

UNIT – II

CLASSICAL THEORY OF INTERNATIONAL TRADE–THEORY OF
COMPARATIVE COST – HECKHER OHLIN THEORY – LEONTIEF
PARADOX – TARIFF AND IMPORT QUATAS

- ***Fundamental questions in International Trade***

- Why does international trade take place?
- What determines which country should export a particular good and which country should import it?
- Who gains from such trade?

Why do Nations Trade?

(i) Nations are different

- *Unequal distribution of natural resources*

- *Difference in Technology*

- *Cost Advantages:*

Cost of production for the same product differs among different locations

Better explained by the *Theories of Absolute Advantage* and *Comparative Advantage*

- *Different Preferences:*

Americans prefer Basmati rice grown in India (taste differences)

Due to different income levels

(ii) To achieve economies of scale in production

- *The New Trade Theory*

Supply conditions (production possibilities)

Demand conditions

Why study trade theory?

- Talks about *benefits of international trade*
 - theories show why countries should trade for products/ services even when they can produce them domestically (Classical theories)
- Talks about *patterns of international trade*
 - theories show why countries specialize the way they do (Factor endowment theories)
- Talks about *the role of intervention*
 - theories help articulate the role of government policy (tariffs, quotas, etc.)

**“International trade theories has long held that
.....*some trade is better than no trade, and more
trade is better than less trade, and free trade is
better than restricted trade...*”**

**Free trade is a situation where a government does
not influence international trade through quotas
and tariffs**

**“.... Free trade is considered to be fair trade,
because what is free must be fair...” !!!!**

An overview of trade theory

- **Early thinking: Theory of Mercantilism**
- **Adam Smith: The theory of absolute advantage, 1776**
- **Ricardo: The theory of comparative advantage, 1817**
- **Heckscher-Ohlin theory: 20th century**
- **“New” trade theory based on economies of scale**
- **Product Life Cycle theory**
- **Porter’s Competitive Advantage Theory**

Theory of Mercantilism

- A trade theory prevailed during 16th to 19th centuries
- The wealth of a nation is measured based on its *accumulated wealth* in terms of **gold and silver**
- Nations should accumulate wealth by *encouraging exports and discouraging imports*
- Theory of mercantilism aims at *creating trade surplus* and in turn accumulate nation's wealth

Absolute Advantage Theory

- Adam Smith, 'An Enquiry into the Nature and Causes of the Wealth of Nations', 1776
- There is international benefit from trade
 - *Everyone better off without making anyone worse off*
- When one country can produce a unit of good with less cost than another country, the first country has an absolute (cost) advantage in producing that good
- Cost is considered based on *number of labour units* used

Absolute Advantage Theory

Assumptions:

- Two countries (**A&B**), both producing two products (**x&y**)
- Labour is the only factor of production and its productivity remains the same
- Perfect mobility of labour between the sectors within a country
- No mobility of labour between the countries
- Assumes perfect competition
 - No transportation cost
 - No restrictions on the movement of goods between the countries (free trade)

Theory of Absolute Advantage

- Assume, two countries, country **A** and country **B** producing only two commodities, **x** and **y**
- Suppose, **A** can produce **x** cheaper than **B**, and **B** can produce **y** cheaper than **A**
- Means, **A** has an absolute advantage in the production of **x** and **B** in the production of **y**
- Thus, **A** will be better off concentrating on the production of **x** and **B** on the production of **y**
- **A** will export **x** to **B**, and **B** will export **y** to **A**

Theory of Absolute Advantage

- Both countries will gain from the trade
 - Results in specialization
 - Increases productivity
- But what happens if **A** has absolute advantage in the production of both **x** and **y**?
- i.e., if **A** can produce **x** cheaper than **B** and it can produce **y** much cheaper than **B**
- Should **A** produce both **x** and **y** and **B** nothing?

