

# Lecture Wise Assignment Questions

Course: International Economics

By

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## Lecture 1

### (BOP and Ex. Rate Explanations)

1. Explain the following concepts:  
Balance of trade; Current and Capital account; Autonomous and Accommodating transactions; Basic balance; Net foreign investment; Full employment equilibrium; Balance of payments disequilibrium.
2. What do you mean by deficit and surplus in BOP? Is deficit necessarily bad and surplus necessarily good?
3. Explain the components of balance of payments. Show its trend in India during post-reform period.
4. What are the causes of an adverse balance of payments in an underdeveloped country? Suggest measures to solve this problem.
5. Study the table and answer the questions below

Exports/Imports	£million
Visible exports	166,921
Visible imports	179,578
Invisible exports	50,807
Invisible imports	43,665

- a) Calculate the balance of trade;
- b) Calculate the current account balance;
- c) Explain two ways in which a country might protect its domestic market from imports.

## Lecture 2

### (Ex. Rate from Gold standard)

1. Which International monetary regime is best for economic performance? Why have some monetary regimes been more successful than others?
2. Describe the international monetary system known as the Bretton Woods system, or the gold exchange standard that existed from the mid-1940s to the early 1970s. How did the system work? Why did it eventually break down?
3. How is foreign exchange rate determined? Show the relationship between the balance of payments and foreign exchange rate changes in a country.

4. What is meant by exchange rate appreciation and depreciation? When would they take place?
5. What are the limitations of devaluation? Show its relevance in the context of Indian economy.
6. Why do you suppose that small countries choose to peg their exchange rates, whereas the largest countries float their currencies?

### **Lecture 3 and 4**

#### **(Expenditure, National Income and its effect on Current a/c Balance)**

1. Suppose the American firms become more optimistic and decide to increase investment expenditure today in new factories and office space.
  - a) How will this increase in investment affect output, interest rates, and the current account;
  - b) Now repeat part (a) assuming that domestic investment is very responsive to the interest rate so that U.S. firms will cancel most of their new investment plans if interest rate rises. How will this affect the answer you gave previously?
2. People sometimes talk about 'twin deficits', where the twins are the current account and the government budget deficit. Explain how these two deficits are related economically so that changes in one are reflected in changes in the other.
3. How is an automatic adjustment in the BOP brought about by allowing flexibility in prices, interest rates and national income levels and exchange rates? What are the benefits and costs of using the automatic adjustment mechanism?
4. Use the IS-LM model to determine how a fall in the world interest rate will influence domestic output under fixed and floating exchange rate regimes. How does your answer depend on the degree of capital mobility?

### **Lecture 5 and 6**

#### **(Ex. Rate and Current a/c (MLR) and Elasticity Approach to BOP)**

1. Prove the following statement:

*“The trade balance will increase only after a real depreciation if the responsiveness of trade volumes to real exchange rate changes is sufficiently large (or sufficiently elastic) to ensure that the volume effects exceed the price effects”.* (Hint: Marshall-Lerner Condition).

2. Show the trade balance effects of devaluation when the price elasticity of domestic demand curve is 1 and the elasticity of the foreign demand curve is greater than zero.

### **Lecture 7**

#### **(Absorption and Elasticity approach to BOP)**

1. What do you mean by Absorption and Elasticity approach to BOP?
2. Consider the case of small open economy, its prices are fixed or change only slowly when it moves away from the internal balance. Its government pegs the exchange rate but is free to change the peg- to devalue or revalue the domestic currency from time to time. Its central bank controls the money supply to influence the domestic interest rate. In this case:
  - a) What will be the policy responses to autonomous changes and switches in expenditure?
  - b) What would be the policy if labour force grows?
  - c) What would be the policy responses when the supply of labour force shrinks?

### **Lecture 8**

#### **(Flexible Ex. Rate, Forms of Economic Integration and Criteria to be a part of EU)**

1. What are the different forms of economic integration? Explain with the help of real world examples.
2. Differentiate between Fixed and Flexible Exchange rate policy with explanation of superiority of one among other in different situations.
3. Explain the conditions/criteria on the basis of which a country could be a part of European Union.

