
ECONOMICS

9757/01

Paper 1

27 August 2018
2 hour 15 minutes

Additional Materials: Answer Paper, Cover Pages

READ THESE INSTRUCTIONS FIRST

Write your name and subject class on all the work you hand in.
Write in dark blue or black pen.
You may use an HB pencil for any diagrams, graphs or rough working.
Do not use staples, paper clips, glue or correction fluid.
DO **NOT** WRITE IN ANY OF THE MARGINS.

Answer **all** questions.

Start parts (d) and (e) for both case studies on a new piece of paper.
Fill in the necessary information on the cover pages.

At the end of the examination, fasten all your work securely with the cover pages given.
The number of marks is given in brackets [] at the end of each question or part question.

This document consists of 7 printed pages and 1 blank page.

Answer **all** questions.

Question 1

Transformation of Vietnam's Agriculture Sector

Extract 1: Thailand and Vietnam urge farmers to plant less rice

Falling global rice prices have caused an outcry in Thailand and Vietnam - the world's largest exporters behind India - prompting the government to rush out soft loans that help farmers withhold sales. But these falling prices are also making regional exporters consider planting less of the grain.

Thailand last month unveiled plans to plant corn on 320,000ha of rice fields over the next seven months. To nudge farmers to switch, the government is dangling interest-free loans and has guaranteed prices for the corn.

Vietnam, the world's third largest rice exporter, approved a strategy earlier in May to restructure its rice industry by integrating production and developing a national brand that can command higher prices. It also wants to convert 700,000ha to 800,000ha of its roughly 4 million hectares of rice fields to mixed or other uses. The idea is to earn more by dedicating less land to rice, so as to help paddy farmers weather the vagaries of the global commodity market.

Dam-building in the upper reaches of the Mekong River, the lifeblood of the region, is also disturbing the sensitive ecology that nourishes rice fields downstream. Earlier this year, a drought caused the loss of 1.29 million tonnes of Vietnam's crop. Vietnam's loss of arable land is also worsened due to Vietnamese government's motivation behind supporting agricultural land acquisition to promote the country's industrialisation and modernisation. The country is said to be working on the rules on how to attract more investors to their lands. Getting a license to operate as a manufacturer in Vietnam has become much easier as compared to Vietnam's Asian neighbours. These are efforts made by the government to welcome more foreign investments in the country, hence increasing the production of manufactured products as Vietnam witnesses a rising manufacturing share of its gross domestic product.

Rice specialist Pham Thi Kim Dung from Vietnam's Institute of Policy and Strategy for Agriculture and Rural Development, the agriculture ministry's think-tank, said: "Rice brings much lower profitability compared with other agricultural commodities when Vietnamese farmers receive little support from the government." In the long run, say experts, the solutions lie in higher-value grains and integrated and environmentally sensitive farming.

Source: *www.straitstimes.com*, 6 November 2016

Extract 2: Shrimp farming in Vietnam - the search for a healthy environment

Due to its favourable natural conditions, farmers in coastal communes of the southern Ben Tre Province started to switch from rice cultivation to shrimp farming 15 years ago. The rapid success and high income that the industry ushered in pushed many local people to invest in this sector.

After a few years, Thanh Phuoc transformed from a poor commune into a wealthy locality. Ngo Van Thu, a farmer in Thanh Phuoc commune, said the land had not yet been exploited at that time, so the water resources were abundant and the clean environment supported the production. Due to attractive profits, farmers in other areas of unfavourable natural conditions also did whatever it took to raise shrimp, including in Ben Tre, but the Ba Lai project area is filled with freshwater. Local people spontaneously drilled wells to bring in salt water and made ponds to raise shrimp.

The rapid growth of shrimp farming has led to disease outbreaks, shrimp kills and huge losses for farmers in many places. Similarly, the delta province of Tra Vinh, where the irrigation system is inefficient, experienced issues with diseased shrimp. Huynh Phuoc Hai, a farmer in Kien Giang Province, said, "It's clear that the farming environment is being seriously polluted. Along one canal, many households scrambled for water for use, and when shrimp got diseases, they discharged the contaminated waste, spreading the diseases."

Vo Hong Ngoan, a long-term shrimp farmer in Bac Lieu Province, said the environment was so polluted many farm owners were using antibiotics to prevent diseases. Besides its prophylactic purpose, antibiotics overuse will increase the cost of production and the seed source is no longer qualified. According to statistics of relevant agencies, in the last two years, 32,000 tonnes of aquaculture (mainly shrimp) of Vietnamese companies were returned after they were imported because of antibiotic contamination.

Source: *vietnamnews*, 17 January 2016

Extract 3: Vietnam - Sustainable Farming Increases Productivity and Improves the Environment

Since the introduction of economic reforms under "Doi Moi" in 1986, Vietnam's agriculture has made impressive progress. Nevertheless, problems of quality and food safety remain, resulting in low export prices and concerns among domestic consumers. At the time of the launch of the Agriculture Competitiveness Project (ACP), productivity growth was decelerating and there was a decline in real expenditures in agricultural research and extension.

The ACP aimed to strengthen the competitiveness of smallholder farmers in the select project provinces through strengthening agricultural technology, fostering the establishment of farmers' organisations and their linkages to agri-businesses, and provision of critical public infrastructure. It provided an opportunity for smaller companies and farmers in less developed areas to accelerate growth.

Through the project, competitiveness of smallholder farmers has strengthened. A total of 154 technology extension packages were implemented. On average, where the technologies were applied, the farmers realised a 17 percent increase in yield and a 22 percent increase in the value of sales. The country has thus emerged as one of the world's leading exporters of agro-food commodities and is among the top five for aquatic products, rice, coffee, tea, cashews, black pepper, rubber, and cassava.

In addition, the project successfully established 98 demand-driven productive partnerships between farmer organizations and agribusiness companies. More than 95,000 farmers benefited from upgraded infrastructure, of which the large proportion was rural/market access roads. These investments resulted in reductions in post-harvest losses, transportation time and transportation costs.

Source: *www.worldbank.org*, 15 April 2016

Table 1: Vietnam's terms of trade (Index Points)

	2011	2012	2013	2014	2015	2016
Terms of Trade	99.5	99.8	99.9	102.2	102.2	103.4
Import Prices	120.2	99.7	97.6	99.0	94.2	105.4
Export Prices	119.6	99.5	97.6	101.1	96.2	109.0

Source: *tradingeconomics.com*

Questions

- (a) With reference to Table 1,
- (i) State the change in Vietnam's terms of trade from 2011 to 2016. [1]
 - (ii) Account for the change in Vietnam's terms of trade from 2011 to 2016. [2]
- (b) With reference to Extract 1, explain why Vietnam is likely to see a change in its comparative advantage away from the production of rice. [4]
- (c) With the aid of a diagram, explain how the rapid growth of shrimp farming might affect societal welfare. [5]
- (d) Discuss the factors that are likely to influence the decision of the farmers to switch from rice growing activity to shrimp farming business. [8]
- (e) Assess the possible impact of the launch of the Agriculture Competitiveness Project on Vietnam's economy. [10]

[Total: 30]

Question 2**Looming Threats to Globalisation****Extract 4: The potential impacts of Brexit on the global economy**

The markets were caught off guard by the UK's vote to leave the European Union (EU) on 23 June. The immediate reaction in the financial markets was swift and violent, and will feed into the far-flung macroeconomic consequences of Brexit (Britain's exit from the EU). For example, a sharp and sustained rise in the value of the US dollar versus the euro will put added pressure on the weak US manufacturing sector just as it seemed to find a new footing. This puts additional downward pressure on historically weak US growth momentum.

While it is uncertain how the Brexit vote will reverberate in the months and years to come, a few immediate consequences seem highly likely:

- The flight to safety away from the epicentre of this British-EU divorce will push capital away from the region and toward key safe-haven markets including the US and Japan.
- A higher US dollar and Japanese yen are negative to both economies' export sectors. In the case of Japan, this is particularly unhelpful to its efforts to reflate and reinvigorate the economy after decades of deflation.
- The higher US dollar also triggers additional pressure on China to float the yuan lower, as it is caught in the divergence between its two largest export markets – the EU and the US.
- For the US, the negative impact on exports is relatively small compared with trends in domestic demand, but the deflationary pressure on tradable goods will widen the divergence between reasonably strong inflation in the services sector vs. reasonably strong deflation in the goods sector.
- The European Central Bank will be compelled to raise its level of intervention yet again, as risk premiums across the region rise. Members of the Eurozone may be hard hit by the loss of investor confidence coupled with debt problems.

Source: *Forbes*, 29 June 2016

Extract 5: Why sterling suffered a “flash crash”

If a country's exchange rate represents international investors' confidence in its government's policies, the markets have given Britain the thumbs-down. On October 7th the pound sterling fell from \$1.26 to \$1.18 against the dollar within a few minutes. The sterling Effective Exchange Rate Index (EERI) – a measure of the value of the pound calculated according to UK's trade with different countries and in various currencies – is close to a record low.

Following the referendum in which Britain voted to leave the EU, the government appears to be pursuing a “hard Brexit”, in which economic aims (free trade and membership of the single market) are subordinated to the political priorities of legal sovereignty and reduced immigration. Analysts at UniCredit, an Italian bank, said that “investors are now perplexed by the country's vision on immigration, openness and business friendliness. This will be detrimental to the outlook for sterling given the global status that the UK has enjoyed for many years.”

Source: *The Economist*, 20 Oct 2016

Table 2: Quarterly Average Sterling Effective Exchange Rate Index (2005 = 100)

2014				2015				2016			
Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
85.6	86.9	88.0	87.3	89.4	91.2	92.9	92.2	87.0	85.5	78.8	76.6

Source: Office for National Statistics, United Kingdom

Extract 6: Trade, at what price?

Since the 1980s, America's economy has gradually opened up to cheap imports. This accelerated in 1993 with the signing of the North American Free-Trade Agreement (NAFTA) with Mexico and Canada. The deal eliminated most tariffs on trade between the three countries over a decade. Imports (excluding fuel) from Mexico grew by about five times between 1993 and 2013, according to the Peterson Institute.

In 2001 China joined the World Trade Organisation (WTO). Although this did not change any tariffs, a tsunami of cheap Chinese imports followed. "Made in China" labels became ubiquitous on clothes, toys, furniture and, eventually, electronics as Chinese imports surged from 1% of Gross Domestic Product (GDP) in 2000 to 2.7% by 2015.

In any case, cheap imports were a windfall for American consumers. Excluding food and energy, prices of goods have fallen almost every year since NAFTA. More trade brought more choice, too. Robert Lawrence and Lawrence Edwards, two economists, estimate that trade with China alone put \$250 a year into the pocket of every American by 2008 due to cheaper goods. The gains from cheap stuff flowed disproportionately to the less well-off, because the poor spend more of their incomes on goods than the rich.

At the same time, trade created new markets for American firms. In 1993 America sold nearly \$10 billion-worth of cars and parts to Mexico, at today's prices. Many American firms have become tightly integrated across the southern border, with low-skilled work done in Mexico and more complex tasks done at home. Exports to China grew by almost 200% between 2005 and 2014, with agriculture and the aerospace and car industries leading the charge. Some workers have benefited from rising exports, because firms that export pay more. Outsourcing low-wage assembly has also increased the productivity of America's high-skilled workers. For example, Apple's ability to assemble its iPhones cheaply in China has made the work of its American designers much more lucrative.

Trade, however, has an acute image problem. Its benefits are hard to perceive directly, spread across various stakeholders: consumers, exporters, and workers. In contrast, its costs are highly concentrated. Cheap imports have been lethal for many American manufacturers, particularly in the mid-western rustbelt and in the South.

The impact of trade on jobs was a growing concern. The sharp decline in American manufacturing employment began in 2000, just as Chinese imports took off. A recent study by Daron Acemoglu, David Autor and others estimated that about 1 million of 5.5 million manufacturing jobs were lost between 1999 and 2011 to Chinese competition.

Many workers displaced by Chinese imports did not simply find another job. Mr Autor and his colleagues have shown that, at the local level, displaced workers are unlikely to move to seek new work. One reason for this immobility could be that the economy is now an unwelcoming place for jobseekers without a university degree.

Source: *The Economist*, 2 Apr 2016

Extract 7: How dairy farmers in Belgium held up a big EU trade deal

Christian Wiertz is a leader of a group of dairy farmers in the Wallonia region in Belgium that single-handedly threatened to derail a landmark accord to deepen commerce between Canada and the European Union. On 14 October, Wallonia's regional Parliament used its veto power to block Belgium from approving the Comprehensive Economic and Trade Agreement (CETA) with Canada, which requires consensus among the 28 nations of the EU.

"Global competition has squeezed small businesses dry," said Mr. Wiertz, a fifth-generation farmer. Selling milk at the world price, according to Mr Wertz, was not commercially viable for them due to their higher costs and taxes compared to the big multinationals.

Source: *The New York Times*, 28 Oct 2016

Table 3: Selected trade indicators (as percentage of GDP), 2016

Percentage of GDP	Belgium	United Kingdom	United States
Exports of goods and services (%)	82.9	28.3	11.9
Imports of goods and services (%)	81.5	30.3	14.7
Current account balance (%)	0.1	- 5.8	- 2.4

Source: World Bank

Questions

- (a) (i) State what happened to the British pound sterling Effective Exchange Rate Index between Q1 2014 and Q4 2016.
[2]
- (ii) Using a demand and supply diagram, explain the cause of the trend observed in the Sterling Effective Exchange Rate Index in 2016.
[4]
- (b) With reference to Table 3, calculate and compare the net income flow (including transfers) in the UK current account balance with that of the US.
[2]
- (c) Explain how a free trade agreement between the EU and Canada might affect a small dairy farmer in Belgium.
[4]
- (d) Given that membership in the EU means free movement of goods, labour and capital among member countries, assess the possible impact of Brexit on the UK economy.
[8]
- (e) Discuss the factors that determine the extent to which globalisation is beneficial to different countries.
[10]

[Total: 30]

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2018 SH2 H2 Economics Prelims

Paper 1 – Case Study Question 1

Questions & Suggested Answers	Marks
(a) With reference to Table 1, (i) State the change in Vietnam's terms of trade from 2011 to 2016.	[1]
Vietnam's terms of trade has increased (1m) from 2011 to 2016.	
(ii) Account for the change in Vietnam's terms of trade from 2011 to 2016.	[2]
The increase in Vietnam's terms of trade is due to a fall in Vietnam's import prices (1m) at a greater rate than the fall in Vietnam's export prices (1m).	
(b) With reference to Extract 1, explain why Vietnam is likely to see a change in its comparative advantage away from the production of rice.	[4]
There are changes in Vietnam's natural resource and climate due to public infrastructure such as dam-building in the upper reaches of the Mekong River (1m). In addition, Vietnamese Government's effort to increase foreign investment bring about an increase in new capital (1m). These factors bring about changes in Vietnam's factor endowment and cause Vietnam to incur a higher opportunity cost in the production of rice and a lower opportunity cost in the production of manufactured goods (1m). Hence Vietnam changes its comparative advantage from the production of agricultural products to manufactured products (1m).	
(c) With the aid of a diagram, explain how the rapid growth of shrimp farming might affect societal welfare.	[5]
<p>In a free market economy, individuals take into account its private cost and private benefit of production, producing at Q_p units where $MPB = MPC$ with reference to Figure 1. Marginal External costs (MEC) to society is not internalised by the price mechanism, examples of MEC are water pollution caused by contaminated waste discharged from shrimps with diseases (1m), affecting households using the water along the same canal. There is a divergence between MPC and MSC, actual costs to society is where $MSC = MPC + MEC$ (1m). Socially optimal level of output is at Q_s units where $MSB = MSC$. Here there is over-production of $Q_p - Q_s$ units (1m) leading to allocative inefficiency and deadweight loss indicated by the area $A E_s E_p$ (1m).</p> <p>Diagram (1m)</p> <p style="text-align: center;">Figure 1: Overproduction of shrimps</p>	

