The National and International Economy (III) Globalisation and the International Economy



Name: _____

Class: _____

Overview of Chapter 8		
Part 1:	International Trade	Pg 1
Part 2:	Protectionism	Pg 8
Part 3:	Economic Integration	Pg 13
Part 4:	Globalisation	Pg 17

© Hwa Chong Institution. All Rights Reserved.

Scanned with CamScanner

HWA CHONG INSTITUTION
Year Two H2 Economics 2023
Chapter #8: The National and International Economy (III)
Globalisation and the International Economy

A LEVEL QUESTIONS IN RECENT YEARS

N2022 Q6
Singapore's Prime Minister has stated that 'Globalisation will be under pressure, but it is imperative for countries to cooperate, for business to operate across many geographics, to tap resources, to bring skills and talents and experiences together, and then serve markets all around the world.'

(a) Explain the benefits and costs of globalisation to Singapore. [10]
(b) Discuss the most appropriate policy measures that the Singapore government should take to increase the benefits and reduce the costs of globalisation. [15]

N2019 Q6
Globalisation has been a major influence on Singapore's economic performance. The uncertainty and instability happening around the world in recent years could threaten the economic benefits that globalization brings.
(c) Explain two different factors that have enabled globalisation to occur. [10]
(d) Assess whether current global economic developments will have a positive or negative effect on Singapore's future performance. [15]

N2018 Q6
Across the globe, people are wondering why the US, usually the leader in free trade, is now taking a protectionist stance
(a) Describe two different types of protectionist policy measure and explain how each type would affect trade. [10]
(b) Discuss the extent to which protectionism would be beneficial to an economy. [15]

N2017 Q6
If Singapore is to continue to benefit from international trade, the government cannot rely solely on exchange rate policies. It needs to continue to use other trade related economic policies, such as free trade agreements (FTAs) and policies to stimulate export industries.
(a) Explain why Singapore uses exchange rates as its main tool of monetary policy. [10]
(b) Evaluate the importance of other trade-related economic policies that are used by the Singapore government in order for the economy to continue to benefit from international trade. [15]

N2015 Q6
"We are restructuring to become more competitive, not less." Mr Lim Hng Kiang, Minister for trade and Industry, The MTI Times, Committee of Supply 2013.
(a) Explain why an economy's comparative advantage might change over time. [10]
(b) Assess the measures adopted by the Singapore government to improve its global competitiveness. [15]

N2014 Q1
In order for specialisation to be beneficial, it must be accompanied by exchange.
(a) Explain how benefits to the economy can arise from specialisation and exchange. [10]
(b) Very often these benefits are not fully achieved in domestic and international markets. Discuss the reasons for this. [15]

N2013 Q6
On 14 October 2011 Premier Wen Jiabao of China called for joint international efforts to combat rising trade protectionism, which he said was damaging the world economy amid on-going global economic turbulence.

Source: China Daily, 15 October 2011

Discuss whether the use of protectionist policies can ever be justified during a period of worldwide economic recession or whether governments should follow Premier Wen's advice and adopt a policy of greater free trade.[25]

N2011 Q6
The Singapore economy is open to the world, in trade and investment. This is both a matter of policy and necessity because of our size and limited resources. In 2008, our trade to GDP ratio was 360%, the highest in the world.

Ministry of Trade and Industry, Singapore, 2009

Discuss whether the openness of the economy is beneficial or harmful to the standard of living in Singapore. [25]

TYS N2010 Q6
There is a general consensus among economists that protectionism is a bad thing.
(a) Explain why protectionism exists. [8]
(b) Assess the extent to which the Singapore government's approach to international trade may need to be adjusted in response to a growth in worldwide protectionism. [17]

TYS N2009 Q6
An economist stated 'The trend towards globalization leaves no room for protectionism.'
(a) Account for the trend towards globalization. [10]
(b) Discuss whether you agree with the economist's view. [15]

TYS N2008 Q6
(a) Explain the determinants of the pattern of trade between Singapore and the rest of the world. [10]
(b) Discuss whether the Singapore government should change its policies for managing the balance of payments. [15]

TYS N2007 Q6
Discuss whether Singapore is among the economies that have most to gain from globalisation. [25]

© Hwa Chong Institution. All Rights Reserved.
Scanned with CamScanner

Hwa Chong Institution
Year Two H2 Economics 2023
Chapter #8: The National and International Economy (III)
Globalisation and the International Economy

PART 1: INTERNATIONAL TRADE

8.1.1 INTRODUCTION

8.1.2 BASIS OF FREE TRADE: THEORY OF COMPARATIVE ADVANTAGE
- 8.1.2.1 Definitions
- 8.1.2.2 Illustration of Specialisation & Trade
- 8.1.2.3 Sources of Comparative Advantage
- 8.1.2.4 Limitations of the Comparative Advantage Theory

8.1.3 BENEFITS AND COSTS OF TRADE
- 8.1.3.1 Benefits of trade
- 8.1.3.2 Costs of trade

8.1.1 INTRODUCTION

International Trade is the exchange of goods and services across national boundaries.

Trade and specialisation are closely connected. The rationale underlying specialisation and trade is to specialise in producing goods & services that one is best suited or most skilled at and using these to trade for other goods and services one is relatively less efficient at producing.

This principle applies at the individual level (i.e. interpersonal trade); the regional level (i.e. inter-regional trade); and the international level (i.e. international trade).

8.1.2 BASIS OF FREE TRADE: THEORY OF COMPARATIVE ADVANTAGE

8.1.2.1 DEFINITIONS

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

For example, to produce an additional unit of a computer, Country A only has to sacrifice the production of 3 units of textile whereas Country B has to sacrifice the production of 6 units of textile. The opportunity cost of producing one additional unit of computer is lower for Country A than Country B. Hence, we say that Country A has a comparative advantage in the production of computers.



In his book Principles of the Political Economy (1817), David Ricardo explained his **Law of Comparative Advantage**, which was further refined by John Stuart Mill. It is this theory that forms the foundation of our theory of international trade.

The Law of Comparative Advantage states that trade can benefit all countries if each country were to specialize in producing the goods in which they have a comparative advantage in (i.e. able to produce at relatively lower opportunity costs) and exchange some of these goods for

© Hwa Chong Institution Economics Unit. All Rights Reserved

Scanned with CamScanner

other types of good in which they have a comparative disadvantage in (i.e. goods in which they can produce at relatively higher opportunity costs)

This explains why many countries are dependent on others for goods which they themselves can produce on their own. A country should **specialise in** what it is **relatively best at** based on comparative advantage.

Provided opportunity costs of various goods differ in two countries, both of them can gain from mutual trade if they specialise in producing and exporting those goods that have relatively lower opportunity costs compared with the other country.

For the case of a developed country (DC) that is more efficient than a less developed country (LDC) at producing both textiles and cars. With a given amount of resources, the production possibilities for each country is shown in Table 1.

Table 1: Production possibilities for two countries

Countries	Textiles	Cars
Developed Country (DC)	20	30
Less Developed Country (LDC)	15	10

Table 2: Opportunity costs ratios

Countries	Opp cost of producing 1 unit of Textiles	Opp cost of producing 1 unit of Cars
Developed Country (DC)	3/2 C	2/3 T
Less Developed Country (LDC)	2/3 C	3/2 T

The LDC has a comparative advantage in textiles since textiles is relatively cheaper in the LDC: 10 units of cars have to be sacrificed to produce 15 units of textiles, whereas in the DC, 30 units of cars have to be sacrificed to produce 20 units of textiles. Hence, the opportunity cost of textiles is higher in the DC as shown in Table 2 since the DC has to give up 3/2 units of cars for 1 unit of textile as compared to the LDC which has to give up 2/3 units of cars for 1 unit of textiles.

Similarly, the DC has a comparative advantage in cars since cars is relatively cheaper in the DC: 20 units of textiles needs to be sacrificed to produce 30 cars, which means the DC has to give up 2/3 units of textiles for 1 unit of cars. This is in contrast to the LDC which needs to sacrifice 15 units of textiles to produce 10 cars, which means the LDC has to give up 3/2 units of textiles for 1 unit of cars.

The above shows that the DC and LDC have lower opportunity costs or comparative advantage in producing cars and textiles respectively. Hence when the DC specialises in producing cars while the LDC specialises in producing textiles, and both countries trade with each other such that they export the good they specialise in exchange for the import of the good they have a comparative disadvantage in (e.g. DC imports textiles, LDC imports cars), there is mutual benefit for both countries to trade (*a detailed numerical illustration on specialisation and trade is shown in Appendix 1*).

Hence, when 2 countries specialise while importing goods in which they have a comparative disadvantage, there can be **mutually beneficial outcome for both countries.**

© Hwa Chong Institution Economics Unit. All Rights Reserved

Scanned with CamScanner

8.1.2.2 SOURCES OF COMPARATIVE ADVANTAGE

(a) Static Comparative Advantage

At any point in time (i.e. static) differences in comparative advantage between countries arise because of **differences in factor endowments** i.e. differences in the quantity or quality of factors of production.

Such factor endowments can be in terms of
(1) Natural resources (e.g. climate, arable land, forests, or fishing grounds)
(2) Human resources (e.g. skilled and unskilled labour)
(3) Capital stock (e.g. infrastructure like transportation systems, utilities, and communications)
(4) Technological capabilities

Such differences in factor endowments persist because resources are not perfectly mobile internationally. For example, natural resources are totally immobile while the international mobility of labour resources is partially limited by relocation costs as well as immigration restrictions. Similarly, international mobility of capital and technology may also be limited by regulations that deter financial inflows and foreign direct investments (FDI).

Differences in factor endowments lead to differing factor prices which in turn affect the prices of goods and services produced by different countries. As such, countries typically specialise in producing goods that require factors in which they are relatively abundant as they are able to produce such goods more efficiently (i.e. at a lower opportunity cost) than countries which are less endowed with such factors. Countries then trade these goods and services for other goods and services which they are able to produce less efficiently.

For example, a developing country that is abundant in unskilled labour (e.g. Pakistan) is likely to specialise in and export labour intensive products (e.g. textiles) in exchange for imports of capital and technology intensive products (e.g. motor vehicles) from a capital and technology abundant developed country (e.g. South Korea).

(b) Dynamic Comparative Advantage

Ricardo's theory of comparative advantage assumes that resource endowments are static. This theory does not account for the fact that **additional resources can be created through sustained investments in physical capital, labour, and technology.** For example:

- Physical capital can be accumulated if savings are channelled to the production or import of capital goods.
- Skills of workers can be raised through education and training
- Technology can also be improved through domestic research and development or by directly purchasing such technology from more advanced countries

Comparative advantage is therefore not static but dynamic because countries can develop comparative advantage in producing higher value products which are capital, skill and technologically intensive with sustained investments in such areas.

In addition, comparative advantage can be **acquired via targeted inflows of foreign direct investments.** For example, the Japanese were among the first to recognize that comparative advantage in a particular industry can be created by the government through targeted investments in labour, capital and technology. Rising from, devastation of World War II, Japan within a few decades rose to become the technological powerhouse that we know today, producing capital and technology intensive goods like electronic consumer durables and automobiles and in the process dominating global markets of such goods from the 1970s to early 2000s. Their industrial policies were emulated by other countries like South Korea, which has in many products and countries taken over Japan as the market leader (e.g. Samsung and LG in mobile devices and consumer and household electronics).

© Hwa Chong Institution Economics Unit. All Rights Reserved

Scanned with CamScanner

8.1.2.3 LIMITATIONS OF COMPARATIVE ADVANTAGE THEORY

While countries do generally specialise and trade according to comparative advantage, the extent of this is likely to be much less than what is postulated in theory because of the following limitations.

(a) Increasing Opportunity Cost

Due to the law of increasing opportunity cost, a country may lose her comparative advantage as she specialises further in the production of a good. This may be caused by the expansion of the industry that drives up factor prices, or when the industry expands into less and less appropriate resources.

(b) Factor Immobility

In order for a country to benefit from trade, she must be able to allow those industries in which she does not have a comparative advantage to decline so that resources can flow into those industries that are expanding due to rising comparative advantage. However, as factors of production are often not able to move quickly or efficiently into alternative uses, it is difficult for the country to fully realise the benefits of specialisation and trade.

For example, many Singaporean workers in the 1990s were unwilling to take up jobs in the expanding service sectors like hospitality and food and beverage even though they were retrenched from the more labour intensive manufacturing industries like electronics assembly because they perceived such service sector jobs to be relatively demeaning as compared to their former occupations. Many were also unable to take up jobs in the capital-intensive industries due to lack of skills.

(c) Transport costs

Even though it might be cheaper to import goods from another country that has a comparative advantage in producing that good, a country might still produce that good domestically if transport costs are high. This is more likely to occur when countries are separated by vast geographical distances, or if the value of the good is low relative to its weight. So, it might be cheaper for domestic firms and households to buy domestically produced goods than to buy the imported variants of such goods.

For example, Singapore still produces building bricks even though the cost of producing such bricks may be lower in other countries. This is because bricks are heavy and hence the cost of transporting them is high, relative to the price at which such bricks can be sold. Similarly, Singapore still has a thriving furniture manufacturing market even though similar types and quality of furniture can be produced cheaper in other parts of the world.

(d) Protectionism

The theory of comparative advantage assumes that countries are able to specialise and trade freely without any form of trade barriers such as tariffs, quotas or restrictive rules and regulations. In reality, governments are sometimes pressured by domestic producers or workers to restrict imports in order to prevent job losses, especially in times of recession. Countries also slap tariffs and duties to correct trade deficits or to counter perceived unfair trade practices by their trade partners. Thus, countries resort to protectionism for political rather than economic reasons.

For example, in the 2008 global financial crisis, governments in the US and Malaysia started a campaign to encourage their people to buy local products instead of imported goods.

(e) Strategic reasons

Countries may choose to produce rather than import certain goods because of the strategic importance of such goods. For example, it is not uncommon for countries to be self-reliant in basic necessities like food and

© Hwa Chong Institution Economics Unit. All Rights Reserved

Scanned with CamScanner

also in weapons and ammunition as importing such goods may be difficult in times of war. Thus countries often do not want to be dependent on the imports of goods which are deemed essential in times of conflict. For example, many farmers in Europe and Japan receive substantial agricultural subsidies and produce much of their food domestically, even though it is actually much cheaper for them to import food from developing countries which are more land and labour abundant. Singapore as well, given our limited land size our government is still pushing out the 30 by 30 goal to be more self-sufficient in food. Many countries also heavily subsidise the development and manufacturing of small armaments and munitions and continue to sustain their production even though they have always been making financial losses in the production of these goods.