Theory of Absolute Advantage

Limitations

- Explains the causes of trade only when both the countries enjoy absolute advantage in the production of at least one product
- Assumes that transportation costs are either non-existent or insignificant, which may not always hold good
- Assumes that prices are comparable across countries, implying stability of exchange rate
- Perfect mobility of labour between sectors – labour may be mobile but to an extent

Comparative Advantage Theory

- David Ricardo, '**The Principles of Political Economy & Taxation**', 1817.
- *Nations can still gain from trade even without an absolute advantage.*
- Facilitator – Difference in opportunity cost
- A country has a Comparative Advantage in producing a good if the *opportunity cost* of producing that good in terms of other goods is lower in that country compared to other countries

The Comparative Advantage Theory

- *Even if countries do not have an absolute advantage, they can gain from trade by allocating resources based on their **comparative advantage** and trade with each other*
- **Assumptions:**
 - Mostly same as that of absolute advantage theory

Comparative Advantage - Illustration

- Labour requirements (opportunity cost in the bracket)

	India	US
Textiles	3 (1/2)	2 (2)
PCs	6 (2)	1 (1/2)

- The relative price of one PC is 2 textiles in India ($6/3$), while it is $\frac{1}{2}$ textiles in the US
- Hence, PC is relatively cheaper in the US
- In the case of relative price of textiles, the reverse is the case
- US specializes in PCs
- India Specializes in Textiles

Ricardian Model – An Overview

- Illustrates the potential benefits from trade
- Trade leads to international specialization
- With labour as the only factor, it moves from relatively less efficient industries to relatively more efficient industries

Gains from Trade

- (a) International trade brings in efficiency in production and consumption, and
- (b) It provides a market for goods and services

Limitations (Implicit Assumptions)

- **Assumption of Perfect Competition**
- **Productivity of labour constant for both products and in both countries, implying constant returns to scale**
- **Labour is perfectly mobile between sectors but immobile between countries**
- **No technological innovation in any of the economies**
- **The above discussion on trade assumes that there is no restrictions on trade**
- **But in real life trade restrictions in the form of tariff and non-tariff barriers, quantitative restrictions, etc exist**
- **Thus, there is a deviation from the expected and actual gain from trade**

The Heckscher – Ohlin Model

Cause of trade

- International differences in labour productivity – *Ricardian view*
- Differences in countries resources – *H-O model*.
- Developed by Eli Heckscher and Bertil Ohlin
- Also called Factor-proportions Theory – because it discusses:
 - The proportions in which different factors of production are available in different countries, and
 - The proportion in which they are used in producing different goods

- ***Assumptions***

- Two factors of production – capital & labour
- Two countries (*India and Japan*), differ in factor abundance/ endowments
- Two commodities – *Steel and Cloth*
- Steel is more capital intensive and Cloth is more labour intensive in both countries
- Both goods uses both factors and the relative factor intensities are the same for each good in the two countries.

- **Based on these postulates, the H-O model predicts that the capital surplus country specializes in the production and export of capital-intensive goods and the labour surplus country specializes in the production and export of labour-intensive goods.**

Consider two countries :

Country A (Japan)	Country B (India)
Capital abundant	Labour abundant
High C/L ratio	Low C/L ratio
Low relative cost of capital (r/w)	High relative cost of capital (r/w)
Produces capital-intensive product, Steel	Produces labour-intensive product, Cloth
Low relative price of Steel (P_S/P_C)	High relative price of Steel (P_S/P_C)
Exports Steel and imports Cloths	Exports Cloth and import Steel

The H-O Theorem

Countries tend to export goods whose production is intensive in factors with which they are abundantly endowed.

Gains from Trade

Trade leads to convergence of relative prices, which in turn has strong effect on the relative earnings of the factors of production.

H-O Theory: Summary

- **Provides a different explanation of comparative advantage**
- **Comparative advantage arises from difference in national factor endowments**
- **Difference in factor endowments explains the differences in factor costs (prices)**
- **The more abundant a factor, the lower its cost**
- **This theory assumes that technologies are the same across countries**

The Leontief Paradox

- H-O theory, one of the most influential theoretical ideas in international economics
- Makes few simplifying assumptions than Ricardo's theory
- H-O theory has been subject to many empirical tests and most raised questions about its validity
- Most famous is by **Wassily Leontief** in 1953 for the US

The Leontief Paradox

- Since US was relatively abundant in capital compared to other nations, the US would be an exporter of capital-intensive goods and an importer of labour intensive goods
- However, Leontief found that US exports were less capital intensive than US imports
- This has become known as Leontief paradox

The Leontief Paradox

Why it is so?

