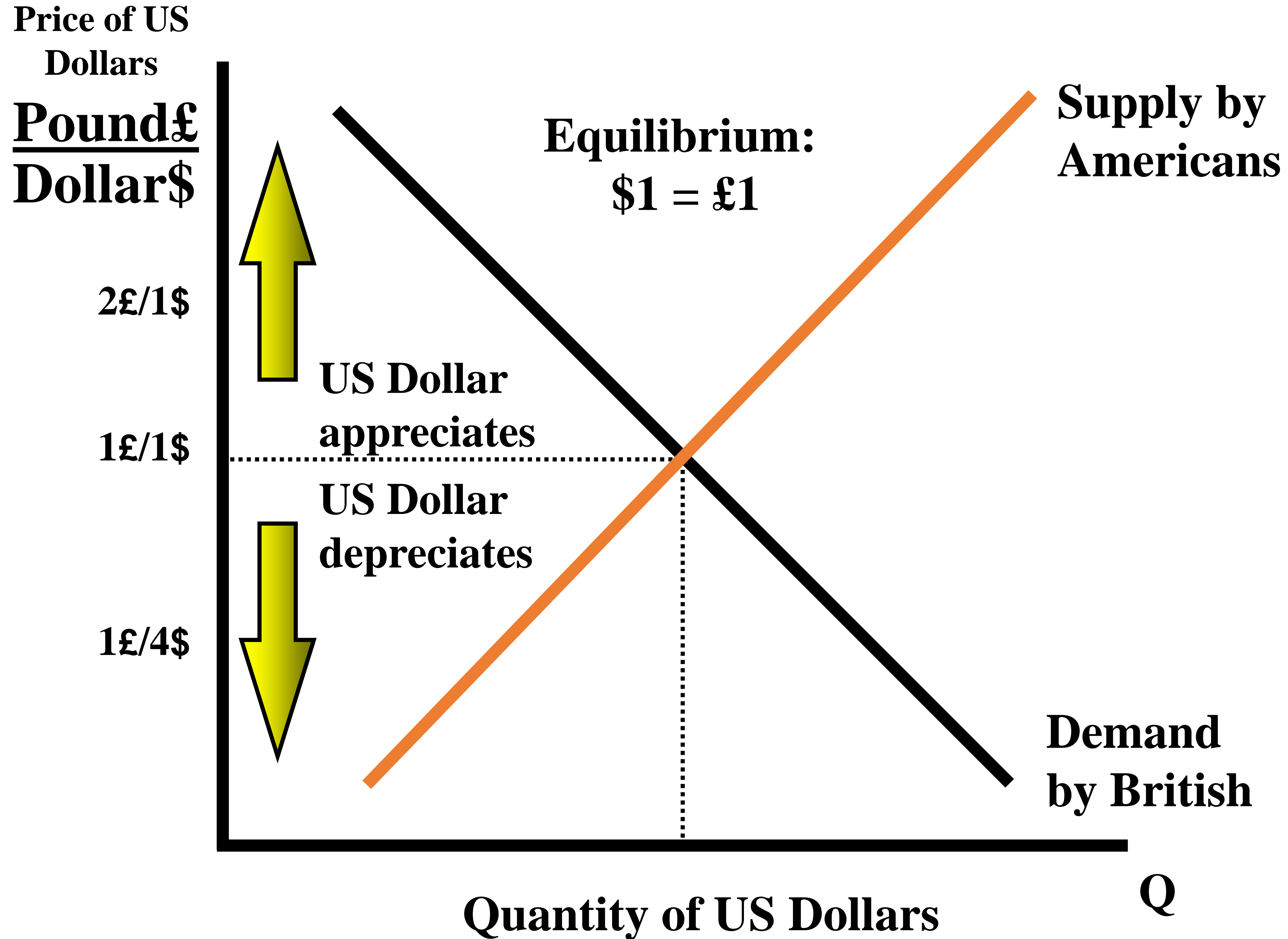
Ex: If Canadians want Russian Rubles. The demand for Rubles in the FOREX market will increase and the supply of Canadian Dollars will increase.

Equilibrium Exchange Rate



- FOREX follows laws of supply & demand
- Equilibrium Exchange Rate

S&D for the US Dollars



Purchasing Power Parity

- Purchasing Power Parity (PPP) is nominal exchange rate between 2 countries for a given basket of goods and services.
- Big Mac Index (single item cost nation to nation)
- Nominal Exchange Rates and PPP
  - If a basket of goods cost $1k in Mexico but only $100 in U.S. then the exchange rate would be 10 pesos to the dollar.