8.1.3 BENEFITS AND COSTS OF TRADE

8.1.3.1 BENEFITS OF TRADE

(a) Higher consumption possibilities

With international trade, a country can specialize in exporting goods in which it is able to produce at lower opportunity costs and import goods in which it does not have a comparative advantage in. The ability to produce at a lower opportunity costs is due to efficiency gains from devoting resources to produce what they are best suited for. For example, given the differences in resource endowment, developed countries like Singapore can gain by specializing in high value-added manufactures like aircraft engines while developing countries like Vietnam gain by specializing in cheap low-end manufactures like clothing and footwear. Such specialization and trade according to comparative advantage, enables a country to consume more than what it could if it was under autarky. In other words, trade results in higher welfare or living standards because it allows a country to **consume beyond its production possibilities** i.e. the country gains from **higher consumption possibilities**

(b) Wider consumer choice and greater product variety

With trade, consumers all over the world are able to enjoy a **greater variety of goods & services** to suit every taste. For instance, consumers in tropical countries can enjoy imports from temperate countries in addition to their own domestically produced goods.

( ) Lower prices for domestic consumers

Firstly, trade enables countries to **import cheaper raw materials and intermediate inputs**, thus lowering the input costs from domestic producers. Secondly, **increased foreign competition** coming from imports helps reduce the market power of domestic producers. In addition, the threat from potential foreign competition also raises the degree of contestability of import competing markets. The rise in actual and potential competition also forces firms to be more productive efficient. Thirdly, increased demand coming from access to export markets also allows domestic firms to expand and **reap internal economies of scale**. Overall, lower production costs, reduced monopoly power, and large scale of production translate to lower prices hence benefitting domestic consumers.

(d) Trade as an engine of growth

Developing countries like China and some developed counties like Singapore, Japan, and Korea (which were developing economies in the past) have through international trade adopted export oriented growth strategies, where trade acted as an engine of growth.

Increased AD

Trade provides exporters an **enlarged market** by giving them greater access to global markets. In a growing world economy, the demand for a country's exports will also grow especially if the goods they are producing has positive and **high-income elasticities of demand** (i.e. normal-luxury goods). This explains why many developing countries often have **industrial policies** that focuses on developing capital and technology

© Hwa Chong Institution Economics Unit. All Rights Reserved

Scanned with CamScanner

intensive industries that produces income elastic goods like consumer electronics and even though their current comparative advantage could be in land and labour intensive sectors such as agriculture, as the income elasticities of the former tend to be much higher.

Increased AS

The added demand coming from exports enable firms to expand their scale of production, which raises capacity causing the AS to shift to the right while the **internal economies of scale**[1] reaped results in costs cost savings that causes the (AS to shift downwards). Opening to trade also enables the importers to source for **cheaper raw materials and intermediate inputs,** which again further lower the cost of production (AS to shift downwards). The introduction of **foreign competition** also forces local producers to be **more productive efficient** and to engage in **process innovation** which will reduce costs further (AS to shift downwards).

Combined effect of both increase AD and AS

Since increased trade raises export demand and hence AD, and eventual leads to capacity improvements and efficiency gains which raises AS, this translate to higher **actual and potential economic growth** and also more employment opportunities. Trade thus acts as an engine of growth because it helps to raise output and reduce unemployment.

(e) Technological transfer

Since the 1970s, the trend of MNCs **'off-shoring'** some of their production processes to lower cost developing countries has led to significant transfer of technology from developed to developing countries. Technological transfer can also come from **importing more advanced capital goods** where the technology is embedded in such goods. The resulting improvements in technology arising from such transfers not only results in **efficiency gains** in terms of production processes but also gains arising from **improved product quality** and the **creation of new products**. The benefits are manifold as such technological improvements **benefit domestic consumers** in terms of **lower prices** as well as **new and better quality products**. It also **benefits the economy** as it enhances the effect of trade as an **engine of growth.**

8.1.3.2 COSTS OF TRADE

(A) Unfair Competition and Dumping

Dumping refers to the situation where an imported good is sold below its marginal cost of production. Accusations of dumping typically arises when that good is sold at price that is lower than what is being charged in the market of origin.

The objective is to drive out rival producers in the importing country and eventually monopolize the market. Import-substituting industries in the receiving market may not be able to compete against such foreign exporters and hence may not be able to develop. Developed economies e.g. US, EU have perceived themselves as victims of **UNFAIR** trade practices perpetrated by emerging economies.

A classic example is that of the trade friction between US and China. The US has been blaming China for various infringements of free trade rules such as "dumping" (using state subsidies to sell their exports at artificially low prices), and "currency manipulation" (deliberately refusing to revalue the Yuan so as to give Chinese exporters an unfair competitive advantage). The consequences of such unfair trade practices have resulted in depressed wages and job losses for American workers i.e. falling living standards for American workers. Thus, they perceived themselves to be so-called "losers". If such trade disputes are unresolved, it may lead countries to retaliate by resorting to protectionist measures. In reality such trade disputes are often referred to the WTO for mediation.

---

[1] The cost advantage (lowering of unit cost) that arises with increased output/production of a good.

© Hwa Chong Institution Economics Unit. All Rights Reserved

Scanned with CamScanner

(B) Over-reliance on Foreign Countries

(i) Susceptible to externally-induced cyclical unemployment

Complete specialization by a country will mean a narrowing of its economic structure, the composition of goods and services produced and the types of jobs available will be limited. An overly specialized economy will face structural rigidity and have difficulty recovering from an economic crisis. Countries that are open to free trade and rely on it mainly for economic growth will be more vulnerable to other countries' economic crisis. These shocks can be transmitted from one country to another through various channels - trade, financial and mechanical spillovers. In the most recent subprime mortgage crisis, which started in the USA, trading partners, countries like Singapore and Vietnam, were also badly affected. This is sometimes called the **"coupling effect"**. Major economies like EU and US are major drivers of global growth because of the importance of their domestic markets and resources to other economies. Singapore at one time was overly dependent on the US economy to drive her economic growth. Whenever the US goes into a recession, Singapore would inevitably suffer the same fate. As US home consumers cut back their spending, invariably it will affect also the demand for Singapore's exports to the US. Thus, workers employed in Singapore' manufacturing goods for these markets may become unemployed. So dependent was the economy on the US that it is said "If US sneezes Singapore will catch a cold'.

(ii) Susceptible to imported inflation

When a country is heavily dependent on imported goods for consumption as well as production, rising costs of imports is a threat to economic stability and growth. On one hand, rising costs of imports such as energy (oil) and food create inflationary pressures and add pressure to cost of living for many individuals especially the low and middle income. If left unchecked, these cost pressures can translate into demands for higher wages to keep pace with inflationary pressures. In the worst-case scenario, such wage claims may result in a counter-productive wage-price spiral when employers under pressure from unions give in to workers demand for higher wages but raise the prices of their goods to compensate for higher labour costs. On the other hand, rising costs of imported inputs or components is a threat to export competitiveness if there is high import content. Exporters may have to raise the prices of their exports to factor in rising imported costs of inputs e.g. oil, making their goods uncompetitive in the international market.

(C) Structural Unemployment

Structural unemployment, **a mismatch between worker's skill and job requirements,** can arise with free ade. Structural unemployment arises when changes in technology or international competition change the skills needed to perform jobs or change the location of jobs. **Occupational** and **geographical immobility** arises because people made redundant in one sector/area of the economy may not immediately find jobs elsewhere because they do not have the necessary skills or because they are unable or unwilling to relocate. In other words, structural unemployment results from the structural decline of industries that are unable to compete or adapt in the face of either changing demand or the emergence of new products or more efficient competitors from other countries. When firms from developed countries relocate their plants to low-cost developing countries, the locals in these developed countries who are occupationally and geographically immobile will experience structural unemployment. Workers also experience technological unemployment when the economy moves up the value chain as those without appropriate skills will not be able to find jobs that require the ability in applying new and emerging technologies.

(D) Worsening Balance of Trade

Less developed economies tend to export mainly income inelastic agricultural products and import income elastic manufactured consumer goods. Hence, as local and global income grows, the demand for their exports will likely increase proportionately slower than their demand for imports. The balance of trade for such developing countries is likely to worsen overtime as compared to a developed country. However, some developed countries like the US have experienced large persistent trade deficits against export-oriented economies like China (and Japan in the 1970s and 1980s) and have accused these economies of unfair trade practices like export subsidies and the artificial undervaluation of their currencies. Hence, depending

© Hwa Chong Institution Economics Unit. All Rights Reserved

Scanned with CamScanner

on individual circumstances, international trade can adversely affect both developing and developed countries' balance of trade

(E) Widening Income Disparities Within a Country

As developed countries specialize according to their comparative advantage and produce capital, knowledge and technology intensive goods, the demand for high skilled labour and the earnings of owners of technology and capital (which are likely be the rich) tend to increase faster than that of lower skilled workers (which tend to be poor). Hence, income inequalities in these countries tend to be worsened by trade. Such widening of the income gap can also be experienced by rapidly developing economies like China if they move up the value chain too quickly. Widening income disparities, if unresolved, create social tension that could eventually lead to social conflicts and political upheaval e.g. civil strife.

(F) Environmental degradation

As increased trade is often accompanied by MNCs 'offshoring' some of the more pollutive production process to developing countries with less stringent environment protection regulations, the latter tends to experience significant environmental degradation overtime. Furthermore, developing countries that embark on export-oriented growth strategies often have industrial policies that promote pollutive heavy industries like the production of metals and chemical as the demand for products are often income elastic thus having a positive impact on the countries terms of trade. Because these economies tend to develop very quickly, environmental regulations often cannot adapt fast enough to accommodate the rise of such sectors thereby leading to increased pollution in these countries.

PART 2: PROTECTIONISM

8.2.1 INTRODUCTION

8.2.2 TOOLS OF PROTECTIONISM

8.2.3 REASONS FOR PROTECTIONISM
- 8.2.3.1 Infant Industries
- 8.2.3.2 Unfair Trade Practices
- 8.2.3.3 Trade Imbalances and Unemployment
- 8.2.3.4 Declining Industries
- 8.2.3.5 Other Reasons

8.2.1 INTRODUCTION

Free trade refers to the exchange of goods and services between countries without any artificial restrictions on the movements of goods and services between countries. This brings about many benefits to an economy such as higher economic growth.

Despite the potential gains from trade, countries often adopt measures to restrict the movement of goods and services between countries. Such practice of sheltering domestic industries from foreign competition is known as **protectionism**.

8.2.2 TOOLS OF PROTECTIONISM

To protect domestic producers against imports, government can impose tariffs barriers or non-tariff barriers like quotas, voluntary export restraints and other administrative restrictions. Subsidies can also be given to domestic firms to lower their costs of production so that they are better able to compete against foreign rivals, both in the domestic market (imports) and in international markets (exports)

© Hwa Chong Institution Economics Unit. All Rights Reserved

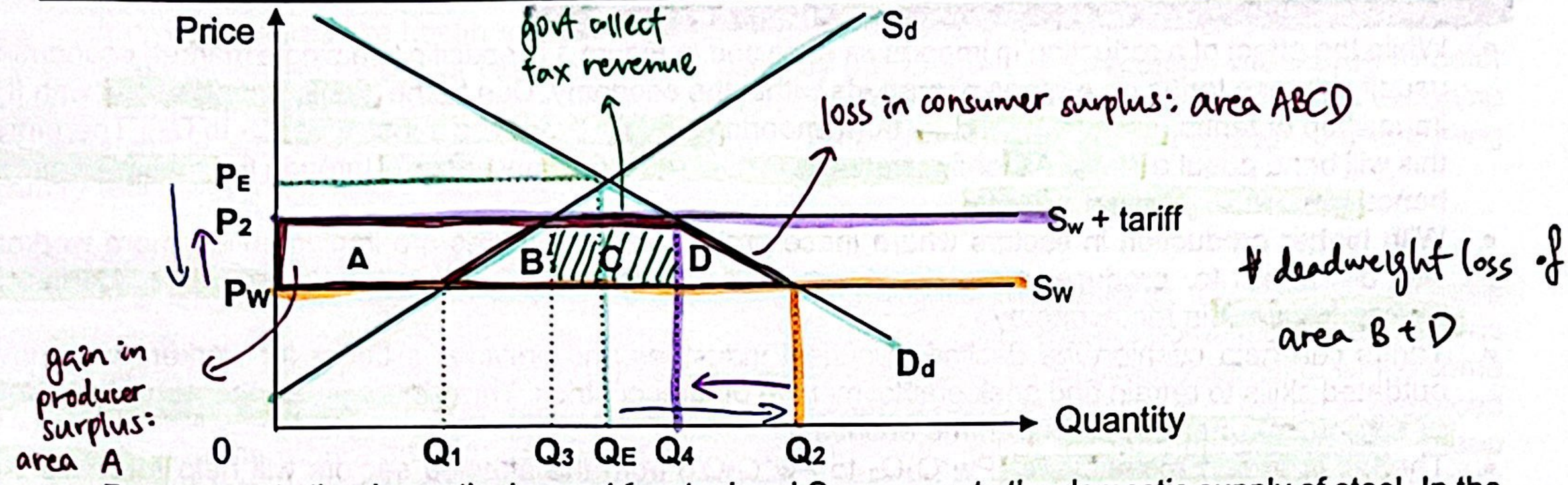
Scanned with CamScanner

(a) Tariffs

Tariffs are taxes imposed on imports. This causes domestic firms and households to switch from purchasing imports to purchasing domestically produced import substitutes.

Note: *The tariff diagram represents a typical market of one good, say steel, that is being affected by tariff and NOT the 'market of all the goods' in the country.*

Figure 1: How Tariff works to reduce imports & increase local production & employment



Assume D_d represents the domestic demand for steel and S_d represents the domestic supply of steel. In the absence of trade, the domestic equilibrium price and quantity of steel are P_E and Q_E respectively. When the country is open to foreign trade, it faces a **perfectly price elastic world supply** for steel S_W. That is, the country can import as much steel as she wants at the prevailing world price P_W. Domestic producers cannot charge a price above P_W as consumers can easily switch to cheaper imports.

With free trade and at the price P_W, domestic consumers will demand $0Q_2$ of steel, of which $0Q_1$ is supplied by domestic producers and the remainder Q_1Q_2 imported from other countries. Free trade thus lowers the domestic price of steel from P_E to P_W. **Consumers are better off as they are able to consume more at a lower price.** However, with trade, domestic producers are selling fewer units (Q_E to Q_1) at a lower price. Under free trade, **domestic producers are adversely affected** by foreign competition. Industry sales and **profits fall and unemployment increases.**

To protect the home industry, the government levies a specific tariff on steel imports, thus raising the supply curve from S_W to (S_W + tariff). The price now increases from P_W to P_2. At P_2, domestic production increases from $0Q_1$ to $0Q_3$; domestic buyers are buying fewer steel – from $0Q_2$ to $0Q_4$. The tariff has caused a fall in the amount of imports from Q_1Q_2 to Q_3Q_4. With higher local production, the firms will experience a fall in inventories and start to hire more to increase production and thus **domestic unemployment is reduced.** With the fall in imports expenditure from $Pw^*Q_1Q_2$ to $Pw^*Q_3Q_4$, **balance of trade also improves.** (importers still pay P_W which is the price charged by the exporting countries & not P_2, as P_2 incorporates the amount of the tariff which is given to the govt.)
HOWEVER, there are negative implications on efficiency. In such instances, the ultimate cost of protection is borne by domestic consumers, e.g. European car consumers suffer welfare losses if their car manufacturers end up paying higher costs for using domestically produced steel. With reference to the tariff diagram, since the price is higher after the tariff, consumers are worse off compared to having free trade as consumer surplus is reduced. The loss in consumer surplus is equal to the areas **A+B+C+D.**

Though producers gain in terms of larger **producer surplus of area A** and government can collect **tax revenue of area C**, there is still a **deadweight loss of areas B+D**.

