

International Trade Theory

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Contents

Why Is Free Trade Beneficial?

Why Do Certain Patterns of Trade Exist?

What Role Does Government Have in Trade?

Trade Theories:

- **Mercantilism**
- **Smith's Theory of Absolute Advantage**
- **Ricardo's Theory of Comparative Advantage**



Why Is Free Trade Beneficial?

What is Free Trade?

A situation where a government **does not** attempt to influence through **quotas** or **duties**:

- What its citizens can **buy** from another country
- what they can **produce** and **sell** to another country

What is Trade Theory?

- It shows why it is beneficial for a country to engage in international trade (**even for products** it is able to **produce**)

Why Is Free Trade Beneficial?

Benefits of Free Trade

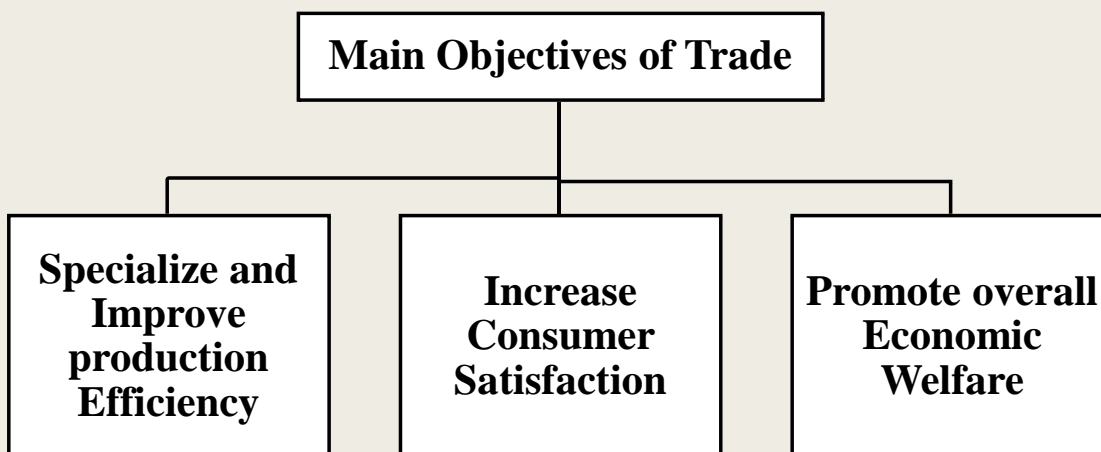
1) Allows a country to specialize in **the manufacture** and **export** of products and services that it can **produce efficiently**

2) allows a country to **import** products and services that can be produced more **efficiently** in other **countries**

Trade Surplus adds to the **national Income**

NOTE: limits on imports may be beneficial to producers, but not beneficial for consumers

Thus, we have three main objectives



How could an economy Improve production Efficiency ?

➔ By increasing the economy's **capacity** to produce

Which is
determined by

(1)

The rate at which the economy builds up its **stock of capital**

(2)

The rate at which **technology** improves

(3)

The rate at which **workforce quality** (or "human capital") is improving

Thus,

More
Capital

Improved
Workforce
Quality

Better
Technology

=

Shift the Production
Function Upward

(a higher potential
GDP)

Note:

Those three factors are obvious sources of **large disparities** between **rich nations**, which tend to have more stock of capital, better technology, and well-educated populations, and **poor nations**, which do not.

**Rich Nations****Poor Nations**

❶ How Could Capital Formation be Encouraged? ?

low real interest rates

Ans. (by)

rapid technical change

favorable tax treatment

political stability that protects property rights

rapid growth of demand

❷ How Could Technological Advances be Encouraged? ?

More Education

Ans. (by)

Higher rates of Investment

Direct expenditures (public and private) on research and development (R&D).

❸ How Could Workforce Quality be Encouraged? ?

Ans. (by)

education

training

Trade Surplus adds to the national Income

Since, **Trade Surplus** is a main component of the aggregate demand of any country

Definition 1 Aggregate demand

- It is the total amount that all **consumers**, **business firms**, **government** agencies, and **foreigners** spend on final goods and services, holding all other things constant.
- The aggregate demand curve is a **downward-sloping** curve.

Components of Aggregate demand

- ✓ The **level** of aggregate demand depends on a variety of other factors—such as **consumer incomes**, various **government policies**, and **events in foreign countries**.

