

INTERNATIONAL TRADE

- International trade or foreign trade is a certain economy in the world exchanging goods and services with another economy or group of economies.
- It can be classified into two sectors as export trade and import trade.
- There are 3 main factors on which a country decides whether to enter to international trade or not,
 1. The unequal factor endowment with countries.
 - The natural resources, human resources and physical capital are distributed in countries in an unequal manner.
 2. The technology or the product mix used to produce various commodities in an efficient manner are different.
 3. Goods have differences in quality and other qualitative features.

Theories in International Trade

1. Mercantilism
2. Absolute Advantage
3. Comparative Advantage

Mercantilism

- Mercantilism is a national economic policy of accumulating monetary reserves through a positive balance of trade, especially of finished goods.
- Mercantilism dominated Western European economies from the 16th to late-18th centuries.
- Mercantilism was a cause of frequent European wars and also motivated colonial expansion.
- High tariffs, especially on manufactured goods, are an almost universal feature of mercantilist policy.

Other policies have included:

- a. Building a network of overseas colonies;
- b. Forbidding colonies to trade with other nations;
- c. Monopolizing markets with staple ports;
- d. Banning the export of gold and silver, even for payments;
- e. Forbidding trade to be carried in foreign ships;
- f. Export subsidies;
- g. Promoting manufacturing with research or direct subsidies;
- h. Limiting wages;

- i. Maximizing the use of domestic resources;
- j. Restricting domestic consumption with non-tariff barriers to trade.

Absolute Advantage Theory

*"If a foreign country can supply us with a commodity cheaper than we ourselves can make it, better buy it of them with some part of the produce of our own industry, employed in a way in which we have some advantage." **The Wealth of Nation (Book IV, Section ii, 12)***

- Absolute advantage means one country is having higher resource efficiency than another country in producing a particular commodity, thus former country can produce that particular product at a lower cost than the latter country.
- Hence absolute advantage suggests countries to specialize in what they are "good at producing" and trade in the excess stocks of those goods with another country that specializes in "what former country is bad at producing".
- Hence absolute advantage theory consist of
 - a. Gains/benefits of Specialization &
 - b. Gains/benefits of Exchange

Gains/benefits of Specialization in Absolute Advantage Theory

- This theory suggests specialization should be based on resource efficiency or low unit cost
- According to this theory, if international trade to take place there should be two countries that have absolute advantage over two separate goods which are need by both countries.
- If so, each country should specialize in what they are good at producing (absolute advantage) and make an excess to trade in with the good that they are bad at producing (absolute disadvantage)
- This theory argues through the advantage of specialization world can reach higher consumption point than world's PPC.
- However according to this theory, if a country has an absolute advantage for all the goods (over the other country) such country gets no gain from either specialization or exchange. Hence such countries should not get in to international trade.

Gains/benefits of Exchange in Absolute Advantage Theory

- After the exchange all countries should benefit.
- Each country should be able to consume more units from all goods (produced locally or imported from another country) than the amount each country consumed prior to specialization and exchange (autarky /no trade).
- With the advantages of specialization & Exchange **each country can reach higher consumption point than their PPC.**

Comparative Advantage Theory

- Comparative advantage means one country is having **lesser opportunity cost** than another country in producing a particular commodity, thus former country can produce that particular product at a **lesser resource sacrifice** than the latter country.
- Hence comparative advantage suggests countries to **specialize** in what they have “**lesser opportunity cost of producing (Most best)**” and **trade in** the excess stocks of those goods with another country that specializes in “**what former country higher opportunity cost of producing (least worse)**”.
- Comparative advantage theory consist of
 - a. Gains/benefits of Specialization &
 - b. Gains/benefits of Exchange

Gains/benefits of Specialization in comparative Advantage Theory

- This theory suggests specialization should be based on **opportunity cost** or **low level of resource sacrifice**
- According to this theory even a country that has absolute advantage over all products still benefits from specialization based on opportunity cost.
- Each country should specialize in what they can produce with lesser opportunity cost (comparative advantage) and make an excess to trade in with the good that they have to bear a higher opportunity cost in producing (comparative disadvantage)
- By doing so, with the advantage of specialization **world can reach higher consumption point than world's PPC.**