IMPACT ON EFFICIENCY: More details on the loss in consumer surplus:

- **Area A:** Transfer of consumer surplus to the home producers in the form of increased producer surplus.
- **Area C:** Import duties collected by the government; Area C represents the amount of consumer surplus that is transferred to the government as revenue.

© Hwa Chong Institution Economics Unit. All Rights Reserved

Scanned with CamScanner

- **Area B:** Area B represents the unnecessary additional marginal costs incurred in producing the extra Q_1Q_3 of steel instead of importing them cheaply at the non-tariff price of P_W. These could have been imported at the price of P_W but is now produced by domestic producers at a higher cost. This enables home producers to stay in business or expand production, instead of being pushed out by foreign competition.
- **Area D:** Deadweight loss due to the decrease in consumption due to the higher price brought on by the tariff protection.
- **Area B & Area D:** The total deadweight loss of a tariff; i.e. a loss in the consumer surplus not transferred to other sectors of the economy.

MACROECONOMIC IMPACT OF TARIFFS ON AN ECONOMY

- While the effect of a reduction in imports as analysed in Figure 1 is specific to a single market, economies usually impose tariffs on a range of markets within the economy. Due to the higher import prices with the imposition of tariffs, consumers switch from imports to locally produced substitutes (Q_1 to Q_3). Therefore, this will bring about a rise in AD and increase real national output and income through the multiplier effect, hence **generating actual growth.**
- With higher production in sectors where these protectionist measures are implemented, more workers will be hired to produce more local products. Collectively, this will help **reduces domestic unemployment** in the economy.
- Tariffs can help cushion the decline of sunset industries and provides a buffer for workers who have outdated skills to retrain and seek employment in other industries. This **slows down the negative effect of structural unemployment** on the economy.
- The fall in import expenditure ($Pw*Q_1Q_2$ to $Pw*Q_3Q_4$) from the affected sectors will help **improve the Balance of Trade.**

Limitation 1

Such protectionist measures will undoubtedly harm the trade position of her major trading partners as their exports will fall. It is deemed to be a 'beggar-thy-neighbour' measure. Hence, if these trading partners **retaliate** with their own set of protectionist measures, the country that initiated the tariff will also experience a fall in exports and this might offset any prior improvement in her trade deficit. In fact, this will cause world trade to fall and impedes recovery and growth if there is a worldwide recession.

Limitation 2

Furthermore, the effectiveness of a tariff depends on the **price elasticity of domestic supply of the good**. If domestic producers are less able to increase production of the good, there would be a less than proportionate increase in quantity supplied despite the higher post-tariff price, reducing the effectiveness of the tariff in encouraging domestic production and hence employment.

Unintended consequences

By resorting to protectionism, the country experiencing the trade deficit forgoes the benefits that come with free trade, i.e. a higher standard of living, cheaper and greater variety of imports.

(b) Quotas

Quotas are quantitative limits placed on the amount of imports allowed into a country per time period. By setting an import quota that is lower than the current free market import volume, the supply of imports will be reduced. This will drive up prices and cause domestic firms to increase their production.

While the macroeconomic impact, limitations and unintended consequences of quotas are similar to that of tariff, the quota does not result in additional tax revenue for the government.

(c) Voluntary exports restraints (VERs)

Instead of imposing a quota, the government of a country may "request" its trading partner to "voluntarily" limit its exports to that country. Such requests typically involve some arm-twisting by the importing country with threats of imposing even more severe protectionist measures should the exporting country fail to restrict its exports to an acceptable level.

(d) Currency Manipulation (Devaluation or Undervaluation)

© Hwa Chong Institution Economics Unit. All Rights Reserved

Scanned with CamScanner

An exchange rate is the price of a currency determined in a market by the forces of demand and supply. A currency manipulator will be one who tries to fix the price of the currency below the equilibrium price in the market for foreign exchange by selling its currency and purchasing foreign exchange. A weaker currency will make exports cheaper in foreign currency, increasing the quantity demanded and raise the demand for exports in its local currency. At the same time, imports will be more expensive in local currency and assuming the demand for imports is price elastic, quantity demanded will fall more than proportionately and import expenditure will fall. Hence the balance of trade will improve.

(e) Administrative measures

Administrative measures like health and safety requirements, complex paperwork, limiting access to foreign currency and deliberate delays at customs can be used by government as **disguised measures** to deter imports. As such measures are not as obvious as tariffs and quotas, it will be harder for the exporting countries to file successful complaints with the World Trade Organization (WTO) against the importing country that is imposing such measures.

(f) Subsides to domestic producers

A subsidy is also another form of indirect protection given to domestic producers so that they can be more competitive against foreign producers. Subsidies will reduce the production costs of domestic producers, thus allowing them to compete more effectively with foreign rivals. Subsides can take many forms, of which some are more explicit than others. For example, explicit subsides can be given for each unit of the good produced or exported. On the other hand, implicit subsidies include grants for R&D and land purchases, and cheap loans given by state owned banks. It is harder for a country's trading partners to file successful anti-dumping complaints with the World Trade Organization (WTO when subsides of the perpetrator country are more implicit in nature.

8.2.3 REASONS FOR PROTECTIONISM

8.2.3.1 INFANT INDUSTRIES

An infant industry is one that has potential comparative advantage but is currently too new and undeveloped for this potential to be realised, especially when faced with more established foreign competition.

When an industry is first established, its level of output is likely to be too low for sufficient economies of scale to be reaped. Product quality may also be lacking as it takes time for the sector to develop and innovate. By providing **subsidies**, production costs will be reduced, thus enabling these firms to charge prices that are low enough to compete with more established foreign firms.

Import barriers also provide these infant firms with **captive domestic markets**, thus giving them time and space to grow in terms of scale and improve in terms of product quality. When these industries become mature enough to be internationally competitive, such protection can be lifted.

Counter arguments

Without foreign competition, local firms may become **complacent** and thus fail to mature. They run the risk of becoming **"permanent infants"** that perpetually produce and sell low-quality goods at inflated prices, causing domestic consumers to suffer in the long run. Furthermore, as economic conditions are ever-changing, it is extremely **difficult** for a government **to pick the right winners**. Very often, the wrong industries are protected thus resulting in long term inefficient resource allocation.

8.2.3.2 UNFAIR TRADE PRACTICES

Protectionism may be used by a country to help its domestic producers compete against unfair trade practices by foreign firms. Such practices include dumping and currency manipulation.

© Hwa Chong Institution Economics Unit. All Rights Reserved

Scanned with CamScanner

Dumping refers to the situation where a firm sells its goods at a price which is below marginal costs in a foreign market because it intends to drive out its competitors in that market. Once that market is monopolized, the firm can then exploit its consumers by raising prices in the future. Very often the losses made by such a firm are covered by subsidies from its government. As it is hard to prove that this firm is actually selling below cost, accusations of dumping typically arise when an imported good is sold at price which is lower than what is sold in the originating country.

Currency manipulation arises when a **country deliberately intervenes** in the **foreign exchange market** to **push its exchange rate below** the **free market value so that the price competitiveness of its exports is artificially enhanced.** For example, **USA** has **long accused China** of **manipulating the Yuan** so that its **exports are artificially cheap**, thus causing the **former to experience a large trade and persistent trade deficit** against the latter.

Counter arguments

Sometimes, domestic producers accuse foreign producers of unfair trading practices when they cannot match the lower prices of their foreign rivals. Such accusations may be untrue as the foreign firms could simply be more efficient and thus be able to 'undercut' domestic producers by selling similar products at lower or more competitive prices. Hence, when domestic producers cry "dumping", there is always a reason to suspect they are simply campaigning for protectionist measures to shelter them from foreign competition. For instance, in the face of mounting trade deficits with China in recent years, such arguments have been used by the USA to pressure China to cut back its steel exports. In those instances where foreign producers are more efficient, the ultimate cost of protection is borne by domestic consumers, e.g. American car consumers suffer welfare losses if their car-manufacturers end up paying higher costs for using domestically produced steel.

8.2.3.3 TRADE IMBALANCES AND UNEMPLOYMENT

When a country faces a **large and sustained trade deficit**, import barriers can be used to improve its trade balance. By imposing tariffs and quotas, import volumes will fall while import prices will rise. The fall in import volumes will raise AD and increase real national output and income, **improving economic growth**. **Demand deficient unemployment** will be **lowered** as jobs are created not only in the import competing sectors but also in other industries through the multiplier process.

Import expenditure will fall with the imposition of tariffs and quotas from $Pw^*Q_1Q_2$ to $Pw^*Q_3Q_4$ (in Figure 1) and $P_{quota}{}^*Q_3Q_4$ (in Figure 2) respectively, **improving balance of trade.**

Counter arguments

Such protectionist measures will create **beggar-thy-neighbour effects** as it causes the export volume and earnings of the country's trading partners to fall. This will reduce their AD, output, income, and employment, hence reducing their demand for imports from the initiating country. The initiating country's export volume and revenue will thus fall, therefore offsetting some of the initial improvements in its trade balance. Furthermore, the country's trading partners may also **retaliate** and impose their own protectionist measures, which will further worsen the situation.

8.2.3.4 DECLINING INDUSTRIES

When a country is open to trade, it is inevitable that some of its industries will lose comparative advantage over time. This could be due to changes in relative factor endowments that arises when the country develops or due to the emergence of new foreign competitors. Without protection, the workers in these **contracting / declining / sunset industries** may become **structurally unemployed** as they may lack the skills and education to transit to other expanding sectors. Hence, it is not uncommon for countries to **temporarily protect these industries**, especially if they employ a substantial proportion of the workforce. Protectionism of such industries will also slow down their rate of decline, thus giving more time for their workers to be retrained and to seek employment in other expanding sectors. Finally, such protection also gives these industries leeway to reorganize and restructure so that they can become more internationally competitive in the future.

© Hwa Chong Institution Economics Unit. All Rights Reserved

Scanned with CamScanner

Counter arguments

Opponents argue that such protection only **hampers the restructuring process** as it prolongs the inefficient use of resources. Instead of allowing such dying industries to be weeded out quickly, protection keeps them alive by providing **'artificial life support'**. Removing such protection will instead allow precious economic resources to be quickly reallocated to expanding sectors, thus enhancing economic growth through efficient resource allocation. In addition, such protection may be difficult to remove once it is introduced because of resistance from parties with vested interest.

8.2.3.5. OTHER REASONS

(a) Protection of Strategic Industries

Some industries may be protected despite the lack of comparative advantage because they are essential for the survival of the country and therefore considered strategic in nature. For example, many countries aim to be self-sufficient in food, armaments and ammunition as such goods are crucial in time of war and the imports of such goods are likely to be disrupted when conflict breaks out.

(b) Protection to Achieve Political Objectives

Trade is often used as a weapon of foreign policy to achieve political objectives. Embargoes and other import controls are often imposed on trade in armaments and military goods.

PART 3: ECONOMIC INTEGRATION

8.3.1 TYPES OF ECONOMIC INTEGRATION

8.3.2 BENEFITS AND COSTS OF FREE TRADE AGREEMENTS
- 8.3.2.1 Trade Creation
- 8.3.2.2 Trade Diversion
- 8.3.2.3 Economic Impact of Joining a Free Trade Area

8.3.1 TYPES OF ECONOMIC INTEGRATION

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

Economic integration proceeds progressively in a few stages, namely, free trade area, customs union, and common market.

Note: despite similarities in benefits and costs from free trade, economic integration among only certain countries is not free trade in the true sense because of its exclusive nature.

(a) Free Trade Agreements (also known as Free Trade Areas)

© Hwa Chong Institution Economics Unit. All Rights Reserved

Scanned with CamScanner

A Free Trade Agreements (FTA) is an agreement between member countries to remove barriers to trade (and often also barriers to investments) amongst themselves while each member retains its own trade (and investment) barriers against other non-member countries.

It is a form of preferential trading arrangement that gives special preference or trade concessions to member states.

Singapore's FTA network

Singapore is a highly trade-dependent economy, with the highest trade to GDP ratio in the world. Singapore is highly dependent on imports for food, energy, and raw materials because it lacks natural resources. Singapore is also heavily dependent on exports to drive her economy because it has a very small domestic market. As trade has been and will continue to be the most important source of economic growth for Singapore, it is thus in her best interest to embrace free trade. Thus, Singapore's trade policy has always been to promote a free and open international trading environment.

Besides being an unequivocal supporter of the World Trade Organisation (WTO), an international organisation that aims to promote multilateral free trade, Singapore has also over the years negotiated and developed an entire network of bilateral FTAs. Since the signing of her first FTA under the ASEAN Free Trade Area (AFTA) in 1993, Singapore's network of FTAs has expanded to 27 agreements.

Table 7: Singapore's FTAs

Countries	Year
New Zealand (ANZSCEP)	Jan 2001
Japan (JSEPA)	Nov 2002
Switzerland, Liechtenstein, Norway and Iceland (ESFTA)	Jan 2003
United States (USSFTA)	May 2003
Australia (SAFTA)	Jul 2003
Hashemite Kingdom of Jordan (SJFTA)	Aug 2005
India (CECA)	Aug 2005
Korea (KSFTA)	Mar 2006
Trans-Pacific SEP (Brunei, New Zealand, Chile, Singapore)	May 2006
Panama (PSFTA)	Jul 2006
GCC* *The Cooperation Council for the Arab States of the Gulf (GCC) countries comprising Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and the United Arab Emirate*	Dec 2008
China (CSFTA)	Jan 2009
Peru (PeSFTA)	Aug 2009
Costa Rica (CRSFTA)	Apr 2010
Turkey (TRSFTA)	Oct 2017
ASEAN Free Trade Area (AFTA)	Jan 1993
ASEAN-China (ACFTA)	Jan 2004 (Trade-in-Goods)
ASEAN-Japan (AJCEP)	Jan 2009 (Trade-in-Goods)
ASEAN-Korea (AKFTA)	Jun 2007 (Trade-in-Goods)
ASEAN-India (AIFTA)	Jan 2010 (Trade-in-Goods)
ASEAN-Australia-New Zealand FTA (AANZFTA)	Jan 2010
Gulf Cooperation Council – Singapore Free Trade Agreement (GSFTA)	Sep 2013
Comprehensive and progressive agreement for Trans-Pacific Partnership (CPTPP)	Dec 2018

Source: http://www.fta.gov.sg/sg_fta

(b) Customs Union

The customs union goes one degree further along the scale of economic integration. It is formed when member countries agree to remove all trade barriers among themselves, and in addition, adopt a common external tariff for non-member countries.