Major components of aggregate demand

$$\text{Consumption (C)} + \text{Investment (I)} + \text{Government purchases (G)} + \text{Net exports (x-IM)}$$

Rule 1 Aggregate Demand (AD)

$$\bullet AD = C + I + G + (X-IM)$$

Definition 2 Consumer expenditure “consumption” (C)

- It is the total amount spent by consumers on newly produced goods and services (excluding purchases of new homes, which are considered investment goods).

Definition 3 Investment spending (I)

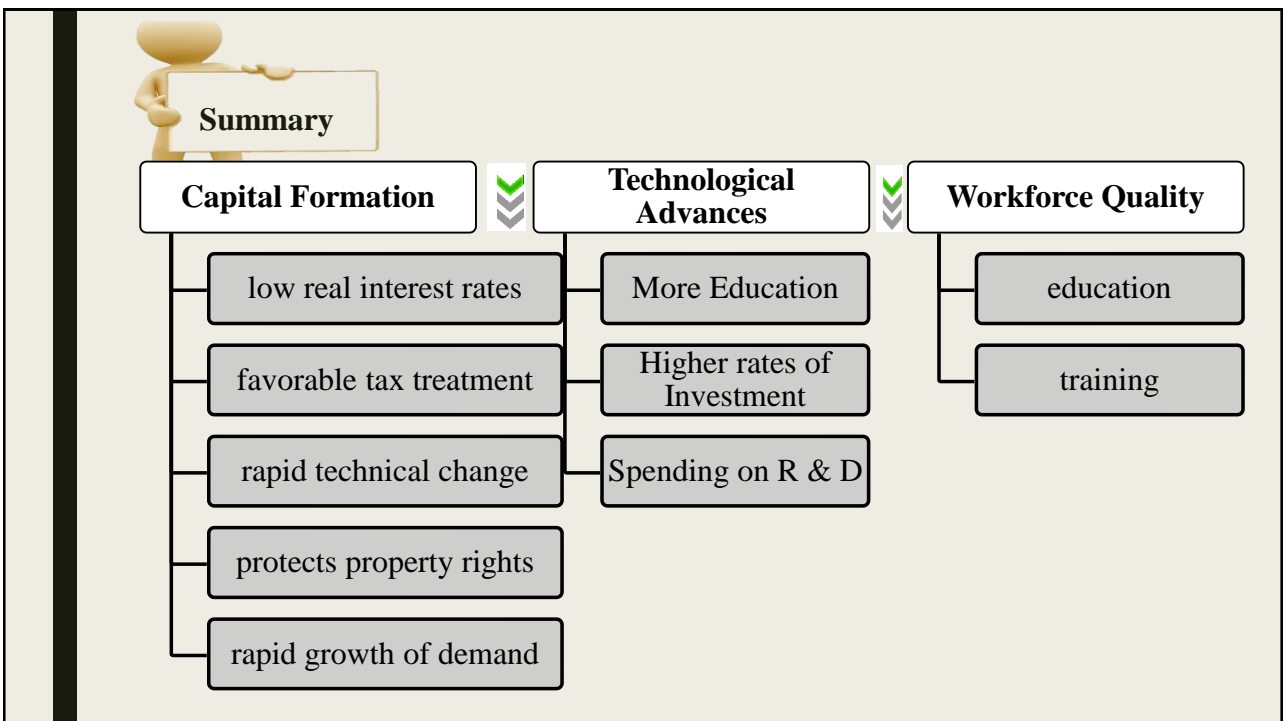
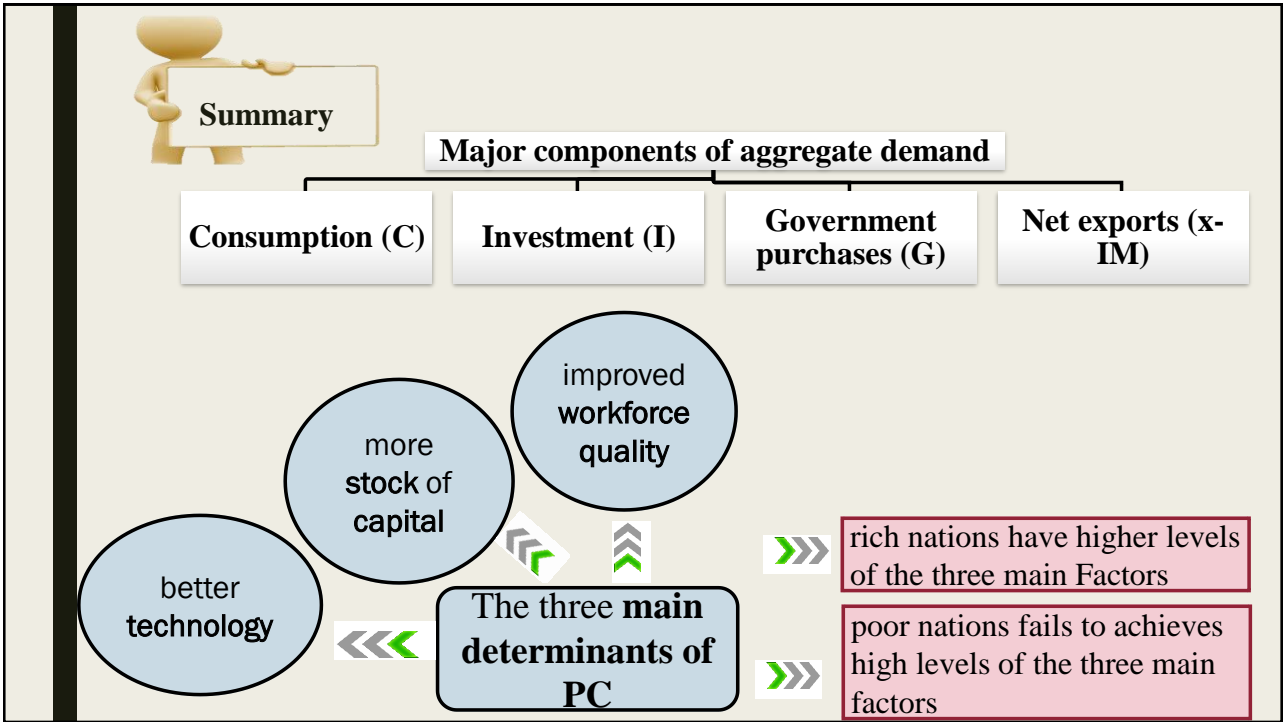
- It is the sum of the expenditures of business firms on new plant and equipment and households on new homes. Financial “investments” are not included, nor are resales of existing physical assets.