1. US has a special advantage in producing new and innovative products

Such products may be *less capital intensive* and *heavily use skilled labour and innovative entrepreneurship*

Ex: *Computer software*

2. May be due to the *assumption of uniform technology* across countries

The Leontief Paradox

- *Differences in technology* may lead to *differences in productivity*, which in turn drives international trade patterns
- New research shows that once differences in technology across countries are controlled for, countries do indeed export goods that make intensive use of factors that are locally abundant
- *That is, the H-O model has predictive power once the impact of differences of technology on productivity is controlled for*



TARIFF AND IMPORT QUATAS

Defining tariffs

- A tariff is a tax (duty) levied on products as they move between nations
 - Import tariff - levied on imports
 - Export tariff - levied on exported goods as they leave the country
 - Protective tariff - designed to insulate domestic producers from competition
 - Revenue tariff - intended to raise funds for the government (no longer important in industrial countries)

Types of tariff

- Specific tariff
 - Fixed monetary fee per unit of the product
- Ad valorem tariff
 - Levied as a percentage of the value of the product
- Compound tariff
 - A combination of the above, often levied on finished goods whose components are also subject to tariff if imported separately

Impact of Tariff (Tax) Barriers

Tariff Barriers tend to **Increase**:

2. Inflationary pressures
3. Special interests' privileges
4. Government control and political considerations in economic matters
5. The number of tariffs they beget via reciprocity

Tariff Barriers tend to **Weaken**:

2. Balance-of-payments positions
3. Supply-and-demand patterns
4. International relations (they can start trade wars)

Six Types of Non-Tariff Barriers

1) Specific Limitations on Trade

- Quotas
- Import Licensing requirements
- Proportion restrictions of foreign to domestic goods (local content requirements)
- Minimum import price limits
- Embargoes

2) Customs and Administrative Entry Procedures:

- Valuation systems
- Antidumping practices
- Tariff classifications
- Documentation requirements
- Fees



Six Types of Non-Tariff Barriers (cont'd.)

(3) Standards :

2. Standard disparities
3. Intergovernmental acceptances of testing methods and standards
4. Packaging, labeling, and marking



(4) Government Participation in Trade :

2. Government procurement policies
3. Export subsidies
4. Countervailing duties
5. Domestic assistance programs

Six Types of Non-Tariff Barriers (cont'd.)

5) Charges on imports:

- Prior import deposit subsidies
- Administrative fees
- Special supplementary duties
- Import credit discriminations
- Variable levies
- Border taxes



6) Others:

- Voluntary export restraints
- Orderly marketing agreements



Import Quotas

Meaning of Import Quotas:

The import quota means physical limitation of the quantities of different products to be imported from foreign countries within a specified period of time, usually one year. The import quota may be fixed either in terms of quantity or the value of the product.

Objectives of Import Quotas:

- (i) protection to domestic industries through restricting foreign competition by limiting the imports from abroad.
- (ii) To make adjustment in the adverse balance of payments.
- (iii) To conserve the scarce foreign exchange resources of the country
- (iv) To ensure the stabilisation of the internal price level
- (v) To discourage conspicuous consumption by the wealthy sections
- (vi) To improve the international bargaining position of the country through allocating larger import quotas for the products of such countries as allow a liberal inflow of the products of the home country.
- (vii) To retaliate against the restrictive trade policies adopted by some of the foreign countries.
- (viii) To check the speculative imports in anticipation of changes in exchange rates, tariff rates and internal money and credit policies, the government may take resort to import quota.

Types of Import Quotas:

(i) Tariff or Custom Quota:

In case of tariff or custom quota, a certain specified quantity of a commodity is allowed to be imported by the government of the importing country either duty free or at a low rate of import duty.

(ii) Unilateral Quota:

Under the system of unilateral quota, a country places an absolute limit upon the quantity of a commodity to be imported during a specified period

(iii) Bilateral Quota:

In case of the bilateral quota system, the import quota is fixed after negotiations between the importing and exporting countries. Haberler has called the bilateral quotas as agreed quotas.

(iv) Mixing Quota:

Under this system, the domestic producers in the quota-fixing country are required to make use of domestic raw materials along with the imported raw material in a specified proportion.

(v) Licensing of Imports:

The government of a country may prescribe any one of the systems of import quota. The most crucial aspect of any system of fixation of quota is its administration. For this purpose, the government may follow the mechanism of issuing licences to different categories of importers on the basis of specific terms, conditions and norms.