# Notes – Topic: International Trade

## Demand and Supply Analysis of Trade

* + - We compare the situation before and after trade:
* 2 countries: Singapore and rest of the world
* Assume that there is same price of goods and same monetary unit

S0

S0

S0

World

Price

Import

Pre-trade price

Export

World price with trade

P

Q

Q

Q

P

P

Singapore

International Market

Rest of the World

D0

D0

D0

Excess ss - Export

Excess dd - Import

* With trade, Singapore’s additional demand will be met by importing goods from the rest of the world.
* Consumers in Singapore are able to consume more of the good and enjoy lower world price.
* Enable efficient-utilisation of resources globally

The international trading price is lower than the pre-trade price of the importing nation but it is higher than the pre-trade price of the exporting nation, implying the international trading price is favourable for both countries.

## Both the concepts of the comparative and absolute advantage explain how countries should specialize and trade in order to increase world production and expand the consumption possibilities.

### Absolute advantage is seen when a country can produce more units of a good as compared to another country for the given level of resources. (One country is efficient in the production of one good while the other country is efficient in the production of another good)

|  |  |  |
| --- | --- | --- |
| With 5x resources | Cloth | Wheat |
| Country A | 100 | 500 |
| Country B | 50 | 1000 |

Country A has absolute advantage in the production of cloth while country has the absolute advantage in the production of wheat.

Country specialise in the production of cloth while B specialises in the production of wheat.

### Comparative advantage is seen when a country has a lower relative opportunity cost in the production of a good when compared to another country in the respective areas of production for similar given resources, despite not producing more units of goods as compared to another country. (One country is efficient in the production of both goods while the other country is inefficient in the production of both goods: specialisation for the efficient country is based on the goods with higher relative efficiency while specialisation for the production of country which is inefficient is based on the good with lower relative efficiency.)

### **Table Presentation and Concept Presentation**

### Assumptions (Same as Absolute advantage)

* + - 2 countries
		- 2 commodities
		- No transportation costs
		- No trade restrictions
		- No foreign exchange difficulties
		- Constant returns to scale in both industries in both countries
		- Perfect knowledge and perfect mobility of factors within the country
		- Limited resources of each country are fully employed

Why the theory of comparative advantage cannot be used to explain the trade pattern?

* Countries will trade with another country without comparative advantage in trade – buy from source with a higher price level – Proximity of the countries – lower transport cost will reduce trading price
* There may be trade restrictions and exchange rate fluctuations distorting the international trading price, making it less beneficial to trade with these countries

### Theory of Comparative Advantage (CA)

* + - The theory of Comparative Advantage is used to explain how countries can specialise and trade with each other despite the fact that one country is more efficient in the production of all goods than another country.
		- States that as long as a country has comparatively lower opportunity cost in the production of a good over another good when compared to another country (i.e. it has comparative advantage); specialization and trade can benefit the country and its trading partner as it will raise the total production or both countries and raise their consumption possibility

**Stage 1 – Production before specialization**

* Suppose country A and country B each has 10x resources.
* Prior to specialization and trade, given x amount of resources, country A produces 20 units of cloth and 200 units of wheat, while country B produces 10 units of cloth and 150 units of wheat. If each country were to devote half of their resources to produce the commodities, their production levels are as follows:

|  |  |  |
| --- | --- | --- |
| With 5x resources | Cloth | Wheat |
| Country A | 5x X20= 100 | 5x X 200= 1000 |
| Country B | 5x X 10= 50 | 5x X 150 = 750 |

* Total output is 150 units of cloth and 1750 units of wheat.
* Country B is inefficient in both goods – CA 🡪lower relative inefficiency
* Country A is efficient in both goods – CA 🡪higher relative efficiency

🡪will do partial specialisation

 for country A – 1C: 10W, 1 W: 1/10C

 for country B – 1C:15W, 1W: 1/15C

* derivation of the areas of CA –
* country B (CA) will produce wheat while country A (CA) will produce cloth

**Stage 2 – Derivation of opportunity cost to determine the areas of specialisation**

* In terms of amount of resources used, the costs of production in both commodities are lower in country A. In country A, the opportunity cost is **1 unit of cloth to 10 units of wheat and 1 unit of wheat for 1/10 units of cloth.** In country B, the opportunity cost is **1 unit of cloth to 15 units of wheat and 1 unit of wheat for 1/15 unit of cloth**. Based on the opportunity, **country A has a CA in cloth and country B has a CA in wheat**.

**Stage 3 - Production after partial specialisation**

Now, let country B who has absolute disadvantage in both commodities to completely specialize in the commodity it has CA (wheat) while country A partially specializes in the commodity it has CA (cloth).