(d)	Discuss the factors that are likely to influence the decision of the farmers to switch from rice growing activity to shrimp farming business	[8]
<p>Introduction:</p> <ul style="list-style-type: none"> From the perspective of farmers, their objective in the long run will be to maximise profit. Relevant information to support farmers' decision making will be both revenue and cost factors. In the decision-making process, farmers might be constrained by other factors. <p>Body:</p> <p>Revenue factors that impact farmers' decision making to switch</p> <ul style="list-style-type: none"> Falling global rice prices (Extract 1) would lead to a fall in price of rice in the domestic rice market. With reference to Figure 2, quantity demanded for rice would increase from Q_0 to Q_1. The demand for rice is relatively price inelastic due to it being a staple food and thus a high degree of necessity. Hence TR falls. Hence, farmers may switch from rice growing activity to other farming businesses. <div data-bbox="368 734 1321 1305" style="text-align: center;"> <p>The graph illustrates the domestic demand for rice. The vertical axis represents Price, and the horizontal axis represents Quantity demanded. A downward-sloping demand curve, labeled D_0, is shown. Two points on the curve are identified: E_0 at quantity Q_0 and price P_0, and E_1 at quantity Q_1 and price P_1. Dashed lines connect these points to their respective values on the axes. A rectangular area labeled 'A' is shaded between the price levels P_0 and P_1 and between the quantity levels Q_0 and Q_1.</p> </div> <p>Figure 2: Domestic demand for rice</p> <ul style="list-style-type: none"> In Extract 2, there was rapid success and high income that the industry ushered in which indicated there was the presence of high profits to be made. This could be attributed to the growing demand for shrimps in Vietnam. With the increase in demand, TR increases. The higher profits to be earned as indicated by attractive profits in Extract 2 may have led to the switch to shrimp farming. <p>Revenue factors that impact farmers' decision making NOT to switch</p> <ul style="list-style-type: none"> With reference to Extract 2, the attractive profits have led to farmers in other areas of unfavourable natural conditions to switch to shrimp farming. However, the rapid growth of shrimp farming has led to disease outbreaks, shrimp kills and huge losses for farmers. This could lead to a large fall in revenue and profits for farmers and they may not switch to shrimp farming. <p>Cost factors that affect farmers' decision making to switch</p> <ul style="list-style-type: none"> With reference to Extract 1, the dam building in the Mekong river led to the disturbance of the sensitive ecology that nourished rice fields downstream. Hence, farmers may have to use additional fertilizers and freshwater from other sources to continue growing their rice crops. This would persuade them to switch to shrimp farming instead. 		

- Vietnam’s loss of arable land is worsened due to Vietnamese Government’s motivation behind supporting agricultural land acquisition to promote the country’s industrialization and modernization as mentioned in Extract 1.
- Hence farmers should switch from rice farming to shrimp farming.

Cost factors that affect farmers’ decision making NOT to switch

- In Extract 1, the Vietnamese government rushed out soft loans that help farmers withhold their sales amidst the falling global prices for rice.. Hence, this lowers the relative total cost and increases profits thus rice farmers may not need to switch over.
- In addition, shrimp farming has led to water pollution caused by contaminated waste discharged from shrimps with diseases (Extract 2).
- The increase in cost incurred and lower profits in shrimp farming will thus affect farmers’ decision not to switch from rice farming to shrimp farming.

Conclusion:

- In deciding whether to switch from rice growing activity to shrimp farming business, farmers need to take into account their objective. Given that profit maximisation is the only objective in the long run, farmers will need to consider the various revenue and cost factors in affecting their profits in rice growing activity compared to shrimp farming.

Mark Scheme

Level	Descriptors
Level 2 4-6	<p>For an answer that demonstrates knowledge, understanding, application and analysis:</p> <ul style="list-style-type: none"> ➤ EXCELLENT breadth that considers the following economic concepts in explaining multiple and balanced perspectives, viewpoints, relationships and factors. ALL points chosen should be of relevance and significance in answering the question. ➤ EXCELLENT depth in economic analysis that reflects the following in ALL explanations. <ul style="list-style-type: none"> ✓ Accurate use of economic concepts, clear elaboration, and precise use of economic terminologies, language and phrasing. <p>The answer should also be supported by:</p> <ul style="list-style-type: none"> ➤ Well-labelled and well-referred to diagram(s) drawn with precision (where appropriate). ➤ Relevant examples and accurate use of facts. ➤ Logical structure.
Level 1 1-3	<p>For an answer that demonstrates knowledge, understanding, application and analysis:</p> <ul style="list-style-type: none"> ➤ GOOD breadth that considers the following economic concepts in explaining multiple and balanced perspectives, viewpoints, relationships and factors. ALL points chosen should be of relevance and significance in answering the question. . ➤ GOOD depth in economic analysis that reflects the following in ALL explanations. <p>The answer should also be supported by:</p> <ul style="list-style-type: none"> ➤ Diagram(s) that may not be well-labelled, may not be well-referred to and may not be drawn with precision (where appropriate). ➤ Example(s). ➤ Logical structure.

	<p>Evaluation</p> <table border="1" data-bbox="360 226 1501 622"> <tr> <td data-bbox="360 226 512 465"> <p>E2 2 marks</p> </td> <td data-bbox="512 226 1501 465"> <p>For an evaluation that contains</p> <ul style="list-style-type: none"> ➤ A synthesis of earlier economic arguments to arrive at relevant judgements/decisions (i.e. answer the question). ➤ Well-explained criteria-based evaluative comments supported by accurate and clear analysis to provide fairness in views. ➤ A good summative conclusion. </td> </tr> <tr> <td data-bbox="360 465 512 622"> <p>E1 1 mark</p> </td> <td data-bbox="512 465 1501 622"> <p>For an evaluation that contains</p> <ul style="list-style-type: none"> ➤ Relevant but unexplained evaluative judgement(s) / statement(s) i.e. evaluative judgement(s) / statement(s) not supported by analysis. <p>OR</p> <ul style="list-style-type: none"> ➤ A relevant conclusion. </td> </tr> </table>		<p>E2 2 marks</p>	<p>For an evaluation that contains</p> <ul style="list-style-type: none"> ➤ A synthesis of earlier economic arguments to arrive at relevant judgements/decisions (i.e. answer the question). ➤ Well-explained criteria-based evaluative comments supported by accurate and clear analysis to provide fairness in views. ➤ A good summative conclusion. 	<p>E1 1 mark</p>	<p>For an evaluation that contains</p> <ul style="list-style-type: none"> ➤ Relevant but unexplained evaluative judgement(s) / statement(s) i.e. evaluative judgement(s) / statement(s) not supported by analysis. <p>OR</p> <ul style="list-style-type: none"> ➤ A relevant conclusion.
<p>E2 2 marks</p>	<p>For an evaluation that contains</p> <ul style="list-style-type: none"> ➤ A synthesis of earlier economic arguments to arrive at relevant judgements/decisions (i.e. answer the question). ➤ Well-explained criteria-based evaluative comments supported by accurate and clear analysis to provide fairness in views. ➤ A good summative conclusion. 					
<p>E1 1 mark</p>	<p>For an evaluation that contains</p> <ul style="list-style-type: none"> ➤ Relevant but unexplained evaluative judgement(s) / statement(s) i.e. evaluative judgement(s) / statement(s) not supported by analysis. <p>OR</p> <ul style="list-style-type: none"> ➤ A relevant conclusion. 					
(e)	Assess the possible impact of the launch of the Agriculture Competitiveness Project on Vietnam's economy.	[10]				
	<p>Introduction:</p> <ul style="list-style-type: none"> • According to Extract 3, Agriculture Competitiveness Project (ACP) aimed to strengthen the competitiveness of smallholder farmers in the select project provinces through strengthening agricultural technology, fostering the establishment of farmers' organizations and their linkages to agri-businesses, and provision of critical public infrastructure. • Through the launch of ACP, Vietnam's economy is likely to experience changes in its economic growth, unemployment level and BOP position. <p>Body:</p> <p>Impact on actual growth and cyclical unemployment (AD analysis)</p> <ul style="list-style-type: none"> • ACP has enormous progress on Vietnam agriculture sector according to Extract 3. It reduces post-harvest losses, improves supply, and food quality, hence increases Vietnam's export competitiveness. Vietnam is likely to experience an increase in export revenue. • The increase in Vietnam's export competitiveness will lead to an increase in its net exports, assuming ceteris paribus and thus increases. The increase in AD will bring about a more than proportionate increase in real national output via the multiplier effect, resulting in actual growth in Vietnam. • Increase in real national output will bring about a fall in cyclical unemployment. <p>Impact on inflation rate (AD analysis)</p> <ul style="list-style-type: none"> • If Vietnam's economy is approaching full employment, the increase in GPL due to an increase in AD is likely to cause Vietnam to experience demand pull inflation. <p>Impact on BOP</p> <ul style="list-style-type: none"> • The increase in Vietnam's net exports will thus have a favourable impact on its BOT and improve its BOP position, ceteris paribus. <p>Impact on actual and potential growth (AS analysis)</p> <ul style="list-style-type: none"> • Through the project, a total of 154 technology extension packages were implemented (Extract 3). In addition, the project increases the provision of critical public infrastructure in the rural areas. • The increasing adoption in technology brings about an increase AS, increasing real national output and full employment output, thus increase both actual and potential growth in Vietnam's economy. <p>Impact on structural unemployment</p> <ul style="list-style-type: none"> • At the same time, structural unemployment might worsen in Vietnam as it transforms its agriculture sector. Improvement in technology changes the way farmers manage farmland and farm such as the use of satellite driven geo-positioning systems and sensors that detect nutrients and water in soil. <p>Evaluative Conclusion:</p>					

The extent of the impacts of ACP on Vietnam's economy depends on the nature of the country, mobility of labour and fiscal position of government (elaborate).

Mark Scheme

Level	Descriptors
L2 5-7 marks	<p>For an answer that demonstrates knowledge, understanding, application and analysis:</p> <ul style="list-style-type: none"> ➤ EXCELLENT breadth that considers the following economic concepts in explaining multiple and balanced perspectives, viewpoints, relationships and factors. ALL points chosen should be of relevance and significance in answering the question. ➤ EXCELLENT depth in economic analysis that reflects the following in ALL explanations. <ul style="list-style-type: none"> ✓ Accurate use of economic concepts, clear elaboration, and precise use of economic terminologies, language and phrasing. <p>The answer should also be supported by:</p> <ul style="list-style-type: none"> ➤ Well-labelled and well-referred to diagram(s) drawn with precision (where appropriate). ➤ Relevant examples and accurate use of facts. ➤ Logical structure.
L1 1-4 marks	<p>For an answer that demonstrates knowledge, understanding, application and analysis:</p> <ul style="list-style-type: none"> ➤ GOOD breadth that considers the following economic concepts in explaining multiple and balanced perspectives, viewpoints, relationships and factors. ALL points chosen should be of relevance and significance in answering the question. ➤ GOOD depth in economic analysis that reflects the following in ALL explanations. <p>The answer should also be supported by:</p> <ul style="list-style-type: none"> ➤ Diagram(s) that may not be well-labelled, may not be well-referred to and may not be drawn with precision (where appropriate). ➤ Example(s). ➤ Logical structure.

Evaluation

E2 2 marks	<p>For an evaluation that contains</p> <ul style="list-style-type: none"> ➤ A synthesis of earlier economic arguments to arrive at relevant judgements/decisions (i.e. answer the question). ➤ Well-explained criteria-based evaluative comments supported by accurate and clear analysis to provide fairness in views. ➤ A good summative conclusion.
E1 1 mark	<p>For an evaluation that contains</p> <ul style="list-style-type: none"> ➤ Relevant but unexplained evaluative judgement(s) / statement(s) i.e. evaluative judgement(s) / statement(s) not supported by analysis. <p>OR</p> <ul style="list-style-type: none"> ➤ A relevant conclusion.

Paper 1 – Case Study Question 2

Questions & Suggested Answers		Marks
(a)	(i) State what happened to the British pound sterling effective exchange rate between the Q1 2014 and Q4 2016.	[2]
	The British pound sterling effective exchange rate depreciated in value between Q1 2014 and Q4 2016. [1 mark]. However, it was rising over the period Q1 2014 to Q3 2015 [1 mark] before decreasing thereafter.	
	(ii) Using a demand and supply diagram, explain the cause of the trend observed in the Sterling Effective Exchange Rate Index in 2016.	[4]
	The main cause was a loss of investor confidence due to Britain's decision to exit from the EU (Brexit). [1 mark] This resulted in capital flight from the UK. This caused an increase in SS of sterling pound [1 mark] from S_0 to S_1 in the foreign exchange market. At the same time, as fewer foreign investors would want to invest in the UK. This means a decrease in the demand for UK sterling pounds from D_0 to D_1 . [1 mark]	
	<p style="text-align: center;">Figure 1: Market for Sterling Pound</p>	
(b)	With reference to Table 3, calculate and compare the net income flow (including transfers) in the UK current account balance with that of the US.	[2]
	UK's current account balance is -5.8% of GDP while its balance of trade is -2% of GDP. Hence, its net income flow should be -3.8% of GDP. US's current account balance is -2.4% of GDP while its balance of trade is -2.8% of GDP. Hence its net income flow should be +0.4% of GDP. This shows that UK experienced a net income outflow, while US had a net income inflow.	
(c)	Explain how a free trade agreement between the EU and Canada might affect a small dairy farmer in Belgium.	[4]
	Since a free trade agreement would mean a removal or reduction of tariffs on imports, dairy farmers in Belgium will now have to compete with cheaper imports from Canada, thus forcing them to lower their price as well ie. "selling their milk at world price". [1 mark] Given that the demand for milk is likely to be price inelastic, the revenue of dairy farmers will fall [1 mark] as price decreases, resulting in a decline in profit. Moreover, small dairy farmers tend to have higher costs compared to large multi-nationals, due to their lack of economies of scale. [1 mark] Coupled with the higher taxes in Belgium, the small dairy farmers may end up incurring losses [1 mark].	
(d)	Given that membership in the EU means free movement of goods, labour and capital among member countries, assess the possible impact of Brexit on the UK economy.	[8]
	Introduction:	

- The departure of UK from the EU (Brexit) would mean that firms in UK would no longer have free access to European markets and that labour and capital might not be allowed to move freely between UK and EU countries.

Body:

Negative Impact

- Loss of confidence and capital outflow – One of the major effects of Brexit is the loss of investor confidence, as mentioned in Extract 4. Brexit means that UK firms would no longer have free access to European markets and may thus face tariff barriers in exporting to EU countries. This could cause a fall in exports. This also cause investors to have a pessimistic outlook of the UK economy. The fall in exports as well as capital flight would thus cause a worsening of UK's Balance of Payments.
- Fall in AD and economic growth –The fall in X and I leads to a fall in AD, which results in a fall in real output and hence economic growth. With the fall in real output, less labour will be needed, and an increase in unemployment. As shown in Fig 2 below, the fall in AD due to fall in X and I causes real output to decrease from Y_0 to Y_1 , resulting in lower or even negative economic growth.

