

Package for Prelim 2014 Essays

- 1 Market failure is often worsened by government failure. Discuss the extent to which this is true in your country.**

[25]

Suggested answer

Introduction

- Define market failure & government failure;
- Overview of essay: this essay will explain market failure and government failure (arising from their intervention to correct the market failure). It will also explore the cases when the failure of the SG government exacerbates market failure, and cases when it actually improves resource allocation; and thus, discuss the extent to which the statement is true.

Explain Market Failure & Govt Failure [Note: Depends on the flow of the essay, this can be worked into the Thesis & Anti-Thesis]

- Explain Market Failure and its sources – at least 3 well explained sources
- Explain Government Failure – what it is, and how it arises (e.g., imperfect information, time lag, electoral pressures)

Thesis: Market failure worsened by government failure in Singapore

- Imperfect info of the MEC/MEB results in a government intervention that worsens the misallocation of resources (DWL after intervention > DWL before intervention)
- E.g., Ban of chewing gum in Singapore
 - Chewing gum – negative externality due to inconvenience to non-consumers as a result of destruction of public property like train/bus seats → due to overconsumption
 - Diagram, showing MEC, overconsumption hence over-allocation of resources
 - Ban – may result in a larger DWL than before, as the MEC of chewing gum is not so high and thus implying MSC is not greater than MSB at every single unit of output.

Anti-thesis: Market failure not worsened by government failure in Singapore

- Provision of public goods such as flood control in view of the recent flash floods, street lights, etc.
 - No free market production due to characteristic of public goods thus, any form of government intervention to provide leads to improvement of resource allocation
 - There may be inefficiencies (X-ineff) arising from government provision, but this would still be better than without govt intervention.
- No govt failure arising from the need to gain electoral votes due to Singapore's longer term political rule which enables SG government to do forward planning. This means that they will not exacerbate market failures by implementing subsidies (so as to pursue popular vote) for goods that have negative externalities

- E.g., some other countries provide subsidies for petrol – a good with negative externalities
- Exacerbate overconsumption of petrol
- Often a policy that cannot be removed once it is in place, due to the political costs of loss of popular votes – e.g., Indonesia
- Thus, the nature of Singapore's ability to forward plan allows minimising of such policies that yield short term electoral gains at the expense of worsening allocation of resources.
- Free provision of merit goods on goods that come with very large MEB
 - Hence, govt's intervention tended to improve allocation (little or zero DWL after intervention) rather than worsen it
 - E.g., specific healthcare services (vaccination for children, which has very high MEB), unlike other countries like the UK where there is universal free healthcare
- Ban for goods with very high MEC – e.g., ownership of guns, smoking within enclosed areas

Synthesis/Conclusion: To what extent is the statement true for Singapore?

- True only to a small extent:
 - On balance, government intervention in the different types of market failure in Singapore tended to be moderated
 - Extreme government intervention such as (i) bans tends to be in cases where the MEC are extremely high and hence justified; or (ii) direct/free provision when the free market doesn't provide at all in the case of public goods or when MEB is extremely high.
 - Longer term government removes the political incentive to impose policies that exacerbates market failure.

Levels	Description
L1 Knowledge/ Recognition {Description}	<p><u>1-5 marks :</u> Answer did not address question or address in an incidental manner – failing to explain market failure (MF) and government failure (GF), let alone address the question of ‘worsening’.</p> <p>Very poor content development of MF and GF, such that the answer is mostly irrelevant and contains only a few valid points made incidentally in an irrelevant context. Argument is incoherent.</p>
	<p><u>6-9 marks :</u> Points merely state or describe, with little/weak explanations, or with basic conceptual errors, of:</p> <ul style="list-style-type: none"> - sources of market failure, - policies to correct them, and - the government failure in correcting them <p>Inadequate content development of analysis present. No/little examples raised in context of Singapore. Argument is incoherent.</p>
L2 Consolidate {Add some detail – Application without Analysis}	<p><u>10-11 marks :</u></p> <p><u>Some parts of the essay address the question (MF, GF and worsen), and shows economic analysis (with use of diagrams) of sources of market failure, policies to correct them and government failure, but with gaps/inaccuracies.</u> Content points are underdeveloped, but with evidence of ability to form some judgement of “whether GF worsened MF”. Argument may not be fully coherent.</p> <p>An answer that <u>does not address the question of whether GF has worsened MF</u> (even if just by mentioning the word “worsened”), i.e., merely explains the sources of MF and GF, with no “worsened” word – max 11marks, regardless of the depth and scope (e.g., number of MF explored) of the answer.</p> <p>Examples raised in context of Singapore, though not thoroughly.</p>
	<p><u>12-14 marks :</u> Most parts of the essay directly addresses/engages the question, esp that of whether GF worsened MF, and shows economic analysis (with use of diagrams) of sources of market failure, policies to correct them and government failure, with some gaps/inaccuracies. Content points are <u>more thoroughly developed</u> and with more evidence of ability to form some judgement in the various examples of MF vs GF raised. Argument is fairly coherent.</p> <p>Examples raised in context of Singapore, though not consistently well elaborated.</p> <p>Marking Guide:</p> <ul style="list-style-type: none"> • Word “worsened” appears (with <u>no other form of elaboration or weighing</u>) – max 12m

	<ul style="list-style-type: none"> Word “worsened” appears and student follows up with some attempt to elaborate or weigh (even if elaboration is not rigorous or unsubstantiated) – 13-14m 	
L3 Elaborate {Extend to include analysis} ▪ Analyse relevant theory to aid explanation ▪ Apply explanation in the context of the question	15-17 marks : Clearly answers the question, going beyond whether GF has worsened MF, into the extent to which GF has worsened MF. The extent can be weighed either by how badly the DWL has increased after intervention for a particular type of MF, or weighing the success of govt in reducing DWL across different types of MF. Answer shows a good knowledge of sources of market failure and government failure in Singapore. Coherent essay with many contextual explanations though this may not be consistently applied throughout the essay. An answer that is very rigorous in content development, good application to Singapore context and well substantiated argument of whether GF has worsened MF, but only explores 2 sources of MF – max 15m	
	18-21 marks : Clearly answers the question, addressing in particular, the extent to which GF has worsened MF . Shows thorough knowledge of sources of MF and GF in Singapore with an excellent ability to describe and explain the various sources and the extent of government failure in each source in a precise, logical and reasoned manner. Well-argued essay with clear evidence of ability to form reasoned judgment in each source, as well as overall in the conclusion of the essay.	
	Evaluation Marks	
E1	Mainly unexplained judgement of when government failure worsens market failure in each source, with no clear/justified conclusion to the extent to which it is true for Singapore	1-2
E2	Well-reasoned/explained judgment of when government failure worsens market failure in each source and as a whole	3-4

Examiners' Comments:

A fairly demanding question that looks innocuous at first glance. Many scripts did not fully appreciate the depth of the question, and hence failed to answer at least one part of the question.

- A few good scripts managed to engage the question fully, i.e., (i) explain sources of Market Failure (MF); (ii) explain the sources of Government Failure (GF), usually in relation to correcting the said MF; (iii) discuss whether GF has worsened MF; and finally (iv) discuss the extent of worsening.
- This is also a very “context-heavy” question – the student needs to make smart choices of the examples to raise in order to illustrate their thesis/anti-thesis points, and develop and substantiate their arguments.

3. The aforementioned good scripts were able to do this well. These scripts were also able to build their argument smoothly to develop a well-reasoned stand at the end of the essay.
4. Of the scripts that did not fully answer the question, the following misinterpretations/gaps were the most common:
 - a) **Sweeping statements made of (iii) (iv)** – many students simply state that GF did not worsen MF in Singapore, without substantiating their claim.
 - b) Misunderstood question in terms of government intervention and government failure: For example, it is not the intervention using subsidies that worsens the MF but the failure to accurately estimate the MEB, and thus the wrong amount of subsidies that worsens MF, hence resulting in government failure (GF).
 - c) **Fail to recognise what “worsen” means.** Undercorrecting the MF does not “worsen” the misallocation of resources, it simply means that that misallocation is not fully corrected. “Worsen” means that the misallocation (and hence deadweight loss) has been **aggravated**, i.e., larger after government intervention, due to an ascribed GF.
 - d) Tried to suggest alternative reasons that worsens MF in Singapore, by raising externalities, imperfect information etc. These are *sources of market failure*, *how can they “worsen” MF?*
 - e) Weak scripts show poor application to Singapore context. For example, saying that Singapore government provides free medical check-up for all, and that our Singapore government is prone to making policies that yield short term gains but compromise on longer term benefits due to electoral votes. Both are incorrect – we do not provide free medical check-up for all (only selected vaccinations), and relative to other countries, we are arguably the least susceptible to electoral votes as a source of GF.
5. Other common errors to note:
 - a) Rigor of content development is not strong, even in the good scripts.
 - a. It is important to explain thoroughly how MF arises:
 - i. Explanation of the 7 steps process (for positive & negative externalities) is still under-developed in many scripts – the derivation of area of deadweight loss due to over/underconsumption/production is the most commonly omitted explanation. It is good habit to include this.
 - ii. Explanation for how the non-rivalry and non-excludability in consumption characteristics of public goods will lead to market failure were riddled with omissions too. Lacking contextualisation when explaining this source of market failure.
 - b. Quality of explaining how government intervention can cause government failure is poor. For example, just stating that government failure arises from information gaps therefore government failure will worsen market failure is not sufficient. Students need to explain with the diagram how this information gap will cause a DWL which is greater than that caused by market failure.
 - c. Labelling and referencing of explanation to diagrams is still weak.
 - b) Some students associated opportunity cost to deadweight loss by saying government failure occurs because provision of a public good like National Defence would mean less funds for infrastructure upgrading. While there is opportunity cost, it does not create further a deadweight loss / allocative inefficiency so it cannot be considered to be a cause of government failure.

