Chapter 18: The Open Economy

I. Capital Flows and the Balance of Payments

- **Balance of Payments Accounts**: A summary of the country’s transactions with other countries.
  - *Sales and purchases of goods and services*: payments to and from foreigners for goods and services that are imported or exported (exports minus imports)
  - *Factor Income*: income paid for using the factors of production (capital, land, labor) owned by residents of foreign countries
  - *International transfers*: funds sent by residents of one country to residents of another country
  - *Official asset sales and purchases*: sales or purchases of foreign-owned assets by governments or government agencies
  - *Private sales and purchases of assets*: sales or purchases of foreign-owned assets by private agents (households and firms)

- **Current Account**: The balance of payments on goods and services (exports minus imports) plus net international transfer payments and factor income.

- **Financial Account**: The difference between the sales of a country’s assets to foreigners and its purchases from foreigners (net capital flows). Net sales of assets to foreigners.

\[
\text{Current Account (CA)} = -\text{Financial Account (FA)}
\]

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<thead>
<tr>
<th></th>
<th>(a)</th>
<th>(b)</th>
<th>Net</th>
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<tbody>
<tr>
<td>Sales and purchases of</td>
<td>Payments from foreigners</td>
<td>Payments to foreigners</td>
<td>Column (a) – Column (b)</td>
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<td>goods and services</td>
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<tr>
<td>Factor income</td>
<td>Foreign use of domestic factors</td>
<td>Domestic use of foreign factors</td>
<td>Column (a) – Column (b)</td>
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<tr>
<td>Transfers</td>
<td>Transfers from foreigners</td>
<td>Transfers to foreigners</td>
<td>Column (a) – Column (b)</td>
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**Current Account**

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<thead>
<tr>
<th></th>
<th>Domestic assets bought by foreigner gov’ts</th>
<th>Foreign assets bought by domestic gov’t</th>
<th>Column (a) – Column (b)</th>
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<td>Official assets sales and</td>
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<td>purchases</td>
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<tr>
<td>Private assets sales and</td>
<td>Domestic assets bought by foreigners</td>
<td>Foreign assets bought domestically</td>
<td>Column (a) – Column (b)</td>
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<td>purchases</td>
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**Financial Account**

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<th>CA + FA</th>
<th>CA + FA</th>
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Use the following information in Questions 1 through 3:

A U.S. resident buys maple syrup from a Canadian resident for $5. Then, the Canadian resident uses that $5 to buy mutual fund of U.S. stocks.

1. What is the effect of these transactions on the U.S. current account?
   a) Imports increase by $5, causing the current account to decrease by $5.
   b) Exports increase by $5, causing the current account to decrease by $5.
   c) Imports increase by $5, causing the current account to increase by $5.
   d) Exports increase by $5, causing the current account to increase by $5.
2. What is the effect of these transactions on the U.S. financial account?
   a) Domestic purchases of foreign assets increase by $5, causing the financial account to decrease by $5.
   b) Foreign purchases of domestic assets increase by $5, causing the financial account to decrease by $5.
   c) Domestic purchases of foreign assets increase by $5, causing the financial account to increase by $5.
   d) Foreign purchases of domestic assets increase by $5, causing the financial account to increase by $5.

3. Suppose the Canadian resident gets paid dividends on from his mutual fund of U.S. stocks. How is the recorded in the U.S. balance of payments?
   a) An increase in exports
   b) A sale of domestic assets to foreigners
   c) Factor income paid to foreigners
   d) An increase in transfers to foreigners

II. The Role of the Exchange Rate
   • Foreign Exchange Market: The market used to trade currencies.
   • Exchange Rate: The price at which currencies are traded.
   • Appreciate: A currency becoming more valuable.
   • Depreciate: A currency becoming less valuable.
     o When the Euro to Dollar (€/$) exchange rate goes from €0.7/$ to €0.8/$, the dollar is appreciating because one dollar can buy more Euros than it used to.
   • Equilibrium Exchange Rate: The exchange rate at which the quantity of a currency demanded in the foreign exchange market is equal to the quantity supplied.
   • Real Exchange Rate: Exchange rates that are adjusted for international differences in prices

   \[
   \text{Real Exchange Rate} = \frac{\text{Nominal Exchange Rate of Foreign to Domestic Currency}}{\text{P}_{\text{domestic}}/\text{P}_{\text{foreign}}}
   \]

