Essentials of

International Trade [Unit 9]

[Coverage: **E**ssentials **1 - 4**]

[SPECIFICALLY DESIGNED FOR ADVANCED LEVEL **2024 - 2025**]

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Learning Keys

Essentials 01

Essentials Segments:

(01) What is meant by **'International Trade'?'**

International Trade can be broadly identified as the trade that takes place between countries across domestic boundaries. Modern International Trade performed by a country can be primarily categorized into three main sectors, namely Import, Export and Entry port (re-export) trade.

A country's decision to engage in international trade is said to be theoretically and broadly based on (or driven by):

- Theory (or Principle) of Comparative Advantage
- Theory (or Principle) of Absolute Advantages

In order to successfully engage in external trade, an increasing number of countries have adopted an 'Open Economic Model or Policy'

(02) **State** the main **'Benefits** of **International** OR **Free Trade'**

[Merits of **Comparative Advantage** or Arguments for **International Specialization**]

- ☐ **Improved 'Efficiency' in production**
- ☐ Opportunity to practice **'Specialization'** in production
- ☐ Improved **'Consumption'**
- ☐ Reduced **'Market Power'** and **'Monopolies'**
- ☐ Improved **'Mutual Benefits'**
- ☐ Opportunity for **'Technical Exchanges'**
- ☐ Improved **'Variety in Choice'**
- ☐ Benefits from **'Economies of Scale'**
- ☐ Creation of **'New Ideas and Concepts'**
- ☐ Rapid **'Economic Growth'** and **'Development'**

Outline: Benefits of Free (International) Trade:

- ✓ **Improved 'Efficiency' in production**

  International competition shall act as a powerful incentive for domestic produces to improve their productive efficacy and reduce cost of production

- ✓ Opportunity to practice **'Specialization'** in production

  With specialization a country is able to improves its productivity. International trade leads to a country only producing or practicing specialization on products they are highly efficient and have lowest opportunity cost in producing.

- ✓ Improved **'Consumption'**

  Free international trade, international specialization leads to increased output and lower prices, thus, increasing consumption levels. With free trade consumption is possible at a combination of goods outside a country's PPF.

- ✓ Reduced **'Market Power'** and **'Monopolies'**

  Free and fair international trade leads competitive and efficient global markets, thus reducing the market and monopolistic power of individual firms and countries.

- ✓ Improved **'Mutual Benefits'**

  By two countries participating in free and fair trade, based on their specializations, they are able to enjoy mutual benefits in terms of production and consumption.

- ✓ Opportunity for **'Technical Exchanges'**

  Free trade promotes the exchange and sharing of technical and scientific knowledge among countries, especially in with the development of global supply chains

- ✓ Improved **'Variety in Choice'**

  Provides consumers with greater variety in choice of products from different countries

- ✓ Benefits from **'Economies of Scale'**

  With specialization and large scale production targeting global markets, a country can benefit from economies of scale and lower average costs

- ✓ Creation of **'New Ideas and Concepts'**

  Promotes new ideas (innovations, intellectual property) and transmits them globally.

- ✓ Rapid **'Economic Growth'** and **'Development'**

  There is sufficient empirical evidence to suggest free and fair trade has increased the rate of economic growth of countries. Rapid growth shall lead to higher per capita income, reduced absolute poverty and improved living standards.

'Theoretical Underpinnings for International Specialization'

(03) Briefly explain 'Adam Smith's **'Absolute Advantage'** theory

The **Theory** of **Absolute Advantage (TAA)** is based on the concept of 'maximum output or minimum absolute resource cost', i.e., being best at producing a given product.

Absolute advantage is a satiation in which an economic unit (a **country**, firm or individual) can produce a given good or service using lesser resources or time (at a lower resource cost) or with greater efficiency (producing a higher output using the same amount of resources or time) than another economic unit.

Absolute advantage is **not a necessary** or **adequate** foundation (**pre-condition**) for mutually beneficial bilateral international trade to take place.

