

# **INTERNATIONAL TRADE**



# UNIT - 1: THEORIES OF INTERNATIONAL TRADE

## **LEARNING OUTCOMES**

# After studying this Unit, you will be able to -

- Define international trade and describe how it differs from internal trade
- Elucidate the arguments in favour of and against liberal trade
- Explain the mercantilists' views on international trade
- Illustrate how trade can be based on absolute advantage
- Describe the Ricardian theory of comparative advantage
- Explain the basis of trade according to modern theory of trade

# CHAPTER OVERVIEW



# 1.1 INTRODUCTION

International trade is the exchange of goods and services as well as resources between countries. It involves transactions between residents of different countries. If there is a point on which most economists agree, it is that trade among nations makes the world better off. International trade reduces production cost and improves living standards of people. The foreign producer also benefits by making more sales than it could selling solely in its own market and by earning foreign exchange (currency) that can be used by itself or others in the country to purchase foreign-made products. International trade is an integral part of international relations and has become an important engine of growth in developed as well as developing countries.

#### Benefits of International Trade

- (i) International trade is a powerful stimulus to economic efficiency and contributes to economic growth and rising incomes. The wider market made possible owing to trade induces companies to reap the quantitative and qualitative benefits of division of labour.
- (ii) Efficient deployment of productive resources to their best use is a direct economic advantage of foreign trade. Greater efficiency in the use of natural, human, industrial and financial resources ensures productivity gains. Since international trade also tends to decrease the likelihood of domestic monopolies, it is always beneficial to the community.

- (iii) Trade provides access to new markets and new materials and enables sourcing of inputs and components internationally at competitive prices. This reflects in innovative products at lower prices and wider choice in products and services for consumers. It also enables nations to acquire foreign exchange reserves necessary for imports which are crucial for sustaining their economies.
- (iv) International Trade necessitates increased use of automation, supports technological change, stimulates innovations, and facilitates greater investment in research and development and productivity improvement in the economy.
- (v) Trade also provides greater stimulus to innovative services in banking, insurance, logistics, consultancy services etc.
- (vi) For emerging economies, improvement in the quality of output of goods and services, superior products, finer labour and environmental standards etc. enhance the value of their products and enable them to move up the global value chain.
- (vii) Opening up of new markets results in broadening the productive base and facilitates export diversification so that new production possibilities are opened up.
- (viii) Trade can also contribute to human resource development, by facilitating fundamental and applied research and exchange of know-how and best practices between trade partners.
- (ix) Trade strengthens bonds between nations by bringing citizens of different countries together in mutually beneficial exchanges and, thus, promotes harmony and cooperation among nations.

Despite being a dynamic force, which has an enormous potential to generate overall economic gains, liberal global trade and investments are often criticised as detrimental to national interests. The major arguments put forth against trade openness are:

- (i) International trade is often not equally beneficial to all nations. Potential unequal market access and disregard for the principles of a fair trading system may even amplify the differences between trading countries, especially if they differ in their wealth.
- (ii) Economic exploitation is a likely outcome when underprivileged countries become vulnerable to the growing political power of corporations operating globally. The domestic entities can be easily outperformed by financially stronger transnational companies.
- (iii) Substantial environmental damage and exhaustion of natural resources in a shorter span of time could have serious negative consequences on the society at large.

- (iv) Trade cycles and the associated economic crises occurring in different countries are also likely to get transmitted rapidly to other countries.
- (v) Risky dependence of underdeveloped countries on foreign nations impairs economic autonomy and endangers their political sovereignty. Such reliance often leads to widespread exploitation and loss of cultural identity. Substantial dependence may also have severe adverse consequences in times of wars and other political disturbances.
- (vi) Too much export orientation may distort actual investments away from the genuine investment needs of a country.
- (vii) Finally, there is often a lack of transparency and predictability in respect of many aspects related to trade policies of trading partners. There are also many risks in trade which are associated with changes in governments' policies of participating countries, such as imposition of an import ban, high import tariffs or trade embargoes.

