Answer Key for PU3 PE2 CSQ1

a) (i)	Compare the changes in income inequality in Europe and the US from 1990 to 2010.	[2]
Marking Scheme	• Income inequality rose for both Europe and USA from 1990 to 2010. [1] • Income inequality rose faster in USA than in Europe. [1]	
Markers' Comments	Candidates were largely able to provide the similarity but not the differences. Many candidates segmented the data by years and provided description in the various segments. A small number of candidates still spent too much time writing overly long answers to a question that required only a succinct comparison of the general trend and refinement.	
(ii)	With reference to the data, account for the income disparity between the rich and the poor in the US.	[4]
Marking Scheme	• A large proportion of household incomes are accounted for by the wages and salaries earned. • Income disparity could thus be explained in terms of demand and supply for labour. • The rich command high wages due to their possession of relatively highly demanded skills (e.g. people with specialised digital technology skills, and the super-managers cited by Piketty in Extract 1) and the relatively low supply of such skills in the labour markets. For example, there are about 20-25 per cent of such people in California working in the high-tech sector and they are the most wealthy there. • On the other hand, the poor possess skills that are relatively much less demanded and relatively large in supply in the labour market. Their skills could only command jobs that pay them less than $16 per hour, which is less than what is needed to support a family. • The above two different markets of labour demand supply will thus have different equilibrium wages, with the highly skilled being much highly paid than the poor with their less demanded skills. • Diagrams and brief explanation pf the wage disparity in the two types of skills market. [4] Alternative ways to score • There is thus **labour immobility** where the less skilled workers cannot easily move to fill the jobs of those employed in digital technologies. [2] • The **lack of homogeneity of labour** can partly explain the differences in wages of people. Those **"supermanagers"** (Extract 1) with the talents, **"high skills"**, and training in higher education earn much more than those with less talents, skills, and education find their earnings lagging behind. [2] • The money that the rich make from their **ownership of real assets** greatly	

	exceed the wages earned from the supply of labour of most other people whose incomes are derived mainly from this only source. [2] **[Max of 4]**	
Markers' Comments	Many candidates failed to explain the disparity using economic analysis of demand and supply in the two markets of highly-skilled and low-skilled labour. They were only explaining reasons for the high wage or reasons for the low wage without providing a comparison and not fulfilling the expected requirements of candidates at an economics examination. Candidates must remember to use economics frameworks such as demand and supply analysis in their answers.	
b)	Using demand and supply analysis, explain reasons for a fall in the price of online goods and services.	[4]
Marking Scheme	• The price of online goods and services is determined by demand and supply forces. • The fall in the price of online goods and services might be due to a large increase in supply and/or fall in demand for such good s and services. • In Extract 2, Amazon is credited for "relentlessly driving down prices of (online) goods and services …" • This is because it "ploughs its profits into price cuts and innovation …" • The profits are used to engage in innovation in the online goods and services industry will have the effect of greatly reducing the costs of production in the industry. • This in turn increases the supply of goods and services. • There are also many new start-ups in the industry that increase the supply of online goods and services (Extract 5). • Meanwhile demand for online goods and services have also increased, due to increased globalisation and use of information technology in online trading of goods and services, as well as increases in income. • However, this increase in demand is not as substantial, relative to the increase in the supply of online goods and services. • The rightward shift (increase) in demand is less than the rightward shift (increase) in supply due to the fall in costs of production. • Together they bring about a subsequent fall in the price of online goods and services. [3] • Diagram with explanation to show the above analysis. [1] **[Max of 4 marks]**	
Markers' Comments	Some candidates were able to explain both demand and supply reasons. However, some failed to illustrate the extent of shift of demand and supply. Some candidates only explained either demand or supply analysis, making the analysis incomplete and insufficient to explain why there was a fall in price. Those candidates did not go on to explain the increase in supply of online goods and services was greater than the increase in the demand. Under pressure of the examinations, some candidates made serious errors in naming the demand and	