The **Principle of Absolute Advantage (PAA)** states that to benefit from international trade a country **should produce (specialize)** and **export only** and **all** goods on which it has an ***Absolute Advantage*** (**use fewer resource** in production, than its trading partner country) and **import** all other goods, i.e., goods with an ***absolute disadvantage.***

(04) State the main **Sources of Absolute Advantage**

- ☐ Uniqueness of climate or natural environment
- ☐ **Resource endowment**
- ☐ Abundance or availability of factors
- ☐ Goodwill or international reputation
- ☐ Historical or empirical reasons

The Case Against (Drawbacks of) the Principle of Absolute Advantage

- Absolute Advantage can be used with moderate effectiveness to explain the trade between developed and developing countries, it is unable to explain or justify trade between developed economies.
- The main criticism is the failure to explain how free trade can be beneficial to two trading partners, when one country holds the absolute advantage in producing all the goods (i.e., when trade occurs without an absolute advantage basis)
- Therefore, absolute advantage is **not a necessary** or **adequate** foundation (**pre-condition**) for mutually beneficial international trade to take place.
- Thus the 'Comparative Advantage Theory' was introduced as measure of correcting the limitations of the Absolute Advantage Theory.

(05) Briefly explain 'David Ricardo's **'Comparative Advantage'** theory

The **Theory** of **Comparative Cost Advantage** or **Comparative Advantage (TCA)** is based on the concept of relative opportunity cost of production.

Comparative advantage is a situation in which an economic unit (a **country,** firm or individual) can produce a given good or service at a lesser opportunity cost in comparison to another economic unit. The country which must give up or forego the least of another product when increasing the output of the selected product (by one unit) will hold the comparative advantage in producing that product.

Comparative advantage is a **necessary** and **adequate** foundation (pre-condition) for mutually beneficial international trade to take place.

The **Principle of Absolute Advantage (PAA)** states that to benefit from international trade a country **should produce (specialize)** and **export only** goods on which it has a **Comparative *Advantage*** (**least opportunity cost** in production than its **trading partner country**) and **import** other goods, i.e., goods with a **comparative *disadvantage.***

Noteworthy [PCA in Action]:

When a country has an absolute disadvantage over the other (trading partner country) in the production of all the goods, the given country should only specialise in the production of goods they have more comparative advantages. While the other county should select and produce goods on which they have less comparative disadvantages, thereby both countries can obtain mutual benefits through free trade.

[P. Perera, 2021 p 325]

(06) State the main **Sources of Comparative Advantage**
[Broad determinants of Comparative Cost Advantage]

(1) Differences in Factor Endowments & Quantity
(2) Differences in Tastes or preferences
(3) Economies of Scale [← Increasing Returns to Scale]

(4) Changes in Technology
(5) Product Differentiation
(6) Government Policies (Trade & Protectionist Policies)

(7) Movement of Exchange Rate and Long-term inflation prospects
(8) Demographics, location & Institutions
(9) Investment in RND & Non-price Competition
(10) Labour Productivity (Specialization & Division of Labour)
(11) Initial Conditions, Rate of Capital Investment (Infrastructure)

Noteworthy:

[A] International specialization practiced based on comparative advantage theory is mainly classified into two types or categories:

- **Static** advantage
- **Dynamic** advantage

- The advantages naturally received or inherited by a country-based production and consumption, is known as **static** comparative advantage. Such advantages are created based on
  - ✓ Resource endowment
  - ✓ Differences in taste or preference among countries
  - ✓ Economies of Scale [← Increasing Returns to Scale in production]

Sources [1 – 3] ↑

- Advantage resulting from some of the following situations created among countries is termed as **dynamic** comparative advantage:

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Sources [3 - 6] ↑

[B] Further Determinants (Sources) of Comparative Advantage exist

Sources [7 - 11] ↑

[C] **Reasons for Differences in Trade Patterns**
(Why trade more with some and less with others)

- ✓ Proximity
- ✓ Communication/Coordination Costs
- ✓ Bilateral Tariffs & Free Trade Zones
- ✓ Historical Ties

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(07) State the main **Assumptions** of **Comparative Advantage**

- There are **two countries** and **two commodities** in the model
- **Perfect mobility of labour** and **resources (homogeneous factors)** within each country and perfectly immobile between the countries, with each country having a **fixed endowment of resources**
- **Fixed** or **constant Opportunity Cost** and thus, **Constant Returns to Scale** [i.e. when inputs change, output shall change in equal proportion]
- **Full employment** of **resources** in both countries

- **Perfect competition** industries and **no trade barriers** among countries **(free trade)**
- There is **no transportation cost** involved and no **externalities** of production and consumption

Estimating Opportunity Cost → **Comparative Advantage**

In order to identify comparative advantage held by a country, we need to select two goods similarly produced by two countries and compare their opportunity cost values.