Q2 Global food prices are poised to rise sharply in 2014 again. Economists cite the rising incomes in China, severe drought in the US, China's rapid urbanisation and unrests in Ukraine and Israel as key drivers of the abrupt price increase. India has been stockpiling grains for sale to consumers at heavily subsidised prices to ensure that the poor has access to cheap food.

(a) Account for the sharp rise in global food prices. [10]

(b) From the consumers, producers and government's perspectives, assess whether India's strategy of stockpiling for subsidised sale is better than a price ceiling. [15]

Suggested Answer

Part (a)

- Rise in income → rise in demand for food Unrests in Ukraine & Israel → rise in demand now due to uncertainty for the future OR fall in SS due to reduction in sources of food
- Severe drought in US → fall in SS
- Rapid urbanisation → fall in amount of land for agriculture → fall in SS
- DD and SS of food are both $P_{inE} - PED$ (necessity), PES (food needs time to grow)
- Illustrate with use of diagram a very sharp rise in food prices as a result of demand and supply shocks

Knowledge, Application, Understanding and Analysis	
L3 7-10	Addresses the question. Able to give in-depth contextual explanation of rise in DD, fall in SS well. Also able to explain price elasticities of demand and supply well. Good diagrammatic illustration and explanation of how these two factors lead to a very sharp rise in food prices. Marking Guide: <ul style="list-style-type: none"> - Any 3 well-explained sources of increase in price (DD, SS, PED or PES): max 7m - 4 well-explained sources of increase in price: 8-10m
L2 5-6	Answer mostly relevant and addresses the question. For an answer which <ul style="list-style-type: none"> • contains some economic analysis of the DD SS PED PES framework though not consistently applied throughout; or with some errors • is largely theoretical with limited application to the given context
L1 1-4	For an answer which <ul style="list-style-type: none"> • is largely irrelevant with no indication that the meaning of the question has been properly grasp • Did not explain PED and PES • is largely descriptive and/or contains gross conceptual mistakes

Part (b)

Compare the impact on key benchmarks (e.g. equilibrium P & Q, TE, TR, consumer surplus, producer surplus, amount of government expenditure) for both stockpiling and price floor strategies to decide which is better.

Thesis: Stockpiling to sell at subsidised price is better Key Criteria: Consumer Surplus, Producer Surplus	
Stockpiling to sell at subsidised price	Price ceiling
<ul style="list-style-type: none"> Explain how stockpiling strategies reduces food prices within India – illustrate increase in SS due to release of stockpile and amount of subsidy in diagram Extent of change for the above depends on relative PED and PES Demand tends to be Price inelastic; SS tends to be relatively more price elastic due to stockpiling Use diagram to illustrate impact based on above benchmarks: (i) P, Q change; (ii) impact on TE consumers; (iii) impact on govt revenue; (iv) impact on producers As a result of the subsidy and price elasticities of DD and SS, <ul style="list-style-type: none"> P falls by a large extent and Q rises less than proportionately TE by consumers falls Consumer surplus increases Producers gain revenue from subsidy and thus larger TR from sale of good 	<ul style="list-style-type: none"> Assume price ceiling is meant to achieve the same lower price at P1 as subsidy in figure 11a Creates a shortage (reference to figure), since Qs is low at Qs at P1, but Qd is high at Q1 Qty exchanged will be based on Qs sold at P1 – <u>same P1 as subsidy, but lower Q at Qs.</u> Consumers who are able to purchase the lesser quantities of food will be able to gain from the lower p – (a) But there will be consumers who were previously able to purchase but do not have access now (Qs-Q0 amount) and so are worse off.– (b) Net change in consumer surplus (to before ceiling) is uncertain – depending on whether (a) outweighs (b) <u>But relative to subsidy, consumer surplus for ceiling is lower.</u> <u>Producer surplus also reduced compared to subsidy</u> (optional – black market) <ul style="list-style-type: none"> Furthermore, there is likely to be formation of black market, where each unit of Qs can be sold up to the consumers' willingness and ability to pay – this will result in zero consumer surplus and producer's in black market will gain maximum seller surplus This also effectively prices out the poor, aggravating the inequality
Anti-Thesis: Price Ceiling is better Key Criteria: Government Expenditure	
<ul style="list-style-type: none"> Govt expenditure rises due to subsidy amount. Producer and consumers gain, but government expenditure rises. 	<p>However, SS in the price ceiling case may be more price inelastic, since there is no stockpiling by the government</p> <ul style="list-style-type: none"> If so, due to the inelastic nature of PES, this will result in a smaller shortage as a result of the ceiling at

	<p>P1.</p> <ul style="list-style-type: none"> Thus, the effects on consumer and producer surplus as explained above will be moderated.
	<ul style="list-style-type: none"> However, there may be some government expenditure incurred, since the govt may however have to police the price ceiling, thereby incurring costs. (optional – black market) Government expenditure may be spent on policing the black market instead
<ul style="list-style-type: none"> Govt did reduce prices for the poor through subsidies, but the extent of increase in quantity is not substantial (less than prop) due to the price elasticity of demand. Wastage of precious food – food is perishable, stockpiling often leads to wastage when the piles of food goes bad in the government warehouses. 	
<ul style="list-style-type: none"> Other considerations: Also depends on whether DD has further increased, due to increase in income; or expectation of food supplies and prices in future; or whether other neighbouring countries can purchase the subsidised grains from India. If there are able to, the subsidy may benefit non-Indians than the poor in India, despite the heavy expenditure on subsidies by the Indian government. Rise in demand would cause prices to rise, requiring more government subsidy and less access by the poor. 	<p>Other considerations:</p> <ul style="list-style-type: none"> Rise in demand will aggravate the shortage and prevalence of black market The poor will only benefit to the extent that they can get their hands on the limited amounts of grains at the official P1 price ceiling.
Synthesis	
<p>Government subsidy seems to yield better outcomes in terms of consumer surplus (particularly access to the poor), producer surplus. Government expenditure is substantial for subsidy, and is much lesser for price ceiling. However, this need not be the case if the monies were required to be spent on policing the price ceiling (or the black market) which may be substantially high and outweighs the costs of subsidy. This is likely to be the case given that India is a very large country (high costs of policing the ceiling or black market). Hence, on balance, subsidy may be better for India.</p> <p>(Added perspective) However, at the end of the day, the subsidy does not solve the root cause of the problem and is unsustainable in the long run given the large costs to the government. India should thus consider investing longer term policies to improve the technology and local production of agriculture produce, in order to meet the rising demand for food and improve access to the poor.</p>	

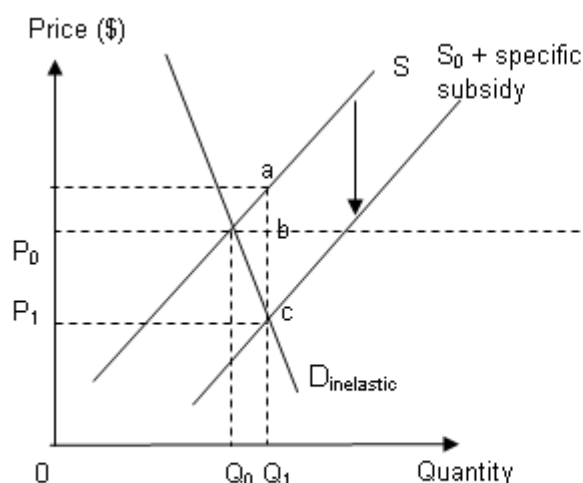


Figure 11a

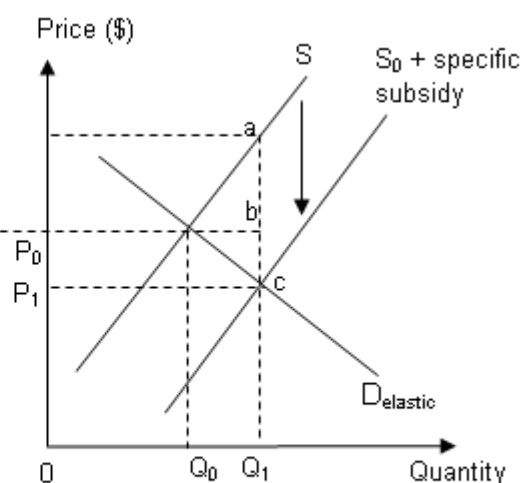


Figure 11b

[NB: Just refer to figure 11a, figure 11b is here for my own reference for the moment]

Knowledge, Understanding, Application and Analysis		
L3	Addresses the question, with thorough explanation of how price ceiling and stockpiling for subsidised sale work, and its effect on P, Q, consumers, producers (with explicit link to consumer & producer surplus) and government, with good use of diagrams to illustrate points. Coherent and well-argued essay that clearly compares the <u>relative</u> impact on consumers, producers and government.	9-11
L2	<p>Mostly addresses the question, and explains (but with some gaps/inaccuracies) how price ceiling and stockpiling for subsidised sale work, and its effect on P, Q, consumers, producers and government, with some relevant use of diagrams to illustrate points. Shows evidence of developing content points to form judgements on the relative impacts on the various parties, though without consistent, explicit and clear explanations.</p> <p>Mostly coherent argument, though not consistent throughout the essay.</p> <p>Marking Guide:</p> <p>Answer that does not fully address the question, in the form of the following variations – max 6m:</p> <ul style="list-style-type: none"> - Answer with no comparison but thorough explanation - Explores only 2 out of 3 parties' perspectives, e.g., only from consumer and producer but not government POV 	6-8
L1	Essay only obliquely answers the question, with weak or incomplete content explanations of how price ceiling and stockpiling for subsidised sale work, and	1-5

	its effect on P, Q, consumers, producers and government, with no/little relevant use of diagrams to illustrate points. No link to consumer, producer and government, or with link to these parties but very poorly or skimpily explained. Little/no evidence of developing content points to form judgements on the relative impacts on the various parties. Incoherent arguments. Marking Guide: - Answer that does not address the question, exploring only 1 out of 3 parties perspectives – max 5m	
Evaluation		
E2	Shows well-reasoned evaluation on the effects on the various parties, and a justified (and contextualised) stand on which policy is better	3-4
E1	Shows some attempt to evaluate the effects on the various parties but with weak or no justified stand on which policy is better.	1-2