# 1.2 IMPORTANT THEORIES OF INTERNATIONAL TRADE

You might have noticed that many goods and services are imported by us because they are simply not produced in our country for various reasons and therefore not available domestically. However, we do import many things which can be produced or are being produced within our country. Why do we do so? Is it beneficial to engage in international trade? The theories of international trade which we discuss in the following sections provide answers to these and other related questions.

#### 1.2.1 The Mercantilists' View of International Trade

Mercantilism, which is derived from the word mercantile, "trade and commercial affairs". Mercantilism according to Microsoft Encarta Dictionary (2009), is the economic policy trending in Europe from the 16th to the 18th centuries, where the government used power to control industry and trade with the theoretical belief that national power is achieved and sustained by having constant large quantities of exports over imports. Nations' human and material resources are unevenly endowed, distributed and developed. This allows flow of labour, raw materials, capital and finished products across national boundaries and markets; thus resulting in "mercantilism" as the earliest international economic system that proposes massive and aggressive export over import to accumulate wealth, to have favourable balance of payment and trade and to be still relevant in today's economy.

### 1.2.2 The Theory of Absolute Advantage

Adam Smith, the father of economics, thought that the basis of international trade was absolute cost advantage. According to his theory, trade between two countries would be mutually beneficial if one country could produce one commodity at absolute advantage (over the other commodity) and the other countries could, in turn, produce another commodity at an absolute advantage over the first. In other words, the principle of absolute advantage refers to the ability of a party (an individual, or firm, or country) to produce a greater quantity of a good, product, or service than competitors, using the same amount of resources. Adam Smith first described the principle of absolute advantage in the context of international trade, using labour as the only input. Since absolute advantage is determined by a simple comparison of labour productivity, it is possible for a nation to have no absolute advantage in anything; in that case, according to the theory of absolute advantage, no trade will occur with the other nation. It can be contrasted with the concept of comparative advantage which refers to the ability to produce specific goods at a lower opportunity cost.

Assumptions of the Absolute Advantage Theory:

- Trade between the two countries.
- He took into consideration a two-country and two-commodity framework for his analysis.
- There is no transportation cost.
- Smith assumed that the costs of the commodities were computed by the relative amounts of labour required in their respective production processes.
- He assumed that labour was mobile within a country but immobile between countries.
- He implicitly assumed that any trade between the two countries considered would take
  place if each of the two countries had an absolutely lower cost in the production of
  one of the commodities.

# 1.2.3 The Theory of Comparative Advantage

In one of the most important concepts in economics, David Ricardo observed that trade was driven by *comparative* rather than *absolute* costs (of producing a good). One country may be more productive than others in all goods, in the sense that it can produce any good using fewer inputs (such as capital and labour) than other countries require to produce the same good. Ricardo's insight was that such a country would still benefit from trading according to its *comparative advantage*—exporting products in which its absolute advantage was greatest, and importing products in which its absolute advantage was comparatively less (even if still

positive). Even a country that is more efficient (has absolute advantage) in everything it makes would benefit from trade. Consider an example:

Country A: One hour of labour can produce either three kilograms of steel or two shirts.

Country B: One hour of labour can produce either one kilogram of steel or one shirt.

Country A is more efficient in both products.

Now suppose Country B offers to sell Country A two shirts in exchange for 2.5 kilograms of steel.

To produce these additional two shirts, Country B diverts two hours of work from producing (two kilograms) of steel.

Country A diverts one hour of work from producing (two) shirts. It uses that hour of work to instead produce three additional kilograms of steel.

Overall, the same number of shirts is produced: Country A produces two fewer shirts, but Country B produces two additional shirts.

However, more steel is now produced than before: Country A produces three additional kilograms of steel, while Country B reduces its steel output by two kilograms.

The extra kilogram of steel is a measure of the gains from trade.

Though a country may be twice as productive as its trading partners in making clothing, if it is three times as productive in making steel or building aeroplanes, it will benefit from making and exporting these products and importing clothes. Its partner will gain by exporting clothes—in which it has a comparative but not absolute advantage—in exchange for these other products. The notion of comparative advantage also extends beyond physical goods to trade in services—such as writing computer code or providing financial products.