### **Lecture 9**

#### **(OCA (Currency Union))**

1. What is Optimum currency area? Explain it with the help of different theories.
2. One could view the United States as a currency union of 50 states. Compare and contrast the Eurozone and the United states in terms of the OCA criteria.

### **Lecture 10 and 11**

#### **(Interest rates and Capital A/c (Fleming-Mundell Approach))**

1. Explain the Fleming-Mundell model with the help of suitable examples and diagrams?
2. When there is high level of capital mobility, how will it affect the behaviour of the flexible exchange rate? Also give the mathematical derivations to support your answers.

- How fiscal and monetary policies can be used for maintain the external and internal balances when there is capital mobility and exchange rate is pegged?

## Lecture 12

### (Effectiveness of Fiscal and Monetary policy with no sterilization)

- What is the impossible trinity of international trade and finance?
- Adapt the following figure (15.6) to show how an open market sale affects income, the interest rate, and the exchange rate when the exchange rate is flexible and there is perfect capital mobility. Is it necessary to distinguish between short-run and long-run effects? Explain.

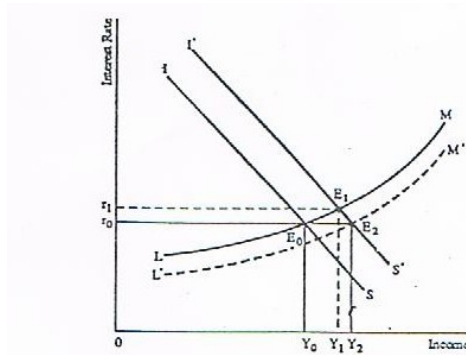


FIGURE 15-6  
Fiscal Policy under a Pegged Exchange Rate with High Capital Mobility

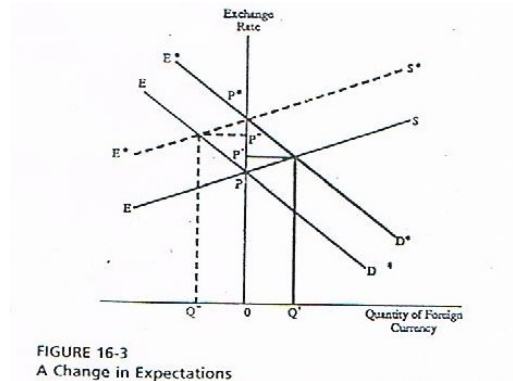
- Suppose that there is an increase in the foreign interest rate. Use IS and LM curves to show what will happen in the domestic economy when there is perfect capital mobility and the exchange rate is pegged.
- Repeat your answer to previous question for a flexible exchange rate.

## Lecture 13, 14 and 15

### (Expectations, Ex. Rate and Capital a/c., Ex. Rate Overshooting and Covered interest parity and Forward Markets)

- The U.S. interest rate is 4.5 percent, the British interest rate is 8.5 percent, and the spot exchange rate is \$1.75 per pound. What exchange rate must be expected to prevail one year from now for open interest parity to hold?
- Adapt the following figure (16.3) to show what happens when investors forecast a future increase in the excess supply of foreign currency coming from trades in goods and services.

- a. Deal first with the case in which the forecast is correct and show that speculators make profits;
- b. Deal next with the case in which the forecast is wrong and show that speculators make losses.



3. Write a note on the followings:
  - a. Covered interest differential;
  - b. Forward rate and Spot rate;
  - c. Exchange rate overshooting.

### Lecture 16 and 17 (Monetary Approach to BOP)

1. Describe the Monetary approach to BOP with its assumptions. How Walras' law is important to explain it?
2. Using a monetary model of a small economy with a pegged exchange rate, show how a reduction in the quantity of domestic credit affects the balance of payments in the short run and the stocks of reserves in the long run. Is there any change in the domestic price level?
3. How would your answer the previous question to be affected if the same economy had a flexible exchange rate? and if the economy were large enough to affect the outside world?
4. Using a monetary model of a small economy with a pegged exchange rate, show how a revaluation of domestic currency affects the BOPs and stock of reserves? Describe the adjustment process that leads to these results. Is there any change in the domestic price level?