(c) Common Market

© Hwa Chong Institution Economics Unit. All Rights Reserved

Scanned with CamScanner

As the term suggests, a common market is when the member countries operate as a single market. Over and above trade liberalization under a custom union, a common market would also have lifted restrictions on trade in services, and all capital and labour movements. In addition, a common market may have a common system of laws and regulations to govern production, employment, and trade. An example of a common market is the European Economic Community (EEC) which is renamed European Community (EC) in 1993, which are both precursors to the European Union (EU).

WTO versus FTAs

FTAs are bi-lateral trade agreements as opposed to multi-lateral free trading arrangements as exemplified by World Trade Organisation (WTO). Unlike WTO, where trade barriers are lifted for all trading nations, FTAs worked on the basis of removing trade barriers only for member states. It is a form of preferential trading arrangement, where goods imported from member countries are given special preference (i.e. tariff free), while those imported from non-members states are discriminated through the imposition of tariffs. As FTAs are exclusive rather than inclusive trading arrangements, they may bring either positive outcomes via trade creation or negative outcomes via trade diversion.

Given that multi-lateral free trade arrangements under the WTO aim to promote free trade, why do countries still forge FTAs on their own? Whilst WTO exemplifies the ideal model of free trade, it has its limitations. The basic drawback is the difficulty of forging consensus amongst its many member countries. Typically, each round of talks to lift trade barriers to promote free trade takes a long time to conclude as it requires the consensus of all members. Indeed, the current round of negotiations initiated in Doha in Nov 2001 years ago has still not been concluded until this day. It is this delay that has prompted many countries to by-pass WTO and initiate their own bi-lateral FTAs. Theoretically, it is actually the first step towards the eventual economic integration amongst member states. A good example is the EU today. In fact, the EU started off initially as an FTA known as the European FTA.

8.3.2 BENEFITS AND COSTS OF FREE TRADE AGREEMENTS

BENEFITS	COSTS
• Trade Creation • *The rest of the benefits are similar to those for free trade*	• Trade Diversion • *The rest of the costs are similar to those against free trade*

8.3.2.1 TRADE CREATION

Trade creation arises when entry into a free trade area causes the production of a good to be shifted from a less efficient to a more efficient producer.

Table 8: Prices of T-shirts in Singapore with a $5 import Tariff

Country of origin	Price without Tariffs	Price with Tariffs
Singapore	$8	$8 → cheapest
Malaysia	$6	$11
Pakistan	$4	$9

Table 8 shows the price a T-shirt in Singapore that is produced locally or imported from Malaysia or Pakistan. If Singapore imposes a tariff of $5 on imported T-shirts, Singaporean consumers have to pay $11 and $9 for a Malaysian and Pakistani made T-shirt respectively, but only $8 for a locally made one.

Assuming that the T-shirt is the same regardless of country of manufacture, Singaporean consumers will only buy Singapore made T-shirts. Hence T-shirts are produced domestically rather than imported. Although Singapore is actually the least efficient producer, the tariff level is high enough to distort prices such that production is actually channelled to the least efficient producer of the good.

© Hwa Chong Institution Economics Unit. All Rights Reserved

Scanned with CamScanner

If Singapore and Malaysia forms a free trade area, the removal of import tariffs on Malaysian goods causes the price of Malaysian made T-shirts to fall to $6 in Singapore, which is now cheaper than Singapore made ones. Singaporean consumers now prefer to buy Malaysian made T-shirts rather than locally made ones. Instead of producing its own T-shirts, Singapore now imports them from Malaysia, which is actually a more efficient producer of the good. When this happens, Singapore benefits as it has experienced trade creation.

8.3.2.2 TRADE DIVERSION

Trade Diversion arises when entry into a free trade area causes the production of a good to be shifted from a more efficient producer to a less efficient producer.

Table 9: Prices of T-shirts in Singapore with a $3 Import Tariff

Country of origin	Price without Tariffs	Price with Tariffs
Singapore	$8	$8
Malaysia	$6	$9
Pakistan	$4	$7

[FTA]
[NoFTA]

In Table 9, suppose Singapore has an initial import tariff of $3 per T-shirt. Singapore consumers pay $9 and $7 for a Malaysian and Pakistani made T-shirt respectively, but $8 for a locally made one. Assuming that the T-shirt is the same regardless of country of manufacture, Singaporean consumers obviously prefer Pakistani made T-shirts. Hence T-shirts are imported from Pakistan, which is actually the most efficient T-shirt producer among the countries. The tariff level is low enough not to distort prices to the extent that production is channelled away from the most efficient producer of the good.

If Singapore forms a free trade area with Malaysia, the removal of import tariffs on Malaysian goods causes the price of Malaysian made T-shirts to fall to $6 in Singapore, which is now cheaper than the Pakistani made ones. Singaporean consumers now prefer to buy Malaysian made T-shirts rather than Pakistani T-shirts and hence imports T-shirts from Malaysia, which is actually a less efficient T-shirt producer compared to Pakistan. When this happens, Singapore has experienced trade diversion.

8.3.2.3 ECONOMIC IMPACT OF JOINING A FREE TRADE AREA

When a country joins a free trade area, it always gains in terms of exports. Greater access to foreign markets will boost export demand thus raising export prices, output, and revenue. When there is trade creation, the country also benefits from importing the good at a cost that is lower than what could be produced domestically.

However, when there is trade diversion, joining a free trade area could be detrimental. While domestic consumers pay less for imports due to the removal of the tariff, the country as a whole actually pays more because it is now importing from a relatively less efficient producer. If the losses from trade diversion exceed the benefits gained from a larger export market, the country may be worse off after joining the trade bloc.

The entry into a free trade area generally brings about trade creation for some goods but trade diversion for others. Hence, before signing such agreements, policymakers need to estimate the extent of trade creation and trade diversion and compare it with the gains from exports, so as to determine the overall economic impact. The country should only join the trade bloc if it expects the overall economic impact to be positive.

In general, the higher the initial tariff level, the higher the chance of trade creation and the lower the likelihood of trade diversion. Hence a country with higher initial trade barriers is more likely to benefit from joining a trade bloc than a country with lower initial trade barriers.

© Hwa Chong Institution Economics Unit. All Rights Reserved

Scanned with CamScanner

PART 4: GLOBALISATION

8.4.1 INTRODUCTION

8.4.2 FEATURES OF GLOBALISATION

8.4.2.1 Openness to Trade
8.4.2.2 Openness to International Capital Mobility
8.4.2.3 Openness to International Labour Mobility

8.4.3 FACTORS AFFECTING GLOBALISATION

8.4.3.1 Economic Factors
8.4.3.2 Technological Factors
8.4.3.3 Political Factors

8.4.4 BENEFITS AND COSTS OF GLOBALISATION

8.4.4.1 Benefits of Globalisation
8.4.4.2 Costs of Globalisation

8.4.5 GLOBALISATION AND SINGAPORE

8.4.5.1 Globalisation and Singapore' Pattern of Trade
8.4.5.2 Singapore's Policies towards Globalisation

8.4.1 INTRODUCTION

Globalisation refers to the integration or inter-connectedness of national economies through trade of goods and services, foreign direct investment, capital flows, spread of technology and labour migration.

Globalisation is thus characterized by greater inter-connectedness between different countries that goes beyond trade in goods and services as it includes openness to the international movement of both capital and labour. In short, globalization is about the free or freer movement of **PRODUCTS, RESOURCES, and PEOPLE** across national boundaries.

8.4.2 FEATURES OF GLOBALISATION

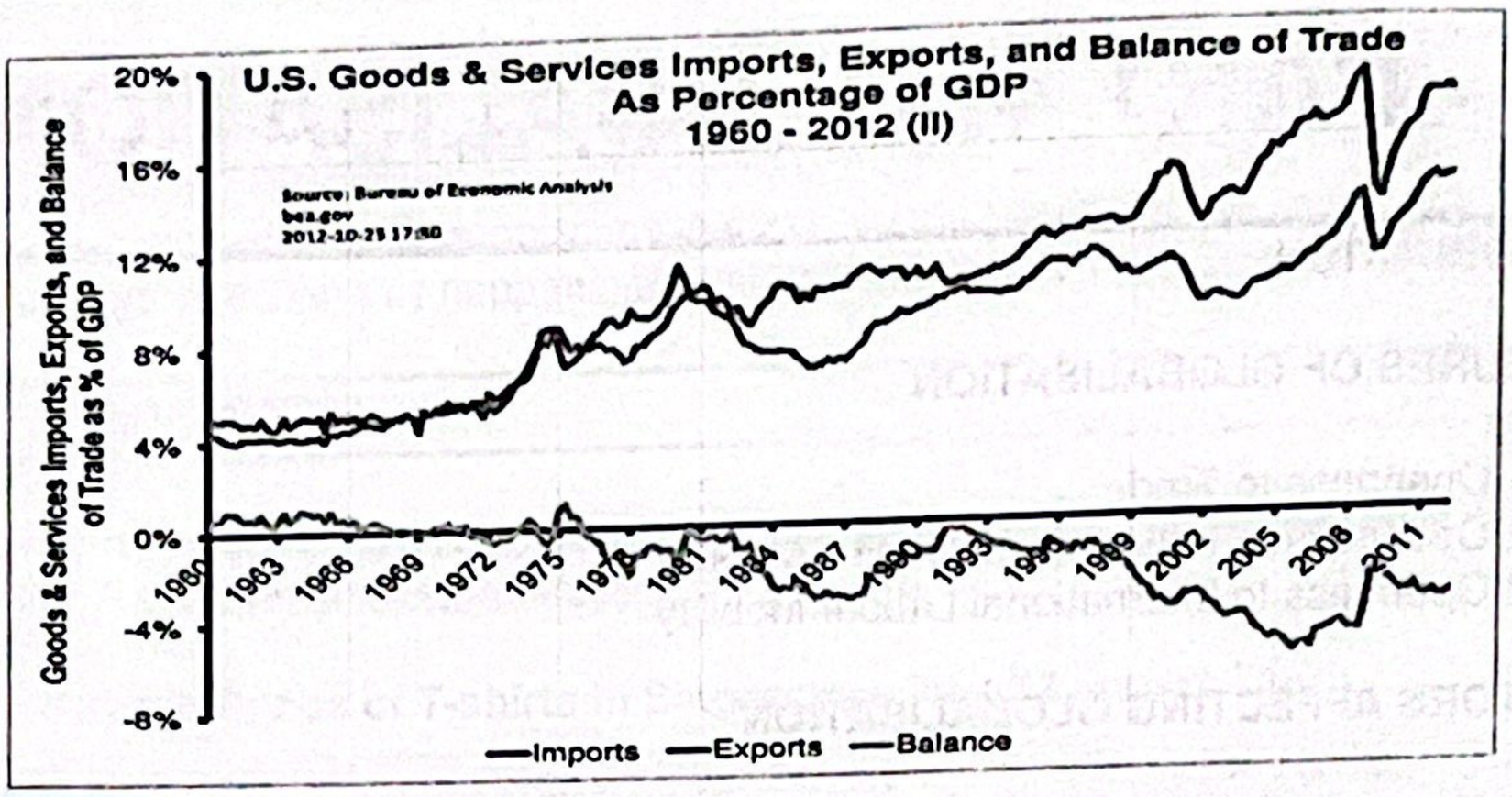
8.4.2.1 OPENESS TO TRADE

(a) External Trade - Engine of Growth

Trade has become a major **'engine of growth'** for the many economies that have embraced globalisation. One sign of this **greater dependence** on trade is the rising trend of trade to GDP ratio. An example of this trend is illustrated by the rising trade/GDP ratio of the US in the figure below:

© Hwa Chong Institution Economics Unit. All Rights Reserved

Scanned with CamScanner



(b) Trade Liberalisation

The proliferation of different forms of free trade arrangements amongst different countries such as WTO, EU, NAFTA, AFTA, and FTAs is a clear indication of the trend towards greater **trade liberalisation** in a globalised world.

(c) Outsourcing

Foreign outsourcing refers to the use of business-related services provided by foreign firms to domestic firms such as those provided by Indian firms like call centres; back-office functions, IT consultancy and tele-medicine to businesses worldwide. This phenomenon represents the **import of cheaper business services** from abroad to cut down business operating costs. The mushrooming of this practice in recent times is due to the pressure and opportunity to cut costs in a globalised world.

In a globalised world firms are exposed to more intense international competition and are therefore under pressure to cut costs to remain competitive. At the same time the availability of relatively cheaper corporate services abroad in countries like India and China enables them to "outsource" or "contract out" non-core functions to an outside foreign firm that can do it more efficiently. For instance, in 2004 it was estimated that every US$1 outsourced to India, the US enjoys $0.58 cost savings.

8.4.2.2 OPENESS TO INTERNATIONAL CAPITAL MOBILITY

(a) Offshoring

The opening up of many previously closed domestic markets to international competition in the form of inflow of FDI is another key feature of globalization. Today, countries like China and India which were previously closed to foreign capital are welcoming foreign investors and attracting massive inflow of FDI. Today, China is said to be the 'factory of the world' for cheap low-end manufactured products. Many international MNCs such as American and Japanese auto-makers have **relocated or off-shored** their manufacturing plants to China and other low-cost production centres in developing countries to take advantage of the availability of cheap labour.

(b) International Supply Chain

The free movement of capital or businesses across countries has created what is known as an **international supply chain.** This means a product exported by a particular country such as USA is actually made of many components, each made in a different country. For instance, a computer made by US firm HP, is made of parts that are produced in different countries – hard-disk and memory chips in Singapore, casing in China, monitor in Taiwan etc. Similarly a Japanese car like Toyota is assembled from components that come from different parts of the world. This practice is a form of **international vertical specialization** aimed at capitalizing on differences in **comparative advantages** across a globalised world.

© Hwa Chong Institution Economics Unit. All Rights Reserved

Scanned with CamScanner

(c) Financial Flows

At the same time, the lifting of capital controls on international movement of funds or money have led to the emergence of world-wide financial markets to provide **funds for investments**. Firms and businesses in need of raising capital could tap on foreign funds through issuing shares/stocks and bonds in international capital markets. For example, in Singapore there are many China-based firms listed in our stock market such as Cosco and Yangzhijiang. While Singaporean-based firms like Creative technologies and DBS are listed on the American stock exchange.

The openness of capital markets also allows investors and savers from all over the world to transfer funds from one country to another to take advantage of **differences in interest rates.** This has often resulted in short term inflow and outflow of **"hot money"** and currency fluctuations.

8.4.2.3. OPENESS TO INTERNATIONAL LABOUR MOBILITY

In today's globalised world, it is much easier for workers to move from one country to another to seek employment. Countries generally welcome foreign labour which are needed to supplement the local workforce and contribute to economic growth. Singapore is a typical example. The policy in Singapore is to allow the inflow of foreign workers to take up jobs which Singaporeans "cannot do" such as highly-skilled jobs like researchers and those that Singaporean "don't want to do" such as low-skilled unpopular jobs like cleaners and construction workers. There are 2 categories of imported labour – those that choose to take up permanent residency are called **immigrants** and those who are **transient workers** on temporary work permits or employment pass. Many cities like Singapore have a **cosmopolitan population** where the proportion of foreigners to locals in the workforce is large.