- **Input Approach:**
  Amount of resources required /used to produce one unit of output (Cost of Production)
- **Output Approach:**
  Amount of output produced/generated using a given amount of input or one unit of input (Production capacity /possibility/productivity /PPF)

ULTIMATE **SUMMARY :** ESTIMATION APPROACHES

Assume a situation where two hypothetical nations engage in producing two selected goods namely, **Tea** and **Coffee**. If the production information is presented in two alternative forms:

Output [Productivity/PPF]

$$\text{OC of Tea} = \frac{\text{Coffee Units}}{\text{Tea Units}}$$

$$\text{OC of Coffee} = \frac{\text{Tea Units}}{\text{Coffee Units}}$$

Foregone

Gained

Inputs [Cost of Production]

$$\text{OC of Tea} = \frac{\text{Tea Units}}{\text{Coffee Units}}$$

$$\text{OC of Coffee} = \frac{\text{Coffee Units}}{\text{Tea Units}}$$

Direct Method

METHOD APPLICATION [1]

Product	Sri Lanka	Japan
Tea	15	06
Coffee	20	12

Assume the info given is **Output** [Per unit of composite inputs]

Requirements:

(A) Establish absolute advantage for these items produced by Sri Lanka and Japan

(B) Estimate the opportunity cost of producing these goods within each country

(C) Identify the items on which each country should practice specialization if engaged in international trade

(A) Establish absolute advantage for these items produced by Sri Lanka and Japan

Absolute Advantage: Analysis and Overall Conclusions

- **Sri Lanka** has the absolute advantage of producing **tea**, therefore should practice specialization in the production of tea.
- **Sri Lanka** also has the absolute advantage of producing **coffee**, therefore should practice specialization in the production of coffee
- Accordingly, there is **no absolute advantage** basis for **mutually beneficial international trade** between Sri Lanka and Japan in terms of tea and coffee, trade should not take place.

(B) Estimate the opportunity cost of producing these goods within each country

Sri Lanka | **Japan** | **Opportunity Cost Comparisons**

Tea = | **Tea =**

Coffee = | **Coffee =**

(C) Identify the items on which each country should practice specialization if engaged in international trade

- **Sri Lanka** has the comparative advantage of producing **tea**, therefore should practice international specialization in the production of tea.

- **Japan** has a comparative advantage of producing **coffee**, therefore should practice international specialization in the production of coffee

- Accordingly, there is a **comparative advantage** basis for **mutually beneficial international trade** between Sri Lanka and Japan in terms of tea and coffee

METHOD APPLICATION [2]

Product	Sri Lanka	Japan
Tea	15	06
Coffee	20	12

Assume the info given is **Inputs**
[Cost of producing one unit]

Requirements:

(A) Establish absolute advantage for these items produced by Sri Lanka and Japan

(B) Estimate the opportunity cost of producing these goods within each country

(C) Identify the items on which each country should practice specialization if engaged in international trade

(A) Establish absolute advantage for these items produced by Sri Lanka and Japan

Absolute Advantage: Analysis and Overall Conclusions

- **Japan** has the absolute advantage of producing **tea**, therefore should practice specialization in the production of tea.
- **Japan** also has the absolute advantage of producing **coffee**, therefore should practice specialization in the production of coffee
- Accordingly, there is **no absolute advantage** basis for **mutually beneficial international trade** between Sri Lanka and Japan in terms of tea and coffee, trade should not take place.

(B) Estimate the opportunity cost of producing these goods within each country

Indirect or **Conversion Method**

Assume each country has a total of 60 units of inputs

Sri Lanka **Japan**

Step: 1
[Input → Output]

Output [Per unit of inputs]

Product	Sri Lanka	Japan
Tea		
Coffee		

Step: 2
[Estimating Opportunity Cost]

Sri Lanka | **Japan** | **Opportunity Cost Comparisons**

Tea =

Tea =

Coffee =

Coffee =

Alternatively: Direct Method [Reciprocal Method]

Sri Lanka | **Japan** | **Opportunity Cost Comparisons**

Tea =

Tea =

Coffee =

Coffee =

(C) Identify the items on which each country should practice specialization if engaged in international trade