Examiners' comments:

Q2(a)

1. A very easy part of the question, but the responses are weak, and very disappointing.
2. Most students are able to correctly identify the factors of demand and supply from the preamble, but many scripts fail to explain role of price elasticities of demand and supply of food in contributing to the **sharp** rise in global prices. As such, a large majority of scripts did not fully answer the question of why there was a **sharp** increase in price.
3. Development of content (factors of demand, supply, and *how* price elasticities of demand and supply result in sharp increase in prices given the demand and supply changes) and application to context of food are usually only explained superficially and lacked the rigor required of a Level 3 score.
4. Other common errors to note:
Content
 - a) Price elasticities of demand and supply and *how* they are related to how sharply prices have risen were not well explained, if at all mentioned.
 - a. First, the terms “more than proportionate” or “less than proportionate” should be consistently used to describe the relationship between P and Q.
 - b. Second, it is important to explain that price inelastic demand means that a rise in price leads to **a less than proportionate** fall in quantity demanded, which also means that there needs to be a more than proportionate increase in price to induce a given reduction in quantity demand. Hence, for **any given shortage at initial equilibrium price P_0 due to a fall in supply, there needs to be a more than proportionate increase in price in order to correct the shortage, ceteris paribus**. This is in contrast to a price elastic demand, where the shortage can be corrected by a less than proportionate increase in price, ceteris paribus. This is the crux of the answer that is not

addressed by most scripts, and is the distinguishing factor for the excellent scripts (8-10marks).

- c. Diagrammatic analysis of PED and PES and their impact on the extent of price change were usually incomplete. E.g. students often did not compare a demand curve that is relatively price elastic to one that is relatively price inelastic to show the difference in extent of price increase.
- b) Inaccurate phrasing of economic concepts, such as “PES is inelastic”. It should be more accurately written as “Supply is price inelastic”, or “PES is less than 1”.
- c) Misuse of terminology: some students remain confused about the difference between “Supply” and “Quantity supplied”, “Demand” and “Quantity demanded”. Changes in “Quantity demanded” and “quantity supplied” are due to price, and hence should be used when explaining PED and PES. Changes in “demand” and “supply” are due to non-price determinants.
- d) Definitions of PED and PES are usually incomplete. It is important to include “ceteris paribus” to complete the definitions.
- e) Explanation of income as a demand determinant often did not include an explanation or qualification that food is considered a normal good. It is important to state so because demand for a good does not necessarily increase when income increases (e.g. inferior goods).

Context

- f) Many students linked urbanisation to a rise in income or assuming that people living in urban areas desire better quality or luxury goods (although the distinction between luxury and necessity goods is not required for this question). The assumption that urban dwellers have a higher income/wealth is a stereotype that reflects the unawareness of the urban poor and the ineffectiveness of urban-biased policies. Geography students should be the last ones to make such an assumption. Some students stated explicitly that ‘urban people are more affluent than rural people’.

Others

- g) Do not use short hand excessively. Terms like “demand” and “supply” should not be abbreviated to “DD” and “SS”. More critically, do not use mathematical symbols within the essay, such as “>” for “more than” etc.

Q2(b)

- 5. Another disappointing part, though the weak responses are understandable due to the demands of the question.
- 6. The better scripts show ability to directly answer the question, by analysing the effects of price ceiling vs subsidy on consumer, producer and government respectively. However, even these scripts were lacking in the rigor in economic concepts, e.g., either did not link to consumer and producer surplus, or with gaps and inaccuracies in analysis and diagrams. A few scripts show good contextualisation and awareness of the Indian economy (large economy, thus difficult to police, but with ready funds for expenditure on subsidies). Most scripts also concluded with a stand, but very few were able to provide a coherent and well-balanced synthesis of all the points raised in the essay.
- 7. Other errors to note:
 - a. Content

- a) It is important to compare the effects of price ceiling and subsidies with each other, **not** before and after the strategies, so as to address the question.
- b) Misinterpretation of India's Stockpiling strategy: Stockpiling for sale at subsidised prices effectively translates into subsidy for the food market, hence shifting supply curve down, because the Indian government actually buys the food at above market price and sells to the mass at below market price. Some students misinterpret this strategy, focussing instead at the 'stockpiling' aspect of the strategy, which they interpret at a fall in supply.
- c) Poor/inaccurate analysis of effects on consumer, producer, and government because:
 - a. Most scripts lacked rigor in economic concepts, which can be improved by bringing in diagrammatic analysis to substantiate the claims made about impacts on the three groups. For example, students made a claim that consumer surplus will fall with a price ceiling imposed on the market without having even drawn a diagram to illustrate how a price ceiling works and for those who did draw this diagram failed to reference the diagram and show how the consumer surplus changed. In fact, if they did do this step accurately they would have concluded that change in consumer surplus is uncertain. In summary the lack of referencing their diagrams to prove their statements reduced the rigor of the essay, not to mention the wasted effort in drawing a diagram that is ignored as no detailed and relevant reference was made to it.
 - b. Some students claimed that producers' total revenue falls when subsidies are implemented because they fail to include the subsidy in calculating producers' total revenue.
 - c. Some students' analysis focused on the welfare loss due to a price ceiling from society's perspective as a whole without breaking them down into producer and consumer surplus.
 - d. Some students conclude that consumer surplus falls for both strategies simply by looking at the decrease in price for both cases without considering the resulting equilibrium quantity.
- d) Misconception of economic framework to use:
 - a. Some claim that there is an underproduction/underconsumption when a price ceiling is implemented, hence that there is market failure and proceeded to do market failure analysis (usually due to positive externality). A shortage cannot be equated to an underproduction/underconsumption and it is not a market failure because the market was not allowed to function normally in the first place. Moreover, there is no positive externality that arises from the consumption of food.
 - b. Others claimed that subsidies or price ceilings aim to help achieve allocative efficiency. But the market had no market failure to begin with, i.e. it was already at the allocative efficient point. In fact, the subsidy or the price ceiling distorts the market and causes misallocation of resources.
- e) There was mention that impact on consumer, producer and government was dependent on the price elasticity of demand and supply. But the impact (price and quantity changes, consumer and producer surpluses) is dependent firstly on the policy implemented, only then does elasticities come into the picture to accentuate or downplay the impacts.

Argument Development/Synthesis

- f) In many of our economics essays, a combination of strategies is the best, since each strategy has its advantages and disadvantages, and the problem they are supposed to solve is multi-faceted. This is one example of a question where a combination of

strategies (implement both price ceiling and subsidy for the entire Indian economy) does ***not make any sense***. Be very careful when you are synthesizing your arguments.

- 3 The online Apple Store offers special education pricing for educators as well as university students, students accepted into university, parents buying for university students, teachers and staff at all levels.

(a) Explain the factors that would affect if Apple can carry out price discrimination in the above situation. [10]

(b) Discuss if barriers to entry is the key in determining a firm's behavior in Singapore. [15]

Suggested answer

Full Answer

Introduction	<p><u>Define price discrimination:</u> Price discrimination refers to the charging of different prices to different consumers for the same product, for reasons not associated with cost.</p> <p><u>Identify the type of PD mentioned in the preamble:</u> In the preamble, it is mentioned that Apple charges a lower price for their products for college-going students, educators, and parents of college-going children – therefore, since there are two distinct markets that are charged different prices, this is a form of 3rd degree PD.</p> <p><u>Briefly explain why the situation mentioned in the preamble is PD:</u> Since college-going students, educators, and parents of college-going children are charged a lower price for the same product as compared to the general population – and there are no conceivable differences in the costs of production or provision of this good to the two different groups of consumers, we can safely conclude that this is a form of third degree PD.</p> <p><u>Overview:</u> In this question I will explain the four conditions that must be fulfilled for PD to take place, using Apple as an example. I will show how not all conditions have been fulfilled satisfactorily, and therefore that might affect how successful Apple can carry out the above example of PD.</p>
Body	<p><u>Paragraph 1: Firm must have market power.</u></p> <p>P: The firm must have some market power, and is able to influence prices.</p> <p>E: This means that the firm can set prices and is not a price taker. Price discrimination would be impossible under perfect competition since firms have no influence over prices. If firms have no influence over prices, then firms will not be able to charge different prices in different markets to different consumers.</p> <p>E: This condition is satisfied in Apple's case, since Apple is one of the world's leading hardware and software provider, has substantial market power to engage in price discrimination.</p> <p>L: In addition, for successful PD to take place, the firm must also be</p>