In summary: The phenomenon called globalisation is characterised by the above features that have swept across the world in recent times. The world has become more globalised in terms of greater **trade flows, capital flows** and **labour flows** across countries

8.4.3 FACTORS AFFECTING GLOBALISATION

Many historians would say that globalization is not a recent trend. Some would even argue that it began with civilization. However, globalization is not a one way process as there is evidence of deglobalisation as well, most recently, during the global financial crisis. The factors aiding globalization or causing deglobalisation can be traced to economic, technological, and political factors.

8.4.3.1 ECONOMIC FACTORS

(a) Globalisation

Comparative advantage

According to Ricardo's Law of Comparative Advantage, international specialisation and trade benefit both consumers as well as the economy because it will lead to a more efficient allocation of resources.

With trade, countries need not be self-sufficient. They can afford to specialize in exporting goods in which they are able to produce at lower opportunity costs and import or exchange for goods in which they do not have a comparative advantage in. The ability to produce at a lower opportunity costs is due to efficiency gains from devoting resources to produce what they are best suited for. For example, given the differences in resource endowment, countries like Singapore (with a well-educated and trained labour force and advanced technology) stand to gain by specializing in high value-added manufactures e.g. aircraft engines, whilst countries like Indonesia (with abundance of land and cheap and low-skilled labour) stand to gain by specialising in cheap low-end manufactures e.g. socks and shoes.

© Hwa Chong Institution Economics Unit. All Rights Reserved

Scanned with CamScanner

Trade between the 2 countries will lead to higher level of welfare or living standards because it is possible to consume beyond a country's production possibility. Thus, the benefits of free trade based on the principle of comparative advantage is one of the key economic reason why many countries today embrace globalization.

Engine of Growth

Free and open trade has enhanced economic growth for many countries such as Singapore and other Asian economies like South Korea, Hong Kong, and Taiwan. The rapid economic growth experienced by these so-called 'Tiger' economies are based on the export-led growth model (i.e. growth is driven/propelled by external demand and not domestic demand). Their success has inspired other previously closed economies such as China to follow suit, hence accelerating the pace of globalization.

More recently, the stellar performance of the newly emerging market economies of Brazil, Russia, India, and China (BRIC) provided the impetus for other previously closed economies to embrace free trade. Thus, traditionally closed economies like Vietnam, Cambodia, Lithuania, and Kazakhstan have also followed suit to open up their economies. Trade based on the principle of comparative advantage has become the new engine of growth for many developing countries.

Proliferation of Free Trade Groupings

The pro-globalist free trade mantra was exemplified by the formation of the WTO (World Trade Organisation) in 1995. China's entry to the WTO in 2001 marked a significant milestone in the progress towards more global trade. China economic resurgence has greatly aided the pace and scale of globalization. Its 1.3bn people represent a very huge potential market for global exporters. Many other countries have also jumped on to the bandwagon of free trade forging FTA (Free Trade Agreements) and forming regional trade blocs (e.g. NAFTA, AFTA). In short, the proliferation of FTAs and other trade groupings have further accelerated the trend towards globalization.

(b) Deglobalisation

During times of economic crisis, many governments chose to close their doors to trade to protect their countries' producers and jobs. There has been reports of increased protectionist measures taken during the Great Depression and also during the more recent Global Financial Crisis.

8.4.3.2 TECHNOLOGICAL FACTORS

(a) Globalisation

Geographical distances and **high transport costs** are hindrances to free trade as countries have to factor in the cost of transporting goods from one country to another. Prohibitively high transportation costs can wipe out the gains from trade arising from differences in comparative advantage. One of the key drivers of globalisation has thus been technological advances that have resulted in significant reduction in transportation costs. Over the last hundred years, the development and expansion of the Suez and Panama canals have cut down shipping times and costs significantly. The proliferation of container shipping and air freight are also other major trends which have brought down transportation costs substantially.

More recently, revolutionary innovations in **information and communication technology** (ICT) such as the internet has provided further impetus for global integration by greatly facilitating complex communications associated with international trade and investments. Today, the world is highly connected electronically as vast distances that separate nations are no longer major obstacles to the establishment and coordination of international supply chains. As it is now cheaper and faster to move goods, factors and people across vast distances than ever before, advancements in ICT have made the world so inter-connected that is it now said to resemble a "global village".

(b) Deglobalisation

Some technological advances actually reduce the need to trade. For example, technological improvements which has resulted in the efficient extraction of shale oil has reduced the need for countries like the US and

© Hwa Chong Institution Economics Unit. All Rights Reserved

Scanned with CamScanner

Canada to import petroleum from other oil producing nations. Technological improvements in the harnessing of energy from renewable solar, wind and water sources (e.g. solar panels, windmills, and dams) have also had a similar effect in reducing international trade in fossil fuels.

8.4.3.3 POLITICAL FACTORS

(a) Globalisation

In the post-world war II period, the world was politically divided into 2 major camps: democratic or 'free world' versus the communist countries. The uneasy relationship between these two camps was exemplified by the cold war which prevented close economic interactions between these two blocs. Hence, globalization was held back by this political divide. However, in the '80s this political barrier was suddenly broken with the collapse of communism both in Eastern and Central Europe and the former Soviet Union. Previous economic models of central planning or command economies were abandoned by these former communist countries in favour of more market oriented economic systems.

About the same time China's former leader Deng Xiaoping embraced market reforms and opened up China to the influx of foreign investments and trade. The transformation of these huge formerly closed socialist command economies to more open market-oriented systems greatly accelerated the process of globalization. The lifting of the 'iron curtain' was like the opening of a floodgate that resulted in the new found freedom to pursue trade and other forms of economic transactions between the peoples of the "free world" and the former communist states.

(b) Deglobalisation

In more recent times, the global financial crisis caused many economies to suffer from recession which has reversed the trend towards globalization. To score political points, leaders in many countries started raising trade barriers in order to win votes from affected business owners and workers. Examples of this include the US's "Buy American" campaign and more recently the US withdrawal from the Trans-Pacific Partnership (TPP).

8.4.4 BENEFITS AND COSTS OF GLOBALISATION

Globalisation has brought both benefits and costs to countries across the world. Although there are winners and also losers, the world as a whole appeared to have benefitted from increased globalisation.
Let us take a closer look at both the benefits and costs of globalisation.

8.4.4.1 BENEFITS OF GLOBALISATION

(a) Access to Raw Materials and Inputs

Globalisation enables countries with resource constraints to tap on foreign resources. In recent years, China has actively sourced for resources like oil, cement, and steel from foreign countries to drive her economic growth. Singapore too has been relying on **imported inputs** (raw materials) to produce goods for exports. In fact, the import-content of our exports is relatively high by international standards. For every $1 of exports about $0.60 is made of imported inputs. With globalisation and with more countries on board, a country is able to source for cheaper raw materials which can lower unit costs of production, increases SRAS.

(b) Access to Foreign Direct Investments

In a globalised world, countries can benefit from Foreign Direct Investments (FDI). FDI not only helps a country raise its capital stock, it also brings in superior foreign technology, skills, management processes, and trade connections. The inflow of FDI brings about a rise in both AD and AS, resulted in economic growth of the host country. One of the first countries that relied on the strategy of using FDI to grow and develop was

© Hwa Chong Institution Economics Unit. All Rights Reserved

Scanned with CamScanner

Singapore, which has progressed from a poor low-income developing country in the 1960s to a fully developed country by the 2010. Following the success of Singapore, many other countries like Thailand, Vietnam and China, have also embarked on FDI oriented growth strategies.

(c) Access to Foreign Technology

Transfer of technology and information has made it easier for emerging economies to catch up with the developed economies. Developing economies can now learn and use technologies from the developed countries to catch up and narrow the technological divide, enhancing economic growth. For example, the rise of the internet and mobile phones has significantly improved the welfare of people in poorer countries by giving them much increased access to information, education, and business opportunities.

(d) Access to Foreign Labour

For labour scarce economies like Singapore, globalisation has enabled her to tap on imported labour to drive economic growth. Today, about a third of Singapore's labour force is made up of foreign workers. The influx of young migrants also rejuvenated Singapore's population and helped mitigate some the problems associated with an ageing population. Such influx of foreign talent represents a **brain gain** to the Singapore economy, raises our potential growth, contributing significantly to the development of a knowledge and innovation driven economy.

8.4.4.2. COSTS OF GLOBALISATION

(a) Economic Instability

Allowing free movement of short-term capital (i.e. 'hot money') can result in exchange rate fluctuations and asset bubbles, which threaten macroeconomic stability. Rapid inflows of hot money may cause a sudden appreciation of a country's currency, which threatens export competitiveness. Conversely rapid capital outflows may cause a sudden currency depreciation, which could result in imported inflation.

During a booming stock or property market, foreign capital adds further to speculative demand, which drives asset prices even higher. Rising residential property prices raises the costs of home ownership for those who genuinely need to buy a house to stay in (e.g. newly married couples). Rising prices of commercial property raises business costs and reduces the country's international competitiveness. Furthermore, when such speculative bubbles burst, households will face a sudden drop in wealth, which leads to cutbacks in consumption. Saddled with bad loans, banks tend to cut back on lending, which further curbs consumption and investment. Aggregate demand falls, leading to an economic downturn.

Finally, international factor flows can be curbed quite easily and abruptly. For various social and political reasons, countries may impose capital and immigration controls to restrict inflow or outflow of capital and labour. Thus countries which are dependent on foreign labour and capital may be subjected to economic instability should they encounter such unfavourable actions from other countries.

(b) Brain Drain

In a globalised world, people who are talented, skilled, and enterprising tend to be more internationally mobile. Pull factors include the attraction of better job prospects, opportunities, and way of life offered by vibrant global cities in developed countries. In contrast, the backwardness, lack of job opportunities, low living standards, corruption, and poverty in poor countries contribute are push factors. Poor developing countries tend to be the losers when their talents migrate to developed countries in search of better jobs and higher living standards. Such 'brain drain' is a cost to poor countries as it slows down their country's economic growth and development.

© Hwa Chong Institution Economics Unit. All Rights Reserved

Scanned with CamScanner

(c) Structural Unemployment and Income Inequality

Firms in developed countries prefer to hire cheaper foreign workers from developing countries in order to reduce cost and hence raise profits. This generally harms the workers in developed countries as it causes structural unemployment and depressed wages. Increased international labour mobility has also resulted in greater income inequality in developed countries. Being internationally immobile, lower skilled workers in developed countries have little choice but to suffer from lower wages arising from the influx of cheap foreign labour. However, internationally mobile high skilled workers like doctors and bankers find their wages pushed up due to the global competition for such talent.

(e) Social Costs of Increased Immigration

Developed countries bear the social cost of increased immigration, which puts a strain on existing social amenities like housing, public transport, schools and hospitals. Furthermore, if the immigrants are unable to integrate with the locals, the social fabric is weakened as the locals find their culture, values, and way of life threatened. All these problems cause social discontent among the local population

(f) Environmental Degradation

As developing countries tend to have weaker environmental laws, MNCs from developed countries often offshore the more polluting aspects of their production processes to these countries. These has resulted in massive environmental degradation in many developing countries, harming not only their living environment but also the health of their people.

8.4.5 GLOBALISATION AND SINGAPORE

8.4.5.1 GLOBALISATION AND SINGAPORE'S PATTERNS OF TRADE

The underlying principle that determines the Patterns of Trade for an inter-industry model is the Law of Comparative Advantage. However, globalization can affect or alter the underlying factors behind Law of Comparative Advantage.

(a) Commodity Composition

Globalisation has impact on comparative advantage (gain/loss)

<u>Loss in comparative advantage:</u>
Trade and capital liberalisation has enabled countries like China and India to acquire comparative advantages in products that Singapore used to specialise heavily in e.g. manufacturing and assembly of electronics. Many MNCs have taken advantage of such opportunities offered by globalisation to cut cost by offshoring or outsourcing parts of the production processes to these lower cost countries.

<u>Gain in new comparative advantage</u>
Mobility of resources or productive factors across national boundaries has enabled countries like Singapore to acquire new comparative advantage in producing high value add, capital and knowledge intensive products e.g. biomedical industry and aircraft engines. Capital mobility usually takes the form of Foreign Direct Investment (FDI) inflows whilst labour mobility takes the form of influx of foreign talent / skilled workers.

(b) Geographical Composition

In Singapore, globalization has also altered the composition of our trade partners. Traditionally, the major advanced economies like US and EU and regional economies like ASEAN have been our key trade partners. Today, due to the growing network of FTAs, trade has extended to emerging economies like China, India, as well as non-traditional trade partners like Peru, Panama, Russia, and some Middle Eastern Countries like

© Hwa Chong Institution Economics Unit. All Rights Reserved

Scanned with CamScanner

Jordan. The forging of FTAs has been prompted by the need to diversify our markets (e.g. decoupling) to cushion the economy against the threat of contagion and protectionism in a globalised world.

8.4.5.2 SINGAPORE'S POLICIES TOWARDS GLOBALISATION & DEGLOBALISATION

Being a small and open economy with no natural resources, Singapore has much to gain from globalisation as it provides access to global markets and resources to power economic growth and development. However, Singapore has from time to time suffered from external shocks e.g. global financial crisis 2007-2008 and has to contend with protectionist threats whenever the world is experiencing an economic downturn as countries scramble to protect their own industries. In recent times, the income gap has also widened to worrying levels. Moreover, workers continue to face the threat of structural unemployment due to outsourcing and off shoring. Hence, Singapore has implemented policies to increase the gains from globalisation and minimise the negative effects from globalisation.

A. Policies to Enhance Singapore's Exports and as a Destination to FDI in view of Globalisation

(i) Supply-side policies to lower the price of exports

- Long-run supply-side policies are used to improve the productivity of the Singapore economy, which will in turn help to lower the cost of production and **make our exports more price competitive**, leading to increase in export volume.
- Various policies that focus on labour and capital productivity as well as supporting **restructuring** have been implemented in Singapore: **Productivity and Innovation Credit (PIC) bonus** encourages firms to **invest in productivity** such as **retraining** of workers with a dollar-to-dollar matching cash bonus and Corporate Income Tax rebate. **ICT for Productivity and Growth (IPG) Programme** seeks to accelerate the adoption of ICT solutions among SMEs and boost their productivity by providing subsidies for ICT-based productivity solutions. **SkillsFuture Credit** supports individual-initiated training for all Singaporeans aged 25 and above to encourage skills development and lifelong learning.

(ii) Supply-side policies to improve the quality of our exports

- Other than lowering the cost of production, supply side policies are also used to enhance the **quality of our exports** to increase the export volume.
- Policies focus on encouraging technological advancements through research and development (R&D) as well as improving productivity. For example, the government will be investing $19 billion over 2016 to 2020 to encourage research, innovation, and enterprise (RIE). The above-mentioned policies on improving labour and capital productivity will help to enhance the quality of our exports too.

(iii) Supply-side policies to attract Foreign Direct Investments

- To remain attractive to FDIs, Singapore continues to focus on maintaining a highly-skilled workforce via retraining programmes (as mentioned above), offering low corporate tax rates of 17% so that the after-tax profits of firms remain high, ensuring good infrastructure, and promoting social and political stability.

