Catholic Junior College

THEME 3: THE NATIONAL AND INTERNATIONAL ECONOMY

3.3 GLOBALISATION AND THE INTERNATIONAL ECONOMY

ENDURING UNDERSTANDING
International trade allows countries to focus on the industries in which they can be most productive and efficient to achieve economic growth and low unemployment. Globalisation has enabled countries, including Singapore, to enjoy higher economic growth and standards of living. However, globalisation has also led to several economic challenges.

ESSENTIAL QUESTIONS
a) Why do countries trade?
b) What are the impacts of the external sector on the domestic economy?
c) What are the government policies to address problems caused by the external sector?
d) What are the intended and unintended outcomes as a result of the government intervention?

UNIT SUMMARY
We start by understanding a major aspect of globalisation - the international trade.

The *Principle of Comparative Advantage* explains why countries trade. Aside from enhancing their consumption possibilities, they also enjoy an increase in economic growth and employment. Access to the global market as well as technology and resources around the world have also benefited the producers and consumers as well as achieve governments' aim of economic growth and low unemployment.

On the other hand, international trade can also have its detrimental effects such as structural unemployment and economic instability. This gave rise to countries implementing protectionist measures. Hence, we have to ask ourselves, ***is trade truly and globalisation beneficial for everyone? Should we be pro or anti-trade?***

We then look at some economic co-operation and trade agreements such as FTA, WTO and ASEAN, and their impact on the member countries' consumers, producers, governments and the whole economy.

Finally, we will also examine the effects of globalisation on the Singapore economy –the costs and benefits, and make an assessment as to Singapore's gains from globalisation, explaining the impact and relevance of free trade areas on Singapore.

CONTENT

1. Globalisation
   - 1.1 Factors contributing towards Globalisation

2. Globalisation through International Trade
   - 2.1 Reasons for Free Trade
   - 2.2 Principle of Comparative Advantage
     - 2.2.1 Understanding the Principle of Comparative Advantage
     - 2.2.2 Evaluation of the Principle of Comparative Advantage
   - 2.3 Impacts of International Trade
     - 2.3.1 Advantages of Free Trade
     - 2.3.2 Disadvantages of Free Trade

3. Globalisation through International Movement of Capital Flow
   - 3.1 Impacts of International Movement of Capital Flow

4. Globalisation through International Movement of Labour
   - 4.1 Impacts of International Movement of Labour

5. Globalisation in the context of Singapore
   - 5.1 Key Features of Singapore's Trade Structure
   - 5.2 Singapore's Changing Comparative Advantage

6. Use of Policies in Addressing Macroeconomic Issues caused by Globalisation
   - 6.1 Protectionism
     - 6.1.1 Arguments for and against Protectionism (Advantages and Disadvantages of Protectionism)
     - 6.1.2 Methods of Protectionism
     - 6.1.3 Effects of Protectionism

   - 6.2 Economic Cooperation and Trade Agreements
     - 6.2.1 Free Trade Areas
     - 6.2.2 Customs Union
     - 6.2.3 Common Market
     - 6.2.4 World Trade Organisation
     - 6.2.5 Benefits and Costs of Economic Cooperation and Trade Agreements
     - 6.2.7 Impact of Free Trade Areas on Singapore

7 Singapore's Trade Policies

H2 9570 SYLLABUS REQUIREMENTS

H2 SYLLABUS REQUIREMENTS	
Free Trade	▪ Explain the basis of free trade and specialisation ▪ How trade is possible based on differences in opportunity costs and beneficial exchange ratio (terms of trade) between countries ▪ Principle of Comparative Advantage ▪ Dynamic Comparative Advantage
Benefits from Free Trade	▪ Explain the gains from free trade using the concept of comparative advantage, from the perspectives of economic agents *(and also the costs of globalisation)* o ***Consumers***: prices, choice and variety of goods and services o ***Producers***: size of markets, degree of competition, costs of production and innovation o ***Governments***: Macroeconomic objectives and policy choice ▪ Awareness of other possible benefits of trade is useful.
Barriers to Trade	▪ Explain why protectionism exists. ▪ Evaluate both the arguments for free trade and the motives for protectionism. ▪ Consideration of both the *benefits* and *costs* of protectionism from the perspectives of the *economic agents* ▪ *Immobility of factors of production (FOP)* is the main motive, when analysing the underlying factor in all arguments for protectionism. Political motivation is also another factor.
Globalisation & Free Trade Agreements (FTAs)	▪ Explain the trend towards globalisation ▪ Examine the impact of globalisation on the *trade in goods and services*, *international flows of capital* and *labour, infrastructure and technology*. ▪ Examine the economic impact of globalisation on the Singapore economy ▪ Examine ***economic issues*** of globalisation in general i.e. effects on Singapore and other countries. ▪ Highlight ***equity issues*** when discussing the impact of globalisation on the *international movement of labour* and *relative earning power of individuals*. ▪ An understanding of how economic agents might mitigate the impacts of globalisation. o ***Producers***: change their production decisions in view of competition from foreign producers. o ***Government***: introduce policy measures, such as subsidies for R&D, in order to improve the competitiveness of domestic producers in the international market. ▪ An awareness of the role of World Trade Organisation (WTO) in promoting free trade, and the forms of economic co-operation and trade agreements between countries is sufficient. ▪ The *benefits* and *costs* of economic co-operation and trade agreements between countries should be considered from the perspectives of economic agents (as above)
Trade between Singapore & the rest of the world	▪ Explain Singapore's trade behaviour with the rest of the world and recent developments (e.g. FTAs) and the impact of globalisation on Singapore.

Flow of Key Content

Part I: Globalisation and its effects

International Flow of Goods and Services

Positive and Negative Impacts on

1. Economy (Macro Aims)
2. Households,
3. Firms
4. Government

International Flow of Labour

Positive and Negative Impacts on

1. Economy (Macro Aims)
2. Households,
3. Firms
4. Government

International Flow of Capital

Positive and Negative Impacts on

1. Economy (Macro Aims)
2. Households,
3. Firms
4. Government

Part II: Policies

to address macroeconomic issues caused by globalisation

Pro Free-Trade

Economic Cooperation and Free Trade Agreements

- How do they work?
- What are some pros and cons?

Against Free Trade

Protectionism (e.g. Tariffs, Quotas, Export Subsidies etc.)

- How do they work?
- What are some pros and cons?

1. GLOBALISATION

An important branch of Macroeconomics is the study of *how* and *why* an economy interacts with other economies in the world – the International Economy.

We shall begin by learning about the main facets of Globalisation and finding out how this phenomenon has impacted the international movement of:

i. ***Raw materials and Goods and services*** (Free trade);
ii. ***Capital flows;*** and
iii. ***Labour flows*** between countries.

Definition of Globalisation

Globalisation refers to the **process of *economic integration* around the world, affecting the markets for *output* (goods and services) and *inputs* (capital and labour flows) and the *diffusion of knowledge and information***.

Note: Globalisation occurs through the channels of **trade, capital and labour flows.**

Globalisation has led to <u>increasing interdependence</u>, integration and interaction amongst people and organisations of different nations. There has been greater international movement of goods and services, capital and labour. The following subsection will account for this emerging trend:

1.1 FACTORS CONTRIBUTING TOWARDS GLOBALISATION

i. Growth of Economic Co-operation

There has been a growing trend towards greater economic integration of countries both within and across continents, such as the Association of Southeast Asian Nations (ASEAN), Asia-Pacific Economic Cooperation (APEC) and the European Union (EU). Such economic co-operation between countries has eased trade as well as movements of resources and technology between countries. This growth in economic cooperation was also aided by the efforts of the World Trade Organisation (WTO), which helps to promote free trade by persuading countries to abolish import tariffs and other barriers to open markets.

ii. Technological Factors

The trend towards globalisation is also driven by the rise of technology.

- **Advances in Transportation Technology**

In the area of transportation, the advancement of commercial air and maritime travel greatly increased the efficiency in which goods, raw materials and people can be transported at lower transport costs. This has resulted in increasingly free flows of goods and services, as well as people. With reduced transport costs, businesses find it increasingly more cost efficient to break up their supply chains to locate different parts of their operations in different countries.

- **Advances in Telecommunication Technology**

With the rapid advancement of telecommunication technology such as the 5G technology, information can now be transmitted around the world instantly at low costs. The fall in telecommunication costs expands global demand and supply for goods and services and increases international trade flows. Improvements in information and communication technology have also increased the flows of international capital as financial capital can be transacted across countries with negligible costs and time.

iii. Political and Policy Changes

As China, India, and the Eastern European countries have opened up, world markets and opportunities to export have expanded considerably for advanced economies and developing countries alike. Due to cheaper their production costs, there has been growing investment flows into developing countries. With the relaxation of migration laws in these countries, there have been greater flows of people in the global economy resulted.

2. GLOBALISATION THROUGH INTERNATIONAL TRADE

Since globalisation includes the integration of economies through the movement of *goods and services* among other things, we start by looking at that movement, which is known as *trade*. *Trade* generally refers to the *exchange of goods and services*.

Definition of International Trade

> Definition: **International Trade** refers to the exchange of goods and services across international borders without any restrictions.

In recent years, globalisation of the world economy inevitably implies that most nations are heavily exposed to trade flows in goods and services.

Trade and specialisation are closely linked. A country should specialise in the goods/services in which she is able to produce relatively more cheaply and then trade with other countries for goods/services where it is relatively costly for the original country to produce. International trade enables countries to obtain goods/services from abroad while providing income for those who produce them.

Overall, all the countries involved in such trade will benefit from a *higher level of production and consumption*. The reasons why countries trade can be categorised as demand- and supply-side reasons, and these will be elaborated in the next section.

2.1 REASONS FOR FREE TRADE

(a) Demand-side Reasons

i. Differences in Tastes & Preferences

- Even if countries have identical resource endowments and combined those resources with equal efficiency, they may still engage in trade if their tastes for goods were different.
  - E.g. Suppose Norway and Sweden produce fish and meat in about the same amounts, but the Swedes prefer meat while the Norwegians prefer fish. Both countries would benefit if Norway exports meat to, and imports fish from Sweden.

- Differences in preferences also explain why countries seem to export and import the same goods (***Intra-industry Trade***). The products may be differentiated by brand names and other distinguishing features.

- E.g. While Germany and Japan both produce and export cars (e.g. Toyota in Japan & Volkswagen in Germany), consumers in these countries may still choose to import cars from other countries due to diverse preferences.

ii. *Stimulates economic growth and development*

- International trade lead to larger market size as the demand is created from more countries instead of just the domestic market.
- This would lead to a rise in net exports of the country, assuming unchanged import expenditure. The rise in net exports would also increase AD.
- This acts as an incentive to invest more in different sectors of the economy, especially the foreign sector. This increase in investment further raises AD.
- The overall increase in AD would lead to increase in production and employment, leading to a higher level of national income, hence achieving **actual economic growth**. Thus, trade is an engine of growth for many small and open economies, e.g. Singapore, where domestic sources of AD are too low to promote economic growth.

(b) Supply-side Reasons

i. Differences in Endowment of Resources

> *Note: This is the **most important reason** why countries trade. Students must be very familiar with this point and the related section on Theory of Comparative Advantage.*

Different countries possess different quantities and qualities of factors of production. This results in ***differences in opportunity cost*** of production, hence leading to ***different Comparative Advantage*** in producing goods and services and thus calls **for international specialisation.** *(This will be covered in greater detail in the **Principle of Comparative Advantage**)*. These give rise to differences in the types and prices of goods and services produced.

a. **Natural Resources**
    - Land-abundant countries, such as Australia and the USA, are able to produce land-intensive products such as agricultural products, more cheaply than land-scarce countries, like Hong Kong and Singapore. In the latter, the use of land for land-intensive products have ***higher opportunity cost***.

    - Some countries have abundant mineral resources- Oil in Saudi Arabia and gold/diamonds in South Africa. Countries generally export products they can produce more cheaply in return for those that are unavailable domestically or are more costly to produce as compared to buying from other countries.

b. **Labour resources**
    - Labour abundant countries, such as China and India, are able to produce labour-intensive products, such as clothing and footwear, more cheaply than developed countries, like USA and Britain, where labour costs are much higher.

c. **Capital stock**:
    Developed countries with a strong technological and capital base. As such, they are more competitive globally in producing ‘high-tech’ products, such as computers, high-end electronics and transportation

equipment, that require high-skilled labour and sophisticated machinery and technology.

ii. Immobility of Resources

- Land, natural resources and climatic conditions are not transferable from one country to another. Labour may also face a significant degree of geographical immobility. This may be due to social ties, differences in culture and language, and also the presence of immigration restrictions.
- While capital is generally mobile within the country, its movements between countries may be hampered by political instability or governmental restrictions as well as inadequate financial, legal and physical infrastructure.
- Since the international mobility of resources is generally limited, the alternative is for countries to specialise in goods in which they produce most efficiently and exchange for those goods they do not produce with other countries.

iii. Potential to Reap Internal Economies of Scale (iEOS)

- Large market size due to access to external market, firms are able to expand their scale of production, hence enjoy large iEOS, lowering their average costs. Access to wider external market is essential for small countries like Singapore because the domestic market is often too small for EOS to be reaped.

iv. Differences in Technology

- This arises because different countries have different intensities of research and development (R&D) activities and different speeds of adoption of new technologies. Economies which are able to adopt more advanced technology can better combine factors of production to produce the good more efficiently and at a lower opportunity cost than other economies which use relatively old technology.

