

ST. ANDREW'S JUNIOR COLLEGE  
PRELIMINARY EXAMINATIONS – 2018 (JC2)  
General Certificate of Education Advanced Level  
Higher 2

**ECONOMICS**

**9757/02**

**Paper 2**

**11 September 2018**

**2 hours 15 minutes**

Additional Materials: Answer Paper

**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.

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

Start each question on a fresh sheet of paper.  
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.



This document consists of **3** printed pages.

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**[Turn Over]**

|   |   |   |      |
|---|---|---|------|
| 1.  | Besides possessing dominant positions in many of the world's most important markets, budget airlines are stealing passengers from full-service carriers. Fierce cost-cutting, unbundling of services as well as booming economies of the developing world are but some contributing factors to the roaring success of budget airlines. Last year, for the first time, they carried more than one billion fliers – nearly 30% of the 3.7 billion who took to the air.<br><div>Adapted from The Wall Street Journal, Aug 2017</div> |   |      |
|   | (a)   | Explain the factors that determine the price elasticity of demand, income elasticity of demand and cross elasticity of demand of a good.                                | [10] |
|   | (b)   | Discuss the relative importance of the above demand elasticity concepts in explaining the rise in popularity of budget airlines among air travelers in the past decade. | [15] |
| (a)   |   |   |      |
| <div><u>Introduction</u><br/>The various elasticity of demand concepts allow economists to determine the responsiveness of consumers to the change in the causal factor. Each of the elasticity concepts is in turn affected by its own sets of factors.</div> <div><u>Body</u><ul style="list-style-type: none"><li>- <b>PED</b> measures the responsiveness of quantity demanded of a good with respect to a change in price of the good itself c.p. (provide formula).</li><li>- The PED value is always negative – assumes Law of Demand applies to the good</li><li>- Size of PED value informs of the responsiveness of consumers to the change in price of the good itself, c.p. The larger the (absolute) value, the more responsive consumers are.</li></ul></div> <div><u>Suggested Factor – E.g. Degree of necessity</u><ul style="list-style-type: none"><li>- PED value of a necessity is expected to be low and less than 1 (i.e. <math>PED &lt; 1</math>).</li><li>- Given a rise in price, a consumer will only reduce the quantity demanded of the goods less than proportionately due to the continued need to consume the good.</li><li>- For example, even if the price of salt rises by 10%, a consumer will unlikely reduce his consumption by more than 10%, if at all. This is as salt is one necessary component of one's diet to maintain a healthy body.</li><li>- Likewise, it is unlikely for a consumer to increase consumption of salt more than proportionately to the given a fall in its price, as there is absolutely no need for an average healthy and rational person to do so. Hence, the PED value of salt is said to be less than one; demand for salt is price inelastic.</li></ul></div> |   |   |      |

- **YED** measures the responsiveness of the demand of a good to a given change in income c.p. (provide formula).
- The YED value is positive for normal good) and negative for inferior good.
- Size of YED value informs of the responsiveness of consumers to demand for a good when they experience a change in income, c.p. The larger the absolute value, the more responsive they are.

#### Suggested Factor – Nature of good

- When a good is Inferior in nature, a given change in income will lead to opposite change in demand for good. For example, a consumer will increase demand for an inferior good (e.g. lower quality meat, canned meat) and a decrease in demand for normal/luxury goods when he experiences a fall in his income.
- **Fall in income** → desire to conserve financial means to fulfil basic needs by giving up 'good-to-haves' such as luxury food items (e.g. expensive cuts of meat) and **increasing demand** for 'must-haves' such as potato or rice for subsistence purpose. Hence, YED for potato is negative.
- **XED** measures the degree of responsiveness of the demand for a good to a given change in the price of a related good or service, ceteris paribus.
- The XED value is positive for substitutes) and negative for complements.
- Size of XED value informs of the responsiveness of consumers to demand for Good X when the price of Good Y changes, c.p. The larger the absolute value, the more related Good X and Good Y are.

#### Suggested Factor – Degree of relatedness of good

- Degree of substitutability between two goods (i.e. Weak vs close substitutes) determine the absolute value of the XED between them.
- For example, Pepsi and Coca Cola are close substitutes. The fall in price of Pepsi will lead to a much more than proportionate fall in demand for Coca Cola than the fall in demand for coffee. This is because Cola drinkers are more ready to switch to cheaper Pepsi (and hence demand much less Coca Cola) than coffee drinkers.
- Coffee drinkers generally do not view Pepsi and coffee as close substitutes. Hence, XED for Coca Cola and Pepsi will be much higher and that for coffee and Pepsi will be much lower.

#### CONCLUSION

- There may be multiple factors which could ultimately determine each of the elasticity values. In such a situation, the dominant factor would usually be the sole determinant of the elasticity value of the good prevailing at that time in consideration.

| Level<br>(Marks) | Knowledge, Application, Understanding, Analysis  |
|------------------|--|
| L3<br>(8 – 10)   | <p>Answer shows thorough knowledge and an excellent ability to explain at least one factor for all three elasticity concepts in a precise, logical and reasoned manner. Top grade answer ought to include the following:</p> <ul style="list-style-type: none"> <li>- Definitions</li> <li>- Examples to illustrate</li> <li>- Explanation of how the factor affects the elasticity values (<b>EITHER</b> different size of values – big vs small <b>OR</b> signs the values take – positive vs negative)</li> </ul> |
| L2<br>(5 – 7)    | <p>Answer explained at least one factor each for at least two elasticity concepts.</p> <p>Answer is mostly accurate but there may be undeveloped explanation of concepts.</p>  |
| L1<br>(1 – 4)    | <p>Answer shows some knowledge of elasticity concepts (mere definitions and formulae given). Factors are more stated than explained. Meek attempts at suggesting examples to support answers.</p> <p>There may be basic errors in phrasing of the key terms and highly inadequate explanations. The answer could be mostly irrelevant or inaccurate.</p>   |

(b)

## Introduction

- The rise in popularity suggests a significant increase in the equilibrium quantity of passenger flights, i.e.  $Q_e$ . (Important to explain why there was a **huge rise in  $Q_e$** )

## Body

- **Fierce cost-cutting – suggest that supply rises (bring in PED)**
  - o Increase in supply of budget carriers leads to movement down demand curve
  - o Hence,  $P$  falls and Quantity demanded rises.
  - o The value of PED for budget air-travel is likely to be high. This is because the customers are largely lower income / budget conscious travelers. Hence, they are more price sensitive; would rather forego comfort/convenience, etc.
  - o Evaluation:

- Likely to be a big reason as budget airlines are new phenomenon in the air travel market over the past decade.
- Budget airlines can attract many price sensitive customers who previously did not have a choice but to fly with full-service carriers.
- Can also attract significant amount of low income travelers who previously could not afford to fly at all (e.g. students, casual workers, retirees, etc)
- Unbundling of services – rise in demand / rise in Qd (**bring in XED**)
  - Ditching of frills better matches the needs of certain groups of travellers.
  - Full-service carriers may compete by providing discounts (P falls). However, XED assumed to be very low due to significant differences between budget and full service carrier services ( in terms convenience when boarding planes, choice of destinations, availability of connecting flights, etc). Hence, such discounts may not be able to claw back significant number of customers from budget airlines.
  - Alternative, in the event that there is no price cuts by the full-service carriers, XED will not be useful at all.
- Burgeoning economies (**Bring in YED**)
  - Offers huge increase in demand by swathes of population across the globe who can now afford to fly. As air travel may be a luxury good to most of them, rise in income earned led to much mtp rise in demand for air travel. This is especially so for big, developing economies such as India and China.
  - Note that there is some exodus from budget to full-service carriers too. However, this is assumed to be less significant due to the considerable margin between budget and full-service carriers.

### Conclusion

- Given the dynamics of the economic conditions over time (simultaneous and multiple changes in income, price of the goods itself and price of other goods), it is theoretically impossible to determine the singular, most important elasticity concept that led to rise in Qe of budget air travel.
- Furthermore there could be other factors that also affect the market equilibrium. For example, there might be increased fears of flying due to terrorism threats or concerns about aviation safety. These might cause a dip in demand which would then dampen the overall rise in Qe of budget air travel. In view of these

external factors, it would also be difficult to assess which demand elasticity was most important in explaining the rise in Qe of budget air travel.

