ECONOMICS   9732/01

Paper 1   **19 August 2016**

2 hours 15 minutes

Additional Materials: Writing Paper and Cover page

READ THESE INSTRUCTIONS FIRST

Write your name and class on all the work you hand in.
Write in dark blue or black pen on both sides of the paper.
You may use a soft pencil for any diagrams, graphs or rough working.
Do not use staples, paper clips, highlighters, glue or correction fluid/tape.

Answer **all** questions.

Begin each question on a fresh sheet of paper.

At the end of the examination, attach cover pages provided to **Case Study Q1 and Q2.**
Fasten all questions **separately** and securely.

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

Answer **all** questions

Question 1

Global Steel Woes

Table 1: Global Steel Production Geographical Distribution

	2004	**2014**
China	25.6%	49.4%
Japan	10.6%	6.6%
Other Asia	11.1%	12.2%
EU	19.0%	10.2%
NAFTA*	12.5%	7.2%
Other	21.1%	14.4%

* NAFTA refers the FTA signed between Canada, North America and Mexico to form a free trade region.

Source: *World Steels in Figures* 2015

Extract 1: Why the world has too much steel

The two giant furnaces at Port Talbot steelworks, Britain's biggest, were still hard at work this week, pouring out vast quantities of molten iron. But production of steel from iron ore here may soon come to an end. At the end of March, the plant's owner, Tata Steel, said that the operation was losing more than £1m ($1.45m) a day due to the low price of steel on global markets, and that it planned to sell off or close down its British operations as it could no longer shoulder the losses; bidders were given until May 3rd to state whether they were interested in buying it. Britain's steel industry is not the only one in the West feeling the pinch from the collapse of global steel price. Both Belgium and Italy are spending public money to keep their steel mills open and the American industry there has been announcing a steady flow of job losses.

Between 2000 and 2014, global production doubled from around 800m tonnes to around 1.6 billion tonnes a year. Until 2014, Chinese demand rose at approximately the same rate as its steel mills could produce, meaning that the impact on the rest of the world was limited. But as its construction boom came to an end, demand sagged, prompting the country's state-owned steelmakers to sell their growing surpluses on foreign markets. Exports of steel from China increased from 45m tonnes in 2014 to 97m tonnes last year—marking a bigger rise than Germany's entire output of the past year: 43m tonnes. This has triggered demands from rival firms for protection.

Many economists argue that government subsidies are responsible for the overcapacity in the industry lasting so long. The flood of Chinese steel around the world should have caused high-cost producers elsewhere to extinguish their blast furnaces, eventually allowing supply and demand to reach a new equilibirum. But because steel is often seen as a strategic industry, providing lots of jobs in areas where there are few other employers, governments are usually keen on propping them up, either through subsidies or nationalisation.

Rising steel prices in America and Europe since January have raised hopes that plants such as Port Talbot may soon be able to break even without any government assistance. But many commodities and metals analysts predict this will simply encourage Chinese plants to increase

production again, causing more overcapacity and lowering prices again later this year. Last month the OECD, a club of rich countries, convened a bunch of ministers in Belgium to discuss measures to deal with the crisis. But until countries stop subsidising their plants, or imposing tariffs to artificially raise prices, progress towards ending the steel glut will be slow.

Source: The Economist, 4th May 2016

Extract 2: Tata's Effort to seek a way out of UK Steel Woes

Tata Steel is in talks with its rival ThyssenKrupp about merging their European operations in a deal that appears to give a stay of execution to the stricken Port Talbot steelworks. The Indian conglomerate said on Friday evening that it was exploring a joint venture with its German competitor that would include a large part of its troubled UK arm.

The proposal offers a glimmer of hope to the 11,000 workers at the collection of British factories, which had experienced years of losses, but the announcement does not dispel the cloud of uncertainty that has been hanging over the business. Koushik Chatterjee, group executive director at Tata Steel, said the discussions could lead to the creation of a "premium, world-class strip steel business" and it is too early to give any assurances about the success of these talks. Any deal could lead to massive restructuring to streamline the production lines and management offices as part of an attempt to find further cost savings in the business.

Although the possible joint venture was "encouraging" and the government will continue to work closely with Tata to find a long-term solution for sustainable blast furnace steel manufacturing in Port Talbot. However, there are also calls for the UK government to nationalise the entire business temporarily.
Source: The Financial Times, 8th July 2016

Source: The Financial Times, 7th July 2016

Extract 3: China's increased effort to curb pollution

Steel producers in top market China may face more shutdowns next year as the government steps up its fight against air pollution, although recent closures in the Hebei province have been restricted to the key producing region for now, sources said. Hebei produces about a quarter of China's crude steel output, which hit a record 716.5 million tonnes last year and is forecast to rise to 780 million this year. But output may suffer next year as China aggressively enforces more pollution control measures and focuses on industries like steel where there is an estimated overcapacity of around 200 million tonnes.

Last week's order to shut some facilities in Wu'an city in southern Hebei to curb power use had stoked steel output worries, pushing Shanghai rebar futures to 11-week highs. But prices have come off almost 2 percent since then on expectations the closures will last for only about 15 days.

"This temporary shutdown should not have any significant impact on steel output this month but we are afraid that Beijing might take more measures targeting steel mills next year to ease air pollution," said an official with a steel mill in Wu'an.

"The government can't just shut down everything as this will cause social instability and high unemployment rate, but they will do it step by step, and it's a gradual, long-term process."

China's large steel mills had only seen an average profit margin at 2.99 percent for the first three quarters of this year, far lower than the average 6-7 percent margin for the whole manufacturing industry, according to state-owned media Xinhua, citing the China Iron and Steel Association.

If China follows through in closing mills that fail to meet pollution control standards and regularly inspects the approved ones, it could mark a "turning point" in both the enforcement of environmental standards as well as management of overcapacity, Citigroup analyst Ivan Szpakowski said. So far closures have mostly been in Wu'an, which has an annual capacity of around 40-50 million tonnes, where mills have started shutting down rolling lines and brought forward annual maintenance on blast furnaces since last week.

Source: Reuter, 13 Dec 2013

Questions

a) Suggest **one** possible reason for the change in geographical distribution of crude steel production between 2004 and 2014. [2]

b) Account for "the collapse of global steel prices". [6]

c) Explain why that the rise in China steel export "triggered demands from rival firms for protection" as mentioned in extract 1. [2]

d) (i) Explain how the merger between Tata and ThyssenKrupp brings about "further cost-saving" to the firms. [2]

   (ii) Assess whether nationalisation will be effective in aiding the UK steel firms in surviving the steel crisis. [8]

e) Discuss the factors that will determine whether China should extend the mandatory "shut-down" beyond Wu' an, Hebei Province. [10]

[Total: 30 marks]

Question 2

Currency War

Figure 1: US Dollar to Chinese Renminbi Yuan (CNY) in 2014

min = 6.04088 (Jan 14)   avg = 6.1617   max = 6.25956 (May 02)
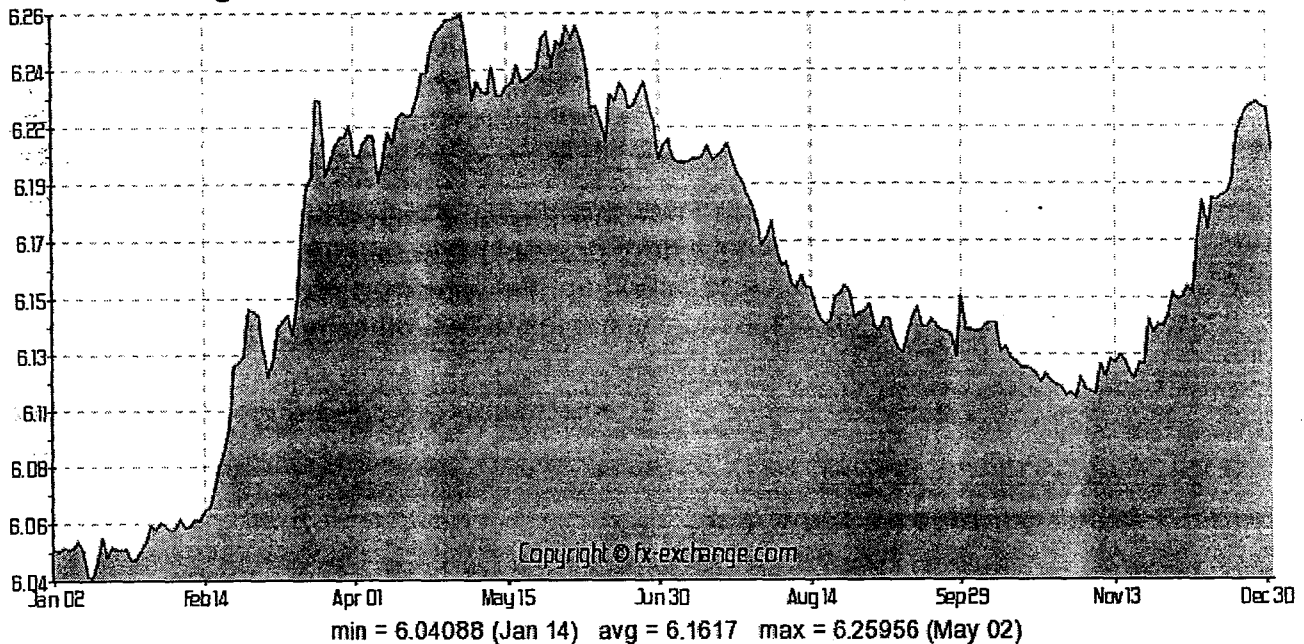
Source: *fx Currency Exchange*

Extract 4: Yuan depreciation poses risk to Chinese economy

A weaker yuan was once one of the magic pills for China's economic boom. It was considered such an effective stimulus to Chinese exports. Some still argue that the Yuan, after years of appreciation, is still undervalued. The central bank, People's Bank of China (PBOC) initiated its campaign to tighten liquidity and raise interest rates last year, hot money flowed into China, which built up the market's one-way yuan appreciation sentiment. By sending the speculators a message that the yuan can depreciate, as well as the recent lowering of short-term interest rates, PBOC has tried to stem the inflow of hot money.

Adapted from *Globalrisk Insights*, 6 March 2014

Extract 5: US warns China after Yuan depreciation

The US has warned Beijing not to go back to manipulating its currency, following a sharp depreciation of the Yuan since the start of 2014. The US comments highlight concern in Washington that China will be tempted to respond to a slowing economy by holding down its currency in order to boost exports. Such moves could lead China to reduce global demand at a time when several other regions of the world, such as the eurozone, are weak. That in turn could hamper US growth. The Obama administration thinks that moving away from exports, via a more fairly valued currency, is in China's own interests and has generally sought to avoid pushing too hard. "To secure its own long-term growth and contribute more to global growth, China needs to shift to a growth model that relies more on consumption and less on investment and exports," said the Treasury official.

Adapted from *Financial Times*, 8 April 2014

Extract 6: Chinese targets to boost foreign trade

In response to a recent slump in foreign trade, China's State Council has announced a swath of new export tax measures, including plans to improve the country's export tax rebate system and simplify the application process for claiming rebates. In a similar move, export VAT refunds were recently extended to foreign trade comprehensive service providers—defined as foreign trade enterprises who provide export-related services for domestic SMEs in the manufacturing industry. Both measures show the Chinese government's concern with maintaining strong growth in foreign trade (especially as a means to maintain the employment rate).

Meanwhile, domestic companies received new incentives to import advanced technology and engage in outward investment for business development purposes. The announcement further called upon the Ministry of Commerce to speed up the implementation of China's free trade agreements and actively support domestic companies in anti-dumping and anti-subsidy trade suits.

Adapted from *China Briefing*, 21 May 2014

Extract 7: Why countries wage currency war

The U.S. dollar has been on a tear this year, rising against the currencies of virtually all major developed economies. What we're seeing around the world is intense -- and in some cases, deliberate -- devaluations. One reason for the devaluations is that, when economic growth is weak -- as it has been globally for five years -- governments feel tremendous pressure to increase exports and reduce imports to restore growth.

The European Central Bank, for example, wants to depress the euro to keep deflation at bay. The euro's earlier strength drove down import prices, forcing domestic producers who compete with imports to slash their prices. As a result, consumer price inflation moved steadily toward zero. It was a mere 0.4 percent in October versus a year earlier. The euro-zone economy remains stagnant, with a third recession since 2007 a possibility. Unemployment is high. Youth unemployment tops 25 percent in many countries; it exceeds 50 percent in Spain and Greece. Meanwhile, consumer sentiment, which never recovered from the last recession, is again dropping.

On the other side of the globe, Japanese Prime Minister Shinzo Abe is curbing deflation and reviving the economy. The use of monetary easing and yen-cheapening is to spur exports, retard imports and reverse the growing foreign-trade deficit. Fiscal stimulus, is difficult to carry off in view of Japan's already high government deficit and debt. Still, the Abe government is discussing some less-disruptive structural reforms that could raise Japan's growth potential. A cut in the top corporate tax rate to below 30 percent from above 35 percent, in line with the 29 percent average among developed nations, is one possibility. Also under consideration are "special economic zones" that would give companies the freedom to cut the red tape that constrains everything from hiring and firing to land ownership and management.

Adapted from *The Bloomberg*, 23rd November 2014

Extract 8: China is preparing for a currency war

The idea that central banks in China, Japan, the US and the eurozone have deliberately attempted to devalue their currencies to improve competitiveness has since taken hold. Many others, however, insist currency wars remain very much alive and thriving, to the detriment of investors and savers in emerging and developed markets. Investors are bracing for further surprising, unwanted monetary policy shifts in the belief that volatile markets since the start of the year are likely to encourage central bankers to employ protectionist tactics.

Some are sceptical about whether the ceasefire will last. David Riley, head of credit strategy at BlueBay Asset Management, the London-based hedge fund company, says: "Markets have decided that, by accident or design, there is a ceasefire in the global currency war. Currency wars leads to "protectionism and trade barriers which will be detrimental to global trade and economic activity", says Abi Oladimeji, head of investment at Thomas Miller Investment, the London-based wealth manager. "This in turn will undermine investor confidence and result in higher volatility. "So long as the global economy stays gloom, the temptation to adopt 'beggar-thy-neighbour' policies will persist."

Adapted from *The Financial Times*, 3rd April 2016

Questions

(a) **(i)** From Figure 1, describe the change in the external value of Chinese Yuan in 2014. [1]

     (ii) With the help of a diagram, explain a possible reason for the change in the external value of Chinese Yuan. [3]

(b) Explain how People's Bank of China tried to stem the inflow of hot money. [2]

(c) Using an elasticity of demand concept, explain how China reduces global demand as mentioned in extract 5. [3]

(d) Using extract 6, discuss the effectiveness of measures adopted by China to improve export competitiveness. [8]

(e) Explain why governments aim to curb deflation identified in extract 7. [3]

(f) In view of the problems faced by different economies, assess whether, on balance, currency war can ever be justified. [10]

[Total: 30 marks]

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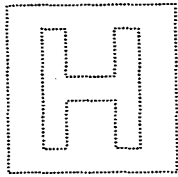
ECONOMICS

9732/02

Paper 2: Essay Questions

23 August 2016

2 hours 15 minutes

Additional Materials:　　　　Writing Paper and Cover Page

READ THESE INSTRUCTIONS FIRST

Write your name and class on all the work you hand in.
Write in dark blue or black pen on both sides of the paper.
You may use a soft pencil for any diagrams, graphs or rough working.
Do not use staples, paper clips, highlighters, glue or correction fluid/tape.

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.

Begin each question on a fresh sheet of paper.

At the end of the examination, attach cover pages provided to **Section A and Section B Essay.**

Fasten all sections **separately** and securely.

At the end of the examination, fasten all your work securely together.
The number of marks is given in brackets [ ] at the end of each question or part question.
You are advised to spend several minutes reading through the data before you begin writing your answers.

You are reminded of the need for good English and clear presentation in your answers.

Answer **three** questions in total.

Section A

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

1   Oil prices fell sharply in the second half of 2014 amidst slow global economic growth.

Discuss the relative importance of factors influencing consumers' expenditure in   **[25]**
air travel.