2.2 PRINCIPLE OF COMPARATIVE ADVANTAGE
(Recall: Supply-side reason for free trade)

To understand how and why countries trade, we need to understand the Principle of Comparative Advantage.

Definition of Comparative Advantage

Definition: A country **has a comparative advantage** over another in the production of a good when it can produce it at a *<u>lower opportunity cost</u>* than the other countries.

<u>To illustrate the concept of Comparative Advantage</u>

- Australia, with its vast land favourable for rearing cows, has the ability to produce dairy products like milk at lower opportunity cost than other land-scarce countries such Singapore.
- Singapore, on the other hand, due to its highly skilled workers and availability of technology, has the ability to produce high-end IT products at lower opportunity cost than Australia. dairy products.
- Hence Australia has comparative advantage in the production of dairy products whereas Singapore has comparative advantage in the production of high-end IT products.

How then should Australia and Singapore trade with one another? Based on the *differences in opportunity costs of production*, countries should trade in accordance to the ***Principle of Comparative Advantage.***

2.2.1 UNDERSTANDING THE PRINCIPLE OF COMPARATIVE ADVANTAGE

Definition: The **Principle of Comparative Advantage** states when countries specialise and produce goods they have comparative advantage in and then trade with one another, there will gains from trade for the countries and increase in world output.

The Principle of Comparative Advantage is based on the ***following assumptions***.

A. **ASSUMPTIONS**

i. There are ***2 countries*** in the world (e.g. Japan & Thailand) and ***2 goods*** being production and consumption (e.g. car and rice).
ii. Each country initially uses half its resources for the production of each good.
iii. Resources are ***fully employed*** and ***perfectly mobile*** within each country (factor immobility still exists *between* countries)
iv. ***Constant opportunity costs*** of production of the goods.
v. ***No barriers to trade***
vi. ***No transport costs*** which might outweigh the benefits of trade.

B. NUMERICAL ILLUSTRATION OF PRINCIPLE OF COMPARATIVE ADVANTAGE

Before Trade:

Table 1: The Production Possibilities Before Specialisation

	Total Output	
	Car (million units)	**Rice (million kgs)**
Japan	100	50
Thailand	5	10
Total	105	60

Table 1 above shows how many units of cars and rice each country can produce, assuming that each country allocates half its available resources to the production of each good. We can see that Japan can produce more of both cars and rice than Thailand (*absolute advantage*). *Even so, it is still beneficial for Japan and Thailand to trade.*

From Table 1, we are able to derive the opportunity cost ratios (Table 2).

Table 2: Opportunity Cost Ratios

	Opportunity Cost Ratios of	
	1 unit of Car (C)	**1 unit of Rice (R)**
Japan	0.5 R [= 50 / 100]	2 C [= 100 / 50]
Thailand	2 R [= 10 / 5]	0.5 C [= 5 / 10]

To produce each unit of car,

- Japan has to forgo 0.5 units of rice; hence the opportunity cost of 1 unit of car is **0.5 R** whereas
  Thailand has to forgo 2 units of rice; thus the opportunity cost of 1 unit of car is **2 R**.
- Japan incurs a lower opportunity cost (0.5 R) compared to Thailand (2 R). Thus, ***Japan*** *has a* ***comparative advantage*** in producing ***cars***.

To produce each unit of rice,

- Thailand has to forgo **0.5** units of cars; thus the opportunity cost of 1 unit of rice is **0.5 C** whereas
  Japan has to forgo 2 units of cars; hence the opportunity cost of 1 unit of rice is **2 C**.
- Thailand incurs a lower opportunity cost (0.5 C) compared to Japan (2 C). Thus, ***Thailand*** *has a* ***comparative advantage*** in producing ***rice***.

Thus, according to the *Principle of Comparative Advantage*, Japan should specialise in the production of cars while Thailand should specialise in the production of rice.

AFTER SPECIALISATION:

Assuming that, since Japan is able to produce more of both goods using its available resources, it transfers 10% of its resources from rice production to car production. We also assume that Thailand diverts all resources to rice production. (Column B in Table 3 below illustrates the quantity of cars and rice produced after specialisation)

TABLE 3: GAINS AFTER SPECIALISATION AND TRADE

Output	Column A Before Specialisation Before Trade [Same as Table 1]		Column B After Specialisation Before Trade		Column C After Specialisation After Trade	
	Car (million units)	Rice (million kgs)	Car (million units)	Rice (million kgs)	Car (million units)	Rice (million kgs)
Japan	100	50	110 [=100 + 10% of 100]	45 [= 50 – 10% of 50]	103 (+3) [= 110 – 7]	52 (+2) [= 45 + 7]
Thailand	5	10	0	20	7 (+2) [= 0 + 7]	13 (+3) [= 20 – 7]
World	105	60	110 (+5)	65 (+5)	110 (+5)	65 (+5)

We see from Table 3 that after Japan partially specialises in cars and Thailand fully specialises in rice, **world output of both goods has increased** – world output of cars has increased by **5** million units and world output of rice has increased by **5** million kgs.

However, the *extent* of trade and benefits between countries depends on their ***terms of trade*** with each other.

Definition: The Terms of Trade (TOT) is the rate at which exports can be exchanged for imports (rate of exchange of exports for imports).

- For both countries to benefit from trade, the TOT must fall between the opportunity cost ratios of the countries for each good.

Referring to Table 2 (opportunity cost ratios),

- Japan would not accept less than 0.5R for 1C exported to Thailand (otherwise they might as well produce their own within their domestic country).
- Similarly, Thailand would not give up more than 2R for 1C imported from Japan.
- Hence, for mutually beneficial trade to take place, the TOT must lie between 0.5R and 2R for each car i.e.

$$0.5R < 1C < 2R$$

In other words, for every unit of car, the TOT will lie between 0.5 to 2 units of rice.

AFTER TRADE:

- Let us suppose the TOT is agreed at ***1C for 1R***.
- Referring to **Column C in Table 3**, assuming Japan exports 7 million units of cars to Thailand in exchange for 7 million units of rice **(**assuming that there are no barriers to trade and no transport costs**).**
- We can see that after specialisation and trade, Japan gains 3 million units of cars and 2 million kg of rice while Thailand gains 2 million units of cars and 3 million kg of rice.
- **Therefore, with specialisation and trade,** we can see that both countries *benefit* from trade with each other. Both countries now can consume higher than their production. Consumers in both countries get to enjoy a greater amount of both cars and rice resulting in ***higher material standard of living*** in both countries.

In conclusion, the theory of CA explains that countries can mutually benefit from specialization and trade in terms of **higher consumption**, based on a favourable terms of trade, which further **increase the material standard of living** of these countries

2.2.2 EVALUATION OF THE PRINCIPLE OF COMPARATIVE ADVANTAGE

Although according to the theory both countries should benefit from higher consumption possibilities, in reality, certain assumptions may not hold and countries may be prevented from reaping the full benefits of free trade.

a. Increasing Opportunity Cost
In reality, a country is likely to experience increasing opportunity costs (i.e. ***give up increasing amounts of other goods*** to produce a good) as she specialises further in the production of a particular good. This is because all resources are not equally suitable and efficient in the production of another good.

b. Factor Immobility within the Country
To benefit from trade, each country should try to scale down those industries in which she has no comparative advantage and divert resources into industries that she has comparative advantage in. However, factors are not perfectly mobile occupationally and geographically e.g. it is neither possible nor easy to transfer resources, e.g. labour, from sheep farming into the production of computer chips even if the country has comparative advantage in producing computer chips.

c. Factor Mobility between Countries
Increased factor mobility between countries will reduce international trade. E.g. developed countries, e.g. the UK, rather than exporting finished high-value goods to developing countries, e.g. India, may instead invest capital in developing

countries to enable the production to take place there. In that case, the finished goods will be available in developing countries at almost equal prices as is available in the developed countries. Thus, there will be no further need for trade.

d. Transport Costs

In reality, transport costs exist, and it may outweigh any comparative advantage. This is especially the case for countries that produce bulky/heavy, low value products e.g. bricks. For such goods, transportation costs are high. This will add on to their final price and may offset any advantage gained through specialisation.

e. Trade Restrictions

Many countries often take actions to 'protect' their domestic industries and discourage imports by imposing tariffs or quotas. As a result, some countries may produce goods in which it does not have a comparative advantage in, thereby reducing the gains from trade. In addition, countries might not be able to export as much as it desires (this will be elaborated further in ***Section 6.1 on Protectionism***).

2.2.3 DYNAMIC COMPARATIVE ADVANTAGE

A country's comparative advantage is **not static** and can change over time. For example, in the 1970s, due to its large number of cheaper unskilled workers, Singapore had CA in cheap electronic products. But overtime, as its workers are more educated and more highly skilled, Singapore's CA has evolved to high-end highly capital-intensive technological products.

Definition: Dynamic Comparative Advantage refers to a country's **comparative advantage *changing over time due to changes in factor endowments***.

Comparative advantage enjoyed by a country may *improve* due to:

i) Discovery of new source of non-renewable raw materials;

ii) Investment in physical capital, human capital and technology. For example, the Singapore government implemented supply-side policies to encourage upgrading of skills in knowledge-based industries as well as improve infrastructure to develop the new industries. These efforts also improved the quality of labour in the economy.

iii) Government policies to promote targeted inflows of FDIs and foreign labour

A country may *lose* their comparative advantage if:

i) Its productivity growth falls behind that of foreign competitors;

ii) Its factor endowment is depleting / depleted (e.g. exhaustion of non-replaceable raw materials (natural resources) in primary producing countries);

iii) It experiences increasing opportunity cost as it specialises in the production of a good; and/ or

iv) Government policies.

2.3 IMPACTS OF INTERNATIONAL TRADE

2.3.1 ADVANTAGES OF INTERNATIONAL TRADE (The Case for Free Trade)

The benefits of international trade can be examined in terms of the following:
- Macro impacts on the economy (i.e. macroeconomic goals)
- Micro impacts on different stakeholders such as consumers, firms and government's microeconomic objectives

Effects on	Criteria
Government/ Economy	▪ Macroeconomic goals (Sustainable & inclusive economic growth, Price stability, Full employment, Favourable BOP ▪ High SOL ▪ Microeconomic Goals
Producer	▪ Costs, Revenue, Profits ▪ Producer surplus
Consumer	▪ Variety & quality of goods ▪ Prices & Consumer surplus

To the GOVERNMENT/ECONOMY,

Potential benefits in terms of govt's macro-aims are as follows:

a. Growth and Development of Economies

- Free trade provides access to markets around the world for domestic producers. This will spur an increase in demand for the country's exports. This will lead to increase in net export, thereby increases AD and hence increases real national income, causing increase in actual economic growth. Therefore, **the government's macroeconomic aim of positive economic growth can be achieved** through free trade.
- Trade also can lead to full utilisation of otherwise underemployed or unemployed resources. The increase in AD due to increase in net export will lead to the creation of more jobs as more workers are required to increase production of output to meet the increase in AD, reduced the country's unemployment level. Using PPC diagram, such production of output to meet AS is reflected in the movement from a point within the PPC outwards to a point on the PPC. **The government's aim to achieve low unemployment is therefore achieved**.

b. Price Stability

- With a greater access to global markets, firms are able to expand their scale of production, reaping economies of scale. This reduces the unit cost of production leading to cheaper goods and services which will be beneficial for the consumers.
- Through trade, countries can import resources and raw materials from cheaper sources around thus allowing for increase in production at lower cost. This increases the country's SRAS, leading to fall in general price level. This helps the government **achieve its macroeconomic aim of price stability**.

c. Faster Rate of Technological Advancement and Diffusion and Potential Economic Growth

- In order to maintain their competitiveness with their foreign counterparts, firms may look to enhance their products e.g. through Research & Development (R&D). Experimentation with new processes and products provide workers with a learning-by-doing environment, which contributes to rapid economic development.

- Countries exposed to international trade can gain access to modern technology. International trade also allows for the transmission of ideas, technical expertise and managerial skill etc. that are essential for the economy to develop. This can lead to higher productivity and increase the country's productive capacity, hence increase the country's LRAS.
- Hence national income increases, thereby leading to economic growth in the long run, **achieving the government's aim of potential economic growth.**

Potential benefits in terms of micro-economic aims are as follows:

d. This is also greater productive efficiency due to specialisation and large-scale production that allow <u>firms </u>to reap greater internal economies of scale, thus reducing average cost of production, also possibly leading to lower domestic prices.

e. Prevention of Domestic Monopolies: The presence of overseas competition can stop domestic monopolies from exploiting their positions. Without trade, a domestic monopoly may be able to raise prices and restrict output. However, trade exposes domestic <u>firms</u> to overseas competition and therefore helps to keep such monopoly powers in check. It also gives more incentive to the domestic firms to remain efficient and competitive.

