ST ANDREW'S JUNIOR COLLEGE
JC2 H2 ECONOMICS 2024

Globalisation and the International Economy

In this theme, students will use concepts, theories and principles from earlier themes to examine the problem of scarcity and the concept of trade-offs at the broader level of International Economics.

Before this, we have examined the macroeconomic aims, issues and policies relating to growth, inflation, unemployment, exchange rates, balance of trade and income distribution, with particular reference to the Singapore context. The key focus is on governments as economic agents, while recognising that the extent and type of government intervention differ among economies.

This theme provides an overview of the workings and linkages of the international economy, which allows students to examine Singapore's position in the global economy and the impact of globalisation on the Singapore economy; the impact of external trends and developments on the national, regional and international economies, and their implications.

Important concepts and tools and analysis

- Globalisation
- Free trade
- Protectionism: Tariffs and non-tariff measures
- International and reginal economic co-operation

Key questions to consider

1. ***Why do countries engage in free trade?***
2. ***What is protectionism and why do countries engage in it?***
3. ***How do countries engage in protectionism and what are the benefits and costs of doing so?***
4. ***How do countries engage in economic co-operation and trade agreements and what are the benefits and costs of doing so?***
5. ***What is the globalisation and what are the factors that drive it?***
6. ***How does globalisation benefit or harm different economic agents and the economy?***

Contents

Why do countries engage in free trade?

1. International trade

International trade involves the exchange of goods and services between countries.

On one hand, international trade can be a source of economic growth for a country, it can also be a means to sustain a country's economic growth, help a country to reduce unemployment, attain a lower inflation rate, a favourable balance of trade and ultimately improve a nation's standard of living. However, international trade could also be the reason why some countries face both macroeconomic and microeconomic problems.

Free Trade can take place when two or more countries can exchange goods and services without any trade barriers between themselves.

Trade barriers can include tariffs and quotas that will be covered in later.

1.1. Basis for trade

While there are many reasons for trade such as the desire for consumer choice (demand factor), the basis for trade between countries can be largely explained using the Theory of Comparative Advantage (supply factor).

The next section explains the Theory of Comparative Advantage and what affects a country's comparative advantage. Section 2 elaborates on the different demand and supply factors affecting patterns of trade.

2. Theory of Comparative Advantage (Supply factor affecting trade)

The **Theory of Comparative Advantage** (Theory of CA) states that countries can gain from trade if there are differences in the opportunity costs of producing specific goods among them. Countries can benefit from specialising and exporting products in which they have a comparative advantage and importing products in which they do not have a comparative advantage.

International trade is possible based on **differences in opportunity costs between countries** and free trade should be advocated based on the Theory of Comparative Advantage. The theory was developed by David Ricardo to show that trade can be mutually beneficial based on the differing opportunity costs of producing goods in different countries and beneficial exchange ratio (terms of trade) between countries.

A country is said to have comparative advantage in the production of a good when the country can produce a good at a lower opportunity cost than another country.

In other words, a country has the comparative advantage in the production of a good if it forgoes fewer units of an alternative good that it could have produced with its resources compared to another country.

2.1. Numerical Illustration of the Theory of CA

The following is a numerical illustration to help you better understand what the Theory of CA is. You are NOT required to reproduce this in examinations.

In our example below, we assume that China and Japan have the same factor endowment and that each country devotes half of its resources to the production of each good.

(Note: If we choose not to assume that China and Japan have the same factor endowment, then we will need to consider instead how many units of resources they need to use in order to produce 1 unit of the same good to illustrate comparative advantage.)

Table 1: Production Possibilities of China and Japan before specialisation

	Clothing	**Food**
China	200	100
Japan	150	50
World output	**350**	**150**

NOTE: *The figures above represent the maximum output if each country uses half of its resources for the production of clothing and the other half for food.*

In order to find out the comparative advantage of China and Japan, it is necessary for us to calculate the opportunity costs of producing food and clothing in the two countries.

Table 2: Opportunity Cost of producing food and clothing in China

	Opportunity Cost of producing	
	1 unit of Clothing	**1 unit of Food**
China	0.5 F	2 C
Japan	0.33 F	3 C

From Table 2 above, the following can be seen:

In China, the opportunity cost of producing 1 unit of clothing is **1/2** or **0.5** unit of food.

In Japan, the opportunity cost of producing 1 unit of clothing is **1/3** or **0.33** unit of food.

It can be seen that the opportunity cost of producing clothing is lower in Japan.

Therefore, **Japan** has a comparative advantage in producing clothing.

Alternatively, we can look at the opportunity cost of producing food in terms of clothing in the two countries in Table 2.

In China, the opportunity cost of producing 1 unit of food is **2** units of clothing.

In Japan, the opportunity cost of producing 1 unit of food is **3** units of clothing.

From the above, it can be seen that the opportunity cost of producing food is lower in China.

Therefore, China has a comparative advantage in producing food.

Benefits of Specialisation

Let us assume that Japan engages in total specialisation in the production of clothing in which it has the comparative advantage i.e. incurs a lower opportunity costs and China devotes 75% of her resource to food production (her comparative advantage) and 25% of her resources to the production of clothing. Table 3 below shows the output of the clothing and food when the above resource allocation is assumed.

Table 3: Output of China and Japan after specialisation before trade

	Clothing	**Food**
China	100	150
Japan	300	0
World output	**400**	**150**

The immediate gains from specialisation can be seen from Table 3 – total world output of clothing rises while that of food remains the same.

Gains from Trade

To illustrate gains from specialisation and trade, we need to ascertain a ***mutually beneficial*** terms of trade between China and Japan.

The terms of trade is the rate of exchange of one good in terms of another. For both countries to ***mutually*** benefit from specialisation and trade in the example above, the terms of trade for 1 unit of food must lie between 2 and 3 units of clothing which is the opportunity cost of producing 1 unit of food in the 2 countries (Refer to Table 2).

Let us assume that the terms of trade is 1 unit of food = 2.5 units of clothing. We further assume that Japan exports 125 units of clothing to China. Based on the terms of trade, it will thus receive 50 units of food from China. By selling 50 units of food to Japan in return for 125 units of clothing, China has 100 units of food left. Their consumption bundles, as reflected in Table 4, are:

Table 4: Consumption of China and Japan after specialisation and trade

	Clothing	**Food**
China	100 (+125) = 225	150 (-50) =100
Japan	300 (-125) = 175	0 (+50) = 50
World output	**400**	**150**

Comparing Tables 1 and 4, China gains 25 units of clothing and Japan too gains 25 units of clothing.

From this example, it can be seen that even though China can produce more of both clothing and food with a given amount of resources than Japan, specialisation and trade – based on the Theory of Comparative Advantage – can still benefit both countries if the terms of trade are mutually beneficial.

Gains from trade arise because countries differ in their opportunity costs which depend on the relative cost of producing goods. When opportunity costs of producing the two goods are the same in both countries, there will ***not*** be any gains from specialisation and trade.

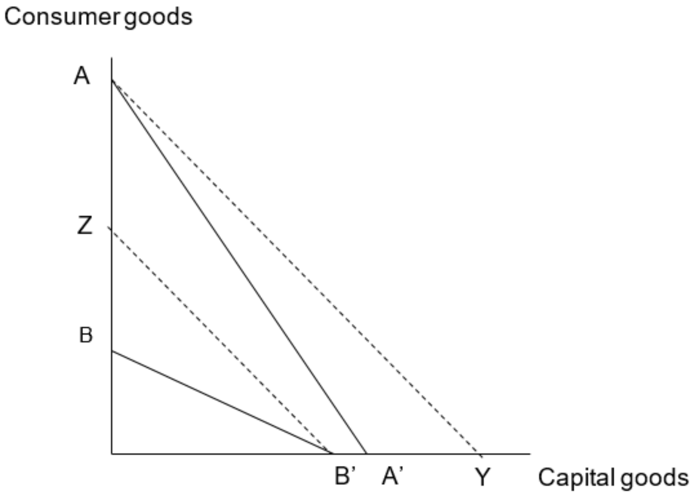
Specialisation can take place when there are differences in opportunity costs of producing the goods and services. Trade will take place only if the **terms of trade are mutually beneficial** to all the trading partners.

For more information on terms of trade, refer to Appendix 1.

RECALL

In Chapter 1 (Central Problem of Economics), we had used the PPC to illustrate the benefits of specialisation and trade.

The production possibility curve (PPC) shows all combinations of the maximum quantities of two goods that can be produced by an economy with a given amount of resources fully and efficiently employed at a given state of technology in a given time period.



The PPCs of country A (AA') and country B (BB') are shown above. In the absence of trade, each country is forced to consume a combination of goods on or inside its PPC. This means that its consumption possibilities are restricted to any point on the respective PPCs.

With specialisation and trade with a favourable terms of trade, both countries are better off as they are now able to consume beyond their PPCs. Country A can consume at any point along AY Country B can consume along B'Z. Since the quantity of goods and services available to residents in both countries have increased, they are able to enjoy an increase in the material SOL.

2.2. Evaluation of the Theory of CA

The Theory of Comparative Advantage can be used to determine the types of goods and services that most counties in the world are specialising, exports and imports. However, gains from specialisation and trade discussed in the Theory of Comparative Advantage are based on many assumptions that may not hold or be possible in the real world.

a) Increasing Opportunity Costs

The assumption of constant opportunity cost is unlikely to hold in the real world. When a country starts to specialise in the production of one good, it will have to use resources that are less and less suited to the production of that good and which are more suited to the production of other goods. This causes the country to experience increasing opportunity costs. This is because the factors of production are not homogenous. Hence, increasing opportunity costs can limit the degree of specialisation and gains of a country.

b) Factor Immobility within the Country

The assumption of perfect mobility of factors of production within each country is unlikely to hold in the real world. To benefit from trade based on comparative advantage, it is necessary for a country to move its resources (e.g. labour) from the production of one good to the other in which it has a comparative advantage. However, in the real world, factors are not perfectly mobile. This limits total specialisation of production of one good in all countries.

c) *Transport Costs*

The assumption of no transport cost is unlikely to hold in the real world. International trade requires the movement of goods from one country to another. High transport costs may negate the gains from international specialisation and trade. In addition, high transport costs, especially of certain bulky goods and materials which command little market value, may lower the gains from trade. Thus, too high a transport cost will limit international specialisation and trade.

d) *Free Trade vs Trade Barriers*

In the real world, some countries do have in place trade barriers for various reasons. A country might not be able to export as much as it desires due to obstacles to trade imposed by other countries. Trade restrictions are always present in practice as countries try to protect their national interests. Refer to Section on "Protectionism".

2.3. Sources of Comparative Advantage

a) *Differences in Factor Endowments*

Climate and resource endowments (e.g. skilled and unskilled labour, capital stock, amount of arable land, etc.) differ among countries. Such differences persist largely because the international mobility of resources is restricted to some extent.

Differences in factor endowment lead to differences in relative prices of factors of production between countries and these differences in turn affect relative prices of goods and services. Countries can specialise in producing goods that require the factors of production for which they have abundant supply and can hence produce at lower opportunity costs and more efficiently, while trading to obtain goods and services that they do not produce or have higher opportunity costs in producing.

For example, Singapore has little land and a small labour force. Thus, given her highly educated labour force, it has comparative advantage in capital-intensive goods and services and exports machinery and equipment like disk drives, integrated circuits, computer parts and pharmaceutical products. On the other hand, Singapore imports agricultural products such as rice and vegetables which are land- and labour-intensive in their production. This is because Singapore incurs lower opportunity costs in producing capital-intensive goods and services compared to producing land- and labour-intensive goods and services. Hence, Singapore has better comparative advantage in producing capital-intensive goods and services such as those mentioned above.

b) *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.

Technology is itself internationally tradable and it is the ability to continually keep ahead in the technological race that can give a country the comparative advantage.

2.4. Dynamic Comparative Advantage

A country's comparative advantage in the production of goods and services are determined by factor endowments and technology. However, these determinants might not be constant over time. Dynamic comparative advantage refers to a country's comparative advantage changing over time due to changes in factor endowments or technology.

One possible erosion of comparative advantage is through the depletion of factor endowments. When a factor of production which gives a country its comparative advantage has been depleted, the opportunity cost for that country will change which will affect the country's comparative advantage.

For example, when China's arable lands for farming are depleted, they will no longer be able to produce the same amount of food causing production possibility of Food to decrease. This will result in changes in opportunity cost and comparative advantage.

Table 5: Production Possibility for China

Original Production Possibility for China		
	Clothing	Food
	100	200
Opportunity Cost of producing 1 unit of	Clothing	Food
	2 units of Food	0.5 unit of Clothing
New Production Possibility for China (After Depletion of arable land for farming)		
	Clothing	Food
	100	20
Opportunity Cost of producing 1 unit of	Clothing	Food
	0.2 unit of Food	5 unit of Clothing

China's new production possibility for clothing and food shows with a higher opportunity cost, its comparative advantage in producing food has now eroded. Compared to Table 2, China no longer has comparative advantage in producing food as compared to Japan.

Another possible factor affecting a country's comparative advantage is technological progress. Through technological breakthrough or progress with new inventions and production methods, it would affect a country's production possibility for goods and services.

For example, China has a technological progress in the production of clothing resulting in China being able to produce more clothing and the same amount of food.

Table 6: Production Possibility for China

Original Production Possibility for China		
	Clothing	Food
	100	200
Opportunity Cost of producing 1 unit of	Clothing	Food
	2 units of Food	0.5 unit of Clothing
New Production Possibility for China (After technological progress in clothing production)		
	Clothing	Food
	800	200
Opportunity Cost of producing 1 unit of	Clothing	Food
	0.25 unit of Food	4 unit of Clothing

China's new production possibility for clothing and food has led to its comparative advantage in producing food now being eroded with a higher opportunity cost. Compared to Table 2, China no longer has comparative advantage in producing food as compared to Japan but comparative advantage in producing clothing instead.