### Lecture 18 and 19 (Asset Market, Ex. Rate and Economic Policy and Portfolio Balance Approach)

1. Adapt the following figure (18.7 and 18.8) to trace the short-run and long-run effects of a fall in foreign demand for the domestic good under a pegged exchange rate. What happens to income, interest rate, wealth, and the stock of reserves? Explain how saving, the current-account balance, and the overall balance of payments work to drive the economy from short-run to long-run equilibrium.
2. Repeat your answer for a flexible exchange rate, showing the short-run and long-run effects on income, the interest rate, wealth, and the exchange rate and tracing the path from short-run to long-run equilibrium. What does your answer say about the ability of a flexible exchange rate to insulate the economy from an external disturbance?

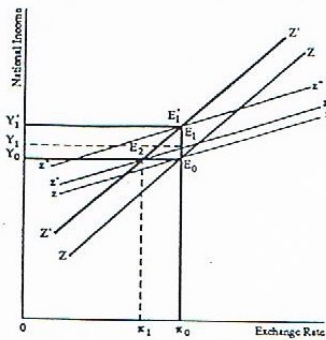


FIGURE 18-7  
Effects of an Increase in Foreign Expenditure on Goods Markets

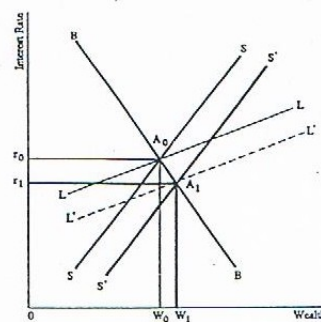


FIGURE 18-8  
Effects of an Increase in Foreign Expenditure on Asset Markets

## Lecture 20

### (Empirical work on Indian Ex. Rate)

1. The J curve effect shows that a real depreciation improves a country's trade balance by increasing exports and reducing imports. Test empirically whether it holds in case of India by taking time series data on trade balance (Exports – Imports) after real depreciation takes place.
2. Show the effect of changes in market exchange rate on imports and exports of a country with the help of time-series regression. Take the time-series data of any country as per the availability.
3. List all the factors affecting exchange rate and try to quantify the impact of each factor with the help of regression analysis.

## Lecture 21

### (Trade Policy (Tariffs))

1. Supercakes Ltd is a company which produces cakes and biscuits. It is hoping to sell its products outside the European Union but in trying to do so it faces trade barriers.
  - a) What is a trade barrier?

- b) Why do countries introduce trade barriers?
2. What are the partial equilibrium effects of tariffs? Examine the effects of tariffs on terms of trade and economic welfare of a country.

### **Lecture 22**

#### **Trade Policy continued (Quotas)**

1. How do import quotas differ from import tariffs? In what respect are they identical? Discuss fully.
2. Suppose you were an import competing producer in a perfectly competitive setup. Which policy instrument would you prefer: an import tariff or an import quota? Would your answer change in a monopolistic setup?

### **Lecture 23 and 24**

#### **Trade Policy- Export Subsidies**

1. Describe the impact of each of the following goals from the Hong Kong WTO meeting on i) domestic prices and welfare of the country taking the action and ii) world prices and welfare for the partner countries.
- Elimination of agriculture export subsidies;
  - Reduction of agricultural tariffs;
  - Duty-free, quota-free access for 97% of goods originating in the world's least developed countries.
2. "A large country has a greater incentive than a small country to use export subsidies". True or false? Evaluate this statement in a partial equilibrium framework.
3. Consider a large country with export subsidies in place for agriculture. Suppose the country changes its policy and decides to cut its subsidies in half.
- Are there gains or losses to the large country, or is it ambiguous? What is the impact on domestic prices for agriculture and on the world prices?
  - Suppose a small food-importing country abroad responds to the lowered subsidies by lowering its tariffs on agriculture by the same amount. Are there gains or losses to the small country, or is it ambiguous? Explain.
  - Suppose a large food-importing country abroad reciprocates by lowering its tariffs on agricultural goods by the same amount. Are there gains or losses to this large country, or is it ambiguous? Explain.

