

Finance 4000

Money and Capital Markets

Seventh lecture

- Brief review of efficient markets
- Foreign Exchange markets
 - What determines foreign exchange rates?
 - Two particularly important variables
 - Relative price levels
 - Relative interest rates
 - Two particularly important relationships
 - Purchasing power parity
 - Interest-rate parity
 - Purchasing power parity is a relationship between the relative price levels in two countries
 - Interest-rate parity is a relationship between the relative interest rates in the two countries
 - Both purchasing power parity and interest-rate parity are based on arbitrage arguments
- Exchange rates

- Price at which buy one currency with another currency
 - Spot versus forward
- Pounds sterling per dollar or dollars per pound sterling?
- Appreciation
 - increase in a currency's value
 - increase in what can be bought with a currency
 - decrease in dollars per pounds sterling
 - increase in pounds sterling per dollar
- Depreciation
 - decrease in a currency's value
 - decrease in what can be bought with a currency
 - increase in dollars per pounds sterling
 - decrease in pounds sterling per dollar
- Now that we're all thoroughly flustered

- Generally speaking, foreign exchange rates are quoted as dollars per unit of foreign currency
 - Just like quotes of other assets or goods and services
 - Dollars per unit of what's being bought
- If use dollars per unit of foreign currency
 - A fall in the exchange rate is an appreciation
 - An increase in the exchange rate is a depreciation
 - Seems a little strange to have an appreciation associated with a fall
 - So we'll quote exchange rates as the ratio of the amount of foreign currency per unit of domestic currency
 - If the number of pounds sterling per dollar increases, then a dollar buys more pounds sterling and the dollar appreciates

- Purchasing power parity

- $$E = \frac{P^f}{P^d}$$

- where E is the exchange rate foreign currency relative to domestic currency
- P^f is the foreign price level
- P^d is the domestic price level

- Why should this hold?

- Consider an individual good
 - Law of one price
 - Net of transportation costs and tariffs, the price of a good should be the same in any two countries
 - Example: steel
 - Can trade inputs instead of good

- Why might the law of one price not hold?
 - Goods not identical
 - Nontraded goods and services
 - * Should the prices of haircuts be the same in Athens Greece and Athens GA?
 - * How about Athens TX and Athens GA?
 - * Why or why not?
- Does purchasing power parity hold?

- Does purchasing power parity hold?
 - Holds in the “long run”
 - The single most important factor that affects an exchange rate is the relative price level
 - Additional factors that have some effect on exchange rates in the long run
 - Demand for domestic relative to foreign goods
 - * An increase in the demand for domestic goods relative to foreign goods -> increase in exchange rate
 - * A decrease in the demand for domestic goods relative to foreign goods -> decrease in exchange rate

- Relative productivity of domestic relative to foreign
 - * An increase in the productivity of domestic production relative to foreign production -> increase in the exchange rate
 - * A decrease in the productivity of domestic production relative to foreign production -> decrease in the exchange rate

- Tariffs and quotas — not obvious