- However, given the main target audience of budget air travel, the burgeoning economies of the developing world may seem to be the key trigger that fueled the rise in popularity of air travel over the past decade.

| Level<br>(Marks) | Knowledge, Application, Understanding, Analysis   |
|------------------|---|
| L3<br>(8 – 10)   | Answer shows thorough understanding of question asked and demonstrated mastery of content to clearly and comprehensively (all three elasticity concepts brought up) answer the question.<br><br>Only minor, non-critical errors allowed.  |
| L2<br>(5 – 7)    | Answer attempted to compare and rank at least two elasticity concepts in explaining the rise of budget airline popularity.<br><br>Relevant causal factors were brought up and could pose as a decent argument in response to question asked.  |
| L1<br>(1 – 4)    | Answer shows some knowledge of how elasticity concepts could affect sales volume of budget airlines. Explanation is largely clumsy or inaccurately phrased.<br><br>There may be basic errors in theory, in adequate explanations or contain only a few valid points. The answer could be mostly irrelevant or inaccurate. |
| E3<br>(4 – 5)    | Clearly worded justification on why ranking of elasticity concepts is as such. Convincing argument based on sound economic analysis, possibly also drawing insights from beyond the context tested.   |
| E2<br>(2 – 3)    | Attempt at justifying ranking of elasticity concepts but weak economic reason provided. Phrasing does not sound convincing. Certain degree of mastery of comparative analysis should be present.  |
| E1<br>(1)        | Merely a stand provided.  |

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| 2. | A firm's level of profits tends to rise and fall with dynamic changes in the global economy. |  |      |
|    | (a)  | Explain whether a firm will continue to operate in the short run when faced with a rise in various types of costs. | [10] |
|    |  |  |      |
|    | (b)  | Globalisation is likely to change the market structure a firm operates in and the level of its profits. Discuss.   | [15] |
|    |  |  |      |

### Introduction

- Firms are assumed to be profit-maximising entities. To maximise profits, firms will seek to produce at the output level where marginal costs equals to marginal revenue.
- Firms can make super-normal, normal and sub-normal profits.  $\text{Profits} = \text{TR} - \text{TC}$
- When faced with rising business costs in the short run, and assuming that total revenue remains the same, firms' profits will be reduced. In such a situation, the manager may need to decide one of the two options he has – to continue with the business or to close down.

### Body

- The decision to continue or shut down depends on whether 1)  $\text{TR} > \text{TVC}$  or 2)  $\text{TR} < \text{TVC}$  respectively.
- A firm operating in the short run incurs two types of costs – TFC and TVC by hiring fixed and variable factors of production respectively.

### A Rise in Total Fixed Cost

Suppose a firm initially earns \$2000 in total revenue, incurs \$1000 as fixed costs and \$400 as variable costs. It is earning \$600 super-normal profits. Assuming no change in total revenue and its variable cost, any increase in fixed costs will not result in a firm shutting down. It will continue its operation.

E.g. Assume a firm's fixed costs rise to \$1800. Despite incurring a loss of \$200 [ $\$2000 - (\$1800 + \$400)$ ] now, the firm will not shut down. This is because its loss will be even greater (i.e. \$1800, the full, increased fixed costs) if it chooses to shut down.

Likewise, if its fixed costs rise to \$2200 (above its total revenue), it should still continue so as to incur lower loss of \$600 [ $\$2000 - (\$2200 + \$400)$ ] than otherwise (i.e. \$2200, its full, increased fixed costs). This shows that changes in fixed costs do not affect a firm's decision to continue operation or shut down in the short run.

### **A Rise in Total Variable Cost**

In another case, suppose the firm still earns \$2000 in total revenue, incurs \$1000 as fixed costs and \$400 as variable costs, a change in variable cost may lead the manager to shut the firm down.

E.g. A rise in variable costs to \$1400 will cause the firm to make a loss of \$400 [ $\$2000 - (\$1000 + \$1400)$ ]. However, the firm should still continue its production as the loss (\$400) will be smaller than otherwise (\$1000, the full fixed costs).

On the other hand, if the variable costs rise from \$400 to \$2400, then the firm should shut down, as the loss of shutting down will be smaller (\$1000, the full fixed costs) than if it continues operating [ $\$2000 - (\$1000 + \$2400) = \$1400$ ]. This shows that rise in variable costs does determine whether the firm should shut down or not.

### **CONCLUSION**

- The manager needs to consider various factors when deciding whether to shut down or continue a business given a rise in costs. Rational behaviour dictates that he ought to continue with the business so long as doing so incurs lower losses.

| Level<br>(Marks) | Knowledge, Application, Understanding, Analysis   |
|------------------|---|
| L3<br>(8 – 10)   | <p>Answer shows thorough knowledge and an excellent ability to explain the consequences of a rise in TFC and TVC in terms of affecting a firm's decision to shut down when it incurs a loss. Full marks to be given when answer contains all of the following:</p> <ul style="list-style-type: none"> <li>- Rise in TFC (regardless of amount) – this is to show the change in various types of cost</li> <li>- Rise in TVC (but still &lt; TR)</li> <li>- Rise in TVC (but &gt; TR)</li> </ul> |
| L2<br>(5 – 7)    | <p>Answer explains at most two out of the three bullets in L3.</p> <p>Answer demonstrates sufficient grasp of the question.</p>   |
| L1<br>(1 – 4)    | <p>High L1 given to an answer that shows some knowledge of shutdown condition but explanation is severely lacking or mistakes are aplenty/irredeemable.</p> <p>Low L1 given to an answer which is mostly irrelevant or inaccurate.</p>  |



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| (b) | <p data-bbox="236 232 408 264"><b>Introduction</b></p> <ul style="list-style-type: none"> <li data-bbox="284 309 1445 524">- Globalisation is likely to exert certain influence on the market a firm operates in. Depending on the market's susceptibility to global influence in terms of barriers to entry, the product type as well as the number of buyers, the firm in question may find itself operating in a different market structure, and earning different levels of profits, should the economy be subjected to greater globalisation forces.</li> </ul> <p data-bbox="236 600 312 631"><b>Body</b></p> <ul style="list-style-type: none"> <li data-bbox="284 636 1445 819">- The <u>market structure</u> a firm operates in is determined by the following characteristics: <ul style="list-style-type: none"> <li data-bbox="379 712 660 743">○ Barriers to entry</li> <li data-bbox="379 748 788 779">○ No. of buyers and sellers</li> <li data-bbox="379 784 1024 815">○ Nature of products (unique or substitutes)</li> </ul> </li> </ul> <p data-bbox="331 860 1445 1008"><u>For example</u>, In the Singapore bakery market, a few local bakeries hold significant market share e.g. BreadTalk, Bengawan Solo and Prima Deli. The bakery market could be said to be operating under an oligopolistic market due to</p> <ul style="list-style-type: none"> <li data-bbox="379 1016 1445 1088">○ its relatively high BTEs (strong brand and product quality, high market dominance)</li> <li data-bbox="379 1093 1445 1164">○ mutual dependence ( offering discounts and new flavours at the same time)</li> <li data-bbox="379 1169 1445 1240">○ few sellers (not many competitors selling premium quality bakery products).</li> </ul> <ul style="list-style-type: none"> <li data-bbox="284 1276 1445 1348">- Globalisation brings with it the <u>removal of barriers across borders</u>. Such barriers relate to labour, technology, capital and goods and services.</li> <li data-bbox="284 1352 1445 1657">- Thus, a greater degree of globalisation allows: <ul style="list-style-type: none"> <li data-bbox="379 1388 1445 1460">○ Foreign competitors to compete with domestic producers in the domestic markets.</li> <li data-bbox="379 1464 1445 1581">○ Domestic firms can also expand their market by exporting their goods and services to external markets or even set up firms in the foreign market.</li> <li data-bbox="379 1585 1445 1657">○ Domestic firms may also import cheaper factors of production from overseas</li> </ul> </li> </ul> <p data-bbox="236 1688 1075 1720"><b><u>Thesis:</u></b> Globalisation changes market structure and profits</p> <ul style="list-style-type: none"> <li data-bbox="284 1724 1445 1872">- With the changing taste &amp; preferences, desire for more choices of the buyers as well as the encouragement of FDI by the government, new players emerge (Paris Baguette, Duke's Bakery, Chateraise, Bread Society, etc) in recent years to compete with local bakeries for a share of the market.</li> <li data-bbox="284 1877 1445 1971">- Even smaller local bakeries also sought to upgrade themselves in order to stay competitive (Swee Heng, Tiong Bahru Bakery) in face of stronger competitors from overseas.</li> </ul> |
|-----|--|

- If the larger bakeries are unable to hold up their brand by ensuring the price and non-price competitiveness of its bread, they will increasingly lose their market share.
- The presence of more foreign competitors means that there are more sellers. As each previously oligopolistic firm loses its market share, the bakery market structure may change from an oligopolistic to a monopolistically competitive one.
- While the local bakeries may lose its domestic market share, they may gain market share in foreign markets and eventually earn higher revenue. For example, Breadtalk has realised expansion plans in bigger foreign markets such as China and Indonesia. Given that these markets are much bigger than the local Singapore's market, the demand (i.e. AR curve) that Breadtalk faces will now be much higher than if it did not expand overseas.
- The same is being observed with Prima Deli. It has also expanded overseas in countries such as Australia and Philippines by not just selling confectioneries but also baking ingredients and ready to cook meals.
- With larger output, Breadtalk and Prima Deli will also be able to enjoy significant IEOS.
- All these will result in higher profits for both firms.