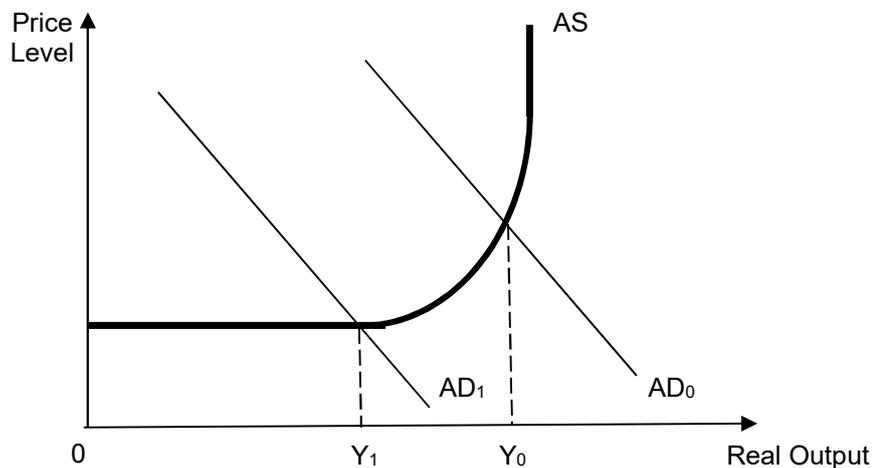


Figure 2

- Labour outflow – In addition, the loss of confidence and negative outlook could also cause people in UK to relocate to the EU. The fall in LRAS can lead to a rise in general price level in the long term, as productive capacity becomes a constraint.
- Currency depreciation and cost of imports – With the capital outflow due to pessimistic outlook and fall in net exports, the exchange rate of the sterling pound will depreciate, causing imports to be more expensive in SGD, leading to cost-push inflation

Positive Impact

- Fall in exchange rate and improvement in BoT –This leads to an improvement in Balance of Trade and increase in AD, resulting in a more than proportionate increase in real national income via the multiplier effect, and hence an increase in economic growth rate.
- Greater autonomy to establish Free Trade Agreements with other countries. This can allow UK to tap new opportunities in other foreign markets and expand its trade with the rest of the world. This can help to boost its exports and hence spur economic growth.
- While the movement of UK firms to Europe or other countries may worsen its balance of payments in the short run, it can generate higher profits which are repatriated back to UK in future, thus improvement in its Balance of Payments.

- Brexit also means that UK can now restrict the influx of immigrants into the country. This reduces the social problems caused by migrant workers, thus contributing to an improvement in non-material aspect of standard of living.

Conclusion

- As discussed above, Brexit can have both positive and negative impact on the UK economy. In the short term, the impact is likely to be more negative as the loss of investor confidence as well as increase in barriers to trade with the EU could lead to a decline in UK's economic growth and worsen its balance of payments position.

Mark Scheme

Level	Descriptors
Level 2 4-6	<p>For an answer that demonstrates knowledge, understanding, application and analysis:</p> <ul style="list-style-type: none"> ➤ EXCELLENT breadth that considers the following economic concepts in explaining multiple and balanced perspectives, viewpoints, relationships and factors. ALL points chosen should be of relevance and significance in answering the question. ➤ EXCELLENT depth in economic analysis that reflects the following in ALL explanations. <ul style="list-style-type: none"> ✓ Accurate use of economic concepts, clear elaboration, and precise use of economic terminologies, language and phrasing.. <p>The answer should also be supported by:</p> <ul style="list-style-type: none"> ➤ Well-labelled and well-referred to diagram(s) drawn with precision (where appropriate). ➤ Relevant examples and accurate use of facts. ➤ Logical structure.
Level 1 1-3	<p>For an answer that demonstrates knowledge, understanding, application and analysis:</p> <ul style="list-style-type: none"> ➤ GOOD breadth that considers the following economic concepts in explaining multiple and balanced perspectives, viewpoints, relationships and factors. ALL points chosen should be of relevance and significance in answering the question. ➤ GOOD depth in economic analysis that reflects the following in ALL explanations. <p>The answer should also be supported by:</p> <ul style="list-style-type: none"> ➤ Diagram(s) that may not be well-labelled, may not be well-referred to and may not be drawn with precision (where appropriate). ➤ Example(s). ➤ Logical structure.

Evaluation

E2 2 marks	<p>For an evaluation that contains</p> <ul style="list-style-type: none"> ➤ A synthesis of earlier economic arguments to arrive at relevant judgements/decisions (i.e. answer the question). ➤ Well-explained criteria-based evaluative comments supported by accurate and clear analysis to provide fairness in views. ➤ A good summative conclusion.
E1 1	For an evaluation that contains

	mark	<ul style="list-style-type: none"> ➤ Relevant but unexplained evaluative judgement(s) / statement(s) i.e. evaluative judgement(s) / statement(s) not supported by analysis. OR ➤ A relevant conclusion. 	
(e)	Discuss the factors that determine the extent to which globalisation is beneficial to different countries.		[10]
	<p>Introduction:</p> <ul style="list-style-type: none"> • Explain that globalisation refers to the increasing integration of national economies in terms of financial flows, trade, movement of factors of production, flow of information and technology. <p>Body:</p> <p>Possible benefits of globalisation include:</p> <ul style="list-style-type: none"> • Increase AD due to increase in net exports and FDI → economic growth and fall in unemployment • Lower prices due to cheaper imports and increased variety of goods → increase in consumer welfare • Outsourcing and offshoring increases profitability of firms → higher profits and higher wages in home country • Technology and labour flows improve efficiency and reduce costs in recipient countries. <p>The extent of benefit to different countries depends on various factors</p> <p>1. Nature of economy</p> <ul style="list-style-type: none"> • Globalisation allows countries to gain access to foreign markets → increase in exports → BoT improve and (X-M) increases → AD increases → more than proportionate increase in real output. • Moreover, the increase in real output → fall in unemployment. • One key factor determining the extent to which globalisation is beneficial to a country is the nature of its economy. • Being small in size and population, Singapore has a relatively small domestic market. This means there is limited scope for domestic firms in the country to expand if they were to focus only on the domestic market. With globalisation, Singapore is able to export its goods and services to the rest of the world. The increase in export revenue is a key driver of growth, as AD increases leading to an increase in real output and hence economic growth. • Globalisation also benefits consumers as it allows a country to import goods at lower prices (compared to domestic goods) and increases the variety of goods available to consumers. <p>2. State of economy or state of development</p> <ul style="list-style-type: none"> • Globalisation also cause increase in FDI flows between countries. Developing countries like China and Vietnam experience FDI inflow → increase in AD → increase in real output. Increase in capital also leads to increase in productive capacity → increase in LRAS → potential growth • Countries like Mexico operating in the Keynesian range where there is substantial spare capacity, will likely benefit more from globalisation, as the increase in AD due to the increase in X and I, will lead to an increase in real output. • By contrast, developed countries which operate near full employment will gain less from globalisation, as the increase in AD will lead to demand-pull inflation. <p>3. Terms of Trade/Type of goods that the country has comparative advantage</p> <ul style="list-style-type: none"> • While globalisation increases the volume of trade between countries and allows a country to increase its exports and imports, the extent to which a country gains from trade depends on its terms of trade, which is the ratio between its export price to import price. • Countries may face unfavourable terms of trade if the price of their exports is much lower compared to prices of imports. The revenue earned from exports may be lower than the expenditure on imports which are much more expensive, leading to a deficit in the country's balance of trade. <p>4. Trading relations / Trade policies</p> <ul style="list-style-type: none"> • The extent to which countries benefit from globalisation also depends on its trade policies and trading relations with other countries • Countries that embrace free trade will benefit more in terms of allowing more imports into the country, thus enabling consumers to enjoy wider variety of goods as well as possibly cheaper 		

goods. As mentioned in Extract 6, “trade with China alone put \$250 a year into the pocket of every American by 2008 due to cheaper goods.”

- Conversely, if the country imposes tariff barriers on imports, it will result in higher prices of imports, thus reducing the welfare of consumers as well as increasing the cost of imported inputs for producers.

Conclusion / Overall Evaluation:

- As discussed above, globalisation can be beneficial to some countries but can also cause challenges to other countries. The extent to which globalisation is beneficial to different countries depends on various factors such as the nature of the economy, the state of development, the terms of trade, the trade policies of countries concerned.

Mark Scheme

Level	Descriptors
L2 5-7 marks	<p>For an answer that demonstrates knowledge, understanding, application and analysis:</p> <ul style="list-style-type: none"> ➤ EXCELLENT breadth that considers the following economic concepts in explaining multiple and balanced perspectives, viewpoints, relationships and factors. ALL points chosen should be of relevance and significance in answering the question. ➤ EXCELLENT depth in economic analysis that reflects the following in ALL explanations. <ul style="list-style-type: none"> ✓ Accurate use of economic concepts, clear elaboration, and precise use of economic terminologies, language and phrasing. <p>The answer should also be supported by:</p> <ul style="list-style-type: none"> ➤ Well-labelled and well-referred to diagram(s) drawn with precision (where appropriate). ➤ Relevant examples and accurate use of facts. ➤ Logical structure.
L1 1-4 marks	<p>For an answer that demonstrates knowledge, understanding, application and analysis:</p> <ul style="list-style-type: none"> ➤ GOOD breadth that considers the following economic concepts in explaining multiple and balanced perspectives, viewpoints, relationships and factors. ALL points chosen should be of relevance and significance in answering the question. ➤ GOOD depth in economic analysis that reflects the following in ALL explanations. <p>The answer should also be supported by:</p> <ul style="list-style-type: none"> ➤ Diagram(s) that may not be well-labelled, may not be well-referred to and may not be drawn with precision (where appropriate). ➤ Example(s). ➤ Logical structure.

Evaluation

E2 2 marks	<p>For an evaluation that contains</p> <ul style="list-style-type: none"> ➤ A synthesis of earlier economic arguments to arrive at relevant judgements/decisions (i.e. answer the question). ➤ Well-explained criteria-based evaluative comments supported by accurate and clear analysis to provide fairness in views. ➤ A good summative conclusion.
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	E1 1 mark	For an evaluation that contains ➤ Relevant but unexplained evaluative judgement(s) / statement(s) i.e. evaluative judgement(s) / statement(s) not supported by analysis. <u>OR</u> ➤ A relevant conclusion.	
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Name: _____

Subject Class: 2ec2 __

NATIONAL JUNIOR COLLEGE

SF2 Preliminary Examination for General Certificate of Education Advanced Level

Higher 2

ECONOMICS

Paper 2: Essays

9757/02

20 August 2018
2 hours 15 minutes

Additional Materials: Answer Paper and 3 Essay Cover Pages

READ THESE INSTRUCTIONS FIRST

Write your student registration number and name on all the work you hand in.

Write in dark blue or black pen.

You may use an HB pencil for any diagrams, graphs or rough working.

Do not use staples, paper clips, glue or correction fluid.

DO **NOT** WRITE IN ANY OF THE MARGINS.

Answer **three** questions in total, of which **one** must be from Section A, **one** from Section B and **one** from **either** Section A or Section B.

Start each question on a **new** piece of paper.

At the end of the examination, fasten all your work securely with the cover pages given [**one cover page for each question**].

Fill in the necessary information on the cover page.

The number of marks is given in brackets [] at the end of each question or part question.

This document consists of **3** printed pages and **1** blank page.

Answer **three** questions in total.

Section A

One or two of your three chosen questions must be from this section.

- 1 Rising cost of laying water pipes and continued income growth have contributed to the significant increase in price of water in Singapore. This is expected to affect the operations of the food and beverage industry.
 - (a) Explain why rising cost of laying water pipes and continued income growth may have contributed to the large increase in price of water. [10]
 - (b) Discuss how the above factors may impact the markets for restaurant and hawker food in Singapore. [15]

- 2 The petrol retailing industry in Singapore has long been dominated by a few large players such as Shell, Caltex, ExxonMobil and SPC.
 - (a) Explain how barriers to entry can affect a firm's price and output decisions. [10]
 - (b) Discuss whether a firm should mainly compete based on pricing strategies in an industry like petrol retailing. [15]

- 3 MediShield Life is a state insurance scheme that provides lifelong protection for all Singapore Citizens and Permanent Residents against large hospital bills. It has co-payment features such as claim limits, deductible, and co-insurance to ensure that those insured share the burden of medical bills with the government.

Discuss the appropriateness of the Singapore government's approach in addressing the market failure due to imperfect information and asymmetric information in the market for healthcare and its related markets. [25]

Section B

One or two of your three chosen questions must be from this section.

- 4** Singapore's monetary policy has been centred on the management of the exchange rate instead of the management of interest rate.

Discuss whether the factors limiting the effectiveness of interest rate policy are key in determining the choice of exchange rate centred monetary policy instead of interest rate policy in achieving Singapore's macroeconomic goals. [25]

- 5** Brazil's Gross Domestic Product (GDP) contracted by 3.6% in 2016 and this has led to calls from policy makers to use discretionary fiscal policy to stimulate the economy.

(a) Explain why a government cannot rely solely on automatic stabilisers and instead uses discretionary fiscal policy to address the concerns of an economic recession. [10]

(b) Discuss whether demand management policies are more important than supply side policies in attaining inclusive economic growth for an economy experiencing recession. [15]

- 6** Evaluate the policies the Singapore government should adopt to improve global competitiveness in light of the potential conflicts with the achievement of macroeconomic goals. [25]

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2018 SH2 H2 Economics Prelims

Paper 2 – Essay Questions (Section A)

- Q1. Rising cost of laying water pipes and continued income growth have contributed to the significant increase in price of water in Singapore. This is expected to affect the operations of the food and beverage industry.**
- (a) Explain why rising cost of laying water pipes and continued income growth may have contributed to the large increase in price of water. [10]
- (b) Discuss how the above factors may impact the markets for restaurant and hawker food in Singapore. [15]

Suggested Answer Outline:

Part (a)

Introduction

- The large increase in price of water can be attributed to relevant demand and supply factors as well as using price elasticity of demand (PED) and price elasticity of supply (PES).
- The demand factor would be the increased income growth and the supply factor would be the rising cost of laying water pipes.

Body

Demand factor combined with PES

- Continued income growth contributes to the increase in price of water. Given Singaporeans now have a higher disposable income, this would lead to a large increase in demand for luxury goods such thus leading to a large increase in demand for water as it is used for production of these goods.
- The increase in income leads to a more than proportionate increase in demand of water from D_0 to D_1 , thus leading to a large rise in price of water.
- In addition, the supply of water is price inelastic which also contributes to the large increase in price. This is because it is difficult for Singapore to increase its supply of water quickly in response to an increase in price. Hence, an increase in demand leads to a more than proportionate increase in price of water from P_0 to P_1 , ceteris paribus.

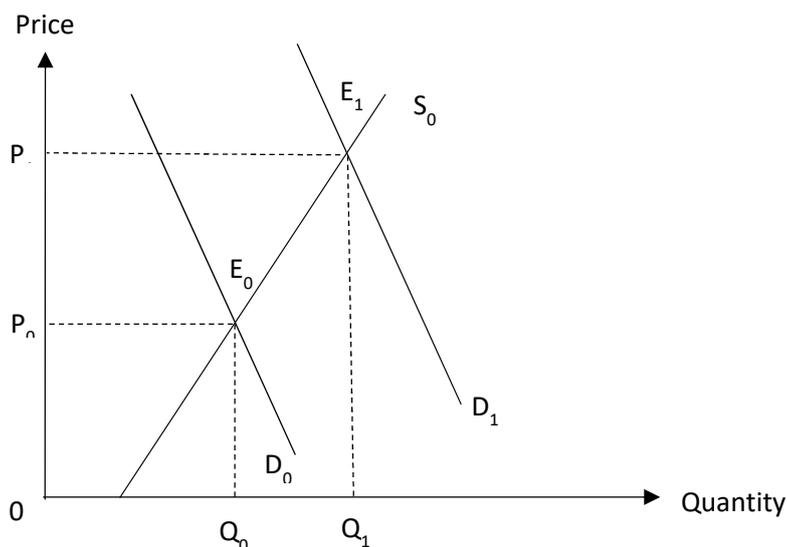


Figure 1: DD with PES in market of water

Supply factor combined with PED

- The increase in cost of building water pipes can lead to an increase in price of water. The increase in cost of producing water for Public Utilities Board (PUB), leads to a fall in supply of water from S_0 to S_1 , thus leading to an increase in price.