### **Lecture 25**

#### **(Tariffs – Foreign monopoly and anti-dumping cases)**

1. Consider the case of a foreign monopoly with no home production. Starting from the free trade, consider a \$10 tariff is applied by the home government:
  - a) Assuming that the demand curve is linear, then what is the shape of the marginal revenue curve?
  - b) Therefore, how much does the tariff-inclusive home prices increase because of the tariff, and how much does the net-of-tariff price received by the foreign firm fall?
  - c) Discuss the welfare effects of implementing the tariff. Use a graph to illustrate under what conditions, if any, there is an increase in home welfare?
2. What do you mean by anti-dumping duties, countervailing duties and safeguard tariffs? Explain the following with the help of a diagram:
 

“Just the threat of an antidumping duty is enough to cause foreign firms to raise their prices and reduce competition in the market for that good.”

### **Lecture 26**

#### **(RTA's and their evaluation)**

1. What are Regional trading agreements? Discuss them in Indian context.
2. Explain the economic and welfare effects of signing a Regional Trade Agreement to a country. Explain with the help of suitable diagram.
3. What do you mean by Trade Creation and Trade Diversion? When a country give duty free access to the exports of other countries, then are trade creation and diversion effects are bad for importing country? Support your answer with suitable example.

### **Lecture 27**

#### **(Ricardian Theory)**

1. What are the assumptions of Ricardian theory? Explain the Ricardian theory in detail.
2. Home has 2400 units of labor available. It can produce two goods, Oranges and Pears. The Unit labor requirement in orange production is 6, while in Pear production it is 4.
  - a. Graph home's production possibility frontier.
  - b. What is opportunity cost of Oranges in terms of Pears?
  - c. In the absence of trade, what would be the price of Oranges in terms of Pears? Why?

### **Lecture 28**

#### **(Specific Factor Model)**

1. Why is the specific-factors model referred to as a short run model?
2. Will there be gains from trade if either good increases in price?



3. Explain the measurement and distribution of gains from trade.

### Lecture 29 and 30

#### (H-O Trade Theory)

1. Consider the standard trade model with two goods and two factors, labour and capital. Suppose that a country experiences an increase in its capital stock. How would the Production Possibilities Frontier change as a result?
2. What are the major assumptions of H-O model? Identify the four major theorems in H-O models?
3. Suppose the world is made of two countries: Home and Foreign. Home is a small labour-abundant, while Foreign is capital-abundant. Both Home and Foreign produce two goods: food and cloth. Food production is labour-intensive and cloth production is capital-intensive. What is the effect of the introduction of an export subsidy in the Home country on the return to each factor of production in the Home country? (Hint: Heckscher-Ohlin model)
4. Suppose there are drastic technological improvements in shoe production at home such that shoe factories can operate almost completely with computer-aided machines.

Consider the following data for Home country:

Computers:

$$\text{Sales revenue} = P_c Q_c = 100$$

$$\text{Payments to Labor} = W L_c = 50$$

$$\text{Payments to Capital} = R K_c = 50$$

$$\text{Percentage increase in the price} = \Delta P_c / P_c = 0\%$$

Shoes:

$$\text{Sales revenue} = P_s Q_s = 100$$

$$\text{Payments to Labor} = W L_s = 5$$

$$\text{Payments to Capital} = R K_s = 95$$

$$\text{Percentage increase in the price} = \Delta P_s / P_s = 50\%$$

- a) Which industry is capital intensive? Is this a reasonable question, given that some industries are capital intensive in some countries and labor intensive in others?
- b) Given the percentage changes in output prices in the data provided, calculate the percentage change in the rental on capital.
- c) How does the magnitude of this change compare with that of labor?
- d) Which factor gains in real terms, and which factor loses?

### Lecture 31

#### (Structure of Production in Autarky)

1. What is the structure of production in no trade situation? Explain with the help of proper derivation and diagram.

### Lecture 32

### **(Technological Progress and International Trade)**

1. What is the impact of technological progress on international trade? Support your answer with proper derivation.
2. Give a real world example where the structure of country's trade is changed due to technological progress.
3. Write a note on the followings:
  - a. Hicks Neutral Technological Progress;
  - b. Labour Using (Capital Saving) Technological Progress; and
  - c. Capital Using (Labour saving) Technological Progress.

### **Lecture 33, 34, 35 and 36**

#### **(Support for proof of Rybczynski and Stolper Samuelson Theorem)**

1. Write a note on the followings:
  - a. Stolper-Samuelson theorem;
  - b. Rybczynski theorem.
2. State and prove the Stolper-Samuelson theorem.
3. State and prove the Rybczynski theorem.