To PRODUCERS, potential benefits are as follows:

f. Increased profits

- By gaining access to foreign markets, firms' demand increases as they expand their market size into these foreign market and hence **enjoy additional source of revenue** through exports on top of the sale of goods and services within the domestic economy.
- Trade also enables firms to lower their average cost of production
  - When <u>firms</u> expand their scale of production, they can reap greater internal economies of scale, thus reducing average cost of production, enabling them to compete better in the export market.
  - Through international trade, firms have access to cheaper sources of resources from various countries, hence able to lower their cost of production
- Hence, firms can enjoy higher demand and fall in unit cost at the same time. This can result in higher level of profit, the primary objective of producers.

g. Increase efficiency and innovation in production due to competition from imports

- Free trade increases competition for domestic firms.
- The entrance of imported goods and services reduces domestic firms' market share the the country → motivate them to streamline their production towards more efficient production methods. May even embark into new technology and innovations to lower average cost to maintain their market share in the economy.

To CONSUMERS, potential benefits are as follows:

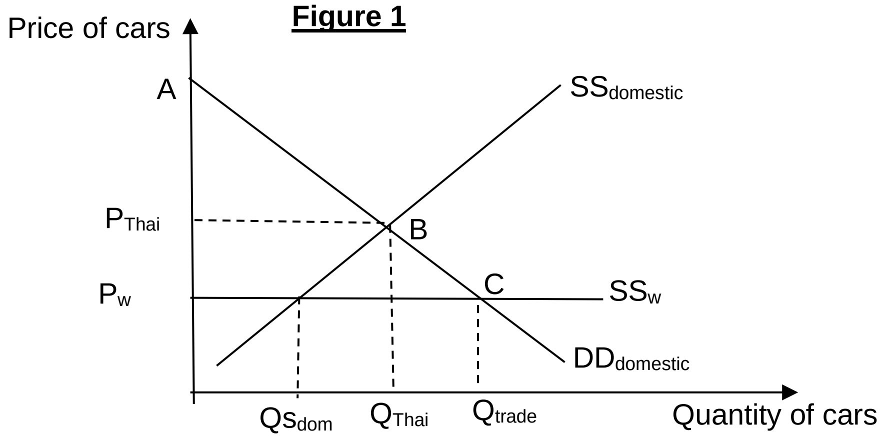
h. Higher Consumption Possibilities

- Trade provides the ability to consume beyond a country's production possibilities. Based on the principle of comparative advantage, we have shown that the quantity of world output is higher when countries specialise. Consumers will then enjoy an improvement in the quantity and quality of goods and services. (Refer to Section 2.2 of this lecture notes)

i. Gain in Consumer Welfare

- With trade, consumers can now **enjoy lower prices and higher consumer surplus** especially in goods their country do have have comparative advantage in (refer to Section 2.1 on the Principle of Comparative Advantage).
  - Before trade: Figure 1 above shows that equilibrium price of cars in Thailand is at P_{Thai} and equilibrium quantity at Q_{Thai}.

Figure 1



  - After free trade: Assuming that there are an infinite number of firms in the world market willing and able to produce cars at P_w, the world supply is perfectly price elastic and price is at P_w. With trade, the domestic car producers will now have to lower their price to match the world price at P_w. Hence after trade, the equilibrium price of cars in Thailand now falls from P_{Thai} to P_w and equilibrium quantity now rises from Q_{Thai} to Q_{trade}. Domestic firms are willing able able to produce Qs_{dom} number of cars, while (Q_{trade}-Qs_{dom}) is quantity of cars imported.
  - Hence with trade, consumers get to enjoy lower price at P_w, and higher quantity at Q_{trade}. Consumer surplus increases from $AP_{Thai}B$ to AP_wC. There is a gain in consumer surplus of $P_{Thai}BCP_w$

- With trade, countries can now import goods and services from different countries and regions.
  - This enhances consumer choice since there is now a tremendous **range and variety of goods and services** that they can choose from. E.g. consumers in tropical countries can enjoy imports from temperate countries.
  - It is also likely that as countries specialise in the production of goods/services, **the quality of goods/services produced will improve**.
  - The availability of large variety as well as higher quality products together with lower prices and higher consumer surplus lead to higher consumer welfare.

j. Diversifying the Source of Products

- With international trade, countries can import goods from different parts of the world. Thus, any supply disruptions in the home country or in another country will have fewer disturbances to the amount of goods available in the home country.
- In addition, diversifying sources of products may also help to reduce prices, which benefits the consumers.

2.3.2 DISADVANTAGES OF INTERNATIONAL TRADE (Case against free trade)

To the GOVERNMENT/ECONOMY

Possible costs of international trade in terms of govt's macro-aims are as follows:

a. Vulnerability to External Shock affecting Economic Growth & Price Stability

- A country that is overly dependent on exports is vulnerable to external factors and will face economic instability due to the phenomenon of trade cycles in importing countries.
  - For example, during the 2008 sub-prime crisis, national income in USA and many European countries fell. Thus, they had lesser purchasing power to buy from other countries, including imports from Singapore.
  - Hence Singapore's exports decline. As Singapore is heavily export-reliant, the significant fall in exports leads to fall in AD. Through the multiplier process, this leads to a **decrease in national output and hence fall in economic growth**, and a **rise in demand-deficient unemployment.**
- Similarly, for an import-dependent country, the economy will be vulnerable to imported inflation due to fluctuations in global prices of goods such as agricultural products and raw materials. As such, the government's aim of price stability is not attained.
  - For example, in Nov 2021, United Nations announced that the world food prices reached the highest level in more than a decade. As Singapore needs to import most of food items, this means the price of imported food will inevitably increase, **leading to imported inflation**.

b. Immobility of Resources and Structural Unemployment

- Economic theory assumes there is free mobility of labour and that countries should mobilise their labour from less efficient industries to industries they have comparative advantage in in order to benefit from trade.
- However in reality, for certain types of labour to be transferred from one industry to another, considerable retraining is often required. Such retraining may be very costly. A considerable time period may also be required for such retraining.
- Furthermore, workers, especially those who are older may be reluctant to be retrained and employers reluctant to spend on their training. These various reasons may result in significant and even **prolonged structural unemployment**. This is especially seen in cases of sunset industries.
- For example, when developed countries experience a loss in comparative advantage in low value-added manufactured goods to developing economies, workers retrenched from the sunset industries do not possess the relevant skills to be transferred to higher value-added industries. This **results in structural unemployment** which needs to be addressed by the government.

c. Environmental Degradation, the 'Race to the Bottom'

- With globalisation, countries take advantage of the opportunities to benefit from trade and hence specialise in the production of goods that they enjoy comparative advantage.
- With rising exports, more goods are produced. This inevitably involves more power generation for industrial production, leading to problems of pollution.

- Some ‘anti-globalist’ economists believe that trade encourage firms to move to countries that have weak pollution controls and export from there. This further weakens controls and aggravates environmental degradation, lowering non-material standard of living.
- This problem is more prevalent among developing countries which went through industrialization relying on the conventional sources of energy such as coal.

To PRODUCERS, possible costs are as follows:

d. Domestic producers may earn lower profits when faced with greater competition

- When a country allows imports into the domestic market, it will be opening up its domestic market to foreign competition.
- While some domestic firms are able to survive the strong competition, other firms that lack the ability to produce at lower costs may not be able to compete in terms of price or quality. This could be due to their inability to reap iEOS, or lacks the machinery, technological know-how or access to cheaper resources → hence unable to lower price to compete.
- Domestic firms may possibly face a lower demand as their market share is reduced. This will adversely affect their profits.

e. Dumping and Unfair Foreign Competition

- **Dumping** occurs when foreign producers sell their goods at prices below marginal cost. Such predatory pricing is made possible if the foreign producer use their past profits or obtain government subsidies. By practising dumping, foreign producer seeks to drive the domestic firms out of competition and gain monopoly power in the market.
- The domestic firms operating in smaller scale compared to the multinational companies will not be able to compete at such low prices. Consequently, domestic producers may have to shut down, resulting in loss of jobs among domestic workers.

To CONSUMERS, possible costs are as follows:

f. Over-Dependence on Other Countries

- It is very possible that due to unforeseen circumstances such as war and global pandemic like the COVID-19, movement of goods and services in and out of a country is hindered.
- A country which depends on imports of essential products like weapons, oil, food and important raw materials can experience shortages of such goods. Consumers may face rising prices of essential goods, and hence fall in material standard of living.
- As such, for security reasons, some countries would rather continue to produce such products than to rely totally on imports despite facing a comparative disadvantage in such productions.

Singapore’s “30 by 30” plan: During the COVID-19 pandemic, supermarket shelves were emptied as people panic bought. This brought to attention Singapore’s overreliance on food imports and its subsequent food security. To address this concern, Singapore government made plans in 2019 to reduce its dependence on food imports with its “30 by 30” vision (To achieve 30% of Singapore’s nutritional needs to be met locally by 2030).

g. Lower consumer welfare and choice due to dumping

- Although the domestic consumers enjoy lower prices and higher consumer surplus as a result of foreign firms' dumping practices, this is only in the short run. Consumers will eventually lose out in the long run by paying very high prices when the foreign firms eventually gain large monopoly power.
- Also, when domestic producers are driven out of competition through dumping, there will be fewer substitutes available. Consumers are worse off due to less choice.

Summary of advantages and disadvantages of International Trade	
Advantages	**Disadvantages**
Govt/Economy (Macroeconomic aims) • Higher net export increases AD → increases actual economic growth. • Technological diffusion → increase productive capacity → increase LRAS → potential economic growth. • As export sector grows→ demand for labour increases → unemployment falls and better utilisation of resources.	Govt/Economy (Macroeconomic aims) • Economic instability as economic growth largely depend on external factors (like net exports) • Structural unemployment as country shifts focus to more export led economic growth • Trade encourages firms to set up factories in developing countries→ pollution levels go up in those countries→ non-material standard of living drops.
Producers • Larger market size as some goods are exported → increases export revenue. • Reap IEOS due to large scale production → lower long run average costs • Incentive to be dynamic efficient and invest in R&D to remain competitive • Technological diffusion → firms learn new processes → increases efficiency→ lowers cost	Producers • Domestic producers may have to shut down if foreign firm practices dumping→ may cause unemployment and wastage of resources in the country • Domestic firms cannot compete on such low price.
Consumers • Trade based on CA →higher consumption possibility • More efficient production and IEOS due to larger scale of production → may translate to lower prices • More variety and choice → due to import and export from different parts of the world • Opens domestic market to more competition→ drives efficiency → better quality, lower price and higher consumer surplus.	Consumers • Over-reliance on imported goods → imports of essentials may fall during crisis → material SOL may fall. • Dumping → may lead to monopolisation by foreign firms, as local firms cannot compete at the low prices→ foreign monopolies exploit the consumers by charging high prices. • Excessive reliance on imports → faced with imported inflation in the case of a weak currency.

3. GLOBALISATION THROUGH INTERNATIONAL MOVEMENT OF CAPITAL FLOW

Previously we understood ‘capital’ to be ‘capital goods’. The term ‘capital’ can also be used more generally to refer to the *money* for various investment purposes. Here, ‘capital’ refers to the money for investment purposes.

There are various forms of international capital flows, they are:

Foreign Direct Investment	Foreign Portfolio Investment	Other Investments
FDIs are investments made by foreign firms or individuals on another country’s domestic firms	Foreign Portfolio Investments are foreign investors buying another country’s shares or other securities such as bonds	Short-term monetary flows between the country and the rest of the world.
The foreign investors actively manage their investments in the other country.	The foreign investors play passive roles in managing the investment. Investors’ main aim is to earn highest returns from the shares and bonds	The foreign investors play passive roles in managing the investment. Like portfolio investment, investors seek to obtain the highest returns.
E.g. Oil firm Shell setting up its largest petrochemical plant in Singapore	E.g. US citizen in the US buying Singapore’s Singtel share	E.g. Singaporeans sell SGD to buy foreign currency and place deposits in foreign banks.
FDIs are long-term investments.	Portfolio investments are short-term investments.	These investments are short-term and more volatile than portfolio investments
	Foreign portfolio investment and the other foreign investment are generally known as “*__hot money__*” i.e. money (or financial capital) that flows freely and quickly in and out of country looking to earn the best rate of return.	

3.1 IMPACTS OF INTERNATIONAL MOVEMENT OF CAPITAL FLOW

POSITIVE IMPACTS

To the GOVERNMENT/ECONOMY, potential benefits in terms of govt’s macro-aims are as follows:

a. FDI is an engine of growth and creates job opportunities

- **Increase both actual and potential economic growth**
  - Foreign direct investments contribute to the country’s overall investment thereby increases the country’s AD and, through the multiplier process, will lead to increase in RNY.
  - Short-term capital inflows (portfolio investments) in the economy leads to increase in availability of funds for borrowing at lower interest rates. This provides cheap funds for domestic firms to borrow to increase production as well

as increase domestic investment. This increase in I increases AD, leading to increase in RNY through the multiplier process → economic growth is achieved.