- The demand for water is price inelastic due to its high degree of necessity in subsistence and production of goods. There is also a lack of close substitutes to water. Hence, a fall in supply leads to a more than proportionate increase in price of water from P_0 to P_1 , ceteris paribus.

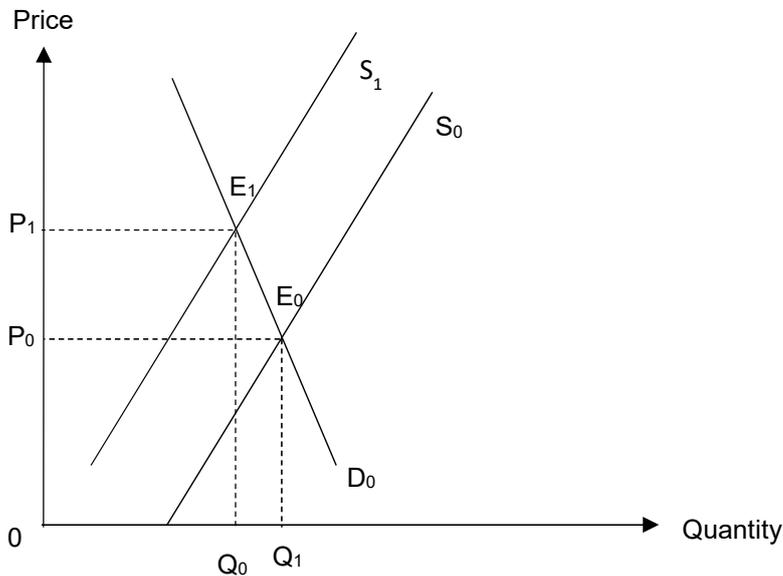


Figure 2: SS with PED for market of water

Simultaneous shifts with price mechanism

- With a simultaneous increase in demand and fall in supply of water, at original price P_0 , there is a shortage of Q_0Q_1 . This exerts an upwards pressure on price resulting in a significant increase in price of water from P_0 to P_1 .

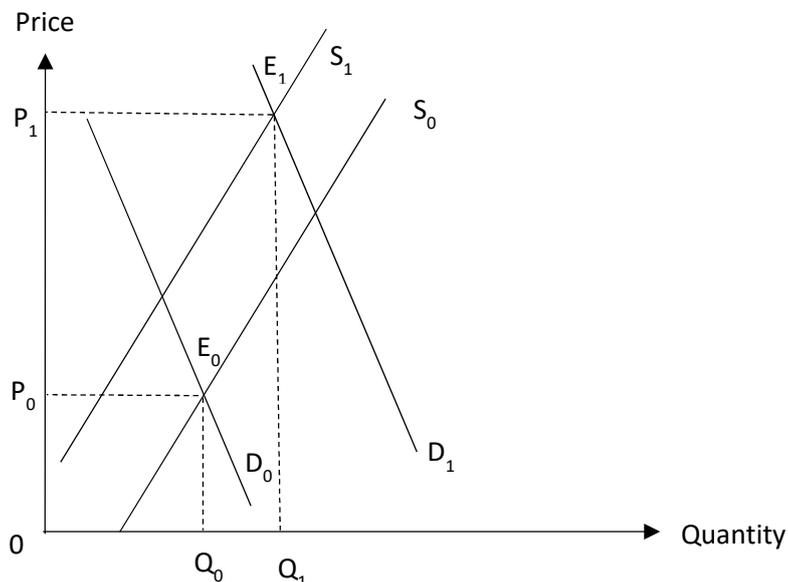


Figure 3: Simultaneous shifts in market of water

Conclusion

- Overall, demand and supply factors combined with inelastic demand and supply led to an increase in price of water significantly which has an adverse impact on the operations of the food and beverage industry.

Marks Scheme:

Levels	Descriptors
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<p>L3 8 - 10</p>	<p>For an answer that demonstrates knowledge, understanding, application and analysis:</p> <ul style="list-style-type: none"> ✓ EXCELLENT breadth that considers the following economic concepts in explaining multiple and balanced perspectives, viewpoints, relationships and factors. ALL points chosen should be of relevance and significance in answering the question. ✓ EXCELLENT depth in economic analysis that reflects the following in ALL explanations. ✓ Accurate use of economic concepts, clear elaboration, and precise use of economic terminologies, language and phrasing. <p>The answer should also be supported by:</p> <ul style="list-style-type: none"> ✓ Well-labelled and well-referred to diagram(s) / tool(s) of analysis drawn with precision (where appropriate). ✓ Relevant examples and accurate use of facts. ✓ Logical structure.
<p>L2 5 - 7</p>	<p>For an answer that demonstrates knowledge and understanding but lacks application and analysis:</p> <ul style="list-style-type: none"> ➤ At least GOOD breadth that considers the following economic concepts in explaining multiple and balanced perspectives, viewpoints, relationships and factors. MOST points chosen should be of relevance and significance in answering the question. ➤ At least GOOD depth in economic analysis that reflects the following in MOST explanations. ➤ Accurate use of economic concepts, clear elaboration, and precise use of economic terminologies, language and phrasing. <p>The answer should also be supported by:</p> <ul style="list-style-type: none"> ➤ Diagram(s) / Tool(s) of analysis that may not be well-labelled, may not be well-referred to and may not be drawn with precision (where appropriate). ➤ Example(s). ➤ Logical structure.
<p>High L1 3 - 4</p>	<p>For an answer that demonstrates knowledge but lacks understanding, application and analysis:</p> <ul style="list-style-type: none"> ➤ INSUFFICIENT breadth that considers the following economic concept(s). Point(s) chosen may be of relevance but may not be of significance in answering the question. ➤ INSUFFICIENT depth in economic analysis that may reflect the following: ✓ Lack of accuracy in the use of economic concepts, lack of clarity in elaboration, and lack of precision in the use of economic terminologies, language and phrasing.
<p>Low L1 1 - 2</p>	<p>For an answer that:</p> <ul style="list-style-type: none"> ➤ Is irrelevant in analysis but may contain an introduction that addresses the question or contains no economic analysis but may contain a few statements that are relevant to the concepts required to answer the question. ➤ Contains fundamental conceptual errors in analysis.

Part (b)

Introduction

- The impact on the market for restaurant and hawker food is determined by the change in equilibrium price and quantity in these markets. Equilibrium is attained when the demand curve intersects with the supply curve. The above factors of increased price of water and continued income growth would affect the markets for restaurant and hawker centre differently by changing both supply and demand of their markets.

Body

Version 1 (excellent depth by focusing on total revenue changes)

Impact on restaurant food

- The increased cost of water leads to a fall in supply of restaurant food, ceteris paribus, due to increase in cost of production. This is seen from an upward shift of supply curve from S_0 to S_1 . Given that demand for restaurant food is price elastic, this fall in supply leads to a smaller fall in quantity from Q_0 to Q_1 relative to the larger increase in price of restaurant food from P_0 to P_1 . This leads to a fall in total revenue given area $0P_1E_1Q_1$ is smaller than area $0P_0E_0Q_0$.

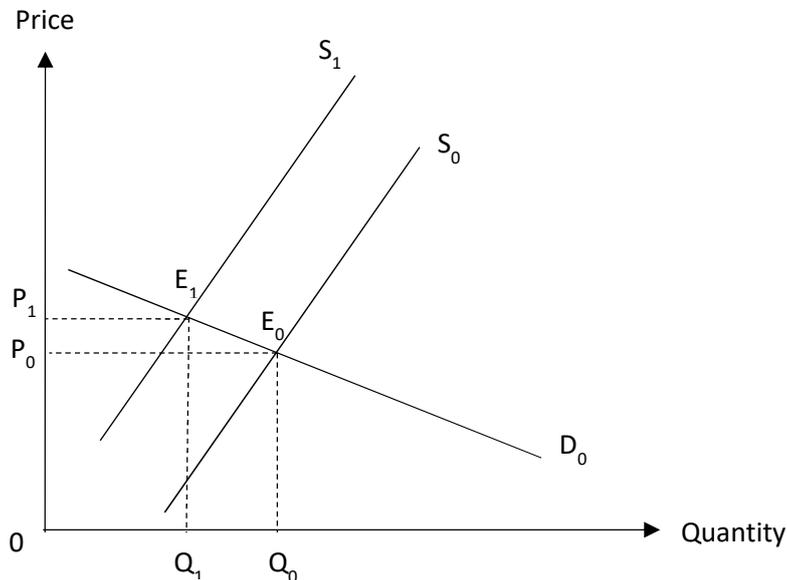


Figure 1: SS with PED for restaurant market

- With an increase in income, this leads to an increase in demand for restaurant food, ceteris paribus. The demand for restaurant food is income elastic as it is a luxury good. Thus, the increase in demand is more than proportionate given the increase in income from D_0 to D_1 , leading to a large increase in both price and quantity of restaurant food.
- It is likely the increase in demand would outweigh the fall in supply.
- Overall, this would lead to a shortage in the market for restaurant food, leading to an upward pressure on price until shortage is resolved, hence the equilibrium price increased from P_0 to P_1 and quantity increased from Q_0 to Q_1 . Total revenue increases as area $0P_1E_1Q_1$ is greater than area $0P_0E_0Q_0$.

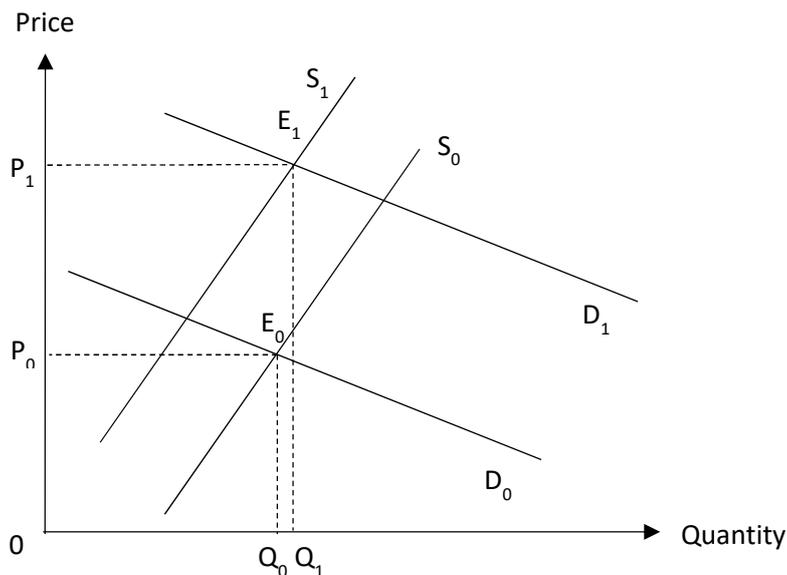


Figure 2: Simultaneous shifts in restaurant market

Impact on hawker food (normal good)

- The increased cost of water is likely to increase the cost of production of hawker food in the same manner as restaurant food. Thus, supply of hawker food decreases. The demand for hawker food is price inelastic due to the lack of close substitutes. Hence, the fall in supply leads to a large increase in price relative to the smaller fall in quantity of hawker food. This leads to a fall in total revenue as area $OP_1E_1Q_1$ is smaller than area $OP_0E_0Q_0$.

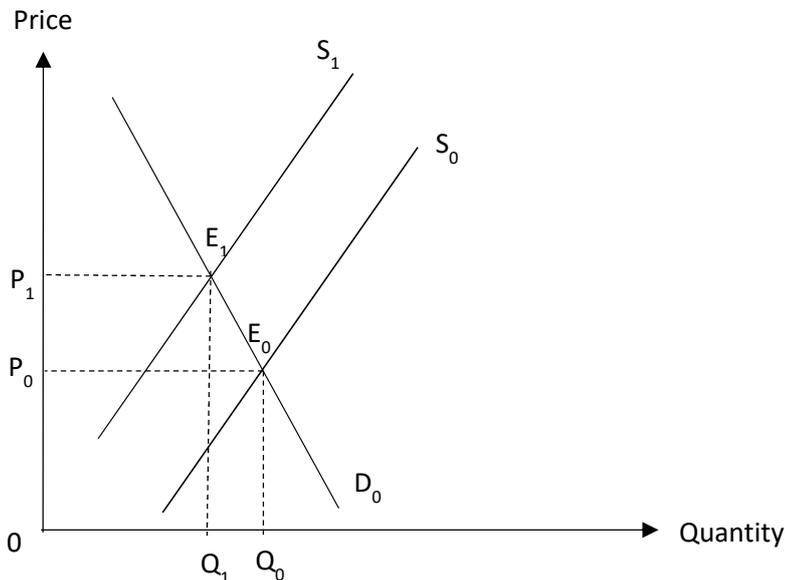


Figure 3: SS with PED for hawker food market

- The increase in income of Singaporeans would lead to an increase in demand for hawker food as it is a normal good. Hawker food is a necessity and the demand for hawker food is income inelastic. Hence an increase in income leads to a less than proportionate increase in demand for it from D_0 to D_1 , leading to a small increase in both price and quantity of hawker food.
- The increase in demand is likely to be smaller than the fall in supply of hawker food as demand for hawker food is income inelastic. At initial price, there exists a shortage which exerts an upward pressure on price until it is eliminated, hence overall price of hawker food increases significantly from P_0 to P_1 and quantity decreases marginally from Q_0 to Q_1 . Total revenue still increases as area $OP_1E_1Q_1$ is bigger than $OP_0E_0Q_0$.

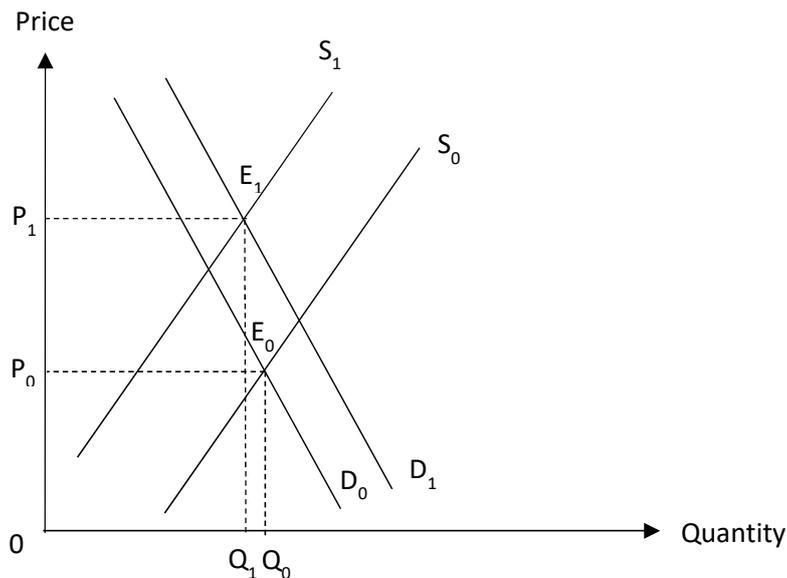


Figure 4: Simultaneous shifts for hawker food market

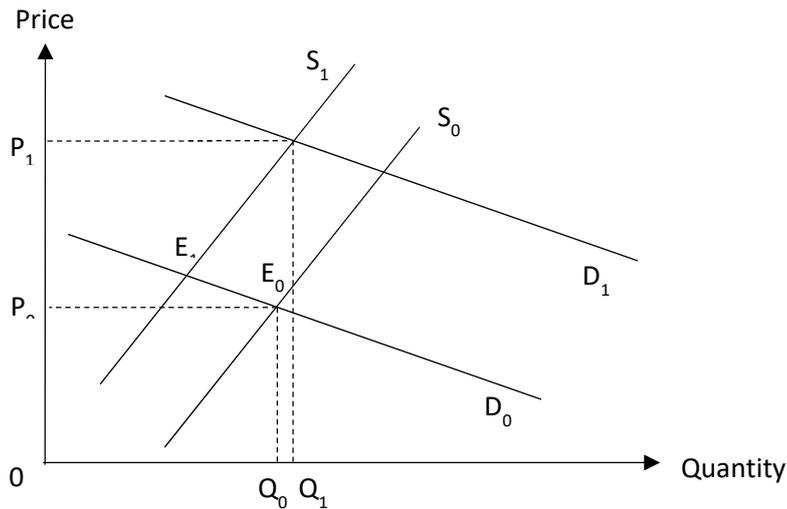


Figure 1: Simultaneous shifts in restaurant market

Evaluation Conclusion

- The above analysis assumes that there are no other factors mentioned in the preamble happening which may not be the case in reality
- In addition, the above analysis may be altered if the YED values changed. For example, wealthy Singaporeans may view restaurant food as necessities, hence an increase in income leads to a less than proportionate increase in demand.