2

Universal Studio Singapore Ticket Pricing	
Ticket Type	One Day Pass
Adult (Ages 13 to 59)	S$74
Child (Ages 4 to 12)	S$56
Senior (Ages 60 and above)	S$36

   (a)   Explain how the above pricing decision could be an example of price   **[10]**
   discrimination.

   (b)   Discuss whether price discrimination will always improve society's welfare.   **[15]**

3   'The market should be left alone as government intervention results in greater   **[25]**
inefficiency.' Discuss.

Section B

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

4   Chinese consumption decreased from 51% of Gross Domestic Product in 1985 to 43% in 1995, 38% in 2005, and 34% in 2013. By comparison, consumption is around 61% in Japan and 69% in the United States. Regardless of its relative percentage of GDP, China's consumption has been growing faster than any other economy's in absolute terms.

   (a) Explain whether the size of national income multiplier is the main **[10]** determinant in influencing the change in national income of an economy.

   (b) Discuss whether raising domestic consumption as percentage of GDP is **[15]** the best approach to achieve sustainable economic growth.

5   The slow economic recovery from world-wide financial crisis has caused emerging countries which exports commodities to suffer from currency depreciation and unsustainable balance of payment deficit. Growth of advanced economies is affected by the lower growth in commodities exporters and productivity growth remains weak. Amid slowing international trade growth, countries have turned to mega-regional trade agreements like Transpacific Partnership (TTP) and Transatlantic Trade and Investment Partnership (TTIP).

   Explain the likely causes of balance of payment deficit and discuss the **[25]** alternative policy approaches that are appropriate for a country to achieve healthy balance of payment amidst slow economic recovery.

6   **(a)** Explain the factors that changes Singapore's trade pattern. **[10]**

   (b) Discuss the view that globalisation will always improve a country's **[15]** standard of living.

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Question 1: Global Steel Woes

Case Q1 Suggested Answers

a)	Suggest **one** possible reason for the change in geographical distribution of crude steel production between 2004 and 2014.	[2]
	Identify the change (1 mark): Increase in China and Other Asia countries **share of global crude steel production / geographical distribution of crude steel production** while there is a fall in other countries share of global crude steel production	
	Explain the reason (1 mark): The China/other Asia countries has comparative advantage in crude steel production due to their relatively cheaper labour cost hence increasing level of production, hence attracting more steel manufacturing firm to relocate to China and Other Asia. (can also accept: possible relatively higher subsidy provided by Chinese govt than that of EU and Japan/increase construction and manufacturing activities in China than EU and Japan)	
	Marker's comment: Many students mistaken that the production level of steel by a countries is the geographical distribution of crude steel production. Many students gave subsidy by Chinese govt as the cited reason from the extract but extract mentioned subsidy by countries hence need to look at the relatively level of subsidy given to explain for why china might increase production more that the othe countries.	
b)	Account for "the collapse of global steel prices".	[6]
	DD – slowdown of world economy and end of China's construction boom → steel is FOP for construction and production of many manufactured goods such as cars and machineries → fall in dd for steel. PES is elastic due the high level of stock/short production time → fall in price less than proportionate to the fall in qty.	
	SS – Government subsidy → lower COP of steel production → increase in SS. PED is inelastic due basic necessity as a FOP for production of many manufactured goods → fall in price more than proportionate to increase in qty → result significant fall in price of steel	
	Combined Shift → fall in DD and increase in SS → resulted in the surplus at original price → downward price pressure → fall in price. With fall in DD and increase in SS, reinforce the fall in price → collapse of steel price.	
	Only DD and SS factor (with combined shift) – cap at 4 One sided with price elasticity – cap 3 If no adjustment process – max 5	
	Markers' comment: Students have mistaken that the increase in China export of steel will increase the global supply. Most students tend to state or cite the evidence of DD and SS from the extract but failed to explain how they affect the DD & SS. Most students failed to recognised that the collapse of price refers to a significant fall in price and hence did not bring in PED and PES in the explanation as well as combined effect of a fall in DD and rising SS on the price.	

c)	Explain why that the rising in China steel export "triggered demands from rival firms for protection" as mentioned in extract 1.	[2]
	The increase in China steel export → **consumers will switch to relatively cheaper China Steel → fall in demand of steel from European or Japan's steel** (1 mark) → European or Japan steel producers will face **a fall in their TR and hence experience subnormal profit** (1 mark)→ need government to protect.	
	Marker's comment Most students answer this question from the perspective of a government and not a producers hence bring unemployment and infant/sunset industries as the reason. Many students have also generalised that increase China steel as an act of dumping which was not accepted.	
d)	i) Explain how the merger between Tata and ThyssenKrupp brings about "further cost-saving".	[2]
	The merger able to reap **Economies of scales such as Managerial EOS due to their increase production level** (1 mark) → streamline the production process and management offices like Finance Dept or Human resource dept (as in extract 2) → **less specialised workers will be required and the wage of these specialised workers will be spread over a larger output → average cost fall → cost-saving** (1mark on the explanation)	
	Marker's comment: Most students have failed to link the increase the ability to reap EOS is due to the increase production level and merely listed the type of EOS without explanation on how the ave cost . Many provided EOS without the evidence from case.	
	ii) Assess whether nationalisation will be effective in aiding the UK steel firms in surviving their steel crisis.	[8]
	Intro: Briefly explain UK steel crisis: - Losing competitiveness against the relatively cheaper China steel → fall in demand for UK steel - Falling global price of steel & fall in demand → fall in revenue → insufficient to cover cost of production → subnormal profit → shut down of steel firms → retrenchment of steel workers Thesis: Nationalisation can effectively aid UK firms - Define: Nationalisation is the process whereby the government take over the ownership of the firms in the industry and have direct control on the operation of the firms. - With Nationalisation, the government will be able to provide the fund needed to cover the subnormal profit and allow the firms to continue production of the steels → prevent the retrenchment of steel workers. - In addition, the nationalised firms can be merged and they will be able to reap more EOS, the cost-saving allows the firms to price their steels at a competitive price level so as to better compete with foreign steel producers and re-capture some of the global demand → which will increase their revenue → reducing the sub-normal profit in the LR. Anti-thesis: Nationalisation → firms to be complacent due to the government protection and govt objective is to not profit-maximising → remove the incentive for the firms to R&D or to	

seek for more cost-efficient method of production → more productive and dynamic inefficient firms → unable to regain its competitiveness against foreign steel producers → inability to re-capture the global market share. However, this is dependent on the

Nationalisation unable to resolve the problem of low global price due to over-production of steels in the world. Since EU is not the significant producer in the global market (10.9% in 2014), even if UK government reduce the amount of steel production after nationalisation → will not be able to increase the global price. In addition, it is fear that China (world's biggest steel producer of 49%) will take the opportunity to increase their steel supply in the world and hence resulting to the global price remain relatively low → worsen the profit position of UK steel producers.

Conclusion:
Effective in the SR – able to help firms cover the subnormal profit in the SR so as to prevent the shutdown of the steel firms and retrenchment of steel workers but not effective in the LR as the UK government has huge public debt, not sustainable for government to provide the support if the global price don't increase. In addition, might promote inefficiency → greater lost of competitiveness.

Level	Descriptors	Marks
L2	Balanced response and detailed analysis on the effectiveness and limitation of the Nationalisation in helping the UK steel firms cover cost, increase revenue or re-gain competitiveness	4-6
L1	One-sided or descriptive or limited explanation on the effectiveness and limitation of the Nationalisation in helping the UK steel firms cover cost, increase revenue or re-gain competitiveness	1-3
E2	Sound judgment with analysis	2
E1	Judgment without analysis	1

Marker's comment:
Many students have mistakenly took nationalisation as subsidy, hence provide an incorrect analysis based on subsidy. Most answers were descriptive.

e) Discuss the factors that will determine whether China should extend the mandatory "shut-down" beyond Wu Han, Hebei Provience. [10]

Benefit:
1) Ablility to reduce pollution
   Production of steel → negative externality in production such as pollution → increase healthcare cost in China. The shut down of steel factory → fall in the production of steel → reduce emission of the carbon → improve non-material SOL.

   Anti-thesis for pt 1): Other policies like pollution control regulation can also reduce the pollution level. More stringent pollution control regulation (extract 3) → increase in cost to steel producers → force them to internalise the 'cost' of pollution. Hence may not need to further shutdown the more steel mill beyond Wu An.

Evaluation for pt 1): Given that China has a large manufacturing sector and is also producing many other primary commodities, the steel industry may not be only major polluting industry → hence a further shutdown of steel mill beyond Wu An may not significantly reduce pollution in China.

2) Reduce problem of over-capacity in steel industry
    a) lower steel production → Given that China contribute 54% (Table 1) → greatly reduce global supply of steel → allow global steel price to increase → given that demand is steel is relatively price inelastic → increase export revenue for China → improve BOP & increase profit for China steel producers
    b) reduce wastage of resources → can relocate the resources to the production of other goods and services

Cost:
1) Increase unemployment & lower SOL for steel industry workers
    Further Shutdown beyond Wu An → lose of job opportunity in the steel industry → increase cyclical unemployment → fall household income of steel workers → material SOL fall.
2) Further Shutdown beyond Wu An → Fall in export qty of steel → AD fall → fall in NY
3) As mentioned, with the further shutdown of steel mills → price of steel to increase → Higher COP for China's manufacturing producers in → cost-push inflation

Conclusion:
China Govt needs to weigh the cost and benefit → margin cost > margin benefit for shutting another steel mill beyond Wu An → should not extent the mandatory shut-down

Level	Description	Marks
3	Balanced discussion and detailed analysis on extent of costs and benefits that China will experience to decide whether to should extend the mandatory "shut-down"	6-8
2	Undeveloped analysis on costs and benefits that China will experience to decide whether to should extend the mandatory "shut-down One-sided detailed – cap 4 marks	4-5
1	Merely lifting of evidence with/or descriptive analysis on costs and benefits that China will experience to decide whether to should extend the mandatory "shut-dow	1-3
Level	Evaluation	Marks
E2	Well-justified evaluation	2
E1	Some attempt to evaluate but may not be supported by sound economic reasoning	1

| | | Markers' comment:
Most answers anchored their answer on "pollution/externality" incorrectly as they have on the how steel industry have created the pollution and market failure, rather than focusing on how the shut-down can resolve the problem of "pollution/externality". Most student merely lifted out the "unemployment and social unrest" from the extract without explanation. Some have mistaken that the unemployment that arises is structural unemployment. Many failed to consider the extent cost or benefit that will arise from the action of "extending the shutdown". | |

Suggested Answers for 2016 IJC Prelim Case 2

(a)	(i)	From Figure 1, identify the exchange rate of Chinese Yuan in January 2014 and December 2014. - Currency has depreciated. [1] **Examiner's Comment:** The diagram was misinterpreted by a handful of candidates.	[1]
	(ii)	With the help of a diagram, explain a possible reason for the change in Chinese Yuan. DD or SS shifting Reason: Extract 2, slowing EU and US economy, decreasing demand for imported goods and services, decrease in demand for Yuan [1] OR Government Manipulation of currency, increase Mss [1] Graphical Analysis with right diagram [2] **Examiner's Comment:** Candidates did not show understanding of what diagram to draw, ended up with an AD/AS graph which does not help explain the change in the value of Chinese Yuan	[3]
(b)		Explain how People's Bank of China tried to stem the inflow of hot money. Lowered interest rate and depreciation Lower rates of return [1] in terms of foreign currency [1] **Examiner's Comment:** Candidates failed to identify both components or did not explain.	[2]
(c)		Using an elasticity of demand concept, explain how China reduces global demand as mentioned in extract 5. Depreciation of Chinese Yuan Decreases the global demand for g&s for other exporting countries - Due to close Substitutes XED [1] - Lowered prices of Chinese exports [1] - Decrease in demand for other economy's G&S [1] OR Decreases the global demand for other economies - By Marshall Lerner's Condition, sum of price elasticity of demand for imports and exports is more than 1 [1] - Depreciation leads to an increase in net export in China [1] - Interconnectedness between world trade would therefore meant that the other economies would suffer from a net export deficit [1]	[3]

	Examiner's Comment: Candidates did not make use of elasticity concepts in the explanation or used the wrong concept in explaining.	

(c)	Using extract 6, discuss the effectiveness of measures to improve export competitiveness in China.	[8]

Tax Rebates

Extract 3: Improvement of the country's export tax rebate system and simplify the application process for claiming rebates. In a similar move, export VAT refunds were <u>recently extended</u> to foreign trade comprehensive service providers—defined as foreign trade enterprises who provide export-related services for domestic SMEs in the manufacturing industry.

Economic Analysis: The improvement of the tax rebates system and the simplification of the process makes it more accessible and easier for producers to claim tax rebates. In addition, the extension to service providers meant that more exporters will be able to benefit from the tax rebates.

Tax rebates reduces the amount of taxes that the producers have to pay and with the extension to the service providers affecting a wider group of export providers, tax rebates would reduce the prices of exports. This allows China's exports to be more competitive in terms of its pricing for most of the exported goods and services.

Effectiveness: Dependent on whether the producers pass on the cost savings & the cross elasticity of demand for the good. Furthermore, if the demand for the good is already lower due to taste and preference, the lowering of the prices would be insignificant in increasing the competitiveness of the exports.

Incentives for R&D

Extract 3: Domestic companies received new incentives to import advanced technology and engage in outward investment for business development purposes

Economic Analysis: Increased ability to import advanced technology could lead to the production of better quality goods and services with at a lower price. Better quality exports will meet the taste and preference of the consumers increasing the non- price competitiveness of the exports in addition to the increasing price competitiveness when the producers pass on cost savings from cheaper production process.

Effectiveness: Dependent on whether the technological readiness of the Chinese economy is sufficient to fully utilize the advanced technology imported. Without the skilled labour to tap on the new technology it will be like a white elephant.

FTA

Extract 3: Ministry of Commerce to speed up the implementation of China's free trade agreements and actively support domestic companies in anti-dumping and anti-subsidy trade suits.

Economic Analysis: Signing of free trade agreements increases accessibility to new economies at a lowered tax rate. It allows for an increased consumer base which increases export demand for China's exports and it will be at a lowered price level with the reduced trade barriers therefore enhancing the export competitiveness of the exports.

Effectiveness: China has been frequently commented on dumping and excessively subsidising their firms bringing about unfair competition in the international market. Although the signing of FTA could have taken place, countries would still impose protectionism against some products that were suspected of dumping.

Conclusion:
Tax rebates seemed like the most effective policy in the short run where the response on the fall in prices is most significant and immediate.
On the other hand, for a long term effectiveness of sustaining export competitiveness, subsidies would be more desirable. Especially with its ability to improve on both price and non-price competitiveness, if China is able to effectively utilise the new technology, subsidies would be a more effective approach.
FTAs would be an effective approach in consideration of the potential increase in the size of the consumer market China could have access into, where its competition can increase across the different economies. The influence and impact of the increased competitiveness is beyond the current economies.

Levels	Descriptors	Marks
3	Explanation of at least 2 measures that relates to rise in export competitiveness in China with reference to the extract. Clear attempts to compare the effectiveness with a judgement on which measure is most effective.	7- 8
2	Explanation of at least 2 measures that relates to rise in export competitiveness in China with reference to the extract. Some attempts to compare the effectiveness. Max 4: No reference to extract	4- 6
1	1 sided analysis without comparison or a brief explanation of 2 measures without relating to the rise in export competitiveness with reference to China. Answer failed to consider measure recommended by the extracts.	1- 3

Examiner's Comment:
Candidates did not anchor and answer what was most effective. Policies mentioned often lacks economic analysis and were highly descriptive.

(d)	Explain why governments target to curb deflation identified in extract 7. Consequences of deflation: -Expectation of lowered prices [1] - postpone current consumption and investments & fall in AD [1] - Decrease in actual economic growth/ employment [1] **Examiner's Comment:** Candidates explained the causes of deflation and did not recognise the question requires discussion about the consequences.	[3]
(e)	In view of the problems faced by different economies, assess whether, on balance, currency war can ever be justified. Justifiable: Devaluation-> Enhances Economic Growth, employment, deflation *** Use AD/AS expain how it can achieve the different macroeconomic goals Extract 4: US, EU & Japan trying to revive their current growth Economic Analysis: - Fall in external value of currency - Price of exports relatively cheaper in terms of foreign currency - Price of imports relatively more expensive in terms of domestic currency - Given that price elasticity of demand for exports is usually elastic due to availability of substitutes from international trade, Marshall Lerner's condition is satisfied. - Increase in net export	[10]

- Increase in AD and RNY, achieving actual economic growth.