Therefore, due to changes in factors endowments and technology, a country's comparative advantage in the production of goods and services might be dynamic.

How would an A-level question that makes use of the theory of CA look like?
Look at the following question for a possible example.
This corresponds to ***EQ 7*** *(2017 AJC H2 Prelims)) of your International Trade and Globalisation Tutorial package.*

(a) Explain how countries can mutually benefit from free trade, including those countries that are most efficient at producing all products. [10]

2.5. Benefits of Free Trade

In addition to the gains from trade arising from the Theory of Comparative Advantage, there are other benefits of free trade. All these benefits are commonly used as arguments against protectionism and reasons to justify free trade.

a) ***Increased World Output***
b) ***Stimulates Economic Growth***
c) ***Increased Competition in World Market***
d) ***Greater Economies of Scale***
e) ***Wider Variety of Goods and Services***
f) ***Facilitate transfer of technology and ideas***

a) *Increased World Output*

Some countries are more efficient than others in the production of certain goods and services because of different factor endowments and the use of different methods of production. Total world output is increased when countries specialise in the production of goods and services that they are most efficient in producing.

For example, labour-abundant countries like China and India are likely to contribute a larger amount of labour-intensive products to the world compared to countries where labour is less abundant.

b) *Stimulates Economic Growth*

If the domestic market is small, the economy may not be able to sustain its growth. With international trade, the market is expanded globally. This can bring about larger cost savings (economies of scale) for firms in these countries as they increase their scale of production to meet the higher global demand. The higher demand for their products can also generate higher export revenue. Higher export revenue would lead to an increase in net exports, ceteris paribus. This would lead to an increase in Aggregate Demand, as AD = C+I+G+(X-M). An increase in AD would lead to actual growth. There is also an incentive for firms to invest in the country, due to higher net exports. With higher investment, this would lead to actual growth and potential growth for the economy.

Therefore, international trade stimulates actual economic growth as exports and investments generate income and employment. Ceteris paribus, increased output and employment will lead to an increase in the standard of living as the consumption of goods and services increase.

c) *Increased Competition in World Market*

Competition from foreign rivals forces domestic firms to be more efficient and competitive in order to survive. As a result, domestic firms will have greater incentive to innovate and to produce goods of a higher quality or at a lower unit cost.

Furthermore, competition from foreign producers can prevent domestic monopolies from charging high prices as imports can weaken the power of the monopoly.

Consumers can enjoy goods at lower prices and/or with better quality. These result in higher consumer welfare.

d) Greater Economies of Scale

Trade allows firms to exploit economies of scale by operating in much larger markets. With a larger consumer base, firms can expand their scale of production. Economies of scale lead to lower average costs of production and the benefits can be passed onto consumers in the form of lower prices.

e) Wider Variety of Goods and Services

A country may not be able to produce certain goods and services domestically due to a lack of factors of production that are essential in the production of these goods. However, with international trade, the country is able to buy these goods from other countries by selling what it has an abundance of. In the process, its people are able to consume a greater variety of goods. The result is greater consumer choice and higher satisfaction levels.

f) Facilitate transfer of technology and ideas

Trade brings with it an exchange of ideas and techniques that increase the efficiency of production and hence stimulates economic growth. The transfer of technology and ideas from more advanced countries can help developing countries speed up their economic development as the latter can avoid the mistakes made by developed countries.

What is protectionism and why do countries engage in it?

3. Protectionism

Despite the benefits of free trade, nearly all countries at one time or another erect trade barriers to impede or block free trade among nations. This is based on the view that free trade, with its accompanying higher degree of competition, might be harmful to a country's production and employment, and thus, should be restricted. Governments may resort to protectionist measures to address macroeconomic issues, protect domestic producers but at the expense of domestic consumers' welfare.

Protectionism is the setting up of trade barriers with the intention of protecting domestic firms from foreign competition.

Trade barriers consist of tariff and non-tariff trade barriers. Details of these barriers will be covered in 3.2. First, we examine the arguments countries make to justify the implementation of protectionist measures. Governments may resort to protectionist measures to address both macroeconomic and microeconomic problems that the economy is currently facing. Some of these issues might be caused or heightened by free trade.

3.1. Arguments for Protectionism

i) To correct a Balance of Trade Deficit

Balance of trade deficits occur when a country's total expenditure exceeds its total earnings in its external trade. This can be caused by importing too much and is undesirable as it leads to a depletion of foreign currency reserves. Thus, the government may try to reduce import expenditure by restricting imports. Alternatively, the government might subsidise domestic producers to help them increase exports.

Evaluation:

However, this is a short-term measure to deal with the balance of trade deficit. In the long run, it is better to examine the root causes of the deficit. If the causes are internal economic problems such as inflation or low productivity, the balance of trade disequilibrium may not be corrected by trade restrictions. A more sustainable method would be to make locally-produced goods more competitive in the international markets in order to boost exports earnings. For example, if the cause of the problem is the relatively high rate of inflation which makes the country's export uncompetitive, then a better remedy would be to control the inflation with contractionary monetary and fiscal policies rather than protective measures in order to regain its export competitiveness.

ii) To promote economic growth and reduce unemployment

This is based on the notion that protectionism can result in higher employment in the country. By restricting the quantity of imports, or imposing a tax (tariff) on cheaper imports, price of imports will increase. This may induce domestic consumers to switch to locally-made goods assuming that they are now cheaper than imports. The resultant increase in domestic demand for locally-produced goods generates demand for domestic factors of production, including labour. This will result in a fall in unemployment in the country. This can be explained using the AD-AS theory where import expenditure decreases and domestic consumption increases causing AD to increase. This can also be explained using the circular flow of income theory where injection > withdrawal.

Evaluation:

Protected from foreign competition through the implementation of tariffs, domestic industries or firms may have less incentive to be more efficient in order to be internationally competitive. This is a case where protective tariffs are used to support inefficient domestic industries or firms. As firms have less incentive to be efficient, this could lead to higher costs, which could be passed on to consumers in terms of higher prices.

In fact, total production and thus employment can increase if the firms can sell more in the global market. This can be done if supply-side policies are implemented to encourage firms to innovate and become more efficient and workers are re-trained for jobs in industries in which the country has a comparative advantage.

Trade restrictions reduce the export earnings of the trading partners and hence their ability to buy imports. The export industries of the country which adopt such protectionist measures may in turn be hit by a fall in export demand from its trading partners who experienced lower increase in income.

This is true if the country that is slapped with import tariffs depends heavily on exports to the tariff-imposing country to fuel its economic growth; and accounts for a significant share of the exports from the tariff-imposing country.

iii) To defend against unfair trade practices (e.g., dumping)

Dumping refers to the sale of goods abroad at a price that is below the marginal cost of production or below the price at which the product is sold for in the domestic market. This is often made possible by export subsidies given by their government. The objective could be to drive out rival producers in the importing country so that the exporter can eventually monopolise the market. The effect would be a reduction in domestic output and employment as domestic industries may not be able to compete against the foreign exporters. This could lead to the collapse of the home industry and affecting balance of trade, national income and employment. This can be explained using the AD-AS theory where import expenditure increase and domestic consumption decreases causing AD to decrease.

The government subsidy is also seen as unfair competition among other producers in the world as firms are not competing under a fair circumstance.

Moreover, foreign firms may also engage in predatory dumping which is the practice of selling the product at a price well below that of the local producers. This could force the local firms out of their market causing domestically produced goods to fall, adversely affecting income and employment. Moreover, once the foreign firm's monopoly position is established, the foreign firm is likely to increase the prices with their pricing ability with the demand being price inelastic due to the lack of substitutes.

Therefore, since unfair trade practices like dumping results in market distortions and likely long term negative impact for the importing country, protectionism is justifiable.

Evaluation:

One of the problems faced by the government is the difficulty of proving that foreign producers are being subsidised for their exports. Even after establishing a foothold in the destination country, it is difficult to prove that the subsequent increase in price is due to exercising of monopoly power and not due to increase in cost of production.

iv) The infant industry argument (potential comparative advantage)

The infant industries are newly established industries that are in their 'infant' stage which might have potential comparative advantage but are too new or undeveloped to realise this potential due to the competition by more established foreign competitors.

The infant industry argument is based on the notion that these firms require help in their initial stage because high initial costs are likely to be incurred in establishing the industry and these costs cannot be completely covered by the initial small output and therefore require 'protection' from foreign competitors.

The justification for protectionism is that a guaranteed domestic market will enable firms in these industries to get over the problems they may face at the very initial stage of this new business and compete on more equal footing with more established foreign firms which may be operating at much lower costs. Protection also gives such firms more time to develop skilled management, business goodwill and to reap the advantages of large scale production (e.g. internal EOS). Without protection, such infant industries may be unable to compete with established ones in the international market, and will be driven out of business in a short period of time.

With protection over a period of time, the infant industry is given a chance to 'grow up'. When it is large/strong enough, it will be able to produce as cheaply as its foreign rivals and compete with these foreign competitors. Until this happens, leaving the infant industry unprotected will cause the industry to die prematurely and their potential will not be realised.

Such protection has been used by newly industrialising economies (NIE's). In Singapore, protective duties covering some 300 items were imposed when she started industrialising in the early 1960's. But since 1970, these duties have been discouraged.

Evaluation:

Protection of infant industries should only be, at best, a temporary measure. Protection, once given, is very difficult to remove especially in the presence of strong workers' unions. Continual protection will lead to misallocation of resources as protection can remove the incentive for the firms to be efficient. When this happens, it results in such firms continuing to be inefficient for as long as they are protected.

Misallocation of resources can also occur when the government incorrectly protects those industries without any potential comparative advantage. It is difficult to identify with certainty the industries that are presently unprofitable but which may acquire comparative advantage in the long run.

Another problem is the difficulty in deciding when the industry is fully and sufficiently established for protection to be removed. A premature withdrawal of protection can cause the early demise of these firms.

v) To enable a Declining (Sunset) Industry to phase out gradually

Certain industries in a country may decline because of a decline in the global demand for their product or because of loss of their comparative advantage due to technological progress or increase in competition from other countries. An example is the decline of the British cotton textile when man-made fabrics such as polyester and rayon came into the market. Workers in these industries became redundant and needed re-training in order to find jobs in other industries. Without slowing down the decline of the industry, there might be a sudden, rapid and massive increase in unemployment in the economy. This could be a serious concern if industries that are in decline employ a significant proportion of the labour force and these workers might suffer structural unemployment. Under such circumstances, temporary protectionism such as import controls may help to slow down the rate of these industries shutting down and allow more time for affected workers to go for training to upgrade their skills.

Evaluation:

Protectionist measures are justified only if there are jobs available in the economy for those who are retrenched. Moreover, it should only be a temporary measure and be removed once sufficient time has lapsed for workers to acquire new skills for work in a different sector.

vi) To diversify the economy

This argument is based on the possible undesirable consequences of specialisation. Economies might be over-reliant on the production of some goods for exports or over-reliant on imports from other countries.

Due to specialisation based on a country's comparative advantage, the variety of goods and services produced by the economy and the types of jobs available will be limited. As a result, the economy becomes more vulnerable to changes in the global demand for its products or an increase in the cost of imported raw materials. Such changes can come about because of changes in tastes and preferences or changes in technology etc.

New inventions and changes in technology may eliminate a country's comparative advantage. These could lead to mass unemployment given the structural rigidity of the economy. For example, when synthetic rubber became available in the 1940s, Malaysia suffered a significant fall in demand for natural rubber, a good that Malaysia originally had comparative advantage in and specialised in producing. Greater diversity in terms of the types of goods and services produced can reduce the risk posed by changing global market conditions.

Another example would be Zambia, a country that was over reliant on her copper exports for income and over reliant on Cuba on her sugar exports. When price of copper decreased, Zambia's export revenue fell which caused them to be unable to purchase essential imports such as sugar from Cuba.

Moreover, there are also social and psychological advantages in economic diversification because it creates a variety of occupations to cater to the different talents and abilities of the population and specialisation limits the range of jobs available.

Evaluation:

The greatest opposition to this argument is that of inefficient allocation of resources as countries move towards producing what they do not have comparative advantage in. This desire for economic diversification results in a waste of resources on a global scale.

vii) To protect against low-wage foreign labour

Countries where the people enjoy high wages have often felt threatened that their standard of living would be undermined by the import of cheaper goods from emerging countries where wages are lower. This is especially so because workers in developing countries are paid lower wages. Consequently, the foreign costs of production of imports are lower than the domestic costs of production.

Without protection, the local industries are unable to compete against the lower costs of foreign imports and have to close down. This can lead to higher unemployment and a lower standard of living.

To protect their jobs, trade unions and firms may press for higher tariffs and other means to keep out the imported goods. This argument has been used in the US to protect the automobile, steel and textile industries.

Evaluation:

However, this is an outright rejection of the theory of comparative advantage especially if the cheaper foreign labour cost is a comparative advantage for the exporting country.

Protection tariffs imposed on goods from low-wage countries will shield workers in the protected high wage industries but consumers will be denied the opportunity to buy from the cheaper source of supply. Therefore, benefits from trade will not be realised.

viii) To retaliate against protectionism by another country

When a country is at the receiving end of protectionist measures implemented on her by foreign countries to protect against foreign firms, protectionism measures can be implemented on the foreign countries as a form of retaliation.

Evaluation:

It is clear that such a practice leads to an overall contraction in world trade. Such measures eventually become ineffective with countries hitting out at each other and building up more and more tariff barriers. Every country will end up as losers as the total volume of world trade is reduced and the full benefits of international trade cannot materialise.

