

**CHAPTER 2 INTERNATIONAL MONETARY SYSTEM**  
**SUGGESTED ANSWERS AND SOLUTIONS TO END-OF-CHAPTER**  
**QUESTIONS AND PROBLEMS**

QUESTIONS

1. Explain Gresham's Law.

Answer: Gresham's law refers to the phenomenon that bad (abundant) money drives good (scarce) money out of circulation. The phenomenon was often observed under the bimetallic standard under which both gold and silver were used as means of payments, with the exchange ratio between the two metals fixed.

2. Explain the mechanism that restores the balance-of-payments equilibrium when it is disturbed under the gold standard.

Answer: The adjustment mechanism under the gold standard is referred to as the price-specie-flow mechanism expounded by David Hume. Under the gold standard, a balance of payment disequilibrium will be corrected by a counter-flow of gold. Suppose that the US imports more from the UK than it exports to the latter. Under the classical gold standard, gold is the only means to settle international payments. Since in our example the US owes money to the UK gold must flow from the U.S. to the UK. As a result, the US (UK) will experience a corresponding decrease (increase) in money supply. This means that the price level will tend to fall in the US and rise in the UK. Consequently, US products become more competitive in the export market, while UK products become less competitive. This change will improve US balance of payments and at the same time hurt the UK balance of payments, eventually eliminating the initial BOP disequilibrium.

3. Suppose that the pound is pegged to gold at 6 pounds per ounce, whereas the franc is pegged to gold at 12 francs per ounce. This, of course, implies that the equilibrium exchange rate should be 2 francs per pound. If the current market exchange rate is 2.2 francs per pound, how would you take advantage of this situation? What would be the effect of shipping costs?

Answer: Suppose that you need to buy 6 pounds using French francs. If you buy 6 pounds directly in the foreign exchange market, it will cost you 13.2 francs. Alternatively, you can first buy an ounce of gold for 12 francs in France and then ship it to England and sell it for 6 pounds. In this case, it only costs you 12 francs to buy 6 pounds. It is thus beneficial to ship gold due to the overpricing of the pound. Of course, you can make an arbitrage profit by selling 6 pounds for 13.2 francs in the foreign exchange market. The arbitrage profit will be 1.2 francs. So far, we assumed that shipping costs do not exist. If it costs more than 1.2 francs to ship an ounce of gold, there will be no arbitrage profit.

4. Discuss the advantages and disadvantages of the gold standard.

Answer: The advantages of the gold standard include: (i) since the supply of gold is restricted, countries cannot have high inflation; (ii) any BOP disequilibrium can be corrected automatically through cross-border flows of gold. On the other hand, the main disadvantages of the gold standard are: (i) the world economy can be subject to deflationary pressure due to restricted supply of gold; (ii) the gold standard itself has no mechanism to enforce the rules of the game, and, as a result, countries may pursue economic policies (like de-monetization of gold) that are incompatible with the gold standard.

5. What were the main objectives of the Bretton Woods system?

Answer: The main objectives of the Bretton Woods system were to achieve exchange rate stability as a means to promote international trade, cross-border investment and economic development.

6. Comment on the proposition that the Bretton Woods system was programmed to an eventual demise.

Answer: The answer to this question is related to the Triffin paradox. Under the gold-exchange system, the reserve-currency country should run BOP deficits to supply reserves to the world economy, but if the deficits are large and persistent, they can lead to a crisis of confidence in the reserve currency itself, eventually causing the downfall of the system.

7. How are special drawing rights (SDR) constructed? Discuss the circumstances under which the SDR was created.

Answer: The SDR was created by the IMF in 1970 as a new reserve asset, partially to alleviate the pressure on the U.S. dollar as the key reserve currency. The SDR is a basket currency, currently comprised of four currencies: US Dollar (42% in the SDR weighting), European Euro (37 %), Japanese Yen (9 %), British Pound (11 %). The weights for the constituent currencies tend to change over time, reflecting the relative importance of each currency in international trade and finance.

8. Explain the arrangements and workings of the European Monetary System (EMS).

Answer: EMS was launched in 1979 in order to (i) establish a zone of monetary stability in Europe, (ii) coordinate exchange rate policies against the non-EMS currencies, and (iii) pave the way for the eventual European Monetary Union. The main instruments of EMS are the European Currency Unit (ECU) and the Exchange Rate Mechanism (ERM). Like SDR, the ECU is a basket currency constructed as a weighted average of currencies of EU member countries. The ECU works as the accounting unit of EMS and plays an important role in the workings of the ERM. The ERM is the procedure by which EMS member countries manage their exchange rates. The ERM is based on a parity grid system, with parity grids first computed by defining the par values of EMS currencies in terms of the ECU. These par values are called the ECU central rates. If a country's ECU market exchange rate diverges from the central rate by as much as the maximum allowable deviation, the country has to adjust its policies to maintain its par values relative to other currencies. EMS achieved a complete monetary union in 1999 when the common European currency, the euro, was adopted.