Practice Questions

For each of the following examples, identify what will happen to the value of US Dollars and Japanese Yen.

1. American tourists increase visits to Japan.
2. The US government significantly decreases personal income tax.
3. Inflation in the Japan rises significantly faster than in the US.
4. Japan has a large budget deficit that increases Japanese interest rates.
5. Japan places high tariffs on all US imports.
6. The US suffers a larger recession.

Module 43 Exchange Rate Policy

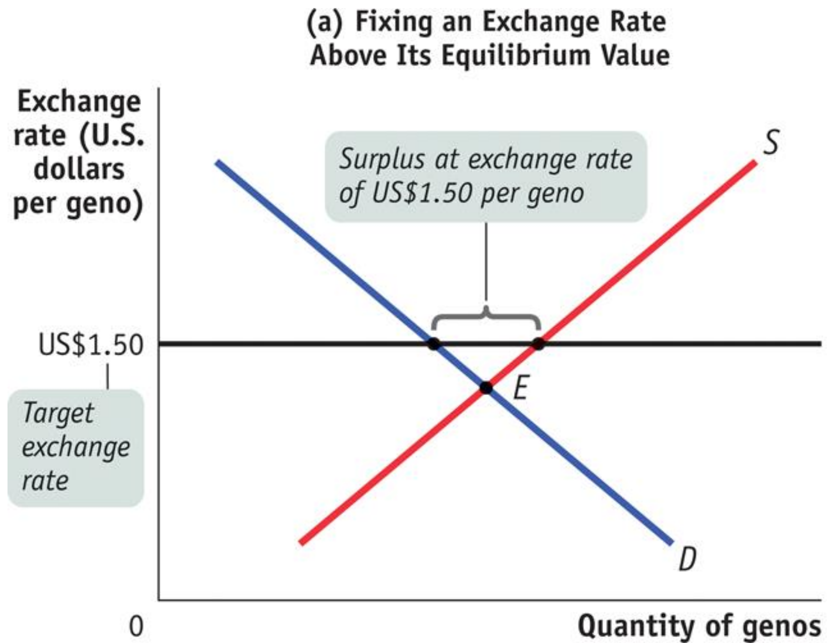
- Governments have more power to influence nominal exchange rates than other prices

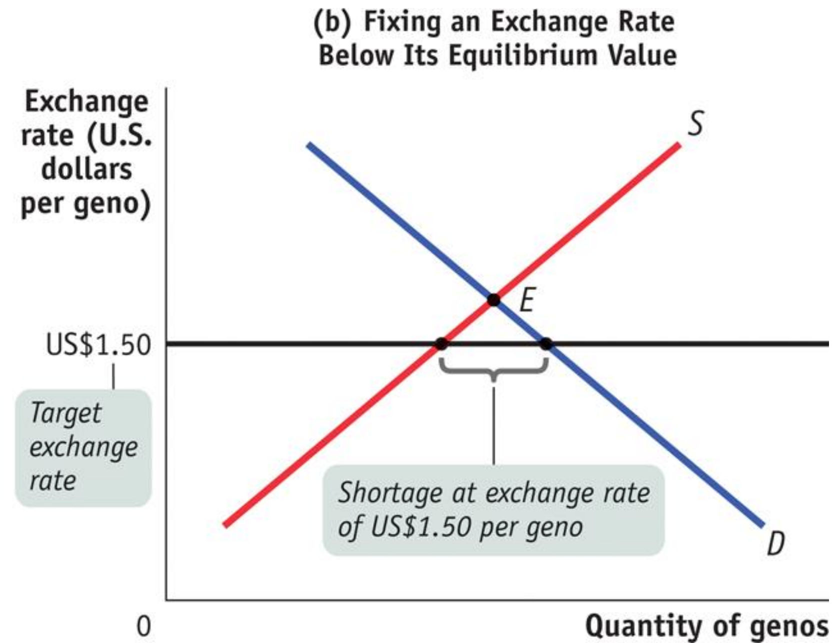
- Exchange rates are important to countries where exports and imports are a large fraction of GDP

Fixed Exchange Rate: When the government keeps the exchange rate against another currency at or near a particular target rate. (provides certainty but must keep large quantities of foreign currency on hand and thus low-return investment)

Floating Exchange Rate: Country lets exchange rate go where ever the market takes it. (helps to insulate nation from recessions in other nations)