Moreover, smaller economies that are highly dependent on international trade as an engine for its economic growth tend to lose more as their growth can be hindered compared to bigger economies that are less dependent on international trade.

ix) To protect strategic or 'key' industries

A key industry is one that is deemed important or vital to a country's political and economic interests or security and therefore requires protection by the government. Common examples of key industries include water, electricity, food source and defence. Being dependent on other countries could be threatening for a country's survival as other countries could use these goods as a threat or bargain.

Singapore's dependency on water from Malaysia can be an example of that situation where disputes between both countries could escalate to Malaysia threatening to 'cut off' water supply to Singapore. To avoid being in this position, Singapore has devoted huge amount of resources to increase water production domestically.

Another key industry is military or defence weaponry production. Most countries would have their own defence industry and Singapore Technologies, a local company produces some of Singapore's military hardware such as SAR21, Bionix and submarines.

x) The self-sufficiency argument

Similar to the arguments for economic diversification and strategic industry, a country may want to encourage the production of a range of goods to ensure that a country is relatively self-sufficient on basic necessities such as food. This aims to reduce a country's reliance and dependency on foreign trading partners for essential products and thus reduces a country's vulnerability should there be a disruption to the supply of these goods in times of political upheaval abroad or a world-wide outbreak of disease such as bird flu.

How do countries engage in protectionism and what are the benefits and costs of doing so?

3.2. Protectionist measures

After learning the reasons and motives for protectionism, we will now look at the various types of methods that governments can protect.

Protectionist measures can be divided into two groups - Tariffs and Non-Tariff measures. The impact of these measures shall be discussed from the perspectives of the various economic agents such as government, household and firms. Each of these measures has its strengths and limitations.

Before we explain how tariffs work, let us first look at how free trade could affect an economy.

Without trade or free trade, the equilibrium price and quantity of a good (e.g., rice) in the country would be determined using the theory of demand and supply for a specific good. The domestic demand would be downward sloping and domestic supply upward sloping, with reference to Figure 1 on the next page, the equilibrium price and quantity of a good would be at P_0 and Q_0.

Assuming that no country can influence the world supply and demand for rice, the world supply of rice for the importing country is perfectly price elastic, i.e., a horizontal supply curve.

With free trade, the consumers will pay a price that is equal to the world price $0P_1$.

At $0P_1$, total quantity consumed of the good is $0Q_4$ which consist of domestic production and imports:

- Domestic production $= OQ_1$
- Imports $= Q_1Q_4$
- The total consumer surplus $= P_1GH$
- The total domestic producer surplus $= P_1DI$

3.2.1. Tariffs

Tariffs, also known as custom duties are taxes imposed on imports of goods by the government.

The imposition of tariffs will result in an increase in prices of imported goods. This will encourage domestic consumers to switch to consuming domestically produced goods instead of imported goods.

Tariffs imposed can be either a specific tariff or an ad-valorem tariff.

- A specific tariff is calculated based on a fixed amount of tax per unit of the imported product example: a $10 tariff on each barrel of oil.
- An ad valorem tariff is a tax that is expressed as a percentage of the price of imports at the point of entry example: 35% of the value of each barrel of oil.

Both the specific and ad-valorem tariffs result in an increase in the prices of the imported goods.

Assuming that the government introduced a specific tariff of P_1P_2 imposed on imported rice, this will lead to a fall in supply of imported rice and the world supply curve shift from SS(World) w/o Tariff to SS(World) w Tariff, the amount of the tariff on each unit of rice imported.

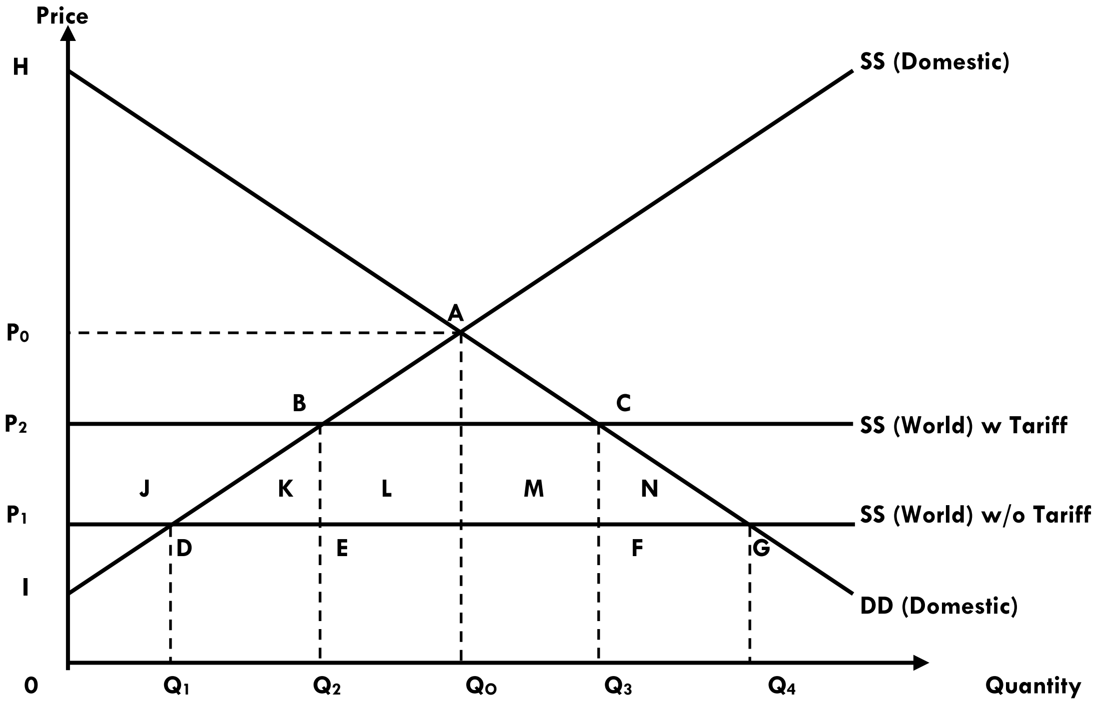


Figure 1: Effects of Free Trade and Tariff

With tariffs imposed, the new market price for rice will be $0P_2$.

At $0P_2$, total quantity consumed of the good is $0Q_3$ which consist of domestic production and imports:

- ♣ Domestic production $=OQ_2$
- ♣ Imports $= Q_2Q_3$

The total consumer surplus $= P_2CH$

The total domestic producer surplus $=P_2BI$

a) Microeconomic effects of a tariff on the Consumers, Domestic Producers and Government

i) Effects of a tariff on the Consumers:

- ♣ Decrease in the total consumption of the rice from OQ_4 to OQ_3.
- ♣ Increase in price for rice from OP_1 to OP_2
- ♣ Decrease in the consumer surplus from P_1GH to P_2CH
- ♣ i.e. a loss of P_1P_2CG or Area J+K+L+M+N.

ii) Effects of a tariff on the Domestic Producers

- ♣ Increase in production from 0Q1 to 0Q2 units
- ♣ Increase in the price for each unit of good produced and sold from 0P1 to 0P2
- ♣ Increase in total revenue from 0P1DQ1 to 0P2BQ2
- ♣ Increase in producer surplus by P1P2BD or Area J

iii) Effects of a tariff on the Government

- ♣ The government gains tariff revenue, = (tariff per unit x quantity imported)
- ♣ Total tariff revenue collected is $= P_1P_2 \times Q_2Q_3 = BCFE =$ Area L+M

iv) Effects of a tariff on the Society as a Whole

Society as a whole incurs a net welfare loss or deadweight loss in terms of Areas K and Area N.

This deadweight loss is the welfare loss that is not captured by any party when the tariff is imposed. When the tariff is imposed, there is a transfer of Area L + Area M of the original consumer surplus from the consumers to the government in the form of tariff revenue. At the same time, part of the consumer surplus Area J is transferred from consumers to the domestic producers in the form of higher producer surplus.

However, Area K and Area N of the original consumer surplus were not transferred to other economic agents. Thus, society is worse off because of a net welfare loss or deadweight loss incurred by society due to the imposition of a tariff on imports.

b) Macroeconomic Effects of a Tariff on an Economy

i) Increase in Real Output and Employment

As consumers purchase less imports and switch to purchasing domestic goods, there is a fall in M and ceteris paribus, a rise in (X-M). This leads to an increase in AD and real output. Hence, the demand for labour rises, increasing employment.

ii) Increase in General Price Level

However, tariffs on imports of raw materials or unfinished goods would lead to imported cost push inflation, raise the unit cost of production leading to a fall in SRAS and increase in general price level. Tariffs on imports of (final or finished) goods and services would lead to imported price push inflation.

A fall in SRAS would not only increase general price level but could also lead to a fall in real output and national income assuming the economy is currently functioning at the Keynesian or Intermediate range of Aggregate Supply.

iii) Impact on a Country's Balance of Trade

Imposition of tariffs would increase the price of imports and reduce the quantity imported. This will lead to an improvement in the country's balance of trade.

However, the country's trading partners may retaliate to the tariffs imposed by imposing reciprocal tariffs or other measures on the country's exports. This may subsequently result in a fall in the country's export revenue and offset the possible improvement in the balance of trade.

3.2.2. Non-tariff Measures

a) Import Quotas

Import quotas are stated limits on the physical quantity or amount of specific goods that can be imported into a country. For example, Indonesian government introduced an import quota on wheat flour imports in 2014 to protect their local wheat producers. In order to be effective, the limit to imports are to be set at a level lower than the imported quantity under free trade conditions.

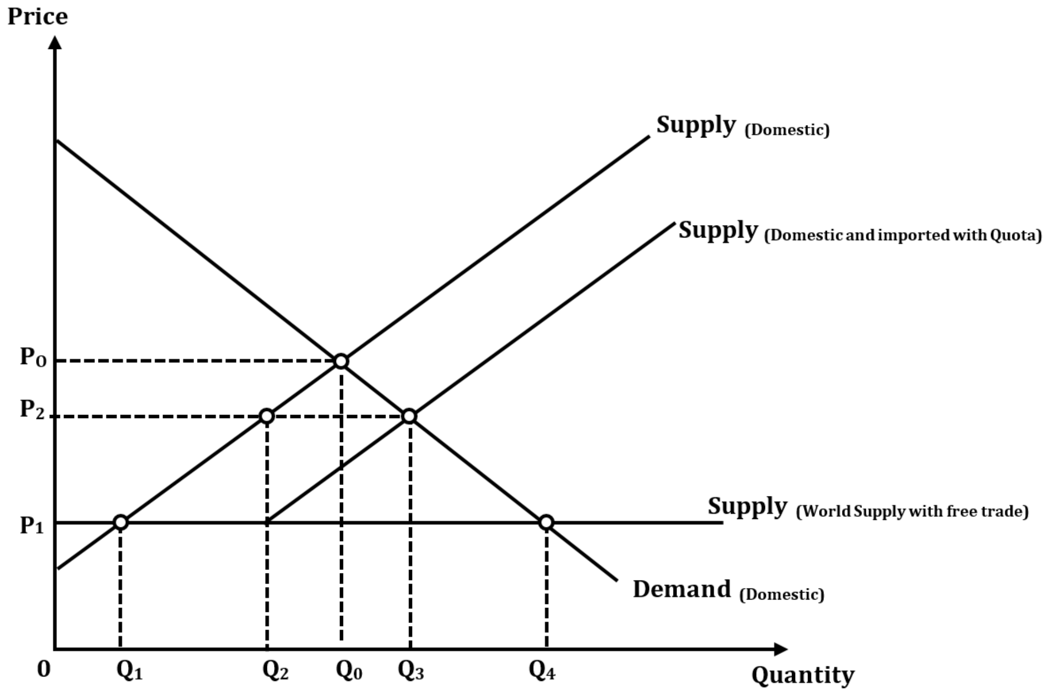


Figure 2: Effects of a Quota on a Market

As shown in Figure 2 above, as a result of the import quota, the total supply (both domestic and foreign) of the good in the country would decrease resulting in a higher price, a lower quantity imported, and a higher quantity produced domestically.

	Price	Quantity	
Free Trade	P_1	Domestically Produced	$0Q_1$
		Imported	Q_1Q_4
		Total	$0Q_4$
Trade with Quota	P_2	Domestically Produced	$0Q_2$
		Imported	Q_2Q_3
		Total	$0Q_3$
Change	Increase	Total	Decrease

Quotas provide a greater certainty of protection for local producers than tariffs because limits are placed on physical quantities. Compared to import quotas, tariffs are less effective if the demand for these imports are price inelastic.

Please refer to Appendix 2 for a more detailed analysis of the welfare effects of an import quota.

b) Import Licences

Import Licences are licences or permits granted by the government for goods to be imported. The purpose of this is to control the quantity or type of goods imported.

For example, when Malaysia started on its car manufacturing industries in the 1980s, import licences were issued to control the quantity of foreign cars that were imported into the country. This restriction shielded the domestic car manufacturing sector and ensured to a large extent that there was a sufficiently high demand for the locally manufactured cars to sustain it.

c) Export Subsidies

Export Subsidies are payments made by government to firms to encourage exports of goods and services to abroad. By doing this, the country's exports will be relatively cheaper and more price competitive in foreign markets. For example, China gives export subsidies to their domestic auto and auto parts manufacturers. This reduces the cost of production in the domestic firms. In so doing, domestic producers have a cost advantage over foreign producers in export markets.

Export Subsidies can be classified as unfair trading practice by trading partners as it would give domestic firms an unfair advantage in trading partner's market.

d) Foreign Exchange Controls

This involves government control over the purchase and sale of foreign currencies. International trade is carried out in terms of foreign currencies. To import goods, payments must be made in foreign currency. The control over the purchase of foreign currency will effectively limit the total value and quantity of imports in the country.

*How would an A-level question that requires you to explain protectionist measures look like? The following question provides a possible example. This corresponds to **EQ 3** (2018 H2 A-Levels)) of your International Trade and Globalisation tutorial.*

"Across the globe, people are wondering why the US, usually the leader in free trade, is now taking a protectionist stance."