Extract 4: Unemployment is high. Youth unemployment tops 25 percent in many countries; it exceeds 50 percent in Spain and Greece.
- Increase in output
- Increase in demand for factor input (Labour)
- Especially in cases of labour intensive economies
- Increase employment

Extract 4: Deflation is an issue in Japan and EU
- Increase in AD to increase GPL of the economy
- Higher prices of imports could bring about a higher price of imported raw materials
- Upward shift of SRAS to increase GPL
- Reduction of deflation in the economies

Not justifiable:
Persistent devaluation of currency, deems devaluation ineffective

Consistent devaluation might increase interest rates in the long run
Extract 5: Currency wars remain very much alive and thriving, to the detriment of investors and savers in emerging and developed markets. Investors are bracing for further surprising, unwanted monetary policy shifts in the belief that volatile markets since the start of the year are likely to encourage central bankers to employ protectionist tactics.
Economic Analysis: Devaluation of money would increase the GPL of the economy which would reduce the real interest rates from savings discouraging savers. The decrease in money supply available for loanable fund would increase interest rate eventually increasing the cost of borrowing, decreasing investments and consumption of big ticket items. Furthermore, with the banks worried about the volatility of markets and less willing to loan, they would increase the requirements for loaning or increase the interest rates therefore further dampening investments and consumption.

Beggar thy neighbour
Extract 5: This in turn will undermine investor confidence and result in higher volatility. "So long as the global economy stays gloom, the temptation to adopt 'beggar-thy-neighbour' policies will persist."
Economic Analysis: The persistent devaluation of currency will eventually lead to undervaluation of currencies across economies. Even though the devaluation of the currency brings about an increase in net export, a surplus in trade balance in one economy is created from the deficit in the trade balance for other economies. In the long run, a persistent trade deficit from trading partners due to currency war would lead not be sustainable and economies might eventually lead to a fall in net export and experience a slowdown in actual economic growth via the decrease in AD.

Conclusion:
A devaluation is justifiable for economies that is export dependent and requires to increase export competitiveness to drive economic growth, employment or even the reduction of deflation. However, the justification is only for devaluation and in the short run. In the long run, persistent devaluation across economies lead to a currency war which would eventually offset the benefits of the devaluation, therefore not justifiable.

The justification of currency war is dependent on the types of economies, it would be justifiable for small economies like Singapore or Hong Kong that is highly dependent on trade to drive economic growth. However, for large economies like USA, UK and Japan

that has a relatively larger domestic market, it would not be justifiable to engage in devaluation and eventually a currency war. They could focus and develop their domestic market instead.

Lastly whether the currency war is justifiable is also dependent on the key problem the economy is facing. If the root cause of the problem stems from net export, it would be justifiable. However, if the main problem faced by the economy is due to domestic factors, other policies that targets internal factors might be more relevant.

Level	Descriptor	Marks
2	A 2 sided analysis showing the effects of currency war and justifying the devaluation of currency in consideration of the different problems faced by different economies. Max 5m: Without consideration of problems faced by different economies.	5- 8
1	A brief 2 sided analysis showing the effects of currency war and without justifying the devaluation of currency in consideration of the different problems faced by different economies. Or A 1 sided analysis showing the effects of currency war and justifying the devaluation of currency in consideration of the different problems faced by different economies.	1- 4

Level	Descriptor	Marks
2	Justification of the currency war with clear explanation using different context with provision of judgement.	2
1	Attempts to justify currency war without supporting statements	1

Examiner's Comment:
Some candidates were unable to accurately explain Marshall Lerner's Condition in the explanation of currency war while some did not even explain how the currency war could lead to different consequences. Many failed to address the problems faced by different economies and could not make use of the extract to justify the currency war.

[Total: 30 marks]

H2 Economics Preliminary Examination 2016

Paper 2/ Essay Question 1

Oil prices fell sharply in the second half of 2014 amidst slow global economic growth.

Discuss the relative importance of factors influencing consumers' expenditure in air travel. [25]

Question Analysis:

Command Word	Concept Word	Context Word	Comparative word
'Discuss' Examine closely taking account of strengths and weaknesses in an argument, offer reasons for and against	'consumers' expenditure' refers to P x Q	'air travel' market	'relative importance' Weighing relative importance of DD & SS factors

Approach

- Using demand & supply & elasticity concepts, explain the factors that influence consumers' expenditure
- Discuss the relative importance of factors influencing consumers' expenditure
- Judgement – Weighing relative importance of DD & SS factors

Suggested Answer:

Introduction:

Air travel provides economic benefits not just for its passengers, but also for the wider economy by connecting businesses and individuals to global markets. The demand for air travel is sensitive to changes in air travel prices and incomes. However, the degree of sensitivity (i.e. its demand elasticity) will vary according to different situations.

Part I: Explain in total at least 3 demand & supply factors influencing consumers' expenditure

Demand factors

- **Slow global economic growth → ↑ in DD [must explain]**

- Internet increasing price transparency → ↑ in DD [optional]

The above 2 demand factors lead to reinforcing effect on both equilibrium price & equilibrium quantity of air travel.
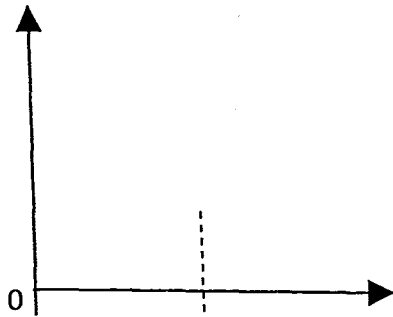
Price

Figure 1: Rise in demand & supply of Air Travel Market

Supply factors
- **Fall in oil prices → fall in cost of production → ↑ in supply [must explain]**
- National aviation tax imposed by governments [optional] [preferred]
  → rise in cost of production → ↓ in supply
  Can explain the offsetting effect of the above 2 supply factors on equilibrium price & equilibrium quantity.
- No frill carriers increasing competition → ↑ in supply [optional]

Discuss the relative importance of the above demand & supply factors
- the net impact on equilibrium price and quantity (Q ↑, P is indeterminate) &
- thus, the changes of consumers' expenditure on air travel
- Preferred outcome: ↑DD > ↑SS → ↑P, ↑Q → ↑ consumers' expenditure

Part II: Price & income elasticity of demand are important factors that influence consumers' expenditure on air travel
Demand elasticities measure the change in the quantity demanded of a particular good or service as a result of changes to other economic variables, such as its own price, income levels and the price of competing or complementary goods and services.

Price elasticity of demand
Goods with elasticities less than one in absolute value are commonly referred to as having price inelastic or price insensitive demand. In other words, the proportional change in quantity demanded will be less than the proportional change in price. In this situation, increasing the price will increase the expenditure incurred by the consumer, since the expenditure lost by the decrease in quantity is less than the expenditure gained from the higher price.

Goods with elasticities greater than one in absolute value are referred to as having price elastic or price sensitive demand. In other words, the proportional change in quantity demanded will be greater than the proportional change in price. A price increase will result in a decrease in expenditure to the consumer since the expenditure lost from the resulting decrease in quantity consumed is more than the expenditure gained from the price increase.

Different consumers market segment:
Either explain Business Travel Versus Leisure Travel

In general, all else being equal, business travellers are less sensitive to travel price changes (less price elastic in demand) than leisure travellers. Business travellers generally have less flexibility to postpone or cancel their travel than leisure travellers. Nevertheless, the studies do show that even business travel will increase in the face of price decreases, albeit not to the same extent as leisure travel.
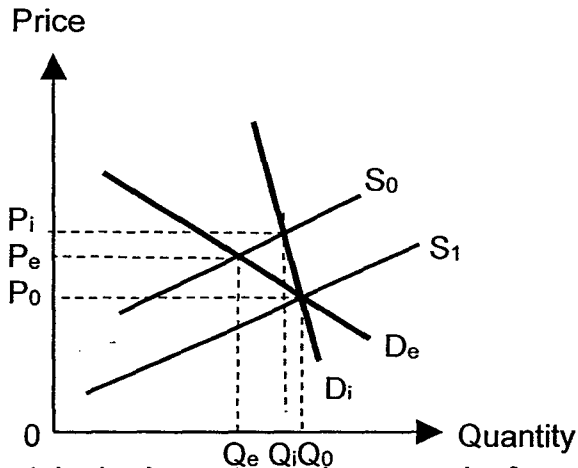
Explain the impact on price, quantity & consumer expenditure.

OR   Short-Haul Versus Long-Haul Travel
Air travel price elasticities on short-haul routes were generally higher than on long-haul routes. In part, this reflects the opportunity for inter-modal substitution on short-haul routes (e.g. travellers can switch to rail or car in response to air travel price increases).
Explain the impact on price, quantity & consumer expenditure.

Evaluation:

The elasticity of air travel demand varies according to the coverage and location of the market in which prices are changed and the importance of the air travel price within the overall cost of travel.

In particular, there is an apparent paradox whereby:
Consumers are becoming increasingly sensitive to price, led by the boom in low cost travel, the transparency brought by the Internet and the intense competition on deregulated markets.
But, passengers are also becoming less sensitive to price, as increasingly lower air travel prices, in real terms, mean that the air travel price itself becomes a smaller and less important part of the total cost of a typical journey.

Income elasticity of demand

The income elasticity measures the sensitivity of demand for a good to changes in individual or aggregate income levels.

An income elasticity between 0 and +1 indicates a normal good, where the quantity demanded increases at the same or a lesser rate than the increase in income. For example, a good where a 10% increase in income results in a 0-10% increase in consumption would be considered a "normal" good.

An income elasticity greater than +1 indicates what economists call a luxury good, where consumption increases by a greater proportion than income. For example, as discretionary incomes rise consumers can afford to buy higher quality and/or leisure related goods that were previously beyond their reach. This does not mean these goods are the exclusive preserve of the rich, but that as living standards rise consumers value buying these goods the most. It is a measure of a highly valued good in consumer welfare terms.

There is some evidence that income elasticities decline as countries become richer and markets mature. Developing countries typically have a greater responsiveness, with an estimated short-haul income elasticity of around 2.0 at the route level and 1.8 at the national level.

There is also evidence that long-haul journeys are seen by passengers as different, more desirable, to the more commoditised short-haul markets, and so income elasticities are higher the longer the distance. This suggests that middle to lower income individuals are more likely to travel on short to medium haul routes, with higher incomes leading to a higher frequency of long haul travel.

Evaluation
It has been found that the growth of incomes, often proxied by GDP, is the fundamental driver of the demand for air travel. During the past twenty years global passenger traffic has expanded at an average annual growth rate of 5.1%, while global GDP grew by an average annual rate of 3.7% over the same period. That implies an average income elasticity of 1.4, similar to the average estimated above for developed economies. The implication is that economic growth can explain most of the expansion in air travel seen in the past twenty years. The fall in real air travel prices has played a part, but mostly in diverting travel between airlines and markets rather than significantly boosting overall travel volumes. In addition, economic growth is now increasingly being driven by developing economies, where income elasticities are higher.

Conclusion
Falling real air travel prices are important in passengers switching from one airline to another, and from one destination to another, but are much less important in driving aggregate national-level air travel or tourism growth. Growth of incomes, often proxied by GDP, is the fundamental driver of the demand for air travel, thus, the rise in consumers' expenditure in air travel.

Level	Knowledge, Comprehension, Application & Analysis	Marks
3	For a well-analysed and balanced discussion that addresses the relative importance of factors influencing consumers' expenditure in air travel market.	15 - 21
2	For an underdeveloped answer that discussed the factors influencing consumers' expenditure in air travel market.	10 - 14
1	For an answer containing a description of the demand and supply factors or one that contains conceptual errors.	1 - 9
Evaluation Marks		
E2	Evaluative judgement supported by appropriate analysis	3-4
E1	Unexplained judgement	1-2

Examiners' Comments:
This is the least popular question in Section A.

Most candidates made good use of well-drawn supply and demand curves. The majority gave at least one factor for a shift in the demand curve and at least one for a shift in the supply curve. However, the relative importance of the factors was not discussed.

Better responses related these factors to the air travel market. For example, they linked the rise in the supply curve with a sharp fall in cost of jet fuel or an insignificant increase in demand to the slow global income level. In addition, clear and well thought out evaluation led to a decision about the relative importance of factors influencing consumers' expenditure based on good use of various elasticities concepts.

Weaker responses drew correct diagrams without a detailed analytical explanation of what had been drawn. In addition, they did not relate the factors to the air travel market or the change in consumers' expenditure.

Oil prices fell sharply in the second half of 2014 amidst slow global economic growth.

Discuss the relative importance of factors influencing consumers' expenditure in air travel. [25]

by Jet New Jun Jie 1512A

Consumer expenditure is calculated using price x quantity and can be affected by both demand and supply factors. Supply factors include a sharp fall in price of oil while demand factors include a change in tastes and preferences and slow rise in average income levels, etc. The relative extent of these factors determining consumer expenditure depends on the respective price elasticities of demand and supply, income elasticity of demand as well as cross elasticity of demand.

A sharp fall in the price of oil has helped increase consumer expenditure in the air travel industry. As oil prices fell sharply, unit cost of production for air travel drastically falls as oil is a major factor of production. This means that there is a rise in supply of air travel.
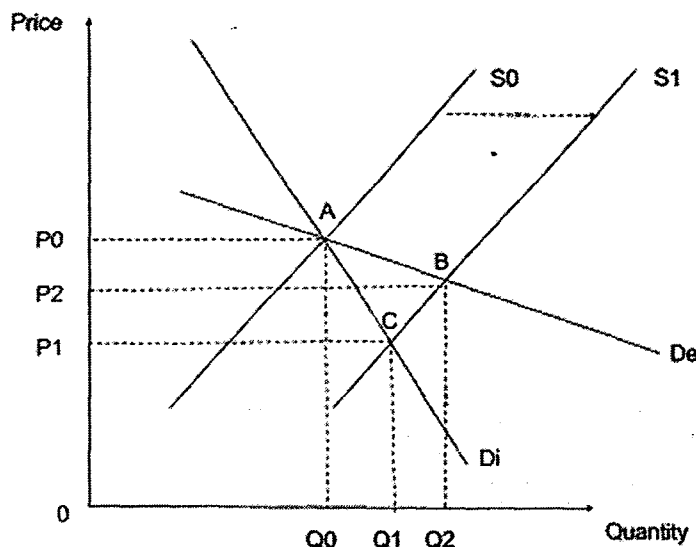

Figure 1: Sharp fall in price of oil

As shown on Figure 1, as S_0 increases to S_1 due to a lower unit cost of production, price fell from P_0 to P_2 while quantity demanded rose from Q_0 to Q_2 at a more than proportionate rate. This analysis is based on the group of consumers (middle-income bracket) where air travel tickets, as well as holiday trip costs, take up a large proportion of their income, hence price elasticity of demand, $|\varepsilon_p|>1$. Price elasticity of demand refers to the degree of responsiveness of demand in response to a change in price. Consumer expenditure also rose from $0P_0AQ_0$ to $0P_2BQ_2$.

As compared to another group of consumers, higher-income earners or businessmen, $|\varepsilon_p|<1$ is likely because prices of air travel are either covered by their companies or that they are able to afford them easily. When $|\varepsilon_p|<1$, when S_0 increases to S_1, P_0 falls to P_1, Q_0 rises to Q_1 along Di, resulting in a loss of consumer expenditure from $0P_0AQ_0$ to $0P_1CQ_1$. Hence, a fall in price of air travel due to a fall in cost of production can result in both rise and fall in consumer expenditure, depending on $|\varepsilon_p|$.

In addition, there is an inherent paradox where consumers are being increasingly sensitive to prices, led by the boom in low cost air travel, the transparency of air travel prices brought about by the Internet and the intense competition in deregulated markets, yet are also being less sensitive to prices as declining air travel prices mean that air travel price becomes less significant in the total cost of travel.