If country A allocates 8x resources to produce cloth and 2x resources to produce wheat, the production levels are as follows:

* country A – 8X for cloth and 2 X for wheat (160 Cloth / 400Wheat)
* country B – 10X for Cloth (1500W)
* Total output will then be **160 units of cloth and 1900** **units** of wheat, where there is an increase in **10 units of cloth and 150** **units** of wheat from the previous output.
* Country A **does not completely specialize** because world production will be compromised as the increase in the production of 1 good is at the expense on another. There is a trade-off as the increase in total production for cloth is at the expense of decrease in total production of wheat. **It is not rationale for the country with greater efficiency to forgo its advantage in the production of a good which she is efficient in it by complete specializing in another good as this will lead to the fall in the production of the good in that industry.**

|  |  |  |
| --- | --- | --- |
|  | Cloth | Wheat |
| Country A | 160(8x) | 400(2x) |
| Country B | 0 | 1500(10x) |

|  |  |  |
| --- | --- | --- |
|  | **Cloth** | **Wheat** |
| **A** | 200 | 0 |
| **B** | 0 | 1500 |
|  **Total** | 200 | 1500 |
| **Original Total** | 150 | 1750 |
| **Change** | 50 | -250 |

* Countries cannot conduct complete specialisation as the increase in the production of cloth is at the expense of reduction in production for wheat
* With partial specialization based on opportunity cost, the world production for both wheat and cloth will increase.

**Stage 4 – derivation of trading Price which is based on the TOT derived from the opportunity cost**

As mentioned previously, the **opportunity costs in countries A and B are 1C: 10W and 1C: 15W**. In order for both countries to benefit from trade after specialization, the terms of trade has to be acceptable to both countries, where 1 unit of cloth is exchanged for 10-15 units of wheat. Suppose that the terms of trade sets at 1 unit of cloth for 12 units of wheat, 55 units of cloth are exchanged for 660 units of wheat. Therefore, trading price is attained from the term of trade which is based on the opportunity cost.

A’s opp cost for cloth is 1C : 10W – exporting country (seller)

B’s opp cost for cloth is 1C : 15W – importing country (buyer)

Trading price should be higher than the local selling price at country A and lower than the local buying price at country B

Trading price is 1C : 12W

(when the trading price @ 1C = 12 W is acceptable to country A as it is higher than what country A can sell @ 1C = 10W and is acceptable to country B as it is lower than what country B can buy @ 1C = 15W)

10W<1C

Country A’s lowest selling price

<15W

Country B’s highest buying price

*🡪1C = 12W*

*🡪higher than what Country A can sell domestically and lower than what Country B can buy domestically*

* (Country A is only willing to sell to a maximum of 60 units of cloth as any amount above this level will mean a reduction in the original level of consumption)
* In comparison to the situation before specialization, country A has now gained 5 more units of cloth and 60 more units of wheat (105C – 100C(original) and 1060W – 1000W(original)). Country B has gained 5 more units of cloth and 90 more units of wheat (55C – 50C(original) and 840W – 750W (original)). Thus, the theory of CA shows that both countries benefit from specialization and trade, as countries can consume beyond their production capacity after trade and specialisation

**Consumption level before trade**

|  |  |  |
| --- | --- | --- |
|  | Cloth | Wheat |
| Country A | 100 | 1000 |
| Country B | 50 | 750 |

**Consumption level after trade**

|  |  |  |
| --- | --- | --- |
|  | Cloth | Wheat |
| Country A | 105 | 1060 |
| Country B | 55 | 840 |

1C= 12W, country A will sell country 55 C for 660 W ( 12x55), country will pay country a 660 W

Before trade and specialization – Country A has 100 C and 1000 W, Country B has 50 C and 750 W

After trade and specialization, country A has 105C and 1060 W and gains 5C and 60 W. As for country B , it gains 5 C and 90W

* Theory of CA will help to explain how countries should specialise and trade as it will increase the world production and allow both countries to consume more, given that the TPC is above the PPC after trade and specialisation.
* **Other benefits of trade (Advantages of International Trade)**
* There are other benefits to be gained from international trade between two countries, provided the terms of trade are agreeable to both countries.
* Countries can now reap the advantages of **economies of scale**. (cost saving gained from large scale production - ⭣AC=TC/↑Q) With increased trade, there would be increased market demand. Thus production will increase, allowing firms to reap EOS, lowering average costs of production.
* Consumers can now enjoy **a greater variety of goods and services**. This would increase the standards of living in the country since the consumer can enjoy other types of goods, which the country is not able to produce due to both natural and man-made constraints.
* Trade can also **enhance greater efficiency in production** through greater specialization. This would allow firms to cut down on costs of production, which could lead to lower prices that consumers can enjoy.
* With trade, the country’s **PPC can be shifted outwards as the availability of resources increases.**
* A country embarking on economic development **can now import more capital equipment and raw materials for its economic development**. In due time, the country will be able to expand the production capacity and hence achieve economic growth.

2.1.3 **How the concepts of comparative advantage can be illustrated through graphical illustration**

**1) Introduction**

1. Purpose of comparative advantage

The concept of comparative advantage explains how countries which are efficient in production can specialise and trade with countries which are inefficient so as to maximise total production and consumption, based on the concept of opportunity cost

1. Definition of comparative advantage

### Comparative advantage is seen when a country has a lower relative opportunity cost in the production of a good when compared to another country in the respective areas of production for similar given resources, despite not producing more units of goods as compared to another country. (One country is efficient in the production of both goods while the other country is inefficient in the production of both goods: specialisation for the efficient country is based on the goods with higher relative efficiency while specialisation for the production of country which is inefficient is based on the good with lower relative efficiency.