Because of comparative advantage, trade raises the living standards of both countries. Douglas Irwin (2009) calls comparative advantage "good news" for economic development. "Even if a developing country lacks an absolute advantage in any field, it will always have a comparative advantage in the production of some goods," and will trade profitably with advanced economies.

# **1.2.4 The Heckscher-Ohlin Theory of Trade**

Differences in comparative advantage may arise for several reasons. In the early 20th century, Swedish economists Eli Heckscher and Bertil Ohlin identified the role of labour and capital, so-called factor endowments, as a determinant of advantage.

The Heckscher-Ohlin proposition maintains that countries tend to export goods whose production uses intensively the factor of production that is relatively abundant in the country.

Countries well endowed with capital—such as factories and machinery—should export capital-intensive products, while those well endowed with labour should export labour-intensive products. Economists today think that factor endowments matter, but that there are also other important influences on trade patterns.

The increase in competition coming from foreign firms puts pressure on profits, forcing less efficient firms to contract and making room for more efficient firms. Expansion and new entry bring with them better technologies and new product varieties. Likely the most important is that trade enables greater selection across different types of goods (say refrigerators). This explains why there is a lot of intra-industry trade (for example, countries that export household refrigerators may import industrial coolers), which is something that the factor endowment approach does not encompass.

There are clear efficiency benefits from trade that results in *more* products—not only more of the same products, but greater product variety. An even greater benefit may be the more efficient investment spending that results from firms having access to a wider variety and quality of intermediate and capital inputs (think lithium battery manufacturing by China rather than manufacturing electrical cars). By enhancing overall investment and facilitating innovation, trade can bring sustained higher growth.

Indeed, economic models used to assess the impact of trade typically neglect influences involving technology transfer and pro-competitive forces such as the expansion of product varieties. That is because these influences are difficult to model, and results that do incorporate them are subject to greater uncertainty. Where this has been done, however, researchers have concluded that the benefits of trade reforms—such as reducing tariffs and other nontariff barriers to trade—are much larger than suggested by conventional models.

The table 4.1.3 presents, though not exhaustive, a comparison of the theory of comparative costs and modern theory.

Table 4.1.3

Comparison of Theory of Comparative Costs and Modern Theory

Theory of Comparative Costs	endowments  Based on money cost which is more realistic.  Widened the scope to include labour and				
The basis is the difference between countries is comparative costs	Explains the causes of differences in comparative costs as differences in factor endowments				
Based on labour theory of value	Based on money cost which is more realistic.				
Considered labour as the sole factor of production and presents a one-factor (labour) model	Widened the scope to include labour and capital as important factors of production. This is 2-factor model and can be extended to more factors.				

Treats international trade as quite distinct from domestic trade	International trade is only a special case of inter-regional trade.			
Studies only comparative costs of the goods concerned	Considers the relative prices of the factors which influence the comparative costs of the goods  Attributes the differences in comparative			
Attributes the differences in comparative advantage to differences in productive efficiency of workers	Attributes the differences in comparative advantage to the differences in factor endowments.			
Does not take into account the factor price differences	Considers factor price differences as the main cause of commodity price differences			
Does not provide the cause of differences in comparative advantage.	Explains the differences in comparative advantage in terms of differences in factor endowments.			
Normative; tries to demonstrate the gains from international trade	Positive; concentrates on the basis of trade			

### 1.2.5 Globalization and New International Trade Theory

The revolution that swept through the theory of international trade in the first half of the 1980s-the rise of the so-called new trade theory'-left many of the insights of traditional trade theory intact. In particular, introducing imperfect competition and increasing returns into the picture does not alter the fundamental point that trade is a positive-sum game, generally carried on to countries' mutual benefit. Indeed, the new trade theory adds to the positive sum: by enlarging markets, international trade increases competition and allows greater exploitation of economies of scale, both of which represent gains over and above those due to comparative advantage.

The new trade theory suggests that in practice many traded goods are produced by industries that are both oligopolistic and subject to external economies (e.g., because of economies of scale in the production of nontraded intermediates). Thus instead of a picture of an international economy that is at a Pareto optimum, the new trade theory offers a picture of one in which markets normally lead to suboptimal results.