Furthermore, a large consumer base for air travel are likely businessmen who need to frequently travel overseas for business trips, hence overall, consumer expenditure is likely to fall due to a fall in price of air travel. However, it is important to take into account demand factors such as a rise in average income levels, resulting in increased consumer base of lower/ average income brackets.

A rise in income levels may result in an increase in consumer expenditure as consumers have higher ability and willingness to consumer the good or service of air travel. This is based on $|\varepsilon_y|$, the degree of responsiveness of demand with respect to a change in income.
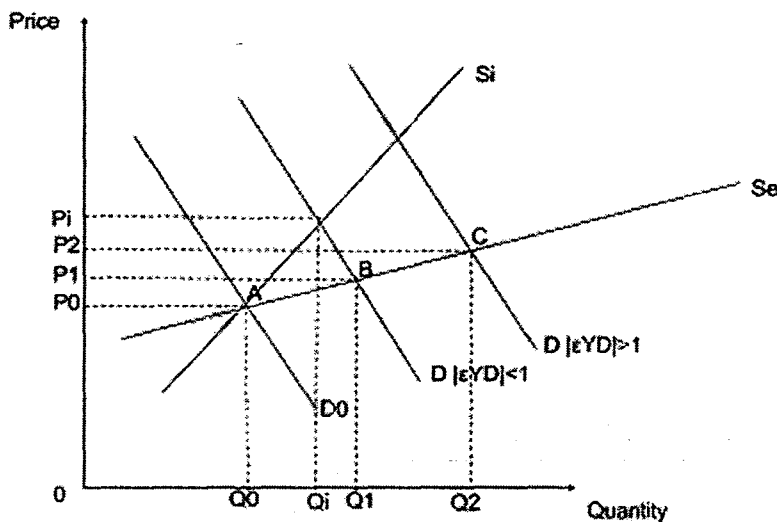

Figure 2: Rise in income levels

As shown on Figure 2, as income level increases, demand rises at varying extents depending on $|\varepsilon_y|$, affecting consumer expenditure. For consumers who are already able to afford air travel with ease, such as high income earners, a rise in income may not necessarily result in a large rise in demand. D_0 will only increase to $D|\varepsilon YD|<1$. Price will rise from P_0 to P_1, where Q_0 increases to Q_1, since supply of air travel is relatively price elastic. In comparison, for consumers who are from middle to lower middle income groups, a rise in income leads to large rise in demand from D_0 to $D|\varepsilon YD|>1$ as they are now able to secure precautionary savings and have higher purchasing power. This results in P_0 increasing to P_2 and Q_0 increasing to Q_2. Hence, this shows that consumer expenditure when $|\varepsilon YD|<1$ only increases from $0P_0AQ_0$ to $0P_1BQ_1$, where when $|\varepsilon YD|>1$, consumer expenditure increases largely from $0P_0AQ_0$ to $0P_2CQ_2$.

However, it is important to take into consideration that high income earners experience a larger absolute rise in income than lower-middle income earners, i.e. higher income

earners earn more.   Hence, the difference in change in consumer expenditure between the two consumer groups may be larger than expected in the analysis. In addition, this is based on the assumption that supply is price elastic, i.e. $|\varepsilon_s|>1$. When $|\varepsilon_s|<1$, when D_0 rises to $D\{\varepsilon YD\}<1$, P_0 rises from P_0 to P_i, Q_0 rises to Q_i, reflecting a slower rise in consumer expenditure. Nonetheless, supply of air travel is relatively price elastic due to the advancement of technology bringing about new online ticketing services, allowing for easier control of supply of air travel.

Another demand factor is changing tastes and preferences of consumers, which can affect consumer expenditure. Pervasive advertisements for Korean products and tourism with the importation of Korean shows for free on TV has led to rise in demand for Korean products and tourism. In addition, as more consumers around the world get exposure to the Japanese anime craze, they become interested to visit tourist hotspots such as Akihabara. Hence, consumers increase demand for air travel and consumer expenditure rises.
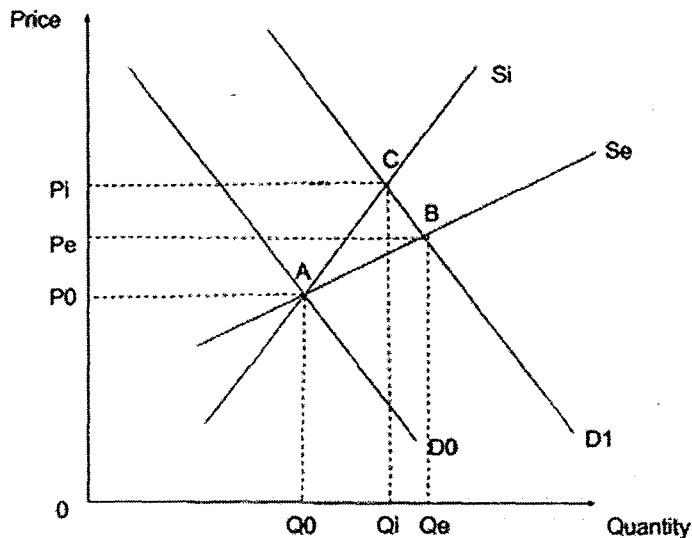

Figure 3: Rise in demand due to changing tastes and preferences of consumers

As shown on Figure 3, when demand rises from D_0 to D_1, due to changing tastes and preferences, P_0 rises to P_e and Q_0 to Q_e along S_e. This is due to supply being price elastic, explained previously. Consumer expenditure hence rises from $0P_0AQ_0$ to $0P_eBQ_e$, in comparison to $0P_0AQ_0$ to $0P_iCQ_i$ when supply is price inelastic.

However, the extent of demand shift is also dependent on average income levels. In developing economies where income is relative lower, changing tastes and preferences may not lead to a large rise in demand for air travel since price is a large factor of consideration. In advanced economies, however, price does not take up as much of a priority, hence demand rises to a larger extent, resulting in different extents in consumer expenditure.

It is also important to consider the simultaneous shifts in demand and supply when considering the change in consumer expenditure in air travel. Despite the fact that falling oil prices greatly increase the supply of air travel tickets, it is speculated that demand would double by 2035, due to the ascent of emerging markets and their rising

middle classes who desire to travel to distant places by air, such as from China and India. Hence, it can be concluded that the rise in demand for air travel would outweigh the rise in supply and hence place upward pressure on the price of air travel.
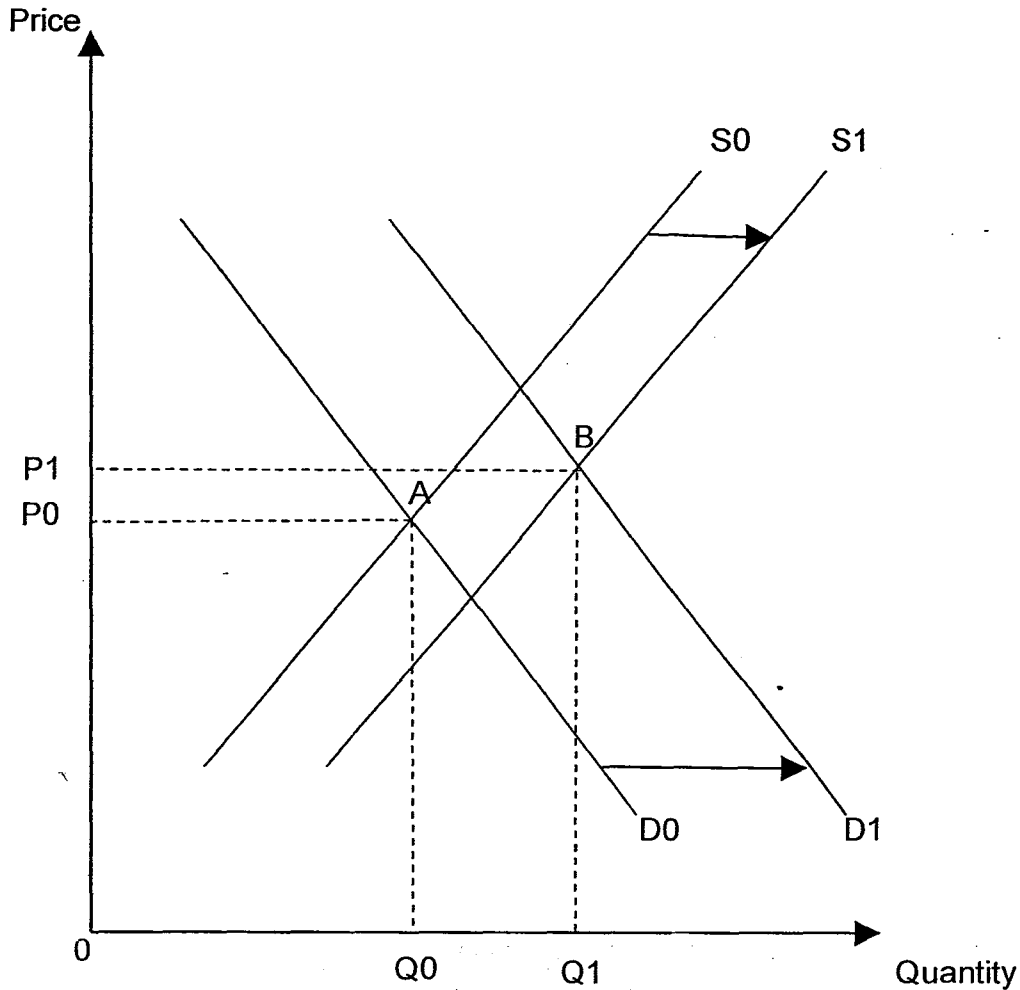

Figure 4: Simultaneous increases in both demand and supply

As shown on Figure 4, when the rise in demand from D_0 to D_1 outweighs the rise in supply from S_0 to S_1, there is a shortage of air travel, causing upward prices of air travel from P_0 to P_1. This results in an increase in consumption expenditure from $0P_0AQ_0$ to $0P_1BQ_1$.

The magnitude of cross elasticity of demand between air travel and domestic tourism also plays a part in affecting consumer expenditure. Air travel is overseas tourism and may be considered a substitute for domestic tourism. Since oil prices fell sharply, price for domestic tourism activities may also fall, resulting in a shift in consumption from air travel to domestic tourism, i.e. an increase in air travel demand to a smaller extent.
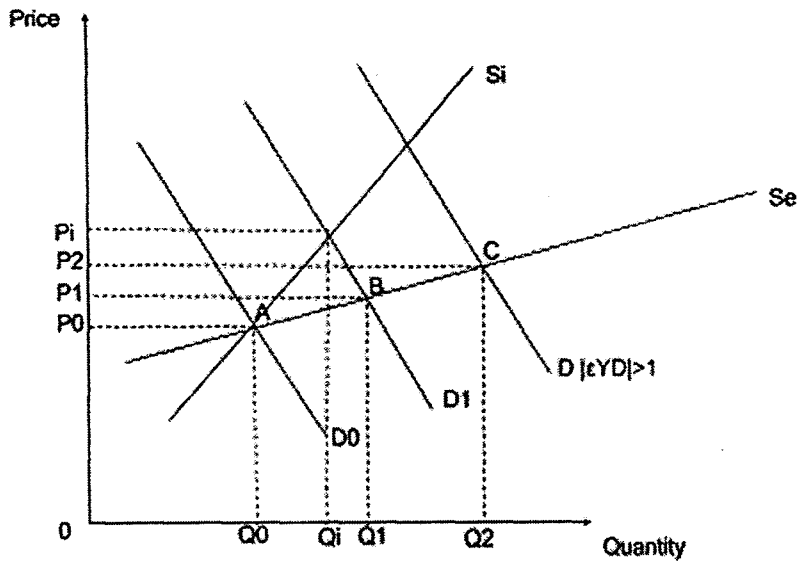
Figure 5: Differing cross elasticity of demand for air travel

As shown on Figure 5, when D_0 rises to D_2 due to low cross elasticity of demand, when consumers perceive domestic tourism as non-substitutes to air travel, P_0 rises to P_2 greatly while Q_0 rises to Q_2, increasing consumer expenditure to a large extent. When D_0 rises to D_1, due to high cross elasticity of demand, as some consumers may be first-time travellers, P_0 rises to P_1, while Q_0 rises to only Q_1. Hence, consumer expenditure increases to a much lower extent, from $0P_0AQ_0$ to $0P_1BQ_1$.

However, in countries which do not specialise in the tourism industry, there may be a smaller variation in cross elasticity in demand since most people would perceive domestic tourism as non-substitutes. Hence, cross elasticity of demand may be less significant in affecting consumer expenditure in air travel.

In conclusion, demand and supply factors depend on relative elasticities of demand and supply and income elasticity of demand to affect consumer expenditure in varying extents.

2

Universal Studio Singapore Ticket Pricing	
Ticket Type	One Day Pass
Adult (Ages 13 to 59)	S$74
Child (Ages 4 to 12)	S$56
Senior (Ages 60 and above)	S$36

(a) Explain how the above pricing decision could be an example of price discrimination. **[10]**

(b) Discuss whether price discrimination will always improve society's welfare. **[15]**

(a) Explain how the above pricing decision could be an example of price discrimination. **[10]**

Command: Explain how

Content: Price Discrimination

Context: Universal Studio Singapore Ticket Pricing

ATQ: Basic understanding of price discrimination and the application of the context to the definition and conditions required for price discrimination would be necessary.

Definition: Price Discrimination is the act of selling the same product at different prices to different buyers not accounted by cost differences.

Conditions of price discrimination

1. The firm must operate in imperfect competition, it must be a price setter
2. The firm must be able to separate markets and prevent resale. E.g. stopping an adults using a child's ticket.
3. Different consumer groups must have elasticities of demand. E.g. students with low income will be more price elastic.

Topic Sentence 1: The above could be a form of price discrimination by definition.

- Entrance to USS offers a range of similar services to the consumers of different age group.
- The consumer could be a child, adult or elderly, the entrance to the USS warrants a variety of services to all, ranging from exciting rides, spectacular performances to attractions based on blockbuster movies and TV series.
- The services would be available to all types of consumers, regardless of their age group and the amount they paid with respect to their age.
- Furthermore, since the provision of the services was identical, the cost to provide the services would also be similar.
- These meant that prices charged differently for the consumers were not due to cost differences and this could be illustrating a form of price discrimination.

Topic Sentence 2: The identification of price discrimination by the conditions for PD, price setter

- The provision of the USS service is in an imperfect market where USS is a price setter
- High barriers to entry in the theme park market, high market dominance
- High fixed cost due to the large land space required.
- High maintenance fee and labour cost
- One themed park in Singapore, acts like a monopoly with no close substitute
- Ability to set price due to market dominance.

Topic Sentence 3: The identification of price discrimination by the conditions for PD, must be able to separate markets and prevent resale

- Separate market by differing age group
- Age will be checked via the use of identity card during the purchase of the entrance tickets
- Tickets will be labelled with the age to differentiate the tickets bought
- Barricades at the entrance to check and ensure that the tickets bought matches the age group of the patron
- Resale of tickets to patrons of other age group would not take place

Topic Sentence 4: The identification of price discrimination by the conditions for PD, Different consumer groups must have elasticities of demand

- Price elasticities of demand differs across the age group
- Adults pay the highest for the tickets as the demand is the most inelastic across the different age group
- Adults of ages 13 to 59 have a relatively greater need for the tickets in comparison to children and elderly as they are of the age in the pursue of fun and entertainment and would have a greater desire to search for more fun elements.
- Unlike seniors who might have lesser desire for these forms of entertainment and children who might be too young to appreciate all of the rides, shows and entertainment.
- The differing PED allows the firms to charge at different prices where consumers with the most inelastic demand pays the highest as mention.

Level	Description	Marks
3	Clear explanation of the context and applying the definition and conditions for price discrimination to explain how the context is a form of price discrimination. Max 8m: 2 very well explained points where one of it must be from the definition and one from the differences in PED (2 Key points of analysis)	7- 10
2	Some explanation of the context and applying the definition and conditions for price discrimination to explain how the context is a form of price discrimination.	5- 6

	Max 5m: Clear theoretical answers that did not explain using the context.	
1	Explanation of the context and attempts to applying the definition and conditions for price discrimination to explain how the context is a form of price discrimination with errors.	1- 4

Examiner's Comment:

Candidates were able to define price discrimination but did not apply the context to the explanation. The question requires candidates to explain how the pricing could be a form of price discrimination, however, candidates were just explaining how price discrimination works. Some were able to clearly identify the differences in price elasticity of demand for the different consumer groups, however wrote too much about the effects on total revenue which would be more useful in part b). Conditions of price discrimination were briefly brought up by students without application to context too.