	<p>able to segregate and identify the market.</p>
	<p><u>Paragraph 2: Firm must be able to segregate and identify the market.</u></p> <p>P: The firm must be able to segment the market by classifying buyers into separate, identifiable groups.</p> <p>E: There are many ways this can be done, such as by classifying buyers in terms of age groups, gender, geography, etc. There must be a way for the firm to identify a consumer as belonging to either markets, as this would allow the firm to charge different prices to different consumers belonging in different markets.</p> <p>E: Again this is satisfied in Apple's case, since the preamble mentioned that staff and students are entitled to the education pricing, together with parents who are purchasing Apple products for their school-going children. Presumably it would be fairly easy for Apple to request for proof (e.g. student/staff ID) from consumers to show that they are either the faculty/students of particular universities before qualifying for the discount.</p> <p>Ev: (Optional) However, it must be noted that it is quite easy for consumers to cheat in order to obtain the discount.</p> <p>L: In order for the firm to <i>benefit</i> from employing PD through increased profits, there must also be differing PED values in the segregated markets.</p> <p><u>Paragraph 3: There must be differing elasticities in the segregated markets.</u></p> <p>P: There must be different PED in the separate markets.</p> <p>E: This is because it allows the firm to charge a lower price to the market with a more price elastic demand, and a higher price to the market with a more price inelastic demand. Overall, this allows the firm to earn a higher profit than if the firm charges one price across both markets (Diagram to illustrate – optional).</p> <p>E: In Apple's case, it is likely that students and education professionals are charged a lower price as their demand is likely to be more price elastic as compared to the general public since computer hardware and software taking up a larger proportion of their income. If one price is charged, it is likely that some of the consumers in the market consisting of students and education professionals will drop out. Therefore there is a possibility that Apple can increase the amount of profits earned by charging these different groups of consumers different prices.</p>

	<p>L: Finally, there must also be no possibility of resale.</p>
	<p><u>Paragraph 4: There must be no possibility of resale.</u></p> <p>P: Buyers must not be able to resell the good at a higher price in another market.</p> <p>E: This condition is necessary because if this condition does not hold, it is possible for consumers that belong in the lower price market (students or education professionals) to resell their computer software/hardware at a higher price to the general public (but the price would still be lower than what the general public would have paid). If this occurs, then PD would have failed because no one in the general public would be buying their computer software/hardware from Apple.</p> <p>E: Technically there is nothing that Apple is doing to prevent resale between the two markets, so therefore it is theoretically possible for a student/staff to buy multiple units and to sell it at a cheaper price to the other market.</p> <p>Ev: (Optional) However this does not happen in real life as the price differential is too small between the two markets for anyone to make much profit from resale.</p> <p>L: Therefore Apple is able to conduct price discrimination for its products between students/education professionals and the general public.</p>
	<p>Conclusion</p> <p>Generally, it can be acknowledged that the conditions for PD to be carried out by Apple have been satisfied. PD can be viewed as a type of non-price competition conducted by Apple to differentiate itself from its competitors. In the next part of my essay, I will explore what determines how firms behave in Singapore.</p>

b) Discuss if barriers to entry is the key in determining a firm's behavior in Singapore. [15]

Full Answer

Introduction	<p><u>Define 'firms' behavior':</u> Firms' behavior refers to the ability and incentive to engage in price and non-price competition.</p> <p><u>Define 'barriers to entry':</u> Barriers to entry refer to any condition that prevents other potential firms from entering the industry, thereby limiting the competition for existing firms.</p> <p><u>Overview:</u> In this question I will explain if the presence or non-presence of barriers to entry (BTEs) is the key to determining if firms in Singapore engage more in price or non-price competition, and to compare this factor with other factors that may be key in determining the behavior of firms in Singapore.</p>	
Body	<p><u>Thesis: Barriers to entry may be the key to explaining firms' behavior in Singapore.</u></p> <p>P: Presence of barriers to entry is important in determining how prices are set.</p> <p>E: This is because the presence of high BTEs prevents potential competitors from entering easily, therefore demand is generally highly price inelastic due to the lack of substitutes. This allows firms to generally set higher prices and restrict output.</p> <div data-bbox="427 1422 1045 1904"> </div> <p>As can be seen from the diagram above, in comparing a monopoly (very high BTEs) with a PC (no BTEs), prices are generally higher at P and</p>	<p><i>How high VS low level of BTEs affect prices</i></p>

	<p>output lower at Q (assuming producer is profit-maximizing and aims to maximize profit at where $MR=MC$).</p> <p>In a PC, P and Q are determined by market demand and supply forces which will cause prices to be set at P' and output produced to be at Q'.</p> <p>Similarly in a monopolistic competition, BTEs are generally lower and therefore demand is likely to be more price elastic as compared to the demand for the product/service in an oligopoly. As such, prices tend to be higher in an oligopolistic market as compared to a monopolistically competitive one.</p> <p>P: The presence of high barriers to entry can result in significant market power in the hands of a few firms and this can result in mutually dependent behavior of firms whereby direct price competition is avoided.</p> <p>E: This is true especially in an oligopoly where prices are fairly rigid due to mutual interdependence. As shown in the diagram below, the demand curve above P is more price elastic as compared to the demand curve below P. This is because firms assume that their rivals will match any price falls, but will not match any price rises. Therefore, when the firm lowers its price, the firm will find that Qd rises less than proportionately (therefore DD is pinE below P) since its rivals have also similarly lowered their prices; and if the firm raises its price, Qd will fall <i>more</i> than proportionately (therefore DD is pE above P) since its rivals would not have followed the price increase.</p> <p>What happens is that as a result of high BTEs leading to mutual interdependence of a few firms in the oligopoly, prices tend to be fairly rigid – substantial changes in costs of production (MC rising to MC' or MC'') will cause price to remain at P.</p> <div data-bbox="464 1570 1106 2002"> </div>	<p><i>How high level of BTEs affect price competition</i></p>
--	---	---

	<p>in price, the benefits to the firm may be negligible. Also firms cannot reduce price indefinitely as this can lead to losses if revenue does not keep up with costs. Instead, we see monopolistically competitive firms engage in small-scale non-price competition as compared to firms in industries with high BTEs.</p> <p>Ex: For example, hawker stalls in hawker centres differentiate themselves from similar stalls selling similar fare (e.g. chicken rice) by relying on quality, word of mouth, etc.</p> <p>L: Therefore, we can see that to a large extent the level of BTEs (whether high or low) determine the kind of behavior firms in Singapore (supermarkets for oligopoly and hawker stalls for monopolistic competition) engage in – whether they are more likely to engage in price or non-price competition and also WRT the price they set.</p>	
	<p><u>Anti-Thesis: Other factors may be more important in explaining the behavior of firms in Singapore.</u></p> <p>P: Government intervention such as regulations, anti-trust laws, and the existence of consumer welfare organizations (CASE – Consumers Association of Singapore) may be more important in influencing the behavior of firms in Singapore.</p> <p>E + Ex: The public transport industry in Singapore is primarily an oligopolistic one with two large private companies – SBS Transit, and SMRT. The behavior of these firms in terms of setting prices to charge for public transport, whether by bus or train, is heavily regulated by the Public Transport Council. Any fare revision has to be submitted to the PTC for it to be approved before it is implemented.</p> <p>E + Ex: The Lemon Law is a consumer protection law that provides remedies against defective goods (colloquially known as “lemons”), which fail to conform to the contract at the time of delivery, e.g. do not meet standards of quality and performance, especially after repeated repair. Such laws obligate sellers to repair, replace, or refund or reduce the price of those defective goods. This will influence the behavior of firms especially in industries that are relatively insulated against competition due to high levels of BTEs – these laws and legislations will force firms to continually engage in R&D to improve the quality of their products and services provided so as to protect consumer welfare.</p> <p>L: Therefore government intervention is a more important factor in influencing firms’ behavior,</p>	<p><i>How government intervention will affect behavior of firms.</i></p>

	<p>especially in industries that have broad social implications such as public transport as well as healthcare.</p>	
	<p>P: Alternative objectives of firms will also influence firms' behavior in Singapore.</p> <p>E: Some firms may not aim to maximize profits and therefore may not engage in price or non-price competition with its rivals. They may be more focused on output maximization (producing at where $MR=0$). These firms usually have other objectives such as a social, humanitarian or environmental focus.</p> <p>Ex: AnnaLakshmi Restaurant is a social enterprise where it is an Indian restaurant, which is largely run by volunteers, and operates on a "pay-as-you-wish" concept. Proceeds go towards sustaining the Temple of Fine Arts and funding classes for needy students.</p> <p>L: Therefore it is important to acknowledge that there are other factors that affect firms' behavior in Singapore.</p>	<p><i>How alternative objectives of firms will affect firms' behavior.</i></p>
	<p>Conclusion</p> <p>[STAND] I believe that whether the level of BTEs is key to influencing firms' behavior in Singapore depends on <i>the type of industry</i> it is.</p> <p>[SUBSTANTIATION] For industries that has broad social impacts and is deemed to be a social need, what determines firms' behavior is more the extent of government intervention, rather than the level of BTEs.</p>	

Examiners' Comments:

This question was generally very poorly attempted. For part (a), it is clear that students are not completely aware of the conditions necessary for price discrimination to be carried out, while for part (b), many students were unable to satisfactorily establish the relationship between the levels of barriers to entry, to explaining how it shapes firms' behavior. For part (a) marks range from 2 to 8 with the majority in the 3 to 6 mark range. For part (b) the marks range from 1 to 15 with the majority in the 6 to 11 marks range.