Common Conclusion: **Indirect (Conversion)** or **Direct (Reciprocal) Methods**

- **Japan** has the comparative advantage of producing **tea**, therefore should practice international specialization in the production of tea.
- **Sri Lanka** has a comparative advantage of producing **coffee**, therefore should practice international specialization in the production of coffee
- Accordingly, there is a **comparative advantage** basis for **mutually beneficial international trade** between Sri Lanka and Japan in terms of tea and coffee

EXCHANGE (TRADE) RATES

[BARTER EXCHANGE RATES]

- **Internal** or **Autarky Exchange Rate (Price Ratio):**
  The rate at which goods were exchanged or traded within each country, before engaging in international trade.
- **External Exchange Rate (Price Ratio):**
  The rate at which goods are exchanged or traded among or between two countries, after engaging in international trade.

METHOD APPLICATION [3]

Assume that both Canada and USA produce two goods, tea and coffee. The productivity of the two economies employing one unit of similar labour resources can be given as follows:

Productivity of Tea and Coffee (using a labour unit)		
Commodity	Canada	USA
Tea	02	10
Coffee	03	05

(A) Establish the **Internal 'Trade (exchange) Rate'** within each country.
(B) What are the goods each country should specialize in?
(C) Identify the **'Range of Mutually Beneficial External Trade Rate or Ratio'**

(A) Establish the Autarky (Internal) **'Exchange Rate'** within each country

Canada **USA**

(**B**) What are the goods each country should specialize in?

Canada **USA**

Tea = **Tea =**

Coffee = **Coffee =**

(**C**) Identify the **'Range of Mutually Beneficial External Exchange Rate'**

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THE PRIMARY ECONOMIC (TRADE) BENEFITS OF INTERNATIONAL TRADE

International trade offers many different benefits or gains to a country through a variety of means such as economic, political, social and cultural etc. The primary or core benefits of external trade from an economic point of view can be given as follows:

- **Benefits or Gains from Specialization**
- **Benefits or Gains from Exchange**

Benefits or gains from specialization and exchange will result from international trade based on both comparative and absolute advantage. In practice these primary benefits are more effectively and efficiently achieved when engaging in international trade based on **comparative advantage.**

[A] GAINS FROM SPECIALIZATION

- Gains from specialization refers the ability of countries to achieve a **higher level of output** by practicing **international specialization** only on a given product category or a few specific product categories, upon which the given country holds a **comparative advantage.**
- Such increase in output achieved by a country due to comparative advantage based, specialization will in turn translate to an **increase in overall global output** levels of the given product(s).

[B] GAINS FROM EXCHANGE

- This is where a country engaged in international trade and specialization on the basis of **comparative advantage** with regards to a given product; being able to **exchange or trade** its domestically produced output for goods and services **not produced** by that country **(i.e. non specialized products)**, thereby gaining the **opportunity** to **consume more goods and services.**
- Due to international trade and increased global production, any country engaged in such trade can **consume an alternative product combination (bundle of goods) outside its production possibility frontier,** without having to shift its production possibility frontier.

Method Application [4]

Output [Per hour of labour]

Requirements

A. Country with the absolute advantage for each product.
B. Country with the comparative advantage for each product.
C. Benefits or gains of specialization.
D. Benefits or gains of exchange.

(A) Country with the absolute advantage for each product.

- **USA** has the absolute advantage of producing **wheat**, therefore should practice specialization in the production of wheat.
- **USA** and **Sri Lanka** both face an **absolute disadvantage** of producing clothing, therefore either country should not practice specialization in the production of clothing
- Accordingly, there is **no absolute advantage** basis for **mutually beneficial international trade** between Sri Lanka and USA in terms of wheat and clothing, trade should not take place.

(B) Country with the comparative advantage for each product.

(C) Benefits or gains from **'Specialization'**

Before Int. Specialization [Without free trade]

Product	Sri Lanka	USA	World
Wheat			
Clothing			

After International Specialization [With free trade]