(b) Discuss whether price discrimination will always improve society's welfare. **[15]**

Command: Discuss

Content: Consequences of price discrimination on society's welfare

Context: General

ATQ: Price discrimination and its effect on society's welfare, considering the society as a whole and examining the impact of consumers and producers within the society. Consideration of the word ALWAYS in identifying situations and scenarios where the statement hold and would not hold.

Thesis: Price Discrimination will improve the society's welfare in the case of a third degree price discrimination.

- Lowering of prices for lower income groups while higher income earners to pay a higher fee
- For the society as a whole, it increases the availability of the good for low income earners since the lowered prices increases the ability of the low income earners to demand for the goods.
- Ensures greater equality in the society where producers are more willing to produce for low income earners, increases the standard of living for low income earners at the expense of higher income earners.
- The ability to charge at a lower price for the lower income earners with a more price elastic demand leads to a more than proportionate increase in quantity demanded brings about a higher total revenue for the producers.
- Similar to the case where prices are charged higher for higher income earners with a price inelastic demand, it leads to a less than proportionate quantity demanded therefore allowing a higher total revenue.

- In addition to the greater equality, price discrimination is able to increase the revenue, rising the profits of the producers.

EV: The ability to be charging different prices to different consumers might not necessary improve equality among the consumers. This is dependent on the industries and how the price discrimination is carried out. In the case of the USS tickets, adults could also be the low income earners and might end up having to pay more too.

Thesis: Price Discrimination will improve the society's welfare in the long run

- This could be in seen in the case for second degree PD where consumers are charged by block pricing
- The additional revenue earned for charging a higher price for lesser quantity of goods and services would allow the producers to earn more profits
- Especially when producers earn sufficient total revenue and are able to product differentiate in the long run
- Improvement in the production methods would lower cost of production and pass on cost savings, lowering prices of g&s for consumers
- Improvement on the quality of the products will enhance satisfaction for the consumer, increasing their welfare.

EV: Depends on the willingness of the firms to re- invest their increase in revenue for R&D. Furthermore, even if they are willing to spend, R&D might not necessary be effective and successful.

Thesis: Price Discrimination will improve the society's welfare when looking at the view of producers

- Price discrimination targets at increasing producers welfare
- Any explanation of different PD to increase TR &/or producer surplus
- With inclusion of graphical analysis

Anti- Thesis: Price Discrimination will not improve the society's welfare in the case of a 1st & 2nd degree price discrimination when looking at the view of consumers

- Exploitation of consumers welfare
- Show how the PD works and illustrate the higher prices, lower output and loss of consumer surplus

EV: Dependent on the ability of the firms to price discriminate and whether there would be government regulation restricting the extend of PD.

Conclusion:

The impact of price discrimination on society's welfare is often dependent on the types of price discrimination that is being engaged. More often than not, PD generally improves the welfare of producers in increasing the ability of them to charge at a higher price and earning a higher revenue, contributing to a rise in profits. On the other hand, consumers are often exploited into paying a higher price for the same type of goods and services. Whether it will eventually

benefit the consumers would depend on the willingness of the producers to engage in R&D to benefit them.

Level	Description	Marks
3	A clear analytical explanation about the effects of price discrimination on different the society as a whole and the different economic agents in the economy. Provision of a 2 sided analysis of context when it does not improve and cases when it would. Max 10m for a discussion without consideration of the effects on the entire economy as a whole Max 9m for an analysis without the use of examples	9-11
2	An analytical explanation about the effects of price discrimination with some missing links on different the society as a whole and the different economic agents in the economy. Max 6m for a discussion on one economic agent Max 6m for a one sided analysis	6- 8
1	An unclear explanation about the effects of price discrimination on different the society as a whole and the different economic agents in the economy.	1- 5

Level	Descriptors	Marks
2	Judgement that is justified with analysis	3- 4
1	Judgement without justification	1- 2

Examiner's Comment:

Candidates showed a lack of content mastery for this question. The results of the question was diverse where candidates who knew the topic well could easily score while those who were unsure about the content had difficulty explaining without concept error.

Some common misunderstanding by candidates include the idea that when consumers are charged at the highest price they are willing and able to pay, their welfare is fully maximized. THIS IS NOT TRUE! Their welfare has been compromised in the process. Some wrote about subsidies as a form of price discrimination. WHY? If it is a subsidy, it is a SUBSIDY, there is no pricing strategy by the firms.

3. 'The market should be left alone as government intervention results in greater inefficiency.'
Discuss.   [25]

Command: Discuss	Provide different view points / thesis-anti thesis on how Govt intervention may or may not results in greater inefficiency
Content: Market, Govt intervention, greater inefficiency	-How would market allocate resources without government? -Why is this form of allocation inefficient? - How would Govt intervention causes bring about efficiency? - How would Govt intervention cause greater inefficiency? - Your stand/conclusion
Context: General	Need to bring in relevant examples

Introduction

There are 3 main kinds of efficiencies, allocative, dynamic and productive efficiency. Having allocative efficiency as one of the microeconomic aims of governments, it is often debated if government intervention is needed in order to achieve allocative efficiency. This is especially so since the price mechanism that is used in the free market to allocate resources would only work under strict conditions and assumptions that includes: market is operating under perfect competition, there is perfect information, no presence of externalities, and all goods and services are produced (i.e. no missing market of public goods). Because these assumptions does not hold in reality, market failure arises, giving rise to the need for government intervention. But, government intervention may or may not necessarily lead to greater efficiency, depending on the cause of the market failure and the different context in which the market fails and the effectiveness of the policy enacted.

Explain how free market can allocate resources efficiently via price mechanism

For instance, in the market for burger, the demand curve for burger (DD) reflects the value of the burger to consumers, which is measured by the prices consumers are willing and able to pay. At any quantity, the demand curve shows the respective value of the last unit of burger that consumers will be willing and able to buy. Hence, the demand curve shows the consumers' marginal benefit (MB) derived from purchasing the last unit of burger.
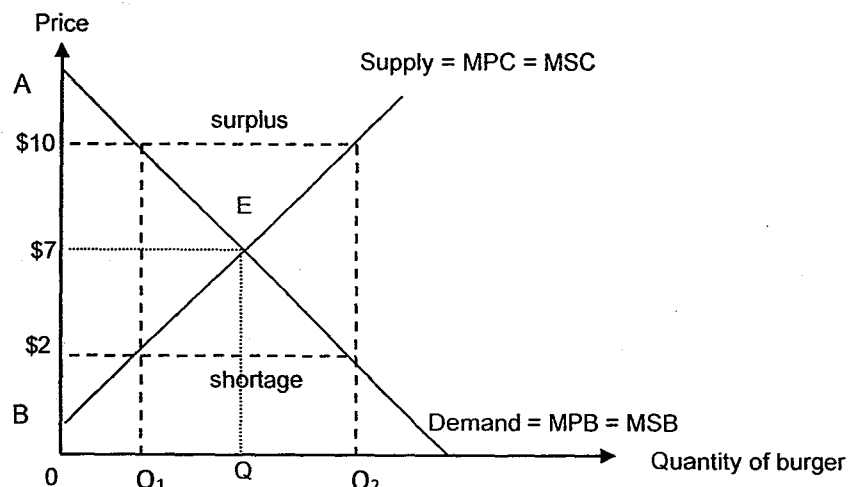
Figure 1: Market for burger

On the other hand, supply curve (SS) reflects the marginal costs (MC) of producing the additional unit of burger. At any quantity, the supply curve shows the opportunity cost in terms of resources used in producing the last unit of burger.

Allocative efficiency is achieved when price of the burger equals to the marginal cost of producing the burger as the value that society places on the last unit of the good (P) is equal to the opportunity cost in terms of resources used in producing that last unit (MC). In the free market, this equilibrium is achieved through the workings of the price mechanism where the price adjusts to equate the supply and demand for burger.

With reference to figure 1, the equilibrium price of burger is at $7. At prices above the equilibrium price, example, $10, the quantity supplied exceeds the quantity demanded. There is a surplus in the market which causes a downward pressure on the price to fall. This is because producers will find that they are unable to sell all their output at that price. They will begin to compete against each other to sell their excess supplies by asking for lower prices. Consumers will also recognize the excess supply and begin to offer lower prices. As prices begin to fall, according to law of supply, quantity supplied will fall from Q_2 while according to law of demand, as prices fall, quantity demand will start to rise from Q_1. This price adjustment process will take place until the market equilibrium is reached at $7 with number of burgers at Q where quantity demanded equals to quantity supplied.

The reverse is true. At prices below equilibrium of say $2, quantity demanded exceeds quantity supplied; resulting in a shortage that exerts an upward pressure on the price. Competition among consumers will drive up the market price where consumers who do not succeed in purchasing all they want of the good at the current price would offer higher prices. As prices begin to rise, according to law of demand, as quantity demand will fall from Q_2; while according to law of supply, quantity supplied will rise from Q_1 as prices rises. Similarly, this price adjustment process will take place until the market equilibrium is reached at $7 with number of burgers at Q where quantity demanded equals to quantity supplied.

Because of the ability of price mechanism to adjust itself according to market demand and supply to bring the market to an allocative efficient market-clearing equilibrium where the marginal benefit of consuming the last unit of burger (reflected by the price: MB=P) equals to the marginal cost incurred in producing that last unit of burger (MC), it is hence argued that there is no need for government intervention.

Nonetheless, as mentioned above, since price mechanism would only work under strict assumptions that do not hold in reality, market failure arises, giving rise to the need for government intervention which may or may not lead to greater inefficiency.

Explain how free market allocate resources (inefficiently) with presence of externalities in the market

In the example of a good that generates negative externalities in production such as Electricity in coal-fired power stations, external costs are generated during the production process.

These external costs that are borne by third parties in society who are not directly involved in the production or consumption of the electricity may include the air pollutants that causes acid rain which damages environment and buildings and will lead to the need for third-parties such as the government to incur cost to 'clean-up' the environment and restore the infrastructure.

In a free market that operates under price mechanism, consumers only consider marginal private benefit (MPB) in their demand curve, such as the satisfaction that they will get from being able to use electricity powered appliances while producers only consider marginal

private cost (MPC) in their supply curve, such as cost of buying coal as raw material. This means that in a free market, equilibrium is at Q_E, where MPB and MPC intersects.
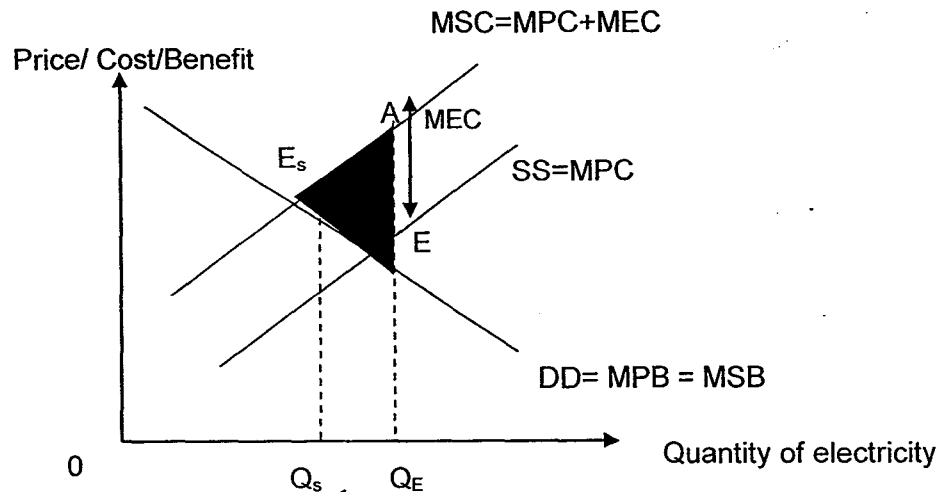

Figure 2: Negative externality in production resulting in over-production

However, this decision making process in a free market unfortunately do not take into consideration the negative externalities in production (marginal external cost, MEC) that was generated during the process. In fact, in order to reach the socially optimal equilibrium, marginal external cost (MEC) which is the divergence between MPC and marginal social cost (MSC) needs to be considered and the socially optimal quantity is at Qs where MSB=MSC.

Failure to account for externalities results in an over-production of electricity from coal-fired power stations (QE > QS) leading to a deadweight loss to society of area AEEs. Hence, it can be said that using price mechanism, resources will in this case be over-allocated to the market of production of electricity – market has fail to achieve allocative efficiency of resources.

Discussion if Government intervention results in greater inefficiency with presence of externalities in the market (Anti-thesis +Thesis)

When there is market failure due to presence of externalities, the government may choose to intervene to correct it. In this case of negative externalities in production, government could step in by introducing a carbon tax on the producers.

(Please draw/indicate on figure 2 on your own)

With the per unit tax set that is equal to the MEC, government aims to increase producers' marginal private cost (MPC) to ensure that producers fully internalize the MEC and reduce production to the socially optimal output (Qs) to achieve allocative efficiency. With this tax policy implemented, the government is able to correct the inefficiency caused by market failure to reach higher allocative efficiency.

However, due to the problem of imperfect information, governments too have limited information on the actual value of MEC in order to set an accurate and effective amount of tax to attain the socially optimal quantity, Qs. Under-estimating MEC will mean that good is still being over-produced while over-estimating MEC will lead to goods being under-produced or under-consumed. In both such scenarios, the government will too fail to allocate resources efficiently.

<u>Greater inefficiency due to government intervention</u> will arise if the over/under-allocation of resources via price mechanism is less than that of after government's intervention. Henceforth, before intervening, there is a need for the government to first assess the extensiveness of the MEC and deadweight loss is. If deemed that the inefficiency is not significant, it may be better for the market to be left alone as the government is ultimately unlikely to resolve the market totally due to imperfect information as explained above and hence, these precious resources should be placed in other markets that might be seeing a greater deadweight loss, lest <u>causing greater inefficiency</u>.

Evaluation & stand

Henceforth, in deciding whether or not greater inefficiency due to government intervention may arise in market where externalities exists, the extent to which imperfect information exist in the economy/industry is important. For an undeveloped and/or big country like India where the tool for facts findings and assessment is still relatively primitive, the extent of imperfect information is likely to be much greater than a developed and/or smaller country like Singapore that could gather and get more accurate information. This suggests that the market in India should be left alone while the latter could possibly welcome government intervention in order to achieve greater allocative efficiency.

Explain how free market allocate resources (inefficiently) in an imperfect market

In a free market, where assumption of perfect competition holds true, firms will be able to achieve allocative efficiency where supply (SS) meets demand (DD) at P_p and Q_p as shown in figure 3 below.
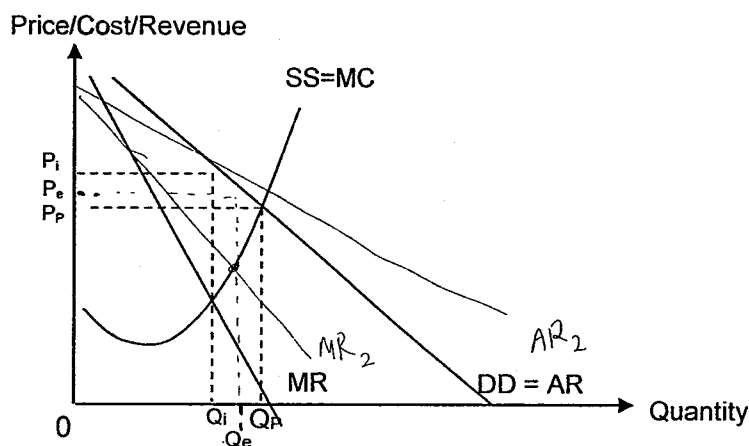

Figure 3: Market equilibrium of a firm under perfect and imperfect market conditions

Nonetheless, with the breakdown of assumption in reality that firms operates under imperfect market conditions, profit motivated producers will produce at profit maximisation point, MR=MC instead of DD=SS (P=MC) which will lead to allocative inefficiency.