Part (a)

6. Good scripts often were able identify all four conditions necessary for price discrimination to be carried out, although scripts which have only identified three out of the four conditions were not penalized. These scripts often were able to make use of the preamble provided to great effect by recognizing that the situation in the preamble was classified as third-degree price discrimination. They were able to explain using concepts of PED why Apple would want to carry out price discrimination with the group of consumers identified in the preamble, and to charge them a different price as compared to the general public.
7. These scripts also put forth, very convincingly, that the reason why having substantial market power was an important factor for PD to be carried out was because even when discriminatory pricing are carried out by Apple, consumers are less likely to switch to alternatives. In addition, these candidates were able to give examples for each of the conditions explained with reference to Apple.
8. They were also able to draw diagrams to illustrate third degree price discrimination and explain the diagrams clearly pertaining to the condition of markets with different PED.
9. Top marks were awarded to candidates who were able to explain the *reasons* behind the conditions, i.e. why the conditions were necessary in order for PD to be carried out, thereby going beyond the question of whether Apple has satisfied the conditions necessary.
10. Of the scripts that did not fully answer the question, the following misinterpretations/gaps were the most common:
 - f) Poorer scripts were often unable to identify that the group of consumers singled out in the preamble were all belonging in the SAME market. They need to realise the 2 markets include everyone mentioned in the preamble vs. everyone not mentioned in the preamble.
 - g) Some students explained that since students use Apple products more frequently, these products were deemed as a necessity and therefore the demand would be more price inelastic than teachers'. This was not a very convincing argument since the preamble had already mentioned that BOTH students and teachers were entitled to the same educational discount!! Clearly this showed a lack of understanding and comprehension on the part of the candidate.
 - h) Many students also showed poor understanding of elasticity concepts in relation to total revenue. They would argue that students and teachers have a more price inelastic demand because they would require the usage of these educational tools regularly, thus rendering their demand more price inelastic. However, they did not realise that if the demand was price inelastic, it would be counter-intuitive for Apple producers to offer them the discount. The discount would only cause quantity demanded to rise less than proportionately, resulting in a fall in total revenue for Apple!

4 Assess the extent to which an improvement in standard of living of an economy requires economic growth to be the top priority.

[25]

Suggested answer

Introduction	<p><u>Define SOL:</u> SOL refers to the welfare/well-being for the average person in a country.</p> <p><u>Explain how material SOL is measured:</u> Material SOL is measured in terms of real GDP per capita, adjusted using PPP-adjusted exchange rates. It is used as a gauge of the level of output available for consumption on a per-head or per-person basis, adjusted for differences in PPP for the purpose of international comparison.</p> <p><u>Explain how non-material SOL is measured:</u> Non-material SOL is usually measured by a confluence of different factors such as income inequality, literacy rate, infant mortality rates, etc.</p> <p><u>Overview:</u> In this essay, I will show how although the pursuit of sustained economic growth can lead to an improvement in SOL, it should not be a top priority as there are other factors such as environmental indicators, as well as income equality that are more important than the relentless pursuit of sustained economic growth.</p> <p>However, this is also contingent on the stage of development the economy is at – whether the economy is a developing one or a developed economy.</p>	
Body	<p><u>Thesis:</u> An improvement in SOL may require economic growth to be the top priority.</p> <p>Economic growth is generally defined as an increase in the output (or income) level of an economy.</p> <p>There are two types of economic growth: actual economic growth, VS potential economic growth. Actual economic growth refers to the actual increase in output of goods and services, while potential economic growth refers to the increase in potential to produce more output. Diagrammatically, actual economic growth is represented by an increase in AD, while potential economic growth is represented by an increase in AS. When AD and AS rise together, there is sustained economic growth, otherwise known as non-inflationary economic growth.</p> <p>To generate sustained economic growth, governments can use demand-management policies such as fiscal or monetary policies, where the former adjusts government spending or taxation, while the latter adjusts interest rates or exchange rates, both to influence the level of economic activity within the</p>	Setting up the premise

economy. This will cause an increase in AD.

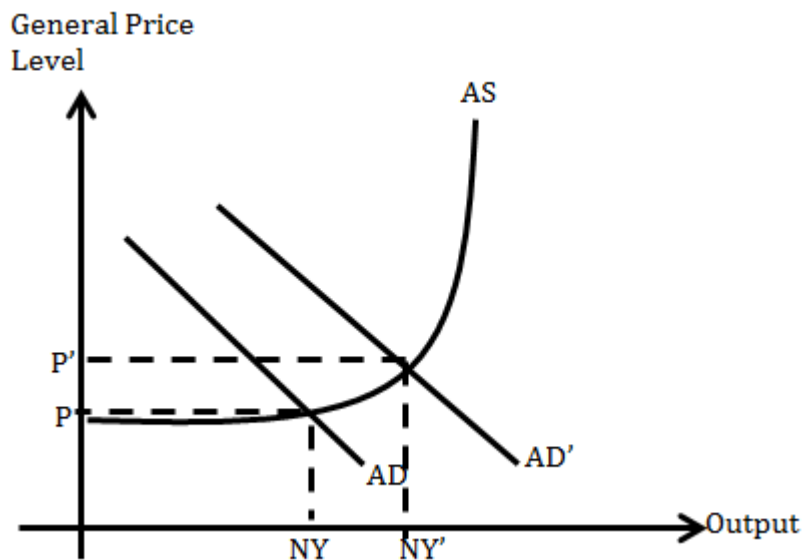
The increase in AS (or the expansion of an economy's productive capacity) can be brought about by the use of supply-side policies such as wage and incomes policies or retraining of workers.

P: When there is actual economic growth, SOL will be improved.

E: This is because actual economic growth means that there is more output produced within the economy, which then implies that more goods and services is available for consumption.

Referring to the diagram below, an increase in AD brought about by demand-management policies as mentioned earlier will cause NY to rise by a multiplied amount from Y to Y' through the multiplier effect, where the initial increase in spending brings about additional rounds of spending.

How actual EG leads to improved SOL.



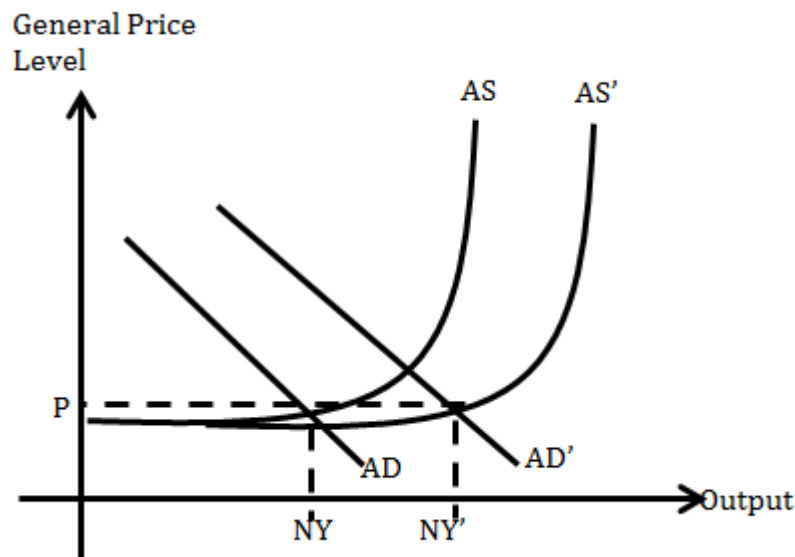
Ev: However, the above assumes that the increase in AD occurs in the Keynesian or intermediate ranges of the AS curve where there are still substantial amount of spare

capacity available in the economy. Successive increases in AD for an economy near full employment will merely result in a sustained increase in GPL, leading to DD-pull inflation. In this case, actual economic growth may come at the expense of rising prices, which means that real income may remain the same and therefore there is no improvement in SOL or SOL may even fall if inflation persists.

P: If, however, economic growth is sustained over a longer period of time due to an increase in *both* AD and AS, the increase in NY can be sustained permanently, leading to an increase in SOL *permanently*.

E: As seen in the diagram below, due to an increase in both the AD and the AS curve, NY is able to increase with no increase in the GPL as the productive capacity of the economy is expanded to accommodate the rising AD. In this case, the rise in NY does not conflict with rising GPL and real income is protected. This increase in SOL is sustained.

How sustained EG leads to improved SOL.



Ev: However, this is also assuming that population growth rate is constant. If population growth at the same time is also increasing, real GDP per capita may be lower since the larger amount of output available is to be shared amongst a greater number of people.

L: Therefore the pursuit of economic growth can improve SOL *if* economic growth is sustained. However, whether this pursuit should be a top priority remains to be seen, as the next part of my essay will show.

	<p>vehicles. Out of the world's 20 most polluted cities, the top 16 came from China. It is not uncommon to see many parts of China covered by smog including Beijing.</p> <p>L: Therefore, if the top priority is instead on improving environmental standards through the focus on green or sustainable growth e.g. the use of green technology; alternative fuels e.g. solar and biofuels; SOL may be improved to a greater extent.</p>	
	<p>Assess the extent to which</p> <p>P: Whether economic growth <u>should</u> be a top priority or not to improve SOL depends on the stage of economic development the economy is at.</p> <p>E + Ex: Economic growth may be more of a top priority to developing economies rather than developed economies. Developing economies include the BRICS economies (Brazil, Russia, India, China, South Africa), while developed economies refer to nations such as the United States, United Kingdom, Singapore, etc.</p> <p>In the initial stages of economic development, a greater improvement in SOL can be achieved by placing EG as the top priority. This is because in the initial stages of development there are a greater amount of resources in a country left unemployed – therefore if the emphasis is placed on EG, it is likely to lead to large rise in income and therefore SOL.</p> <p>In the later stages of development, the relentless pursuance of EG as a top priority will not lead to a very large increase in SOL. Instead, emphasis should be placed on distributing the gains of growth more evenly to ensure that SOL is increased uniformly throughout.</p> <p>L: Therefore it cannot be said the economic growth should be a top priority to all economies in order to improve SOL.</p>	<p><i>Comparison between factors presented, according to a criteria.</i></p>
Conclusion	<p>[STAND] The extent to which an improvement in SOL requires economic growth to be a top priority depends on two factors: (a) the type of economic growth (b) the stage of development an economy is at.</p> <p>[SUBSTANTIATION] In the short run, a faster improvement in SOL can be achieved when <i>sustainable</i> economic growth is placed as the top priority; however, in the long run as an economy becomes more developed, it is likely that other factors will become increasingly more important in raising SOL.</p>	<p><i>Synthesis</i></p>

Examiners' Comments:

This question was generally well-attempted. Most students were able to classify standard of living (SOL) into both the material and non-material aspects, and base their discussion on these two aspects to evaluate if pursuing economic growth should be the top priority.