Source: Foreign Policy Journal, February 2017

(a) Describe two different types of protectionist policy measure and explain how each type would affect trade. [10]

3.3. Benefits and Costs of Protectionism

The table below summarises the benefits and costs of protectionism:

	Benefits	Costs
Consumers/ Households	Increased employment and national income.	Lower consumption of goods and services. Higher price for goods and services. Lower consumer surplus.
Domestic Producers	Increase in demand for domestically produced goods and services. Higher price for goods and services. Higher quantity of goods and services produced and sold. Higher total revenue for domestic producers. Higher producer surplus for domestic producers.	Potential complacency. Higher cost of imported factors of production.
Government	Receives tariff revenue equivalent to the amount of tariff paid by the consumers for the imported quantity. Achieve macroeconomic goals of more favourable balance of trade, economic growth, reduction in unemployment	Might lead to macroeconomic problem of inflation. Might lead to trade disputes with other countries.
Society		Deadweight loss incurred by society as societal welfare would be higher without trade barriers.

Table 7: Benefits and Costs of Protectionism on different Economic Agents

3.4. Conclusion of Protectionism

Countries practising protectionism usually experience welfare loss in the form of reduced consumer choice and higher prices. This is aggravated when the volume of world trade and total world output are reduced as a result of retaliatory actions by trading partners. This worsens global allocative efficiency.

Protectionism also causes a misallocation of resources. Protectionism can keep a firm in production when its productivity is lower than it could have been in another sector/production. With protection, there may be little incentive for the firm to want to reduce prices, produce better quality products and/or improve on its efficiency. Moreover, once a protectionist measure is imposed, it is not easy to remove.

A better alternative to protectionism could be for a country to stimulate export competitiveness by making efforts to improve productivity and lower unit cost of production. These can be achieved through better training and education, better infrastructure, incentives for innovation and so on.

While there are many arguments for protection in term of the benefits that the imposing country can enjoy, there are also costs incurred by various economic agents. There will be economic agents who will benefit from protectionism and other economic agents being worse off.

Whether protectionism should be introduced is normative as it would depend on the aims and objectives of the government as well as the problems the country is currently facing.

How do countries engage in economic co-operation and trade agreements and what are the benefits and costs of doing so?

4. Economic Co-operation and Trade Agreements

Economic integration involves two or more countries coming together to achieve common economic goals. The spectrum of economic integration ranges from the formation of a free trade area to the more complex common market.

The rationale for economic integration includes economic objectives and non-economic objectives:

a) Economic Objectives:

- Achieve microeconomic objective of allocative and productive efficiencies
- Achieve the four macroeconomic objectives
- Improvement in standard of living

b) Non-Economic Objectives:

- Promote political stability
- Social reasons

4.1. Types and degree of Economic Integration

a) *Free Trade Area*

A free trade area is a form of economic integration where member countries remove trade barriers like quotas and tariffs within the area but each member retains its own trade barriers with non-member countries.

E.g., Association of South East Asian Nations (ASEAN), European Free Trade Area (EFTA) and North American Free Trade Area (NAFTA).

b) *Customs Union*

A customs union has characteristics of a free-trade area, but with this additional feature:

- All member countries adopt a common trade policy such as a common external tariff and quota with non-member countries.

E.g., Southern African Customs Union (SACU)

c) *Common Market*

A common market is where member countries operate as a single market. A common market has characteristics of a custom union, but with these additional features:

- A common system of taxation;
- A common system of laws and regulations for production, employment and trade;
- Free movement of labour, capital and materials and of goods and services and
- The absence of special treatment by member governments of their own domestic industries.

E.g., European Economic Area

d) *Monetary Union*

A monetary union has characteristics of a common market, but with these additional features:

- A common currency and
- A common monetary policy

E.g., Eurozone

Table 8: Various forms of economic co-operation and trade agreements

Degree of Integration (Least → Most)				
	Free Trade Area	Customs Union	Common Market	Monetary Union
No Trade Barriers	✓	✓	✓	✓
Common External Tariff		✓	✓	✓
Mobility of Factor and Asset			✓	✓
Common Currency & Economic Policy				✓

Membership in a trading bloc such as a Free Trade Area, Customs Union, Common Market or Monetary Union changes a country's pattern of trade in two main ways:

i) Trade Creation

Trade Creation involves a shift in spending from domestic products to lower cost imports of members within the trading bloc. This results in an increase in trade and a more efficient allocation of resources as each member country exploits their comparative advantage.

ii) Trade Diversion

However, membership of a trading bloc makes trading with non-members less attractive. This may involve buying products from members instead of non-members who might have produced those products more cheaply. Imports from non-members have become more uncompetitive because of tariffs. This can lead to a misallocation of resources.

For more details on these effects, you can refer to Appendix 3.

4.2. Benefits of Economic Co-operation and Trade Agreements

The benefits of economic co-operation and trade agreements between countries are similar to the benefits of free trade. It also increases the attractiveness of a country as an investment destination leading to an increase in foreign direct investment.

These benefits should be discussed using the concepts of Demand-Supply as well as AD-AS from the perspectives of economic agents such as consumers, producers and governments.

Do note that there are also different interest groups within consumers, producers and governments.

The benefits and costs of economic co-operation and trade agreements between countries will be discussed in greater details within the topic of "Globalisation".

a) Summary of Macroeconomic Benefits

i) Increase in Trade

Benefits of FTA are similar to the benefits of specialisation and trade (theory of CA)

- ♣ Stimulation of Economic Growth (Actual growth & Potential growth)
- ♣ Improvements in the Balance of Trade
- ♣ Reduction in inflationary pressures
- ♣ Reduction in unemployment

ii) Increase in FDI for the Recipient Country (where Foreign Direct Investments (FDIs) flow into)

- ♣ Stimulates Economic Growth (Actual growth & Potential growth)
- ♣ Improvement to the capital and financial account of the BOP
- ♣ Higher Employment and Wages for Workers

iii) Microeconomic Benefits for Consumers:

- ♣ Consumers can enjoy goods and services at lower prices due to increase in supply of goods and services from abroad and increase competition from abroad.
- ♣ Consumers can enjoy a larger variety of goods and services.
- ♣ Unemployed labourers can find employment due to increase in real output.
- ♣ Equalisation of wages between countries, reducing income inequalities due to international movement of labour

iv) Summary of Microeconomic Benefits for Producers:

- ♣ Producers can enjoy a larger demand for their goods and services due to the increase in size of markets.
- ♣ Producers can also have the ability to exploit economies of scale due to the increase in output.
- ♣ Producers can also be more dynamic and productive efficient due to increase in competition from abroad.

4.3. Costs of Economic Co-operation and Trade Agreements

Economic Co-operation and Trade Agreements may also negatively affect some industries or some jobs and as well as the environment.

i) Macroeconomic Costs

- ♣ Adverse Effects on Balance of Trade
- ♣ Adverse Effects on the other macroeconomic goals

ii) Microeconomic Costs

- ♣ Increasing Income Inequalities
- ♣ Negative Externalities
- ♣ Monopoly Power

How would an A-level question that requires you to explain how countries can benefit from economic cooperation look like? The following question provides a possible example.
*This corresponds to **EQ 6** (2023 CJC H2 Prelims)) of your International Trade and Globalisation tutorial package.*

While Singapore continues to sign more Free Trade-Agreements, most recently with the Pacific Alliance, a Latin American bloc of countries, others have retreated to protectionism to boost their economic resilience and self-sufficiency amidst global economic turbulence.

Source: Various Source

(a) Explain how the FTA between Singapore and the Pacific Alliance will benefit its domestic firms and macroeconomy. [10]

What is the globalisation and what are the factors that drive it?

5. GLOBALISATION

Globalisation can be broadly defined as the increased interconnectedness and interdependence of peoples and countries with the opening of international borders to increasingly fast flows of goods, services, finance, people and ideas; and the changes in institutions and policies at national and international levels that facilitate or promote such flows.

Globalisation is the phenomenon of integration of markets in the global economy or international integration in the commodity, capital and labour markets.

Globalisation has been taking place for hundreds of years, but has speeded up enormously. Globalisation has resulted in:

- an increase in international trade of goods and services;
- an increase in international movement of labour;
- an increase in international flow of capital including foreign direct investments;
- improvements in infrastructure and technology (especially transport and telecommunications)

5.1. Drivers of Globalisation

The process of globalisation is motivated largely by the self-interests of firms to increase profits, consumers to increase their welfare as well as governments to tap into the wider macroeconomic and social benefits that come from greater trade in goods, services and the freer flow of financial capital.

Main Drivers of Globalisation:

a) ***Elimination of Trade Barriers***
b) ***Technological Advances***
c) ***Potential for Economic Growth***
d) ***Removal of Restrictions on Flow of Resources, especially Labour***

a) *Elimination of Trade Barriers*

Governments have negotiated reductions or even elimination of trade barriers and have established international agreements to promote trade in goods and services, and investment, based on the theory of comparative advantage. This allows firms to take advantage of new opportunities in foreign markets through the establishment of factories and partnerships abroad as well as access to cheaper resources such as labour. This will allow firms to increase their revenue through reaching out to overseas markets as well as reducing their costs of production. A defining feature of globalisation, therefore, is an international industrial and financial business structure.

The elimination or reduction of trade barriers encourages trade creation and increases the amount of trade done. This leads to an increase in international trade of goods and services.

b) *Technological Advances*

Improvement in technology has been a principal driver of globalisation,

especially in:

- ♣ advances in Information and Communication Technology (ICT) and
- ♣ improvements in transportation.

Advances in Information and Communication Technology (ICT) have dramatically transformed the way economic activities are carried out. It has massively reduced the cost of transmitting and communicating information. Information and communication technologies have given economic agents – consumers, investors, firms – valuable new channels for identifying and pursuing economic opportunities, including faster and more informed analysis of economic trends around the world, easier transfers of assets and collaboration with more distant trade partners.

With better communication systems, it is easier to spread new ideas and innovation. Advancements in ICT help to break physical and geographical barriers and allow firms to engage their consumers with their online presence. This allows consumers to enjoy a larger variety of goods and services through global trade and in the process, increase consumer welfare. Harnessing such technology represents a lucrative way of expanding a country’s market given a global population of 7.7 billion people – a potentially large consumer base for any firm in the global market. With the increase in overseas sales, it has also enabled the firms to achieve greater cost savings as their scale of production increases.

Improvements in transportation have led to a decrease in transportation costs. Improvements in the various mode of transportation such as larger container ships, commercial planes that can fly a larger distance as well as increase in rail network connections around the world. These improvements led to faster transportation of a larger quantity and at a lower cost.

c) Potential for Economic Growth

Governments are aware of the benefits of being connected to the region and the world. This is especially so for small and open economies who can reap potential benefits of economic growth through a rise in the inflow of foreign direct investment (FDI) and trade in goods and services. The benefits are applicable to all countries especially small countries such as Singapore with a small domestic markets and population. The lack of factor endowments also reduces its ability to sustain economic growth. Being connected to the world allows these small economies to tap into the global market which will lead to an increase in their aggregate demand and thus achieve actual growth and create jobs as well as sources of factors of production they do not possess.

Many developing countries have opted for outward looking development strategies in order to achieve faster economic growth.

d) Removal of Restrictions on Flow of Resources, especially Labour

There has been an increasing trend of cross-border labour movement due to the breaking down of international borders and improvement in transportation. An economy in which labour is scarce can either import labour-intensive products or import labour itself.

Governments around the world promote labour movements by providing attractive remuneration packages in the hope that these highly-skilled "talents" can help in carving out new areas of comparative advantage for their economy and boost their economic growth. This is especially true for small countries like Singapore where its population base and pool of talent is too small for it to grow the chosen niche sectors in the economy.

At the same time, the import of low-skilled workers allows its more highly educated resident workforce to be employed in higher value-added sectors or jobs. This, too, can help to boost its national income.

How does globalisation benefit or harm different economic agents and the economy?

5.2. Impact of Globalisation

The impact of globalisation can be discussed from the perspectives of different economic agents such as consumers, producers and governments.

The impact of globalisation can be examined in terms of the microeconomic and the macroeconomic impact of an increase in these 4 factors:

i) Increase in Trade in Goods and Services
ii) Increase in Foreign Direct Investments (FDI) flow
iii) Increase in Labour movement
iv) Increase in Hot Money flow

These 4 factors can be analysed further by considering these details:

i) Increase in Trade in Goods and Services

- Increase in Exports
- Increase in Imports

ii) Increase in Foreign Direct Investments (FDI) flow

- For the Recipient country where FDI flows into
- For the Source country where FDI flows from

iii) Increase in Labour movement

- Skilled and Unskilled workers
- Labour flowing into the economy
- Labour flowing out of the economy

iv) Increase in Hot Money flow

- For countries where Hot Money flows into
- For countries where Hot Money flows away from

5.3. Benefits of Globalisation

5.3.1. Macroeconomic Benefits

i) Increase in Trade

The benefits of increase in trade is similar to the benefits from Free Trade as well as Economic Co-operation and Trade Agreements.

a) Stimulation of Economic Growth (Actual growth & Potential growth)

Greater economic integration allows countries to gain access to larger export markets, enhancing growth with an increase in demand of exports and exports quantity. The increase in exports would lead to an increase in AD and actual economic growth for the economy, assuming ceteris paribus.