### c) State the assumption

### **2) Main Body**

### a) Explain the production condition before specialisation

### ✓Prove why Country A is more efficient in production of both goods than Country B

### Prior to specialisation and trade, we can observe that one country (country A) will be able to produce more than country B in both the industries when resources are distributed equally between the two industries for the two countries, which is the production and consumption level before trade and specialisation

b) Explain how comparative advantage is identified through the notion of opportunity cost to determine the areas of specialisation

✓Show how the inefficient country specialises completely and trade

Based on the value of opportunity cost for both countries, the country which is inefficient in the production of both goods will specialise in the area of production with a lower opportunity cost as it has a lower relative inefficiency for this industry. It will therefore conduct complete specialisation.

✓Show how the efficient country specialises partially and trade

As for the other country which is efficient in the production of both goods, it will specialise more in the production of the first good while it continues to produce some of the other good. This is to avoid the problem of trade-off where the total production of one good is increased at the expense of another good. By doing partial specialisation, the total production for both countries will increase as the efficiency of country B will not be forgone.

c) Explain how the trading price is derived based on the range of TOT derived from the opportunity cost to raise the consumption possibility

The trading price between the two countries is derived from the TOT which is derived from the opportunity cost. It will be higher than the opportunity cost of the exporting country which means that the exporting country will be able to sell the good at a price higher than the local selling price level based on opportunity cost. On the other hand, it will be lower than the opportunity cost of the importing country, which means that the importing cost will be able to buy the good at a price lower than the local buying price.

With the more favourable international trading price for buyer (importer) and seller (exporter) will enable both countries their consumption beyond their respective production possibility curve

d) Diagrammed Presentation of how CA is conducted through the concept of Production Possibility Curve (PPC) and Trading Possibility Curve (TPC)

Cloth

Cloth

Wheat

c2

C1

C1

C2

W1

W2

X

Y

W1

W2

Wheat

X

Y

Diagram 1

(Country A)

Diagram 2

(Country B)

1C=12W

1C=10W

1C=12W

As seen from diagram 1 and 2, the production level before trade and specialisation is depicted by the level X for both importing and exporting country on their respective PPCs (Production Possibility Curve). After engaging on trade, the PPC will pivot outward to Trading Possibility Curve (TPC) for both countries, indicating increase in consumption possibility as the international trading price is more favoured, allowing both importing and exporting nations to import and export more respectively and thus, shifting the actual consumption and production level to the level at Y, an indication of betterment of consumption and production, since both countries are consuming more wheat and cloth, where W2 and C2 are higher than W1 and C1 for respective countries

**3) Conclusion**

Through this demonstration, it can be seen that the concept of CA can explain why countries will trade and specialise, holding all the stated consumption constant as both countries can gain. It is only possible when the production can be increased and amount of exchange has an agreeable trading price and the quantity of exchange is better than before trade and specialisation.

2.2 Summary of the understanding of the comparative advantage (use this part to explain the concept of CA for CSQ question)

1. The concept of comparative advantage explains how the countries should specialise and trade so as to raise the total production of the countries involved and raise their consumption beyond their production capacity **(purpose)**
2. According to the concept a country is said to have a comparative advantage in the production of a good in comparison to another country when it possesses a lower opportunity cost of production of a good in relation to the other country, despite the fact that it may not produce more of a good with the same units of resources. **(definition)**
3. In this concept, it determines the source of efficiency in the respective industries through the concept of opportunity cost whereby the country with the lower opportunity cost is considered the country with the source of efficiency. **(How CA determines areas of specialization)**
4. For the trading price, it is derived from the term of trade which is based on the opportunity cost. The international trading must be within the range of the term of trade such that the trading price based on opportunity cost is higher than the opportunity cost of the exporter or seller and lower than the opportunity cost of the importer or the buyer. **(how CA determines trading price)**
5. **CSQ – what determines CA of the country? / assumptions as to why the CA will not work**

2.3 **Explain how the concept of CA explains the trading patterns between countries (trade pattern – direction of trade, quantity of trade)**

2.3.1 **Countries of similar state of Development**

The concept of absolute Advantages would be more appropriate to (Singapore and New Zealand) explain the trade patterns of countries of similar state of development. These countries will specialise in areas of production in which they have greater production capacity with the same level of input or possess a lower opportunity cost of production in comparison to their trading partner. This will enable both countries to expand their production capacity.

The basis of this efficiency of production is seen from the countries’ ability to lower their cost of production due to their natural endowment of resources, technology advantages, skills of labour and other determining factors that will raise their efficiency of production and lower cost of production.

For example:

1. **Singapore and New Zealand**

a. Singapore – manufactured goods – technological advantage / skilled workers

b. New Zealand – agricultural products – land space / natural habitat

1. **China and India**

a. China - abundant, cheap labour/abundant resources/infrastructures (manufacturing products)

b. India - software skills, proficient in English (outsourcing of computer work and call centre work)

The country will specialise in the production which is more efficient in production as it can produce more with equally distributed resource or have a lower opportunity cost while the other country will specialise on the same basis. Both countries will conduct complete specialization in their respective areas which they are efficient in.