**Anti-thesis: Globalisation does not change market structure and profits**

- Certain markets will remain unaffected by the wave of globalisation.
- These markets could be protected by the government as they are considered either as 1) strategic industries (e.g. Japan's car manufacturing firms) or 2) relate to national security (Lockheed Martin providing military aircraft and equipment to the USA govt).
- In other case, it could be due to the immobility of factors of production. E.g. provision of goods and services which cannot be duplicated by others (travel services to visit Mt Fuji in Japan).
- As such, the characteristics of such markets may not change even when a country gets more globalised. The market structure in which a firm operates prior to the wave of globalisation will likely remain relatively unchanged.
- Accordingly, the change in profits may also be due to other factors and not just globalisation.
- E.g. disruptive technology and smart urban planning can change the way people travel and reduce people's demand for privately owned cars. This may reduce the demand for cars world-wide in general. In this case, despite government's protection, car manufacturers in Japan may not be able to continue to earn significant supernormal profits.
- E.g. Mt Fuji erupts and makes any visits unsafe.
- Despite the wave globalisation, certain firms could still act strategically to protect their market share from being eroded. Apple and Samsung had been the world leaders of the smartphone market. After more than a decade, during

which many smartphone makers have also entered the fray after tapping on the technology in producing smartphones, Apple and Samsung are still arguably the world leaders.

- The main reason could be the continual raising of barriers to entry by Apple and Samsung (highly innovative hardware and software offerings over the decade) in order to entrench their lead in this market. As such, globalisation of ideas/technology continued to allow Apple and Samsung to take advantage of and develop sufficient arsenal to defend their position in this market.

### Conclusion

- With the relentless search of ever lower COP and market outreach, successful and entrepreneurial firms will ride on the wave of globalisation to fully realise their potential profits. In so doing, competition in the markets tend to rise and even a monopoly may end up facing fierce competitors in due course throughout most part of the world.
- While it is true that such a day will come for most markets, that day may require differing amount of time depending on the complexity of goods/services sold and the profile of the consumers. The more complex the goods/service and finicky the consumers are, the longer it will take for globalisation to transform the competition landscape of the market existing firms operate in.

| Level<br>(Marks) | Knowledge, Application, Understanding, Analysis  |
|------------------|--|
| L3<br>(8 – 10)   | <p>Answer showed thorough knowledge and an excellent ability to explain both the impact of globalisation and the lack thereof on the market structure in which a firm operates and the profits it earns.</p> <p>Suitable examples were brought up to support arguments.</p>  |
| L2<br>(5 – 7)    | <p>Answer managed to somewhat explain how globalisation might or might not impact the market structure of a firm and profits earned by a firm.</p> <p>Answer is mostly accurate but there may be undeveloped explanation of facts and theory.</p> <p>May lack suitable examples to back up the arguments.</p>  |
| L1<br>(1 – 4)    | <p>Answer showed some knowledge of globalisation and market structure but simply failed at putting them together to form a cogent response to the question. Meek attempts at suggesting examples to support answers.</p> <p>There may be basic errors in theory, in adequate explanations or contain only a few valid points. The answer could be mostly irrelevant or inaccurate.</p> |

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|--|---------------|--|
|  | E3<br>(4 – 5) | Strong conviction of the stand provided, largely based on sound economic argument/reasoning having considered the relevant situations. Best answers will contain real-life scenarios to support stand taken. |
|  | E2<br>(2 – 3) | Attempt at providing a simple justification of the stand and may or may not be based on economic argument/reasoning. Reasoning may be flawed or unconvincing.  |
|  | E1<br>(1)     | Merely a stand provided.   |

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| 3. | In the US and UK, public libraries have been facing cuts in government funding and there is a rise in the number of public library closures. In Singapore, the National Library Board (NLB) has been revamping old libraries and opening new ones. In 2017, the government provided an operating budget of \$246.97 million to NLB.  |
|    | <div data-bbox="236 454 1342 562">Explain whether governments should fund public libraries and discuss the factors that governments should consider when allocating resources to public libraries.</div> <div data-bbox="1377 454 1433 488">[25]</div>   |
|    | <div data-bbox="252 633 408 667">Introduction</div> <ul data-bbox="252 701 962 734" style="list-style-type: none"> <li>• Government usually intervenes when market fails.</li> </ul> <div data-bbox="252 768 323 801">Body</div> <ul data-bbox="252 835 1310 1485" style="list-style-type: none"> <li>• Public library services could be merit goods. Governments of some countries deem it as being under-consumed due to positive externalities and imperfect info of full private benefit of library services</li> <li>• Positive externalities of public library services <ul data-bbox="347 981 1310 1171" style="list-style-type: none"> <li>◦ E.g. People who access public library services such as books-related activities, wifi and reference books usually can improve their literacy, social and intellectual developments. They become more literate. Higher literacy rate can result in more economic development benefiting 3<sup>rd</sup> parties such as firms and government in terms of higher profits and tax revenue → external benefits</li> </ul> </li> <li>• External benefits cause divergence in MPB and MSB → private consumption of library services lower than social optimal level.</li> <li>• Imperfect info of MPB means even lower private consumption level than socially optimal</li> <li>• Subsidies help to increase the level of library services consumption by internalising the external benefit</li> <li>• In developing countries or even in developed countries where there are poor communities, the private consumption of public library services may be much lower than socially optimal level.</li> </ul> <p data-bbox="252 1525 1321 1653">Governments can allocate resources to public libraries in the form of subsidies, direct provision and campaigns to encourage people to go to the libraries. However, when allocating any resources to public libraries, government may want to consider factors such as:</p> <ul data-bbox="300 1693 1321 2024" style="list-style-type: none"> <li>• <b><u>Objectives of government</u></b> <ul data-bbox="395 1727 1321 2024" style="list-style-type: none"> <li>◦ Subsidies bring about allocative efficiency if public library is indeed deemed as a merit good → increase consumption of public library services</li> <li>◦ Subsidies improve equity ; for greater access by the lower income → brings down the MPC of public library services or brings up the MPB of public library services.</li> <li>◦ E.g. In Singapore, full subsidy is given to the public. Government deemed library as an important merit good. There is huge DWL if not subsidy is given.</li> </ul> </li> </ul> |

- **Effectiveness of policies** to achieve objectives e.g. MEB hard to calculate so may be hard to decide how much to subsidise in cases where partial subsidies are more appropriate
- **Changing levels of external benefits** that public library brings about, hence changing levels of subsidies.
  - Overtime, the marginal external library that the public library brings may become lower due to obsolescence of the resources and alternative ways of reading and accessing books through e.g. E-library. So MSB become lower.
  - Obsolescence of library resources can reduce the MEB of libraries since knowledge gained becomes irrelevant to 3<sup>rd</sup> parties when perhaps shared by readers.
  - E-library offers more up to date resources that are riding the reading trends/ interest/ needs of the nation. In this case 3<sup>rd</sup> party benefits may be higher since relevant info could be shared by readers with 3<sup>rd</sup> parties.
  - The MSB of “brick and mortar” public library services falls and reduces the socially optimal level of public library services.
  - Hence level of resources allocated to public library will naturally fall.
  - In US and UK, government chose to close public libraries since their relevance have fallen; in Singapore government chooses to revamp old ones so that libraries continue to be relevant
- **Resource scarcity / Budget constraint** and need to re-prioritise → closing down libraries. E.g. Land previously occupied by libraries need to be developed for housing, commercial purposes.
- Over time has readership and literacy rates improve in countries, it could mean that the level of library services privately consumed have already met the socially optimal level → no need for government intervention at all.

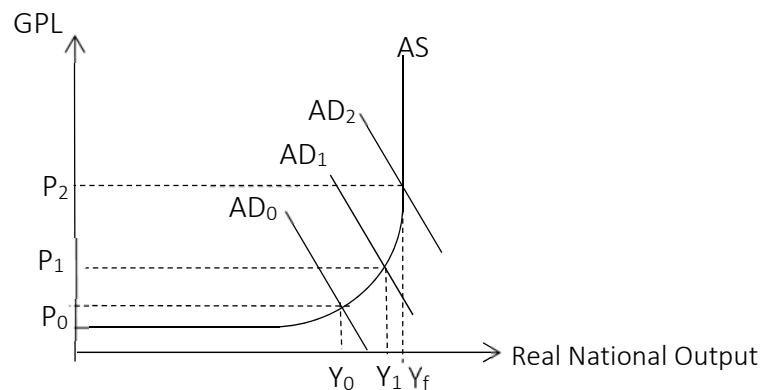
#### Conclusion

- Whether/how government allocated resources typically depends on its objectives to achieve, cost/benefits (effectiveness of interventions, changing needs/circumstances).
- No fixed factors to consider. Differs between countries and over time
- Therefore, US and UK chose to close down whereas, Singapore decides to increase resources.