- Also, the inflow of capital goods and technology as well as transference on knowledge brought into the economy by FDIs leads to increase in productivity and productive capacity of the country, increase the country's LRAS → further increases national output → increases potential growth.
- Hence FDIs spur both actual and potential economic growth.

- **Reduce unemployment**
  - With the increase in real GDP, firms have to hire more workers. Demand for labour rises as firms hire more workers to increase output. This lowers the country's demand-deficient unemployment.
  - When firms from developed countries outsource/ offshore part of their production process to developing countries, more jobs are created for the workers in the country.
  - The entrance of foreign firms has leads to growth not just in the industry but also in other related industries such as the logistics and construction industries → more jobs are created → further reduce the country's unemployment rate.
    - E.g. the popularity of India as a call centre is prevalent amongst many multi-national corporations. This has led to increase in employment in this sector in India.

To PRODUCERS, potential benefits are as follows:

b. Higher profits enjoyed by firms

- Globalisation has encouraged firms from developed countries to relocate their production to countries where wage costs and hence unit labour costs are lower, typically developing countries. They will also be able to gain access to cheaper raw materials. These will reduce unit cost of production for these multi-national corporations (MNCs), resulting in higher profits.
- Another gain from FDI is higher revenue by tapping on the potential markets. For instance, when China became more open to FDI, many foreign firms undertook direct investment in China to take advantage of the rising income of consumers in the emerging economy (e.g. European car manufacturers like Volkswagen)
- In addition, industries and sectors with intensive FDI tend to have higher average labour productivity due to the use of more efficient machines. The higher labour productivity may benefits firms as this can translate to lower unit cost of production, resulting in higher profits.

c. Foreign producers stimulates growth of domestic firms

- Domestic producers get to learn from the foreign MNCs and gain access to the technical expertise and effective business management skills brought in by these foreign firms. This can greatly help the domestic producers to grow, leading to the growth of the whole industry.
- In fact, competition from foreign firms in the country act as motivation for domestic producers to innovate and embark on R&D towards greater efficiency in their attempt to compete better and maintain their market share in the domestic market.
- The presence of foreign firms in the country brings businesses to domestic producers in other related industries that supports the MNCs such as transportation and even F&B industries. Such domestic producers enjoy larger demand, hence higher revenue and profit.

To CONSUMERS, potential benefits are as follows:

d. Increase household income and improves material standard of living

- Industries and sectors with intensive FDI tend to have higher average labour productivity due to the use of more efficient machines. Such higher productivity could result in higher wages for workers, giving consumers a greater purchasing power to access goods and services. As such, their material standard of living improves.

NEGATIVE IMPACTS

To the GOVERNMENT/ECONOMY, possible costs are as follows:

a. Economics instability caused by short-term capital flows (hot money) due to speculative activities

There may be increased volatility in the economy due to speculative activities. This will negatively impact the country's economic stability. The volatility in capital flows due to globalisation was clearly seen in the 1997 Asian Financial Crisis and the European Debt Crisis in 2009.

- **Unstable exchange rate**
  - Hot money can destabilise the country's demand and supply of currency
  - Short-term capital inflows caused by hot money flowing into the country will lead to increase in demand for domestic currency, causing appreciation of the country's currency.
  - On the other hand, short-term capital outflows will cause increase in supply of the country's currency, causing its currency to depreciate
  - Such rapid changes in the country's exchange rate will lower confidence in the country's exchange rate.

- **Negative impact on trade and economic growth**.
  - The unstable exchange rate caused by the volatility in capital flows will have **negative impact on business confidence on the country's economy**.
  - Net-exports will fall as unstable exchange rate lowers foreigners' confidence in trading with the country.
  - Foreign I will also fall due to fall business confidence. The fall in net-exports and I will lead to fall in AD and, through the multiplier process, will lower national output. **This will slow down economic growth and may even lead to recession.**
  - Depreciation of domestic currency due to large capital outflow will lead to unfavourable terms of trade i.e. the country needs to export more in exchange for import. This will lead to fall in net-export → **worsens Balance of Trade**

- **Imported inflation**
  - When hot money flow out of the economy causing massive capital outflow, the country's currency will depreciate significantly.
  - This will increase import prices. Imported resources will be more expensive, raising the country's production costs. This can lead to cost-push inflation.
  - For open and import-dependent countries like Singapore, large depreciation of SGD caused by large outflow of hot money will lead to imported inflation.

b. Widening of income inequality and threatening inclusive economic growth

- Although it cannot be denied that foreign investments have positive impact on the country's employment and economic growth, there is a preference for skilled workers over the unskilled workers.
- The sectors which attract FDI are generally the modern and more advanced sectors in the developing countries. Hence, they tend to employ more skilled workers and are willing to pay them higher wages than what they would have otherwise earned. As such, FDI tends to widen the inequality/imbalances between the modern and the backward sectors of the economy as well as between skilled and low-skilled workers.
- The restructuring to higher value-added industries as well as relocation and **outsourcing/offshoring*** of lower skilled production process in many developed countries leads to an increase in demand for skilled workers and a fall in demand for lower skilled workers. This has resulted in a wider income disparity between those with relevant skills while low or even no income for those who are displaced in developed countries.

Outsourcing and Offshoring are cost-cutting measures

***Outsourcing** is the business practice of hiring a party outside a company to perform services and create goods that traditionally were done by company's own employees.

***Offshoring** is the relocation of a business process from one country to another—typically an operational process, such as manufacturing, or supporting processes, such as accounting.

c. Shifting of highly polluting industries by developed countries

- Developed countries may very likely shift some of their more polluting industries into the developing countries. Residents may have to put up with more pollution and suffer from a lower quality of life.
- Developing countries utilise lax environmental standards to court MNCs, especially with the emergence of more low-cost rivals. Hence, developing countries are more likely to face environmental degradation (e.g. "Cancer Villages" in China) as compared to developed countries which impose stringent environmental regulations (e.g. carbon taxes) leading to a fall in non-material standard of living. Environmental pollution is a form of negative externalities which results in deadweight loss to society and a lack of allocative efficiency (overproduction).

d. Hollowing out of industries and unemployment in countries with higher cost of production

- "Hollowing out" refers to the deterioration of a country's manufacturing sector when producers move to lower cost countries. Some economists believe the world's leading developed economies are being hollowed out. E.g. As the US firms move their production plants out of the country to developing countries such as Mexico and Vietnam, this reduces the number of jobs available in the US, leading to unemployment in the US.
- Hence offshoring will make it difficult for the government to attain its macro-economic aims of full employment.

To PRODUCERS, possible costs are as follows:

e. Foreign control of domestic industry

- As developed countries pump more capital into developing countries, e.g. large MNCs setting up production plants in these developing countries or by raising stake in company through portfolio investment, the local firms may be faced with greater foreign competition. The smaller less efficient firms may not be able to survive the competition. Not only will they lose their market share to these foreign firms, these foreign firms may even be able to eventually gain control of the domestic industry.

To CONSUMERS, possible costs are as follows:

f. Higher price of goods and less choice

- The domination of foreign producers over the smaller domestic forms will decrease the level of competition in market. These foreign producers can charge a higher price. Consumers are worse off due to higher price, lower consumer surplus and less choices.

Summary of Advantages and Disadvantages of International Capital Flows	
Benefits	**Costs**
Govt/Economy (macro-aims) • Rise in FDI increases overall investment leading to increase in AD, thus increases RNY and hence actual growth • Better diffusion of technology and transference of knowledge→ increases productive capacity → increases LRAS → increases national output → potential economic growth • Relocation/outsourcing/offshoring by developed countries → creation of jobs in developing countries → reduces unemployment	Govt/Economy (macro-aims) • instability of domestic currency due to the speculation by foreign investors • Sectors that receive FDIs grow faster and more efficient that the other sectors→ widens income gap → economic growth is not inclusive • Rise in pollution as firms choose locations where environmental concerns are limited → economic growth is not sustainable • Hollowing out of industries in countries with higher production cost → rise in unemployment
Producers • Learn new skills and technology from the developed counterparts→ lower average cost of production → higher profits • Relocation/outsourcing/offshoring and access to cheaper resources → lower lower average cost of production → higher profits	Producers Foreign MNCs with large funds (portfolio investments) in the country → stiff competition for domestic producers.
Consumers • Better technology → better quality and cheaper products • Higher productivity → higher wages → higher material SOL	Consumers • Foreign control of the domestic market → may eventually lead to higher prices

4. GLOBALSATION THROUGH INTERNATIONAL MOVEMENT OF LABOUR

Definition of Labour

The work time and work effort that people devote to producing goods and services is called labour.

With globalisation, we see people relocating internationally. This also brings benefits and costs to various economic agents.

4.1 IMPACTS OF INTERNATIONAL MOVEMENT OF LABOUR

POSITIVE IMPACTS

To the GOVERNMENT/ECONOMY, the potential benefits are as follows:

a. Increase in remittance and income level from migrant workers

- Migrant workers from developing countries stand to receive a higher income compared with what they earn in their own countries and remit a large sum of their income back. This has helped improved living standards in their domestic countries. E.g. personal remittances of Filipino workers abroad account for about 9.6% of The Philippines' GDP in 2020.
- The remittances from migrants in different countries would also bring about knock-on benefits to the local and wider economy. C rises because with an increase in remittances being sent back by the migrant workers, their families in their home country experience a rise in incomes. I rises because families with small farms and businesses have more funds to invest in farm machinery and other equipment to raise productivity. There is an increase in LRAS in the home country of the migrant workers due to the increase in I, which increases quantity and quality of resources, **resulting in sustained economic growth**.

b. Alleviation of skill shortage can help relax constraint on economic growth

- Influx of foreign talent enhances quality and quantity of labour and increases productive capacity. This will lead to increase in LRAS resulting in potential growth.
- Highly skilled segments of the population in developing countries may find opportunities and choose to work in developed countries where developed countries face skill shortages.
  - This increases the skilled labour supply of developed countries and developed countries enjoy an increase in quantity and quality of labour. Moreover with the increase in supply of foreign labour, wages are depressed and cost of production falls.
  - This results in an increase in SRAS and LRAS, resulting in sustained economic growth in developed countries.
- Higher skilled workers from developed countries also tend to move to developing countries and take on managerial roles where skills may be lacking in developing countries.
  - These expatriates are likely to contribute positively to the economic growth of the developing countries by sharing their expert knowledge with their local counterparts.

c. Increase in skills and knowledge

- Such migration of workers will also lead to an increase in skills when they return to their domestic (developing) countries and transfer their knowledge. This would raise productivity levels in the home country, resulting in lower unit cost of production and increased productive capacity, resulting in actual and potential economic growth.

d. Diversification of the economy

- Influx of foreign talent allows emerging economies to develop new niche areas especially in diversifying the economy by allowing the economy to move up the higher value-added manufacturing ladder, or move into the services sector.

To CONSUMERS, potential benefits are as follows:

e. Increase in income and standard of living

- Migrant workers employed overseas are attracted by higher pay and better living conditions. With higher income, their material standard of living increases.

To PRODUCERS, potential benefits are as follows:

f. Higher profits

- With greater mobility of labour among countries, firms in developed countries are able to employ migrant workers who tend to command lower wages than local workers. This helps to lower the average cost production. Ceteris paribus, producers can enjoy higher profits

NEGATIVE IMPACTS

To the GOVERNMENT/ECONOMY, the possible costs are as follows:

a. Brain drain

- The emigration of the “human capital” to the developed countries has posed severe challenges for the developing countries.
- The outflow of skilled labour from developing countries leads to a fall in the quantity and quality of resources within developing countries, resulting in a loss of productive capacity.
- A loss in talents in particular, would lead to a fall in potential growth, along with a fall in LRAS. This loss of talented skilled labour might impede their ability to progress to higher-value-added production in future. They may not be able to keep up with the competition in the world.

b. Increase in unemployment in certain sectors in the country

- When developed countries set up their companies in developing countries, the top tier management positions may be filled by those from the developed countries. This may lead to the dominance of foreigners in high skilled jobs even though there may be sufficient supply of local talent in the developing countries that could have filled the above high skilled jobs. This may create unemployment of high skilled workers in the developing countries.
- Similarly, as the developed countries outsource some low wage jobs to the developing countries, there will be rise in unemployment of such jobs in their own

home country. Moreover, the rise in supply of labour due to inflow of labour from developing countries will depress wage rates especially for some low skilled jobs.

c. Income inequality

- While outsourcing has created job opportunities in developing countries, these opportunities often benefit only a privileged minority and only exacerbated the existing income inequalities within the country. E.g. the income inequality between the Chinese in coastal cities, e.g. Shanghai, Guangzhou and Shenzhen which receives more FDI, and the inland Chinese cities.

d. No incentive to climb up the value chain

- Firms who make use of cheap migrant labour tend to become less driven and lack incentive to adopt new technology. Hence there is no motivation for firms to move up the value chain.