(iv) Trade polices to promote exports/FDI and accessibility to imports

- Singapore has undertaken trade efforts in this region such as APEC, ASEM, and ASEAN, as well as under bilateral Free Trade Agreements (FTAs) to accelerate the momentum of trade liberalisation and strengthen the multilateral trading system. Such FTAs **provide preferential trading arrangements** that **enhances trade and investment flows** by providing lower tariffs for exports of goods, hassle-free custom procedures, improved market access for various commercial and professional services, easier entry for businessmen into other countries, better terms for investment in foreign countries etc. FTAs also contribute to **more sources of imports for her raw materials.**

- Since the signing of her first FTA under the ASEAN Free Trade Area (AFTA) in 1993, Singapore's network of FTAs has expanded to cover 18 regional and bilateral FTAs with 24 trading partners.

© Hwa Chong Institution Economics Unit. All Rights Reserved

Scanned with CamScanner

B. Policies to Mitigate the Negative Effects of Globalisation and the Rise of Deglobalisation

(i) Supply-side policies to reduce economic instability and build resiliency

- Globalisation exposes Singapore to **many risks via the contagion effect** – when demand and price of her exports can fall suddenly and supplies of important raw material can be cut when major trading partners face recession or supply shock respectively.
- Hence, it is important for Singapore to diversify our export markets away from major trading partners such as the US. This policy is sometimes called **"decoupling".** This is done by forging a network of FTAs with other trade partners including those from non-traditional areas like Middle East and Central Asia.
- Many countries around the region like Thailand, Vietnam and China, have also embarked on FDI oriented growth strategies. This means Singapore might start losing its edge in attracting FDIs in times to come. Hence, there is a need for Singapore to be less dependent on FDIs and more dependent on Singapore's small and medium sized enterprises (SMEs) to drive our future growth. As many of the SMEs lag behind the MNCs in terms of productivity but yet employ the main bulk of Singapore's labour force, there has been increasing emphasis by the government to help these firms improve their productivity via the measures mentioned above.

(ii) Supply-side policies to prevent structural unemployment and reduce income inequality

- Continuous investment in training, retraining, and skills upgrading will enable the workforce to be competitive and occupationally mobile so that should workers lose their jobs they can easily switch to other sectors where jobs can be found. Examples of upgrading courses include those provided by the **Continuing Education and Training Centres (CET),** which is accredited by **Singapore Workforce Development Agency (WDA).**
- There is also the **Employment and Employability Institute (e2i)** which is a one-stop, skills-based institute for job seekers, employers and training providers where employment and career coaching as well as employability and skills training are provided for all segments of workers ranging from rank and file to professionals, managers, executives and technicians (**PMETs**).
- Initiatives such as the **Skills Development Fund (SDF),** as well as the **Lifelong Learning Endowment Fund** and **Workfare Training Support Scheme** provide subsidies to firms who send their workers for re-training or upgrading courses to retain their employability
- The government also introduced the **Wage Credit Scheme (WCS),** where the Government co-funded 10-40% of wage increases from 2015-2020 to Singapore Citizen employees who earned a gross monthly wage of up to $4,000. This is to support businesses embarking on transformation efforts and encourage sharing of productivity gains with workers. The **Workfare Income Supplement (WIS) Scheme** was also introduced to supplement the income of low-wage earners to help cushion the impact of globalisation on their stagnating income.

(iii) Supply-side policies to manage labour movements

- Due to her small domestic market and lack of labour resources, resorting to protectionist measures to save jobs and closing doors to foreign talent can only be detrimental to Singapore in the long run.
- Singapore instead controls foreign immigration with a foreign worker levy and with mandatory ratios of domestic to foreign workers. This ratio varies across industries with sectors like construction having more lax ratios compared to others like retail. This is because local workers are more likely to shun jobs in sectors where working conditions are harsher hence the need for foreign workers in these sectors is greater. The levy and the ratio are relaxed when the economy is booming but tightened when the economy is faltering. This allows Singapore to expand its capacity quickly when demand is rising while preserving jobs for locals when demand is falling.

REFERENCES

Interested to find out more?

1. "Economics" by John Sloman (6th Ed)
2. "Economics Today" by Roger L. Miller (9th Ed)

© Hwa Chong Institution Economics Unit. All Rights Reserved

Scanned with CamScanner

APPENDIX 1: ILLUSTRATION OF THE LAW OF COMPARATIVE ADVANTAGE

Sample Illustration of Theory of Comparative Advantage for the purpose of understanding only

The following illustration of the Law of Comparative Advantage is based on the following assumptions:

- Only 2 countries are involved in the production and exchange of 2 commodities.
- Each country devotes half of its resources among the production of the 2 goods.
- There is a constant opportunity cost of production of the goods.
- There are no transport costs, which might outweigh the benefits of specialisation and trade.
- There are no restrictions to trade, i.e. no protectionism.
- There is perfect factor mobility within each country and perfect factor immobility between countries

Table 1: Before and after specialisation according to CA

	Production of textiles and cars before specialisation and trade		Opportunity Cost of producing 1 unit of		Production with: DC: Partially Specialise with 75% resources in cars and 25% in textile LDC: Full specialisation in textile		Consumption after trade by exchanging 12T for 12C TOT: 1T:1C	
Countries	**Textiles**	**Cars**	**Textiles**	**Cars**	**Textiles**	**Cars**	**Textiles**	**Cars**
Developed Country (DC)	20	30	3/2 C	2/3 T	10	45	22	33
Less Developed Country (LDC)	15	10	2/3 C	3/2 T	30	0	18	12
World	35	40			40	45	40	45

Before specialisation, the DC produces 20 units of textiles and 30 units of cars which means it has to give up 3/2 units of cars for 1 unit of textile or 2/3 units of textiles for 1 car. On the other hand, the LDC produces 15 units of textiles and 10 units of cars which means it has to give up 2/3 units of cars for 1 unit of textiles or 3/2 units of textiles for 1 unit of car. This means that the DC and LDC have lower opportunity costs or comparative advantage in producing cars and textiles respectively.

Suppose the DC partially specialises and uses 75 units of resources to produce cars and 25 units of resources to produce textiles while the LDC fully specialises and channels all its resources to producing textiles. The DC will produce 10 units of textiles and 45 units of cars while the LDC will produce 30 units of textiles only.

Terms of trade (TOT) refers to the rate at which one unit of a good can be exchanged for another. Trade between 2 countries will only be mutually beneficial if the TOT lies within the opportunities cost ratios of the two trading partners. In this case, trade between the DC and LDC will be beneficial if the TOT are as follows:

- 2/3 cars < 1 textile < 3/2 cars OR
- 2/3 textiles < 1 car < 3/2 textiles.

The exact terms of trade will depend on the relative strength of the demand and the bargaining power of the countries involved in the exchange.

Let's assume that both countries agree on the terms of trade of 1 textiles = 1 car and exchange 12 units of textiles for 12 units of cars. After specialisation and trade, the DC gained 2 of textiles and 3 units of cars while the LDC gained 3 of textiles and 2 units of cars. The world output also increases by 5 units each for textiles and cars.

It is clear that after specialisation and trade, both the DC and LDC gain from trade as they are able to consume beyond what they are able to produce domestically (i.e. consume outside their PPC). Although for a given unit of resource, the DC is able to produce more of both goods than the LDC (i.e. the DC has absolute

© Hwa Chong Institution Economics Unit. All Rights Reserved

Scanned with CamScanner

advantage in producing both goods), both countries can still gain from trade if they specialise according to their comparative advantage which is determined by their opportunity cost in production or relative efficiency in producing the good

APPENDIX 2: THE TERMS OF TRADE (TOT)

- **Conceptually,** as used in the Theory of Comparative Advantage (refer to Appendix 1), the concept of terms of trade refers to the **amount of exports than can be exchanged for a unit of imports**
  - Terms of trade would have improved if more imports can be exchanged for a unit of exports
  - Terms of trade would have worsened if less imports can be exchanged for a unit of exports
- However, as a country typically exports and imports thousands of goods and services and not only just one type of export and one type of import (as illustrated in typical CA numerical examples), this conceptual definition **cannot be used empirically** to estimate changes in a country's TOT
- Hence the more **practical empirical definition** of TOT would be to take the ratio of an index of export prices to an index of import prices
- Thus TOT Index can be calculated as follows:

$$\text{TOT index} = \frac{\text{Export Price Index}}{\text{Import Price Index}} \times 100$$

Note: In the base year, the TOT index will be 100.

- Assuming that import prices remain unchanged, higher export prices enables the country to earn more revenue from each unit of exports and thus be able to buy more units imports in return, so its TOT would have **improved** (and the opposite would occur if export prices fell instead)
- Conversely, assuming that export prices and hence export revenue remain unchanged, higher import prices would enable the country to buy less units of imports for a given amount of exports, so its TOT would have **worsened** (and the opposite would occur if import prices fell instead).
- Example 1
  - Price of exports by 10%
  - Price of imports by 3%
  - TOT index = (110/103) X 100 = 106.8
  - This means that a given amount of exports can now exchange for **6.8%** more imports.
- Example 2:
  - Price of exports by 10%
  - Price of imports by 20%
  - TOT index = (110/120) X 100 = 91.7
  - This means that a given amount of exports can now exchange for **8.3%** less imports.
- An improvement of the TOT can be the result of
  - An increase in export prices, ceteris paribus
  - An decrease in import prices, ceteris paribus
  - Export prices rise while import prices fall
  - Export prices increase faster than import prices
  - Export prices decrease slower than import prices
- A worsening of the TOT can be the result of
  - An decrease in export prices, ceteris paribus
  - An increase in import prices, ceteris paribus
  - Export prices fall while import prices rise
  - Export prices increase slower than import prices
  - Export prices decrease faster than import prices

© Hwa Chong Institution Economics Unit. All Rights Reserved

Scanned with CamScanner

APPENDIX 3: RELATIONSHIP BETWEEN TERMS OF TRADE AND BALANCE OF TRADE

The Balance of Trade (BOT), also known as the trade balance, refers to the difference between the value of exports and imports.

That is

Balance of Trade (BOT) = Export Revenue (X) - Import Spending (M) = P_XQ_X - P_MQ_M

- **Positive** BOT represent a trade **surplus**, whilst a **negative** BOT represents a trade **deficit.**

Effects of an improvement of the TOT on the BOT

- An improvement in a country's TOT can lead to either an improvement or deterioration of its BOT. The effects will depend on the **price-elasticity of demand** for imports and exports

- Case 1: ↑Px → TOT improves.

Export demand is price inelastic	Export demand is price-elastic
▪ Qx ↓ less than proportionately ▪ Export revenue (X) rises ▪ **BOT improves**	▪ Qx ↓ more than proportionately ▪ Export revenue (X) falls ▪ **BOT worsens**

- Case 2: ↓Pm→ TOT improves.

Import demand is price inelastic	Import demand is price-elastic
▪ Qm ↑ less than proportionately ▪ Import expenditure (M) falls ▪ **BOT improves**	▪ Qm ↑ more than proportionately ▪ Import expenditure (M) rises ▪ **BOT worsens**

Effects of a deterioration of the TOT on the BOT

- A worsening of a country's TOT can lead to either an improvement or deterioration of its BOT. The effects will again depend on the price-elasticity of demand for imports and exports.

- Case 1: ↓Px → TOT worsens.

Export demand is price inelastic	Export demand is price-elastic
▪ Qx ↑ less than proportionately ▪ Export revenue (X) falls ▪ **BOT worsens**	▪ Qx ↑more than proportionately ▪ Export revenue (X) rises ▪ **BOT improves**

- Case 2: ↑Pm → TOT worsens

Import demand is price inelastic	Import demand is price-elastic
▪ Qm ↓ less than proportionately ▪ Import expenditure (M) rises ▪ **BOT worsens**	▪ Qm ↓ more than proportionately ▪ Import expenditure (M) falls ▪ **BOT improves**

© Hwa Chong Institution Economics Unit. All Rights Reserved

Scanned with CamScanner

Hwa Chong Institution
Year Two H2 Economics 2023
Chapter #8: The National and International Economy (III)
Globalisation and the International Economy

Tutorial 8

Essay Question 1: TYS N2014 Q1 (attempt part b only)
In order for specialization to be beneficial, it must be accompanied by exchange.

(a) Explain how benefits to the economy can arise from specialization and exchange [10]

(b) Very often these benefits are not fully achieved in domestic and international markets. Discuss the reasons for this. [15]

Essay Question 2: TYS N2015 Q6
"We are restructuring to become more competitive, not less." Mr Lim Hng Kiang, Minister for trade and Industry, The MTI ...nes, Committee of Supply 2013.

(a) Explain why an economy's comparative advantage might change over time [10]

(b) Assess the measures adopted by the Singapore government to improve its global competitiveness. [15]
Hint: Think in terms of the competitiveness of Singapore's exports and Singapore as a destination for FDI.

Essay Question 3: TYS N2019 Q6
Globalisation has been a major influence on Singapore's economic performance. The uncertainty and instability happening around the world in recent years could threaten the economic benefits that globalization brings.

(a) Explain two different factors that have enabled globalisation to occur. [10]

(b) Assess whether current global economic developments will have a positive or negative effect on Singapore's future performance. [15]

Essay Question 4: TYS N2018 Q6
Across the globe, people are wondering why the US, usually the leader in free trade, is now taking a protectionist stance

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

(b) Discuss the extent to which protectionism would be beneficial to an economy. [15]

Essay Question 5: Specimen Paper Q6
'Free Trade Agreements (FTAs) are treaties which make trade and investment between 2 or more economies easier. Singapore has an open economy which is driven by trade in goods and services. Over the years, it has forged an extensive network of 25 implemented agreements.' Ministry of Trade and Industry, Singapore

(a) Explain how consumers and producers can benefit from free trade. [10]

(b) Discuss whether free trade agreements are the best approach for governments to achieve their macroeconomic objectives. [15]

© Hwa Chong Institution Economics Unit. All Rights Reserved.

Scanned with CamScanner

Case Study Question 1: TYS N2015 Q2

The Growing Threat of Protectionism

Table 1: European Union (EU) trade balance with China

Year	EU imports from China (€ billions)	EU exports to China (€ billions)
2008	248	78
2009	214	82
2010	283	113
2011	294	136
2012	290	144
Average annual growth 2008–2012	4%	17%

Source: Eurostat

Extract 5: Escalating trade war between EU and China

After the European Union levied heavy tariffs of 48% on subsidised Chinese-made solar panels China announced it was considering retaliation by levying a similar 'anti-dumping' duty on wines made in the EU. The French President has expressed alarm at a development that threatens exports worth €546 million for France and called for a special EU meeting to discuss the escalating trade war between the EU and China.

Echoing the language used by the EU before it imposed import tariffs on Chinese solar panels, the Chinese trade ministry announced it had begun an anti-dumping investigation into EU wines at the request of Chinese wine producers.