Marks scheme:

Levels	Descriptors
L3 8 - 10	<p>For an answer that demonstrates knowledge, understanding, application and analysis:</p> <ul style="list-style-type: none"> ➤ EXCELLENT breadth that considers the following economic concepts in explaining multiple and balanced perspectives, viewpoints, relationships and factors. ALL points chosen should be of relevance and significance in answering the question. ➤ EXCELLENT depth in economic analysis that reflects the following in ALL explanations. ➤ Accurate use of economic concepts, clear elaboration and precise use of economic terminologies, language and phrasing. <p>The answer should also be supported by:</p> <ul style="list-style-type: none"> ➤ Well-labelled and well-referred to diagram(s) /tool(s) of analysis drawn with precision (where appropriate). ➤ Relevant examples and accurate use of facts. ➤ Logical structure.
L2 5 - 7	<p>For an answer that demonstrates knowledge and understanding but lacks application and analysis:</p> <ul style="list-style-type: none"> ➤ At least GOOD breadth that considers the following economic concepts in explaining multiple and balanced perspectives, viewpoints, relationships and factors. MOST points chosen should be of relevance and significance in answering the question. ➤ At least GOOD depth in economic analysis that reflects the following in MOST explanations. ➤ Accurate use of economic concepts, clear elaboration, and precise use of economic terminologies, language and phrasing. <p>The answer should also be supported by:</p> <ul style="list-style-type: none"> ➤ Diagram(s) /tool(s) of analysis that may not be well-labelled, may not be well-referred to and may not be drawn with precision (where appropriate). ➤ Example(s).

	➤ Logical structure.
High L1 3 - 4	For an answer that demonstrates knowledge but lacks understanding, application and analysis: <ul style="list-style-type: none"> ➤ INSUFFICIENT breadth that considers the following economic concept(s). Point(s) chosen may be of relevance but may not be of significance in answering the question. ➤ INSUFFICIENT depth in economic analysis that may reflect the following: <ul style="list-style-type: none"> ✓ Lack of accuracy in the use of economic concepts, lack of clarity in elaboration, and lack of precision in the use of economic terminologies, language and phrasing.
Low L1 1 - 2	For an answer that: <ul style="list-style-type: none"> ➤ Demonstrates POOR breadth and POOR depth in economic analysis. ➤ Is irrelevant in analysis but may contain an introduction that addresses the question or contains no economic analysis but may contain a few statements that are relevant to the concepts required to answer the question. ➤ Contains fundamental conceptual errors in analysis.
Levels	Descriptors
E3 4 - 5	For an evaluation that contains <ul style="list-style-type: none"> ➤ A synthesis of earlier economic arguments to arrive at relevant judgements/decisions (i.e. answer the question). ➤ Well-explained criteria-based evaluative comments supported by accurate and clear analysis to provide fairness in views. ➤ A good summative conclusion.
E2 2 - 3	For an evaluation that contains <ul style="list-style-type: none"> ➤ Relevant judgement(s)/decision(s) (i.e. answer the question) that may not follow from earlier economic arguments. ➤ Criteria-based evaluative comment(s) supported by analysis to provide fairness in views but the comment(s) may not be well-explained, may be unclear and/or may be inaccurate at times.
E1 1	For an evaluation that contains <ul style="list-style-type: none"> ➤ Relevant but unexplained evaluative judgement(s)/statement(s) i.e. evaluative judgement(s)/statement(s) not supported by analysis or ➤ A relevant conclusion.

Q2. The petrol retailing industry in Singapore has long been dominated by a few large players such as Shell, Caltex, ExxonMobil and SPC.

- (a) Explain how barriers to entry can affect a firm's price and output decisions. [10]
 (b) Discuss whether a firm should mainly compete based on pricing strategies in an industry like petrol retailing. [15]

Suggested Answer Outline:

Part (a)

Introduction

- Barriers to entry refer to the various forms of restrictions or obstacles which prevent/deter new firms from entering a market to compete with incumbent firms. They could either be natural (e.g. economies of scale/ownership of key resources) or artificially erected (e.g. legal barriers; branding).

Body

1. Perfectly Competitive market with totally no barriers to entry

- In a perfectly competitive market, the non-existence of barriers to entry allows for a large number of firms, each with no market power and is a price taker.
- Since there are no barriers to entry, new firms can easily enter the market, resulting in a highly competitive market with many sellers.
- This is reflected by the perfectly elastic demand curve faced by the PC firm.
- Therefore, each perfectly competitive firm becomes a price taker and sells at a profit-maximizing level of output, where $MC=MR$ and at the market price determined by the market demand and supply.

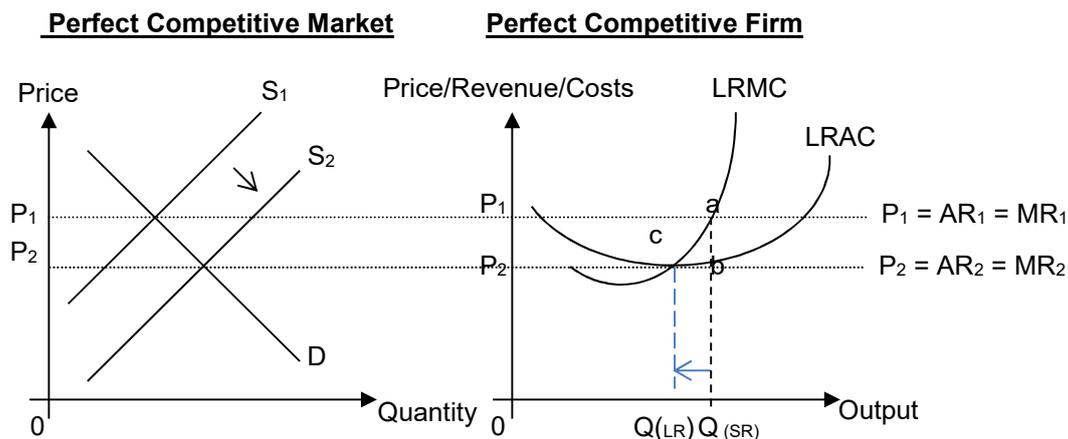


Fig 1: Long run adjustment of the Perfect Competitive firm

- From Figure 1, we see that in the short run, the market demand and supply determined the price at P_1 . Output for all profit maximising firms will be at $MC=MR$.
- Hence, a perfectly competitive firm which is a price-taker enjoys supernormal profits in the short-run. It produces an output of $Q(SR)$ where $MC=MR_1$ and P_1 is above average cost (AC). price at P_1 ,
- However in the long run: such supernormal profit, represented by the area P_1abc will attract new firms into the market.
- When new firms are attracted into the industry, the market supply increased.
- Firms will continue entering the industry until each firm charges P_2 and earns only normal profit in the long-run, with profit-maximizing price P_2 equals to average cost (LRAC and LRMC).

Impact of No barriers to entry on firm's price and output decisions

- Perfect competitive firms are price takers in both SR and LR. Price is determined by the market equilibrium where $DD=SS$
- Output of the firm is determined where $MC=MR$ in order to maximise profit

2. Monopolistic firms in industries with high barriers to entry

- Conversely, the existence of high barriers to entry protects a monopoly from potential competitors, limiting the market to one dominant seller.
- As a result, the industry demand curve is in fact the monopolist's demand curve, which is downwards sloping demand in Figure 2. This means that a monopolist has its ability to set its own price, unlike a perfectly competitive firm which has to be a price taker.
- Similarly, a monopolist profit-maximizes at $MC=MR$, with price P_1 and quantity Q_1 .

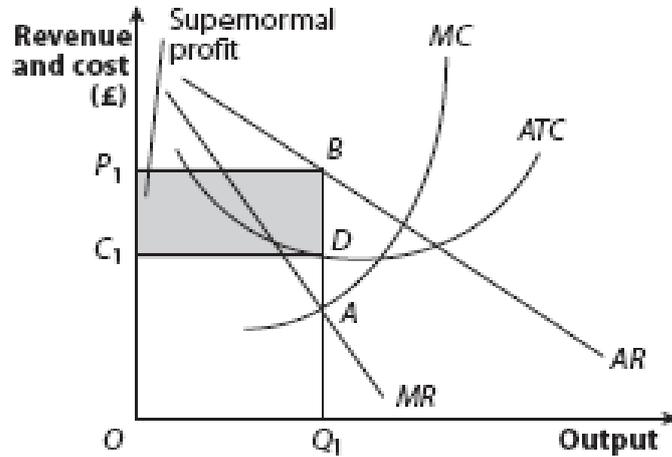


Fig 2: A monopolist equilibrium (short and long-run)

In the LR:

The existence of high barriers to entry allows a monopoly to set profit-maximizing price with supernormal profits, both in the short-run and long-run.

- With high barriers to entry preventing the entry of new firms, the monopolist's supernormal profit is not competed away by potential competitors and hence is able to retain its supernormal profits in the long-run.

Impact of High barriers to entry on firm's price and output decisions

- Monopoly is a price setter in SR and LR
- Price and output are set at the profit-maximising level where $MC=MR$

Conclusion

- From the above analysis it is clear that barriers to entry play a key role in price and output decisions of firms in a market.

Marks Scheme:

Levels	Descriptors
L3 8 - 10	<p>For an answer that demonstrates knowledge, understanding, application and analysis:</p> <ul style="list-style-type: none"> ✓ EXCELLENT breadth that considers the following economic concepts in explaining multiple and balanced perspectives, viewpoints, relationships and factors. ALL points chosen should be of relevance and significance in answering the question. ✓ EXCELLENT depth in economic analysis that reflects the following in ALL explanations. ✓ Accurate use of economic concepts, clear elaboration, and precise use of economic terminologies, language and phrasing. <p>The answer should also be supported by:</p> <ul style="list-style-type: none"> ✓ Well-labelled and well-referred to diagram(s) / tool(s) of analysis drawn with precision (where appropriate). ✓ Relevant examples and accurate use of facts.

	Logical structure.
L2 5 - 7	<p>For an answer that demonstrates knowledge and understanding but lacks application and analysis:</p> <ul style="list-style-type: none"> ➤ At least GOOD breadth that considers the following economic concepts in explaining multiple and balanced perspectives, viewpoints, relationships and factors. MOST points chosen should be of relevance and significance in answering the question. ➤ At least GOOD depth in economic analysis that reflects the following in MOST explanations. ➤ Accurate use of economic concepts, clear elaboration, and precise use of economic terminologies, language and phrasing. <p>The answer should also be supported by:</p> <ul style="list-style-type: none"> ➤ Diagram(s) / Tool(s) of analysis that may not be well-labelled, may not be well-referred to and may not be drawn with precision (where appropriate). ➤ Example(s). ➤ Examples may lack accuracy ➤ Logical structure.
High L1 3 - 4	<p>For an answer that demonstrates knowledge but lacks understanding, application and analysis:</p> <ul style="list-style-type: none"> ➤ INSUFFICIENT breadth that considers the following economic concept(s). Point(s) chosen may be of relevance but may not be of significance in answering the question. ➤ INSUFFICIENT depth in economic analysis that may reflect the following: ✓ Lack of accuracy in the use of economic concepts, lack of clarity in elaboration, and lack of precision in the use of economic terminologies, language and phrasing.
Low L1 1 - 2	<p>For an answer that:</p> <ul style="list-style-type: none"> ➤ Is irrelevant in analysis but may contain an introduction that addresses the question or contains no economic analysis but may contain a few statements that are relevant to the concepts required to answer the question. ➤ Contains fundamental conceptual errors in analysis.

Part (b)

Introduction

- Firms in such an industry operate in an oligopolistic market. A key characteristic of such a market is mutual interdependence between the few dominant firms in the industry, where the actions of one firm will directly impact the other firms in the industry.

Body

Petroleum retailing industry in Singapore

Market features:

- Few large, dominant firms relative to market size (e.g., Singapore Petroleum Company (SPC), ExxonMobil, Shell, Caltex)
- Significant barriers to entry
- Differentiated product.
- Due to the existence of a few dominant firms in the market selling a differentiated product, petrol retailers, are notable examples of non-collusive (competitive) oligopolies due to the unique characteristic of mutual interdependence.

1. **Anti-Thesis 1: This uniformity in price and price rigidity can be explained using the kinked demand-curve model ie Why firms in such an industry do not commonly compete based on price strategies.**

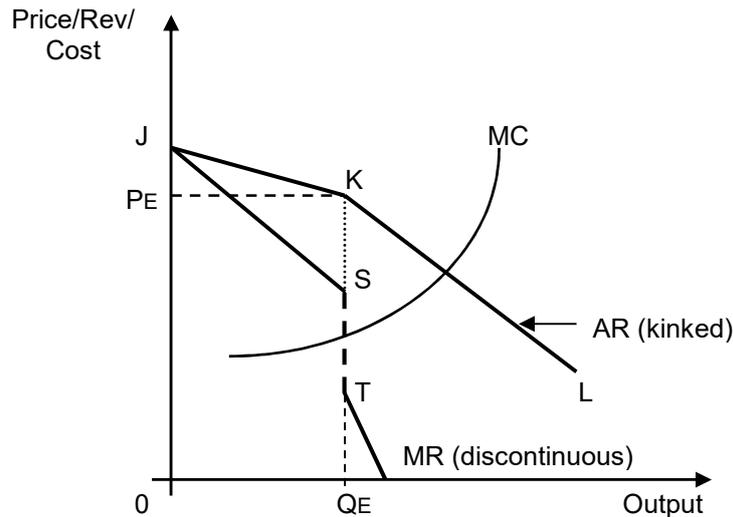


Fig 3: Kinked Demand curve of firm in Oligopolistic market

- Assuming rival petrol firms do not match price increases, if say SPC raises its price independently above PE, it will find its quantity sold fall more than proportionately as most of his customers will switch to the relatively cheaper substitute in ExxonMobil, Shell and Caltex, resulting in a fall in revenue. Hence, at output prices above PE, the oligopolist faces a relatively price-elastic demand (AR) curve.
 - By the same argument, as rival firms are assumed to match any price reduction, when SPC lowers its price, it will not sell proportionately more of its output and revenue will fall, so it faces a relatively price inelastic demand curve at prices below PE .
 - The price is 'rigid' at PE as oligopolistic firms in such an industry have little incentive to independently change prices for fear of the impact of the reaction of their rivals.
- 2. Anti- Thesis 2: Non-Price Competition is largely the main strategy for firms in such an industry to compete**

 - Hence petrol retailers largely focus more on non-price strategies. These include both product differentiation and product innovation.
 - Firms in an oligopolistic industry have the ability to invest in R and D and due to their ability to earn supernormal profits in the long run due to high barriers to entry. They also have the incentive to do so due to the keen competition with their rivals.
 - Hence petrol companies also invest in finding more efficient and cleaner fuel and advertise heavily through the mainstream media.
 - Through such non-price strategies, the petrol firm can increase the demand for their product and hence earn higher revenue.
 - 3. Anti-Thesis 3: However, it does not mean the Oligopolies do not adopt any price strategies at all. (Tacit collusion)**

 - Although collusion is not allowed by laws against anti-competitive practices (e.g. price fixing or cartel. There is possibility of tacit collusion in the form of price leadership in oligopoly markets that have one significant dominant firm/ leader.
 - However, this means that oligopolies generally do not use pricing strategies unless they choose to collude instead of compete.
 - 4. Anti-Thesis 4: Oligopolies may also choose to form cartels to fix prices instead of compete**

 - A formal and contractual collusive agreement is called a cartel. A cartel may be defined as a group of firms (Oligopolies) which agree to cooperate and act jointly in setting their output as a group or fixing the price of their product. The Organisation of the Petroleum Exporting Countries (OPEC) is probably the best known of all cartels.
 - More commonly, a cartel will decide to restrict their output in the market (thus raising the price), or fix the price of their product. For example, OPEC decides on the output of oil they will produce in the form of production quotas for each member country.