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| L3 | Ability to describe the different factors that different government may consider when allocating resources. Answer is supported with thorough knowledge of theories and relevant policies.<br><br>There are good comparisons on the different approaches by different government | 15 – 20 |
| L2 | Ability to describe the factors that government may consider when allocating resources. Answer is supported with knowledge of theories and relevant policies, but with some error in analysis  | 9 - 14  |
| L1 | The answer shows some knowledge but does not indicate that the meaning of the question has been properly grasped. Basic errors of theory or inadequate development of analysis.  | 1 - 8   |
| E3 | For an answer that critically build on the analysis and answers the question. There is a well-reasoned judgement (as required by the question)   | 4-5     |
| E2 | For answer that makes some attempt at evaluation and conclusion that answers the question.   | 2-3     |
| E1 | For answer that gives an unsupported evaluative statements.  | 1       |
|    |  |         |

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|----|--|------|
| 4. | Discuss the extent to which conflicts in government macroeconomic objectives limit the scope for the use of macroeconomic policies.  | [25] |
|    | <p>Introduction:</p> <p>Government's macro objective are to achieve the following:</p> <ul style="list-style-type: none"> <li>• Stable economic growth</li> <li>• Low and stable inflation or price stability</li> <li>• Low and stable unemployment rate</li> <li>• Favourable BOP</li> </ul> <p>Body:</p> <p><b>Thesis</b></p> <p>Depending on the objectives and issues faced, government can choose a range of policies to meet objectives and address macroeconomic issues. However, in achieving its macroeconomic goals, government may face potential trade offs.</p> <p><b>Depreciation of currency to boost (X-M) &amp; address Balance of Payments (BOP) deficit → increases economic growth but increases inflation rate.</b></p> <p>Depreciation causes exports to be cheaper in foreign currency and imports to be more expensive in domestic currency. Quantity demanded for exports by foreign countries increases whereas quantity demand for import by domestic country decreases. Assuming the Marshall- Learner condition holds (i.e. <math>PED_x + PED_m &gt; 1</math>), there will be an increase in net export revenue. An improvement in net export revenue will improve the Balance of Payments</p> <p>At the same time, as net exports increases, AD increase. If there is no increase in AS and economy is near full employment of output, the boost in economic growth will demand pull inflation.</p> <p><b>Expansionary Fiscal Policy and Monetary Policy → increase growth but higher inflation rate and possibly BOT deficit due to increase M</b></p> <p>Expansionary fiscal policy is a demand-side policy that seeks to increase C and I by reducing income and corporate tax respectively, as well as to increase G. On the other hand, expansionary interest rate centred monetary policy will increase C and I as the cost of borrowing is reduced with a lower interest rate. C, I and G will increase AD. If there is no increase in AS and economy is near full employment of output, the boost in economic growth will demand pull inflation.</p> <p>As seen in figure below, the increase in AD from AD0 to AD1 to AD2 without an increase in AS, has resulted in an increase in real GDP from Y0 to Yf while general price levels have increased sharply from P0 to P2, a demand-pull inflation.</p> |      |





Economic growth (resulting in a reduction of unemployment) in the economy may have an undesirable impact on a country's Balance of Payments position. As income rises, consumer spending tends to rise. This is because assuming that the average individual earns more and has higher purchasing power, consumers will purchase more goods and services including imports, resulting in a rise in import expenditure.

The rise in import expenditure may have negative consequences on a country's trade position. An increase in import expenditure, assuming no changes in export revenue, is likely to cause a worsening of the country's balance of trade and may worsen the position of its current account *ceteris paribus*. If there are no changes in its capital and financial account as well, this could worsen a country's balance of payment position.

In the event that economic growth results in higher prices of domestic goods and services, this might erode export competitiveness, if the inflation rate in the country is higher than in trading partner countries. Assuming that the demand for exports is price elastic, this would cause a more than proportionate fall in quantity demanded of the country's exports causing export revenue to decrease.

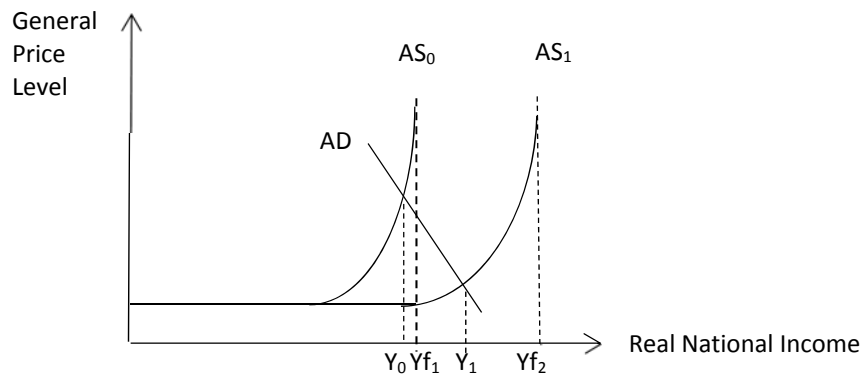
The increase in import expenditure and a fall in export revenue due to the loss of competitiveness of domestic goods is likely to cause a worsening of the country's balance of trade and worsen the position of its current account, *ceteris paribus*. If there are no changes in its capital and financial account as well, this could worsen a country's balance of payment position.

In addition, the increase in import expenditure and fall in export revenue will cause a net increase in supply of domestic currency in the foreign exchange market, assuming *ceteris paribus*, resulting in a depreciation of the country's currency.

### LR ss-side policies to prevent further dd-pull inflation can cause unemployment

LR supply side policies often involve improving the quality, quantity of factors of production and the adoption of new technology. For example, workers are encouraged and given financial support to undergo training to upgrade their skills, firms also given financial supports to adopt new technology to make their production process more efficient and productive. LR supply side policies can bring about underlying shift in the structure of the economy, e.g: shift away from the development of labour intensive industries to capital intensive industries – where more skilled labour is required. This makes it difficult for certain segments of the population, who are unable to upgrade their skills, to find jobs. Structural unemployment can thus happen in manufacturing industries, where sophisticated machinery has been replacing workers. If the workers are unable to get the training in the use of these machinery to get jobs in the same factories they worked in before, they will become unemployed. A mismatch of skills between the unemployed and the skills required by producers seeking factors of production causes structural unemployment unless the workers are retrained and are equipped with the relevant knowledge, skills and expertise to be absorbed into the newly developed sector.

Alternatively, as shown in the figure below, when there is an increase in aggregate supply from  $AS_0$  to  $AS_1$  without a corresponding increase in AD, the economy experiences both actual growth (shown by the increase in real national income from  $Y_0$  to  $Y_1$ ) and potential growth (shown by the increase in productive capacity from  $Y_{f1}$  to  $Y_{f2}$ ). As firms increase their production, there is an increase in demand for factors of production, including labour. However, the number of jobs created (as a result of the increase in productive capacity) can also exceed the increase in demand



for factors of production (as a result of an increase in production). The economy is now producing further away from full employment and hence there is greater unemployment in the economy.

Such trade-offs may limit the use of the policies, especially if the trade-offs are also goals that govt wishes to maintain.

### **Anti-thesis:**

However, limitations do not arise just because there are macroeconomic trade offs. The policies themselves may be limited due to other reasons. In some cases, outcomes of macroeconomic policy may even complement each other.

### **Domestically driven vs externally driven economy**

For small, resource scarce and open economies, e.g. Singapore demand side policies (e.g. Fiscal policy and interest rate centered monetary policy) that focus on stimulating the domestic components of AD may not work effectively. Given Singapore's small population and a small multiplier, injection must be sufficiently large before achieving significant improvement in economic growth and employment.

As such Singapore chooses to rely on exchange rate policy (adopting an appreciating stance) to ensure that price of imported raw material in domestic currency (S\$) are priced low. This ensures that cost of production for goods/services for both domestic consumption and exports are price competitive.

### **The impossible trinity**

In some cases, the combination of policies that countries choose may also limit the scope for the use of macroeconomic policies. Using Singapore as a case again, given our reliance on trade and the desire for free capital mobility, the use and control over interest rate centred monetary policy is lost. Hence, Singapore, cannot use interest rate centred monetary policy to stimulate domestic components, particularly I and C of the AD.

### **Economic Outlook**

Poor economic outlook generally limit the scope of use of macroeconomic policy. Expansionary demand-side policies may not be effective when consumers and firms expect that economy may shrink. Rather than spending, they may save. This reduces C and I respectively.

In Japan, decades of poor economic outlook resulted in a liquidity trap, where interest rates have been reduced to a level where they cannot be further lowered. Despite so, the increase in C and I are still not picking up.