Gains/benefits of Exchange in Comparative Advantage Theory

- After the exchange all countries should benefit.
- Each country should be able to consume more units from all goods (produced locally or imported from another country) than the amount each country consumed prior to specialization and exchange (autarky /no trade).
- With the advantages of specialization & Exchange **each country can reach higher consumption point than their PPC.**

Assumptions in Absolute Advantage Theory & Comparative Advantage theory

1. Only **2 economies** exists in the world
2. Each economy has **equal factor endowment**
3. **Perfect mobility of factors of production** - resources used in one industry can be switched into another without any loss of efficiency
4. **Constant returns to scale** Ex;- doubling the inputs in each country leads to a doubling of total output)
5. **No externalities** arising from production and/or consumption
6. **No Transportation** costs
7. **Resources are fully employed** (especially labour)
8. **Production technology differences across industries and across countries** and are reflected in labor productivity parameters
9. The labor and goods markets are assumed to **be perfectly competitive** in both countries

Example 01

Following table provides number of labour units required to produce one unit of tea or Banana. Assume each country has 1200 labour hours

<i>Product</i>	<i>Sri Lanka</i>	<i>Brazil</i>
Tea	50	25
Banana	24	30

Following table provides number of labour units required to produce one unit of rubber or Rice.

<i>Product</i>	<i>Sri Lanka</i>	<i>Pakistan</i>
Rubber	10	25
Rice	20	30

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Key sources to determine absolute advantage

- a. Factor abundancy and ownership
Ex: Middle east countries has crude oil deposits
- b. Climatic conditions
- c. Historical reasons of producing goods
- d. Goodwill

Key Sources of comparative advantage (Key Sources of International trade)

- a. Differences in factor endowment among countries
- b. Difference in returns to scale / economies of scale among countries (Mainly due to technology)
- c. Geographical location & other geographical factors
- d. Product differentiation in different countries (differences in specialization & knowledge)
- e. Differences in preferences in different countries.
- f. Differences in technology an innovation in different countries.
- g. Advantages of specialization
- h. Government policies
- i. Quality of factors of production
- j. Changes in price levels (Inflation)

Limitations of the theory of comparative advantage

- a. This theory works as expected under perfectly competitive market structure
 - If countries follow anti – competitive acts, theory of comparative advantage won't work as it prevents economies from free trade (Free exchange of commodities among countries).
Ex: Tariff and non – tariff barriers such as economic embargoes, trade agreements etc.
- b. This is successfully working in between countries which has equal power in economic and political sectors. But, the realistic situation is that these type of situations are very rare or not in existence in the world.

Dynamic comparative advantage

- Comparative advantage is a dynamic concept.
- In other words, due to investments in physical and human capital and changes technical methods along with the time, the comparative advantage of countries changes.
- As an example, although in early stages the popularity and ability of making electronics such as televisions goes to United States of America, recently it can be discovered that with the

improvement of human capital and skills in east Asian countries, the ability and popularity to make electronics has been changed along with time and nowadays countries like Japan, Korea are also act as pioneers in electronics sector. So, it can be observed that along with the time the comparative advantage of America to make TVs has changed.

Factors affecting dynamic comparative advantage

- I. Changes in technology
- II. Product differentiation
- III. Returns to scale
- IV. Government policies

Competitive advantage (Gains of competition)

- Competitive advantage is that with the same factor endowment and productivity with the capability to produce goods and services, a country is providing the good or the service to consumer in a better way than the other country.
- In other words, it is a way of providing more value for the consumers when supplying a good than the other competitors.
- This gain can be obtained in two ways as either by lowering the price than other competitors or by providing a quality good or service at a higher price than other competitors.
- When a firm undergoes a situation of competitive advantage by attracting more customers to it relative to its rivalries, it can gain more profits than its competitors.
- Competitive advantage is a strategy used by firms, countries in order to assure their survival in the local or international markets.