The countries will be able to attain a higher trading price than their domestic selling price to extend their consumption possibility beyond their production capacity, which is based on Terms of Trade (TOT). The international trading price must be higher than the selling price or price of export for the exporting country and must be lower than the buying price or price of import for the importing country.

As the opportunity cost of the good that the countries will specialise in will be lower, the countries will be able to attain a higher trading price than their domestic selling price to extend their consumption possibility beyond their production capacity.

2.3.2 **Countries of different state of development.**

The concept of comparative advantages would be more appropriate to explain the trade patterns between the developed and developing economies where the developed economy will be more efficient in the production of all goods than the developing economy (Trade and specialisation between more advanced and less advanced economies)

However, both the countries can still conduct specialisation and trade as they can base it on the relative opportunity cost to derive the areas of specialisation.

The country that is inefficient in production of both goods will specialise in the area of production of the good with a lower relative inefficiency while the country that is efficient in production of both goods will specialise more in the production of the good with a higher relative efficiency but will still produce the other good on a partial basis. The partial specialisation arrangement will ensure that there will be increase in the total production.

The basis of this efficiency of production is seen from the countries’ ability to lower their cost of production due to their natural endowment of resources, technology advantages, skills of labour and other determining factors that will raise their efficiency of production and lower cost of production.

For example: Singapore/USA

SG: R&D🡪clinical and specialised R&D (complete specialization in one area)

USA: R&D🡪 General R&D with a wider scope of development (complete specialization in one area while partial specialization in clinical and specialized R&D)

The countries will be able to attain a higher trading price than their domestic selling price to extend their consumption possibility beyond their production capacity, which is based on Terms of Trade (TOT). The international trading price must be higher than the selling price or price of export for the exporting country and must be lower than the buying price or price of import for the importing country.

2.3.3 **Why the concept of comparative advantage or absolute advantage will fail to explain the trade pattern? (Limitation of CA and other reasons like FTA)**

**Introduction**

Countries may not just trade because of the notion of efficiency. Very often; countries may trade due to other reasons as the theory CA/AA cannot hold to explain trade pattern.

1. Proximity of the countries engaged in trade – reduce transport cost
2. Difficulty encountered in specialisation

-Lack of mobility of resources

-Change in cost condition as a result of specialisation – rising cost condition

1. Exchange rate fluctuation and protectionism
2. Social and political link – historical based –US – Japan relationship
3. Free Trade Agreement – trade diversion – will be affected by the cost of trade
4. Condition of full employment cannot be fulfilled in the real world due to imperfect mobility of resources
5. Imperfect knowledge about trading activities and market power – barriers to entry
6. Political reasons – like sustain food supply

**Qn: Explain how the development of globalization undermines the concept of Comparative Advantage in explaining trade pattern?**

* Mobility of resources – help certain countries to lower cost of production such as the importing of foreign workers which will raise the competitiveness of the industries – overcome the limitations of natural endowments proposed in CA
* flow of FDI – overcome the market constraint by producing at the country where the goods are to be sold, therefore this will undermine the trading activities – give rise to CA and undermine the concept of CA to explain specialization
* Mobility of fund-affect the exchange rate – affect trading prices as price of export and import will change

### **Factors that determines CA**

* + - Differences in Factor Endowments
		- Differences in Technology
		- skills of labour
		- availability of labour
		- cost of production and operation of business – affected by infrastructural development
		- Dynamic Comparative Advantages: Changing pattern of CA across time as government pursue different policies

**Detrimental Effects of Dynamic CA**

* Dynamic CA refers to the capacity of the economy in adjusting its comparative advantage to raise international competitiveness
* Singapore is able to achieve dynamic comparative advantage as it is able to raise export demand and foreign direct investment (FDI) to promote economic growth. However, dynamic comparative advantage may promote structural unemployment as there is high degree of technological advancement and sectoral adjustment (rise and decline of industries) which will lead to lesser demand for workers since there is displacement of workers and skill incompatibility

2.5 **Why Singapore needs Free Trade? (basis for trade)**

1. To overcome the lack of resources – small economy
2. To derive an international market🡪 to overcome the limitation of small nation (lack of market)
3. To use trade as a means to increase competitiveness🡪derive lower cost of imports to lower cost of production – to attract more FDI and increase export demand
4. Use FTA to raise Xd so as to induce more FDI – FDI will increase because MNC only invests in Singapore as we can export due to our export capacity

**Qn: What are our strengths in export capacity?**

## Advantages and Disadvantages of Trade

### Advantages of Trade

* + - A wider variety of goods and services at a lower price level for consumption to raise consumer satisfaction, satisfying their taste and preferences
		- Firms are able to enjoy both internal and external economies of scale – large scale of the market – increase in production - reap EOS and lower average cost of production
		- Increasing world output – specialization based on comparative advantage – will raise the efficiency of production of the respective countries which specialize – thus raising world output.
		- Countries with surplus of raw materials can export these in exchange of other goods and services – enable optimization of resources at a global scale – reduces wastages
		- Increased competition among suppliers in world markets – raise the efficiency of production – the world market has more producers
		- Provide growth for the nations engaged in trade as there is greater market and flow of foreign direct investment – raise the production capacity and opportunities of employment.
		- Facilitates transfer of knowledge and technology
		- Promotes beneficial political links