Definition 4 Government purchases (G)

- It refers to the goods (such as airplanes and paper clips) and services (such as school teaching and police protection) purchased by all levels of government.

Definition 5 Net exports (X – IM)

- It refers to the difference between exports (X) and imports (IM). It indicates the **difference** between what we sell to foreigners and what we **buy** from them.



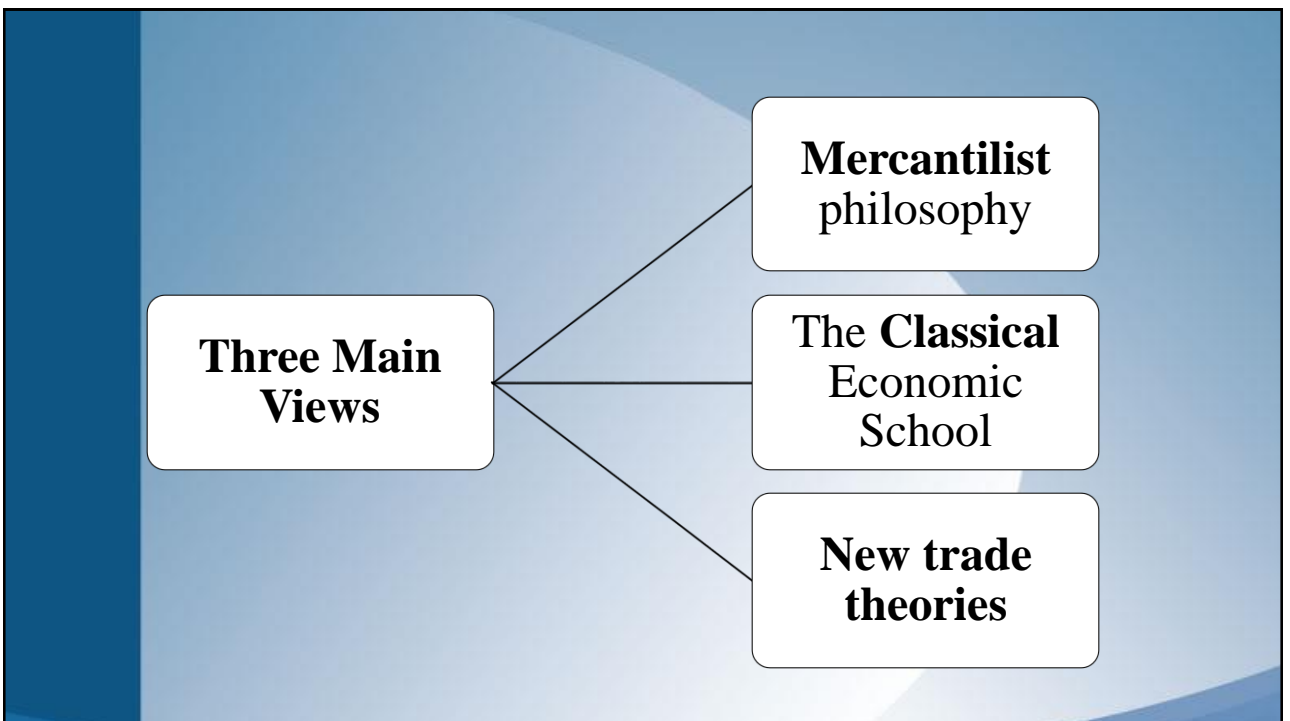


Some patterns of trade are fairly easy to explain

- Why Saudi Arabia exports oil and Brazil exports coffee

But,

- Why does **Switzerland** export **chemicals** and **watches**?
- Why does **Japan** export **consumer electronics**?
- Why does **France** export Machinery and equipment?



Role of Government in Trade:

- 1) The **Mercantilist** philosophy adopts the idea of government involvement in **promoting exports** and **limiting imports**.
- 2) Smith, Ricardo, and Heckscher-Ohlin promote **unrestricted free trade**.
- 3) **New trade theories** justify **limited** and **selective** government intervention to support the development of certain **export-oriented** industries.

What is the View of Mercantilism?

In a country's best interest to maintain **a trade surplus**

- Advocates government intervention to achieve a **surplus** in the **balance of trade**

Trade as a zero-sum game

- One in which a **gain** by one country results in a **loss** by another

What is Smith's Theory of Absolute Advantage?

A country has an absolute advantage in the production of a good when:

- it is **more efficient** than any other country in producing it.

Accordingly,

- countries should **specialize** in the production of goods for which they have an absolute advantage
- and then **trade these goods** for goods produced by other countries.

This leads to:

- An increase in the **total production** of all goods
- Acquiring **more skills** in the production of all goods.
- Lowering the **total cost** of production.

- **Example,**

- If we assume that the total number of hours required for producing equipment in France and textiles in Egypt is as following:

The country/ The product	Equipment	Textile
Egypt	4	3
France	3	4

- So, Egypt has an absolute advantage in producing “textile”, while France has an absolute advantage in producing Equipment.

27

- If we assume that each country has **120 million hours** as resources for producing both products.

a) Without trade

Each country will utilize **60 M** hours to produce both of equipment and textile

The country/ The product	Equipment	Textile
Egypt	$60/4 = 15$	$60/3 = 20$
France	$60/3 = 20$	$60/4 = 15$
Total Production	35	35

28

b) With specialization and trade

It is better for **Egypt** to **specialize** in **textile**.

- So, Egypt utilizes **120 M** hours in producing **textile** and **zero** hours in producing **equipment**.

It is better for **France** to **specialize** in **equipment**.

- So, France utilizes **120 M** hours in producing **equipment** and **zero** hours in producing **textile**.

29

- So, the production of **both countries** after specialization is as following:

The country/ The product	Equipment	Textile
Egypt	-	$(120 \div 3) = 40$
France	$(120 \div 3) = 40$	-
Total Production	40	40

So, the total gain from trade is:

- ✓ - An increase in the production of textile by 5 M units
- ✓ - An increase in the production of equipment by 5 M units

30

Trade is a positive sum game

What is Ricardo's Theory of Comparative Advantage?

David Ricardo asked **what happens when one country has an absolute advantage in the production of all goods**

According to the theory of CA,

- Countries should **specialize** in the production of those goods they produce **most efficiently**
- And **buy** goods that they produce **less efficiently** from other countries

The productivity of labor

■ **Example,**

- If we assume that the total number of hours required for producing equipment in **France** and textiles in **Egypt** is as following:

The country/ The product	Textile	Equipment
France	3	4
Egypt	4	6

- So, France has an absolute advantage in producing “textile” and “Equipment”.