1. The definition of Standard of living was often left wanting. The definition of Economic Growth was also left much to be desired, in that many students were under the misconception that Economic growth referred only to actual economic growth!! They should realise that Economic growth in the question refers to sustainable Economic Growth i.e. both actual and potential growth.
2. Thus, good scripts are able to give examples of how Singapore has achieved actual and potential growth through demand management policies e.g. expansionary fiscal policy and exchange rate policy as well as supply side policy and trade policy. As a result Singapore is able to achieve a high material SOL compared with other countries in the region.
3. Poorer answers would often use other macroeconomic indicators as part of the anti-thesis for this question. This is not recommended as students who establish this argument often fail to realise that the pursuit of (sustainable) economic growth as a top priority, often meant that the other macroeconomic aims are also at the same time achieved: for example, sustainable economic growth with the increase of both AD and AS will lead to increased employment and stable prices. Students who put forth the argument that achieving price stability and/or lowering unemployment should be the alternative top priority often overlook this key fact. Thus, such arguments often limit the students to a low L2 score.
4. Thus, to prevent such contradictions that undermine the value of their argument, students should look at other factors that should be the top priority in increasing SOL that clearly may be at odds with economic growth. For example, stronger answers put forth that with economic growth, income inequity may increase particularly if economic growth is achieved by the growth of certain sectors in the economy over others. Such answers made possible the attainment of L3 marks.
5. Many essays also overlooked the non-material aspect of SOL, providing only cursory links back to SOL (e.g. with economic growth, and thus higher employment levels, people will have greater peace of mind.) This is a poor example of non-material SOL. Instead, good points relating back to the environment, stress levels which are supported with real-life examples e.g. pollution levels in China or working hours in Japan should be brought up.
6. Also, the link between economic growth and SOL was sometimes not established clearly, with many students making statements stating the link between the two instead of explaining the relationship. Students should note that they should establish how material SOL is measured first before explaining how economic growth. In increasing national income, this will lead to an increase in purchasing power and thus the ability to consume more goods and services. Some candidates attempt to show this relationship without the use of AD-AS analysis, but this is often done poorly. Students are reminded that where possible, they should support their claims with relevant economic analysis and diagrams to obtain a higher Content Development score. Answers that obtained a lower L2 or higher L1 score would have included AD/AS analysis, but did so with no clear link to SOL. These students usually state that an increase in AD (with no explanation why AD increases) and an increase in AS

(without explaining why AS increases) will lead to an increase in national income without explaining how an increase in national income can increase material SOL.

7. A minority of the students explained that an increase in productive capacity of the economy that outstrips the increase in AD, will increase unemployment levels as the economy now moves further away from the full employment level. While this may be true diagrammatically, it is counter intuitive to mention that in achieving potential economic growth, unemployment rises instead of falls! To avoid such logical fallacies, students are encouraged to say that in such situations, employment rises with the creation of more jobs made possible by the increase in productive capacity.
8. Argument development for this question was the area for improvement. A large majority of the student completely ignored the key phrase of the question, which was 'top priority'. Students should note that in order to address this key phrase, there should not only be a listing of other factors that are priorities in improving SOL, but also a ranking amongst these factors to justify which should be the TOP priority. Often, the average answer would simply posit that economic growth, while allowing SOL to improve, often overlook the non-material aspects, etc etc without justifying IF certain types of economies/ certain situations would require the top priority to be economic growth. For example, stronger answers were able to explain that a country's economic situation needs to be taken into consideration when deciding whether economic growth should be the top priority. If the economy is currently suffering from a recession, then the pursuing of economic growth should be placed first over other priorities. For instance, these scripts indicated with supportive examples that economic growth is more important to the US whereas non material factors appear to be more important in Singapore. Such answers often obtained the top score for this question.

<p>Lastly, the government can influence the size of the multiplier through changes in direct taxes. For example, a cut in the rate of income tax will increase the amount of extra income that can be spent on further goods and services. Such a tax policy change will bring about a smaller withdrawal from the circular flow of income and bring about a larger increase in the national income eventually, raising the size of the multiplier.</p>	<p>will affect size of k</p> <p>Elaboration: relate to circular flow</p> <p>Link back to question</p>
<p><u>Conclusion:</u></p> <p>All in all, any factors that affect the marginal propensity to withdraw will bring about a change in the amount of leakages from the circular flow of income and thus influence the size of the multiplier. The size of the multiplier will have some consequences in terms of the impact of different types of policies used to manage the macroeconomy.</p>	<p>Summarise main points.</p> <p>Link to part b question</p>

Level	Descriptor	Marks
L1	Spattering of points, statements and unexplained or incidental explanation. Did not address question requirements on factors affecting size of multiplier, incorrect or conceptually lacking explanation of multiplier content.	[1-4m]
L2	Address question requirement though explanation may be undeveloped. Factors may not have all 3 aspects and/or not contextualised to real life economies	[5-7m]
L3	Excellent analysis of what determines the size of the multiplier with the aid of either a multiplier table or the circular flow diagram with contextualisation to real life economies	[8-10m]

b)

<p><u>Introduction:</u></p> <p>Faced with the twin threats of worldwide recession and high inflation, Singapore will be hit hard as a small open economy that depends heavily on external trade as her engine of growth and a resource-limited economy that needs to import the vast majority of her goods for final consumption as well as for inputs of production. The worldwide recession will drastically reduce demand for Singapore's exports and bring about a fall in Aggregate Demand (AD) and a fall in actual economic growth and employment levels. High inflation will raise the cost of living as well as cost of production for Singapore, shifting AS upwards, resulting in higher inflation rates. There will be a negative impact across all four macroeconomic aims of growth, employment, inflation and balance of payments. It is of utmost importance that interventionist policies be employed to tackle the twin threats and while expansionary fiscal policy may seem like the most appropriate policy to be employed, other policies still need to be utilised to complement and overcome shortcomings of inflationary pressures.</p>	<p>Explain the impact of worldwide recession and high inflation on Sg economy</p> <p>Overview/Thesis statement</p>
<p><u>Body: Thesis 1 – appropriateness of FP in addressing twin threats</u></p>	

<p>Expansionary fiscal policy can be used to directly resolve demand-deficient unemployment brought on by the worldwide recession. This can be done by increasing government expenditure spending which would raise the level of aggregate demand resulting in increase in employment.</p> <p>AND/OR tax incentives can also be used to increase the level of investment to encourage economic growth: e.g. lower corporate tax to increase after-tax profits. More funds will be available for re-investment due to the higher after-tax returns on investment which will encourage more investment to take place (explain with aid of AD-AS diagram) Together, the rise in AD and AS in the long run will bring about a reversal of the twin threats of higher unemployment, higher prices and lower growth.</p> <p>This is particularly appropriate in Singapore where fiscal measures are used often with a supply-side emphasis to prepare the economy for recovery by increasing AS. For example, the Resilience Package introduced in the aftermath of Global Financial Crisis brought about increased government expenditure that helped workers stayed employed but also encouraged them to go for retraining. This helps in adjusting the economy to be ready when the global economy turnarounds: targeted at increasing the potential output in the economy → in the long run, improve the productive capacity of the economy.</p>	<p>Point: use of expansionary FP to address recession and inflation</p> <p>Example</p> <p>Link back to question</p>
<p><u>Body: Antithesis 1- FP is inappropriate in other aspects when addressing twin threats</u></p> <p>However, the use of fiscal policy may have limited impact due to the small multiplier value of Singapore. This is because the marginal propensity to save and import is extremely high due to cultural and institutionalised reasons of savings in the mandatory CPF scheme, conservative attitudes towards saving for future emergencies. Hence the Increase in government spending may need to be significantly large before the intended effect can be achieved. This in turn may require the government to tap on its reserves to support the increase in government expenditure. This may not be sustainable as the worldwide recession may be dragged on and the tapping on reserves may become a regular affair rather than an abnormality. Moreover, the effectiveness of such pump-priming methods is questionable since a large proportion of the rise in government expenditure leaks out as withdrawal expenditure. More importantly, Singapore has always been dependent on external factors as the domestic market is very small. It may be difficult to make up the shortfall of AD from the fall in exports triggered by the worldwide recession. Moreover, should the fiscal policy be implemented as a pure demand management tool without any supply side effects, this will only tackle problems associated with the recession and worsen the effects of the cost push inflation.</p>	<p>Point: pitfalls of FP</p> <p>Elaboration: relate to limitations especially in context to Sg</p> <p>Support with contextual example</p>
<p><u>Body: antithesis 2 – Due to shortcomings of FP, need for other appropriate policies to complement</u></p> <p>Exchange rate policies can be used to tackle either the problem of weak worldwide demand or imported inflation. A mild appreciation of the Singapore dollar will help to mitigate against higher imported inflation without significant impact on export competitiveness. This is important as Singapore's exports have very high imported content and a mild appreciation would thus place emphasis on the addressing of imported</p>	<p>Point: suggest how other policies may be more appropriate</p>

<p>inflation first. This can be used together with expansionary fiscal policy that will help tackle cyclical unemployment and prop up AD. However, should there be very high levels of imported inflation, the required appreciation of the Singapore dollar will mean that export competitiveness is compromised.</p> <p>Supply side policies - Supply side policies work by improving the productivity of Singapore and remaining attractive to foreign direct investments as MNCs seek out low cost or 'best sourcing' areas to produce goods. Singapore, with her productive economy and well developed trade links must continue to strengthen these capabilities to be in the best position possible when the global economy recovers. Supply side policies would be powerful to bring about non-inflationary potential economic growth but these measures would take a long time to take effect.</p> <p>(Can also accept argument of use of income & wage policies to address domestic causes of cost push inflation)</p>	Link back to question
<p><u>Conclusion:</u></p> <p>All in all, though there are large leakages in the Singapore context, the use of fiscal policy is still one of the cornerstone of policymakers due to the direct and malleability of how the fiscal measures can be executed. However, to maximize effectiveness and appropriateness, Singapore should utilize fiscal policy that has a supply side effect so that both issues will be effectively tackled.</p>	Justify synthesis in light of above arguments.