To PRODUCERS, possible costs are as follows:

e. Lower incentive to innovate
- When domestic firms have cheap migrant workers as an alternative to domestic workers, producers are less incentivised to improve the method of production or improve labour productivity through automation.

To CONSUMERS, possible costs are as follows:

f. Loss of income
- Influx of foreign workers results in the loss of jobs among domestic workers. Those affected will experience a loss of income, leading to lower material SOL

Summary of advantages and disadvantages of International Flow of Labour	
Advantages	**Disadvantages**
Govt/Economy (Macro-aims) • Skilled migrant workers in developed countries and developing countries to plug shortages in skills → increase quantity and quality of resources → increase C and LRAS → spur both actual and potential economic growth • Returning skilled workers in developing countries → transfer of skills → increase productivity → increase quantity and quality of resources → increase C and LRAS → spur both actual and potential economic growth	Govt/Economy (Macro-aims) • Brain drain in developed countries → lower quantity and quality of resources → lower actual and potential EG • Migrant workers from developed countries to fill top managerial positions in multinational companies (MNCs) in developing countries → unemployment among skilled workers in developing countries • Job opportunities in cities and coastal regions → increase in demand for workers and higher wages in these areas → income inequality between urban and rural regions
Producers • In developed countries, migrant workers are cheaper than local workers → lower average cost production → higher profits	Producers • No incentive to innovate among firms who use cheap migrant workers.

Consumers Unskilled and skilled migrant workers in developed countries from developing countries earn higher income → increase in material SOL	Consumers • Loss of jobs to skilled and low skilled worker in developed → loss of income → lower material SOL

In Summary

Globalisation

International Trade	Capital flows	Labour movements
Final goods and services Intermediate goods Raw materials	Foreign direct investments Foreign portfolio investments Other investments	

Benefits / Advantages

To the economy
- Increase actual and potential growth
- Lower unemployment

To the producers
- Access to larger global markets → larger demand hence larger revenue
- Able to reap large iEOS, access to technology, cheaper resources → lower production cost
- Access to cheap funds from short-term capital inflows

To the consumers
- Lower prices, higher consumer surplus
- variety

Against / Disadvantages

To the economy
- Structural unemployment
- Vulnerable to external factors and global shocks
- Income inequity
- Environmental degradation

To the producers
- Lower market share in domestic market
- Strong competition from foreign imports and foreign firms in domestic market

To the consumers
- Possibility of higher prices and lower consumer surplus in the long run

Hence need for government policies to mitigate the disadvantages to gain high net benefit of globalisation

5. GLOBALISATION IN THE CONTEXT OF SINGAPORE

5.1 Key features of Singapore's trade structure

- Singapore's economy possesses a ***high degree of openness to international trade and factor flows****.* There is *rapid industrialization* and *export-led growth* with exceptionally high import content of exports, especially petroleum-related products since all crude oil is imported.
- The country has ***no significant natural resources*** except for a well-located harbour, with heavy reliance on the international market for raw materials and food, including water from Malaysia and Indonesia.
- The last decade has seen ***rapid growth of intra-industry trade,*** i.e. there is an increasing propensity of Singaporeans to consume branded goods from the rest of the world while simultaneously exporting similar but differentiated goods to cater for foreign tastes.
- Singapore experiences a ***high degree of foreign influence***, evidenced by the heavy net inflows of capital, labour and technology. The net inflow of long-term capital is overwhelmingly foreign direct investment (FDI) rather than portfolio.

5.2 SINGAPORE'S CHANGING COMPARATIVE ADVANTAGE

- The changes in our trade pattern can be viewed as a response mainly to our changing comparative advantage that has changed over time.
- In the 1960s and early 1970s, our comparative advantage was in labour-intensive manufacturing, given an abundance in low-skilled labour.
- However, by the mid-1970s, when savings accumulated and rising labour costs, capital-intensive industries became the major focus.
- The efforts to upgrade manufacturing industries and promote service industries after the 1985 recessions, coupled with the then-abundant skilled labour, allowed Singapore to start exporting human-capital and technology-intensive goods and services even up to today.
- After Singapore's 50th birthday [2015], its growth expansion is driven by deep skills and innovation, with Singaporeans and local enterprises at the core, with a push for Singaporeans to develop a mastery of skills in every vocation via the SkillsFuture initiative. There is a move from value-adding to value-creation, emphasizing the importance of SMEs and also to establish Singapore as a leading centre for value creation in the business strategies of foreign companies.

Table 4: Singapore's Changing Comparative Advantage

Period	Factor endowments	Comparative Advantage
Before 1960	▪ Well-located harbour ▪ Little capital	▪ Entrepôt Trade goods
1960s – Early 1970s	▪ Well-located harbour ▪ Abundant labour ▪ Accumulating capital	▪ Labour intensive goods
Mid 1970s – Mid 1980s	▪ Well-located harbour ▪ Abundant capital ▪ Upgrading technology, education and training skilled labour	▪ Capital intensive goods
Mid 1980s – Late 2000s	▪ Well-located transportation hub ▪ Abundant capital ▪ Abundant skilled labour ▪ Higher technology	▪ Human capital and technologically-intensive goods and services (high value-added activities in global supply chains)

Mid 2010s – Current	▪ Deep Skills and Innovation ▪ Entrepreneurship and Local Enterprises (SMEs)	▪ Moving from value-adding to value creation. ▪ Five growth clusters for future growth (knowledge-intensive sectors) – advanced manufacturing, applied health sciences, smart and sustainable urban solutions, logistics and aerospace, and Asian and global financial services.

Source: Economic Policy Management in Singapore, 1996
The Business Times, 2015

6. USE OF POLICIES IN ADDRESSING MACROECONOMIC ISSUES CAUSED BY GLOBALISATION

Countries enjoy the benefits of globalisation at varying degrees, depending on the extent of the adverse issues that arise from globalisation. In order to maximise the gains resulting from globalisation, while addressing the macroeconomic problems, different countries may adopt a range of policies.

There are three main types of policies:

- Protectionism
- Regional economic integration and trade agreements
- Trade and Industrialisation policies

6.1 POLICY: PROTECTIONISM

Protectionism is sometimes employed to counteract the disadvantages of free trade.

Definition of Protectionism

Protectionism is defined as the *act of imposing economic policies aimed at restricting trade between countries, designed primarily to protect domestic producers and workers from foreign competition*.

Note: While protectionism reduces trade, it does not eliminate it such that it results in an autarky (which means zero trade). Thus, the costs of protectionism should not be the elimination of the benefits of free trade, but rather a reduction in these benefits.

6.1.1 ARGUMENTS FOR AND AGAINST PROTECTIONISM (Advantages and Disadvantages of Protectionism)

When analysing the motives for protectionism, it is useful to highlight that the arguments that countries put forth to justify the acts of protectionism tends to stem from the disadvantages of international trade (Section 2.4.2), but it does not always overlap.

a) Argument For: To Protect Infant (Sunrise) Industries

- ***An infant industry is one which has potential comparative advantage but is too young to realise this potential in the face of more established foreign competitors.***
- Free trade will expose the domestic infant firms to strong competition from imported goods. Given the infancy stage of the domestic firms (thus operating at a smaller scale and higher unit cost), they may not be able to compete with the foreign firms or products.
- These firms in the infant industries need to be protected so that they can reap the EOS that can help to lower their production cost, in order to grow and develop the comparative advantage and able to compete on more equal terms.
- Protection of infant industries is justifiable if the protection is removed once the industries are established.

Argument Against:

- A temporary net welfare loss from higher domestic prices is expected from such restrictions while the industry is still developing. However, this loss may be permanent if the firms in the protected industry never realised the expected comparative advantage and thus never become competitive.
- It may be difficult to determine which new industries have the potential to become internationally competitive. If industries with no potential comparative advantage are protected, it can lead to a misallocation of resources.
- Protecting the industry from competition during the growing stage may reduce the pressure and incentive for it to reduce its average costs, causing the firms to be complacent and remain inefficient over the long run and become too dependent on protection.
- Once protection is in place, it is politically difficult to remove.

Recommendations:

- The period under protection should be stated.
- Production subsidy to the industry rather than an import restriction like tariff could be used. Governments will review a subsidy after some time as it is a drain on the countries' resources.

b) Argument For: To Protect Declining (Sunset) Industries

- A country could have lost its comparative advantage in certain industries. This means that there are always some declining industries.
- Intense competition from tree trade can hasten the decline of such declining industries and may lead to significant rise in structural unemployment due to occupational immobility.
- Protection would allow the industry to decline gradually and giving time for firms to restructure their business and move their resources to other industries. It will also reduce the structural unemployment, allowing the workers time to be retrained to acquire the skills required in other industries.

Argument Against:

- Protection cannot be sustained in such cases as it goes against the principle of comparative advantage. If the industry has indeed lost its comparative advantage, then it would only be efficient to transfer resources into other industries with comparative advantage.
- A problem that could arise if such protection is removed would be firms and employees within the industry will resist the change. Even if the economy does recover, such protection is not so easily removed once they are in place.

Recommendation:
- The period under protection should be stated.

c) Argument For: To Prevent Foreign Control of Domestic Market through Dumping

- With free trade, foreign producers might engage in dumping (where prices are charged below marginal cost of production).
- This is possible if they practice predatory pricing (where prices are charged below average cost of production), or their government is subsidising them.
- Dumping allows these foreign producers to further reap economies of scale and increase their share of the domestic market.
- Therefore, this may drive the domestic firms out of the industry resulting in the foreign company gaining control of the market and subsequently charging higher prices.
- Thus, government impose trade restrictions on imports so that locally produced goods will be competitive.
- Note: According to WTO, dumping through government's subsidies is illegal.
- Example: China being hit by anti-dumping investigations into its steel exports.

Argument Against:
- It is difficult to prove that the foreign goods are being subsidised so it will be difficult to know when to impose trade barriers. The differences in price could be due to lower production costs (i.e., comparative advantage) rather than subsidies.
- Domestic consumers of the cheap imports will not welcome the tariffs.
- Foreign countries may retaliate by imposing restrictions on the home country's exports. Hence, effort to protect domestic industries may 'backfire', leading to hardship for domestic exporting industries.

Recommendation:
- Evidence, if any, of subsidies given should be presented to all interested parties.

d) Argument For: To Correct Balance of Trade Deficit Temporarily

- For countries suffering from an acute balance of trade deficit, unlimited inflow of imports will worsen their condition.
- Trade restrictions may be required to cut down on the import of non-essentials when a country has a serious trade deficit.

Argument Against:
- Trading partners may retaliate and impose their own import restrictions thus causing the initiating country's exports, output and employment to suffer subsequently, thus affecting the macro goals and SOL. In a free market and flexible exchange rate system, a balance of payments deficit should cause the value of home currency to depreciate. This increases their exports' price competitiveness and hence automatically improving their balance of payments.
- With trade restrictions, foreigners' income level will fall because their export revenue will decrease. Trading partners will use this as reason to retaliate by imposing trade restrictions on the home country's exports. This will cause a fall in the home country's exports and no improvement to its balance of payments position.

Recommendation:

- The root cause of the trade deficit has to be tackled. If the deficit is due to a lack of price competitiveness, poor quality or marketing, then imposition of trade restriction will not be a long-term solution. Instead, supply-side policies should be adopted to improve the price and quality competitiveness of its exports.

e) Argument For: To Encourage Production of Goods of Strategic Importance

- Where a nation is dependent on foreign sources for goods of strategic importance, there is a danger of supply being cut off in the event of war.
- Even though domestic producers are not as efficient, trade restrictions could be imposed on the import of these goods to encourage domestic production and ensure survival of the plant and skilled labour.
- For example, due to the COVID-19 pandemic, the US began preventing shipments of domestically-produced protective medical supplies from leaving the country (i.e. export restrictions) due to the shortage situation.

Argument Against:

- The definition of essential industry may pose a problem. If the term is broadly defined, many industries may be able to win import protection and the argument loses its meaning.

f) Argument For: Protect Against Goods That Gives Rise to Negative Externalities

- Certain products such as cigarettes, drugs may be considered socially undesirable and restrictions or prohibitions placed on their importation.
- More recently, the EU has introduced policies to restrict import of palm oil from 2021 as it cites the need to stop massive deforestation in Malaysia and Indonesia to produce palm oil.

Argument Against:

- There may be other alternative ways of accomplishing the same objective which may have a lower economic cost than the costs of import protection. E.g. Excise duties rather than custom duties.

There are some criticisms against protectionism that are *generic* and can be used to counter all the arguments for protectionism. In addition to the many **benefits of free trade** which are arguments against protectionism, ***other arguments*** include:

- [Impact on Firms] Firstly, protection raises the market power of domestic firms hence resulting in greater allocative inefficiency. Also, being flushed with monopoly profits, domestic firms tend to end up being productively inefficient as they have less need to improve operating efficiencies and minimize costs

- [Impact on Consumers and Government] Secondly, when a country engages in protectionism, it creates a “beggar thy neighbour” effect where exports, output and income of its trading partners are reduced, which then in turn curbs the exports, output and employment of the former, subsequently affecting the country’s macro goals and SOL.