American economist and journalist Paul Krugman received the 2008 Nobel Prize for Economics for his work in economic geography and in identifying international trade patterns. In the late 1970s, Paul Krugman noticed that the accepted model that economists used to explain patterns of international trade did not fit the data. The Heckscher-Ohlin model predicted that trade would be based on such factors as the ratio of capital to labor, with "capital-rich" countries exporting capital-intensive goods and importing labor-intensive goods from "labor-rich" countries. But Krugman noticed that most international trade takes place between

countries with roughly the same ratio of capital to labor. The auto industry in capital-intensive Sweden, for example, exports cars to capital-intensive America, while Swedish consumers also import cars from America. This is particularly true in key economic sectors in India such as electronics, IT, food, and automotive. We have cars made in India, yet we purchase many cars made in other countries.

Krugman defended free trade. He was passionate and showed deep concern for the well-being of people around the world. One such example is "In Praise of Cheap Labor," published in Slate in 1997. In it, Krugman told of Smokey Mountain, a huge garbage dump in Manila in which men, women, and children made a living combing through garbage for valuable items. Low-wage jobs in multinational companies' factories in the Philippines, Bangladesh, and other poor countries, he noted, are much better alternatives. Because multinational companies hired many of these poor workers, he wrote that "the result has been to move hundreds of millions of people from abject poverty to something still awful but nonetheless significantly better.

According to NTT, two key concepts give advantages to countries that import goods to compete with products from the home country:

- Economies of Scale: As a firm produces more of a product, its cost per unit keeps going down. So if the firm serves domestic as well as foreign market instead of just one, then it can reap the benefit of large scale of production consequently the profits are likely to be higher.
- Network effects refer to the way one person's value for a good or service is affected by the value of that good or service to others. The value of the product or service is enhanced as the number of individuals using it increases. This is also referred to as the 'bandwagon effect'. Consumers like more choices, but they also want products and services with high utility, and the network effect increases utility obtained from these products over others. A good example will be Mobile App such as What's App and software like Microsoft Windows.

#### **SUMMARY**

- International trade is the exchange of goods and services as well as resources between countries and involves greater complexity compared to internal trade.
- ◆ Trade can be a powerful stimulus to economic efficiency, contributes to economic growth and rising incomes, enlarges manufacturing capabilities, ensures benefits from economies of large-scale production, and enhances competitiveness and profitability by adoption of cost reducing technology and business practices.
- Efficient deployment of productive resources to their best use, productivity gains, decrease in the likelihood of domestic monopolies, cost-effective sourcing of inputs

- and components internationally, innovative products at lower prices and wider choice in products and services for consumers are claimed as benefits of trade.
- Enhanced foreign exchange reserves, increased scope for mechanization and specialisation, research and development, creation of jobs, reduction in poverty, augmenting factor incomes, raising standards of livelihood, increase in overall demand for goods and services and greater stimulus to innovative services are other benefits of trade.
- There are also other possible positive outcomes of trade in the form of prospects of employment generating investments, improvement in the quality of output, superior products, labour and environmental standards, broadening of productive base, export diversification, stability in prices and supply of goods, human resource development and strengthening of bonds between nations.
- The arguments against trade converge on negative labour market outcomes, economic exploitation, profit-driven exhaustion of natural resources, shift towards a consumer culture, risky dependence, shortages resulting in inflation, disregard for welfare of people, quick transmission of trade cycles, rivalries and risks in trade associated with changes in governments' policies of participating countries.
- Mercantilism advocated maximizing exports in order to bring in more precious metals and minimizing imports through the state imposing very high tariffs on foreign goods.
- According to Adam Smith's Absolute Cost Advantage theory, a country will specialize in the production and export of a commodity in which it has an absolute cost advantage.
- Ricardo's theory of comparative advantage states that a nation should specialize in the production and export of the commodity in which its absolute disadvantage is smaller (this is the commodity of its comparative advantage) and import the commodity in which its absolute disadvantage is greater (this is the commodity of its comparative disadvantage).
- Haberler resolved the issue of dependence on labour alone in the case of theory of comparative advantage when he introduced the opportunity cost concept. Opportunity cost which is the value of the forgone option.
- The Heckscher-Ohlin theory of trade, also referred to as Factor-Endowment Theory of Trade or Modern Theory of Trade, states that comparative advantage in cost of production is explained exclusively by the differences in factor endowments.
- A country tends to specialize in the export of a commodity whose production requires intensive use of its abundant resources and imports a commodity whose production requires intensive use of its scarce resources.