<table>
<tr><td></td><td>supply curves, confusing one for the other, thus making the explanation rather strange. Candidates need to stay calm, and remember to explain both demand and supply factors and the extent of their shifts.</td><td></td></tr>
<tr><td>c)</td><td>With reference to the concept of price elasticity of demand and extract 4, explain the expected impact of a price fall on Amazon’s total revenue from the sale of electronic readers.</td><td>[2]</td></tr>
<tr><td>Marking Scheme</td><td>Demand for Amazon’s electronics is price elastic.
There are many close substitutes for e-book readers such as Hudl tablet produced by Tesco and other e-book readers produced by John Lewis and Dixon. [1]
When there is a fall in price, it leads to a more than proportionate increase in quantity demanded. Hence total revenue would increase. [1]</td><td></td></tr>
<tr><td>Markers’ Comments</td><td>Some candidates failed to explain the reason for the demand for Amazon’s electronics being price elastic. Those who provided a good explanation sometimes failed to answer the question and did not explain the change in the total revenue.</td><td></td></tr>
<tr><td>d)</td><td>To what extent is Amazon a monopoly in the online retail industry.</td><td>[8]</td></tr>
<tr><td>Marking Scheme</td><td>Question Analysis: Two-sided discussion is required.
<table>
<tr><th>Yes, Amazon is a monopoly in the online retail industry.</th><th>No, Amazon is not a monopoly in the online retail industry.</th></tr>
<tr><td>High barriers to entry: Big firms have large profit accumulation and easier financing and are hence can buy up small rivals to become the only firm in the market OR adopt predatory pricing by charging very low prices which are insufficient to cover their cost of production. This is done to increase their market share and deter rivals from entering the market [Extract 2:” we instead be praising the company and its ability to compete other firms out of the market” and “relentlessly drives down prices for goods and services”].
Large market share: Amazon</td><td>Number of sellers: Depending on the type of product sold, there are a few other large online retailers who are rivals, such as John Lewis and Dixons in the e-reader market and Asos in the apparel market [extract3 & 4].
Pricing and Output Decision: Amazon charges low prices unlike a typical monopoly that would restrict output and increase price to increase total revenue [refer to extract 2]. This suggests that Amazon may face competition in the market due to the presence of other sellers that are selling close substitutes.
Price competition: Dixons has promised to match the price</td></tr>
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has close to two third of the market share for e-books.	of Amazon in the electronics retailing market and Amazon can no longer undercut rivals [extract 4]. This shows that there is price matching in the online electronics market. When one firm reduces price, the other firms would follow suit. PED is hence very inelastic below the original price level and very elastic above the original price level. Such behaviour gives rise to the kinked demand curve, which is observed in a market with non-collusive oligopoly. • Barriers to entry: Barriers to entry in the digital realm is low as it is easier to launch a new online product or service. There is no physical infrastructure required [extract 5].

Conclusion: Amazon is not likely to be a monopoly in the online retail industry especially in the long run. It is more likely to be an oligopoly. Barriers to entry is the only key factor which determines whether a firm is capable of maintaining its market power over time. With the lowering of barriers to entry, it is likely many new firms will entry the market. Even if Amazon maintains a large market share and remains as a monopoly, there is a constant threat of competition [theory of contestable market] and they would be forced to keep prices low. In other words, they cannot behave like a monopoly even if they fit the criteria to be considered as a monopoly.

Moreover, Amazon is operating at low profit level; they may not be able to sustain large profit accumulation over time to buy up small rivals in the future.

L3	Well-developed two-sided explanation on whether Amazon is a monopoly or not, with good reference to evidence from the case.	5-6
L2	Two-sided explanation on whether Amazon is a monopoly or not, making good reference to evidence from the case. OR	3-4

	<table><tr><td></td><td>Well-developed one-sided explanation on whether Amazon is a monopoly or not, making good reference to evidence from the case. Max 3 for answers without reference to case materials.</td><td></td></tr><tr><td>L1</td><td>Explains the features of monopoly or oligopoly. Answer could be scanty, theoretical, superficial or descriptive.</td><td>1-2</td></tr><tr><td>E2</td><td>Stand with justification.</td><td>2</td></tr><tr><td>E1</td><td>Stand with weak justification.</td><td>1</td></tr></table>	
Markers' Comments	Most candidates passed this question. However, many did not do well (i.e., score L3). They were able to write at least 1 thesis and anti- thesis point but the elaboration tended to be sketchy. Additionally, the conclusive statement and argument was not well done.	
e)	With reference to the extracts, discuss the impact on producers and consumers with increasing competition in the online retail industry.	[10]
Marking Scheme	Assumption: All firms are profit maximising while all consumers wants to maximise their consumer surplus. With increasing competition, it means that the online retail industry have less market power to influence price and quantity. The firms should now behaviour more like monopolistic competition rather than oligopoly. **Effect of increasing competition:** With increasing competition, there should be more efficiency in the economy which results lower prices of goods and services. Assuming online retailers were behaving as a collusive oligopoly, with increased competition and the changing of the market structure towards monopolistic competition, there will be a fall in prices. (slope of AR & MR becomes gentler; price falls and quantity increases) **Negative impact on producers:** • Profits level is likely to be eroded since more competition. Producers will earn less supernormal profits. (Use diagram to illustrate) **Evaluation:** In the long run, firms will earn only normal profits since they behave as monopolistic competition now. (Extract 5) The lack of the profits may reduce the ability for firms to engage in R&D. In the long run, there may be little/no improvement in the quality of the goods due to lack of R&D. • Reduction in firm size will lower the scale of production and thus, reduce the ability for firms to enjoy IEOS. Firms will enjoy less cost savings and experience an increase in cost of production, further eroding their profits. **Positive impact on consumers:** • Price and quantity: With increasing competition, there will be a reduction in	