Greater economic integration allows countries to gain access to larger source of factors markets, which allows imported prices of factors of productions to decrease, leading to an increase in SRAS, hence reducing imported cost push inflation. Increase in the imports of capital goods could also increase the productive capacity of the economy and an increase in LRAS.

b) Reduction in unemployment

For countries which experience actual economic growth, with an increase in real output due to the increase in exports and AD, demand for labour might increase causing cyclical unemployment to decrease.

c) Improvements in the Balance of Trade

Greater economic integration between countries can bring about positive effects on balance of trade. The increase in export revenue assuming ceteris paribus can lead to an improvement in the country's balance of trade, assuming that it outweighs the increase in import expenditure.

d) Reduction in Inflationary Pressures

Greater economic integration also allows countries to gain access to larger source of markets for final goods and services. This allows imported prices of goods and services to decrease, leading to an increase in SRAS hence reducing imported inflation. The entry of countries such as China and India into the world market has put downward pressure on prices of many consumer goods and services such as fabrics and garments, food as well as consumer durables.

ii) Increase in FDI for the Recipient Country (where Foreign Direct Investments (FDIs) flow into)

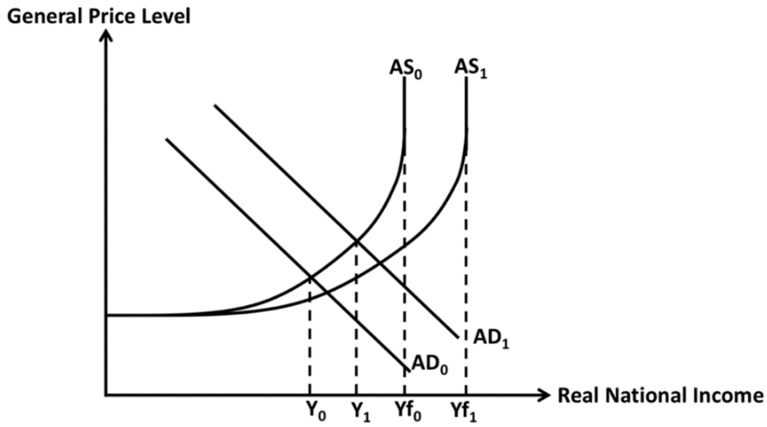
a) Stimulates Economic Growth (Actual growth & Potential growth)

With globalisation, investment possibilities increase. The lure of higher profitability of investments abroad resulting from lower cost of production leads to a greater volume of foreign direct investment (FDI) around the world.

FDI refers to the movement of capital that involves foreign ownership and control of production facilities. Such activities are usually carried out by multi-national corporations (MNCs) e.g. Mitsubishi and Toyota from Japan and General Electric and ExxonMobil from USA. These MNCs operate in many host countries, and often conduct research and development (R&D) activities in addition to their routine business operations in the various sectors of the economy.

With reference to Figure 1 below, as firms (such as MNCs) move to countries with lower unit production costs and a greater access to regional markets, investment increases, leading to an increase in the country's AD from AD_0 to AD_1. Hence, actual growth takes place as shown by an increase in the national income from Y_0 to Y_1.

Figure 2: Effects of Increase in Exports and the FDI on Economic Growth



In the long run, foreign direct investments also generate spillover effects such as improved management (MNCs bring in foreign managers and other top executives to run the subsidiary in host countries), technology transfers (knowledge and skills applied to how goods are produced) as well as greater levels of capital accumulation. This can lead to an increase in the country's productive capacity, paving the way for potential growth as aggregate supply increases from AS_0 to AS_1.

There is also a competitive effect as other firms feel threatened by the intense competition from foreign investments. In order to survive, these firms would have to innovate and improve their production processes and this further enhances potential growth in a country.

b) Higher Employment and Wages for Workers

With increase in real output brought about by increase in FDI inflow, demand for workers will increase reducing the unemployment rate for the recipient country of FDI. Also with an increase in demand for labour, the wages of labour would also increase.

c) Increase in Labour Flow

Countries where labour flow from might experience a lower unemployment rate as the unemployed seeks employment abroad. These countries might also experience an improvement in balance of payments as migrant workers send back their income earned abroad via remittance

Countries where labour flows to would experience an increase in quantity of labour which would lead to an increase in productive capacity, LRAS and achieve potential growth.

d) Increase in Hot Money Flow

Countries where Hot Money flows into might experience an increase in liquidity and money supply which promotes actual economic growth. Increase in money supply could also lead to lower interest rate which also promotes actual economic growth.

5.3.2. Microeconomic Benefits

a) Microeconomic Benefits for Consumers:

i) Consumers can enjoy goods and services at lower prices.

Consumers can enjoy goods and services at lower prices due to increase in supply of goods and services from abroad and increase competition from abroad.

Greater economic integration across countries exposes local producers to higher levels of competition as firms have to compete with producers in the international market. This provides incentive for producers to undertake investments in new equipment, technologies and adopt the most efficient method of production. The result is lower unit costs of production. Consumers may also enjoy lower prices of goods if the firms choose to pass the costs savings from internal economies of large-scale production to their consumers.

ii) Consumers can enjoy a larger variety of goods and services.

Due to the competition from foreign competitors from all over the world, firms may also end up undertaking more innovation to improve the quality of their products in order to survive the international competition. Such a proliferation of better-quality product as well as differentiated products increase the variety of goods and services available to global consumers.

All these can lead to an improvement in consumer welfare.

iii) Unemployed labourers can find employment due to increase in real output.

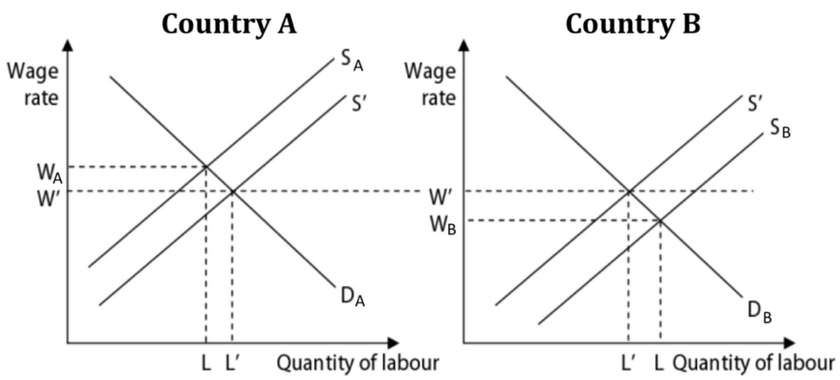
Globalisation increases international trade and stimulates actual economic growth as exports and investments increase aggregate demand and real output income. Ceteris paribus, an increase in real output would likely increase demand for labour causing unemployment to fall.

iv) Equalisation of wages between countries, reducing income inequalities due to international movement of labour

International labour movements can equalise incomes in different countries. Migrant workers flow from areas of lower productivity (and thus lower wages) to higher productivity (and higher wages).

To illustrate this, suppose the world consists of two countries, Country A (high wage) and Country B (low wage) that were initially in isolation.

<u>Figure 3: Illustration of equalisation of wages between countries</u>



In Figure 3, the demand for labour curves are D_A and D_B respectively in Countries A and B. The original supply of labour curves in each country are in turn represented by S_A and S_B. Originally the average wage rates in A and B were W_A and W_B respectively. Responding to the higher wages in A, workers in B migrate to A, this leads to a reduction in labour supply in B and an increase in A. Wage rates will continue to fall in A and rise in B until they are eventually equalised at W'. This partially explains the trend towards the equalisation of wages across countries for the similar type of skills.

b) Microeconomic Benefits for Producers:

i) Producers can enjoy a larger demand for their goods and services due to the increase in size of markets.

Globalisation results in an increase in the market size as firms experience an increase in demand from consumers abroad. The higher demand for their products can generate higher total revenue for firms.

ii) Producers can also have the ability to exploit economies of scale due to the increase in output.

Globalisation results in freer trade and this encourages specialisation in production that is based on the principle of comparative advantage. Such specialisation allows producers to enjoy economies of scale from enlarging their scale of production that arises from expanding into the global market.

For example, there can also be higher level of efficiencies attributable to greater specialisation of workers and the use of the most technically advanced equipment and machinery. This allows a lower average cost to be incurred in the production process, lowering the opportunity cost of production and enhancing the comparative advantage of countries.

Such international specialisation in the production of goods and services based on the principal of comparative advantage results in allocative efficiency in terms of resource allocation since resources in the world are allocated to the production of the good in which they are best suited.

iii) Producers can also be more dynamically and productively efficient due to increase in competition from abroad.

Due to an increase in competition from abroad, firms would be more willing to invest in research and development to improve the quality and varieties of goods and services produced in order to remain competitive. Firms would also be more willing to invest in research and development to reduce their cost of production. Both would lead to firms being more dynamically efficient.

Due to an increase in competition from abroad, firms would be more likely to be productive efficient so as to produce at the lowest cost possible in order to be able to sell the goods and services at a lower and more competitive price.

How would an A-level question that requires you to explain how globalization can benefit an economy looks like? The following question provides a possible example.
*This corresponds to **EQ 9(2023 DHS H2 Prelims))** of your International Trade and Globalisation tutorial package.*

(a) Explain how embracing globalisation helps an economy alleviate the problem of scarcity. [10]

5.4. Costs of Globalisation

5.4.1. Macroeconomic Costs

i) Costs of increase in trade

For economies with non-competitive firms, globalisation would lead to adverse effects on Balance of Trade.

For economies with non-competitive firms, these economies might face a situation where their imports spending increase more than their exports earnings. As their domestically produced goods are less competitive in terms of price and quality compared to foreign goods, consumers will choose to import those goods instead. This results in an increase in import expenditure and a fall in AD. Export earnings might still increase due to an increase in trading partners, however there could also be situation that the export earning might fall due to increase in competition in the global market. This would lead to worsening of balance of trade.

ii) Costs of increase in flows in FDI

For economies with non-competitive firms, these economies might face a situation where their economy become a less attractive destination for investment due to increase competition from other economies. This would lead to outflow of investments as well as diversion of FDI away from the economy. This would lead to negative impacts on AD and AS, affecting both actual and potential growth. A net outflow of FDI would also worsen the capital and financial account balance of the BOP.

iii) Cost of increase in Labour Flow

Countries where labour flows from might experience ‘brain drain’ or human capital flight.

'Brain Drain' or human capital flight refers to the situation where a country loses its highly skilled or well-educated labour. These highly skilled or well-educated labour could be attracted to other countries by better wages or working and living conditions. This usually takes place from developing to developed countries.

Countries where these workers flow from would experience a fall in quantity and quality of labour resulting in a fall in productive capacity, LRAS and will experience negative potential growth.

iv) Cost of increase in Hot Money Flow

Countries where hot money flow away from would experience a decrease in liquidity and money supply which leads to slower or negative actual economic growth. Decrease in money supply could also lead to higher interest rate which also leads to slower or negative actual economic growth. If there is a sudden massive outflow of hot money, the country's currency might suffer depreciation. This could lead to imported inflation and a fall in investor confidence.

5.4.2. Microeconomic Costs

The World Bank report, Global Economic Prospects 2007: Managing The Next Wave of Globalisation, highlights the risks that come with a more integrated world economy. These include income inequality and environmental damage.

a) Increasing Income Inequalities Within the Country

The creation of a dual economy as small pockets of wealth may result from FDI but the domestic sector remains poor, leading to unequal growth hence raising income disparities within the country.

Globalisation has resulted in a growing divide between the haves and have-nots in many countries. This is because the people at the top are getting much higher income due to the premium their skills, knowledge and expertise command. On the other hand, the people at the bottom have to compete with the cheap labour from all over the world hence depressing their wages, resulting in rising income disparities within the country. Rapid growth that is propelled by globalisation does not always boost living standards broadly.

In Singapore, a widening Gini coefficient has emerged in recent years. The Gini coefficient has been rising from 0.430 in the year 2000 to 0.452 in 2010 and 0.459 (after taxes and transfers) in 2012, partially due to globalisation. (However, it fell after 2012 to 0.458 in 2016, Singapore's lowest score in 10 years. The lower Gini reflects the redistributive effect of government transfers.)

b) Negative Externalities

Destruction of the environment has caused negative externalities such as pollution or congestion. The costs to developed countries also include the closure of industries that re-locate to low-wage countries where environmental regulations are less stringent. Driven by profits, foreign investors may shift highly-polluting production to the developing countries which are less stringent in environmental regulations. This may further cause plants in the source country using cleaner but more expensive methods to close as they become less cost-competitive internationally. The result is the survival of the cheapest which may also be most environmentally-damaging.

c) Monopoly Power

With globalisation, there may be an increase in monopoly power within the economy especially when a large foreign firm undercuts a competitive local industry because of some particular advantage (such as technology) and drive out domestic firms from that industry. Once the foreign firm's monopoly position is established, the foreign firm is likely to increase the prices with their pricing ability with the demand being price inelastic due to the lack of substitutes.

	Benefits	Costs	Policies
Economic Growth	Increase in Trade (if ↑X>↑M ⇒↑AD⇒↑NY) Increase in capital flows (if inflow of FDI>outflow of FDI⇒↑AD and ↑LRAS ⇒↑NY and ↑Yf) Increase in labour flows (if inflow of labour>outflow of labour), ideas and technology ⇒↑LRAS ⇒↑NY and ↑Yf	Increase in Trade (if ↑M>↑X ⇒↓AD⇒↓NY) Increase in capital flows (if outflow of FDI>inflow of FDI⇒↓AD and ↓LRAS (or slower ↑LRAS)⇒↓NY) Increase in labour flows (if outflow of labour>inflow of labour), ideas and technology ⇒⇒↓LRAS (or slower ↑LRAS) ⇒ possible ↓NY and ↓Yf Greater interconnectedness also results in greater volatility as countries become more dependent on each other. If a trading partner faces a recession, there would be a fall in (X-M) and FDI in its partners' economies too.	To reap greater benefits from globalisation, countries (e.g. small open economies like Singapore) may promote more trade through signing more Free Trade Agreements. For countries who may be suffering from severe trade deficits and unemployment because of increasing world competition, some may choose to adopt protectionist measures while others may choose to adopt supply-side policies to improve international competitiveness. (Section 6.6 will explain international competitiveness in more detail.) Countries who face net outflows of FDI might adopt policies to improve international competitiveness to attract FDI. This could include competitive tax rates or ensuring a high quality workforce. Countries that fear volatility may choose to rebalance their economies by growing C and reducing their reliance on (X-M) for growth. This might involve protectionist measures or expansionary fiscal policies to increase C,I,G. Other countries that have small domestic markets might diversify export markets to reduce their reliance on any one single trading partner.