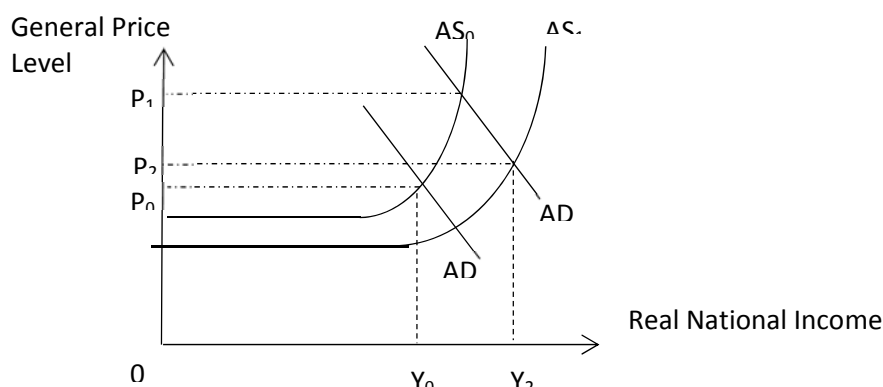
### **Globalisation**

The rise of globalisation has meant that economic shocks from one part of the world can quickly spread around the global economy. The 2008 financial crisis is a case in point. The interconnectedness of the global economy creates problems for domestic policy makers as the source of inflation or unemployment may be the global economy, and beyond the control of domestic governments. In this case, global cooperation may be needed rather than having each country relying on its own macroeconomic policies. For example, officials from different nations may need to meet to evaluate the world's economic conditions and come up with solution collectively.

### Outcomes of macroeconomic policies complement each other

While there are possible conflicts in macroeconomic goals, there are also instances where the attainment of a given macroeconomic goal may bring about the achievement of another. For example - long term economic growth may result in low and stable inflation given an increase in productive capacity.

The key for all economies is striving not just for strong or high economic growth, but long term economic growth (both actual and potential growth). No country can rely solely on stimulating aggregate demand (AD) to achieve long term economic growth. Once the economy reaches full employment, any increases in AD will not result in any actual economic growth but just increases in general price levels (from  $P_0$  –  $P_1$ ) as reflected in figure below.



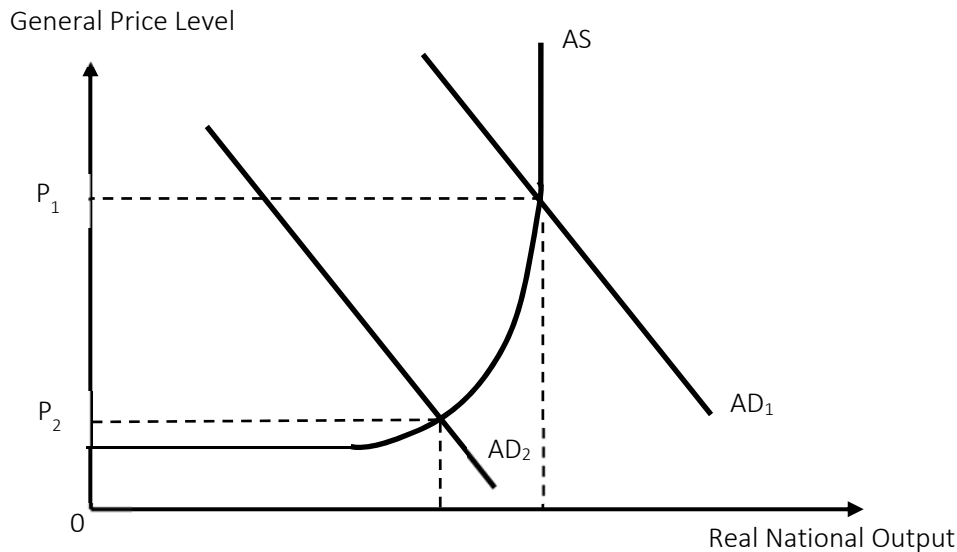
Demand-side policies to achieve growth need to be complemented with supply-side measures to prevent the economy from overheating and inflationary pressures from setting in. When a country focuses on achieving potential economic growth by increasing AS in the long run (from  $AS_0$  –  $AS_1$ ), it will be able to expand AD and also keep inflationary pressures low by preventing the GPL from rising too quickly. The resultant overall rise in GPL is from  $P_0$  to  $P_2$ . Real national income increases

### Conclusion

- To a large extent, possible trade offs of macro policies should not limit the use of macro policies. More importantly, it is the cause of the issues and the presence of specific conditions that may determine whether policies should be used or not.
- Yet, this view may not be subscribed by all.
- Countries may place more emphasis on trade-offs under special circumstances e.g political consideration. While others may be able to accept the trade-off and consider the different conditions that need to be present for a policy to be implemented.

|    |  |         |
|----|--|---------|
|    |  |         |
| L3 | A thorough knowledge of theories and policies. Ability to describe the conflicts of macro objectives, given the implementation of a macroeconomic policy in a precise, logical and reasoned manner.                                    | 15 – 20 |
| L2 | There should be evidence of knowledge of theories and policies relating to conflicts or macro objectives, given the implementation of a macroeconomic policy.<br><br>Answer is relevant but explanation may be incompletely explained. | 9 - 14  |
| L1 | The answer shows some knowledge but does not indicate that the meaning of the question has been properly grasped. Basic errors of theory or inadequate development of analysis.  | 1 - 8   |
| E3 | For an answer that critically build on the analysis and answers the question. There is a well-reasoned judgement (as required by the question)   | 4-5     |
| E2 | For answer that makes some attempt at evaluation and conclusion that answers the question.   | 2-3     |
| E1 | For answer that gives an unsupported evaluative statements.  | 1       |

|    |  |      |
|----|--|------|
| 5. | (a) Explain how a country's deficit on its balance of payments could affect its standard of living.  | [10] |
|    | (b) Discuss how best a government should address potential concerns arising from a persistent deficit on its balance of payments.  | [15] |
|    | <p>(a)</p> <p>Introduction</p> <p>The Balance of Payments (BOP) is a summary record of all the international transactions between the residents of a country and the rest of the world over a period of time, usually one year. The BOP is made up of the Current Account (CA), Capital and Financial Account (KFA) and the Official Reserves Transaction Account. A BOP deficit occurs when the total international receipts of a nation from abroad are less than its total international payments to abroad over a period of time. This could happen when there is a deficit in the CA or in the KFA or in both.</p> <p>Body</p> <p><i>Negative Impact on SOL</i></p> <ol style="list-style-type: none"> <li>1. A balance of payments deficit can have a contractionary effect on the economy. For example, a balance of payments deficit caused by a CA deficit brought about by a fall in export earnings and rise in import expenditure reduces the level of aggregate demand.</li> <li>2. Assuming the economy is at or near full employment, this fall in aggregate demand, <i>ceteris paribus</i>, will cause a fall in national output from Y1 to Y2, a fall in general price level from P1 to P2 and an increase in unemployment due to lower output levels as illustrated in Figure 1. Eventually, the initial fall in net exports will result in a greater decrease in national income through the multiplier process, leading to negative economic growth.</li> </ol> <p>The fall in national income will induce a fall in consumption by households because household incomes have fallen thus they have lower purchasing power. A lower level of consumption of goods and services could lead a reduction in households' <b>current material standard of living</b>.</p> |      |



3. If households feel pessimistic about the economic outlook, they may decide to save more in anticipation of the possibility of a further reduction in income in the future. This uncertainty and anxiety could also affect **non-material standard of living**.
4. A fall in investment level and production level will lead to rising unemployment in the economy, as firms reduce their demand for labour and other factors of production. Unemployed workers might face anxiety and stress if they continue facing difficulties in looking for a job. As their household income falls, both their **material and non-material standard of living** might worsen.
5. If the BOP deficit was due to a deficit in the KFA arising from a fall in FDI and foreign investors pulling out FDI from the country, LRAS might shift to the left, reducing the productive capacity of the economy. This would negatively affect **future standard of living** as the potential output of the economy decreases.
6. Under a flexible/managed float exchange rate regime, a persistent balance of payments deficit will result in a depreciation of the country's currency as this would lead to a fall in the demand for and an increase in the supply of the domestic currency in the foreign exchange market. With the depreciation, imported inflation may result if the economy is heavily dependent on imports, leading to higher cost of living. This would affect consumers' purchasing power and hence negatively affect their **material standard of living**.
7. If the BOP deficit was due to a CA deficit caused by huge quantities of undesirable imports such as tobacco, alcohol and drugs, the non-material standard of living might be affected.