price of the online goods and services. A lower price will benefit consumers as now they are able to consumer more goods and services with the same given amount of income. There would also be an increase in consumer surplus and increase in the material standard of living of the consumers.

- Better quality of final products with the same amount of current resources since there is more competition. Producers would want to improve the quality of their goods and services so as to gain more consumers since it is harder to participate in price competition now.

  Evaluation: In the long run, there will be a greater variety of goods and services to choose from. (Extract 5) shows more variety of different online retailers → more substitutes of the same product available for consumers to choose from.) Improvement of non- material standard of living of consumers.
- More convenience for the consumers as producers compete to provide the best possible services (Extract 4 shows faster delivery of goods and services)

Negative impact on consumers:

- Lack of IEOS results in higher cost and this increase in cost can be passed on to consumers, therefore increase in price of goods and services. A rise in the price of goods and services can reduce consumer surplus and make consumers worse off.

Conclusion

The role of the government in the regulation of the online retail industry is important. The impact on producers and consumers will depend on the intervention of the government. Government should intervene when the consumer or the producer are experiencing too much negative impact.

Level	Mark	Descriptors
L3	7 – 8	• For answers that show a good understanding of the effects of an increased in competition on both producers and consumers • Answers provide a good scope and depth with good understanding of the varying effects
L2	4 – 6	• For answers that show the effects of an increased in competition on either consumers or producers • For answers that shows unelaborated effects of increased competition on producers and consumers •
L1	1 – 3	• For an answer that is mostly irrelevant • Contains only a few valid points made incidentally in an irrelevant context • For answers that shows little knowledge on the effects of increased in competition

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<table>
<tr><th>Level</th><th>Mark</th><th>Descriptors</th></tr>
<tr><td>E1</td><td>1 – 2</td><td>• For a explained judgment on the effects of more competition on producers and consumers</td></tr>
</table>
</td><td></td></tr>
<tr><td>Markers' Comments</td><td>Many candidates were able to state that firms aim to maximum profits and consumers aim to maximise consumer surplus/welfare/utility with their given income and prices of goods and services. Many also explained that with increasing competition, firms in the online retail industry would behave more like monopolistic competition instead of oligopoly. Some candidates showed a firm grasp of the impact this change in behaviour of firms on their efficiency and profits, as well as on consumers. Fewer candidates could arrive at a good evaluative conclusion which, among other considerations, included the important role of government in the regulation of the online retail industry.</td><td></td></tr>
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Case Study 2

Suggested Answer Plan

(a) (i) Describe the trend in the merchandise exports of the selected countries inferred from Table 1. [2]

- *Exports were increasing at a decreasing rate after 2009 global recession. [1]*
- *The slow down further deteriorated/worsened with a fall in exports in 2015. [1]*

Marking guide:
Students who merely read off from Table 1 and described the <u>% change</u> in exports – max 1 mark

<u>Markers' Comments:</u>

- Many used the 'compare' technique to highlight a similarity and difference (across countries i.e. 'over space'), which **does not show the ability to describe a trend (over time)**
- Note such **wrong expression** 'exports went from surplus to deficit'. The term 'surplus'/'deficit' is used for those concepts involving 'difference'. So we can say trade (X-M) or budget (T-G) surplus/deficit, but exports increase/decrease!
- **Errors in interpreting percentages**: Many misinterpreted the fall in percentages (%) in Table 1 as fall in exports revenue ($)! Quite a number simply took the highest % to mean highest value in X! Many did not know the meaning and implication of changes in percentages (correction: <u>fall in %</u> means $X <u>rising slowly</u>, only <u>negative %</u> means $X is <u>falling!</u> The highest % means $X is rising the fastest in that year. The fastest increase in $X is not the year in which $X is the highest)

(a) (ii) Explain how the changes in merchandise exports affect the selected countries' balance of trade (BOT) and exchange rate in 2015. [2]

In 2015:

- *↓X, ceteris paribus, BOT worsens (note: depends on the balance at the start when countries could have surplus for SG/Germany/China or deficit for US). [1]*
- *↓X, DDcurrency ↓ ceteris paribus, ER ↓ [1]*

<u>Markers' Comments:</u>

- **Inaccurate description for BOT**: BOT worsens ≠ BOT deficit. The country's BOT may start off with a large surplus, so fall in X does not immediately means that BOT is in deficit! (It could be a large surplus becoming a smaller surplus)
- **Gaps in explaining** ↓ER: Many did not explain why ER ↓ (using $DD_{currency}$) or explain wrongly (using $SS_{currency}$). Some answers were out of point and explained the causes of the fall in X or the effects of the fall in ER on X & AD.