Level	Descriptor	Marks
L1	Question requirements have not been understood One-sided unbalanced view. Conceptual errors evident in analysis. Incidental discussion.	1-5m
L2	Question requirements addressed broadly. Balanced view attempted though can be skewed and lacking in some perspectives. Attempt at contextualisation evident though can be hypothetical Content development generally on the right areas OR very well argued one-sided essay [max 6m]	6-8m
L3	Well-balanced view of perspectives. Coherently engaged question with clear two-sided discussion - clear explanation on how fiscal policy tackles the twin problems while considering limitations and suggesting alternative policies as better options. Detailed and relevant content development Well supported with applicable real-world examples	9-11m
E1	Unjustified synthesis with little or no evaluation within the essay	1-2m
E2	Evaluation within the essay evident. Justified stand in relation to above arguments and question requirements	3-4m

Examiners' Comments:

This question was generally well-attempted. Most students were able to list and explain the factors affecting size of multiplier, and discuss the circumstances behind appropriateness of fiscal policies to handle the twin threats of worldwide recession and high inflation. Majority of scripts were complete and showed good time management, though there were still some who clearly struggled with time constraints and did not attempt one part of the question.

Generally, those who were able to engage the question asked and address question requirements clearly in their analysis will be rewarded with good credit, as opposed to scripts which consist of large chunks of memorised explanation of multiplier or policies without addressing the question asked.

Lastly, it should also be noted that with this being a formal written examination, students should refrain from using excessive short forms or acronyms (especially those that are self-concocted) as this breaks up the reading flow and can be difficult for examiners to understand the explanation especially when acronyms are unestablished and self-concocted.

Part A

1. Good scripts were able to identify factors of marginal propensity to withdraw and explained these factors clearly to size of multiplier. For higher L3, there needs to be clear linkages to the circular flow of income as well, in terms of increased withdrawals/leakages that resulted in a smaller multiplier size. Weaker scripts were able to identify relevant factors but failed to recognise the focus of question requirements was on size of multiplier and not solely on the multiplier process.
2. The most common was the confusion between absolute size of withdrawals and marginal propensity to withdraw: While many can define that size of multiplier is the reciprocal of marginal propensity to withdraw, many scripts though continue to explain that "the larger the size of withdrawals, the smaller the multiplier"; "when consumers save more and spend less, there will be higher multiplier" – such statements are not accurate. A larger amount of savings may come about due to higher income but still the same proportion saved up. Size of multiplier needs to be linked to MPW (the proportion of each extra dollar of disposable income not spent by households), not absolute size of the withdrawal.
3. Similarly, some were confused about the size of multiplier being influenced by initial injection size: "if government pumped in a lot of money, then the increase in national income is larger, and so is the size of multiplier." This is a misconception, since the increased injection is the reason for the larger increase in national income and can occur with no change in size of multiplier. Others wrote about how the size of multiplier in Singapore is small due to the small size of the population. This is a serious misconception that showed little understanding of mpw.
4. Finally, many left out the explanation of MPT in their points.

Part B

5. For part b, students need to understand that the twin threats of recession and inflation are occurring at the same time and need to be dealt with together. Many scripts did not understand this and dealt with each problem in turn, which meant that they explained that expansionary fiscal policies should be employed to tackle recession and contractionary fiscal policies used for tackling inflation. There are

several glaring issues with this overly simplistic approach, since the analysis often meant that students would be contradicting themselves.

6. More problematic would be the often unexplained assumption that the cause of inflation in this case would be demand-pull inflation, which would contradict the first problem of a recession. This meant that there is a cap on the credit given to such scripts.
7. For those who have understand the twin threats to be dealt with together, the ideal analysis should explain why a traditional fiscal policy used as a pure demand management way would be clearly insufficient to deal with cost-push or imported inflation, and then proceed to suggest alternatives.
8. Better approaches were able to suggest that fiscal policy are normally implemented with a supply side policy slant as well in Singapore, and thus may be able to tackle the twin problems, though imperfections still exist. Some scripts though completely miss out on addressing how fiscal policy may be inappropriate or inadequate to address the twin threats and jump to discussing alternatives policies after a cursory discussion on fiscal policies. Students need to remember that engaging the question asked is of utmost importance and not just mechanically write out memorised paragraphs.
9. Exchange rate policies were suggested as an alternative. However, students should assess whether recession or inflation were the greater threat and suggest either depreciation or appreciation as the suggested exchange rate policy, then proceed to address the insufficiency to address the other problem.

6 It has been asserted that the rapid pace of globalisation appear to have contributed to rising income inequity and economic vulnerability in developed economies. Thus, protectionism has been adopted by some countries in response to these challenges.

- a) Explain the benefits of globalisation for the developed economies. [10]**
- b) Discuss whether protectionism is the best approach to deal with the challenges posed by globalisation. [15]**

Suggested answer

<p><u>Introduction:</u></p> <p>Globalisation is increasing integration and interdependence of the world's economies arising from increased trade and greater international mobility of factors like capital, labour and enterprise. There is a greater movement of goods and services, capital, information and people as well as the development of technology.</p> <p>As a small open economy with limited natural resources, Singapore has definitely benefited much from globalization.</p>	<p>Define Globalisation</p> <p>Contextualize: Singapore</p> <p>Overview</p>
<p><u>Body: Paragraph 1 – benefits of increased trade flows</u></p> <p>Singapore has benefited in terms of higher consumer welfare and access to export markets due to increased trade flows that comes with a more globalized world. With countries specializing and trading the goods that they have more comparative advantage in, consumers get to enjoy lower prices and increased variety. The theory of comparative advantage states that a country should specialize and trade in the goods it has lower opportunity cost in. Due to specialization, prices will be lowered and output higher and this translates to higher consumer surplus for Singapore. There will also be more variety and consumer choice, all of which means higher consumer welfare. In addition, producers of Singapore also benefit from being able to export to markets beyond Singapore shores. These benefits are not just restricted to inter-industry trade but also intra-industry trade. For example, Creative Technologies benefitted when it was able to import cheaper component parts and then assemble and trade their best-selling Soundblaster series of computer audio entertainment devices. The benefits from higher trade flows have definitely benefitted Singapore vastly especially since she has limited natural resources and would have suffered from a severe lack of products without trade.</p>	<p>Point: higher consumer welfare and access to global markets</p> <p>Elaboration: theory of comparative advantage.</p> <p>Example</p> <p>Link back to question</p>
<p><u>Body: Paragraph 2- benefits of increased capital flows</u></p> <p>Singapore actively sought, and still does, to attract foreign direct investments that come about with increased capital flows due to globalisation because of the expected favourable effect of technology spillover, increased productive capacity and sustainable economic growth. Higher capital flows in the form of higher FDI will help to increase AD in the short run and AS in the long run, leading to actual economic growth and</p>	<p>Point: technology spillover, growth and higher productive capacity from increased FDI</p>

<p>potential economic growth respectively. This not only increases output but also helps to maintain price stability.</p> <p>For example, Singapore benefited immensely from the increase in manufacturing sectors in the 1970s-1980s and the labour force also received technological spillover benefits when they learnt these skills from the foreign companies. Even now, Singapore companies also benefited from outward FDI flows that allowed them to tap on the benefits of lower production costs and easier access to foreign export markets.</p>	<p>Elaboration: Link to AD-AS analysis</p> <p>Support with example</p>
<p><u>Body: Paragraph 3 – benefits from increased labour flows</u></p> <p>Singapore also benefited in terms of higher productive capacity and lower cost of production due to increased labour flows. With the emergence of technology and organisation of production, movement of labour now does not necessary involve the physical movement of workers. For example, firms in Singapore can contract jobs to workers in developing countries without the workers relocating.</p> <p>One key benefit of higher labour flows is that we are able to maintain and even expand our labour force and thus able to increase our AS and productive capacity, which means more goods to enjoy. The movement of labour also allows foreign workers to fill jobs that are unpopular with locals. For example, the local cleaning industries and retail service industries were able to recruit from foreign labour forces to meet some of the shortages.</p>	<p>Point: higher productive capacity and lower cop from increased labour flows</p> <p>Elaboration: labour flows help to fill up jobs that face shortage of labour</p> <p>Link back to question</p>
<p><u>Conclusion:</u></p> <p>All in all, Singapore has indeed benefited greatly in terms of higher consumer welfare, gaining access to foreign markets, higher productive capacity and increased sustainable economic growth due to increased trade, capital and labour flows. However, this does not preclude some problems associated with globalization.</p>	<p>Summarise and reiterate main points. Link to part b question</p>

Level	Descriptor	Marks
L1	Spattering of points, statements and unexplained or incidental explanation. Did not address question requirements, weak explanation of content and little or no contextualisation.	[1-4m]
L2	Address question requirement though explanation may be undeveloped (No AD-AS analysis) Benefits may not have all 3 flows and/or not contextualised to any developed economy	[5-6m]
L3	All the above and to have benefits in terms of the 3 flows, with theory of comparative advantage and AD-AS analysis clearly explained and contextualised to developed economies For higher L3, explanation of bilateral flows of trade, capital and labour is expected.	[7-10m]

b)