5. Thesis: However, at times, oligopolies do engage in price war to gain market share

- Although oligopolies are often characterised by price rigidity, price competition is not altogether absent among some oligopolies. In fact, price competition can be intense and described as 'price wars'.
- Sporadic price wars happen among the major petrol retail outlets in Singapore. However, price wars often last for a very short period of time.
- In some cases, the dominant oligopolistic firm may deliberately lower its price below the profit maximising level in order to drive out its competitors. This is known as predatory pricing.

Evaluative Conclusion

- Due to the nature of such an oligopolistic industry, where a few dominant firms exist, the industry is characterised by mutual interdependence of the firms which leads to price rigidity and the lack of use of pricing strategies to compete. This can be seen by how firms appear to follow a price leadership model, although explicit collusion is not allowed in Singapore.
- Hence with the exception of very rare price wars, firms in such an industry largely compete based on non-price strategies such as branding, customer loyalty and R and D in order to continue to increase their market share and profits in the long run.

Marks Scheme

Levels	Descriptors
L3 8 - 10	<p>For an answer that demonstrates knowledge, understanding, application and analysis:</p> <ul style="list-style-type: none"> ➤ EXCELLENT breadth that considers the following economic concepts in explaining multiple and balanced perspectives, viewpoints, relationships and factors. ALL points chosen should be of relevance and significance in answering the question. ➤ EXCELLENT depth in economic analysis that reflects the following in ALL explanations. ➤ Accurate use of economic concepts, clear elaboration and precise use of economic terminologies, language and phrasing. <p>The answer should also be supported by:</p> <ul style="list-style-type: none"> ➤ Well-labelled and well-referred to diagram(s) /tool(s) of analysis drawn with precision (where appropriate). ➤ Relevant examples and accurate use of facts. ➤ Logical structure.
L2 5 - 7	<p>For an answer that demonstrates knowledge and understanding but lacks application and analysis:</p> <ul style="list-style-type: none"> ➤ At least GOOD breadth that considers the following economic concepts in explaining multiple and balanced perspectives, viewpoints, relationships and factors. MOST points chosen should be of relevance and significance in answering the question. ➤ At least GOOD depth in economic analysis that reflects the following in MOST explanations. ➤ Accurate use of economic concepts, clear elaboration, and precise use of economic terminologies, language and phrasing. <p>The answer should also be supported by:</p> <ul style="list-style-type: none"> ➤ Diagram(s) /tool(s) of analysis that may not be well-labelled, may not be well-referred to and may not be drawn with precision (where appropriate). ➤ Example(s). ➤ Logical structure.
High L1 3 - 4	<p>For an answer that demonstrates knowledge but lacks understanding, application and analysis:</p> <ul style="list-style-type: none"> ➤ INSUFFICIENT breadth that considers the following economic concept(s). Point(s) chosen may be of relevance but may not be of significance in answering the question.

	<ul style="list-style-type: none"> ➤ INSUFFICIENT depth in economic analysis that may reflect the following: <ul style="list-style-type: none"> ✓ Lack of accuracy in the use of economic concepts, lack of clarity in elaboration, and lack of precision in the use of economic terminologies, language and phrasing.
Low L1 1 - 2	<p>For an answer that:</p> <ul style="list-style-type: none"> ➤ Demonstrates POOR breadth and POOR depth in economic analysis. ➤ Is irrelevant in analysis but may contain an introduction that addresses the question or contains no economic analysis but may contain a few statements that are relevant to the concepts required to answer the question. ➤ Contains fundamental conceptual errors in analysis.
Levels	Descriptors
E3 4 - 5	<p>For an evaluation that contains</p> <ul style="list-style-type: none"> ➤ A synthesis of earlier economic arguments to arrive at relevant judgements/decisions (i.e. answer the question). ➤ Well-explained criteria-based evaluative comments supported by accurate and clear analysis to provide fairness in views. ➤ A good summative conclusion.
E2 2 - 3	<p>For an evaluation that contains</p> <ul style="list-style-type: none"> ➤ Relevant judgement(s)/decision(s) (i.e. answer the question) that may not follow from earlier economic arguments. ➤ Criteria-based evaluative comment(s) supported by analysis to provide fairness in views but the comment(s) may not be well-explained, may be unclear and/or may be inaccurate at times.
E1 1	<p>For an evaluation that contains</p> <ul style="list-style-type: none"> ➤ Relevant but unexplained evaluative judgement(s)/statement(s) i.e. evaluative judgement(s)/statement(s) not supported by analysis or ➤ A relevant conclusion.

- Q3. MediShield Life is a state insurance scheme that provides lifelong protection for all Singapore Citizens and Permanent Residents against large hospital bills. It has co-payment features such as claim limits, deductible, and co-insurance to ensure that those insured share the burden of medical bills with the government.**

Discuss the appropriateness of the Singapore government's approach in addressing the market failure due to imperfect information and asymmetric information in the market for healthcare and its related markets. [25]

Suggested Answer Outline

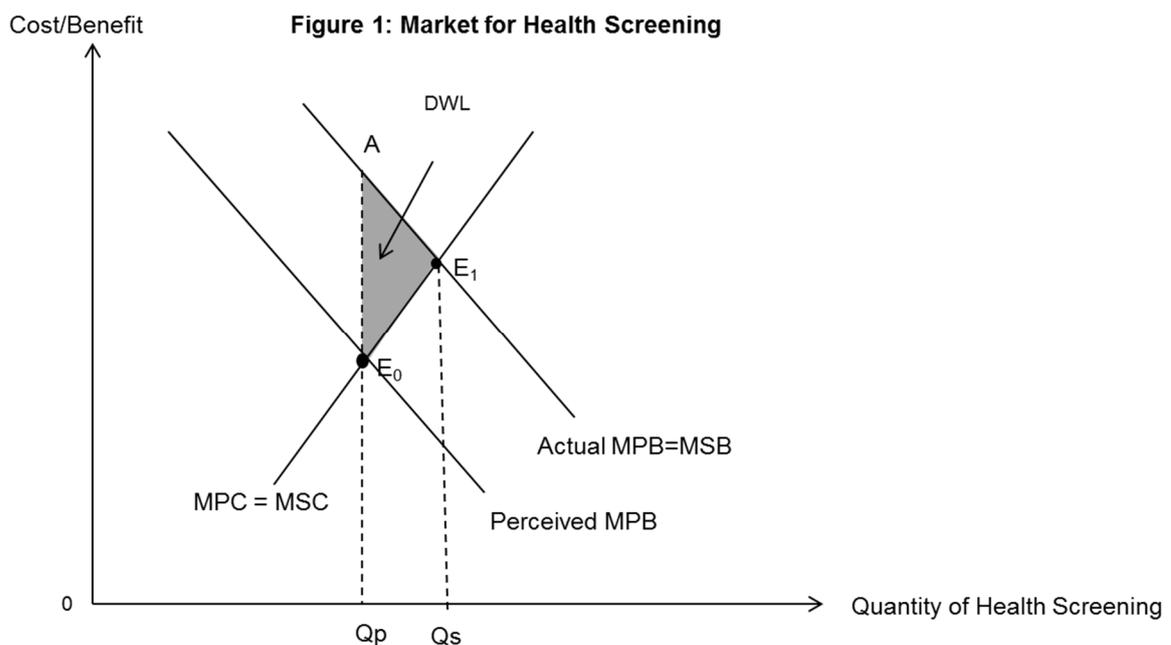
Introduction

- State the sources of market failure in the market of health insurance.
- State the policies to address these sources of market failure.

Body

Explain imperfect information as the source of market failure in the market for healthcare

- Define imperfect information:
 - Imperfect information occurs when the economic agents (consumers or producers) are unable to accurately value the true cost and/or benefit of a good or service because they have inaccurate, incomplete, uncertain, or misunderstood data and therefore make potentially "wrong" decision.
- In the market of healthcare, there could be imperfect information about the benefits of "consuming" healthcare. This means that there is a difference between the value of the perceived benefit and the actual benefit.
- When the consumers go for health screening, they only consider perceived MPB and Marginal Private Cost (MPC) which is the cost of health screening. Hence, as shown in figure 1, they will consume at Q_p unit of health screening. However, the actual MPB is higher than the perceived MPB. This means the socially optimum level of output is at Q_s unit. As Q_p is less than Q_s , there is an under-consumption of health screening.
- With an under-consumption of Q_p units, there is the welfare loss/deadweight loss to the society which is the area AE_1E_0 . There is a need to increase output to Q_s unit of healthcare to increase social welfare and to achieve allocative efficiency.



Explain asymmetric information as the source of market failure in the market of health insurance

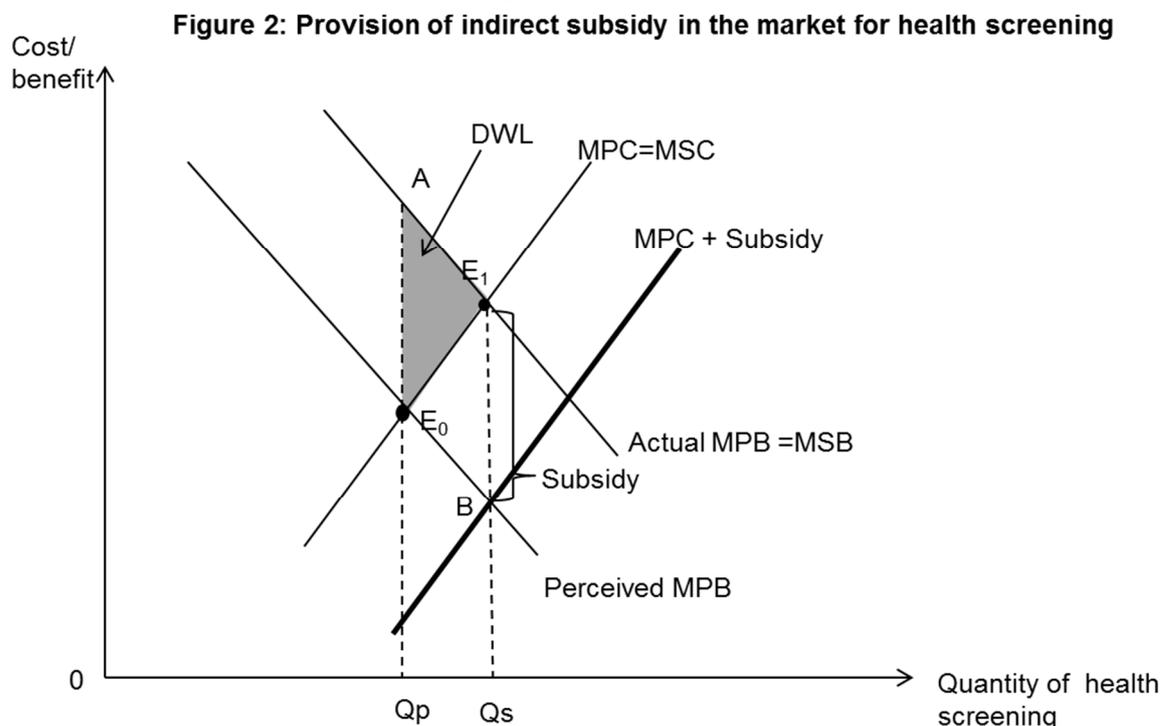
- Define asymmetric information

- Asymmetric information is a case where one party in the market (either buyers or sellers) has more information about the product than the other resulting in a distortion of incentives and inefficient market outcomes
- Adverse selection
 - Adverse selection occurs when due to asymmetric information; potential buyers can only offer an average price between that of good-type and bad-type. Thus, this leads to good-type leaving the market as the price offered is too low. The eventual outcome of adverse selection is the case where the market is only left with the bad-type and hence, the market will eventually collapse as no consumer is willing to pay the amount for the bad-type good.
 - In the market of healthcare, adverse selection is more likely to exist in the context of health insurance. People who buy health insurance usually know much more about their general health than any insurance company can hope to know. As a result, insurance companies will raise their premiums to cover their losses which force the price of insurance to increase.
 - Therefore, the health insurance market can fail completely because insurance companies will not want to sell health insurance to unhealthy people as that can become really unprofitable.
- Moral hazard
 - Moral hazard exists when one party to a transaction has the ability to shift costs onto other party and thus engages in more risky activities that could be detrimental to society.
 - Moral hazard arises in health insurance as the incentive to lead a healthy lifestyle is reduced when the medical bills of the insured is covered by the insurance.
 - Hence, the insurance companies might raise the premiums to deal with increase in costs.

Explain how Singapore government's approaches address imperfect information in the market for healthcare

1. Provision of subsidies

- Define subsidy
- In Singapore, the healthcare services providers include polyclinics, public hospitals and private hospitals. Polyclinics and public hospitals receive subsidies from government so that they can provide subsidised medical services to the patients.



- With reference to figure 2, the amount of indirect subsidy should be equal to E1B which is the gap between actual and perceived MPB. This will shift MPC downwards to MPC + subsidy. Consumers

will now be able to consume at socially optimal level of output as perceived MPB cuts MPC + subsidy at Qs unit of health screening.

- With an increased consumption, there will be a removal of deadweight loss (DWL) to society.
- Limitations/Evaluation:
 - The implementation of the indirect subsidy might cause strain in the government budget.
 - Even though subsidy is able to increase the consumption level to the socially optimum level of output, it does not address the imperfect information.

2. Education/campaign/advertisements

- Singapore government also undertakes education and campaigns to encourage residents to go for various types of healthcare services such as health screening or immunisation by informing the public of the benefit of consuming healthcare.
- Limitations/Evaluation:
 - The effectiveness of such policies depends on the receptiveness and the willingness of the consumers to digest the information provided and to go for the health screening.
 - It might also take a long time for the consumers to change their lifestyle and habit.

3. Regulation

- Government also has regulations to ensure that certain healthcare services are consumed. This is to ensure that such services are consumed at the socially optimum level of output.

Explain how Singapore government's approaches address asymmetric information in the market for healthcare

MediShield Life

- In addition to subsidies, Singapore government has also implemented 3M framework (Medisave, MediShield Life, and MediFund), the financial framework that incorporates personal responsibility with risk pooling and community support, to ensure that healthcare is affordable for all.
- MediShield Life is a compulsory basic health insurance plan, administered by Central Provident Fund (CPF), which helps to pay large hospital bills and selected costly outpatient treatment, such as dialysis and chemotherapy.
- The co-payment feature of MediShield helps to better share the burden of the medical costs with the insured which helps in addressing the excessive medical claims due to moral hazard.
- Limitations/evaluation:
 - As MediShield is compulsory and provided at the subsidised rate, it might cause strain in the government budget.