### Disadvantages of Trade (Why countries should diversify in trading pattern)

* + - **Increasing competition between countries leads to the closure of small local firms.** This, in turn, results to the **structural unemployment**, which creates greater social disorder and increase government spending on helping those who are unemployed. Furthermore, if there is an absence of corresponding training programmes to retrain the workers so as to enable them to work in new industries, the problem of unemployment will aggravate. The keen competition from foreign companies will **undermine entrepreneurship which will lower the level of innovation and creativity of the economy.**
		- Proliferation of international trade will **encourage the depletion of resources**, especially for those primary product-producing countries. Greater demand for these products will encourage these countries to produce in excess, accelerating the countries’ production. As a result, **excessive agricultural production may undermine the quality of soil through excessive mono-agricultural activities and accelerated mining extraction will deplete resources much faster.**
		- Excessive international trading activities will **expose the economy’s vulnerability in term of over dependency for economic growth**. Countries like Singapore will depend on foreign markets for its export demand and hence, a fall in growth of other economies will subsequently affect the growth of Singapore. Besides the export demand, Singapore **may also rely excessively on other countries for all of its resources if it decides specialize extensively. Hence, a shortage of supply may undermine our production capacity, leading to slower economic growth.**
		- International trade will **stifle the country’s creativity and adaptability of the workers as it promotes specialization**. When workers concentrate too much in the production of certain goods due to greater trade and specialization, it will condition the workers to be monotonous in their skill development, undermining their abilities to adapt to technological, economic and political global changes.
		- As international trade promotes specialization, the economy may stifle itself from exploring other areas of growth. This lack of diversification limits the scope of economic growth, undermining the economy from adapting to regional competition and environmental changes. The economy will lose out in seeking new areas of development, which may enhance its economic development.

## Reasons for Countries to Diversify in their Economic Development

###  To Avoid the Disadvantages of Specialization

* + - Reduce the vulnerability of dependency for a few industries for economic growth.
		- Avoid being too stifling in the skill development of the workers

### To Reap the Advantage of Diversification

* + - Widen the scope of economic growth

🡪widen opportunities of development – expand scope of economy

🡪provide greater variety of employment opportunities

🡪dynamic CA raise competitive edge

* + - Provide a greater variety of jobs for employment
		- Provide greater synergy of the economy to enhance the integration of the industries which raise our competitiveness as a global hub for trade and investment

###  Singapore’s strategy in economic development

* Singapore focuses on a strategy of diversification and specialisation
* it will raise competitive edge and reduce the vulnerability of
* specialization
* it creates greater integration of industries to enhance our status as a regional and global hub

## Factors that Limit Free Trade

### Artificial Barriers to Trade (Mainly Protectionism)

### Natural Barriers to Entry

* + - High transport cost
		- Lack of mobile factor
		- Increasing cost of production
		- Market imperfections
		- Political instability

## Concept of TOT

* + - can be seen in terms of index or range

🡪For TOT Index: Index of price of exports

 Index of price of imports

if TOT Is larger, the country can get more for its export

🡪For range of TOT: 10W<1C<15W (indicating highest buying price for the importers and lowest selling price for the exporters in their respective economy)

* + - A country’s TOT worsens when the unit value of its imports rises by a bigger % than the unit value of its exports.
		- A deterioration in TOT means that the country is able to obtain less foreign goods for the same quantity of exports
		- A country’s TOT improve when the unit value of its imports rises by a smaller % than the unit value of its exports
		- An improvement in TOT means that the country is able to obtain more foreign goods for the same quantity of exports
		- Improvement in the TOT for one country is deterioration in the TOT for another country
		- Free Trade Agreement is more beneficial for a country with favourable term of trade as high-valued manufactured goods will enable the exporting nation to gain more in term of their imports
* Explain how term of trade would affect production possibility curve

International trading price will make the term of trade more favourable for trading countries to allow them to shift the PPC outward to TPC to allow higher level of consumption beyond PPC (TOT range, 10C<1W<15W)

Cloth

Cloth

1C=12W

**Exporting Country**

**Importing Country**

Wheat

Wheat

1C=10W

1C=12W

1C=15W

## 6.1 Factors affecting TOT/ Consequence of Changes in TOT

### 6.1.1 Lower Prices of Imports

* + - Direct change in prices due to taxation or tariffs – removal of tariff will lower price of import and worsen TOT
		- Changes in conditions of demand patterns of domestic country due to change in national income, size of population or availability of substitutes

### 6.1.2Higher Prices of Exports

* + - Direct change in prices due to taxation or tariffs
		- Changes in conditions of domestic country supplying exports affecting by change in technology, depletion of natural, non-renewable resources, etc.