  In summary, protectionism should be used as a short-term measure to prevent inefficiencies. Once better long-term measures are put in place, protectionism must be removed.

6.1.2 METHODS OF PROTECTIONISM

Governments restrict international trade to protect domestic industries from foreign competition by using the different types of trade restrictions, depending on the extent of the negative impact of trade on the economy as well as the current economic condition of the country.

The following trade restrictions will be discussed in detail:
1) Tariffs
2) Quotas
3) Export Subsidies
4) Exchange Control
5) Embargoes

1) Tariffs

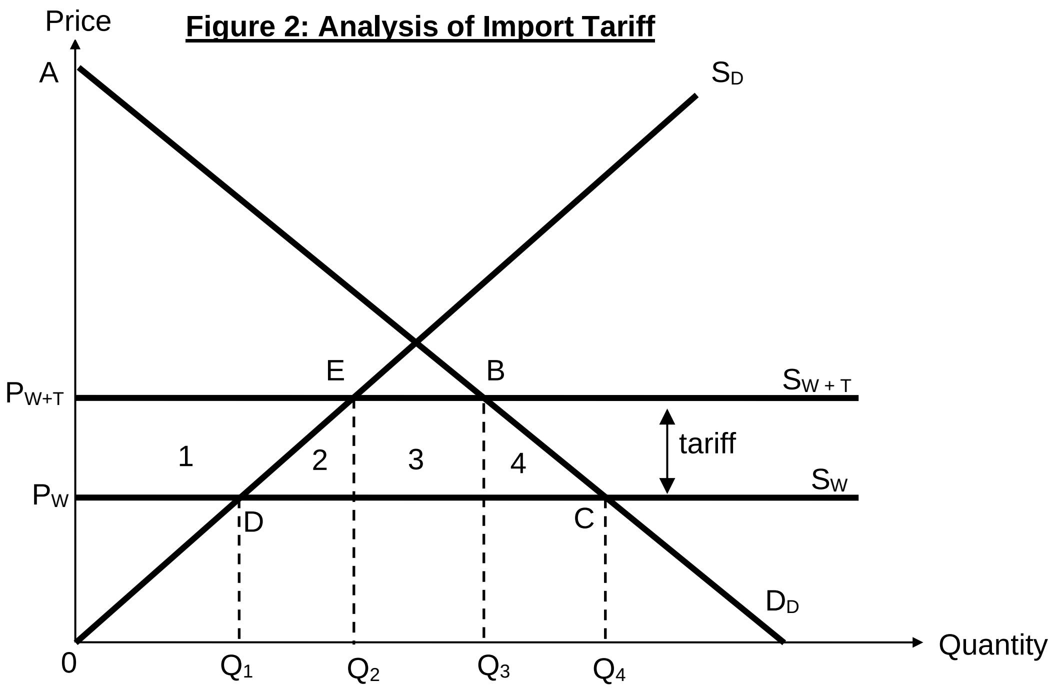
A tariff is a tax levied on imports mainly to protect home industries by making imports less competitive than local products.

- Import tariffs will increase price of imports, reducing total expenditure on imports (assuming demand for imports in price elastic), thereby lowering the country's imports

- The artificially higher import prices due to import tariffs makes domestically produced goods relatively cheaper now. This causes consumers to switch their expenditure from imports to the relatively cheaper domestically produced goods. The increase in consumption of domestically produced goods leads to increase in production of domestic out → increases employment, National output (or National income), thereby increase economic growth.

- In figure 2 below, D_D and S_D are the domestic demand and domestic supply curves of a good. Assuming that this country is too small to affect world prices (i.e. price taker), this country can import as much as it wants at the world price of P_W. Also assuming that there are an infinite number of firms in the world market, supply of imports Sw is perfectly price elastic at price P_W.

Figure 2: Analysis of Import Tariff



- At P_W, domestic production is Q_1 while the domestic consumption is Q_4. The difference of Q_1Q_4 is quantity of imports.

- A specific import tariff imposed would shift the world supply curve up from S_W to S_{W+T} raising the price of imports by the amount of the tariff i.e. P_W to P_{W+T}. At P_{W+T}, domestic production rises from Q_1 to Q_2 while domestic consumption falls from Q_4 to Q_3. As a result, imports fall from Q_1Q_4 to Q_2Q_3.

- As a result, import expenditure paid to foreign supplier is reduced from [Q_1Q_4 x Pw] to [Q_2Q_3xPw]. This helps to reduce the trade deficit of the economy. In addition, with domestic production increases from Q_1 to Q_2,, more workers are employed. This helps to reduce domestic unemployment.

- However, protectionist measures such as tariff only benefit the firms and workers of the protected industries. Consumers will be made worse off.

  - Before the tariff, the consumer surplus was area ACP_W, while the producer surplus was area below $0DP_W$.

  - After the tariff, prices rise from P_W to P_{W+T}. Consumer surplus falls by the area (1+2+3+4) to area ABP_{W+T} while domestic producer surplus rises by area 1 (redistribution effect) to area $0EP_{W+T}$. Area 3 (revenue effect) is the tariff revenue earned by the government.

  - Areas 2 and 4 are deadweight loss, reflecting the loss in welfare and allocative inefficiency.
    - Area 2 measures the additional opportunity cost (marginal cost) incurred due to the increase in domestic production (production effect). Since the domestic producers are relatively more inefficient than the foreign producers, increase production of output will incur higher marginal cost.
    - Area 4 measures the loss of consumer surplus due to the reduction in overall consumption (consumption effect) from Q_4 to Q_3.

Import Tariffs may sometimes be seen as a way to promote economic growth through **Import Substitution Industrialisation (ISI).**

The key idea is to generate economic growth by reducing foreign competition to encourage domestic production. As imports are restricted due to the use of tariffs, domestic industries will be encouraged to produce previously imported goods. Such goods produced domestically are then sold locally thereby increasing domestic consumption (**expenditure switching** from imported goods to domestically produced substitutes), leading to a rise in AD hence increasing national income, thereby spurring economic growth. If the domestic industries can produce these goods in sufficient quantities they may also be considered for exports, further adding to economic growth of the country.

In addition, such a policy can also promote more employment in the domestic sector by allowing the domestic industries to thrive, thus creating higher demand for labour, in the absence of foreign competition.

Limitations of Tariffs

- Tariffs increased price of imports. Unless it is sufficiently large, it will have little impact in reducing quantity of imports if the demand for import is price inelastic.
- Domestic consumers have to pay a higher price for imported goods and this could reduce their material SOL. This means also more inefficient local producers are able to sell their product.
- If tariffs are imposed on imported inputs such as steel, then domestic firms using steel in their production will incur a higher cost of production. Firms are likely to pass on the higher cost of production to consumers.
- Deadweight loss is created due to resource misallocation.
- Retaliation measures may be undertaken by the exporting countries.

2) Quotas

- A quota takes the form of a physical limitation on the quantity of the commodity which is allowed to enter the country in a given year.
- A quota may also be set on the value or volume of imports.
- It is usually enforced by issuing licenses to some group of individuals or firms

Box 2: Comparison between Tariff and Quota

Unlike a tariff which curbs imports by raising its price, the quota instead works by directly reducing the quantity of imports. Hence, with less imports available, domestic consumers have to buy more from domestic producers. Nevertheless, since the import quota reduces the supply of the good in the domestic market, the price of the good will rise. However, this price rise has no impact on the quantity imported, which is already fixed by the quota.

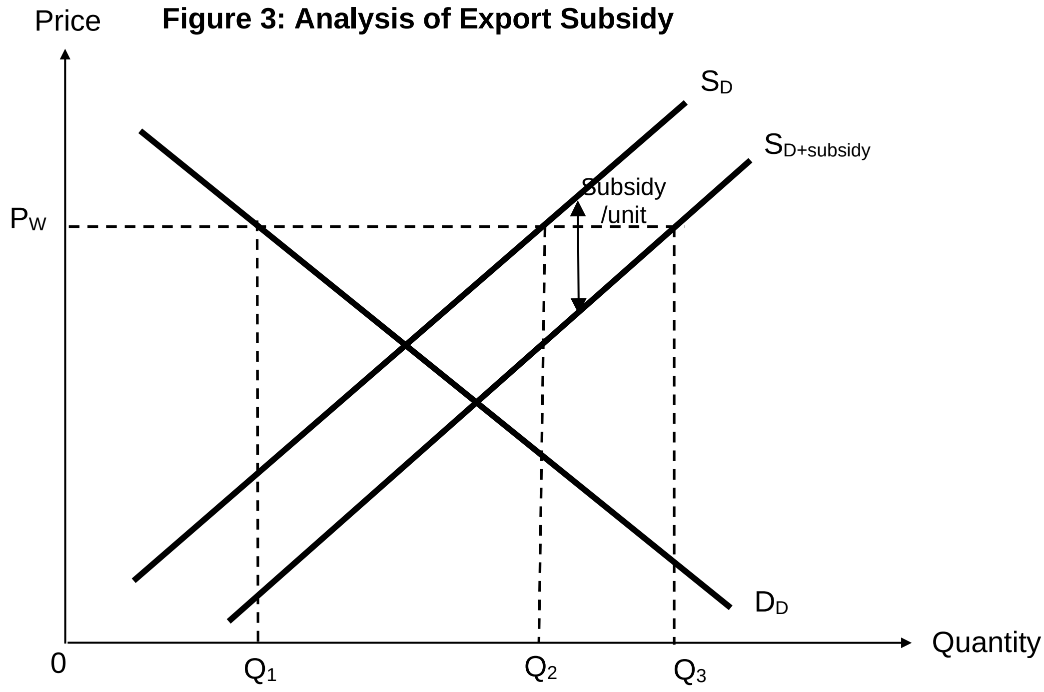
Limitations of Quotas

- Quotas do not bring in revenue for the government.
- It is usually set on the basis of certain volume which may grow increasingly out of date with times. This might penalise a local firm that wishes to expand its production.
- It might invite retaliation measures by the exporting countries.
- Quotas may not deal with the underlying cause of the Balance of Trade deficit which is the uncompetitive exports. They reduce competition for domestic firms and make them less efficient (and more complacent).
- They may also lead to retaliation, with an undesirable decrease in specialisation and world trade.

3) Export Subsidies

- These are given to domestic producers to help improve their export competitiveness.
- Alternatively, subsidies also allow domestic firms to export their products cheaper in a process known as dumping (this is a means of increasing exports rather than reducing imports).
- Subsidies can be given in the form of outright cash payments to a domestic producer after a sale has been completed or they could also be indirect in the form of tax concessions, loans at below market interest rates or sale of raw materials by the government to producers at more favourable prices, etc.

Figure 3: Analysis of Export Subsidy



- In Figure 3, D_D and S_D are the domestic demand and supply curves of a good. Assuming that this country is too small to affect world markets and prices (i.e. price taker), this country can export as much as it wants of the good at the world price of P_W. The domestic production is Q_2 while the domestic consumption is Q_1, with exports being equal to Q_1Q_2.

- With an export subsidy being imposed, this causes the domestic supply curve to increase to $S_{D+subsidy}$. This enables producers, at the world price, to increase the production of exports from Q_1Q_2 to Q_1Q_3. This would increase the economy's export revenue, increase AD and spur economic growth, assuming that the economy still has some spare capacity.

Limitations of Export Subsidies

It may lead to a drain in government resources as subsidies involve government expenditure that could have been spent on development projects. Taxpayers eventually pay for the subsidies.

4) Exchange Controls

- To pay for imports, the importers have to obtain currencies of foreign suppliers.
- Importers requiring foreign exchange must apply to the Central Bank which can hence control the volume of imports by controlling the issue of foreign currency.
- By restricting the availability of such foreign currency through some system of exchange control, the government is able to reduce the purchase of imports.

Limitations of Exchange Controls

- May cause the development of black market for foreign exchange and encourage smuggling.
- Creates uncertainty among local producers depending on imported raw materials to produce their product as they are unable to plan ahead.

5) Embargoes

- They are total ban on certain imports for different reasons.
- They have also been used as diplomatic tools by governments against each other. For example, The United States has maintained embargoes against various foreign countries, such as Cuba, Iran, Iraq, Libya, North Korea etc for security and political reasons.

Limitations of embargoes:
- May encourage smuggling and development of black markets.

6.1.3 Effects of Protectionism (in addition to the limitation points specific to each policy above)

To the GOVERNMENT/ECONOMY:

When a government adopts protectionist measures on a wide range of imports, it is often taken to address domestic issue such as unemployment, and balance of trade deficit.

Positive impacts

- **Increases Economic Growth (must include AD/AS analysis)**
  - Government protectionist policies essentially make imports relatively more expensive this reducing the level of competition in the country for the domestic producers. so that consumers will switch to domestically produced goods.
  - Consumer expenditure on domestic goods will then rise. AD will increase, thereby increasing Real GDP increase through the multiplier process.
  - Hence, by reducing import expenditure and diverting consumption to locally produced goods, the government is able to restore economic growth.