This is because, if a firm produces at MR=MC instead, from figure 3, it can be seen that the firm will restricts output to Q_i or Q_e depending on the price inelasticity of its demand instead of socially optimum point at Q_p. The more price inelastic the demand is, the more market power the firm has to raise price above marginal cost to sell the good/service at P>MC and at

a lower equilibrium quantity – *if demand is price inelastic, it would produce at Pi and Qi and if demand is more price elastic, it would be producing at Pe and Qe.*

When price is above marginal cost, it means that society values the last unit of the good more than the additional cost the society incurs to produce it. In this sense, social welfare can increase if more resources are allocated to the production of this good. Hence, relying on free market mechanism cause an under-allocation of resources resulting in welfare loss and inefficient allocation of resources. This problem is especially apparent if there is presence of market dominance where firms enjoy larger market power and is able to set higher price and lower output as demand is relatively less price inelastic (as explained above).

Discussion if Government intervention results in greater inefficiency in an imperfect market *(Anti-thesis +Thesis)*

In face of this problem, there too are a few ways that the government could step in to alleviate the problem. One of the ways is through nationalisation.

Nationalisation refers to the situation when the ownership and control of a privately owned firm is taken over by the government. Without the objective to profit maximise, the government takes over the production of the good and produce at the socially optimum level where P=MC, hence results in greater allocative efficiency as compared to profit motivated free market.

Nonetheless, dynamic efficiency could be compromised. This is because, as oppose to the free market where firms such as Apple and Samsung needs to keep up with competition via non-price strategies such as newer versions with higher quality in order to maintain their market share and profits, a nationalised firm/industry lacks competition and with the lack of competition, it is hence not motivated to engage in innovation leading to greater dynamic inefficiency.

Evaluation & stand

Thus, in the case of imperfect market conditions, while government intervention may reduce allocative inefficiency, greater dynamic inefficiency could result. The decision to whether government should intervene then depends on her aims and priority and through the conduct of cost and benefit analysis to assess the importance of achievement of allocative or dynamic efficiency in the given time period. For instance, during the development periods of a country, it may be more important for the government to place more emphasis on achieving allocative efficiency by keeping the pertinent industry such as water and electricity supply nationalised to ensure that the basic welfare of her people being looked after. Following which, with the attainment of a decent level of standard of living, the government may then wish to deregulate and privatised these firms in order to ensure the up-keep of quality of the good/service produced and also to ensure that the firms/industry stay competitive in terms of prices and wastage of resources in order to minimise inefficiency.

Explain how free market allocate resources (inefficiently) in the market of public goods

Another assumption that is made under the working of free market price mechanism is that there are no missing markets. However, in reality, there exist problem of non-provision of public goods which causes a complete market failure that signifies an inefficient allocation of resources.

Public goods like the national defence system, tsunami warning system and flood control system have the characteristics of non-excludability & non-rivalry. In the free market, when a good is non-excludable, non-payers can also enjoy the good. This hence leads to the free-rider problem and no one is willing to pay for the good and demand is being concealed. Without

an effective demand, producers have no incentive to produce as there is no revenue to be gained. This means, if good is left for market to produce, there will non-provision of such good signifying an inefficient allocation of resources.

Also, the characteristic of non-rivalrous in consumption means that the consumption of say the tsunami warning system by 1 person will not diminish the amount of this tsunami warning system for additional person to consume it. This means the marginal cost of providing to an additional consumer is zero. Since, to reach socially optimum level of output where there is allocative efficiency, price should be equal to marginal cost, the price of providing tsunami warning system will have to be 0. With a price of 0, profit motivated producers will not be willing to produce. Thus, if left for market to produce, there will non-provision of public good such as the tsunami warning system.

Given the characteristics of public goods allocation of resources through the free market is inefficient because market forces of demand and supply, and hence the price mechanism are non-existent. As a result, market equilibrium quantity for tsunami warning system in this case is equal to zero and the society suffers a welfare loss because the tsunami warning system, are beneficial and desired by society but are not provided for.

Therefore, in this case of complete market failure, there is a <u>strong need</u> for the non-profit motivated <u>government to intervene</u> in order to provide for the 'missing' public good.

Discussion if Government intervention results in greater inefficiency in the market of public goods <u>*(Anti-thesis + Thesis)*</u>

Government commonly employs direct provision of these public goods. In the provision, government do not usually collect a fee from consumers. For example, the government do not require her people to pay for the consumption (listening) of the siren of the tsunami warning system each time the siren is activated. Rather, these provisions of public goods are financed through the tax revenues that the government collects from her people. With direct provision, the desired but 'missing' public good is hence produced; <u>causing lesser allocative inefficiency</u> than if market were to be left on its own.

On the contrary, with the government holding the sole responsibility of producing public goods, this means that there is a lack of competition that may lead to productive inefficiency (X-inefficiency). This is because, under the assumption that market is perfectly competitive, there is a sheer need for firms to stay productive efficient, producing at the lowest cost to ensure survival. However, being the sole producer, which is made worse by the lack of incentive to profit maximise, the government may not have the incentive to use the most cost-efficient method of production which may include employing too many workers at unnecessarily high wages or using/buying of machines may not be utilised.

Costs

C_2 ------- X

C_1 ------- X-Inefficiency

LRAC
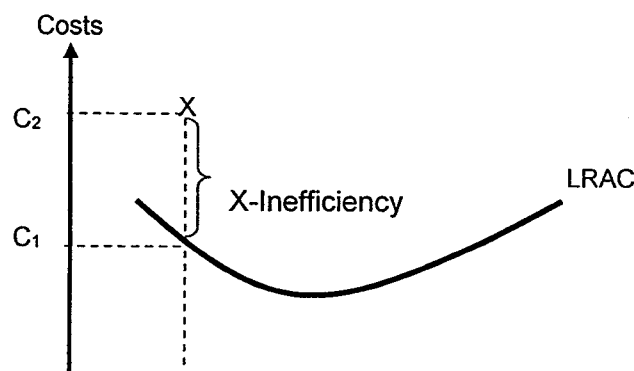
Figure 4: X-inefficiency occurring when government produces public goods

Henceforth, while government intervention in the case of non-provision of public goods may lead to greater allocative efficiency, productive inefficiency may arise.

Evaluation & stand
Nevertheless, even though the greater allocative efficiency seems to be compromised by the productive inefficiency that is likely to happen with government intervention, the extensiveness of allocative inefficiency due to missing market is possibly much higher than the productive inefficiency that may be reduced through prudent decisions made by the government. Thus, in this case, government intervention is advocated. Moreover, like in the case of Singapore, governments could also engage private auditing companies to assess the finances and operations of government bodies in order to bring about greater productive efficiency. Having said this however, the success of this method may not be seen in all the economies, especially in those that are high in the rate of corruption.

Conclusion
All in all, it is evident that there is almost no certainty to conclude if market mechanism or government intervention would result in greater inefficiency. In all the analysis given, it all boils down to the different contexts, situations, problems, types and the extent to which government intervenes that could either alleviate or worsen the problem of inefficiency.

'The market should be left alone as government intervention results in greater inefficiency.'
Discuss.   [25]

Knowledge, Application, Understanding, Analysis		
L3	For a balanced answer that has 3 well-developed markets that addresses the different types of inefficiencies (i.e. AE/PE/DE). Answer analyses how government intervention may results in greater AND lesser inefficiency with clear comparison to the operations in a free market. Answer contains good use of examples. Max 18m: If answer only focuses on 1 kind of inefficiency regardless no. of market that is used.	15 - 21
L2	For a balanced answer that has at least 2 markets that analyse how government intervention may results in greater AND lesser inefficiency. Answer may lack development but has some attempts to compare the level of efficiency (in only 1 kind of inefficiency) to the operations in a free market. Answer may contains some use of examples. Max 12m: If answer has at least 2 underdeveloped analysis on 2 markets that analyse how government intervention may results in greater AND lesser inefficiency (in only 1 kind of inefficiency) with no attempts to compare the level of efficiency to the operations in a free market. Answer may contains some use of examples. Max 12m: If answer has 1 developed analysis on 1 market that analyses how government intervention may results in greater AND lesser inefficiencies of different kinds (i.e. AE/PE/DE) with some attempts to compare the level of efficiency to the operations in a free market. Answer may contains some use of examples. Max 12m: For a well-developed ONE-SIDED answer that only discusses if government intervention may results in greater OR lesser inefficiency in the different types of markets when faced with market failure. Answer has no attempts to compare the level of efficiency in the operations in a free market. Answer may contains some use of examples. Max 11m: If answer has 1 developed analysis on 1 market that analyses how government intervention may results in greater AND lesser inefficiency (only 1 kind of efficiency) with some attempts to compare the level of efficiency to the operations in a free market. Answer may contains some use of examples.	10 - 14
L1	For an answer which shows some knowledge of how government intervention may or may not results in greater inefficiency. Answer may contain irrelevant content or unexplained, smattered or listed relevant points that appeared incidental. Max 7m: Answer only discusses how free market allocates resources in 3 different markets. Max 9m: Answer focuses on how free market allocates resources in different markets and merely stated possible ways of how government can intervene.	1 - 9
Evaluation		
E2	For an evaluative judgement based on economic analysis	3 – 4
E1	For an unexplained judgement, or one that is not supported by analysis.	1 - 2

Question 4

Chinese consumption decreased from 51% of Gross Domestic Product in 1985 to 43% in 1995, 38% in 2005, and 34% in 2013. By comparison, consumption is around 61% in Japan and 69% in the United States. Regardless of its relative percentage of GDP, China's consumption has been growing faster than any other economy's in absolute terms.

a) Explain whether the size of national income multiplier is the main determinant in influencing the change in national income of an economy. [10]

b) Discuss whether raising domestic consumption as percentage of GDP is the best approach to achieve sustainable economic growth. [15]

Part a

Question Analysis:

Command Word	Concept Word	Context Word	Comparative word
'Explain' Making clear of causal links, supported by economic analysis	1) 'size of national income multiplier' 2) 'change in national income'	'in an economy'	'main determinant' Need to explain at least 2 determinants

Approach

[Key focus] Explain why & how the size of national income multiplier is the main determinant in influencing the change in national income of an economy.

Explain at least one alternative key determinant in influencing the change in national income of an economy.

Conclude – summarizing technique

Suggested Answer:

by Nguyen Thuy Duong & Lau Li Ying of 1512A

Introduction	The size of the multiplier is the main determinant in influencing the extent of change in real national income of an economy. However, there are also other factors, like the state of the economy and openness of economy that play a role in affecting the change in real national income.

|	
Main Body I (Key focus): Topic sentence Explain how the size of national income multiplier affects national income of an economy	The size of the national income multiplier k is the main determinant in influencing the change in national income of an economy due to its multiplied impact on any increase or decrease in the components of AD. The effect of the change in national income can be explained via the multiplier process. The national income multiplier k is a measure of the magnitude in national income as a result of an autonomous change in aggregate expenditure. It is defined as the ratio of the change in national income to the initiating change in autonomous expenditure that brings it about.
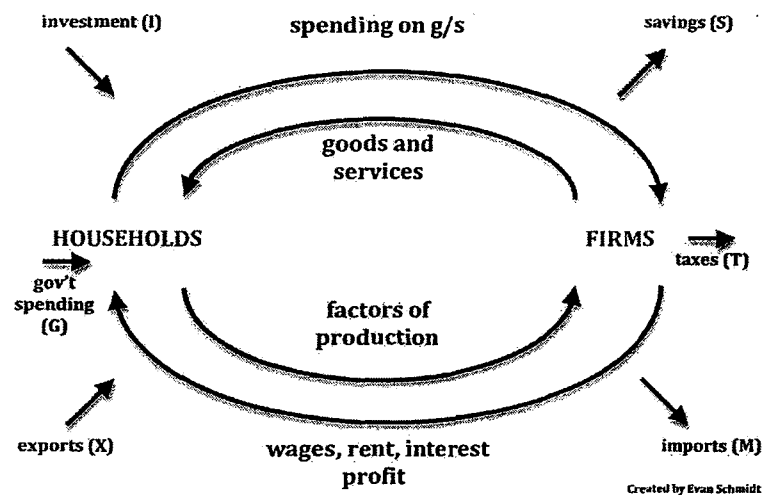
Figure 1:Circular Flow of Income in a 4 sector economy

Using a 4-sector economy as shown in Figure 1 above, withdrawals are part of the factor payments made by firms to households that leak out from the circular flow while part of the incomes received by households will be spent on the goods and services of domestic firms. The remainder is withdrawn from the inner flow in the form of savings, taxes and import expenditure. Thus not all income received by households are channelled back into the income flow. Consider a 4 sector economy, assuming income is consumed, saved, taxed or spent on imported goods, by definition, $Y = C + S + T + M \Rightarrow \Delta Y = \Delta C + \Delta S + \Delta T + \Delta M$. Divide the expression by Y, $\Delta Y/\Delta Y = \Delta C/\Delta Y + \Delta S/\Delta Y + \Delta T/\Delta Y + \Delta M/\Delta Y \Rightarrow 1 = MPC + MPS + MPT + MPM$. Thus, $1 = MPC + MPW$. Marginal propensity to save (MPS) refers to the proportion of change in income which is saved. Marginal propensity to tax (MPT) refers to the proportion of change in income which is taxed and marginal propensity to import (MPM) is the inclination for imports to change when income changes. MPS, MPT and MPM are collectively called the marginal propensity to withdraw, MPW. The multiplier, $k = 1/MPW = 1/(MPS + MPT + MPM) = 1/1 - MPC$. The smaller the value of

	MPW, the larger the size of national income multiplier. Hence when MPS, MPT or MPM increases, k decreases in size and vice versa. E.g. if MPC=0.2, k=1.25. If MPC=0.8, k=5.

Alternative

Given an economy is initially at equilibrium (Y_0), an increase in injections (government expenditure) of $100 million to set up a factory will create a situation in which the planned spending exceeds planned output at the existing level of national income. There will be unplanned depletion of inventory stock. Assuming there are unemployed resources in the economy, output is then increased and national income increases by $100 million. The need to expand output levels means additional income for those who provide the output. Assuming MPW=0.5, 50% of any additional income received will be spent on domestic output. Since MPC=0.5, $50 million will be spent on food, clothing etc while the remaining $50 million is used on imports, taxes and savings and hence withdrawn from the flow. Another round of planned expenditure exceeding planned output and an unplanned depletion of inventory. The latter will in turn spend $25 million on consumption of domestically produced goods while the rest is withdrawn. The process will continue with each round of spending being half of the previous round. The process stops when the change in leakages is now equal to the original change in injections. The economy returns to equilibrium (Y_e) with withdrawals equal to injections. Rise in national income is $200 million, as k=2.
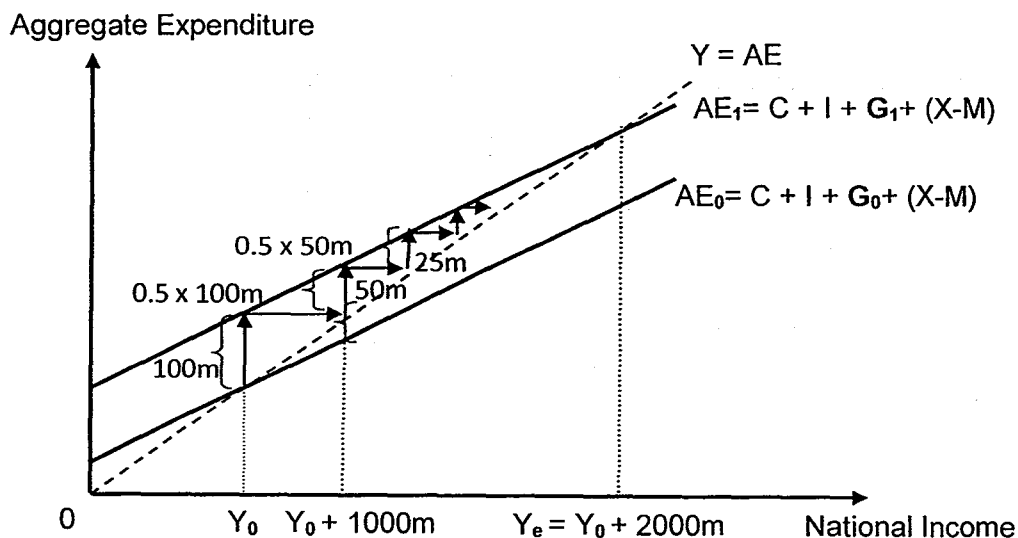
Aggregate Expenditure