But,

- By calculating the **relative cost** “opportunity cost”, we find that **France** has a **relative advantage** in producing **equipment** and **Egypt** has a **relative advantage** in producing **Textile**.

Calculating the relative cost

The country/ The product	Textile	Equipment
France	$\frac{3}{4} = 0.75$	$\frac{4}{3} = 1.3$
Egypt	$\frac{4}{6} = 0.6$	$\frac{6}{4} = 1.5$

35

Accordingly,

- Although **France** has an **Absolut advantage** in producing both Equipment and Textile, it has a **relative advantage** in producing **Equipment** compared to **Textile**.

France



✓ could specialize in **Equipment** and gains from trade.

Egypt



✓ could specialize in **Textile** and gains from trade.

To Explain the CA theory,

a) **Before Trade**, assume that both countries produce equipment and textile as following:

The country/ The product	Textile (units)	Equipment (units)
France	120	90
Egypt	20	90
Total production	140	180

- According to the relative costs, it is **better** for **France** to specialize in **producing Equipment** and it is better for **Egypt** to specialize in **Textile**.

37

b) **With specialization and trade**

According to the **relative costs**, it is better for **France** to specialize in producing **Equipment**

- So, France utilizes **720 M** hours in producing **equipment** and **zero** hours in producing **Textile**.

and it is better for **Egypt** to specialize in **Textile**.

- So, Egypt utilizes **620 M** hours in producing **textile** and **zero** hours in producing **equipment**.

38

- So, after specialization, the production of both textile and equipment is as following:

The country/ The product	Textile (units)	Equipment (units)
France	-	$(720/4)=180$
Egypt	$(620/4)=155$	-
Total production	155	180

So, the total gain from trade is:

An increase in the production of textile by 15 M units

39

if each country specializes in the production of the good in which it has **a comparative advantage** and trades for the other, both countries **gain**

Comparative advantage theory provides a strong rationale for encouraging **free trade**

- ✓ total output is higher
- ✓ both countries benefit

Trade is a positive sum game



■ Multiple Choice

Q) According to the theory of comparative advantage, which of the following is not a reason why countries trade?

- a. Comparative advantage.
- b. Costs are higher in one country than in another.
- c. Prices are lower in one country than in another.
- d. The productivity of labor differs across countries and industries.
- e. Exports give a country a political advantage over other countries that export less.

Ans: e

Q) Which of the following statements would a mercantilist not agree with?

- a. Imports are desirable.
- b. Trade is a zero-sum activity.
- c. The purpose of trade is to amass revenues from exports.
- d. A country can benefit by granting monopoly rights to individuals.
- e. Policies should promote exports and discourage imports.

Ans: a

Q) According to the theory of comparative advantage, a country will export a good only if

- a. It can produce it using less labor than other countries.
- b. Its productivity is higher in producing the good than the productivity of other countries in producing it.
- c. Its wage rate in producing the good is lower than in other countries.
- d. Its cost of producing the good, relative to other goods, is at least as low as in other countries.
- e. All of the above.

Ans: d

Q) Suppose that Germany and Belgium have the unit labor requirements for producing steel and cars shown in the table,

The country/ The product	Steel	cars
Belgium	3	2
Germany	8	1

- Germany has a comparative advantage in cars.
- Belgium has a comparative advantage in steel.
- Belgium has an absolute advantage in steel.
- Germany has an absolute advantage in cars.
- AOTA.

Ans: e

Q) Suppose that France and Italy have the outputs per worker in producing Equipment and Leather shown in the table at the right. Then France has a

The country/ The product	Equipment	Leather
Italy	300	2
France	200	1

- Comparative advantage in equipment.
- Comparative advantage in leather.
- Absolute advantage in equipment.
- Absolute advantage in leather.
- NOTA.

Ans: a

Q) According to the theory of comparative advantage, countries gain from trade because

- a. Trade makes firms behave more competitively, reducing their market power.
- b. All firms can take advantage of cheap labor.
- c. Output per worker in each firm increases.
- d. World output can rise when each country specializes in what its does relatively best.
- e. Every country has an absolute advantage in producing something.

Ans: d

Thank you