(b) (i) With reference to Figure 2, compare the economic growth rates of the developing countries with the advanced countries from 2000 to 2015. [2]

- *Similarity – all follow similar trends (when advanced countries enjoyed growth, so would the developing countries) [1]*
- *Difference – developing countries' growth rates are constantly higher than advanced countries' growth rates. [1]*

Markers' Comments:

- Again here, students used the wrong 'trend' technique (identify trend followed by a refinement), instead of the 'comparison' technique (identify a similarity and a difference). E.g. many said that all the countries (both developing and advanced nations) experienced a slight fall in economic growth rates and in 2009, the growth rates for all these countries decreased significantly (due to the global recession in 2009).

(b) (ii) Explain 2 possible reasons for the observations made in b(i). [4]

- *Similarity – all countries are integrated with (trade &) globalisation, so we tend to see similar changes in growth rates i.e. when advanced countries enjoyed +ve growth, they tend to import more from developing countries (ie X for developing countries rises) that spur growth in the latter. Eg, if country A enjoys economic growth, she might buy more imports from country B. This means country B's export revenue would increase, ceteris paribus; stimulating country B's AD to rise, and hence achieving economic growth. [growth in county A, $NY_A\uparrow\uparrow$, $M_A\uparrow = X_B\uparrow$, $AD_B\uparrow$, $NY_B\uparrow\uparrow$ ie growth in county B too]*
- *Difference – advanced countries are operating near full employment, so growth rates tend to be lower than developing countries which are, in general, below full employment. Hence developing countries are capable of achieving higher growth rates.*

Marking guide:

- each reason carries 2m

Markers' Comments:

- **Lack sound reasoning**: Many relied on the extracts to look for hints and argued that the fall in I (investors' confidence) or the geopolitical risks in Europe caused the fall in AD and hence NY fell by a multiple (through the multiplier process). This is a weak argument as the reverse multiplier process cannot possibly work for 15 years! Moreover only relying on extracts is a flawed approach as the extracts do not account for the whole period of 15 years in Figure 2. Neither do the extracts cover all the advanced and developing countries' economic situations.
- Others used their own knowledge about firms from advanced countries relocating their production plants to developing countries, so the developing

countries' growth was higher. Again, this argument may not be applicable for all developing countries. Such response was partially logical, hence earning some (but not the full) credit.

(c) (i) Explain what is meant by the term 'stagnation'. [2]

- *(According to Extract 7 – last line of first paragraph) Stagnation refers to zero or low positive growth rates (as opposed to negative growth or recession). [1]*
- *In other words, AD is rising very slowly, slower than the expected targeted growth rates set by the authorities (governments, central banks, IMF) [1]*

Markers' Comments:

- **Incomplete explanation**: many explained incompletely with only 'little or no growth'. More importantly, students need to clarify that this 'little' growth is below the expected target (growth rate) set by the govt.
- **Misinterpretation:** A handful totally misinterpreted stagnation to be synonymous with stagflation, unemployment and/or inflation.
- **Vague description:** others merely describe stagnation as a period of pessimism and/or a situation when there is 'no progress in many aspects of economic activities'. Such unclear responses that lacked specific details would not gain full credit.

(c) (ii) Discuss whether the investors' pessimism is more likely a cause or consequence of stagnation. [8]

- *Thesis: investors' pessimism is a cause of stagnation*
  According to Extract 7,
  - *Investors' pessimistic outlook for the future results in their (investors) reluctance to invest, making investment (I in AD component) weak. As AD is not rising (fast) adequately, the slow growth could not achieve the targeted expected growth that the govt set earlier.*
  - *(With pessimism) Investors' are not providing adequate loanable funds to (pte sector) firms to encourage (pte) investment to increase, so AD is not rising satisfactorily. (Elaborate that as supply of loanable funds falls, i/r ↑ ceteris paribus, then cost of borrowing could exceed the investment return to make investment less profitable, so investment is low)*
- *Anti-thesis: investors' pessimism may be a consequence of stagnation*
  - *When growth rate turns out to be lower than expected/targeted growth rate, many economic agents (be it households, firms, govt) would perceive such below-expected economic performance as a sign of stagnation and/or even heading towards a recession (if the poor economic performance persists).*
  - *This (stagnation) could make investors develop a pessimistic outlook for the future.*
- *Conclusion: a 'vicious' cycle where the above effects seem to reinforce each other.*

The question is what cause(s) investors' confidence to be shaken (or pessimism) – the stagnation and/or other events (eg geopolitical risks mentioned in Extract 8 such as regional political, military or trade disputes) Data does not provide enough evidence to conclude on the causality.