$Y = AE$

$AE_1 = C + I + G_1 + (X-M)$

$AE_0 = C + I + G_0 + (X-M)$

0.5 x 50m

25m

0.5 x 100m

50m

100m

0

Y_0 $Y_0 + 1000m$

$Y_e = Y_0 + 2000m$

National Income

Figure 2: Graphical Illustration of the Multiplier Process in 4-sector economy
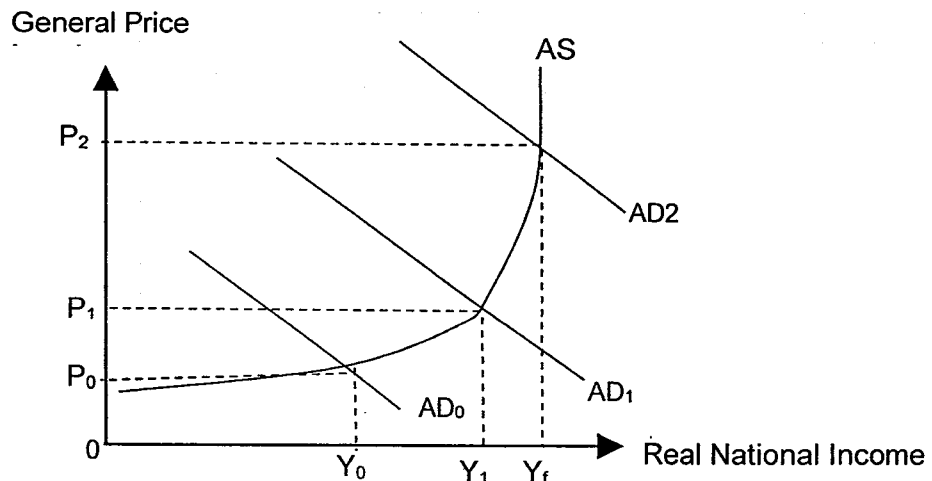
	Thus, the size of the national income multiplier shares an inverse relationship with the marginal propensity to withdraw (MPW), the smaller the leakage in the form of the marginal propensity to tax, save

	and import, the larger the value of the national income multiplier and thus the larger the expansionary effect on the national income of the economy. This applies to resource rich economies like the US which is likely to have a large multiplier due to her abundance of raw materials thus MPM is likely to be small. Also with her consumerist culture, her MPS is also likely to be low thus leading to a relatively bigger multiplier. For small and open economies like Singapore with limited natural resources, the size of the national income multiplier would be small due to her high marginal propensity to import & high marginal propensity. Hence an increase in Aggregate Expenditure of the US government would result in a larger increase in real national income than that of Singapore.
Main Body II Explain other key determinant that influences the change in national income of an economy	Due to the size of multiplier, the components of AD namely C, I and G played a smaller role in the promoting continuous growth in a small and open economy. Instead, other determinants like external economic outlook, investors' confidence level & existing capacity of the economy involved, influence changes in national income levels significantly. Another determinant that influences the change in real national income of an economy would be the state in which the economy is in. For an economy such as the US, operating near full employment, an increase in real national income is limited given an increase in Aggregate Demand. Meanwhile, an economy operating below full employment level such as Russia and India, an increase in AD leads to a larger extent of of increase in real national income. This can be explained using an AD-AS graph. For the US's economy operating near full employment level, Y_f, every unit production would incur higher opportunity cost due to competition for scarce resources. For example, the building the New York city subway required many

engineers to work there, leaving few engineers for private transportation reparation works, leading to resource crowding out due to scarcity of manpower. An increase of AD from AD_1 to AD_2 would lead to an upward pressure on general price level from P_1 to P_2, with a less than proportionate increase in real national income from Y_1 to Y_f. For an economy operating way below full employment level, more goods and services can be obtained due to availability of resources. An increase in AD from AD_0 to AD_1 will cause a more than proportionate increase of real national from Y_0 to Y_1. Hence, in the long run, increase in LRAS is insignificant. Hence the state of the economy influences the extent of change in real national income of an economy.

Another determinant in influencing the change in real national income of an economy is the nature of openness of the economy. Depending on the openness of a country, this determinant affects different economies to varying extents. For example, Singapore is a small and open economy that is highly dependent on external trade for sustained economic growth. Her trade to GDP ratio is 326%, indicating the importance of exporting to significantly larger markets such as the US. In this situation, signing of FTAs becomes an important leverage for Singapore and reduces trade barriers between Singapore's major trading partners through tariffs and quotas. This allows Singapore to export more to these economies. Through FTAs, Singapore benefit from cheaper raw materials and intermediate products to be used for production. Singapore would be able to import cheaper crude oil for refining upon signing FTA with Gulf state, reducing unit cost of production and enabling refined oil products to be relatively more price competitive. This leads to a more than proportionate rise in quantity demanded than the fall in price, leading to rise in export revenue. Ceteris paribus, net exports increases. This increases AD and real national income of the economy significantly via the multiplier effect. However, when compared to a large economy like China, where domestic market is large and is able boost China's economy, external circumstances play little role in influencing the change in real national income, compared to the size of the multiplier. Thus, external circumstances like world recession and willingness of other countries to trade is a determinant in influencing change in real national income for a trade-dependent economy.

Conclusion	In conclusion, the change in national income of an economy depends largely on the size of the multiplier, besides external circumstances and spare capacity. Since the multiplier is largely fixed for each economy, the government should then take it into consideration when

	choosing the best approach to achieve sustainable economic growth as seen in (b).

Level	Description	Marks
3	For a well-balanced answer, supported by the explanation of at least 2 key determinants that influence the change in national income of an economy.	7- 10
2	For an accurate but <u>undeveloped explanation</u> of why & how the size of national income multiplier influences the change in national income of an economy.	5- 6
1	For an answer containing a superficial outline of the multiplier process or one that contains conceptual errors.	1- 4

Examiner's Comments:

Most candidates were able to use a range of approaches, including the use of diagram, equations and tables, but many responses would have benefited from giving a detailed theoretical explanation of outcomes rather than stating them. For example, calculation on large/low multiplier value would frequently be presented without an explanation of the underlying theoretical process.

Several candidates explained the Keynesian multiplier using AD and AS curves, but most showed the AD curve shifting along an upward-sloping AS curve. In strict economic analysis this is not the Keynesian multiplier but rather a 'damped' multiplier. (A minority did recognise that the full Keynesian multiplier only occurred on the horizontal part of the AS curve.)

In addition, a significant minority of the candidates misunderstood determinant as components of aggregate demand.

b) Discuss whether raising domestic consumption as percentage of GDP is the best approach to achieve sustainable economic growth. [15]

Question Analysis:

Command Word	Concept Word	Context Word	Comparative word
'Discuss whether' Examine closely taking account of the benefits and costs for and against	1) 'raising domestic consumption as percentage of GOP' 2) 'sustainable economic growth'	'approach' Refers to rationale & intent of the suggestion	'best approach' Need to compare at least 3 approaches

Approach

- Thesis: Raising domestic consumption as percentage of GDP is the best approach to achieve sustainable economic growth
- Anti-Thesis: There are other better approaches to achieve sustainable economic growth
- Judgement – Give reasoned judgement to which is the best approach to achieve sustainable economic growth, given the contextual circumstance

Suggested Answer:
by Nguyen Thuy Duong & Lau Li Ying of 1512A

Introduction: Define sustainable economic growth	Sustainable economic growth ensures growth without creating further problems such as BOP imbalances, high inflation rate and environment damage that will otherwise suppress it. Given the increasingly volatile and uncertain world brought about by globalisation, raising domestic consumption as percentage of GDP would be the best approach for big consumer markets in the quest for sustainable growth. However, this is not ideal for economies with small domestic markets and facing an aging population, and hence other approaches such as increasing productivity and investing in Research and Development to look for new areas of comparative advantages would be better approaches.

Thesis 1 (Internal factors)	Raising domestic consumption as percentage of GDP allows economies with large domestic market to increase real national income via multiplier effect, leading to actual and sustainable economic growth. The high demand for goods and services from large domestic market induce employment opportunities in the retail and service sectors. Under Korea's Cosmetics Act, foreign cosmetics are subjected to "pre-market approval" (quality checks) and strict regulations and under the Korea Food & Drug Administration (KFDA) and Korea Pharmaceutical Traders Association) (KPTA). This high barrier to entry is created to ensure local cosmetics to be the key player in the industry, accounting for 85% of the growing market demand and raises private consumption level up to 10% annually. As a result, Korea experiences stronger job creation and give a strong fillip to dominant domestic firms such as AmorePacific and LG Household & Healthcare (with 50% market share). Comparing consumption and service - led economies and capital- led industries, consumption and service - led economies like Korea tend to create more jobs per unit of investment, accompanied by higher wages per dollar invested. Hence economies like Korea will benefit the most from this approach.
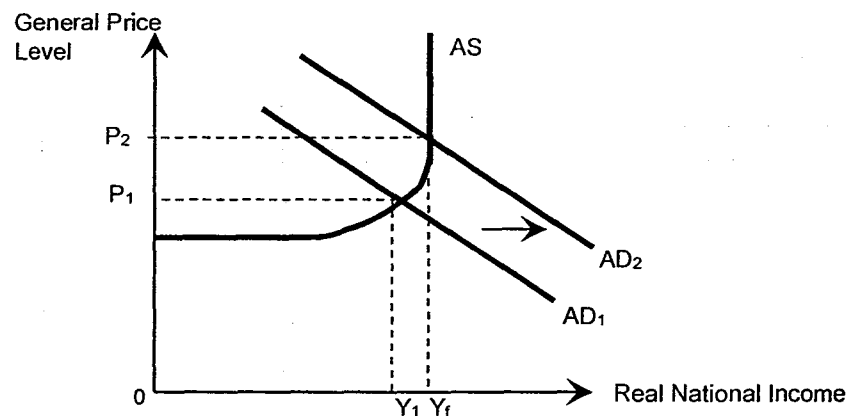
Increase in private consumption causes aggregate demand (AD) to increase from AD_0 to AD_1, leading to increase in real national income via multiplier effect (Fig 1) and actual economic growth, with a positive spillover effects on internal economic health such as induced employment and higher standard of living for consumers (higher quality products in the case of Korean cosmetics). Hence, actual economic growth is sustainable and can be achieved with the approach of rising domestic demand and consumption.

| Thesis 2 (External factors) | In addition, raising private consumption as percentage GDP eliminates the reliance on trade to achieve sustainable economic growth, thus, reducing susceptibility to external shocks for large economies such as China and hence is the best approach. The increase in real national income obtained from raising private consumption contributes to the national official reserves and diminishes the need to build up foreign reserves through reducing import expenditure. This allows China to narrow her trade surplus and reduce conflicts arising from global trade imbalances with her trading partners. Moreover, by turning towards producing consumption goods, China is able to reduce excessive usage of natural resources such as fossil fuels, water and land required to produce capital goods (industrial parks) and mitigate mounting environmental pressures, therefore achieving sustainable economic growth. Being one of the world's greatest producers of greenhouse gases and the world's largest coal consumer, China needs to adopt a more efficient use of resources in order to achieve sustainable economic growth. Hence, a rebalancing of China's growth toward production of goods and services would help boost the country's already – commendable efforts to put the economy on a more environmentally sustainable footing.

In addition to a lesser reliance on international trade, consumption spending in general simply tends to be much less volatile than either investment or exports. Investment can be postponed according to the cyclical needs of businesses, but consumers tend to prefer a smoother consumption trend over their lifetimes and at least some portion of consumption spending goes on non-optional basic necessities. Broadly speaking, investment-led economies also tend to be those that are going through a rapid period of industrialisation; economies that are expanding more rapidly may face wider swings during shocks that affect the equilibrium exchange rate.

Thus, raising domestic consumption as percentage of GDP is the best approach to achieve sustainable economic growth for economies with big domestic markets like China and the US. |

Anti-Thesis 1	However, raising private consumption can be a challenge for developed economies facing aging population in a rapidly changing global economic environment like European economies and Singapore due to the necessary quantity and quality of labour required for potential economic growth, which then leads to cost–push inflation as these economies reach full employment level. Therefore, an approach that anchors on productivity–led growth will deliver sustainable economic growth for these economies.

An increase in labour productivity will lead to lower per unit labour cost and hence lower unit cost of production. This means higher rate of expected returns from investment, which attracts FDI into the economy and improve the economy's capital and financial account. The inflow of FDI also improves employment by creating employment opportunities for the locals. Additionally, advanced technologies, machines, skilled labour and expertise that FDI bring in can expand productive capacity of the economy and contribute to higher potential economic growth. Therefore, scarcity of resources that otherwise hinders sustainable economic growth can now be addressing following this productivity–led growth approach.
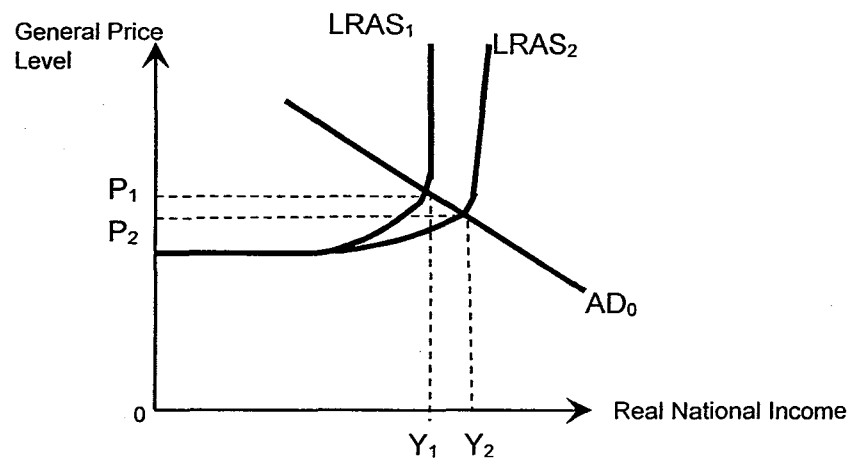
Furthermore, Using AD-AS framework, labour productivity growth can reduce inflationary pressure caused by actual economic growth of economies operating at/near full employment level. An increase in labour productivity leads to rightward shift of LRAS from $LRAS_1$ to $LRAS_2$. Hence, general price level will decrease from P_1 to P_2 in response to an increase in real national income from Y_1 to Y_2 via multiplier effect. Hence, actual economic growth can be achieved without trade–offs with high inflation.

	Improving labour productivity also help improve an economy's BOP through price competitiveness and product differentiation. Labour productivity growth lowers unit cost of production and price of exports in foreign currencies, thus boosting international export competitiveness. As demand for exports is price elastic, lower exports price leads to more than proportionate increase in quantity demanded for exports. Total export revenues $R = P \times Q$ thus increases and BOP in current account increases. This leads to a significant actual economic growth for small and open economies like Singapore where exports revenues take up 326% GDP. Moreover, improvement in process and product innovation (as part of labour productivity growth) such as improving users' experiences in connectivity between consumers and electronics, as well as products/services improvement and differentiation through smart phones apps, wearable devices, data and media may lead to the development of consumer preferences to domestic products and form brand loyalty. This makes demand for domestic exports even more inelastic and price competitive with higher BOP surplus, contributing to sustainable economic growth. Also, to mitigate the negative impact of an ageing labour force on labour productivity growth, it is important for the government to continue to focus on lifelong learning and retraining of older and less educated workers, as it will help the workers to remain relevant and productive in the domestic economy. Hence, enhancing labour force's productivity and employability for older workers will be the key to help economies achieve sustainable economic growth and high employment levels.
Anti Thesis 2	Another approach to sustainable economic growth is to seek new areas for comparative advantage and build up sunrise industries to improve attractiveness of investment climate. The economy is able to benefit from potential economic growth and increased spare capacity. In Singapore, the government has identified 4 pillars of growth as they hold significant growth potential, namely the water processing, tourism, biomedical and pharmaceutical industries. The Biopolis and Fusionopolis are examples of such, and they have managed to attract many renowned companies into Singapore. Biopolis, in particular, have made its mark in tropical diseases and stem cell development in Singapore.