### **Lecture 37**

#### **(Testing of H-O Model)**

1. What is the Leontief Paradox? Give one explanation to explain the paradox.
2. Critically examine the structure of trade prediction of the Heckscher Ohlin theorem with particular references to the Leontief paradox, factor intensity reversals and demand reversals.
3. What is the key difference between Leamer's approach and Leontief's? why is Leontief test sensitive to trade imbalances, give proof of Leamer's theorem in this context and why is Leamer's test is robust to trade imbalances?

### **Lecture 38 and 39**

#### **(H-O-V Model and Outsourcing Model)**

1. How H-O-V model is an extension of H-O model?
2. What do you mean by Sign Test and its utility in explaining H-O-V model?
3. Is outsourcing different form the type of trade we studied in the Ricardian and H-O Models?

4. How today's trade is different from the past? Support your answer with suitable examples?
5. Why is it relatively easier for a developing country to export service activities through outsourcing than to participate in the global economy by producing manufacturing components?
6. It is widely noted that China is the favoured destination for manufacturing outsourcing; it is far behind India in the business of outsourced services. What are some differences between these two countries that may account for this observation?
7. Consider a model of a firm that produces final goods using R&D and components as inputs, with cost data as follows:

Components:	Total cost of production = $P_r \cdot Q_r = 100$
	Earnings of skilled labor = $W_s \cdot S_c = 25$
	Earnings of unskilled labor = $W_1 \cdot L_r = 25$
	Earnings of capital = $R \cdot K_r = 50$
	Share of total costs paid to skilled labor = $25/100 = 25\%$
	Share of total costs paid to unskilled labor = $25/100 = 25\%$
R & D:	Total cost of R & D = $P_r \cdot Q_r = 100$
	Earnings of skilled labor = $W_s \cdot S_r = 30$
	Earnings of unskilled labor = $W_1 \cdot L_r = 20$
	Earnings of capital = $R \cdot K_r = 50$
	Share of total costs paid to skilled labor = $30/100$
	Share of total costs paid to unskilled labor = $20/100$

- a. In which factor(s) is components intensive? In which factor(s) is research intensive?
- b. Suppose that due to the opening of trade, the relative price of R & D increases,  $\Delta P_r / P_r = 10\%$ , while the price of components stays unchanged,  $\Delta P_r / P_r = 0$ . Calculate the change in the relative wage of skilled and unskilled labor.
- c. What has happened to the relative wage of skilled/unskilled labor?

### **Lecture 40 and 41**

#### **(Impact of Migration, Movement of Labor and Capital)**

1. What do you mean by migration? Explain the short-run and long-run effects of migration with suitable diagrams.
2. Are wages really the same among industries? Comment on this statement.

3. What are the short-run and long-run effects of capital movements in between the countries?
4. Account the types of international capital movements. What factors influence international capital movements?
5. How do you quantify the gains from the movement of labor and capital in between countries?

## Lecture 42

### (Models of Financial Crisis and Reforms)

1. From the definition of crisis, can we say that different crises are linked, if yes then how?
2. Make a case on the recent financial crisis of United States in the year 2007 and its impact on the economies of the world.
3. On the basis of your knowledge, suggest possible reforms in the international financial system to reduce the vulnerabilities of countries from the crisis occur in the outside world.

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## REFERENCES

- Krugman and Obstfield(2009), *International Economics: Theory and Policy*, 8 edition, Dorling Kindersley India Pvt. Limited.
- ***Handbook of International Economics (3 volumes), Elsevier, Netherlands***
- Charles Van Marrewijk(2007): *International Economics, Theory, Application and Policy*, Oxford University Press
- Robert J Carbaugh(2004), *International Economics, 9 edition*, Thomson Southern Western,
- Caves, Frankel and Jones(2002), *World Trade and Payments, 9 Edition*, Pearson Education
- Raveendra Batra, *Pure Theory of International Trade*, JNU

- *Salvatore, Dominic (2004), Schaum's Oulines, International Economics, 4 edition, Tata McGraw Hill*
- *Kenen, PB(1964), International Economics,*
- *Feenstra and Taylor, International Economics,*