Price Stability	Increase in capital flows (if inflow of FDI>outflow of FDI ⇒↑LRAS ⇒↓GPL) Increase in trade (cheaper access to imports) ⇒↓COP⇒↑SRAS⇒ ↓GPL Increase in labour flows⇒ greater access to cheaper labour ⇒↓COP⇒↑SRAS⇒ ↓GPL	Increase in Trade (if ↑X>↑M ⇒↑AD⇒↑GPL if economy is near Yf) Increase in capital flows⇒↑AD and ↑LRAS (if ↑AD >↑LRAS ⇒↓GPL) Greater flows of speculative hot money may have destabilizing effects on the economy as a sudden massive outflow of hot money might lead to currency depreciation which could result in inflation.	To manage demand-pull inflation, countries may choose to adopt contractionary demand management policies to reduce AD or supply-side policies to increase AS. To manage imported inflation, countries such as Singapore have chosen to adopt a gradual appreciation stance to ensure price stability. Singapore has also diversified its sources of raw materials to avoid being over-reliant on any one single trading partner.
Unemployment	Increase in Trade (if ↑X>↑M ⇒↑AD⇒↑NY⇒↓U) Increase in Outsourcing and Offshoring ⇒Developing countries may experience ↓U	Increase in labour flows, ideas and technology ⇒↑structural U Increase in Outsourcing and Offshoring ⇒Developed countries may experience ↑U (demand deficient and structural)	Some countries may choose to adopt expansionary demand management policies if they face cyclical unemployment. Others may choose to adopt protectionist measures to protect domestic workers. Supply-side policies to retrain workers might be most appropriate if structural unemployment is the main type of unemployment present. Some countries may also adopt stricter immigration policies to reduce inflow of cheaper foreign labour.
BOT	Increase in Trade (if ↑X>↑M ⇒BOT improves)	Increase in Trade (if ↑M>↑X ⇒BOT worsens)	To reduce trade deficits, some countries might choose to adopt protectionism. This may not only

			involve imposing tariffs on imports but also export subsidies to boost exports. Others might choose to allow the currency to depreciate to improve export competitiveness. Assuming Marshall-Lerner condition holds, the BOT will improve. However, a more sustainable policy would be to increase a country's international competitiveness through supply-side policies.
Microeconomic Effects	↑competition⇒ ↑efficiency +↑equity Consumers enjoy lower prices, greater variety Producers enjoy access to larger markets, EOS, higher profits	↑market power of large global firms (domestic producers may see a fall in profits and may exit market) ⇒ ↓efficiency + ↓equity ↑production⇒↑negative externalities⇒↓allocative efficiency ↑income inequality as industries with CA expand but industries which have lost CA shut down ↑income inequality due to inflow of cheaper labour that depresses the wages of low-skilled workers in developed countries.	Some countries may implement competition laws to ensure fair competition. Regulations to manage negative externalities such as carbon taxes can be imposed. Redistributive policies such as a progressive tax structure and providing subsidies for the poor might help to reduce income inequality. Supply-side policies to retrain low-skilled workers could also help them secure higher pay.

5.5. International Competitiveness

Globalisation has made a country's competitiveness in the international economy a much more important determinant of its economic success. If a country is not competitive, its rate of economic growth is likely to be curtailed.

International competitiveness can be defined as the ability to compete successfully overseas and sustain growth in real national income and improvements in living standards.

A country's goods and services are said to be competitive if their prices are relatively lower and if their quality, after-sales services, rates of innovation etc. are higher relative to substitute products made in other countries.

A country's ability to compete in markets for factors of production are influenced by the ability of the country to attract FDI, entrepreneurship and labour (especially high-skilled labour) from other countries. Globalisation has increased the importance of competitiveness in the markets for factors of production. Since firms are free to locate wherever they choose around the world, countries must compete to attract the physical capital provided by FDI, along with the jobs that such investment generates.

5.5.1. Determinants of a nation's competitiveness

The following are some key determinants of a nation's competitiveness:

a) Costs of Production

When wages rise faster than productivity, unit labour costs rise, adversely affecting an economy's competitiveness. Firms will choose to invest in countries where costs of production are low.

b) Quality of Labour Force

The higher the level of skills and productivity of the labour force, the greater the attractiveness of a country as a location for business.

c) Economic Stability

Firms are more likely to locate in countries with a reputation of economic stability. For example, firms may be attracted to relocate to countries with a track record of price stability because this helps firms make good business decisions.

d) Tax Regimes

Low corporate income taxes will attract firms since they will be able to earn higher post-tax profits. Low household income taxes (especially at high income levels) will attract skilled labour. High household income taxes, on the other hand, might lead to brain drain. Governments sometimes offer tax incentives like tax reliefs to attract FDI.

e) *Degree of regulation*

There are costs to complying with a country's regulations. If there are many strict policies that discourage enterprise, firms will be discouraged from investing in these countries. Countries with less stringent regulations on business tend to be more competitive.

5.5.2. World's most competitive economies

World's most competitive economies

Singapore beats the United States to take top spot in 2019

Rank		Ranking last year
1	**Singapore**	**2**
2	United States	1
3	Hong Kong	7
4	The Netherlands	6
5	Switzerland	4
6	Japan	5
7	Germany	3
8	Sweden	9
9	United Kingdom	8
10	Denmark	–

Source: WORLD ECONOMIC FORUM
STRAITS TIMES GRAPHICS

Figure 4: 2019 Global Competitiveness Report

In 2019, Singapore climbed to the top of the annual world rankings for competitiveness by the World Economic Forum (WEF), beating the United States, Hong Kong and the Netherlands to the spot.

Policymakers may see how their countries are shaping up in 103 indicators surveyed or tracked by the WEF and aggregated to 12 pillars that determine the country's competitiveness. Based on this, countries are given scores from zero to 100, with 100 being the point at which the issue stops being a constraint to productivity growth.

Here is how Singapore fared:

- Institutions (80/100, 2nd in the world)
- Infrastructure (95/100, 1st)
- Info-communications technology adoption (87/100, 5th)
- Macroeconomic stability (100/100, tied for 1st)
- Health (100/100, tied for 1st)
- Skills (79/100, 19th)
- Product market (81/100, 2nd)
- Labour market (81/100, 1st)
- Financial system (91/100, 2nd)

- Market size (72/100, 27th)
- Business dynamism (76/100, 14th)
- Innovation capability (75/100, 13th)

On aggregate, Singapore scored 84.8, ahead of the US (83.7), Hong Kong (83.1), the Netherlands (82.4), Switzerland (82.3) and Japan (82.3). The next highest South-east Asian nation, Malaysia (74.6), is ranked 27th in the world.

For further details on the report and suggested policies on how Singapore can ensure it remains competitive and achieve sustainable growth, refer to Appendix 7.

5.6. Conclusion

All in all, globalisation has improved the standard of living for many people in the world. Statistical data suggests that in terms of aggregate quality of life indicators, (declining infant mortality, longevity and income for example), there is aggregate global improvement.

However, international economies are able to modernise and enjoy the benefits of globalisation on condition that governments are able to improve the education system, provide better infrastructure (cheaper electricity, better roads) and investment incentives. Factors like corruption, poor education, red tape, crumbling infrastructure, lack of credit and a tiny tax base would deter countries from enjoying the range of benefits from globalisation. Economic integration can only provide additional wealth but governments have to allocate the gains to those who are most in need. If a government does not allocate new wealth appropriately, the advantages of free trade quickly erode.

Appendix

Appendix 1: Terms of Trade

The amount of domestically produced goods and services that must be given up in exchange for one unit of foreign goods is known as the terms of trade.

1) Measurement of Terms of Trade

$$\text{Terms of trade} = \frac{\text{Average price of exports}}{\text{Average price of imports}} \times 100$$

The terms of trade is expressed as an index where price changes are measured against a base year index which is 100.

For example:

If export prices increase by 5% since the base year and import prices remain unchanged,

$$\text{Terms of trade} = \frac{105}{100} \times 100$$

$$= 105$$

A terms of trade index of 105 here means that between the current period and the base period, the terms of trade has improved by 5%.

2) Interpretation of Changes in Terms of Trade

An improvement in terms of trade means that the country is able to obtain more foreign goods for the same quantity of domestically produced goods that is exported. Alternatively, a country is able to obtain the same amount of imports with fewer units of exports.

A country's terms of trade improves when the average prices of its imports rise by a smaller percentage than the average prices of its exports.

A country's terms of trade worsens when the average prices of its imports rises by a larger percentage than the average prices of its exports.

A worsening of terms of trade means that the country is able to obtain fewer foreign goods for the same quantity of exports.

When the terms of trade improves for one country, it is necessary that that of its trading partner must worsen

3) Factors Affecting the Terms of Trade

a) Changes in demand conditions

Changes in size of population/taste and preferences, etc

An increase in population will result in an increase in aggregate demand. This increases the demand not just for domestic goods but also imported goods. The higher demand for imports may cause import prices to rise[1] and the country's terms of trade to deteriorate.

b) Changes in supply conditions

Changes in technology

Improvements in techniques of production tend to decrease the cost of production and thus increase supply. If there is no increase in demand, price will fall, moving terms of trade against the exporting country.

Natural, non-renewable resources

Diminishing supplies of non-renewable resources such as coal or oil by a major producer will increase the prices of these goods and move the terms of trade in favour of the producing country. For example, a reduction in the supply of oil by OPEC allows OPEC countries to enjoy an improvement in the terms of trade when oil price increases, ceteris paribus.

4) Consequences of Changes in the Terms of Trade

a) Changes in Balance of Trade and Standard of Living

Balance of Trade = Total Export revenue (Price of exports x Quantity of exports) – Total Import Expenditure (Price of imports x Quantity of imports)

The state of a country's balance of trade will depend on the quantity of exports and imports and their relative prices (terms of trade). A positive balance of trade is known as a <u>trade surplus,</u> while a negative balance of trade represents a <u>trade deficit.</u>

The effect of changes in terms of trade on balance of trade will depend on:

The price elasticities of demand for exports and imports

The underlying causes of the changes in terms of trade

The responses that follow the changes in terms of trade

Standard of living refers to the quantitative and qualitative well-being of the average person in the country. A measure of material welfare is real GDP per capita.

Since AD = C+I+G+(X-M), an improvement in the net exports, ceteris paribus, will lead to an increase the AD. This will cause GDP to rise through the multiplier effect. Assuming constant prices and population size, real GDP per capita will rise, indicating a rise in the standard of living.

(b) Re-allocation of Resources

A fall in the price of imports could lead to an increase in the quantity demanded of imported goods and a fall in demand for local substitutes. This will cause a fall in production in the import-substitution industries.

An improvement in terms of trade due to a fall in import prices would lead to lower unit cost of production in the country especially in the case of Singapore since it imports most of her raw materials or factor inputs. As a result, the export sector becomes more competitive, production increases and standard of living Improves.

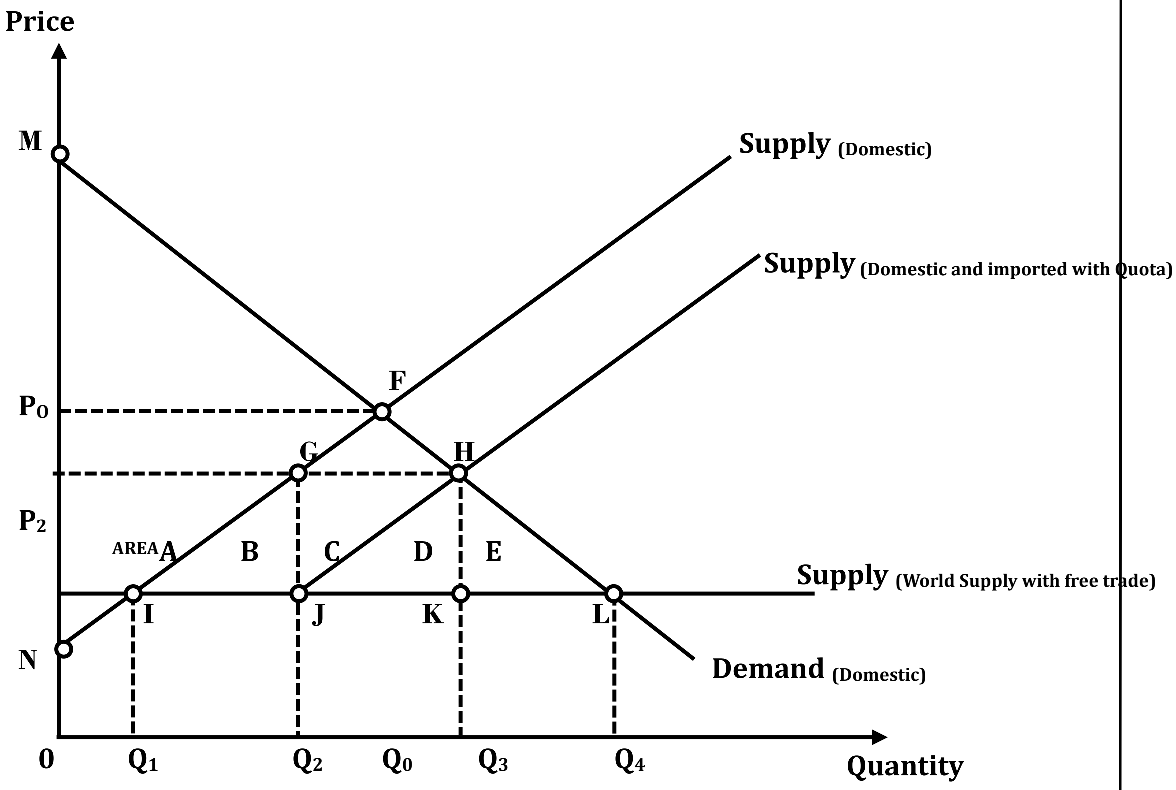
(c) Changes in Consumption Pattern

An improvement in terms of trade due to a fall in import prices could mean that imported goods are now within the reach of more people. They can therefore enjoy a greater variety of imports at lower prices. This will increase the level of consumer satisfaction.