#### *Positive Impact on SOL*

1. However, if the BOP deficit was due to large import expenditure on consumer goods that outweigh export revenue, consumers might be enjoying a wide variety of imported goods. This might, in the short run, lead to an increase in **current non-material standard of living**.
2. If the BOP deficit was due to large import expenditure on capital goods, the LRAS might shift to the right, bringing about potential growth. For example,

developing countries might import machines and technology to increase production. The increase in productive capacity means that the **future standard of living** would increase as the potential amount of goods and services that can be produced and enjoyed in the future would increase.

3. Unemployed workers might see an increase in leisure time which might improve their **non-material standard of living** temporarily, as they spend more time with family and friends, reducing the stress levels related to work.
4. The fall in economic activity in the economy might also lead to a fall in pollution levels as factories reduce their production levels and hence, their emissions. This might also lead to improvement in **non-material standard of living**.



### Conclusion

To conclude, how standard of living is affected by the BOP deficit would depend on what caused the BOP deficit. Also in the short run, there might be some positive impact on standard of living, especially in the non-material aspect. But in the long run, a persistent BOP deficit is likely to negatively impact standard of living.

### Mark Scheme

|  |  |
|--|--|
| <p><b>Level 3</b></p> <p><b>8 - 10</b></p> | <p>Answer shows thorough knowledge and an excellent ability to explain the consequences of a BOP deficit and its impact on SOL in a precise, logical and reasoned manner. The answer recognises all of the following:</p> <ul style="list-style-type: none"> <li>- A BOP deficit could both positively and negatively impact SOL</li> <li>- A BOP deficit could affect both material and non-material SOL <b>OR</b> current and future SOL</li> </ul> <p>Note for markers: For full 10m, the answer should recognise BOP deficit could affect material and non-material SOL <b>AND</b> current and future SOL.</p> |
| <p><b>Level 2</b></p> <p><b>5 - 7</b></p>  | <p>Answer explains the consequences of a BOP deficit but might not have made clear links to SOL.</p> <p>Answer is mostly accurate but there may be undeveloped explanation of facts and theory.</p> <p>Answer has achieved some balance (e.g. considers material and non-material aspect of SOL, or positive and negative impact on SOL, or current and future SOL)</p>  |



|   |  |
|---|--|
|   | <p>Note for makers:</p> <p>As long as any one type of balance is recognised, the answer can be awarded L2.</p> <ul style="list-style-type: none"> <li>- Answer explains both positive and negative impact on SOL</li> <li>- Answer explains impact on both material and non material aspect of SOL</li> <li>- Answer explains impact on both current and future SOL</li> </ul> |
| <p><b>Level 1</b></p> <p><b>1 - 4</b></p>   | <p>Answer shows some knowledge of BOP but might not have recognised that the question is on the consequences of a BOP deficit. There may be basic errors in theory, in adequate explanations or contain only a few valid points. The answer could be mostly irrelevant or inaccurate.</p>  |
| <p><b>(b)</b></p> <div style="border: 1px solid black; padding: 10px; margin: 10px 0; text-align: center;"> <p>Identify concerns arising from BOP deficit<br/>(link to answer in (a) which would have identified the consequences of a BOP deficit)</p> </div> <div style="text-align: center; margin: 10px 0;">  </div> <div style="border: 1px solid black; padding: 10px; margin: 10px 0; text-align: center;"> <p>Discuss policies to deal with the concerns<br/>(Explain how they work and evaluate them)</p> </div> <div style="text-align: center; margin: 10px 0;">  </div> <div style="border: 1px solid black; padding: 10px; margin: 10px 0; text-align: center;"> <p>Conclude that the best policies to adopt would depend on the root cause of the BOP deficit</p> </div> <p><b>Introduction</b></p> <p>In view of the possible detrimental effects on the macro-economy and hence, standard of living, as explained in (a), governments generally adopt the following types of policies: (i) Expenditure-Reducing Policies, (ii) Expenditure-Switching Policies, (iii) Supply-Side Policies, to improve the BOP so as to address potential concerns.</p> <p><b>Body</b></p> <p><b><u>Policy #1:</u></b></p> |  |

**Cause of BOP Deficit:**

CA deficit due to rising import expenditure (in excess of export revenue), *because of rising domestic incomes*

**Concern Arising from BOP Deficit:**

Currency Depreciation which might lead to imported inflation

**Assumptions about the economy:**

- Economy is operating at full employment level
- Economy is under a flexible/managed float exchange rate regime

An expenditure reducing policy aims to reduce the demand and limit spending on imports by reducing overall expenditure in the economy. This results a fall in aggregate demand and in turn, national income falls. When national income falls, the demand for imports will also fall, since import expenditure is income induced. This in turn reduces the balance of payments deficit.

For example, contractionary fiscal policy might be adopted. Taxes (e.g. personal income taxes, corporate income taxes) might be raised and government expenditure reduced. An increase in personal income taxes will lead to a fall in disposable income. This will lead to a fall in the level of consumption expenditure (C). An increase in corporate income taxes will lead to a fall in post-tax profits which results in a fall in the level of investment (I).

The fall in the level of government expenditure (G), consumption expenditure (C) and investment expenditure (I) will reduce the level of aggregate demand (AD), resulting in a fall in national income. This will induce a fall in demand for imports, hence leading to a fall in total import expenditure. Balance of trade and current account deficit would thus be reduced, thereby improving the overall BOP position.

In the longer term, the reduction in AD is deflationary and would reduce the general price level especially if the country is near full employment level of income. The downward pressure on general price level improves the price competitiveness of exports and increases demand for exports.

Assuming the demand for exports is price elastic, a rise in export earnings will reduce the balance of trade and current account deficit, hence improving the overall BOP position in the long run.

**Evaluation**

However, this policy would not be appropriate if the economy was not operating at full employment and there are concerns about falling national income and rising unemployment. This policy would further worsen these concerns.

**Policy #2 (to address concerns of falling national income, rising unemployment due to a fall in demand for exports):**

**Cause of BOP Deficit:**

CA deficit due to rising import expenditure (in excess of export revenue), *because of increasing price competitiveness of imports relative to domestic goods.*

**Concern Arising from BOP Deficit:**

Fall in AD, national income and employment levels

**Assumptions about the economy:**

Economy is NOT operating at full employment level

The aim of this policy is to change the relative price of domestic goods and foreign goods (imports) so that people will substitute foreign goods with domestic goods.

An example of such a policy is to depreciate the currency. This would make country's exports cheaper in terms of foreign currency and imports more expensive in terms of the domestic currency. Since imports are more expensive in domestic currency, people will switch away from imports to consume more domestically produced goods and services. At the same time, this makes exports more competitive and the demand for exports would rise.

Assuming Marshall Lerner condition (i.e.  $PED_X + PED_M > 1$ ), balance of trade and current account deficit would be reduced, thereby improving the BOP position.

**Evaluation**

However, this policy might not be appropriate if there are concerns about inflation in the economy. Currency depreciation would result in imported inflation (especially if the country is highly dependent on imported raw materials) and could also lead to demand-pull inflation as AD increases.

This policy would also only be appropriate if Marshall Lerner condition holds. If the demand for both their exports and imports were very price inelastic and the summation of elasticities was less than 1, then the BOP would not improve.

Currency depreciation should also be a short term policy because a continual fall in the value of the currency could lead to a fall in investor confidence, resulting in a withdrawals of FDI. This would worsen the KFA deficit and also lead to a fall in LRAS, worsening the initial concerns of slower actual and potential growth.

**Policy #3 (to address concerns of falling national income, rising unemployment, falling productive capacity due to a lack of competitiveness):**

**Cause of BOP Deficit:**

KFA deficit due to a fall in attractiveness of country as a destination for FDI, *possibly because of falling labour productivity*

CA deficit due to fall in export revenue, *because of falling competitiveness of exports, possibly due to falling labour productivity*

**Concern Arising from BOP Deficit:**

Fall in AD, national income and employment levels

Fall in LRAS

**Assumptions about the economy:**

Economy is NOT operating at full employment level

For example, investment in training could improve the quality of the labour force and raise the labour productivity and hence lead to a rise in LRAS. Government could provide subsidies to encourage firms to upgrade the skills of their workers. Assuming the increase in labour productivity brings about a fall in per unit labour cost, cost of production decreases and this causes an increase in SRAS. This would bring about a fall in the general price level of domestically produced goods and services and in turn lead to a rise in the price competitiveness of exports. Additionally, the quality of exports might also rise due to innovation arising from a higher quality labour force. This will increase export revenue and reduce the current account deficit. Furthermore, as domestically produced goods and services are more attractive relative to foreign goods and services. There could be a reduction in import expenditure as consumers switch from imported goods and services to domestic goods and services. The balance of trade and current account deficit will be reduced.

At the same time, foreign investors might be encouraged to invest because of the high labour productivity, this would also increase LRAS as well as improve the capital and financial account, improving the BOP position.