9. There are arguments for and against the alternative exchange rate regimes.

- a. List the advantages of flexible exchange rates.
- b. Criticize flexible exchange rates from the viewpoint of the proponents of fixed exchange rates.
- c. Rebut the above criticism from the viewpoint of the proponents of flexible exchange rates.

Answer:

- a. The advantages of the flexible exchange rate system include:
    - i. automatic achievement of balance of payments equilibrium
    - ii. maintenance of national policy autonomy.
  - b. If exchange rates fluctuate randomly, that may discourage international trade and encourage market segmentation. This, in turn, may lead to suboptimal allocation of resources.
  - c. Economic agents can hedge exchange risk by means of forward contracts and other techniques. They don't have to bear it if they choose not to. In addition, under a fixed exchange rate regime, governments often restrict international trade in order to maintain the exchange rate. This is a self-defeating measure. What's good about the fixed exchange rate if international trade needs to be restricted?
10. Discuss the criteria for a 'good' international monetary system.

Answer:

A good international monetary system should provide

- i. sufficient liquidity to the world economy
  - ii. smooth adjustments to BOP disequilibrium as it arises
  - iii. safeguard against the crisis of confidence in the system.
11. Once capital markets are integrated, it is difficult for a country to maintain a fixed exchange rate. Explain why this may be so.

Answer: Once capital markets are integrated internationally, vast amounts of money may flow in and out of a country in a short time period. Such volatile demands for the domestic currency (on Capital Account) make it difficult for a country to maintain a fixed exchange rate.

12. Assess the possibility for the euro to become another global currency rivalling the US dollar. If the euro really becomes a global currency, what impact will it have on the US dollar and the world economy?

Answer: In light of the large transactions domain of the euro, which is comparable to that of the U.S. dollar, and the mandate for the European Central Bank (ECB) to guarantee the monetary stability in Europe, the euro is likely to become a global currency over time. A major uncertainty about this prospect is the lack of political integration of Europe. If Europe becomes politically more integrated, the euro is

more likely to become a global currency. If the euro becomes a global currency, it will come at the expense of the dollar. Currently, the U.S. derives substantial benefit from the dollar's status as the dominant global currency. For instance, the U.S. can run trade deficits without having to maintain substantial foreign exchange reserves and it can carry out international commercial and financial transactions in dollars without bearing exchange risk. If the euro becomes a major transactional, reserve and invoice currency in the world economy, dollar-based agents will come to bear more exchange risk.

13. What are the basic characteristics of a bona fide common currency area? Is Canada a common currency area?

Answer: A *bona fide* common currency area is characterized by a high degree of internal factor (capital and labour) mobility, price flexibility and relatively little occurrence of *internal* asymmetric shocks.

Canada's recent economic experience with its "economic dualism" – with extraordinary growth in the oil and energy rich West and a slumping manufacturing sector in the East suggest that Canada is NOT always well-served by our single currency. The rising value of the Canadian dollar through the 2003 – 2008 period was due in part to the rise in the price of oil and energy, which serves Western Canadian interests, whereas Eastern Canada would have benefitted from a somewhat lower value of the Canadian dollar. Since Canada has a nationwide monetary policy, the Bank of Canada is not in a position to differentially address the economic interests of the West and the East simultaneously.

### **Mini Case: Will the United Kingdom Join the Euro Club?**

#### *Suggested Solution to Will the United Kingdom Join the Euro Club?*

Whether the UK will join the euro club will be a political as much as economic decision. Recently, the UK economy was converging with those of euro-zone countries. Economic conditions in terms of government budgets, interest rates, and inflation rate are becoming similar to those in euro-zone countries. On an economic ground, this convergence is creating a condition that is conducive to UK's joining the euro club. As pointed out by Wim Duisenberg, when he was President of the European Central Bank, British opposition to joining the euro club is more "psycho-political" than justified on economic grounds. Since many political leaders in France and Germany consider adoption of the euro as a step toward the European political union, the UK is likely to join the euro-zone if it is prepared to join the European political union as well. Once the UK joins the euro-zone, the euro will likely become a global currency rivaling the US dollar.