The Chinese action targets France and other wine producers, which all happen to be countries that supported the European Union's tariffs on Chinese solar panels despite opposition from Germany, Britain and sixteen other countries within the EU. The EU imposed a tariff on Chinese solar panels because it believes that Chinese producers benefit from unfair subsidies.

French wine exports account for 71% of the European wines imported by the Chinese, a fast-growing market among China's growing middle classes. Italy and Spain will have exports worth respectively €77 million and €89 million affected by any Chinese retaliatory measures against European wines.

The French trade ministry condemned the Chinese threat and warned of an escalating trade war if Beijing did not follow World Trade Organisation (WTO) rules.

Source: *Daily Telegraph*, Bruno Waterfield, 5 June 2013

© Hwa Chong Institution Economics Unit. All Rights Reserved.

Scanned with CamScanner

Extract 6: EU and China reach deal in solar panel dispute

The European Union says it has reached "an amicable solution" with Beijing in a row over imports of Chinese solar panels.

"Both sides have agreed on a minimum price for the panels", said an EU Trade Commissioner. The dispute erupted after the EU imposed temporary anti-dumping tariffs on the imports. China is the world's largest producer of solar panels. Its exports of solar panels to Europe totalled €21 billion in 2011.

"After weeks of intensive talks, I can announce that I am satisfied with the offer of a price undertaking submitted by China's solar panel exporters," said an EU spokesman on Saturday. "This is the amicable solution that both the EU and China were looking for." He added that the agreement would "lead to a new market equilibrium at a sustainable price".

Source: BBC News, 27 July 2013

Extract 7: Europe fears 'uncontrolled protectionism' as emerging markets turn against free trade

The European Union has warned of a slide towards "blatant and uncontrolled protectionism" across the world as emerging markets defend themselves, warning that abuses by Russia, Argentina, India, Brazil, Indonesia, China and other key states pose a growing threat to global recovery. The EU's trade body said 154 new tariffs and restrictive measures have been pushed through over the past year while "virtually none" has been abolished. "It is a striking phenomenon. Looming protectionism is now more than ever a significant threat to global growth and prosperity," said an EU trade commissioner.

Trade restrictions have been building up since the economic crisis of 2008–2009. They have spread rapidly over the past year as once-booming economies start to show slower rates of economic growth. The worry is that emerging markets – now responsible for half of global output – are turning their backs on free trade as political pressure mounts.

Brazil raised tariffs on 100 sectors last October to defend its declining industrial base, with tariffs of up to 25% on machinery, iron and steel, plastics, chemicals, paper and wood products. It is now pursuing a full-blown "industrial policy" with tax concessions for those who build plants locally. It has targeted its car industry for protection, and this will soon be broadened to 19 strategic sectors. Argentina imposed tariffs of up to 35% in January to stem a balance of payments crisis, while Ukraine imposed duties on 131 products. Indonesia's food law prohibits food imports unless deemed necessary, and it too has a draft industry law for complete takeover of strategic sectors by the state.

The EU said the move by several states to unravel the WTO structure is alarming. "Such practices should be strongly condemned, as their potential proliferation can put at risk and even nullify the whole global set-up of rules governing trade, opening the way to blatant and uncontrolled protectionism." Countries are using various methods to keep goods and services out, going far beyond tariffs. These include licensing barriers, technical regulations, procurement rules and internal stimulus measures that distort competition. Many forms of "behind-the-border" protectionism are hard to police. "These measures are often applied without pre-warning for businesses. Whole consignments of goods end up blocked in customs entry points and warehouses. Perishable products can often totally lose their market value in the process," said the report.

"We think it is too crude to say that all emerging markets are going protectionist," said a spokesman from an economic research company, Capital Economics. "For every case like Brazil, there are those like Colombia, Chile, Peru and Mexico that have just signed a free trade deal."

He said that this year's exchange rate depreciations in emerging markets might help restore lost competitiveness for those with big current account deficits, notably Brazil, India, Turkey and South Africa. "A weaker exchange rate is what they need and will be more useful in the end than any industrial policy," he said.

Source: *Daily Telegraph*, Ambrose Evans-Pritchard, 2 September 2013

© Hwa Chong Institution Economics Unit. All Rights Reserved.

Scanned with CamScanner

Questions

2 (a) With reference to Table 1, compare the EU's trade balance with China in 2008 and 2012. [2]

(b) Explain what is meant by the term 'protectionism'. [2]

(c) With the help of a diagram, explain how it could be claimed that subsidies allow the Chinese to dump solar panels in the EU. [4]

(d) With the help of a diagram, explain whether an agreed minimum price for solar panels will always result in 'a new market equilibrium at a sustainable price'. [4]

(e) Assess whether a tariff or a weaker exchange rate is the better method for a country to deal with a loss in competitiveness. [8]

(f) In view of the possible impact of escalating trade wars upon consumers, employees and producers, assess whether, on balance, protectionism can ever be justified. [10]

[Total: 30]

© Hwa Chong Institution Economics Unit. All Rights Reserved.

Scanned with CamScanner

Case Study Question 2: TYS N2016 Q1

Question 1: India's agricultural policy

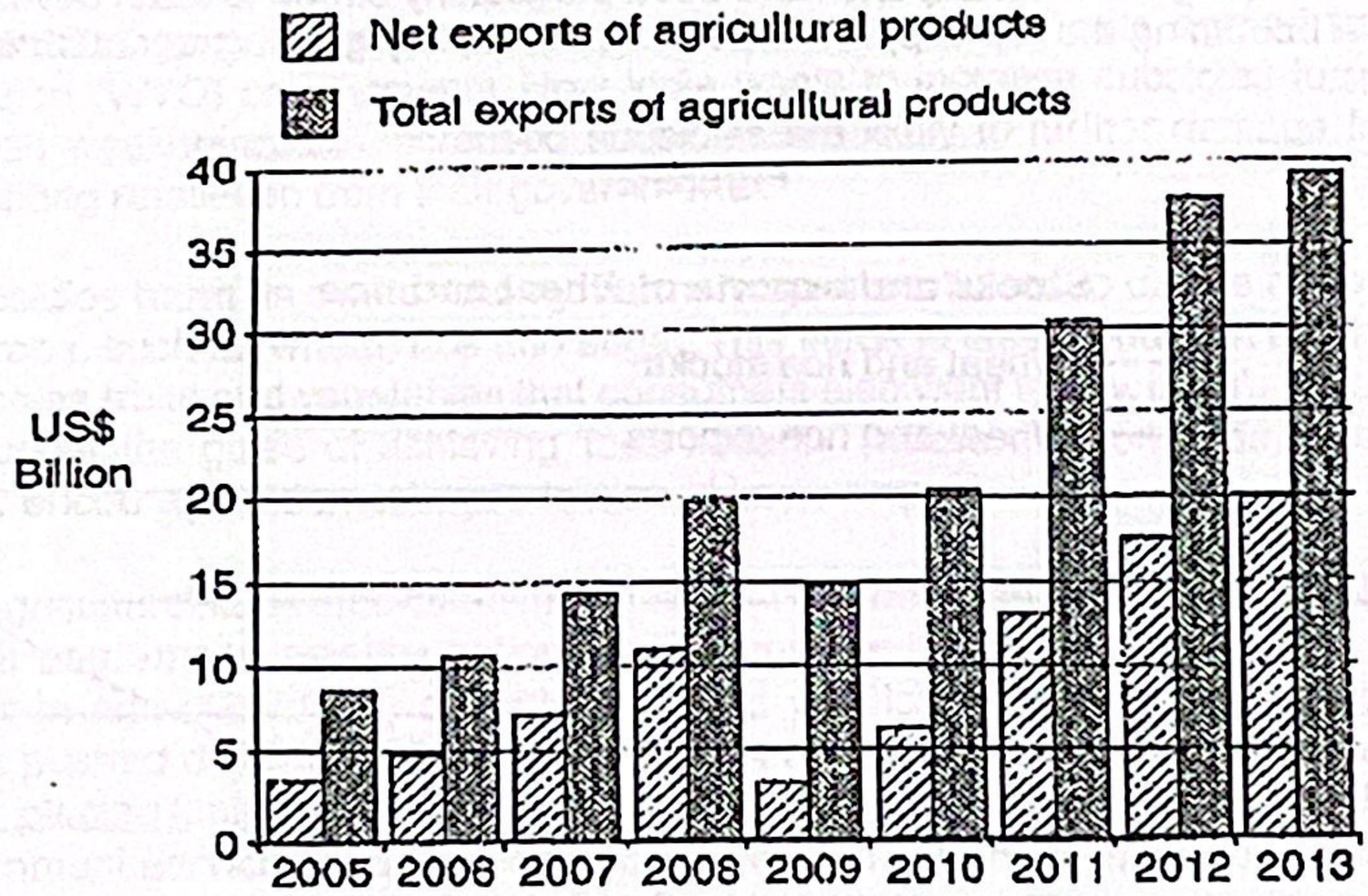
Extract 1: India's agricultural exports climb to record high

In the past decade, India has emerged as a major agricultural exporter, with exports climbing from just over US$5 billion in 2003 to a record of more than US$39 billion in 2013. In terms of agricultural products, in 2013 India was the world's sixth-largest net exporter. India has become a very important player in the global market, especially for rice, cotton, sugar, and bovine meat (buffalo). In addition to these products, India has also become a sizeable exporter of guar, corn and wheat, as well as a diverse range of other products. India's export growth of agricultural products over the past decade has been the highest of any country, with an annual rate of growth of more than 21%.

Source: US Department of Agriculture, accessed 3 September 2014

Figure 1

India emerges as a large net exporter of agricultural products



Source: US Department of Agriculture, accessed 3 September 2014

Extract 2: India's exports benefit from government policies and subsidies

One of the drivers behind India's export growth in agricultural products has been the dramatic increase in government support provided to agriculture, in particular for wheat and rice. It is estimated that the Indian government's total support for agriculture has grown to US$85 billion in 2013/14. Furthermore, the government's latest budget indicates that support is likely to reach a record high in 2014/15. In addition to providing subsidies to irrigation schemes, power and fertiliser, which boosts production for many exported crops such as cotton and sugar, the Indian government provides direct price support for wheat and rice, among other commodities.

© Hwa Chong Institution Economics Unit. All Rights Reserved.

Scanned with CamScanner

The Indian government purchases rice and wheat directly from farmers at minimum support prices (MSPs). These prices are set artificially high. The MSPs for wheat and rice have increased significantly over the past six years, with that of rice up 75% and that of wheat up 40%. The increasing MSPs have contributed to expanding production and rapidly rising government stocks. The Indian government purchases these basic crops from farmers. Of these purchased crops:

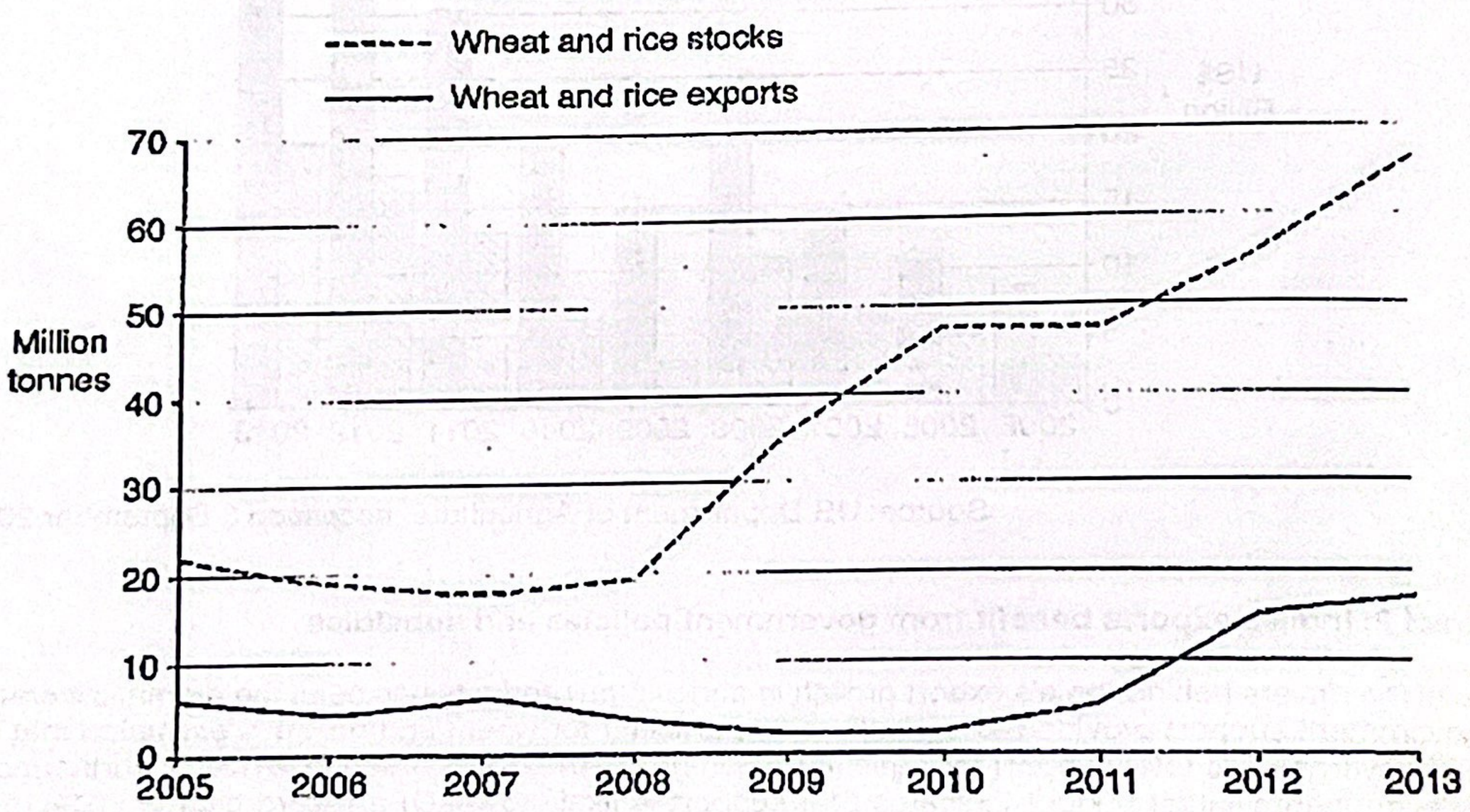
1. The government sells a portion in 500,000 'fair price' stores to some 800 million poor people at low prices.
2. An estimated 40% never reaches its intended consumers because of corruption.
3. Some is wasted owing to inadequate storage and transport.
4. Some is exported. This is particularly true for wheat, which the government sells from its stocks at prices below acquisition and transport costs.

The loss of crops seems particularly cruel in a country where many people remain hungry.

Although the United States has been the largest market for India's agricultural exports in the past two years, nearly all other large markets for India are developing countries. In total, 79% of India's exports went to developing markets. Exports have been particularly strong to least developed countries (LDCs), with India becoming the top supplier in 2013 with a rapidly growing agricultural trade surplus with these nations.

Figure 2

Stocks and exports of wheat and rice



Source: US Department of Agriculture, accessed 3 September 2014

© Hwa Chong Institution Economics Unit. All Rights Reserved.