Sources affecting to competitive advantage (Benefits of competition)

1. Large potentials in the fields of research and development (Countries can stand ahead by promoting innovations)
2. Intellectual property rights
3. Unique ownership of resources in distribution networks
4. Having a large production capacity
5. Having good market strategies
6. Ability to supply circulating capital/ floating capital continuously
7. Having superior management groups
8. Having barriers to entry and exit

Reason for government involvement to international trade

- a. To avoid anti-competitive actions such as dumping
- b. To protect local industries and local infant industries
- c. Create a tariff structure that can improve local industry value addition
- d. To promote specialization and export differentiation
- e. To avoid economic growth dependency on international trade
- f. To face for the global shocks and international price fluctuations
- g. To promote diplomatic relationships and attract international investments
- h. To enter in to bilateral, multilateral and regional trade agreements
- i. To provide help to local exporters to find foreign markets

Protectionism

- Protectionism is government **actions and policies** that **restrict or restrain international trade**, often done with the **intent of protecting local businesses and jobs** from foreign competition.
- Protectionism is opposite to free trade
- Due to protectionist measurement of a government demand and supply of imports and exports and the prices are directly affected.
- Protectionism can be executed in 2 main ways:
 - a. Tariff barriers
 - b. Non- tariff barriers

Tariff barriers

- Using tariff restricting the foreign trade (free trade) is known as tariff barriers.
- In Sri Lanka at the moment only tariff barriers are used to restrict international trade (free trade)
- There are several taxes those can be used:
 - a. Specific tax /Unit tax
 - b. Ad-valorem tax (percentage tax)
 - c. Compound tax (Tax on to of anther tax)
 - d. Preferential tax (Taxation only for a specific category)

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- A blank coordinate system with a horizontal x-axis and a vertical y-axis, both ending in arrows. The axes are drawn in a dark blue color. The origin is at the bottom-left corner. The x-axis extends to the right, and the y-axis extends upwards. The background is a light gray grid.

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	Before Tariff	After Tariff
Equilibrium Price		
Equilibrium Quantity		
Local quantity		
Consumer Expenditure		
Consumer Surplus		
Producer Surplus		
Economic Gain		
Government Tax Collection		
Dead Weight Loss		

Non -Tariff barriers

- Non-tariff barriers are a form of restrictive trade where barriers to trade are set up and take a form other than a tariff.
 - a. Subsidies (especially to local industries)
 - b. Quotas
 - c. Anti-dumping laws
 - d. Foreign exchange controls
 - e. Administrative hampers
 - f. Trade embargos
 - g. Trade agreements

Free Trade

- Free trade is the unrestricted purchase and sale of goods and services between countries without the imposition of constraints such tariff barriers and non-tariff barriers.
- Theoretically free trade is a win-win proposition because it enables nations to focus on their core competitive advantage(s), thereby maximizing economic output and fostering income growth for their citizens.

Nominal Rate of Protection (NRP)

- Nominal rate of protection is the protection given to local product due to the relative price increase of the imported product from an import tax.
- In other words NPR is due to an import tax, the percentage price increase of an imported good as against the price of competing domestically produced good.
- Nominal rate of protection only shows the percentage of price increase of imports relative to the price of competitive local produce. Therefore, this does not show actual or real protection given to local producers through an import tax to improve their value addition.

Effective Rate of Protection (ERP)

- Effective rate of protection is the percentage increase of actual value addition from domestic industries after an import tariff structure relative to actual value addition from domestic industries prior to an import tariff structure (free trade).
- Tariff structure refers to the relationship among tariffs in related industries
- Value addition is the difference between the selling price and the cost of intermediate goods.

$$V = \text{Selling Price} - \text{Cost of intermediary goods}$$

- A domestically produced good can use imported inputs and imported intermediary goods. Therefore, due to an import tariff structure, value addition of domestically produced goods can even fall down.
- Thus, even though due to an import tariff structure, price of imported final good rises as against competing local good, if local good is heavy consuming imported inputs and intermediary goods, real value addition of local good can be very low.
- Therefore, in order to measure the real protection effective rate of protection is more appropriate than nominal rate of protection

$$\text{ERP} = \frac{V1 - V0}{V0}$$

ERP = Effective Rate of protection

V1 = Valued added after tariff

V0 = Valued added before tariff

Suppose following details are given for a domestically produced good and competing imported good

- Local price of locally produced product - Rs.400/-
- Imported inputs for the locally produced product – Rs.220/-
- Imported final goods price - Rs.400/-

Scenario 01

- Import tax 20% on final goods (except inputs)

Scenario 02

- Import tax 20% on final goods
- Import tax 25% on inputs

Calculate Value added before tariff, Value added after tariff and EPR for scenario 01 & 02.