### 6.1.3Changes in Exchange Rate

* + - As exchange rate fluctuates, relative price of exports and import will change – Appreciation of exchange rate will raise price of exports and lower the price of imports – worsen TOT

6.1.4 Factors affecting the price of imports and exports

1. Inflation rate – affect cost of production – affect Px and Pm
2. relative income level
3. taste and preference of the products
4. change in exchange rate
5. comparative advantage – affected by the change in cost of production
6. structural changes in the economy – economic development

income of the foreigners – increase in income – increase in Md – increase the Xd – increase in the price of XD – TOT improves

## 6.2 Consequences of Change in TOT

### Changes in TOT affect a Country’s BOT

The nature of impact on the economy due to TOT depends on two main factors:

1. Causes of change in term of trade
2. Value of Pedx and Pedm

**6.3** **Significance of TOT**

1. Affects BOT (Change in TOT will affect Xd/Md)
2. Affects Global equality of distribution of Y and wealth
3. Determine the degree of expansion of economy of resource capacity🡪can attain potential growth easier
4. May affect the cost of living as the price of import will be affected while the price of export will affect export demand and the level of production and national income
5. May affect SOL as TOT will affect our price of imports and exports which will affect our export and import demand

**6.4 Question: The improvement in term of trade will benefit the country while the deterioration of Term of Trade (TOT) will worsen the country. Discuss.**

1. Explain how Improvement in TOT will benefit the country
2. Explain how Improvement in TOT will undermine the country
3. Explain how deterioration in TOT will undermine the country
4. Explain how deterioration in TOT will benefit the country

**6.4A Explain how favourable TOT will lead to beneficial or detrimental impact**

If the favourable TOT is due to improvement in the quality of the product which will raise the export demand and the price of exports, there will be a higher level of production which will raise national income and employment. Furthermore, when the export demand is price-elastic, it will induce rise in export revenue which will lead to higher level of production, employment and rise in national income.

If the favourable TOT is due to rise in cost of production, there will be a rise in price of export demand which will decrease export demand. Subsequently, a fall in production, employment and national income. Furthermore, when the export demand is price-inelastic, the total revenue for export will decrease. Therefore, it can be seen that favourable TOT will lead to favourable and less harmful impact.

**Qn: Country with favourable term of trade will gain more than country with less favourable term of trade when they engage in FTA?**

Yes, our favourable TOT against New Zealand will allow SG to gain BOT surplus when there is FTA,

## Protectionism: Methods, Effects, Reasons For and Against

### 7.1Meaning of Protectionism

* + - The act of imposition of trade barriers on the importing of goods and resources by regulating the prices or quantity of the imported goods and resources so as to encourage the growth of local production. This is line with the notion of **import substitution strategy**, which involves the replacement of imports with local production.

### 7.2Types of Protectionism

* The methods of protectionism focuses on price regulation or the regulation of output

### Tariffs or Custom Duties

### The imposition of tariffs raise the price of the imported so as to decrease the quantity demanded

### Price of import will rise🡪decrease in quantity demanded 🡪 replaced by increase in demand for local producers

### Quotas

* Set control of import demand 🡪 ⭣SS for imports🡪increase Qtydd for local products (import substitution)
* The restriction of the quantity of imported goods which will create an artificial shortage that leads to an increase in the price of the goods which will discourage imports

### Import Licenses

* Sale of permits of imports allows the government to control the price and quantity of imported goods

### Embargos on Imports

* Restriction of the imported goods, usually done on the basis of political reasons

### Subsidies

### Increase subsidies to local producers 🡪 ↓COP 🡪↓Price of local goods – replace the more expensive imports

* Subsidized exporters and domestic producers will have lower the cost of production and thus enables the firms to lower the cost of production so as to lower the price of export goods to increase export demand while the domestic price of local goods will be lowered to substitute imported good
* Increase subsidies to lower cost of production – decrease price of export – increase in export demand

### Exchange Controls

### The control of amount of foreign exchange available for imports which will indirectly control the value of import expenditures.

7.2.7 **Qn: Which method of protectionism is preferred? Quotas/tariff**

 Advantages of tariff

* government can get revenue from tariff
* still rely on the use of price mechanism to allocate resources

Disadvantages of tariff

* higher cost of living – increase demand for higher wages – increase in cost of production – price-wage spiral
* lower standard of living as increase in price will lower real consumption
* our price of export will increase – lower export demand

Advantages of quota

* can control the demand for the goods with price-inelastic demand
* can control qty and ensure that local production can increase output to raise employment

disadvantages of quota

* disrupt the efficient use of price mechanism -adopting quots means that there is no need of price level to determine allocation
* the gain in revenue will be taken by the importers rather than the government as the increase in price of the imported amount will be gained by the import distributor

## Arguments for Protectionism

### Justification for the use of protectionism

🡪reasons for protectionism and examine its validity

### The ‘Infant Industry’ Argument

A: Provides potential employment opportunities and tax revenue for the economy

J: But infant industries seldom develop – must be selective and the imposition is only temporary. Developed countries have resources and cannot use protectionism to develop their infant industry

### Diversification of Industry

A: May help to widen the scope of economic growth

J: Waste of resources due to inefficient allocation of resources and duplication as countries are producing a variety of the same types of goods

### To Prevent Dumping (foreign producers selling at a price below their cost)

A: Unfair to the local producer and the foreign workers who are exploited

J: Argument not valid if foreign producer does indeed have a lower cost of production and to sell at a lower price

### To Enable a Declining Industry to be Phased Out Gradually

A: To ensure the workers who are retrenched can find new employment and allow the industries to relocate their resources.

J: If there are no new jobs for labour from rising industry and the absence of a training program to ensure the workers have the necessary skills for the new industries, argument not valid.