Scanned with CamScanner

Table 1: India: terms of trade indices (2005–2013), year 2000 (base year) = 100

Year	2005	2006	2007	2008	2009	2010	2011	2012	2013
Indices	105.2	110.8	114.2	117.2	131.7	132.5	127.6	127.7	131.1

Source: UNCTAD Statistics

The index of the terms of trade is defined as:

$$\frac{\text{the index of export prices}}{\text{the index of import prices}} \times 100$$

Extract 3: India's dangerous food subsidies

India's farm subsidies and MSPs are already far in excess of the limits agreed to in their World Trade Organisation (WTO) commitments. Now India wants to increase subsidies further. With global commodity prices weakening, the increased subsidies are likely to further damage farmers in other countries, prompting retaliation from their governments.

India's farm subsidies harm its own economy. Farmers are incentivised to devote more land and water to subsidised crops, such as wheat, rice and sugar. This leads to less production and higher prices for other items, such as fruits and vegetables that consumers also want to buy. India's government justifies these policies under the guise of achieving 'food security' (where everyone has access to sufficient healthy food) by encouraging domestic production of basic crops.

WTO rules on agricultural subsidies came into effect in 1995 because the global marketplace had been affected by their use among wealthy nations, most prominently the European Union and the United States. Farmers in non-subsidising countries suffered with low prices, as the subsidised food from wealthy nations pushed down the market price. The WTO 1995 Agreement on Agriculture addressed this problem by placing limits on these trade-distorting subsidies, while allowing a wide range of non-distorting government services and payments to be provided to farmers. It also permitted governments to spend as much as they wish to provide food to low-income people.

Recently India ignored the WTO's prohibition on new export subsidies and began to use them on sugar, thus undercutting sugar exporters such as Thailand and Brazil. If India won't follow the rules to which it has agreed, other countries are likely to follow suit soon.

Source: Dan Pearson in *The Diplomat*, 27 August 2014

© Hwa Chong Institution Economics Unit. All Rights Reserved.

Scanned with CamScanner

Questions

(a) Estimate and compare the value of India's total imports of agricultural products in 2013 and 2005. [2]

(b) Using a supply and demand diagram, explain how the Indian government's purchase of grains at artificially high minimum support prices has contributed to the changes shown in Figure 2. [4]

(c) (i) Suggest **two** ways in which changes in the prices of exports and imports might lead to the change in India's terms of trade in 2013 compared to 2005. [2]

(ii) Explain how a rise in the terms of trade can be consistent with a strong rise in the value of India's net exports of agricultural products. [4]

(d) Discuss how far the concept of comparative advantage explains whether India should specialise in agricultural products or other goods. [8]

(e) Discuss whether the Indian government's policy towards agriculture can be justified. [10]

[Total: 30]

© Hwa Chong Institution Economics Unit. All Rights Reserved.

Scanned with CamScanner

Case Study Question 3: TYS N2008 Q2 (Optional)

Issues in Trade and Globalisation

Extract 1: European Union imposes shoe penalties

The European Union (EU) has begun imposing duties on imports of shoes from China and Vietnam. Tariffs are to be phased in starting at 4% and rising to nearly 20% for China and 16.8% for Vietnam. The EU contends that these measures are a justifiable response to "unfair competition" from Asian producers who, it is alleged, enjoy state support in the form of tax exemptions, cheap finance, or subsidized rents. China denies the accusation, saying the EU does not want to open up its markets to competition. The move is supported by EU nations with large shoe industries such as Italy and Portugal, but others such as the UK fear it will have a negative impact on consumers and retailers.

China has urged the EU to re-consider its action, saying the planned measures are unfair. Chinese officials say there is no evidence of dumping and question whether the measures conform to World Trade Organization (WTO) rules.

China exported 1.2 billion pairs of shoes to the EU last year, while Vietnam exported 265 million pairs.

Source: *BBC News, 7 April 2006*

Extract 2: New threats to global trade and investment

In its latest report on the global economy, the International Monetary Fund (IMF) highlighted the need to resist protectionist pressures. In the US there are complaints in some quarters that Chinese manufacturers enjoy an unfair competitive advantage arising from the alleged undervaluation of the Chinese currency, the Yuan (Rimini). Some politicians are calling for the US Treasury to declare China a "currency manipulator", while others have called for heavy tariffs on China's exports to the US.

In April the EU took legal action against several of its own member states considered to have breached EU free- market rules. This action was welcome in ensuring free trade within the EU's internal market. However, the EU's record on global trade issues is less inspiring. Last year, a 'bra war' dispute arose between the EU and China. The Chinese were accused of dumping bras in the EU market. This resulted in quotas being applied to textile imports from China. The footwear trade now faces similar difficulties following the EU's decision in April to impose tariffs on shoes from China and Vietnam. In the US there is now growing doubt about globalization, and influential voices are calling for US trade policy to be focused on bilateral or regional trade deals.

Source: Meredydd Davies, *HSBC Economic Review, July 2006*

Extract 3: EU threatens India in whisky feud

The EU will carry out its threat to refer India to the WTO if the Indian government does not agree to remove "unfair" tariffs on imports of drinks by the end of next month. India is an open economy which generally favours free trade, but it is risking a trade war by effectively excluding whisky from its market. A recent EU investigation found that India's duty system 'unfairly' distorts competition' and includes 'clear violations' of WTO rules.

The threat to take action will be welcomed by the Scottish Whisky association (SWA), a strong critic of the Indian tariff policy. India has long been considered a potentially profitable market for international whisky producers, but a range of duties imposed by national and state governments means that a bottle of Scottish whisky faces a tax burden up to five times greater than its Indian-made substitutes. In contrast, the Indian-made product is not taxed when imported into Europe, although it is subject to stringent labelling requirements. Compared with Scottish whisky Indian whisky is made from different ingredients and is not allowed to be labelled as whisky in the EU. It is marketed in the EU as 'Indian Spirit' which Indian producers claim gives it a disadvantage when compared to 'scotch'.

A spokesman from the SWA in support of the EU's threat of action stated that 'Scottish whisky producers have campaigned for years for fair market access to India. A non-discriminatory duty policy would offer Indian consumers more choice at a

© Hwa Chong Institution Economics Unit. All Rights Reserved.

Scanned with CamScanner

reasonable price, boost Indian government revenue and introduce a fair system for international producers. However, representatives of India's domestic drinks industry claim that it will be destroyed if tariffs are removed.

Source: Conal Walsh, *Observer, 13 August 2006*

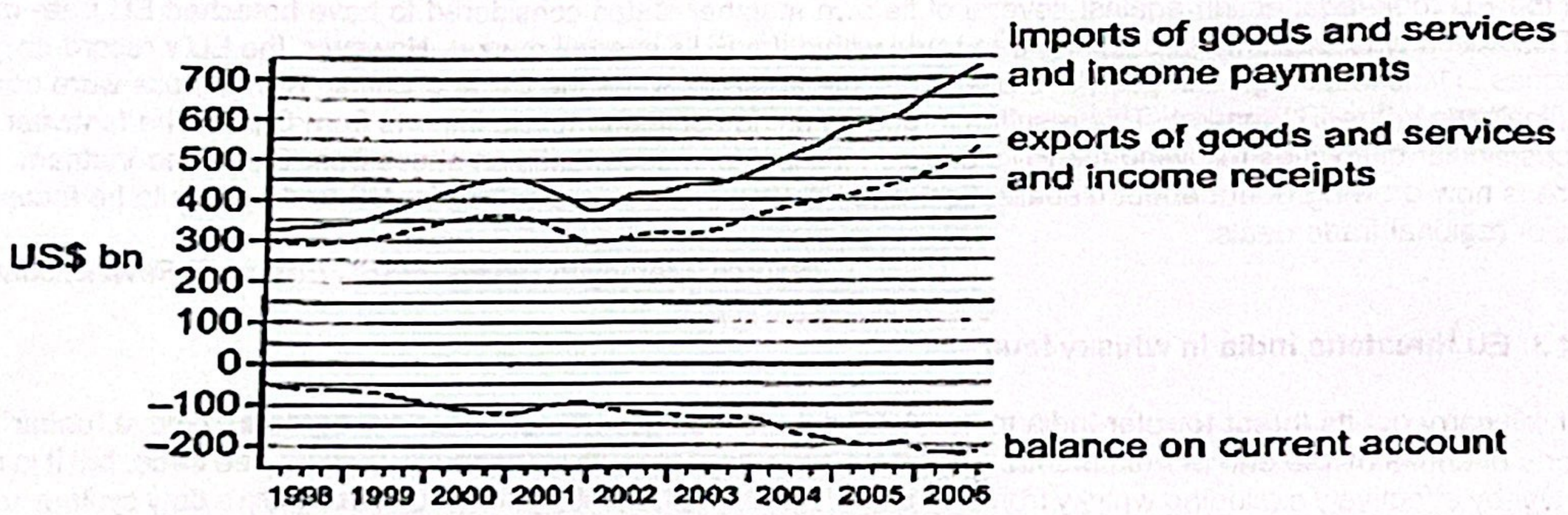
Table 3: Trade In Goods

	Total Value Of Trade US$bn	Exports				Imports			
		Annual Percentage Change				Annual Percentage Change			
	2005	2000-2005	2003	2004	2005	2000-2005	2003	2004	2005
World	10121	10	17	21	13	10	17	21	13
USA	904	3	5	13	10	7	9	17	14
Total EU:	3988	10	19	19	7	10	20	20	8
UK	378	6	9	14	9	8	13	20	6
Italy	367	9	18	18	4	10	20	19	7
China	762	25	35	35	28	24	40	36	18
India	90	16	16	33	19	21	26	37	35
4 Asian Tigers*	731	9	19	25	12	8	15	27	14

* Hong Kong, Singapore, South Korea, Taiwan

Source: World Trade Organization (WTO) World Trade Report 2006

Figure 1: US Current Account

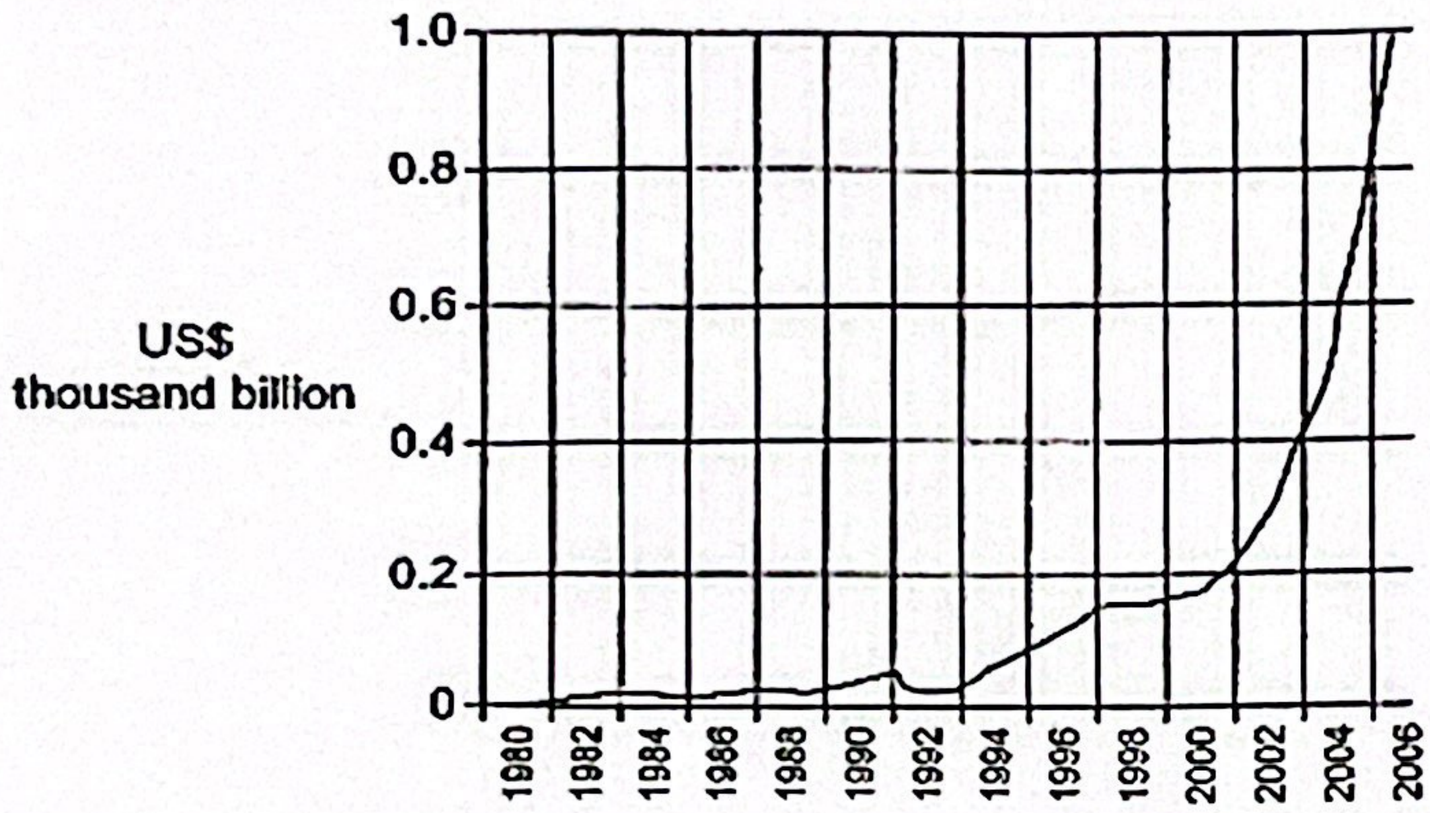


Source: Bureau of Economic Analysis, US Department of Commerce

© Hwa Chong Institution Economics Unit. All Rights Reserved.

Scanned with CamScanner

Figure 2: The rise and fall of China foreign exchange reserves



Source: *Observer*, 1 October 2006

Table 4: Value of Yuan (average rate per US$)

2000	2001	2002	2003	2004	2005 Mar	2005 June	2005 Sept	2005 Dec	2006 Mar	2006 June	2006 Sept
8.28	8.28	8.28	8.28	8.28	8.28	8.28	8.09	8.08	8.05	8.00	7.93

Source: various

Questions

(a) (i) How does the value of the Yuan in September 2006 compare to its value in 2000? [1]

(ii) Describe what happened to the US balance on current account over the period 1998 to 2006. [2]

(b) Identify and explain any evidence contained in the data that suggests that the Chinese government is a 'currency manipulator'. [5]

(c) Explain how you would decide whether the low price of Chinese shoes in EU markets occurred as a result of 'dumping'. [4]

(d) Discuss whether the Indian government's treatment of Scotch whisky and the EU government's treatment of imported bras from China can be justified in terms of economic theory. [8]

(e) Assess whether the 'growing doubt about globalization' is well founded, using both the case study and your own relevant knowledge. [10]

© Hwa Chong Institution Economics Unit. All Rights Reserved.

Scanned with CamScanner