- **Reduces Cyclical Unemployment (must include AD/AS analysis)**
  - In period of recession and rising cyclical unemployment, protectionist policy may be used to address this domestic economic problem.
  - Expenditure switching policies such as import tariffs will divert demand for imports to demand for domestically produced goods. This will increase production of domestic goods will lead to increase in the derived demand for labour. This helps to reduce the problem of unemployment.

- **Improves Balance of Payments Balance via an improvement in Balance of Trade**
  - At the same time, the reduction in import expenditure can reduce the current account deficit in the balance of payments.

Negative Impacts:

Protectionism also has some negative unintended consequences on the economy:

- **Cost-Push Inflation (must include AD/AS analysis)**
  - If the tariffs are imposed on raw materials and intermediate inputs, domestic firms will incur a higher cost of production. This will lead to a fall in SRAS. This inevitably will result in cost-push inflation.
  - For instance, the high inflation rate (7% in Dec 2021) in the US economy was caused by the hefty import tariffs imposed on a wide range of goods.

- **Negative Impacts on Economic Growth (must include AD/AS analysis)**
    - In addition, as a beggar-thy-neighbour policy, protectionism will worsen the economic performance of the trading partners. When a country imposes trade barriers on imports, her trading partners will experience a fall in national income. This will eventually reduce their purchasing power to buy goods from the country that initiated protectionism. In the long run, protectionism is mutually damaging to all countries involved.
    - Furthermore, it is likely that countries subject to trade restrictions will retaliate. When this occurs, protectionism will become counter-productive. The initial benefit arising from lower import expenditure will be partially offset by the fall in export revenue. The final improvement on net exports may be limited.

➔ It should be noted that while the economy may benefit from protectionist measures in the short, it is not a long term solution as it will creates negative repercussions on the economy. Protectionism is at best a short term solution.

➔ In addition, if the underlying root cause of unemployment and trade deficit is the loss in comparative advantage to other economies, protectionism does not address the root cause. Other policies such as supply side policies should be adopted to develop new areas of comparative advantage.

To PRODUCERS

- Firms in the protected industries stand to gain. This is because imports have become less competitive due to tariffs and quota. The less efficient firms in the protected industries will now be able to survive even though they experience comparative disadvantage in the production of the goods. For example, tariff on imported steel can allow domestic firms producing steel to survive.
- However, firms in other industries can be made worse off. As steel is used as an input, producers in car manufacturing and construction industries will face a higher cost of production.

To CONSUMERS

- Similar to producers, workers in the protected industries stand to gain. This is because firms in the protected industries will enjoy an increase in output. In order to produce more goods, firms will hire more workers. Using the same example that steel industry is protected from imports, the unemployment among steel workers will reduce. Consequently, the steel workers will not experience a fall in income due to unemployment. Their material standard of living is preserved.
- However, as explained above that firms will have to face a higher cost of production, they will pass on the higher cost to consumers in the form of higher price. By and large, consumers will pay more for the final products. Consumer welfare is reduced as a result.

6.2 POLICY: ECONOMIC COOPERATION AND FREE TRADE AGREEMENTS

Economic integration refers to the process where neighbouring countries integrate as one economic unit to take advantage of the extended market and bring about better allocation of resources.

The benefits and costs of economic co-operation and trade agreements between countries should be considered from the perspectives of consumers, producers and the government.

6.2.1 Free Trade Areas

This refers to a trade bloc whose member countries abolish all tariff and adopt non-tariff barriers among themselves but each can retain whatever restrictions it wants for non-member countries. It is a form of preferential trading arrangement to give special preference or trade concessions to member states. E.g. the ASEAN Free Trade Area (AFTA).

[Note: To create a Free Trade Area, countries have to first sign a Free Trade Agreement, which is a legally binding international treaty between two or more trading partners that seek to promote trade by reducing barriers to trade in goods, services and investments. They may also allow for freer mobility of investments and labour, as well as other forms of social and political agreements.]

FTAs with Singapore

Singapore has established many FTAs with other countries. This includes the Regional Comprehensive Economic Partnership (RCEP) – largest FTA in history, the ASEAN Free Trade Area (AFTA) and the most recent CPTPP (Comprehensive and Progressive Agreement for Trans-Pacific Partnership) and RCEP (Regional Comprehensive Economic Partnership).

Why has Singapore signed FTAs with so many countries? Why do these countries want to sign FTAs with Singapore?

- Singapore does not have trade barriers for almost all goods and services. Singapore definitely ***benefits*** from an expanded export market when it enters into an FTA. Hence it is always beneficial for Singapore to sign an FTA with another country that initially has import restrictions on Singapore's products.

- However, we should also analyse why other countries want to sign FTAs with Singapore given that they already have unrestricted access to the Singapore market. One explanation could be that they ***expect more trade creation than trade diversion***. However, even if they do not experience overall trade creation, there could also be other reasons.

- The first reason is that signing a FTA with Singapore enables the country's exports to ***bypass trade barriers*** *and* ***gain access to a third party market*** *that also has a FTA with Singapore*. The FTAs also ***draw in foreign investments*** because foreign firms need to set up processing operations here in order to meet the requirements stipulated by the Rules of Origin. For example, China may get to enjoy tariff free access (or at least tariff reductions) to the USA if they were to export their goods through Singapore rather than exporting their goods directly to the USA, as long as the rules of origin are met.

- Secondly, Singapore may also be offering some other benefits to a FTA partner. For example, Singapore could offer to ***transfer knowledge and technology*** to the other country.

- Thirdly, ***extradition treaties and cooperation in security issues*** could also be part of the agreement. Hence, ***political considerations*** also come into play alongside economic ones.

  By negotiating a vast network of FTAs, Singapore enhances its position as a shipping hub. This increases her earnings from port and shipping related services as more ships stop at Singapore to offload the goods that are meant for re-export.

6.2.2 Customs Union

This refers to a trade bloc where two or more countries agree to free all internal trade barriers and to also levy a common set of external trade barriers against non-member countries. E.g. Southern African Customs Union (SACU) and the Gulf Cooperation Council (GCC).

6.2.3 Common Market

A common market involves an even higher degree of economic integration, whereby member countries operate as a single market. Like a customs union, a common market eliminates tariffs and quotas between member countries and establishes common external tariffs and quotas with non-member countries. In addition, members countries agree to eliminate all restrictions on the movement of factors of production within the common market. Hence, labour and capital are free to cross borders between all member countries. An example of a common market is the European Union (EU).

6.2.4 The World Trade Organisation (WTO)

The WTO is an international organisation dealing with the global rules on trade between nations. At its heart are the WTO agreements, negotiated and signed by the bulk of the world's trading nations and ratified in their parliaments. The goal is to ensure that trade flows as smoothly, predictably and freely as possible. However, the pace of trade liberalisation via the WTO is very slow because consensus is difficult with so many countries involved, each with very different domestic economic and political interests.

The functions of the WTO include administering WTO trade agreements, being a forum for trade negotiations, handling trade disputes, monitoring national trade policies, providing technical assistance and training to developing countries, and cooperating with other international organisations.

6.2.5 BENEFITS AND COSTS OF ECONOMIC COOPERATION AND TRADE AGREEMENTS

These impacts are similar to the ones you learnt on the advantages and disadvantages of international trade in Section 2.4.

6.2.6 IMPACT AND RELEVANCE OF FREE TRADE AREA ON SINGAPORE

- Singapore is a *highly trade dependent economy*, with the highest trade to GDP ratio in the world. Not only does she have to *rely heavily on imports* as her only source of food, energy and industrial raw materials, her small domestic market also means that the industries must *rely on overseas export markets to absorb their outputs*. Furthermore, trade activities have historically been and continue to be an *important source of economic wealth* for the country. Singapore therefore has to be *free trading nation*.

- FTAs enhances *trade* and *investment flows* by providing lower tariffs for export of goods, hassle free custom procedures, improved market access for various professional and commercial services, easy entry for businessmen into other countries, better terms for investment in foreign countries etc. FTAs will set a framework for businesses in a small country like Singapore to grow and expand globally, which in turn will generate more employment opportunities for Singaporeans.

Source: Singapore's free trade agreements: Making pacts – and the making of a sound economy, The Straits Times, 9 Dec 2019.

How FTAs benefit Singapore

Since its first bilateral free trade agreement (FTA) with New Zealand almost 20 years ago, Singapore has signed 25 FTAs with 37 partners. These help local companies access overseas markets, clear their goods more quickly and easily, and safeguard their businesses. Here are the key benefits of FTAs.

TRADE IN GOODS

1. **More competitive exports by reducing the duties consumers have to pay**

Asean Trade in Goods Agreement eliminated more than 98 per cent of all tariffs in the region, allowing businesses to export to Asean without incurring tariffs.

2. **Streamlined Customs procedures allow goods to be cleared more quickly and efficiently**

- Under the China-Singapore FTA upgrade, traders no longer have to submit Certificates of Origin in hard copy to China.
- China's Customs authorities will accord Singapore traders preferential treatment – release of nationwide express shipments within six hours of arrival, and all goods within 48 hours of arrival.

TRADE IN SERVICES

1. **Preferential access to service sectors in foreign markets**
2. **Greater ease of providing services from Singapore to overseas consumers**

GOVERNMENT PROCUREMENT

1. **More access to government procurement projects in partner country**
2. **Transparent, objective and non-discriminatory tender specifications**

Under the European Union-Singapore FTA, companies can participate in tenders for goods and services conducted by EU government entities in railway, computer, telecommunications and landscape architecture services.

INTELLECTUAL PROPERTY (IP) PROTECTION

Stronger IP protections – trademark applications, patent protection and registered designs

The US-Singapore FTA provides for greater protections in copyrights, trademarks, patents and related rights, and anti-piracy IP enforcement. These protections are above current commitments under the World Trade Organisation Agreement on Trade-Related Aspects of Intellectual Property.

INVESTMENTS

1. **Eliminate regulations that restrict market access or provide favourable treatment to domestic firms**
2. **Neutral avenue for recourse in case of dispute with host state**

The Comprehensive and Progressive Agreement for Trans-Pacific Partnership sets strong investment rules that ensure Singapore businesses will not be treated less favourably than a local business. These rules improve transparency and help provide a more predictable business environment for companies.

KEY FIGURES

A study by MTI estimated that, on average, Singapore businesses' export of goods to a trade agreement partner increases by about 18% two years after the agreement's entry into force and a further 16% in the third year.

Tariffs that FTAs helped businesses save

2016	About $730 million
2006	$450m

Since the Comprehensive Economic Cooperation Agreement was signed in 2005...

Bilateral trade has increased by $9.7 billion.

Bilateral investments have increased by 26 times.

PMET jobs for locals have grown by more than 400,000 to reach 1.25 million last year.

PMET share among employed locals has grown.

2008	2018
50.1%	56.9%

Source: MINISTRY OF TRADE AND INDUSTRY SUNDAY TIMES GRAPHICS

7. SINGAPORE'S TRADE POLICY

DID YOU KNOW?

Since the mid-1960s, Singapore's trade regime can best be described as that of an outward-oriented, very open re-export economy pursuing selective export promotion.

1959 – 1965: Import Substitution
With independence from the British in 1959, the government attempted to diversify the entrepôt base (which was seen as constraining in terms of potential income and employment growth) by encouraging import-substitution industrialization for the Malaysian market.

To absorb excess labour, labour-intensive industries were encouraged to expand while others were created.

To complement this strategy, the government provided infant industry protection, fiscal incentives and industrial infrastructure for selected industries

1966 – 1973: Export Orientation
When Singapore became independent in 1965, trade policy switched from import substitution to export orientation. This was due to our small domestic market, given the loss of access to the large Malaysian market and a lack of indigenous industrial entrepreneurs.

Industries like textiles, garments and television assembly which had potential of developing export markets had preferential treatment.

MNCs were encouraged to invest here. They brought with them complementary resources like better technology, capital inputs, established brands and marketing outlets and managerial skills.

Industries that expanded were petroleum refining, chemical products, electrical and electronic parts.

Full employment was achieved in the early 1970s.

1974 – 1980s: Further Export Orientation
As OPEC raised oil prices, Singapore experienced inflation and a severe recession in the 1974-1975 period, adversely hitting the labour-intensive export industries.

In response, the government launched the "Second Industrial Revolution" to promote higher value-added, high technology industries together with skills and technology upgrading.

1990s – Present: Venturing beyond our domestic economy
Besides developing the local industries, this period saw a trend towards regionalization and globalisation. Local firms are encouraged to venture into developing countries to take advantage of cheaper labour or to move into the service industries.

Our government has also consistently pursued trade liberalisation through various institutions e.g. WTO.

Free Trade Agreements (FTAs) are also being struck with other countries. (More information about FTA found in section 2.8, page 33 onwards.) Such FTAs are superhighways that connect Singapore with key economies in North & South America, Europe, Asia and even the Middle East. Global trading routes become congested as competition grows, but our businesses will enjoy first-mover advantage through FTAs. Goods and services flow more freely. Economic integration deepens.