Evaluative Conclusion

- Whether Singapore government's approach in addressing the presence of imperfect and asymmetric information in the market of healthcare is appropriate depends on the sustainability of the policies. Some of the policies require public financing which might cause strain in the government budget.

Marks Scheme

Levels	Descriptors
High L3 18 - 20	<p>For an answer that demonstrates knowledge, understanding, application and analysis:</p> <ul style="list-style-type: none"> ✓ EXCELLENT breadth that considers the following economic concepts in explaining multiple and balanced perspectives, viewpoints, relationships and factors. ALL points chosen should be of relevance and significance in answering the question. ➤ EXCELLENT depth in economic analysis that reflects the following in ALL explanations. <ul style="list-style-type: none"> ✓ Accurate use of economic concepts, clear elaboration and precise use of economic terminologies, language and phrasing. <p>The answer should also be supported by:</p>

	<ul style="list-style-type: none"> ➤ Well-labelled and well-referred to diagram(s) / tool(s) of analysis drawn with precision (where appropriate). ➤ Relevant examples and accurate use of facts. ➤ Logical structure.
<p>Low L3 15 - 17</p>	<p>For an answer that demonstrates knowledge, understanding, application and analysis:</p> <ul style="list-style-type: none"> ➤ At least VERY GOOD breadth that considers the following economic concepts in explaining multiple and balanced perspectives, viewpoints, relationships and factors. MOST points chosen should be of relevance and significance in answering the question. ➤ At least VERY GOOD depth in economic analysis that reflects the following in MOST explanations. <ul style="list-style-type: none"> ✓ Accurate use of economic concepts, clear elaboration, and precise use of economic terminologies, language and phrasing. <p>The answer should also be supported by:</p> <ul style="list-style-type: none"> ➤ Well-labelled and well-referred to diagram(s) / tool(s) of analysis drawn with precision (where appropriate). ➤ Relevant example(s) and accurate use of facts. ➤ Logical structure.
<p>High L2 12 - 14</p>	<p>For an answer that demonstrates knowledge and understanding but lacks application and analysis:</p> <ul style="list-style-type: none"> ➤ At least GOOD breadth that considers the following economic concepts in explaining multiple and balanced perspectives, viewpoints, relationships and factors. MOST points chosen should be of relevance and significance in answering the question. ➤ At least GOOD depth in economic analysis that reflects the following in MOST explanations. <ul style="list-style-type: none"> ✓ Accurate use of economic concepts, clear elaboration, and precise use of economic terminologies, language and phrasing. <p>The answer should also be supported by:</p> <ul style="list-style-type: none"> ➤ Diagram(s) / Tool(s) of analysis that may not be well-labelled, may not be well-referred to and may not be drawn with precision (where appropriate). ➤ Example(s). ➤ Logical structure.
<p>Low L2 9 - 11</p>	<p>For an answer that demonstrates knowledge and understanding but lacks application and analysis:</p> <ul style="list-style-type: none"> ➤ At least SUFFICIENT breadth that considers the following economic concepts in explaining multiple and balanced perspectives, viewpoints, relationships and factors. SOME points chosen should be of relevance and significance in answering the question. ➤ At least SUFFICIENT depth in economic analysis that reflects the following in SOME explanations. <ul style="list-style-type: none"> ✓ Accurate use of economic concepts, clear elaboration, and precise use of economic terminologies, language and phrasing. <p>The answer should also be supported by:</p>

	<ul style="list-style-type: none"> ➤ Diagram(s) / Tool(s) of analysis that may not be well-labelled, may not be well-referred to and may not be drawn with precision (where appropriate). ➤ Example(s). ➤ Logical structure.
High L1 5 - 8	<p>For an answer that demonstrates knowledge but lacks understanding, application and analysis:</p> <ul style="list-style-type: none"> ➤ INSUFFICIENT breadth that considers the following economic concept(s). Point(s) chosen may be of relevance but may not be of significance in answering the question. ➤ INSUFFICIENT depth in economic analysis that may reflect the following: <ul style="list-style-type: none"> ✓ Lack of accuracy in the use of economic concepts, lack of clarity in elaboration, and lack of precision in the use of economic terminologies, language and phrasing. ○ Minimal or no contextualisation.
Low L1 1 - 4	<ul style="list-style-type: none"> ➤ Demonstrates POOR breadth and POOR economic analysis. ➤ Is irrelevant in analysis but may contain an introduction that addresses the question or contains no economic analysis but may contain a few statements that are relevant to the concepts required to answer the question. ➤ Contains fundamental conceptual errors in analysis.
Levels	Descriptors
E3 4 - 5	<p>For an evaluation that contains</p> <ul style="list-style-type: none"> ➤ A synthesis of earlier economic arguments to arrive at relevant judgements/decisions (i.e. answer the question). ➤ Well-explained criteria-based evaluative comments supported by accurate and clear analysis to provide fairness in views. ➤ A good summative conclusion.
E2 2 - 3	<p>For an evaluation that contains</p> <ul style="list-style-type: none"> ➤ Relevant judgement(s)/decision(s) (i.e. answer the question) that may not follow from earlier economic arguments. ➤ Criteria-based evaluative comment(s) supported by analysis to provide fairness in views but the comment(s) may not be well-explained, may be unclear and/or may be inaccurate at times.
E1 1	<p>For an evaluation that contains</p> <ul style="list-style-type: none"> ➤ Relevant but unexplained evaluative judgement(s)/statement(s) i.e. evaluative judgement(s)/statement(s) not supported by analysis or ➤ A relevant conclusion.

Paper 2 – Essay Questions (Section B)

- Q4. Singapore's monetary policy has been centred on the management of the exchange rate instead of the management of interest rate.**

Discuss whether the factors limiting the effectiveness of interest rate policy are key in determining the choice of exchange rate centred monetary policy instead of interest rate policy in achieving Singapore's macroeconomic goals. [25]

Suggested Answer Outline:

Introduction

- Monetary policy involves the manipulation of interest rates or money supply by the Central Bank in order to influence the level of economic activity of the country in pursuance of macroeconomic objectives.
- State 4 macro aims:
 - Sustained economic growth
 - Low unemployment rate
 - Low inflation rate
 - Healthy Balance of Payment

Body

Explain the working of interest rate centred monetary policy

- Monetary Policy is the discretionary control of money supply or interest rates by Central Bank to influence the level of Aggregate Demand (AD) and hence, economic activity.
- Monetary policy can be expansionary or contractionary
 - Expansionary monetary policy refers to deliberate increase of money supply or lowering of interest rates in order to raise Aggregate Demand (AD).
 - Contractionary monetary policy refers to deliberate reduction of money supply and raising of interest rates in order to lower AD.
- With reference to figure 1, when a country adopts expansionary Monetary Policy to boost economic growth, the increase in money supply will lead to a surplus of money (excess liquidity) at r_0 , causing the interest rate to fall. The fall in interest rate from r_0 to r_1 leads to a rise in investment from I_0 to I_1 . An increase in investment causes AD to rise. If originally AD is at AD_0 , increase in investment (I) will shift AD from AD_0 to AD_1 and this will result in an increase in national income and rise in general price level. This means the expansionary monetary policy has been successful in attaining non-inflationary economic growth. However, if AD is originally at AD_2 , increase in investment will lead a rightward shift of AD from AD_2 to AD_3 . This will cause a rise in both national income and general price level.

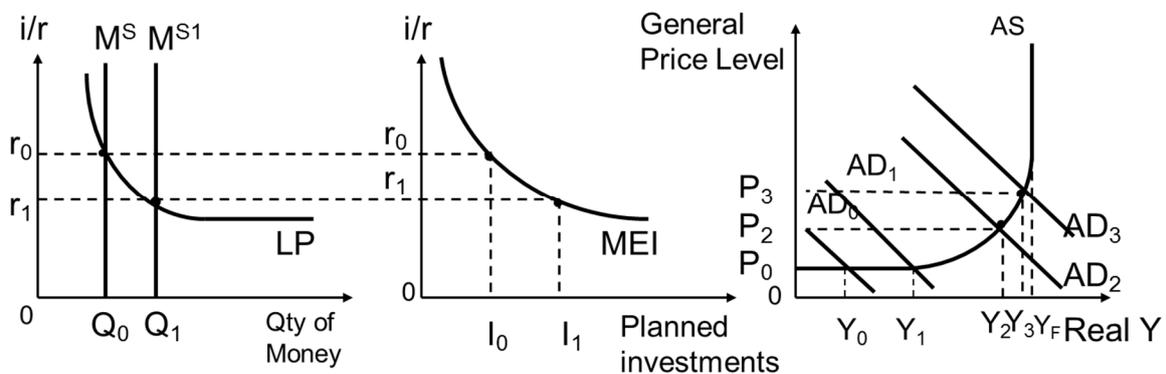


Figure 1: Effect of Expansionary Monetary Policy

- There will be an increase in the demand for labour, leading to a fall in unemployment level, especially cyclical unemployment.

Thesis: the factors limiting the effectiveness of interest rate policy are key in determining the choice of exchange rate centred monetary policy instead of interest rate policy in achieving macroeconomic goals.

Monetary Policy is the demand management policy that mainly aims to achieve price stability as a basis for sustained economic growth. These are the factors that will affect the extent of change in investment and the eventual effect on national income and general price level.

Explain the factors that limit the effectiveness of interest rate policy

1. Interest-elasticity of demand of money (Liquidity Preference)

- The more interest-elastic the demand for money, the smaller will be the fall in interest rate given an increase in money supply. The smaller the fall in interest rate, the less significant is its impact on investment and thus the smaller the change in AD. This means that expansionary monetary policy will have a weak effect on the economy.

2. Interest-elasticity of Marginal Efficiency of Investment (MEI)

- The more interest-inelastic the Marginal Efficiency of Investment (MEI) curve, the smaller the change in investment given a fall in interest rate and hence, the less effective is the monetary policy.
- In the context of Singapore, investment is considered to be relatively interest-inelastic, indicating that any changes in interest rates will lead to a less than proportionate change in investment, ceteris paribus. As such, interest rates centred monetary policy might not be an appropriate choice for Singapore.

3. Business expectation

- The economic outlook can affect business expectations which in turn influence firms' decision to invest.
- If economic outlook is positive and incomes are expected to increase, expected future returns of investment will increase, there will be rightward shift of MEI curve. Hence, even with the implementation of contractionary monetary policy to restrict AD, investment can still increase.
- On the other hand, if the economic outlook is negative and incomes are expected to fall, firms will expect the demand for their products to fall and to receive less profit in the future. Therefore, there will be a leftward shift of MEI curve. So, even with the implementation of the expansionary monetary policy to increase AD, investment will still fall.

4. Size of multiplier

- The smaller the size of multiplier, the weaker is the effect on national income and economic growth, given a change in investment and AD.
- For instance, Singapore has a small multiplier size due to huge leakages. Therefore, with the implementation of expansionary monetary policy which aims to achieve economic growth, the increase in investment and AD will not cause a significant increase in national income.

Anti-Thesis: Other factors are more important in determining the choice of exchange rate centred monetary policy instead of interest rate policy in achieving macroeconomic goals.

1. Nature of the economy

- Nature and size of the economy is one the determining factors when the government chooses between interest rate and exchange rate centred MP.
- For example, Singapore is a small and open economy and is very dependent on imported raw materials, increase in the price of the imported goods will result in the higher prices of final goods and services produced in Singapore. Therefore, Singapore is very prone to import price-push inflation.
- Therefore, Singapore chooses to adopt exchange rate centred monetary policy to curb the imported inflation. With gradual and modest appreciation of Singapore Dollar, the prices of imported goods and raw materials will be relatively cheaper in domestic currency, ceteris paribus. Therefore resulting in an increase in SRAS, curbing inflation.
- However, it is noted that with appreciation, the price of export will be relatively more expensive in the foreign currency, ceteris paribus. This will result in the decrease of demand for exports.

- With increase in import expenditure and decrease in export revenue, there will be a worsening of Balance of Trade which might also cause the worsening of the Balance of Payment.

2. Openness to capital flow

- An economy's openness to capital flows will affect the ability of the country to control money supply or interest rates, affecting the choice of the policy.
- As international financial centre with free movement of capital, Singapore is very open to capital flows, hence it is difficult to control our domestic money supply.
- In addition, Singapore is a price taker in the world market for funds due to its small size.
- Hence, given that Singapore is a price taker in the world market for funds, Singapore is unable to use interest rate centred monetary policy to affect aggregate demand to achieve economic growth.

Other factors that contribute to the choice of policy in Singapore:

1. Policy Trilemma
2. Openness to capital flow
3. Nature of the economy

Marks Scheme

Levels	Descriptors
<p>High L3 18 - 20</p>	<p>For an answer that demonstrates knowledge, understanding, application and analysis:</p> <ul style="list-style-type: none"> ➤ EXCELLENT breadth that considers the following economic concepts in explaining multiple and balanced perspectives, viewpoints, relationships and factors. ALL points chosen should be of relevance and significance in answering the question. ➤ EXCELLENT depth in economic analysis that reflects the following in ALL explanations. <ul style="list-style-type: none"> ✓ Accurate use of economic concepts, clear elaboration and precise use of economic terminologies, language and phrasing. <p>The answer should also be supported by:</p> <ul style="list-style-type: none"> ➤ Well-labelled and well-referred to diagram(s) / tool(s) of analysis drawn with precision (where appropriate). ➤ Relevant examples and accurate use of facts. ➤ Logical structure.
<p>Low L3 15 - 17</p>	<p>For an answer that demonstrates knowledge, understanding, application and analysis:</p> <ul style="list-style-type: none"> ➤ At least VERY GOOD breadth that considers the following economic concepts in explaining multiple and balanced perspectives, viewpoints, relationships and factors. MOST points chosen should be of relevance and significance in answering the question. <ul style="list-style-type: none"> • ➤ At least VERY GOOD depth in economic analysis that reflects the following in MOST explanations. <ul style="list-style-type: none"> ✓ Accurate use of economic concepts, clear elaboration, and precise use of economic terminologies, language and phrasing. <p>The answer should also be supported by:</p> <ul style="list-style-type: none"> ➤ Well-labelled and well-referred to diagram(s) / tool(s) of analysis drawn with precision (where appropriate). <ul style="list-style-type: none"> • <i>Good use of diagrams that are adequately explained</i> ➤ Relevant example(s) and accurate use of facts. <ul style="list-style-type: none"> • <i>Some attempts at contextualisation with some relevant examples.</i> ➤ Logical structure.