	With capabilities of high and advanced technology, Singapore also have found comparative advantage in water treatment plants(e.g NEWater). As a result of government focus on these industries, productive capacity in the country will rise as technology and expertise can be passed on to Singapore companies. This ensures sustainability as economic growth is supported with increase in workers' skills and knowledge, thereby ensuring vibrant economic environment for investment and provides opportunities for employment. However, there are also some adverse effects on citizens of lower income groups and skills. Such rapid industrialization and structural change might bring about increased income inequality and structural unemployment. Then again, the government needs to ensure lifelong learning through training programmes and workshops. One such example would be SkillsFuture, a philosophy led initiative in which the government provides opportunities to maximise one's potential and develop a mastery of skills. This policy encourages Singaporeans, young or old, to achieve success through the growth mindset, charting our own paths and skills mastery. Hence, an approach to sustainable economic growth is to seek new areas for comparative advantage and build up sunrise industries to improve attractiveness of investment climate.
Conclusion	In conclusion, raising domestic consumption as percentage is the most appropriate for countries with large domestic markets and when there are external shocks as countries are able to rely on their factor endowments to achieve sustained economic growth. However, when countries rely on one another to boost economic growth due to small domestic markets, other approaches like boosting productivity and research on comparative advantages to attract investors would be more appropriate in sustaining all aspects of economies.

Level	Knowledge, Comprehension, Application & Analysis	Marks
3	For a well-balanced discussion on the best approach to achieve sustainable economic growth.	9- 11
2	For an accurate but <u>undeveloped discussion</u> on the approach to achieve sustainable economic growth.	6- 8

1	For an answer containing a superficial outline on how economic growth can be achieved or one that contains conceptual errors.	1- 5
	Evaluation Marks	
E2	Evaluative judgement supported by appropriate analysis	3-4
E1	Unexplained judgement	1-2

Examiner's Comments:

The best answers showed a clear understanding of the term 'sustainable economic growth' and 'approach'. To address directly to the question requirements, candidates must explain the rationale/objective of the approach taken.

Most candidates ensured that their points were linked to achievement of higher economic growth. Often, explanations and evaluations presented were rehearsed responses that did not address to the specific question requirements.

Few scripts, however, explained sustainable economic growth accurately. Many confused sustainable economic growth with sustained economic growth. The result of this conceptual error meant that many essays lacked the required underlying analytical basis for both Thesis & Anti-Thesis stance. Some candidates misunderstood this to be a policy description question.

The slow economic recovery from world-wide financial crisis has caused emerging countries which exports commodities to suffer from currency depreciation and unsustainable balance of payment deficit. Growth of advanced economies is affected by the lower growth in commodities exporters and productivity growth remains weak. Amid slowing international trade growth, countries have turned to mega-regional trade agreements like Transpacific Partnership (TPP) and Transatlantic Trade and Investment Partnership (TTIP).

Explain the likely causes of balance of payment deficit and discuss the alternative policy approaches that are appropriate for a country to achieve healthy balance of payment a midst slow economic recovery. **[25]**

Command: Explain and discuss

Content: Balance of payment deficit, Policy (monetary policy, fiscal stimulation policy, exchange rate policy, trade policies)

Context: a midst slow economic recovery

Question Requirement:

1)   Causes of BOP Deficit

2)   Policies approaches to achieve healthy BOP

3)   Appropriateness during slow economic recovery

Adapted from Kinson Tan 1512A

Key Analysis	Explanation
Introduction	As the world's economy is slowly recovering from the recent worldwide financial crisis, it led to some countries suffering from BOP deficit and some government around the world would have unsustainable BOP deficit. The **balance of payments** (BOP) is defined as a systematic record of all economic transactions between residents of an economy and residents in the rest of the world over a period of time, usually one year. The BOP estimate is very useful for assessing the __external performance__ of an economy and for formulating policies connected to it. Hence government would adopt appropriate policies to achieve healthy BOP.
Content Analysis: Cause of BOP deficit	UK is recovering from the post worldwide financial crisis, employment rate increases and household income rises and consumers gain greater confidence in the economy. These will increase their consumption and decreases their savings. Consumer demand for more both domestically produced goods and services and also imported ones from other countries. Since demand for imported services such tourism are income elastic, when income rises, demand will increase. Assuming exports remained the same, import expenditure increase in UK will lead to net x fall and thus worsening of trade balance in the current causing BOP deficit in UK.

	Australia which is a resource rich country is one of the major exporting country of commodities like metalliferous ores and metal scrap is suffering from the global fall in demand for such goods hence the poor economic outlook in Australia led to domestic and foreign firms to lose confidence in its own economy hence domestic firms seek to invest in foreign markets such as US and China which are larger than domestic markets while some foreign firms might withdraw their investment to other countries that have better prospects thus it lead to net outflow of FDI Australia leading to a worsening capital and financial account thus suffering from BOP deficit. BOP deficit can also be caused be relatively lower interest rate that resulted in capital and financial account deficit. The US lowered their interest rates relative to those in other countries. This results in short-term capital outflow such as portfolio investment due to lower profitability and may cause deficit in the capital and financial account. BOP deficit can also be caused by a deficit in the capital and financial account due to a net outflow of FDI. When US loss comparative advantage in production of labour intensive products due to higher wages thus causing higher cost of production for firms resulting in higher opportunity cost in production of such goods compared to China. The higher cost of production of labour intensive products will cause FDI to outflow to other countries to take advantage of the lower wages and hence lower production cost so as to increase their profitability. Thus any persistent net outflow of direct investment will cause BOP deficit in capital and financial account.
Content Analysis: Explain policy to achieve healthy BOP via improvement of current account. Appropriateness of the policy.	To achieve a healthy balance of payment, many economies had turned to free trade agreements (FTA) like TPP to facilitate trade and improve their BOP. Other policies that are also employed are expenditure reducing policies and expenditure reducing policies like protectionism. FTA agreements between countries to reduce trade barriers to encourage trade thus will attract foreign direct investment (FDI) to invest in the economy so as to exploit the lower trade barriers that improve price competitiveness of their goods that can be exported. With the net inflow of FDI into countries that signed more extensive FTAs, it will increase long term capital inflow hence reduces the capital and financial account deficit. However FTA agreements takes many years to negotiate for countries to strike mutually beneficial agreement therefore it will not be an immediate solution to reduce capital and financial account deficit. However it is not appropriate to attract FDI to improve the BOP a midst of slow economic recovery as investments are dependent on various factors of considerations such as economic outlook. With the uncertainty in global economic conditions, some firms might put off investment in US or China. Aside from FTAs, a country like UK can use expenditure reducing policies to maintain a healthy BOP. In times of rising real national income due to

	the recovery, consumers have better confidence in the economy and rising income hence more willing to consume goods and services due to higher purchasing power. A proportion of income may go to increased import expenditure. Contractionary fiscal policies through an increase in taxation and or government expenditure can help to reduce AD by causing a leftward shift of AD. This results in a reverse multiplier effect where an initial decrease in demand results in a fall in derived demand for factor inputs such as labour, thereby further reducing consumption expenditure and imported expenditure as income level falls which in turn improves trade account in the BOP.

However in times of slow economic recovery, such a policy is detrimental to the economy as it reduces AD and via the reverse multiplier, there will be a more than proportionate fall in real GDP and higher unemployment which is not appropriate when the economy are just showing signs of recovery from the financial crisis.

Protectionism can be used to improve BOP. Protectionism as opposed to FTAs is a policy to increase trade barriers such as tariffs to protect domestic firms from foreign competitors. The imposition of tariffs for example increases prices of imported goods relative higher compared to domestically produced goods as illustrated in Figure 1 where prices increases from Pw to Pw'. This has an expenditure switching effect as imported goods and domestically produced goods are close substitutes hence when price of imported goods increases, quantity demand for imports will decrease more than proportionately as consumers switch to relatively cheaper domestic goods, hence total import expenditure will decrease and improving trade balance in the current account of BOP.

This policy might not be appropriate for small economies like Singapore that have limited resources to be able to produce enough domestic goods for their consumers. Furthermore, such actions might lead to retaliation from trading partners which might cause a fall in demand for its exports by trading partner hence overall net exports fall and AD fall leading to fall in economic growth. This might be detrimental to an economy which is just slowly recovering from the worldwide financial crisis. |
| Conclusion | In conclusion, some of the causes such as large import expenditure of sophiscated machineries for developing the economy of BOP deficit might not need policies to reduce the trade balance deficit. In consideration on the use of policies to reduce BOP deficit, governments have to weigh the outcome achieving BOP and gaining stronger economic recovery as they are conflicting goals. |

Level	Descriptor	Marks
L3	For a well-developed answer that analyses the appropriateness of the different types of policies (how policy works & limitations) adopted by the	15 – 21

		government for both causes of BOP deficit due to current account and capital & financial account that is also well explained. Relevant examples are also well-integrated into the economic analysis. Answers are appropriate with the context of a midst the economic recovery are able to access 18-21 marks.	
L2		For an underdeveloped answer that provides underdeveloped answer with brief economic analysis of the different types of policies (how policy works & limitations) adopted by the governments for the different causes of BOP deficit. Max 11marks if only 1 policy is discussed with the relevant causes of BOP deficit (both current and C&F account). Max 10 for well-developed answer that only answer the causes of BOP deficit without the policies being used (they would have listed some polices).	10 – 14
L1		Answer is mostly irrelevant and contains only a few valid points made incidentally in an irrelevant context. OR an unexplained list of stated policies / causes of BOP deficit. OR a largely descriptive answer that shows some knowledge of BOP deficit and some policies but with no/little economic analysis.	1 – 9
Evaluation Marks			
E2		For an evaluative judgment based on analysis and supported with a strong conclusion.	3 – 4
E1		For an unexplained judgement, or one that is not supported by analysis	1 -2

Marker's Comment:

Candidates which attempted this question have some misconceptions. Misconception includes unable to differentiate balance of payment deficit and budget deficit, the lenders and borrowers perspective of interest rates and the use of Marshall-Lerner's' condition. Some candidates have problems with questions interpretation as some did not even explain causes of BOP deficit and some went to explain how the policies improve economic growth instead of reducing BOP deficit.

Weaker candidates were unable to explain the causes and policies well with some candidates only explaining either current account deficit or capital and financial account deficit only. Some candidates also did not state how the policies suggested were able to address which aspect of BOP deficit clearly. Most candidate did not use examples and the policies used together with the consideration of economic recovery. Hence candidates were unable to access higher level marks if they did not address the appropriateness of the policies.

6 (a) Explain the factors that change Singapore's trade pattern. **[10]**

(b) Discuss the view that globalisation will always improve a country's standard of **[15]** living.

<u>Suggested Answer for part a</u>

Introduction:

- Define trade pattern – refers to the type of export and imports, vol of trade and who the trading partners
- Possible factors: Change in CA (SS factor), change in Income level (DD factor), Change in government policies

Body 1: Change in Techonology level

Due to the opening up of new economies around Singapore such as Vietnam, China, Thailand etc as well as the technological improvement in these developing countries → erosion of CA in term of low-value capital intensive industries in Singapore→ relocate of factories to countries like China, Vietnam and Thailand etc. While Singapore continue to develop an adopt new technology for higher value capital intensive manufacturing goods and knowledge based industries goods/services → change in export towards high-value goods and service while import more low value goods.

Body 2: Change in Income of Singapore

Rising affluent of Singapore due to past 2 decades of E.G → require more high qly and tech-advance goods → increase import of more luxury brand goods and tech gadgets → change Singapore type of import.

Body 3: Change in government policies (signing of FTA)

Signing of more FTA → lower trade barrier such as import and export tariff → make Singapore export more price competitive in other countries → increase ability of Singapore firms to penetrate a new market → increase in no. of trading partners and increase trade vol.

(Other factors acceptable: change in T&P, Change in endowment level, change in other countries policies)

Levels	Description	Marks
3	Well-developed answer that explains a variety of different factors that cause Singapore trade pattern to change with good and appropriate use of examples. Max 7m: Well-developed answers that provides only 2 factors of cause with good and appropriate use of examples	7- 10
2	Under-developed answer that explains a variety of different factors that cause Singapore trade pattern to change with no or little use of examples Max 5m: Well explained answers that provides only 1 factor with good and appropriate use of examples.	5- 6
1	Answer that has conceptually wrong and/or briefly describes the different factors that cause Singapore trade pattern to change.	1- 4

Examiner's comment:

Most students presented that their factors of change as a "current situational factor" rather than a "changing factor". Some merely stated that the factors or list the example without explanation. Students who score better are those who gave a changing factor and explain explicitly to the which aspect of trade pattern that is affected.

Sample answer for part b

Intro:

Define Globalisation: the increased interconnectedness between countries

Define SOL: Standard of living refers to the economic and social aspect of quality of life. It comprises of the material and non-material aspect of life. Material aspect of life refers to the quantity of goods and service that an average individual can enjoy while the non-material aspect refers to the level of socio-emotional, environment and culture and heritage of an individual.

Link Globalisation to SOL: Globalisation will affect the the SOL via the flow of trade, capital and labour.

Thesis: Globalisation improve SOL (select any 2 points)

Point 1: Globalisation → increase export due to improvement in transport technology (explain) → increase NY → material SOL. In addition govt tax rev increase → more funds for public and merit good

EV: depends on govt objective when allocating their funds

Point 2: Globalisation → more foreign competition due to the increase in imported goods and FDI due to the improvement in communication technology (explain)→

   a) increase incentive for R&D by domestic producers → better qly and more variety of goods and svr
   b) lower ability of domestic firm to set high price → tend to adopt more cost-efficient method → lower price → increase qty of goods and svr

EV: depends on the ability of foreign firms to penetrate the domestic market

Point 3: Globalisation → more imports → wider choice of goods. In addition, gloablisation allow countries to better to tap of each other CA by facilitating the slicing up of the production chain **(explain with use of example)** → relocate the production of some parts of the final product to countries that have CA in producing them → lower COP → price of domestic goods and service to fall → higher PP → more qty enjoyed

EV: Depend on the extent the country is dependent in imported FOP.

Anti-thesis: Globalisation worsen SOL

Point 1: Globalisation → increase export dd & FDI → increase production level and construction activities → increase level of pollution and environmental damage

Ev: Depends on level of green technology in the country

Point 2: Globalisation → increase in foreign labour and greater exposure to foreign movies/news/drama/music etc → intro to foreign culture and values → erode tradition cultures and heritage

Point 3: Globalisation → increase FDI → technology improvement → increase need for higher skill or knowledge → mismatch of skill → increase rate of structural unemployment in the LR → lower H/H income → lower ability to enjoy goods and svr in LR

Conclusion:

Globalisation → will mostly to increase the material of SOL but might reduce non-material SOL in some countries depends on level of govt intervention

Levels	Description	Marks
3	Well-developed and clear answer that explain how globalization will positively and negatively affect the standard of living as well as analyse how the extent of the impact will varies within/across countries. Good and appropriate use of examples Max 9m: Well-developed and clear answer that explain how globalization will positively and negatively affect the standard of living with good and appropriate use of examples	9- 11
2	Underdeveloped answer that explain how globalization will positively and negatively affect the standard of living. Little or no use of examples Max 8m: Well-developed one-sided answer that explain how globalization will positively or negatively affect the standard of living as well as analyse how the extent of the impact will varies within/across countries. Good and appropriate use of examples Max 6m: Well-developed one-sided answer that explain how globalization will positively or negatively affect the standard of living. (or only material or non-material SOL)	6- 8
1	Answer that are descriptive and/or mostly conceptually faulted in analysis.	1- 5

Levels	Description	Marks
2	Well explained Judgement with clear supporting evidence and reasoning.	3- 4
1	Judgement with a lack of supporting argument.	1- 2

Examiner's comment:

Most answer failed to give a clear explanation from globalization, but merely state the effect of globalization. Most answers are only limited in scope whereby SOL increased because of either due to trade increase only or SOL is affected due to economic growth or employment level changing. Some answers did not answer to question because they analysis on individual SOL rather country's SOL. Many made the conceptual error that globalization brings about/build comparative advantage of a country rather than globalization allow countries to better tap on each other comparative advantage.