**Evaluation**

Supply-side policies are not easily implemented as firms might not be willing to send workers for training as there will be loss of output during training. Firms may also underestimate the true benefits of education and training. Hence, the amount of training undertaken may be less than socially optimal. Workers also face difficulties in learning new skills, especially the older workers. In most cases, the government needs to increase its spending on subsidies on training and incentives for research and

development. As such, these policies can drain the government's resources, diverting resources away from other areas of competing needs.

There is a time lag in the implementation of supply-side policies, which may compromise its effectiveness as economic conditions are very dynamic.

### Conclusion

The best policies a government should adopt to address potential concerns arising from the deficit would depend on the root cause of the deficit. Depending on the root cause of the deficit, the concerns arising from a BOP deficit could be very different.

If the BOP deficit is persistent and is a result of a loss of competitiveness of a country, both in terms of its exports as well as its attractiveness for FDI, structural changes might be required in the economy. Otherwise, the detrimental effects on actual and potential growth, and current and future SOL, as outlined in (a), would be a serious cause for concern. In such instances, supply-side policies to improve productivity would likely be the best policy. Expenditure reducing policy would not be appropriate as it would further reduce actual growth. Expenditure switching policy could help in the short term but would probably not be sustainable in the long run. Taking the example of currency depreciation, it would not be possible for a currency to keep depreciating as investors might lose confidence in the economy, causing further withdrawals of FDI.

However, if the BOP deficit is due to large import expenditure on capital goods, then as outlined in (a), there might not be a cause for concern as the country's productive capacity might grow. This could lead to an increase in export competitiveness in the future as prices fall and quality increases. Similarly, if the BOP deficit is due to large amounts of local firms investing overseas, thus leading to a net outflow of FDI, in the long run, these investments may yield positive returns and eventually there will be receipts of interest, profits or dividends from investments abroad, resulting in an eventual currency inflow in the current account. In these cases, the government might choose not to adopt any policy to correct the BOP deficit.

### Level 3

8 - 10

Answer shows thorough knowledge and an excellent ability to explain at least 2 policies to correct a BOP deficit, in view of the specific concerns arising from the deficit. There should be a clear explanation of how the policy would address those concerns and hence, a recognition that the best policy would depend on the cause of the BOP deficit.

Answer should have demonstrated balance by discussing how the policies could work well to correct BOP deficit but at the same time, have limitations.

|  |                                    |   |
|--|------------------------------------|---|
|  |                                    | <p>The arguments should be made in a precise, logical and reasoned manner.</p> <p>Note for makers:</p> <p>For top L3 marks (i.e. 10marks), the answer must have discussed 3 policies.</p>   |
|  | <b>Level 2</b><br><br><b>5 - 7</b> | <p>Answer explains policies to correct a BOP deficit but might not have made clear links to how each policy addresses specific concerns arising from the deficit.</p> <p>Answer is mostly accurate but there may be undeveloped explanation of facts and theory.</p> <p>Answer has achieved some balance (e.g. discussed how a policy might work well as well as recognised its limitations or discussed how different policies work for different causes of a BOP deficit)</p> <p>Note for makers:</p> <p>For top L2 marks (i.e. 7marks), the answer must have discussed at least 2 policies which address different causes of a BOP deficit and discussed some limitations of the policies.</p> |
|  | <b>Level 1</b><br><br><b>1 - 4</b> | <p>Answer shows some knowledge of macroeconomic policies. There may be basic errors in theory, in adequate explanations or contain only a few valid points. The answer could be mostly irrelevant or inaccurate.</p>  |
|  | <b>E3</b><br><br><b>4 - 5</b>      | <p><i>There is a critical evaluation of the policies discussed and economic arguments are synthesised to arrive at well-reasoned judgements in a good summative conclusion.</i></p> <p><i>There is recognition that the best policies would depend on the concerns arising from the BOP deficit, which in turn, depends on the cause of the BOP deficit.</i></p>  |
|  | <b>E2</b><br><br><b>2 - 3</b>      | <p><i>There is some attempt at evaluation or a summative conclusion.</i></p>  |

|  |                       |   |  |
|--|-----------------------|---|--|
|  |                       | <i>While the judgement is relevant to the question, it may not be well-explained or based on relevant analysis</i>  |  |
|  | <b>E1</b><br><b>1</b> | <i>Unsupported or unexplained evaluative statement(s) or judgements are made.</i><br><br><i>Note to markers: As long as there is attempt to explain limitations of a policy, even if there is no summative conclusion, give 1m.</i> |  |
|  |                       |   |  |

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| 6.  | “Rising protectionism in the West has become a threat to Asia’s prosperity.” Tommy Koh, ambassador-at-large for Singapore’s Ministry of Foreign Affairs.   |      |
|     |  |      |
| (a) | Explain why protectionism exists.  | [10] |
| (b) | Discuss whether the Singapore government’s approach towards international trade should be adjusted in view of rising worldwide protectionism.  | [15] |
|     | <p>(a)</p> <p>Introduction</p> <ul style="list-style-type: none"> <li>Define protectionism: <i>Protectionism is the act of imposing trade barriers to shelter domestic firms from foreign competition.</i></li> <li>Give a short preview of essay: <i>Countries may engage in protectionist policies such as imposition of tariffs and quotas for various purposes. There are several arguments for protectionism that are practised worldwide.</i></li> </ul> <p>Body</p> <ul style="list-style-type: none"> <li>Explain any 3 arguments for protectionism <ul style="list-style-type: none"> <li>Correct Balance of Trade deficit [e.g. US vs China: solar panels] <ul style="list-style-type: none"> <li>Balance of trade deficits occur when a country’s total expenditure exceeds its total earnings in its external trade. This can be caused by importing too much and is undesirable as it leads to a depletion of foreign currency reserves. Balance of payments deficit caused by balance of trade deficits would lead to leakage from the economy.</li> <li>Thus, the government may try to reduce import expenditure to correct the balance of trade deficit by restricting imports. Assuming initially a balance of payments deficit, when the balance of trade deficit is reduced, the country’s balance of payments deficit will decrease as well.</li> </ul> </li> <li>Protect sunset industries <ul style="list-style-type: none"> <li>Certain industries in a country may decline because of a decline in the global demand for their product or because of loss of their comparative advantage due to technological progress or increase in competition from other countries. An example is the decline of the British cotton textile when man-made fabrics such as polyester and rayon came into the market. Workers in these industries became redundant and needed re-training in order to find jobs in other industries. Without slowing down the decline of the industry, there might be a sudden, rapid and massive increase in unemployment in the economy. This could also have negative psychologically effect on the labour force. This point is especially important for economies where industries that are in decline employs a significant proportion of the labour force and these workers might be</li> </ul> </li> </ul> </li> </ul> |      |



occupationally immobile. Under such circumstances, temporary protectionism such as import controls may help to slow down the rate of these industries shutting down and allow more time for affected workers to go for skill training.

- Protect infant industries [e.g. steel in the US]
  - Allow sunrise industries to gain competitiveness in the global market. Gain EOS before allowing foreign competition
- Prevent dumping [e.g. Aluminium from China into India]
  - Certain industries in a country may decline because of a decline in the global demand for their product or because of loss of their comparative advantage due to technological progress or increase in competition from other countries. An example is the decline of the British cotton textile when man-made fabrics such as polyester and rayon came into the market. Workers in these industries became redundant and needed re-training in order to find jobs in other industries. Without slowing down the decline of the industry, there might be a sudden, rapid and massive increase in unemployment in the economy. This could also have negative psychologically effect on the labour force. This point is especially important for economies where industries that are in decline employs a significant proportion of the labour force and these workers might be occupationally immobile. Under such circumstances, temporary protectionism such as import controls may help to slow down the rate of these industries shutting down and allow more time for affected workers to go for skill training.
- Protect strategic industries [e.g. energy and water, cars in Japan, agricultural for food security]
  - A key industry is one that is deemed important or vital to a country's political and economic interests or security and therefore requires protection by the government. Common examples of key industries include water, electricity, food source and defence. Being dependent on other countries could be threatening for a country's survival as other countries could use these goods as a threat or bargain.
  - Singapore's dependency on water from Malaysia can be an example of that situation where disputes between both countries could escalate to Malaysia threatening to 'cut off' water supply to Singapore. To avoid being in this position, Singapore has devoted huge amount of resources to increase water production domestically.
  - Another key industry is military or defence weaponry production. Most countries would have their own defence industry and Singapore Technologies, a local company produces some of Singapore's military hardware such as SAR21, Bionix and submarines.

