JEB102 - Principles of Economics II

Seminar 7: Open-Economy Macroeconomics: Basic Concepts

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Basic concepts

- Open economy
  - Flows of goods
    - Export
    - Import
    - Net export = trade balance
    - Which factors might influence them?
  - Flows of Capital
    - Net capital outflow = net foreign investment
    - Which factors might influence them?

The Equality of Net Exports and Net Capital Outflow

- Why NCO = NX?
- **net capital outflow -** the purchase of foreign assets by domestic residents minus the purchase of domestic assets by foreigners
- **net exports** - the difference between the value of its exports and the value of its imports

Saving, Investment, and Their Relationship to the International Flows

- $Y = C + I + G + NX$
- $S = Y - C - G$
- $I + NX = Y - C - G = S$
- $S = I + NX$
- And as NCO = NX, S = ?
- The case of closed economy?

Summary

Trade deficit	Balanced Trade	Trade Surplus
Exports < Imports	Exports = Imports	Exports > Imports
Net Exports < 0	Net Exports = 0	Net Exports > 0
$Y < C + I + G$	$Y = C + I + G$	$Y > C + I + G$
Saving < Investment	Saving = Investment	Saving > Investment
Net Capital Outflow < 0	Net Capital Outflow = 0	Net Capital Outflow > 0

Real and Nominal Exchange Rates

- 25 CZK/EUR to 27 CZK/EUR – is it appreciation or depreciation of the EUR?
- Real Exchange Rate = (Nominal Exchange Rate x Domestic Price) / Foreign Price
  - = (e x P) / P*

Purchasing-Power Parity

- Purchasing-power parity: a theory of exchange rates whereby a unit of any given currency should be able to buy the same quantity of goods in all countries
- Law of one price – arbitrage
- The nominal exchange rate between the currencies of two countries should depend on the price levels in those countries
- Limitations???

Purchasing-Power Parity

- PPP holds between Germany and the Czech Republic, suppose that the price of a bottle of beer is 5 Eur in Germany, and the nominal exchange rate is 27 CZK / EUR that is 1 / 27 EUR / CZK. What is the price of a bottle of beer in the Czech Republic?
- $E = P^* / P$
- P^*… CZ, P… Eurozone
- What is real exchange rate? $(e \times P) / P^*$
- What is r.e.r. the next year when the CZ inflation rate was 10%? Depreciation or appreciation of German RER?

True or false?

1. If a country's imports exceed its exports it has a trade surplus.
2. If purchases of foreign assets by U.S. residents exceed purchases of U.S. assets by foreign residents, then U.S. net capital outflow is positive.
3. If a German firm buys goods from a U.S. firm with dollars it obtains by exchanging euros for dollars, both U.S. net exports and U.S. net capital outflow increase.

True or false?

1. If Walmart buys $50 million worth of consumer goods from China and sells them in the U.S., and China uses the $50 million to purchase U.S. bonds, U.S. net exports and U.S. net capital outflow both fall.
2. If a country's trade surplus falls, its net capital outflow rises.
3. In an open economy, national saving can be less than investment.

True or false?

1. If the price of a good in the U.S. is $10, the exchange rate is 2 units of foreign currency per dollar, and the foreign price of the same good is 30 units of foreign currency, then the real exchange rate is 2/3.
2. Many economists believe that the theory of purchasing-power parity describes the forces that determine exchange rates in the long run.

1. A country purchases more goods and services from residents of foreign countries than residents of foreign countries purchase from it. This country has
   a) a trade surplus and positive net exports.
   b) a trade surplus and negative net exports.
   c) a trade deficit and positive net exports.
   d) a trade deficit and negative net exports.

1. If U.S. exports are \$300 billion and U.S. imports total \$350 billion, which of the following is correct?
   a) The U.S. has a trade surplus of \$350 billion.
   b) The U.S. has a trade surplus of \$50 billion.
   c) The U.S. has a trade deficit of \$350 billion.
   d) The U.S. has a trade deficit of \$50 billion.

1. If a country has negative net capital outflows, then its net exports are
    a) positive and its saving is larger than its domestic investment.
    b) positive and its saving is smaller than its domestic investment.
    c) negative and its saving is larger than its domestic investment.
    d) negative and its saving is smaller than its domestic investment.

1. An American retailer sells dollars to obtain euros. It then uses the euros to buy ready-to-assemble furniture from Sweden. These transactions
    a) increase U.S. net capital outflow because foreigners obtain U.S. assets.
    b) decrease U.S. net capital outflow because foreigners obtain U.S. assets.
    c) increase U.S. net capital outflow because the U.S. buys capital goods.
    d) decrease U.S. net capital outflow because the U.S. buys capital goods.

1. All saving in the U.S. economy shows up as
   a) investment in the U.S. economy.
   b) U.S. net capital outflow.
   c) either investment in the U.S. economy or U.S. net capital outflow.
   d) None of the above is correct.

1. Other things the same, if a country saves more, then
   a) net capital outflow rises, so net exports rise.
   b) net capital outflow rises, so net exports fall.
   c) net capital outflow falls, so net exports rise.
   d) net capital outflow falls, so net exports fall.
2. Other things the same, if a country has a trade deficit and saving rises,
   a) net capital outflow rises, so the trade deficit increases.
   b) net capital outflow rises, so the trade deficit decreases.
   c) net capital outflow falls, so the trade deficit increases.
   d) net capital outflow falls, so the trade deficit decreases.

1. Other things the same, the real exchange rate between U.S. and Belgian goods would be higher if

a) prices in the U.S. were higher, or the number of euro the dollar purchased were higher.

b) prices in the U.S. were higher, or the number of euro the dollar purchased were lower.

c) prices in the U.S. were lower, or the number of euro the dollar purchased were higher.

d) prices in the U.S. were lower, or the number of euro the dollar purchased were lower.

1. The nominal exchange rate is .80 euros per dollar and the real exchange rate is 4/3. Which of the following prices for a particular good are consistent with these exchange rates?

a) $4 in the U.S. and 3 euros in Italy.
b) $4 in the U.S. and 3.75 euros in Italy.
c) $5 in the U.S. and 3 euros in Italy.
d) $6 in the U.S. and 2.50 euros in Italy.

Thank you for your attention!

ANY QUESTIONS?