However, an improvement in the terms of trade due to a lower price of imports could mean that foreign countries are selling less of their exports. Hence their ability to buy from our country will be correspondingly reduced. This may lead to a fall in the volume of trade which can affect our domestic production and national income.

Appendix 2: Imposition of a Quota and its Effects

Figure: Effects of a Quota on the Market



	Price	Quantity		Consumer Surplus	Domestic Producer Surplus
Free Trade	P_1	Domestically Produced	$0Q_1$	Area M L P_1	Area P_1 I N
		Imported	Q_1Q_4		
		Total	$0Q_4$		
Trade with Quota	P_2	Domestically Produced	$0Q_2$	Area M H P_2	Area P_2 G N
		Imported	Q_2Q_3		
		Total	$0Q_3$		
Change	Increase	Total	Decrease	Decrease	Increase

Effects on Consumers:

- Consumption will decrease.
- Consumers have to pay a higher price for a lower level of consumption.
- Loss of consumer surplus = Areas A+B+C+D+E

Effects on Domestic Producers

- Market price increases
- Quantity produced by domestic producers increases
- Domestic producers surplus increase by Area A

Effects on Government

- Tax / Tariff Revenue from the imposition of quota = 0
- In the case of quota, the government does not benefit directly.

Effects on Society

- Loss of consumer surplus = Areas A+B+C+D+E

Out of which:

- Area A would be redistributed to domestic producers in the form of producer surplus.
- Area C and D would be redistributed to importers who got the quota to import in the form of producer surplus for them.
- Deadweight loss: Areas B and E

Appendix 3: The Effect of Economic Integration on the Pattern of Trade

The economic implications of regional trade liberalisation, such as free trade areas or customs unions, are essentially identical. By joining a customs union or a free trade area, a country will find changes in its trade patterns. Two such patterns can emerge: trade diversion and trade creation.

To show how this happens, let us assume that this is the initial scenario.

- ♣ There are three countries in the world: A, B, and C.
- ♣ Country B is the higher-cost producer of a product among the 3 countries.
- ♣ Country C is the lowest-cost producer of the same product among the 3 countries.
- ♣ Initially Country A protects its producers with an ad valorem tariff of 10% against all foreign producers.

Suppose that Country A forms a free trade area with Country B. Under this arrangement, no tariff will be imposed on goods coming from Country B, a member country, to Country A.

However, tariff will continue to be imposed on goods coming from Country C, a non-member country.

As a result of this development, the pattern of trade changes. There is trade diversion from a lower-cost producer to a higher-cost producer as explained below.

a) Trade Diversion

For Country A, there is a shift in the source of trade away from Country C, the lower-cost world producer in favour of Country B, a higher-cost FTA member country. This shift in the pattern of trade from low-cost world producers to a higher-cost FTA member is known as trade diversion.

In general, trade diversion is viewed as welfare reducing for the world as it represents a movement away from the principle of comparative advantage. Country A no longer imports from the country that has a natural comparative advantage (i.e., Country C). Instead, it has acted in favour of its fellow FTA member, Country B, even though Country B is not the lowest-cost producer. In the process, resources are directed away from production in the lowest-cost world producer, Country C, and directed towards production in the higher-cost partner, Country B.

Trade Diversion - occurs when lower cost imports from outside the free trade area or customs union are replaced by higher cost imports from another union member.

b) Trade Creation

The second effect of the formation of the FTA is that trade expands for Country A. The removal of trade barriers allows greater specialisation in accordance with the principle of comparative advantage. The removal of trade barriers among members results in an increased volume of trade. Hence trade is created. The expansion of trade that results from free trade area or customs formation is known as trade creation.

From a world welfare point of view, trade creation is good as it represents a movement towards the principle of comparative advantage which results in welfare gains from more efficient resource allocation. This is true because the highest-cost producer (Country A, in this example) is availing itself of the benefits available from international trade.

Trade Creation - occurs when some domestic production in a member country is replaced by lower cost imports from another member country. It results from greater specialisation in accordance with the principle of comparative advantage.

Whether or not the creation of a free trade area is beneficial to the member countries depends on the relative strengths of the forces of trade creation and trade diversion. Overall, Country A is better off if the benefits of trade creation exceed the costs of trade diversion, but there is nothing to guarantee that this will occur.

Appendix 4: Singapore's Changing Trade Policies

Although there have been changes in trade policy since 1960, 5 fundamental principles have guided trade policy in Singapore:

- ♣ Commitment to free trade through a low level of protection and continual exposure of consumers/producers to international price signals;
- ♣ Adoption of an active export promotion strategy, primarily through improvements in infrastructure and selective fiscal incentives;
- ♣ Adopting an 'open-arms' policy towards multi-national corporations (MNCs);
- ♣ Liberalisation of trade through economic integration e.g. ASEAN etc;
- ♣ Maintaining external competitiveness and flow of foreign investments into Singapore by maintaining low inflation and domestic price stability.

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 ruling PAP attempted to diversify the entrepôt base (which was seen as constraining in terms of potential income and employment growth) by encouraging import-substitution industrialisation 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

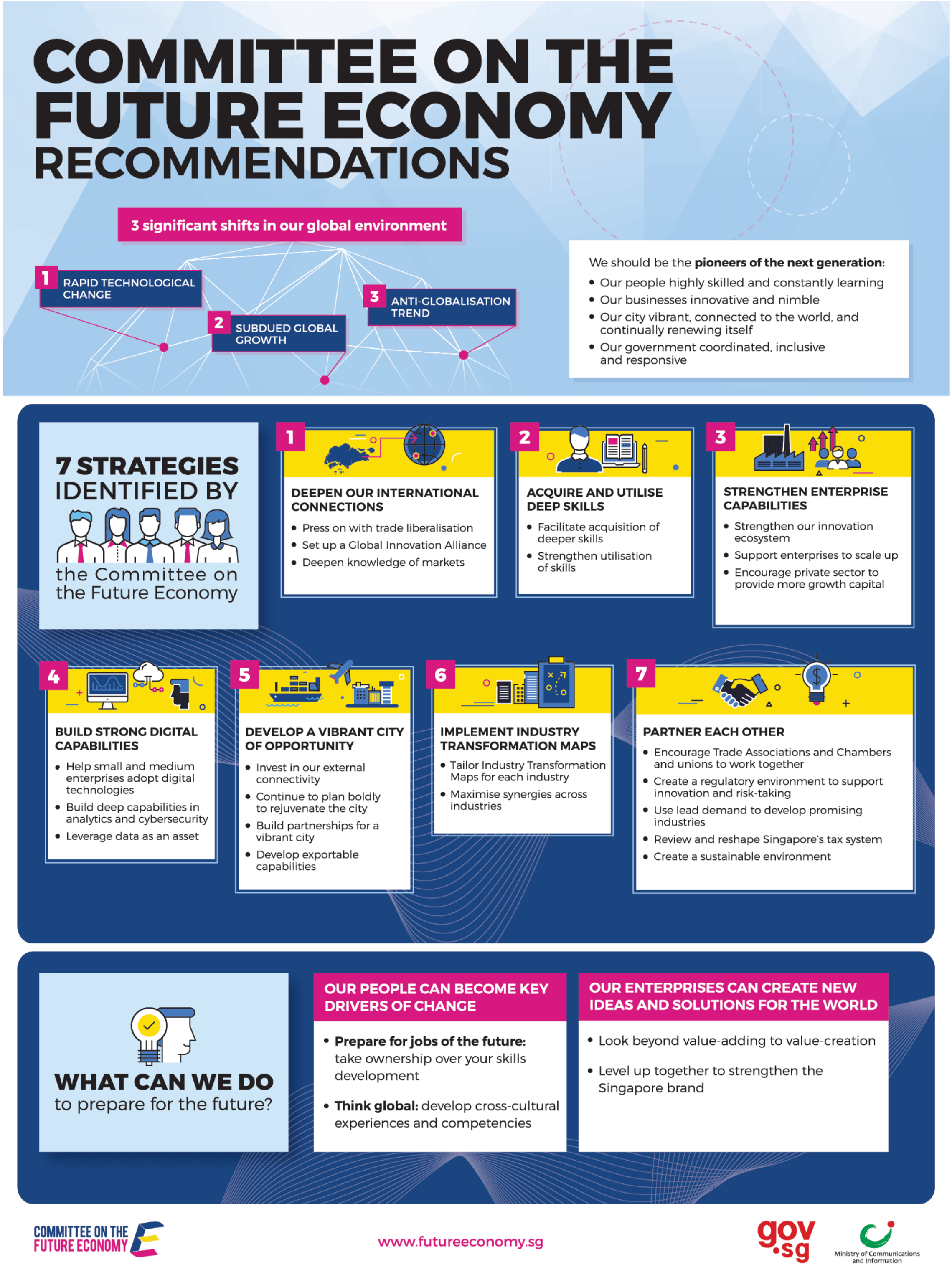
Besides developing the local industries, this period saw a trend towards regionalisation and globalisation. Local firms are encouraged to venture into developing countries to take advantage of cheaper labour or to move into the services industries.

Export services industries, such as finance and insurance and wholesale trade will continue to grow, while manufacturing industries are also becoming increasingly services-oriented with knowledge- and skill-intensive activities.

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 will be given in the next section) Such FTAs are superhighways that connect Singapore with key economies in North and 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.

Appendix 5: Committee on the Future Economy Recommendations



Source: https://www.gov.sg/microsites/future-economy

Appendix 6: 50 Years of ASEAN (Nov 2017)

- ♣ The Association of Southeast Asian Nations (ASEAN) celebrated its 50th anniversary in 2017.
- ♣ Singapore will be taking over the ASEAN chairmanship in 2018, and the key focus will be on e-commerce and the digital economy. Singapore will be working closely with other ASEAN members to promote innovation, build up digital connectivity and facilitate e-commerce flows to benefit businesses, especially micro, small and medium-sized enterprises (*The Straits Times*, 20 September 2017).
- ♣ Freer flows of workers across borders are to be encouraged as they will help to further integrate ASEAN and spread talent as well as know-how around the region, according to a World Bank study (*The Straits Times*, 10 October 2017).
- ♣ ASEAN has already taken key steps to promote free movement of goods, services and people among ASEAN countries by boosting land, sea and air links. This will lead towards the formation of a single shipping and aviation market, while making it easier for buses to move between borders (*The Straits Times*, 13 October 2017).
- ♣ ASEAN was established in 1967 with Thailand, Indonesia, Malaysia, the Philippines and Singapore as founding members. Brunei Darussalam, Vietnam, Laos, Myanmar and Cambodia later joined.
- ♣ The ASEAN Declaration states that the aims and purposes of the Association are: (1) to accelerate the economic growth, social progress and cultural development in the region through joint endeavours in the spirit of equality and partnership in order to strengthen the foundation for a prosperous and peaceful community of Southeast Asian nations, and (2) to promote regional peace and stability through abiding respect for justice and the rule of law in the relationship among countries in the region and adherence to the principles of the United Nations Charter.

Describe what happened to ASEAN's merchandise trade and services over time.

- ♣ Exports and imports for both merchandise trade and services have increased over time. By 2016, ASEAN's total merchandise trade stood at US$2.2 trillion while trade in services accounted for US$681 billion.
- ♣ The shares of ASEAN's merchandise exports and imports in the world have risen significantly to 7.2% and 6.6% by 2016.
- ♣ Intra-ASEAN trade made up almost 24% of ASEAN's total merchandise trade in 2016.

Describe what happened to FDI inflows to ASEAN in 2016.

- ♣ In 2016, ASEAN attracted US$96 billion of FDI. The services sector constituted the largest share of FDI inflows to ASEAN, reaching almost 81% in 2016.
- ♣ Intra-ASEAN investment accounted for almost 25% of total FDI inflows.

TRIGGER QUESTIONS:

Explain the economic opportunities that ASEAN presents.

Explain how ASEAN could be further integrated.