#### Conclusion

- The above are some reasons why countries adopt protectionism. Essentially it is to protect the national interests.

| Level                | Knowledge, Understanding, Application and Analysis   |
|----------------------|--|
| <b>L3<br/>(8-10)</b> | Clear explanation of why countries practise protectionist policies with at least 3 arguments for protectionism with clear link to macro goals. Good use of examples. |
| <b>L2<br/>(5-7)</b>  | Basic explanation of why countries practice protectionism with some link to macro goals.   |
| <b>L1<br/>(1-4)</b>  | Incorrect or poor explanation of reasons for protectionism.  |

**(b) Discuss whether the Singapore government's approach towards international trade should be adjusted in view of rising worldwide protectionism. [15]**

Introduction

- Singapore economy is characterised as *small and open with limited resources*
- Singapore government's general approach towards international trade is one that *embraces free trade, focuses on exporting goods and services where she possesses comparative advantage (e.g. pharmaceuticals, medical devices, refined oil, etc) and very proactive in seeking for opportunities to sign FTAs with trade partners* → this is particularly important since domestic market is small
- Singapore adopts an appreciating exchange rate policy. This is to keep cost of imported raw material low. Being a resource scarce nation, we depend on imported raw material for production of exportable goods/services and for domestic consumption.
- *With rising worldwide protectionism, Singapore will face challenges such as increased input costs or fall in demand for Sg exports.*

Body

**Thesis: Singapore government's approach towards international trade should be adjusted in view of rising worldwide protectionism because of the negative implications on Sg economy.**

Potential disadvantages:

- With rising protectionism worldwide, Singapore may face a rise in raw material costs. Being an economy lack of natural resource, Singapore is dependant on import of raw materials or semi-finished products for survival and growth. Hence Singapore firms that rely on imported factors of production may face a rise in cost of production → COP □ → SRAS □ → **cost-push inflation**; negative economic growth; employment □

- Also, given Singapore small and open nature, rising worldwide protection may negatively affect our balance of payments current account position. With rising worldwide protectionism, trade partners (countries such as China and Indonesia which Singapore exports our goods and services to) may raise trade barriers, → SG exports lose price competitiveness →  $\downarrow P$  of SG exports in foreign currency →  $\downarrow Q_d$  for SG exports → assuming  $PED_x > 1$ , export revenue for SG  $\downarrow$  → **current account worsens**. Furthermore, capital inflow to Singapore may fall as countries make it more difficult to invest in Singapore in order to retain investments in their own domestic economy. Fall in FDI to Singapore → **capital account worsens**.
- In addition, a fall in FDI due to rising worldwide protectionism will cause domestic firms to reduce investments due to poor business expectations →  $I \downarrow$  → AD falls → slowdown in growth or negative growth; furthermore,  $I \downarrow$  might **cause productive capacity to be negatively affected**
- Rising protectionism might cause domestic firms to have lesser access to global markets → firms are unable to enjoy EOS → COP increases → firms may not achieve **productive efficiency**. Also, increase in COP may mean firms are unable to enjoy large profits like before → reduces firms' ability to engage in R&D → **dynamic efficiency** negatively affected.
- Singapore is not able to control events world-wide and stop the West from engaging in protectionism. Hence, these negative consequences are inevitable if Singapore chooses to remain an open economy. This may provide a case for adjusting our view and approach towards international trade.
- Instead of largely relying on international trade as a source of growth, Singapore must also strengthen our domestic economy so that we could grow domestically. One area is for Singapore to focus on improving the provision of high-tech, value added services. The Industry Transformation Map (ITM) seeks to achieve this purpose. The ITM will aim to create 3,000 jobs in the financial services sector such as in banks and fund management companies in the next three years. An additional 1,000 jobs in the financial technology (FinTech) sector will be created each year up to 2020. This helps to enhance local connectivity and collaborate with local banks to create common utilities such as electronic payments and digital ID, while sustaining economic growth.

**Anti-thesis: Singapore government's approach towards international trade need not be adjusted because of the strong foundations laid out by the government, which should be able to withstand the threats from rising protectionism**

- Singapore follows a three-pronged approach towards international trade
  - Focus on exporting goods in which she possesses comparative advantage in
    - With continued focus on goods that Sg has comparative advantage in, Sg firms are able to gain competitiveness in terms of price and quality of our exports such as pharmaceuticals, medical devices, etc. Since Sg is a small economy, it is important for firms to have access

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|--|---|
|  | <p>to international markets. With greater access to global market, firms are able to enjoy significant EOS since scale of production can be large (lower AC as scale of production increases). Furthermore, firms are able to engage in R&amp;D to constantly improve product quality (reduces substitutability, countries are less likely to switch to competitors selling similar products such as South Korea and Thailand for pharmaceuticals) to ensure that demand for Sg produced exports remains price inelastic. [<math>PED_x &lt; 1</math>]</p> <ul style="list-style-type: none"> <li>○ Modest and gradual appreciation of SGD; with flexibility of adopting zero appreciation during worldwide recession (e.g. in 2009 global financial crisis) <ul style="list-style-type: none"> <li>▪ Singapore's long term stance on her monetary policy centred on exchange rate is to promote a modest and gradual appreciation of SGD. This ensure price stability as Singapore is heavily reliant on imported raw materials (e.g. crude oil and food) for survival, and for export competitiveness. With a stronger SGD, imported raw materials are cheaper when measured in SGD, and this reduces the risk of price fluctuations in domestic markets. This also ensures SG's exports remain price competitive in the global market. Hence this reduces the risk of SG's exports becoming too expensive which may cause export revenue to fall (assuming <math>PED &gt; 1</math> in the SR; and import is constant) → dampens AD → negative or slow growth; also, BOP current account worsens.</li> <li>▪ A flexible exchange rate policy is also important for Singapore in times of global economic fluctuations. During global economic crisis, demand for Sg exports may fall. Continuing to appreciate SGD might have negative implications on Sg economy since export revenue might fall. Hence, Sg govt may choose to maintain a zero appreciation approach during this period to ensure exports is less likely lose export competitiveness.</li> <li>▪ Hence, SG's monetary policy centred on exchange rate should continue to remain flexible and adjust accordingly to global changes.</li> </ul> </li> <li>○ Embraces free trade → actively signs FTAs with new countries, particularly the Asian countries <ul style="list-style-type: none"> <li>▪ The Singapore government is proactive in seeking opportunities to secure FTAs with major trade partners. With an extensive network of 22 bilateral and regional FTAs signed since 1992, Sg is building her resilience against global economic fluctuations. The more notable ones include China-Singapore FTA, US-Singapore FTA, EU-Singapore FTA, ASEAN FTA, etc, and these are the largest economies in the world. This ensures sufficient demand for Sg exports and also affordable imports of FOPs with the elimination of trade barriers between these countries.</li> <li>▪ → less fluctuations to AD caused by X and M changes</li> <li>▪ → less fluctuations in GPL caused by imported inflation</li> <li>▪ FTAs are also vital in ensuring healthy capital inflow and outflow. Being an economy very open to capital flows, stability of investment</li> </ul> </li> </ul> |
|--|---|

flows is important to ensure sustainable growth (healthy and steady increase in  $I \rightarrow AD$  increase; LRAS increase)

- Unlikely to be a target of/hurt by protectionist measures by other nations
- Have secured FTAs with major trade partners such as US, China, EU.

### Conclusion

Despite rising worldwide protectionism, Singapore should push for freer international trade by seeking closer partnership with other countries, particularly the Asian countries. This is especially so given our small and resource scarce economy. Therefore, it is imperative that Singapore continues seek new areas of comparative advantage, in order to withstand against the volatile changes in the increasingly globalised world, and avoid direct competition with our trading partners. Though the existing approaches have been working well, the government should continue to refine the approaches in view of global economic changes and advances. One example is the Sri Lanka-Singapore FTA signed in 2018, which allows Singapore to leverage on Sri Lanka's fast-growing economy to promote domestic growth. Given its geographical proximity, an FTA with Sri Lanka will definitely help Singapore mitigate disadvantages that she may face in view of growing worldwide protectionism.

| Level                | Knowledge, Understanding, Application and Analysis   |
|----------------------|--|
| <b>L3<br/>(8-10)</b> | Good two-sided explanation with clear use of economic analysis on whether Sg government should adjust her current approaches. Sg's current approaches is well elaborated using economic analysis with at least 1 macro and 1 micro challenge that Sg faces with rising protectionism OR 1 internal and 1 external challenge that Sg faces with rising protectionism<br><br>Good answers should have a good scope of both Macroeconomic (internal and external) and Microeconomic impact. |
| <b>L2<br/>(5-7)</b>  | Good two-sided explanation with clear use of economic analysis on whether Sg government should adjust her current approaches. Some analysis on Sg's current approaches with explanation on Sg faces with rising global protectionism.<br><br>Some link to macro and/or micro challenges that Sg government faces   |
| <b>L1<br/>(1-4)</b>  | One sided answers. Weak understanding of Sg current approaches.  |
| <b>E3<br/>(4-5)</b>  | For an evaluation with justification using economic analysis base on the context of Singapore  |
| <b>E2<br/>(2-3)</b>  | For an evaluation with basic justification   |
| <b>E1<br/>(1)</b>    | For an unexplained evaluation  |