GLOSSARY OF KEY TERMS

1.	Absolute advantage	A country has an absolute advantage over another in the production of a good if it can produce it at a lower absolute cost per unit (i.e. using fewer resources or same resources in less time).
2.	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 i.e. if it has to forgo less of other goods in order to produce it.
2.	Dynamic comparative advantage	Refers to a country's comparative advantage changing over time due to changes in factor endowments.
3.	Free Trade Agreement	It is a legally binding agreement between 2 or more nations to lift bilateral trade through measures such as lowering tariffs and other trade barriers to bring about closer economic integration
4.	Globalisation	The process of economic integration around the world, affecting the markets for output (goods and services) and inputs (capital and labour flows) and the diffusion of knowledge and information.
5.	International trade	International Trade refers to the exchange of goods and services across international borders without any restrictions.
6.	Principle of comparative advantage	States that for mutually beneficial trade to occur, countries should specialise and export the good that it has comparative advantage in, and import the good that it does not have comparative advantage in.
8.	Protectionism	Defined as the act of imposing economic policies aimed at restricting trade between countries, designed primarily to protect domestic producers and workers from foreign competition
9.	Terms of trade	It is the rate at which exports can be exchanged for imports (rate of exchange of exports for imports)

Selected Past Year Essay Questions Related to This Topic:

A-Level Essay Questions	Marks	Year
Globalisation has been a major influence on Singapore's economic performance. The uncertainty and instability happening around the world in recent years could threaten the economic benefits that globalisation brings. (a) Explain two different factors that have enabled globalisation to occur. [15] (b) Assess whether current global economic developments will have a positive or negative effect on Singapore's future economic performance. [15]	**25**	**2019**

Other JCs Prelim Essay Question	School	Year
Anti-globalisation sentiments have been developing in recent years. President Donald Trump ended US involvement in the Trans-Pacific Partnership (TPP), citing protection of US jobs and businesses as the reason. UK voted out of European Union, where the vote for 'Brexit' was strongest in regions devastated by wage undercuts and the offshoring of manufacturing jobs. (a) Explain the reasons behind the growing anti-globalisation sentiment. [10] (b) To what extent can globalisation address the fundamental economic problem of scarcity? [15]	**DHS**	**2019**
Various factors, including improvements in transport and digital communication networks, have led to a trend of economies becoming more interconnected. However, this trend seems to be reversing and economists now fear the effects of increasing deglobalisation (diminished interconnectedness between economies). (a) Explain the possible factors that have led to greater interconnectedness between economies. [10] (b) Discuss whether governments should be concerned about the impact of deglobalisation on its budget and balance of payments positions. [15]	**EJC**	**2019**
Globalisation has allowed Singapore to overcome its natural constraints of limited land, labour and market size to achieve rapid economic growth through a capital and skills-intensive economy in recent years. While the benefits of globalisation have been enormous, skill-biased technological change due to globalisation, have necessitated a more proactive policy response to counter the rise in income inequality. (a) Explain how globalisation would change Singapore's comparative advantage over time. [10]	**NYJC**	**2019**

(b) Discuss whether a gain in a country's comparative advantage would always lead to a positive macroeconomic impact for a small and open economy. [15]		
(a) Explain why a country's pattern of trade may change over time. [10] (b) Discuss the impact of a country's openness on its consumers, producers and employees. [15]	**RI**	**2019**
In recent years, increasing protectionism and rapid technological change have affected Singapore in various aspects, such as trade and her level of competitiveness. (a) Explain the determinants of the pattern of trade between Singapore and the rest of the world. [10] (b) Assess the measures adopted by the Singapore government to maintain competitiveness in such a global environment. [15]	**RVHS**	**2019**
Globalisation has changed the volume, composition and direction of trade between Singapore and the rest of the world. Countries continue to look for ways to harness the benefits of globalisation. (a) Explain how globalisation affects Singapore's pattern of trade. [10] (b) Discuss the appropriateness of increasing productivity in order to harness the benefits of globalisation. [15]	**TMJC**	**2019**

Synoptic (Cross topic) A-Level & Other JC Essay Questions		
Essay Question	**A-Levels / School**	**Year**
The British voted in a referendum in 2016 to withdraw the United Kingdom (UK) from the European Union (EU) and this is commonly known as Brexit. This has raised the fear of an adverse impact on exports and foreign direct investment. It has also resulted in an immediate drastic depreciation in the pound that caused inflation to rise above the 2% target, to 3.1% in 2017, adding to the UK cost of living squeeze. This happens at a time of stagnant living standards which has persisted since the global financial crisis. (a) Using the circular flow of income, explain how the Brexit referendum might impact UK's national income. [10] (b) Assess the extent to which the Brexit referendum would increase cost of living and decrease standard of living in the UK. [15]	**HCI**	**2019**
In the small island economy of Singapore, producers face different constraints than those in the larger economies. (a) Explain how firms would be affected by constraints, such as having a small domestic marker and lack of resources. [10]	**A-Levels**	**2017 (H2)**

(b) Assess which are the appropriate policies that firms and government could adopt to overcome such constraints. [15]		
In order for specialisation to be beneficial, it must be accompanied by exchange. (a) Explain how benefits to the economy can arise from specialisation and exchange. [10] (b) Very often these benefits are not fully achieved in domestic and international markets. Discuss the reasons for this. [15]	**A-Levels**	**2014 (H2)**

APPENDIX 1: **GRAPHICAL ILLUSTRATION OF PRODUCTION POSSIBILITIES CURVES (PPC) AND CONSUMPTION POSSIBILITIES CURVES (CPC) FOR EACH COUNTRY**

- The earlier sections illustrated numerically the production possibilities of each country before and after specialisation.
- Graphically, each country's PPC *(assuming constant opportunity costs*) can be plotted as shown in Figure 1.

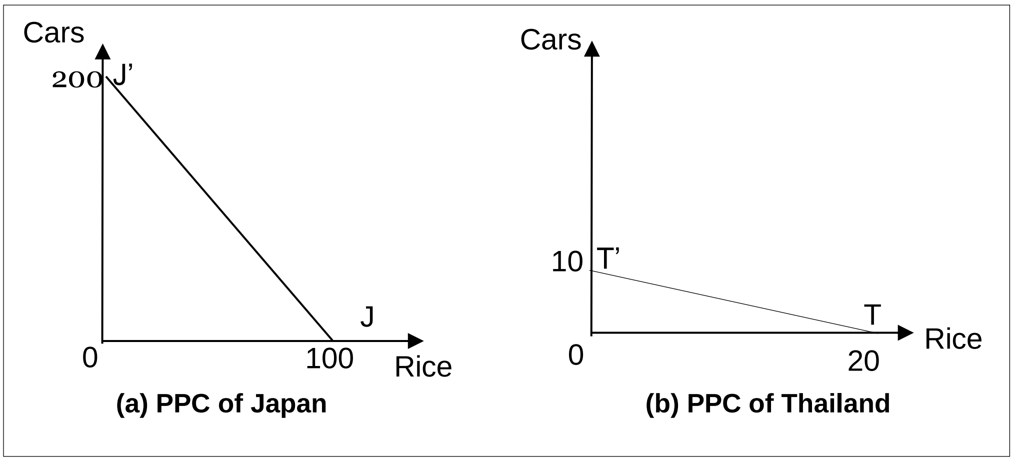


Figure 1: PPCs for Japan and Thailand Before Trade

Referring to *Figure 1*:

- JJ' represents the PPC for Japan while TT' represents the PPC for Thailand.
  - » Slope of JJ' = opportunity cost = 1C:0.5R
  - » Slope of TT' = opportunity cost = 1C:2R
- Recall that the PPC represents the highest attainable output levels that each country can produce at full employment, given her resources and state of technology.

Before Trade:

- Before specialisation (Mark out points ***A*** & ***B*** yourself!)
  - » Japan produces and consumes at point A with 100 units of cars and 50 units of rice
  - » Thailand produces and consumes at point B with 5 units of cars and 10 units of rice.
- After specialisation (assuming complete specialisation at the extreme) (Mark out points ***A'*** & ***B'*** yourself!)
  - » Japan will produce at point A' with 200 units of cars
  - » Thailand will produce at point B' with 20 units of rice.

After Trade:

- Trading with a mutually beneficial TOT must follow that specialisation. Graphically, each country's CPC can be plotted as shown in Figure 2 below:

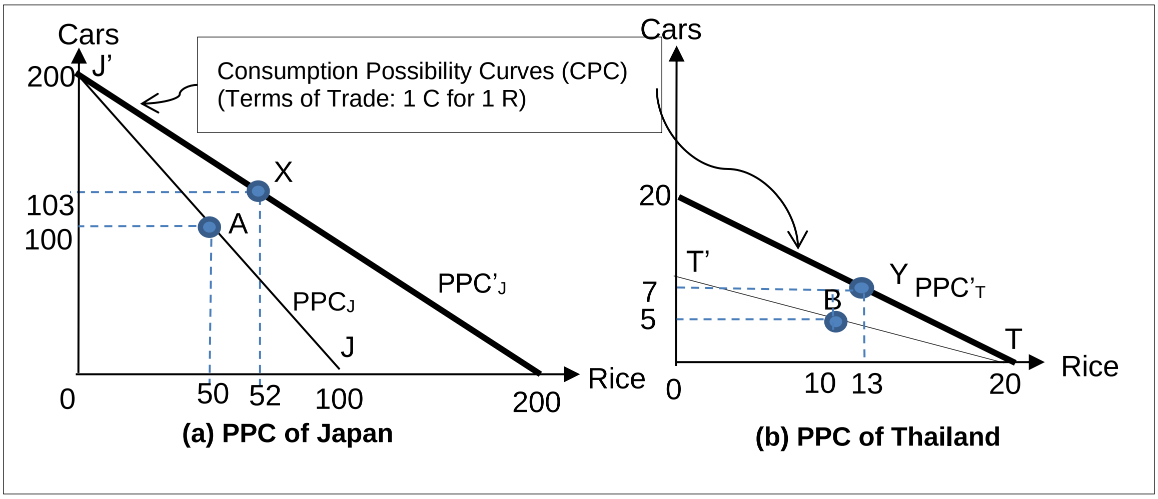


Figure 2: Consumption Possibilities for Both Countries After Trade

Referring to ***Figure 2*** above:

(a) Japan:

- Line JJ' is the PPC for Japan. All points to the right of JJ' are unattainable given her productive capacity.
- However, when trade arises at a TOT of 1 unit of car for 1 units of rice, the **CPC** or **TOT line** is drawn with the slope equal to the rate of exchange (refer to bold line).
- Slope of TOT line = rate of exchange = 1C:1R
- In our numerical example (Table 4), Japan has chosen to consume at point X after specialisation and trade. As seen, point X allows her to consume more of both goods compared to the previous point A.

(b) Thailand:

- For Thailand, she now consumes at point Y, which is also an improvement from the previous point B.
- Slope of TOT line = 1C:1R

In conclusion, according to the principle of comparative advantage, we see that when a country specialises in a good, which incurs a lower opportunity cost as compared to another country, and both countries engage in trade, world output increases. Assuming a mutually beneficial terms of trade, both countries are also able to consume outside their PPCs on their CPCs, as shown in figure 2, thus benefiting from free trade.

APPENDIX 2: WTO & IMPORTANT WORLD TRADE AGREEMENTS

BOX 1: The World Trade Organization (WTO) is an international organization whose primary purpose is to open trade for the benefit of all.

The WTO provides a forum for negotiating agreements aimed at reducing obstacles to international trade and ensuring a level playing field for all, thus contributing to economic growth and development. The WTO also provides a legal and institutional framework for the implementation and monitoring of these agreements, as well as for settling disputes arising from their interpretation and application. The current body of trade agreements comprising the WTO consists of 16 different multilateral agreements (to which all WTO members are parties) and two different plurilateral agreements (to which only some WTO members are parties).

Important WTO Trade Agreements

The **Multi-Fibre Arrangement** (MFA) governed the world trade in textiles and garments from 1974 through 2004, imposing quotas on the amount developing countries could export to developed countries. Since developing countries have a comparative advantage in textile production due to the labour intensive nature of the industry, the MFA was introduced in 1974 as a short-term measure intended to allow developed countries to adjust to imports from the developing world. The MFA expired on 1 January 2005.

The **General Agreement on Trade in Services** (GATS) is a treaty that entered into force in January 1995 as a result of the Uruguay Round negotiations. The treaty was created to extend the multilateral trading system to service sector, in the same way the General Agreement on Tariffs and Trade provides such a system for merchandise trade.

The **Agreement on Technical Barriers to Trade** (TBT Agreement) is an international treaty administered by the WTO to ensure that technical regulations, standards, testing, and certification procedures do not create unnecessary obstacles to trade. The agreement prohibits technical requirements created in order to limit trade, as opposed to technical requirements created for legitimate purposes such as consumer or environmental protection.

The **Agreement on Trade Related Aspects of Intellectual Property Rights** (TRIPS) is an international agreement administered by the WTO that sets down minimum standards for many forms of intellectual property. TRIPS also specify enforcement procedures, remedies, and dispute resolution procedures. The agreements also aim to enable such protection and enforcement of intellectual property rights to ideally meet the objectives of promoting technological innovation and the transferring and dissemination of technology in a manner that is conducive to social and economic welfare