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Factors those can improve effective rate of protection (ERP)

- Increase in import tariff on final goods
- Reduction in import tariff on inputs/ intermediary goods

Arguments “for” Protectionism (Benefits of protectionism)

- To protect domestic infant industries
- To avoid dependency on few product lines countries can implement economic differentiation with protectionism (Control excessive specialization)
- To counter domestic unemployment by promoting local industries
- To avoid dumping and other anti-competitive actions of foreign competitors
- To solve BOP deficit (BOP imbalance)
- To collect tax revenue to government
- When making policies regarding national defense, political and economic sectors
- To discourage importing of demerit goods

Arguments “against” Protectionism (Cost of protectionism)

- a. Protectionism promotes less protective and less efficient producers (this is a social cost to the society since consumers lose the chance of getting higher quality products at a cheaper price)
- b. Consumers have to pay a higher price (Consumers lose the chance of getting the products at a lower price due to tariff)
- c. Protectionism becomes a necessity. If protectionism is taken off it leads to economic & social issues.
- d. Protectionism can create local monopolies.
- e. Protectionism restricts the transformation of technology and global innovations
- f. Protectionism can adversely affect diplomatic relationships

Advantages of International trade

- a. By specializing based on comparative advantage or absolute advantage production and the income of the country will get increased.
- b. Country will be able to consume a point beyond their production possibility curve.
- c. Consumers will get better choice since products that cannot be produced domestically can be imported
- d. Since country is specializing on the products that they have comparative advantage, country will enjoy returns to scale advantages
- e. This helps to improve international relationships and will be able to attract more investments.
- f. Due to international trade services such as transportation, banking, insurance will get developed.
- g. International trade helps to improve diplomatic, cultural and social relationships among countries.

Disadvantages of International trade

- a. Due to international competition (quality, cost and technology) domestic industries might get wiped off
- b. There can have domestic inflation due to the price fluctuations in the global market Ex:- Oil
- c. Anti-competitive acts such as dumping and it will badly affect local industries (Dumping means the export by a country or company of a product at a price that is lower in the foreign market than the price charged in the domestic market. Most of the time export price is even lesser than cost of production of the domestic player.)
- d. Economic growth of the country might depend on international trade and international investments.
- e. When consumers demand more of imported goods (due to quality or price or technology) domestic industries will lose consumer demand

- f. Due to over specialization income of the country will only concentrate on few product ranges. Due to fluctuation in the international trade this may adversely affect to such countries.
- g. Due to higher demand for import than exports, there will have impacts on exchange rate & external value of local currency.

Export Structure of Sri Lanka

- According to the central bank report, export structure only consists of good exports.
- Central bank classifies exports in to main 4 categories.
 - a. Agricultural Exports
 - b. Industrial Exports
 - c. Mineral Exports
 - d. Unclassified Exports

	1977	2019
01. Agricultural Exports	79.0	20.6
02. Industrial Exports	14.0	78.9
03. Mineral Exports	5.0	0.3
04. Unclassified Exports	2.0	0.2
	100.0	100.0

Key Highlights (After 1977)

Import Structure of Sri Lanka

- According to the central bank report, import structure only consists of **good imports**.
- Central bank classifies exports in to main 4 categories.
 - a. Consumer Goods
 - b. Intermediate Goods
 - c. Investment Goods
 - d. Unclassified Imports

	1977	2018
01. Consumer Goods	42.0	19.8
02. Intermediate Goods	45.0	57.0
03. Investment Goods	12.0	23.1
04. Unclassified Imports	1.0	0.04
	100.0	100.0

Key Highlights (After 1977)

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Sri Lanka's key trade partners in recent years (Direction of Trade of SL)

01. Sri Lanka's key export buyers (Export Direction)

	2018	2019
USA	26%	26%
Asia -other	13%	11%
EU - Other	16%	16%
UK	8%	8%
Middle East	10%	9%
India	7%	6%
Germany	5%	5%

02. Sri Lanka's key Import Suppliers (Import Direction)

	2018	2019
China	19%	20%
India	19%	20%
Asia - Other	25%	18%
EU	9%	10%
Middle East	12%	4%
Singapore	6%	5%
UAE	8%	8%