### To Reduce Unemployment Especially in Times of Recession

A: Alleviate the effects of unemployment.

J: However, if the industries are not efficient on their own, the trade protectionism can only provide a temporary solution to help the industries to increase production.

###  To Protect the Home Industries from Unfair Foreign Competition

A: To sustain national interests.

J: Only can do so if the foreign producers are indeed violating trade laws which are quite difficult for the international organization to judge whether there is violation or not.

### To Retaliate Against Tariff of Another Country

A: To sustain national interest.

J: Not justify as it will only promote contraction of trading activities, leading to contraction of global economic growth.

### To Correct a Balance of Payment Disequilibrium

* + - To eliminate the possible fluctuation of exchange rate that will contribute to disruption to trading and investment activities that will undermine the growth of the economy
		- Unless the BOP disequilibrium is contributed by the trade deficit which can be resolved with the introduction of trade restriction which can decrease import demand and increase export demand.

### The ‘Key Industry’ Argument

* + - To sustain the growth of the economy
		- Certain industry is critical to the economy as it is the source of economic growth, employment and tax revenue for the government and it is important for the government to protect the industries.

### The Self-Sufficiency Argument

* + - To ensure the economy can survive during crisis
		- The economy can also seek to ensure that the industry can continue to maintain the production capacity to provide the necessary goods to the economy.

**Qn: Discuss the effects of removal of protectionism on an economy**

- negative effects of removal of protectionism – forgone benefits of protectionism – one point – loss of tax revenue

- positive effects of removal of protectionism – advantages of free trade

- positive impact – the advantages of free trade

- negative impact – forgone benefits of protectionism

**9.1 Qn: Is protectionism an effective measure to solve structural UN­­­­+ and unequal distribution of income?**

* Explain how protectionism can help to solve the two problems
* Can introduce import substitution strategy – reduce imports and replace with local production – provide employment to lower income group and maintain their purchasing power

*🞹limitations of the measures : Why it cannot solve the 2 problems*

* Create time-span for the economy to adjust by training themselves but it cannot prevent sectoral adjustment

🡪protectionism cannot prevent the change in comparative advantage

**Is it justifiable for countries to impose protectionism in this era of globalization?**

Introduction

* definition of globalization and protectionism
* the detriments of globalization call for protectionism but it may not be justifiable

Main Body

1. possible detriments of globalization that calls for protectionism
2. how protectionism will solve the problems
3. why this is not justifiable
4. analysis – which factor will determine whether protectionism is justifiable or not – severity of the nature of unemployment

Conclusion

A retrospective summary and your opinion (protectionism is not viable in LR but can help the country in SR.

## Effects of free trade agreement - pros and cons

* + - Minimize conflicts between nations
		- Common market allows more efficient trade
		- Guaranteed increase in trade
		- Unable to protect infant industries

## Effects of international business (pros and cons of FDI)

* + - Facilitate transfer of knowledge and technology
		- Reduce the need for infrastructures that FDI brings in
		- Dependency on foreign firms
		- Vulnerable to foreign business cycles

Outsourcing (which can be explained by theory of CA)

🡪source out the non-core production activities to cheaper base of production

🡪internal

🡪external and foreign nations

## Benefits of FTA to Singapore (refer to essay – S’pore context)

### 11.1 Trade in Goods

* + - Costs and time savings because of streamlined procedures and mutual recognition of standards
		- Producers can price more competitively and enjoy shorter product dissemination time.

### 11.2 Investment Protection and Facilitation

* + - Assurance of fair compensation in event of expropriation
		- Resolution of conflicts at international arbitration tribunal through investor-to-state dispute mechanism

### 11.3 Government Procurement

* + - Increase transparency of procurement process
		- Increase business opportunity with foreign government

### 11.4Intellectual Property Right Protect

* + - Encourage the growth research and development and investment in these areas

### 11.5 Movement of Workers

* + - To expand the pool of labour force through the imports of foreign workers and talents
		- Extended stay for foreign investors, business visitors, etc

## 15. Static effects of a custom union

### 15.1 Trade Creation

* + - Where a customs union results in greater specialization according to comparative advantage, and hence a shift in production from higher cost to lower cost sources.

### 15.2 Trade Diversion

* + - Where a customs union diverts consumption of goods produced at a lower cost outside the union to goods produced at a higher cost (but tariff free) within the union

### A customs union is more likely to lead to trade diversion than trade creation:When the union’s external tariff is very high. The abolition of the tariff within the union is likely to lead to large reduction in price of goods imported from other members of the union.

16.1 – Notion of Free Trade Agreement

A free trade agreement involves the abolishment of tariffs and other forms of trade restrictions and it may include other forms of de-regulations such as:

-abolishment of restriction on mobility of resources and fund

-Intellectual Property rights

-Protection of Investment and Return

## 16.2 Impact of FTA and Custom Unions (Analysis of effects)

### Beneficial Impact to Both Developed and Developing Nations

* + - Raise the standard of living through trade which allows the consumers to attain a greater variety of goods and services at lower price – seen front the expansion of consumption possibilities
		- Expand the potential and actual growth of the economy as specialisation and trade will raise resource and production capacity
1. Beneficial Impact to Developed Nations
	* + Expand their export market which will allow the MNCs to attain economies of scale through large scale of production made possible from EOS.
		+ Attain more resources to expand their production capacity to achieve sustainable economic growth.