- Accordingly, a capital abundant country will produce and export capital-intensive goods relatively more cheaply and a labour-abundant country will produce and export labour-intensive goods relatively more cheaply than other country.
- ♦ The Factor-Price Equalization Theorem states that international trade equalizes the factor prices between the trading nations. Therefore, with free trade, wages and returns on capital will converge across the countries.
- ♦ NTT is the latest entrant to explain the rising proportion of world trade between the developed and bigger developing economies (such as BRICS), which trade in similar products. These countries constitute more than 50% of world trade.

#### **TEST YOUR KNOWLEDGE**

### **Multiple Choice Type Questions**

- 1. Which of the following does not represent a difference between internal trade and international trade?
  - (a) transactions in multiple currencies
  - (b) homogeneity of customers and currencies
  - (c) differences in legal systems
  - (d) none of the above
- 2. The theory of absolute advantage states that
  - (a) national wealth and power are best served by increasing exports and decreasing imports
  - (b) nations can increase their economic well-being by specializing in the production of goods they produce more efficiently than anyone else.
  - (c) that the value or price of a commodity depends exclusively on the amount of labour going into its production and therefore factor prices will be the same
  - (d) differences in absolute advantage explains differences in factor endowments in different countries
- 3. Which of the following theories advocates that countries should produce those goods for which it has the greatest relative advantage?
  - (a) Modern theory of international trade
  - *(b)* The factor endowment theory
  - (c) The Heckscher-Ohlin Theory
  - (d) None of the above

- 4. Which of the following holds that a country can increase its wealth by encouraging exports and discouraging imports
  - (a) Capitalism
  - (b) Socialism
  - (c) Mercantilism
  - (d) Laissez faire
- 5. Given the number of labour hours to produce cloth and grain in two countries, which country should produce grain?

#### Labour cost (hours) for production of one unit

	Country A	Country B		
Cloth	40	80		
Grain	80	40		

- (a) Country A
- (b) Country B
- (c) Neither A nor B
- (d) Both A and B
- 6. According to the theory of comparative advantage
  - (a) trade is a zero-sum game so that the net change in wealth or benefits among the participants is zero.
  - (b) trade is not a zero-sum game so that the net change in wealth or benefits among the participants is positive
  - (c) nothing definite can be said about the gains from trade
  - (d) gains from trade depends upon factor endowment and utilization
- 7. Given the number of labour hours to produce wheat and rice in two countries and that these countries specialise and engage in trade at a relative price of 1:1 what will be the gain of country X?

#### Labour cost (hours) for production of one unit

	Wheat	Rice
Country X	10	20
Country Y	20	10

(a) 20 labour hours

- (b) 10 labour hours
- (c) 30 labour hours
- (d) Does not gain anything
- 8. Assume India and Bangladesh have the unit labour requirements for producing tables and mats shown in the table below. It follows that:

#### Labour cost (hours) for production of one unit

	India	Bangladesh
Tables	3	8
Mats	2	1

- (a) Bangladesh has a comparative advantage in mats
- (b) India has a comparative advantage in tables
- (c) Bangladesh has an absolute advantage in mats
- (d) All the above are true
- 9. Comparative advantage refers to
  - (a) a country's ability to produce some good or service at the lowest possible cost compared to other countries
  - (b) a country's ability to produce some good or service at a lower opportunity cost than other countries.
  - (c) Choosing a productive method which uses minimum of the abundant factor
  - (d) (a) and (b) above
- 10. Ricardo explained the law of comparative advantage on the basis of
  - (a) opportunity costs
  - (b) the law of diminishing returns
  - (c) economies of scale
  - (d) the labour theory of value

#### **ANSWERS**

1.	(b)	2.	(b)	3.	(d)	4.	(c)	5.	(b)	6	(b)
7.	(b)	8.	(d)	9.	(b)	10.	(d)				