4. If the exchange rate of Mexican pesos to U.S. dollars (pesos/$) rises, then we say that the peso is ________ against the dollar and the dollar is ________ against the peso.
   a) depreciating; depreciating
   b) depreciating; appreciating
   c) appreciating; depreciating
   d) appreciating; appreciating

5. The U.S. dollar falls from $2 per British pound to $1.50 per British pound. Prices in Great Britain increase by one third but prices in the U.S. stay the same. Which of the following is true?
   a) The real exchange rate in dollars to pounds ($)£) increases by on third.
   b) The real exchange rate in dollars to pounds ($)£) stays the same.
   c) The real exchange rate in dollars to pounds ($)£) falls by one fourth.
   d) The real exchange rate in dollars to pounds ($)£) falls by one third.
III. Exchange Rate Policy
- **Exchange Rate Regime**: Rule governing the policy toward the exchange rate
- **Fixed Exchange Rate**: When the government keeps the exchange rate against some other currency at or near a particular target
- **Floating Exchange Rate**: When the government lets market forces determine the exchange rate

6. Suppose a foreign country wants to keep its exchange rate in terms of dollars to the foreign currency ($/fc) below the market rate. What can the foreign country do to maintain this price?
   a) Sell dollars in exchange for its own currency.
   b) Nothing.
   c) Raise its interest rates.
   d) Sell its own currency in exchange for dollars.

7. When the Federal Reserve raises interest rates,
   a) the demand for dollars increases and the supply of dollars increases.
   b) the demand for dollars increases and the supply of dollars decreases.
   c) the demand for dollars decreases and the supply of dollars increases.
   d) the demand for dollars decreases and the supply of dollars decreases.

8. When the Federal Reserve raises interest rates
   a) exports increase and imports increase.
   b) exports decrease and imports increase.
   c) exports increase and imports decrease.
   d) exports decrease and imports decrease.

IV. National Savings and Investment in an Open Economy
- **Net Exports = Net Foreign Investment**
- **National Savings = Public Savings + Private Savings + Net Foreign Investment**
- If we remember that Savings = Investment in equilibrium this means:
  \[ S = I + NFI \]
- If the Fed raises its deficit (lower public savings), either Investment or NFI must fall
  o To finance a deficit the Fed may raise interest rates, which would both decrease investment and cause the dollar to appreciate, lowering net exports

9. How does an increase in the budget deficit affect the demand for dollars and the supply of dollars on the foreign exchange market?
   a) The demand for dollars falls, and the supply of dollars falls.
   b) The demand for dollars rises, and the supply of dollars rises.
   c) The demand for dollars rises, and the supply of dollars falls.
   d) The demand for dollars falls, and the supply of dollars rises.

10. An increase in U.S. federal government budget deficits that raises U.S. interest rates relative to the rest of the world should
    a) raise the trade balance.
    b) increase net exports.
    c) cause the dollar to depreciate.
    d) lead to a current account deficit.
    e) decrease foreign portfolio investment.
11. How might a U.S. federal budget surplus affect the balance of trade? (Assume exchange rates are stated in terms of foreign currency per U.S. dollar.)
   a) A federal budget surplus raises interest rates, which raises exchange rates, and increases the balance of trade.
   b) A federal budget surplus raises interest rates, which raises exchange rates, and reduces the balance of trade.
   c) A federal budget surplus reduces interest rates, which raises exchange rates, and reduces the balance of trade.
   d) A federal budget surplus reduces interest rates, which reduces exchange rates and increases the balance of trade.

12. How does a decrease in the federal budget deficit affect the demand for dollars and the supply of dollars on the foreign exchange market?
   a) The demand for dollars falls, and the supply of dollars falls.
   b) The demand for dollars rises, and the supply of dollars rises.
   c) The demand for dollars rises, and the supply of dollars falls.
   d) The demand for dollars falls, and the supply of dollars rises.