Analyse the implications of deepening ASEAN integration on Singapore.

a) *Explain the economic opportunities that ASEAN presents.*

- Students can refer to *The Straits Times* (6 Aug 2017) and *The Straits Times* (26 Aug 2017). Students are encouraged to consider the economic factors that are working in favour of ASEAN and its member states.
- ASEAN is favourably located within the fastest growth zone in the world, with natural maritime access to India, China and global markets as a hub of the global supply chain. The ASEAN+3 (China including Hong Kong, Japan and South Korea) grouping is expected to grow at around 5% per annum, twice that of advanced countries and emerging markets, in 2017-2018.
- The Regional Comprehensive Economic Partnership (RCEP) has been set in place to champion trade liberalisation. It will link ASEAN to its six partner countries (China, Japan, South Korea, India, Australia and New Zealand), creating a bigger market of 3.5 billion people for further economic growth and development.

b) *Explain how ASEAN could be further integrated.*

- Students can refer to *The Straits Times* (7 June 2017), *The Straits Times* (20 Sept 2017), *The Business Times* (27 Sept 2017)* and *The Straits Times* (10 Oct 2017). Students are encouraged to consider measures that could lead to further integration of ASEAN.
- ASEAN countries have made great economic progress in the past five decades. However there is a wide disparity between the 10 countries in terms of wealth and economic development. For instance, GDP per capita is 55 times greater in Singapore than that of Cambodia (*The Business Times,* 27 Sept 2017). To sustain growth, economies would need to be more connected.
- In order to pursue greater integration, member states can strengthen areas such as seamless logistics, digital innovation, people mobility, sustainable infrastructure and regulatory excellence.

c) *SEAMLESS LOGISTICS*

- ASEAN has taken key steps to promote free movement of goods, services and people among ASEAN countries by boosting land, sea and air links. This will lead towards the formation of a single shipping and aviation market, while making it easier for buses to move between borders. Such measures will facilitate greater movement of people and goods in the region, and boost trade, investment, tourism and economic growth.

d) *DIGITAL INNOVATION*

- ♣ ASEAN accounts for approximately 5% of global manufacturing in value-added terms. It is the seventh-largest producer globally in the auto industry, employing about 800,000 workers. ASEAN countries have been increasingly attractive to MNCs as China's labour costs have risen to around US$28 a day for the average factory worker, compared with around US$7 a day in Vietnam and US$9 a day in Indonesia *(The Straits Times*, 7 June 2017).
- ♣ However, International Labour Organisation reported that ASEAN countries such as Vietnam, Cambodia and Indonesia have the highest number of workers at risk from automation.
- ♣ Thus there are plans for ASEAN to tap on the digital economy, with emphasis on development of innovation labs and equipping workers with the right skills.
- ♣ As Singapore takes over the ASEAN chairmanship in 2018, the key focus will be on e-commerce and the digital economy. Singapore will be working closely with other ASEAN members to promote innovation, build up digital connectivity and facilitate e-commerce flows to benefit businesses, especially micro, small and medium-sized enterprises (*The Straits Times*, 20 Sept 2017).
- ♣ There are also plans to assist ASEAN businesses to lower the administrative costs of trade, for instance by expediting Customs clearance via electronic exchange of information across borders.
- ♣ Such measures will help to integrate ASEAN and enable firms to better adapt against disruptive innovations and global developments.

e) *PEOPLE MOBILITY*

- ♣ It was noted that mobility of talent in ASEAN is an important issue, and that borders should be opened for skilled labour to move from one country to another. Freer flows of workers across borders will help to further integrate ASEAN and spread talent as well as know-how around the region, according to a World Bank study (*The Straits Times*, 10 Oct 2017).
- ♣ Singapore, Malaysia and Thailand attracted the bulk of migrant workers (6.5 million ASEAN workers) within the region. The migrant workers were made up of lower-skilled workers and qualified professionals, with the majority being that of the former.
- ♣ ASEAN aims to further support the ease of travel throughout the region, reduce the gaps between vocational skills demand and supply across ASEAN and to increase the number of intra-ASEAN international students.
- ♣ World Bank recommendations include to make entry requirements more transparent and to help workers track their progress towards admission. Workers are often ill-informed about job opportunities and costs, and may be subjected to exploitation by recruitment

agencies or employers who demand high job-placement fees. ASEAN could address this with a common labour market information portal.

Analyse the economic implications of deepening ASEAN integration on Singapore.

Students can refer to *The Business Times* (6 Sept 2017) and *The Business Times* (27 Sept 2017).*

Students are to consider some of the advantages and possible disadvantages of deepening ASEAN integration on Singapore.

Students can consider the benefits of increased trade and investment to the Singapore economy from deepening ASEAN integration. ASEAN is one of Singapore's largest trading partners and accounts close to 25% of its international trade. Tourism is also likely to be positively impacted. Hence the closer cooperation between member states would improve economic growth and quality of life for Singaporeans.

There would be greater opportunities for local firms to expand regionally as well to tap on e-commerce and the digital economy. The government has introduced initiatives to help companies expand internationally. The government has also introduced IE Singapore's upcoming Non-Recourse Financing, which is targeted at local enterprises undertaking mid-sized overseas infrastructure projects. Such loans are secured only by project assets and its cash flow, limiting the impact on a borrower in the event of a default. The Asian Development Bank has estimated that ASEAN countries need to invest over US$60 billion a year in infrastructure until 2020 to maintain their growth. However its current infrastructure spending is around 3 to 4 % of GDP and less than the desired rate of 5 to 8 % of GDP. Such infrastructure is needed not only to improve domestic and regional connectivity, but also to deal with basic needs of citizens such as water, electricity, health and climate change amelioration investments. Singaporean firms would stand to benefit if they could tap on the infrastructural projects available in the region.

Challenges may include vulnerability to regional shocks, firms who are unable to keep up in the face of competition and disruptive innovations as well as some degree of inequity.

Source: OPAL

7.7 Appendix 7: Why Singapore is deemed the most competitive economy globally but still can do better (OCT 2019)

Source: TODAY, 09 OCTOBER, 2019

(https://www.todayonline.com/singapore/explainer-why-singapore-deemed-most-competitive-economy-globally-still-can-do-better)

Singapore has climbed to the top of the annual world rankings for competitiveness by the World Economic Forum (WEF), beating the United States, Hong Kong and the Netherlands to the spot. The report assessed 141 countries, covering 99 per cent of the global economy this year.

Professor Klaus Schwab, its founder and executive chairman, said that the findings serve as an annual yardstick for policymakers to look beyond short-term and reactionary measures and, instead, measure against a full set of factors affecting productivity.

Competitiveness, a concept in accounting theory, means the attributes and qualities of an economy that allow for a more efficient use of the factors of production — namely capital and labour. Increasing productivity in any nation is the most important factor driving economic growth, and there is strong evidence showing that sustained economic growth is “the most effective way to lift people out of poverty and increase their quality of life”, the report noted.

HOW SINGAPORE COULD DO BETTER

The report highlighted a few shortcomings:

1. Skilled workforce

Singapore has achieved a high skills base, ranked 19th in the world. In order to become a global innovation hub, it will need to promote entrepreneurship and further improve its skills base.

2. Limited checks and balances and freedom of the press

Singapore’s public institutions rank second in the world, behind Finland. But its performance in this department “is undermined by limited checks and balances”, which scored 23rd in the world.

In terms of freedom of the press, Singapore was ranked 124th out of 141 countries. It is 14th in the world for judicial independence, and 15th in the legal framework to challenge regulations.

3. Lack of commitment to sustainability

Singapore is 66th in the world for its commitment to environmental sustainability. It came in 62nd for the regulation of renewable energy, and 119th for its number of environment-related treaties currently in force.

4. Ratio of salaried female workers to male workers

Singapore is first for diversity of workforce. However, its ratio of female to male workers at 0.89 is 31st in the world.

5. Ease of hiring foreign labour

Singapore is top in co-operation in labour-employer relations. But it is 93rd in the world in the ease of hiring foreign labour, and 18th for workers’ rights.

In a Facebook post, Trade and Industry Minister Chan Chun Sing wrote that Singapore's ranking at the top of the table is encouraging news, reflecting "how our strong fundamentals have continued to distinguish us from the competition".

He added that Singapore cannot take things for granted: "We must persevere with our collective efforts to stay ahead in light of the current economic uncertainties… improve the capabilities of our enterprises, transform our industries and ensure that our workers are well-equipped with the right skills to stay competitive."

WHAT'S NEXT BEYOND GROWTH

Beyond economic competitiveness, Prof Schwab of WEF said that world leaders must work towards growth, inclusion and sustainability", stating that there is a "clear moral case" for a focus on the environment and on inequality.

1. The environment

The WEF found no inherent trade-offs between economic growth and social and environmental factors, but there is some evidence showing that failing to address the environmental tipping points will affect productivity.

Suggested approaches include giving incentives for green research, carbon taxes and subsidies, as well as international collaboration to tackle environmental challenges.

Highly competitive economies that have greater access to technological progress are better positioned to smoothen the difficult transition to a low-footprint economy, the report also said.

Based on the average number of "green patents" registered in 2014 and 2015, Singapore has one of the lowest number of environmental-related technology inventions per capita — fewer than 20 — for a country that has scored highly in the overall WEF competitive index.

2. Inequality

While globalisation has been beneficial to overall global growth, WEF noted it has also increased inequality within countries, by transferring low-skilled jobs in high-productivity sectors from advanced economies to developing countries, which are mainly in Asia. This could penalise the workers in these developing countries.

In summary, inequality has these effects:

People who are not benefiting from globalisation could have a change in attitude to not contribute to society in the same way as they would otherwise.

Erosion of trust among stakeholders in society, such as between the government and the people.

Creation of a polarised society, the rise of extremism and the weakening of social fabric, potentially leading to social unrest and political instability.

The belief among people that this unfairness stems from capitalism, leading to the conviction that economic liberalism has failed to deliver on the promise of widespread prosperity.

WEF said that inequality should be seen as a result of these policy choices:

Deregulated labour markets and finance, changing tax codes and public investments — with little attention to how it worsens income distribution.

Insufficient action to prepare workers and businesses for technological shifts.

It recommended several policy efforts, including these:

Enhance access to opportunities to include disadvantaged households and underprivileged ones.

Foster fair competition and level playing fields. If many firms compete in the markets, prices are lower — benefiting consumers — and stronger competitive pressure translates into greater innovation and more investments and jobs.

Update tax systems to become more progressive. When it comes to personal income, "restoring greater tax progressivity" to tax the rich more should allow for more equitable income distribution "without significant losses to economic activity or productivity", WEF said.

Appendix 8: Patterns of Trade

The pattern of trade of a country describes:

i) ***the volume of goods and services a country exports and imports***
ii) ***the type of goods and services a country exports and imports***
iii) ***the trading partners of a country (i.e. From whom does this country import? To whom does the country export?)***

Patterns of trade are influenced by both supply and demand factors.

Supply Factors

1. Comparative advantage – Since countries can gain from trade by specialising in those goods in which they have lower opportunity cost, comparative advantage would therefore determine the types of goods and services a country would export and import.

2. Transport costs and location – Transport costs can play a major role in influencing a country's choice of major trading partners. Neighbouring countries tend to have large volumes of trade with one another. Some firms may want to locate their production nearer to their key markets to better serve their customers as well as reduce transport costs. This helps to explain the huge trade volume between Singapore and Malaysia. Canada and USA also have a huge trade volume despite the two countries having largely complementary industries.

3. Off-shoring and outsourcing – With differences in resource endowments, some firms may shift some of their production activities overseas to benefit from the lower relative factor prices in foreign countries that arise due to differences in opportunity cost. For example, many MNCs set up their production of high technology components in countries like Singapore and locate the production of labour intensive intermediate products to countries such as China, Myanmar, Vietnam and Cambodia. Off-shoring and outsourcing thus plays a role in determining the type of goods the country exports.

Demand Factors

4. Consumer tastes and preferences – The consumption pattern of a country can affect its demand for imports, thereby influencing the type and volume of goods and services the country imports. This explains why a significant part of trade is intra-industry in nature. (Comparative advantage explains inter-industry, not intra-industry trade.) For example, a country which produces rice could also import rice from other countries.

5. Changes in income – The economic growth and development of particular countries and regions also affects patterns of trade as fast developing countries tend to see a growing increase in both imports and exports. As a country's income increases, its demand for luxury goods may increase and volume of such imports would tend to rise.

6. Trade agreements and restrictions – The presence of protectionist measures or the presence of Free Trade Agreements may determine the trading partners of a country as well as the type and volume of goods and services to import or export.

7. National interests – For national security and strategic reasons, countries may be selective in the type of goods and services they import and export. A country may prefer to produce a good that is important for national security e.g. production of weapons even if it does not have comparative advantage in the good.

Appendix 9: Singapore's Patterns of Trade

Key Features of Singapore's Trade Structure:

- a high degree of openness to international trade and factor flows, and exceptionally high import content of exports;
- a process of rapid industrialisation and export-led growth since the 1960s;
- the lack of significant natural resources except for a well-located harbour;
- a 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, especially fashion goods and electronic products, while simultaneously exporting similar but differentiated goods to cater to foreign tastes;
- 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.

Singapore's Changing Patterns of Trade

In terms of merchandise trade:

- In 1960, Singapore traded mainly in food and raw materials, with neighbouring countries as her major trading partners followed by European countries. In the 1960s, Singapore moved from entrepot to manufacturing. Lack of manufacturing expertise led to reliance on FDI to enable Singapore to access foreign investment capital, technology and managerial expertise, and integrate into MNCs' global production networks and supply chains.
- As labour shortage emerged by the late 1970s, Singapore's industrial strategy evolved towards higher-skill and higher value-added manufacturing, responding to changing factor endowments and facilitated by government industrial promotion policies. As pace of industrialisation increases, exports of machinery and transport equipment grew, with USA, EC and Japan becoming more important as trading partners.
- By the year 2000, electronic products have overtaken machinery and transport equipment as the most important items traded. In the 2000s, leading industries in terms of value added terms were electronic and optical products, pharmaceutical and biological products, transport equipment (mainly marine) and machinery and equipment.

Singapore's Changing Patterns of Trade

In terms of trade in services:

- Singapore has been a net exporter of services;
- In 1965, more than half of total service exports were from rental income from military bases rented to the British Government while majority of service imports were for shipment payments to foreign companies;
- Singapore grew as a regional services hub, linking its Southeast Asian hinterland to the rest of the world through finance, shipping and air transport activities, based on its competitive advantages of a strategic geographical location; well-developed physical and

telecommunications infrastructure; expertise in commerce, finance and infrastructure management; well-educated and English-speaking workforce; conducive legal environment; minimal restrictions on right of establishment; favourable tax regime; absence of controls on capital flows and foreign exchange transactions; and political, social and economic stability.

- By 1975, transportation and services took over as the most important service export sector;
- Over the years, travel and investment income sector have gained importance in services trade.

For more information, please read

- Appendix 5: Committee on the Future Economy Recommendations
- Appendix 6: 50 Years of ASEAN (Nov 2017)