Product	Sri Lanka	USA	World
Wheat			
Clothing			

(D) Benefits or gains from **'Exchange'**

Deriving the Consumption Combinations → CPC

Sri Lanka

Wheat **Clothing**

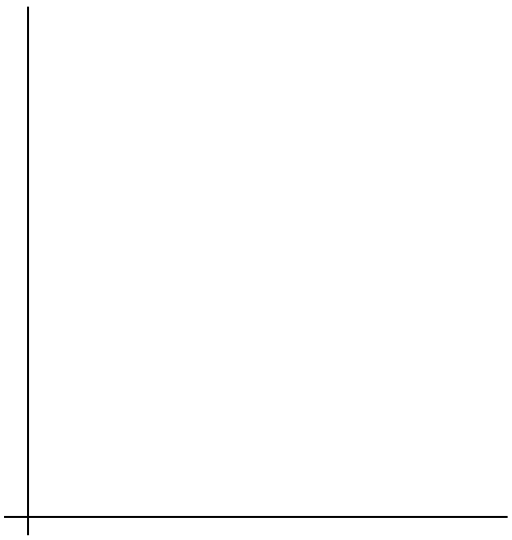
USA

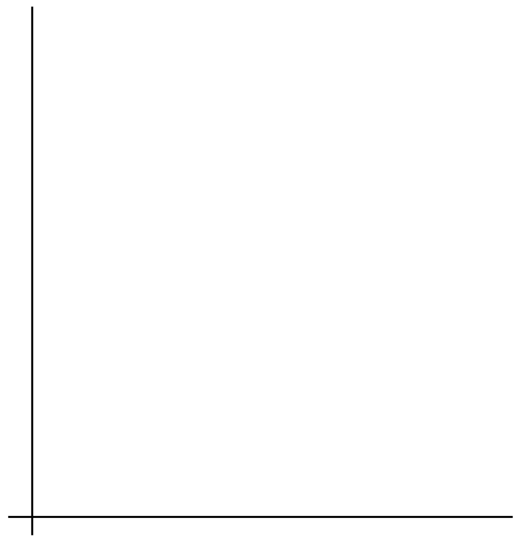
Wheat **Clothing**

GRAPHICAL PRESENTATION [PPC; CPC]

Sri Lanka	Wheat	Clothing
	0	1000 [5x200]
	800 [4x200]	0

USA	Wheat	Clothing
	0	1000 [5x200]
	2000 [10x200]	0





Sri Lanka	Wheat	Clothing

USA	Wheat	Clothing

OVERALL CONCLUSION

- It is a more practical and logical approach towards evaluating the decision of a country to engage in international trade, while effectively deriving benefits of specialization and exchange.
- Accordingly, **comparative advantage** becomes an essential and adequate condition for mutually beneficial international trade.

Noteworthy [PCA in Action]:

When a country has an absolute disadvantage over the other (trading partner country) in the production of all the goods, the given country should only specialise in the production of goods they have more comparative advantages. While the other county should select and produce goods on which they have less comparative disadvantages, thereby both countries can obtain mutual benefits through free trade.

[P. Perera, 2021 p 325]

(08) Outline the Basic Limitations of the Comparative Advantage Theory

- The comparative advantage theory is limited to two products and two countries, but in a practical world trade situation there will be millions of goods produced and transacted among countries (highly simplified or less realistic model).
- There will not be perfect mobility of resources in reality. Resources are not perfectly interchangeable (homogenous) among two different products, but tend to be non-homogeneous in reality.
- Subsequently, the fixed opportunity cost is not a realistic situation and realistically there will be an increasing opportunity cost behavior in the real world.
- The assumption of constant returns to scale and full employment of resources is unrealistic.
- The assumption no transport cost is unrealistic, and such cost have a significant impact in deciding comparative cost differences.
- Many production and consumption activities shall result in creating externalities both positive and negative,
- The existence of different barriers to free trade in certain countries, due to political, social, and strategic reasons.
- Modern economies and trade are dynamic, and the comparative cost theory is a static, based on many assumptions.

(09) Outline the main limitations or drawbacks of an open economic system or international trade

- **Domestic** market-based **producers** will be **discouraged** and may even **collapse,** due to the increasing number of relatively high quality and cheaper foreign products (brands) entering the domestic market and declining profits.
- High level of **economic dependency,** possibility of being economically exploited by developed nations, especially since underdeveloped nations tend to practice **excessive** local and international **specialization** (narrow range national output)
- Disadvantages through **'Dumping'**
- **The highly volatile nature of export** and import prices, uncertainty in global geopolitics, may lead to persistent **Balance of Payments (BOP) challenges.**
- Misuse of natural resources (exploitation by large multinational corporations)
- High dependence on foreign investments and possible excessive **foreign debt burden**
- **Possible cultural** and **social issues, political dependance** and **threat** to **national security**