- "Managed" & "Target Zone"





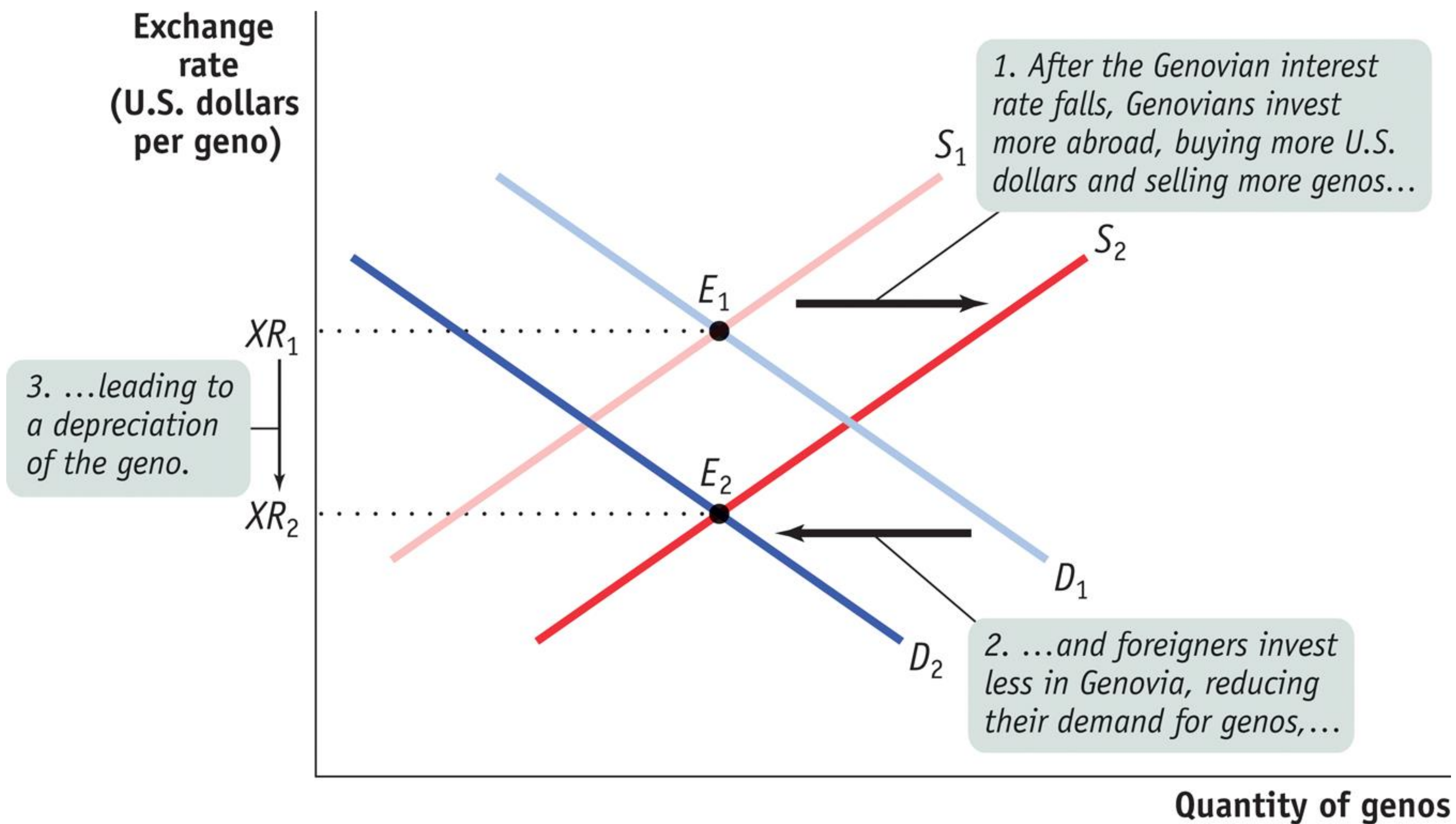
If using a fixed exchange rate then country must be prepared to "step into the market" to adjust currency rates.

Module 44: Exchange Rates and Policy

- Devaluation: A reduction in the value of a nation's currency

- Revaluation: An increase in a nation's currency value

General Rule: Recessions lead to a fall in imports and an expansion leads to a rise in imports



Hypothetical country of Genovia lowers interest rates and thus attracts less foreign investors reducing demand for Genos