### Detriments to Both Developing and Developed Nations

* + - Increase the complexity of trade which will complicate the bureaucratic process and raise transaction cost
		- Reduce the source of government revenue which will lead to the government to impose tax on the local people and thus, raise the tax burden of the people
		- Encourage the growth of market power as the firms are likely to grow and thus, raise the degree of consumer exploitation.

### Detrimental Impact to Developed Nations

* + - Create structural unemployment as the developed nations adjust their comparative advantages which will contribute to the change in the sectors of the economy.

### Beneficial Impact to developing Nations

* + - Provide massive employment as trade will encourage more investment which will raise large scale of production that induces employment.
		- Attain a higher level of technology through transfer of technical knowledge
		- Attain more fund for investment which will allow the nation to pursue economic development, overcoming the lack of funding for economic development

### Detrimental Impact to Developing Nations

* + - Accelerate the exploitation of resource utilization, thus undermining the potential growth.
		- Create unequal distribution of income and wealth as portion of the population who fail to capitalize on the economic development will be undermined
		- Develop vulnerability as the economy relies extensively for the global market, subjecting the economy to the global trade cycle and economic trends and crisis

## List of FTAs and other trade policies

### ASEAN Free Trade Area (AFTA)

### US-Singapore FTA (USSFTA)

### Asia-Pacific Economic Cooperation (APEC)

### Association of Southeast Asian Nation (ASEAN)

### Asia-Europe Meeting (ASEM)

**Qn: Discuss the impact of FTA on Singapore’s Economy.**

Introduction

definition of fta and state that there will be positive and negative impact – seen from the aims of government

Main body

1. How it will affect the BOT and BOP (Md, Xd, FDI)
2. How it affects the actual and potential growth
* impact on AS and AD
* draw diagram and description of diagram
1. impact on inflation and unemployment
2. analysis – which is the key determinant – significant – high reliance on external market and import growth

Conclusion

a retrospective summary – FTA is a very important trade strategy for SG -

## List of Definition

### 18.1International Trade

* + - International trade involves the transaction of purchase of goods and services across international borders, involving the use of a common international currency.

### 18.2International Business

* + - It involves the shift of production base and business operation from one country to another in the form of foreign direct investment.

### 18.3Degree of Exposure to External Environment

* + - It refers to the degree of the reliance on the external demand for the growth of the national income
		- The proportion of trade to GDP of the country
		- Formula:

Openness =

Exports + Imports

 GDP of country

### 18.4 Specialization

* + - The production of goods or/and services that a country is best suited and most efficient at.

18.5 Theory of Absolute Advantage

* + - A country has an absolute advantage over another country in the production of a good if the same amount of resources will produce more of the good in one country than in another.

### 18.6 Theory of Comparative Advantage

* + - A country has a comparative advantage over another in the production of a good if it can produce it at a lower opportunity cost, if it has to forgo less of other goods in order to produce it.

### 18.7 Terms of Trade (TOT)

* + - Refers to the rate at which a country exchanges its export for imports.
		- Formula

Terms of Trade = 100 x

Exports Price Index

Imports Price Index

### 18.8 Protectionism

* + - Policies that protect domestic industries from foreign competition through the setting up of barriers to trade on imports or foreign firms.

### 18.9 Tariffs

* + - Custom duties or tax on imported goods and services by the government.

### 18.10 Quota

* + - Quantity restriction imposed on imported goods and services by the government.

### 18.11 Embargo

* + - Complete ban on certain imports to or exports from a country

### 18.12 Free Trade Agreement (FTA)

* + - A trade agreement where no tariff and trade restrictions are imposed among the nations but respective countries can set different tax rates against other trading nations

### 18.13 Preferential Trade Agreement (PTA)

* + - A trade agreement whereby trade between the signatories is freer than trade with the rest of the world. There will be no restriction of trading activities and regulation of the flow of investment and mobility of resources.

### 18.14 Custom Unions (CU)

* + - An agreement where no tariff and trade restriction among the nations but a common tariff against other trading nations.

### 18.15 Common Market

* + - An agreement where no tariff and trade restrictions among nations and they are to use a common monetary and fiscal policy.

### 18.16 Infant Industry

* + - An industry that is just starting out and hence vulnerable to collapse when faced with more established foreign competition.

### 18.17 Trade Creation

* + - Arises when there is a shift in trade from a high-cost producer to a low-cost member country.

### 18.18 Trade Diversion

* + - Arises when there is a shift in trade from a low-cost producer of a non-member country to a high-cost producer of a member country.

### 18.19 Import Substitution Strategy

* + - Strategy to replace imported goods and services by producing them domestically.

### 18.20 Import Expenditure

* + - Amount spent on importing goods and services from foreign country into the domestic country.

### 18.21 Export Revenue

* + - Amount earned from exporting goods and services from domestic country out to foreign country.

### 18.22 Balance of Trade (BOT)

* + - It refers to the difference between the total value of goods and services exported to other nations and the total value of foreign goods and services spent by local economy
		- Balance of trade = Export revenue – Import Expenditure