<p>High L2 12 - 14</p>	<p>For an answer that demonstrates knowledge and understanding but lacks application and analysis:</p> <ul style="list-style-type: none"> ➤ At least GOOD breadth that considers the following economic concepts in explaining multiple and balanced perspectives, viewpoints, relationships and factors. MOST points chosen should be of relevance and significance in answering the question. ➤ At least GOOD depth in economic analysis that reflects the following in MOST explanations. <ul style="list-style-type: none"> ✓ Accurate use of economic concepts, clear elaboration, and precise use of economic terminologies, language and phrasing. <p>The answer should also be supported by:</p> <ul style="list-style-type: none"> ➤ Diagram(s) / Tool(s) of analysis that may not be well-labelled, may not be well-referred to and may not be drawn with precision (where appropriate). <ul style="list-style-type: none"> ○ <i>Relevant diagrams drawn but not well explained or clear explanation in absence of diagrammatical analysis.</i> ➤ Example(s). ➤ Logical structure.
<p>Low L2 9 - 11</p>	<p>For an answer that demonstrates knowledge and understanding but lacks application and analysis:</p> <ul style="list-style-type: none"> ➤ At least SUFFICIENT breadth that considers the following economic concepts in explaining multiple and balanced perspectives, viewpoints, relationships and factors. SOME points chosen should be of relevance and significance in answering the question. ➤ At least SUFFICIENT depth in economic analysis that reflects the following in SOME explanations. <ul style="list-style-type: none"> ✓ Accurate use of economic concepts, clear elaboration, and precise use of economic terminologies, language and phrasing. <p>The answer should also be supported by:</p> <ul style="list-style-type: none"> ➤ Diagram(s) / Tool(s) of analysis that may not be well-labelled, may not be well-referred to and may not be drawn with precision (where appropriate). ➤ Example(s). ➤ Logical structure.
<p>High L1 5 - 8</p>	<p>For an answer that demonstrates knowledge but lacks understanding, application and analysis:</p> <ul style="list-style-type: none"> ➤ INSUFFICIENT breadth that considers the following economic concept(s). Point(s) chosen may be of relevance but may not be of significance in answering the question. ➤ INSUFFICIENT depth in economic analysis that may reflect the following: <ul style="list-style-type: none"> ✓ Lack of accuracy in the use of economic concepts, lack of clarity in elaboration, and lack of precision in the use of economic terminologies, language and phrasing.
<p>Low L1 1 - 4</p>	<ul style="list-style-type: none"> ➤ Demonstrates POOR breadth and POOR economic analysis. ➤ Is irrelevant in analysis but may contain an introduction that addresses the question or contains no economic analysis but may contain a few statements that are relevant to the concepts required to answer the question. ➤ Contains fundamental conceptual errors in analysis.

Levels	Descriptors
E3 4 - 5	For an evaluation that contains <ul style="list-style-type: none"> ➤ A synthesis of earlier economic arguments to arrive at relevant judgements/decisions (i.e. answer the question). ➤ Well-explained criteria-based evaluative comments supported by accurate and clear analysis to provide fairness in views. ➤ A good summative conclusion.
E2 2 - 3	For an evaluation that contains <ul style="list-style-type: none"> ➤ Relevant judgement(s)/decision(s) (i.e. answer the question) that may not follow from earlier economic arguments. ➤ Criteria-based evaluative comment(s) supported by analysis to provide fairness in views but the comment(s) may not be well-explained, may be unclear and/or may be inaccurate at times.
E1 1	For an evaluation that contains <ul style="list-style-type: none"> ➤ Relevant but unexplained evaluative judgement(s)/statement(s) i.e. evaluative judgement(s)/statement(s) not supported by analysis or ➤ A relevant conclusion.

- Q5. Brazil's Gross Domestic Product (GDP) contracted by 3.6% in 2016 and this has led to calls from policy makers to use discretionary fiscal policy to stimulate the economy.**
- (a) **Explain why a government cannot rely solely on automatic stabilisers and instead uses discretionary fiscal policy to address the concerns of an economic recession. [10]**
- (b) **Discuss whether demand management policies are more important than supply side policies in attaining inclusive economic growth for an economy experiencing recession. [15]**

Suggested Answer Outline:

Introduction

- A recession is defined as two consecutive quarters of a fall in real GDP. During a period of economic recession, a country is facing concerns such as falling living standards and rise in cyclical unemployment

Body

Concerns of a recession

- A recession is caused by a fall in AD which can be due to a fall in any autonomous injections such as consumption, government expenditure, investment and net exports. This causes a fall in real national income. The fall in disposable income and purchasing power of households cause a decline in consumption of goods and services, leading to a lower material living standard.
- In addition, the fall in real output reduces the demand for labour, leading to higher cyclical unemployment.
- Moreover, consumers and investors may develop a pessimistic outlook of the economy, hence further reducing C and I respectively which lowers AD and real national output even further.

How automatic stabilisers work in an economy once in place

- Without any deliberate intervention from a government, automatic stabilisers would dampen the fall in AD automatically through tools such as progressive tax system and unemployment benefits.

Progressive tax system

- A country with a progressive tax system in place taxes the rich proportionately more than the poor. When incomes fall due to a recession, more of its citizens would fall into the lower income tax brackets by design and this implies that the fall in tax payments would be faster than the fall in income. Hence, this would lower the extent of fall in disposable income, leading to a smaller decline in consumption levels, AD decreases by a smaller extent and the effects of a recession is cushioned.

Unemployment benefits

- A government can give out unemployment benefits to their citizens when they lose their jobs. Given a recession, more citizens would be unemployed and they would be eligible to receive some form of unemployment benefits. The fall in disposable income is reduced with these transfer payments, leading to a smaller fall in consumption and AD, thus mitigating the recession.

Workings of discretionary Fiscal Policy with brief multiplier process explanation

- Given the inadequacies of the automatic stabilisers, the government is likely to engage in expansionary fiscal policy to stimulate its economy. The government could decide to spend more on building infrastructure projects, leading to increase in government expenditure.
- In addition, the government could reduce its personal income tax for its citizens which would raise the consumption of goods and services. Likewise, a fall in corporate income tax means higher post-tax profits for firms and lead to an increase in investment given more funds now to invest.
 - The combined increase in consumption, investment and government spending would increase AD and increase real national income.

Conclusion

- Automatic stabilisers can only smoothen the fluctuations in the economy and when these are too large, in the case of a recession, expansionary fiscal policy is more effective to bring the economy out of a recession due to the multiplier effect.

Marks Scheme:

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<p>L2 5 - 7</p>	<p>For an answer that demonstrates knowledge and understanding but lacks application and analysis:</p> <ul style="list-style-type: none"> ➤ At least GOOD breadth that considers the following economic concepts in explaining multiple and balanced perspectives, viewpoints, relationships and factors. MOST points chosen should be of relevance and significance in answering the question. ➤ At least GOOD depth in economic analysis that reflects the following in MOST explanations. ➤ Accurate use of economic concepts, clear elaboration, and precise use of economic terminologies, language and phrasing. <p>The answer should also be supported by:</p> <ul style="list-style-type: none"> ➤ Diagram(s) / Tool(s) of analysis that may not be well-labelled, may not be well-referred to and may not be drawn with precision (where appropriate). ➤ Example(s). ➤ Logical structure.
<p>High L1 3 - 4</p>	<p>For an answer that demonstrates knowledge but lacks understanding, application and analysis:</p> <ul style="list-style-type: none"> ✓ INSUFFICIENT breadth that considers the following economic concept(s). Point(s) chosen may be of relevance but may not be of significance in answering the question. ✓ INSUFFICIENT depth in economic analysis that may reflect the following: ✓ Lack of accuracy in the use of economic concepts, lack of clarity in elaboration, and lack of precision in the use of economic terminologies, language and phrasing.
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Part (b)**Introduction**

- A recession means there is a consecutive fall in real GDP for 2 quarters or more. The recession can be caused by either a fall in AD or a fall in SRAS. Inclusive economic growth is not attained and with a fall in living standards of a country's citizens, it is important for a government to intervene using relevant policies.

Body

Thesis: Demand management policies more important than supply side policies if recession is due to a fall in AD

Explanation of expansionary MP (Note: any alternative demand management policy like exchange rate and fiscal policy can be accepted)

- Demand management policies are more effective for a country facing a recession due to a fall in its AD. For example, a country like the USA can use expansionary monetary policy (MP). The central bank of USA can increase the money supply in its economy, hence decreasing interest rates.
- This reduces the cost of borrowing for firms and individuals, leading to an increase in I and C respectively. Since I and C are part of AD, this increases AD from, leading to an increase in real NY.

Limitations

- However, the effectiveness may be limited due to the MEI being interest inelastic.
- Expansionary monetary policy is unable to attain inclusive economic growth because although it increases real national income, it does not determine the distribution of this.
- Generally, demand management policies are more important than supply side policies as they target the lack of AD in an economy which supply side policies cannot do.

Alternative policy for thesis: Demand management policies more important than supply side policies if recession is caused by a fall in AD

Explanation of expansionary fiscal policy

- Another way of increasing AD during a recession is to use expansionary fiscal policy. A government can increase its development expenditure on public infrastructure projects and the construction of more hospitals and schools.
- The increase in government spending and consumption leads to increase in AD and a multiple increase in real national income via the multiplier effect which is based on the principle that expenditure creates income and income creates expenditure.

Limitations

- If the government is having a budget deficit and needs to finance its expenditure through borrowing, crowding out effect may occur.
- For any demand management policy, the effectiveness also depends on the multiplier size. A small multiplier limits the extent of increase in real NY when AD increases.

Anti-thesis: Supply side policies more important than demand management policies if recession is caused by fall in SRAS

Explanation of subsidies to mitigate recession caused by fall in SRAS

- If an economy is facing recession from a fall in SRAS, it is more pertinent to use SS policies. A fall in SRAS is caused by an increase in cost of production in an economy. This can lead to stagflation with rising prices and falling real output. If this is because of high oil prices in the global market, the government can consider giving subsidies to producers in the form of lower petrol prices at pump stations.
- In addition, this policy of giving fuel subsidies help to improve equity as a petrol cost takes up a larger proportion of income for lower income citizens as compared to higher income ones.

Limitations

- While giving fuel subsidies can help to reduce cost of production, this imposes a strain on the government budget. The increased subsidies incur an opportunity cost to the economy as it could have been spent on another area such as education.

Anti-thesis: Supply side policies more important than demand management policies if recession is caused by loss of comparative advantage

Explain incentives to restructure economy when the recession is caused by loss of comparative advantage for a trade reliant country

- If a trade reliant country experiences a fall in external demand due to a loss in its comparative advantage, supply side policies are more effective in addressing this than demand management policies.
- Supply side policies can be used to develop a new area of comparative advantage such as pharmaceutical industry. For example, the US government could give research and development grants to companies to encourage them to invest in this sector. This will lead to a fall in opportunity cost and this may be lower than its rival countries, hence developing a new comparative advantage.

Limitations

- Such projects usually take a long time to bear fruit, if any, due to the numerous iterations and tweaking that needs to be done after each experiment.

Evaluative conclusion

- In conclusion, demand management policies are generally more important than supply side policies if the root cause is a fall in AD while the reverse holds true if the root cause is a fall in SRAS.
- In reality, both demand management and supply side policies are used in combination to effectively address an economic recession in the short and long term due to the various strengths and limitations of each type of policy.

Marks Scheme

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Levels	Descriptors
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<p>E2 2 - 3</p>	<p>For an evaluation that contains</p> <ul style="list-style-type: none"> ➤ Relevant judgement(s)/decision(s) (i.e. answer the question) that may not follow from earlier economic arguments. ➤ Criteria-based evaluative comment(s) supported by analysis to provide fairness in views but the comment(s) may not be well-explained, may be unclear and/or may be inaccurate at times.
<p>E1 1</p>	<p>For an evaluation that contains</p> <ul style="list-style-type: none"> ➤ Relevant but unexplained evaluative judgement(s)/statement(s) i.e. evaluative judgement(s)/statement(s) not supported by analysis or ➤ A relevant conclusion.

- Q6. Evaluate the policies the Singapore government should adopt to improve global competitiveness in light of the potential conflicts with the achievement of macroeconomic goals. [25]**

Suggested Answer Outline:

Introduction

- Singapore is a small and open economy that is heavily dependent on trade, due to our small domestic market and lack of resources for production.
- Therefore, the Singapore government needs to focus on appropriate policies to continuously improve our global competitiveness to boost our economy through our export demand. This includes reducing the price and improving the quality of our exports.

Body

Policy 1a: Exchange Rate policy (Depreciation of Singapore dollar)

- In a severe recession, to improve our global competitiveness by keeping the prices of our exports low, Singapore should directly reduce the price of our exports in terms of foreign currency through a depreciation of the Singapore dollar.
- Hence a depreciation of the Singapore dollar during times of recession, will help boost our global competitiveness and increase our export demand which will boost our aggregate demand and actual economic growth.

Limitations of policy 1a: Conflict with macro goal of Price stability

- A depreciation of the Singapore dollar would lead to higher import prices in terms of Singapore dollars. This would hence increase the cost of production of many of our industries. This would lead to a fall in Short Run Aggregate Supply (SRAS) and a rise in General Price level and cost push inflation in the economy.

Choice of Policy 1b due to Conflict: Gradual and modest appreciation of Singapore dollar

- Therefore during times of economic growth, where price stability is likely to be one of the main priorities of the government, Singapore generally maintains a policy of a gradual and modest appreciation of the Singapore dollar.
- Hence this helps mitigate any imported price push inflation due to inflation in our trading partners and has kept the inflation rate in Singapore generally low.

Limitations of Policy 1b

- However, an appreciation of our currency leads to an increase in the price of our exports in terms of foreign currency. If Marshall-Lerner condition holds in the long run, IE. The sum of the absolute value of the price elasticity of demand of our exports and imports is greater than 1, (X-M) and aggregate demand will fall in the long run, reducing actual growth.

Policy 2a: Supply side policies to overcome potential conflict of inflation in LR and problems with overdependence on external demand and FDI through improving our domestic industries

- The only way to maintain our global competitiveness in the long run is through our supply side policies. This is largely done by the Singapore government through efforts to increase R and D as well as retraining of workers.
- Focusing on developing the capabilities and competitiveness of its own local producers in face of foreign competition helps local enterprises grow and develop their capabilities to compete in the world market.

Limitations of Policy 2a: - Conflict with Structural unemployment

- Efforts to develop our domestic industries and help them move up the value-added production chain, often leads to an increase in structural unemployment.

Policy 2b: Supply side-Retraining/ Skills development our workforce

- In order to prevent the conflict with structural unemployment and improve our labour productivity, the government also rolled out skills future, which enables all eligible Singaporeans to upgrade their

skills by giving them a \$500 grant to attend accredited skills related courses. This is especially important for Singapore, given that labour is practically our only natural resource available.

Policy 2a and 2b: Effectiveness

- These schemes help increase the productivity of the firms and help lower their per unit cost of production. This will then increase the production capacity of Singapore in the long run, as well as lower general price level of the economy as LRAS increases.
- These will then help us improve our global, as well as making our economy more attractive to FDIs.
- Therefore, supply side policies are key to Singapore's global competitiveness and attainment of its macroeconomic goals. In particular, in the long run, to ensure we can continue to sustain our competitiveness through the encouragement of investments.

Limitations of Policy 2a and 2b: Supply side policies

- The impact of most Supply side policies are only seen the long run. Hence, they will not be able to improve Singapore's global competitiveness in the short run.
- Also opportunity cost is incurred.

Due to limitations of Policy 1 and 2, also need FTAs to help boost export competitiveness

- The Singapore government has in recent times embarked on a policy of forging FTAs with many countries.
- The lack of trade barriers has hence helped boost our export competitiveness due to less taxes on our exports leading to relatively lower prices.
- Adopting a free trade policy without any import restrictions also enables us to avoid retaliation from other countries which will hurt Singapore's exports.

Use of FTAs to boost FDIs

- In addition, FTAs go beyond trade. They also help boost FDIs as there is more interconnected investments between countries. They are designed to support SG's business community in moving up the value-added ladder and knowledge chain and to achieve global competitiveness.

Anti-Thesis 2- Limitations of FTAs

- With Free Trade policy, Singapore firms will face increased competition; Singapore's FTA partners will also enter Singapore more easily than before. Service suppliers are more likely to feel the impact of foreign competition.

Evaluative Conclusion

- Being a small and open economy with a small domestic market and a lack of resources, Singapore is highly dependent on both exports and imports to drive its economic growth. With a small domestic market and our dependence on external demand and FDIs, it is crucial for the government to have sound policies to maintain our global competitiveness.
- In face of limitations from the policies adopted, it is thus crucial for Singapore government to use a mixture of long and short term policies, that target both increasing AD and AS to complement one another and help us overcome the potential conflicts and sustain the growth of our economy into the long term.

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	<ul style="list-style-type: none"> ✓ Example(s). ✓ Logical structure.
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