<p><u>Introduction:</u></p> <p>As explained earlier, globalization brought about many benefits for Singapore but it has also resulted in increased income inequity and economic vulnerability. Protectionism, which is the act of any action that the</p>	<p>Contextualize to preamble & Singapore</p>
---	--

<p>government may take to influence market forces to provide an advantage to domestic industries over foreign producers, has been proposed as one of the response to cope with these problems. Yet, protectionism may not be one of the best approaches as it creates a whole load of other problems as well.</p>	<p>Define 'protectionism'</p> <p>Overview</p>
<p><u>Body: Thesis - Protectionism has its strengths as a short run approach to deal with the challenges posed by globalization</u></p> <p>Firstly, there is worsening income equity which is aggravated due to rapid rate of changes brought about by globalisation. Wages of lowly skilled labour generally grow slower than highly skilled labour. In addition, greater mobility and interdependency among countries mean problems in one country can be easily transmitted to other countries. For instance, recession in one country can be transmitted to other countries such as the US financial crisis affecting the rest of the world. In addition, the reliance on other countries for trade means we are also more susceptible to imported inflation.</p> <p>Some form of protection in the short run allows workers in sunset industries which are having declining comparative advantage and may employ significant proportion of the labour force to adjust to new conditions. For example, tariffs may be imposed on imports so that imports are now less attractive and ensures that the domestic firm is not priced out of the market. This will help buy time to improve workers morale and prevent social tensions. Moreover, imposing protectionism like tariffs earn more government revenue and less government funds will now be required for giving out some form of social safety net as compared to no protectionism when the workers are unemployed suddenly. This also allows time for workers to switch to another job. Thus, SOL is maintained.</p> <p>Limitations though exist in that it may lead to higher cost of production due to complacency, misallocation of scarce resources since any price intervention is distortionary and fall in world output and trade if protection is long term. Nevertheless, protectionism helps as a measure against the woes of globalisation, albeit in the short run.</p>	<p>Point: Protectionism works to counter challenges of globalization.</p> <p>Elaborate challenges posed – worsening income inequity</p> <p>Explain what protectionism can address</p> <p>Evaluation</p> <p>Link back to question</p>
<p><u>Thesis: Protectionism has its strengths as an insulator to external vulnerability posed by globalization</u></p> <p>One of the key criticisms of globalisation is that it results in economic vulnerability in terms of exposure to global crisis and more frequent economic recessions. For example, due to globalisation, countries are exposed to the Global Financial Crisis which initiated as a domestic subprime crisis in USA. As such, during a worldwide recession, some countries may protect to maintain home employment and restrict imports in order to ensure that income is spent in domestic country. This helps in providing certain stability in income and employment. However, there are also limitations in that this may encourage inefficiency in protected</p>	<p>Point: Protectionism works to counter challenges of globalization.</p> <p>Elaborate challenges posed – economic vulnerability</p> <p>Explain role of protectionism to reduce vulnerability.</p>

industries and Singapore may also produce goods that she has no comparative advantage in. In addition, this result in reduced competitiveness of our goods in future	Evaluate limitations
<p><u>Body: Antithesis 1 – problems of protectionism</u></p> <p>Protectionism may result in risk of retaliation from trade partners, resulting in deterioration of trade relations and falling net exports and growth in the long run. This is because after the first round of protectionism measures, trading partners may impose their own import restrictions thus causing the initiating country's exports, output and employment to suffer subsequently. Even without retaliatory reactions, there may still be a fall in export revenue which is also caused by the beggar-thy-neighbour effect. This happens when the exports, output and income of trading partners are reduced, resulting in a depressed economy and falling demand for the goods of the country which initiated protectionism. This then curbs the exports, output and employment of the initiating country.</p>	<p>Point: Problems of protectionism</p> <p>Elaboration: retaliation and beggar-thy-neighbour effect</p>
<p><u>Body: Antithesis 2 – other approaches may be better</u></p> <p>Government may want to protect the industry but this is a SR policy which does not solve the root of the problem of rising income inequity which may be rooted in structural unemployment. Structural change in country needed and relevant skills required</p> <p>In this case, use of supply-side policy that involves retraining the workers so as to allow better match of skills and jobs available while speeding up restructuring of the economy. In the long term, productivity increases as workers are equipped with appropriate and higher level of skills and unemployment levels fall. For example, Spore needs to move up value chain instead of protecting our domestic industries i.e. nature of our exports has to change as we compete with emerging economies such as China.</p> <p>Another approach to address increase vulnerability is via expansionary fiscal policy: Building of IRs which increases G and resilience package in the form of increase government expenditure. This will help to pump prime the economy in times of slowdowns. Lower corporate taxes may be considered in the longer run to reduce size of marginal propensity to tax and hence increase the size of multiplier. Such policies will help to regulate the aim of actual growth and address cyclical unemployment.</p> <p>These approaches are preferred to protectionism as they do not sour trade relations and invite retaliation nor have any detrimental impact on trade partners. In addition, these policies are more sustainable in terms of funding and have other wider macroeconomic benefits as compared to specific protectionism measures on selected industries.</p> <p>That said, however, these alternative policies are also not perfect. Limitations include unguaranteed effectiveness, due to the uncertainty of retraining schemes, and speed of implementation since time is needed for expansionary fiscal measures to take full effect.</p>	<p>Point: Supply side policies to reduce problems of globalisation</p> <p>Elaboration: why alternative approaches work</p> <p>Explain why these approaches are better</p> <p>Evaluate alternative policies</p>
<u>Conclusion: Justification & Synthesis</u>	

In conclusion, protectionism should only be used as an interim measures to counter the problems of globalization since they result in detrimental effects on trade partners that eventually hurt our own economy as well. There should be use of adjustment policies such as supply side training programs and expansionary fiscal measures to deal with income inequity and economic vulnerability as they tackle the root problems more effectively.	Justified stand in relation to above arguments and question requirements
--	--

Level	Descriptors	Marks
L1	Question requirements have not been understood One-sided unbalanced view. Conceptual errors evident in analysis. Incidental discussion.	1-5m
L2	Question requirements addressed broadly. Balanced view attempted though can be skewed and lacking in some perspectives. Attempt at contextualisation evident though can be hypothetical Content development generally on the right areas OR very well argued one-sided essay [max 6m]	6-8m
L3	Well-balanced view of perspectives. Coherently engaged question with clear two-sided discussion - clear explanation on how protectionism tackles problems of inequity and vulnerability while considering limitations and alternative policies as better options. Detailed and relevant content development Well supported with applicable real-world examples	9-11m

E1	Unjustified synthesis with little or no evaluation within the essay	1-2m
E2	Evaluation within the essay evident. Justified stand in relation to above arguments and question requirements	3-4m

Examiners' Comments:

Part A

Students seemed to have a fairly good understanding about what globalisation means and thus were able to meet the requirements in terms of explaining their answers in the context of trade flows, capital flows and labour flows.

1. The answers, however, tend to be stuck at the mid-range with students not elaborating the benefits from the three flows well in the context of developed economies. The elaboration remained to be rather generic and not supported well by specific characteristics and hence, benefits that developed countries will enjoy. The elaboration of the benefits also seemed to not use economic framework very well. For example, the benefits from trade were seldom linked to the theory of comparative advantage. Similarly, the AD-AS framework was not used very well to explain the benefits from trade.

2. The *very good answers* started with **setting the tone** of the essay well. They seemed to set the context of the developed countries, often **using one or two specific countries as examples**, and explaining the characteristics of these countries. Henceforth, the benefits from trade were **well linked to the comparative advantage that developed countries have**. The benefits from the three flows were also explained **using the AD-AS framework** and **'benefits'** explained in terms of **various macro and micro economic aims**.
3. The very weak answers were the ones that did not understand the requirement of answering a 'globalisation' question and thus, the benefits they explained were limited to benefits from trade only. They, often, also were confused between trade and capital flow, rendering to incoherent development of the content.
4. For scripts that were explained three flows (trade, capital and labour), they were able to attain L3 marks but many did not achieve full credit because they did not realise the need to **analyse the benefits from both inward and outward flows** for the three components (trade, capital and labour).

Part B

Majority of the answers to this question were stuck at mid or low levels of marks. The main problem that the students faced for this question was with regard to understanding the requirements- the need to link to the preamble, to show how protectionism helps to solve the problems mentioned in the preamble, how protectionism does not help in solving the problems (instead may aggravate the problems) and the analysis of alternative policies in solving the problems. Most students explained memorised points on how protectionism works. These points were not linked to the problems in the extract.

1. Some students attempted to make the connections between 'sunrise' and 'sunset' industries to the problems of income inequity and economic vulnerability but the answers were largely weak in elaboration and rigour of analysis. They need to explain the terms 'sunrise' and 'sunset' industries and explain the linkage to income inequity and economic vulnerability in terms of loss of employment and greater risk of economic fluctuations, for example. Analysis of alternative policies was largely missing in most answers.
2. The few very good answers made use of specific countries as examples to show how globalisation has led to income inequity and economic vulnerability in those countries- this setting of context generally gave them an advantage to explain their points in the answer in a better way.
3. Thereafter, the students showed how protectionism may help/has helped these countries to lower the extent of the two problems. The answers also analysed the ways in which protectionism may not be useful in correcting the problems and may instead lead to bigger problems.
4. Analysis of alternative policies in the context of the country chosen was done well- choice of exchange rate policy to lower vulnerability from imported inflation for small open economies- rendered them good levels of marks.