L3 [5 – 6]	A balanced, detailed and in-depth discussion, providing elaboration with relevant economic concepts on the arguments put forth.
L2 [3 – 4]	A detailed but lop-sided discussion or a balance discussion with missing details.
L1 [1 – 2]	A response that shows candidate has not fully understood the question's requirement but making attempts to propose irrelevant arguments that may coincidentally satisfy some aspects of the question's requirement
E [1 – 2]	[2] – A reasoned judgement [1] – an unexplained judgement

Markers' Comments:

- **Lack (insufficient) economic analysis:** Many students failed to include AD-AS analysis to make their valid arguments stronger
- **Lost focus:** Some students argued that geopolitics was the cause of pessimism and forgot to relate the argument back to the question requirement (is pessimism the cause or effect of stagnation). The consideration of geopolitics may still be relevant as part of the explanation of how pessimism could cause stagnation (geopolitics could result in pessimism which in turn, results in stagnation) but students wrongly tried to force the illogical argument of pessimism being a consequence of stagnation due to geopolitical factors.
- **Judgement is unexplained:** many just said that pessimism was more likely a cause of stagnation, but did not clarify why so. Hence such judgement scored less (1 mark) compared to those who said that it (pessimism) could be both a cause and effect of stagnation.

(d) Assess the economic policies a government could adopt to address stagnation. [10]

- *Thesis: economic policies to address stagnation*
  - *Extract 6 → IMF proposed expansionary MP & FP, especially expansionary FP with SS-side effect (public infrastructure investment). IMF also added that for developing economies, govt can also consider SS-side policy (structural reforms)*
    - *Expansionary MP, ↓i/r, cost of borrowing ↓, ceteris paribus, C & I ↑, AD ↑, NY ↑↑ (via k) such that the growth can achieve or exceed expected growth rate*
    - *Expansionary FP with SS-side effect, govt spending (G on infrastructure) ↑, AD ↑ (SR) + AS ↑ (LR), achieve both actual (SR) & potential (LR) growth ie sustainable growth can be pursued*
    - *For developing economies, SS-side policy through structural reforms (eg tax reforms, reduce unemployment benefits to improve work incentive*

or reduce bureaucracy to improve efficiency) can shift LRAS to the right to achieve potential growth.

- *The use of expansionary FP is reiterated again in Extract 7 (expansionary FP with SS-side effect through infrastructure investment).*

- *Anti-thesis: limitations of policies and counter-arugment*
  - *Limitations of policies*
    - *With pessimism (and liquidity trap), expansionary MP may not effectively stimulate AD to rise significantly*
    - *the usual theoretical limitation of small k may be considered in assessing the effectiveness of the fiscal & monetary policies, but may not be significant for the case of EU & US as they generally have relatively smaller withdrawals.*
    - *SS-side effects (or SS-side policy) may have long time lag, so govts may face pressure to implement short-term measures to ease/cushion the negative effects from stagnation.*
    - *In Extract 6, IMF added that for emerging economies, those countries which rely heavily on exports as their main source of growth would face 'external vulnerabilities' ie external shocks which are beyond the control of authorities (govt & central banks), hence the effectiveness of the recommended macro policies may be limited.*
    - *(Extract 7) The concern by some govts on austerity may make them reluctant to ↑ G (for fear of running persistent budget deficits which may develop into debt problem), even though the govt expenditure on infrastructure have +ve LR(AS) effect. With G restricted (and even possibly ↑ T in the austerity package), AD cannot rise significantly to address the stagnation problem.*
    - *From Extract 8, the 'insufficient policy stimulus' could have made the actual growth rates fall below the expected target. This reinforces the policy limitations mentioned above.*
  - *Counter-argument*
    - *(Extracts 6 & 8) if the low investment is mainly due to 'geopolitical risks', the economic policies (MP, FP, SS-side policy) may not address this root cause and hence be ineffective in addressing the stagnation.*
- *Conclusion:*
  - *Depends on the root cause of the stagnation (which can affect the effectiveness of the policy prescribed)*
  - *But many a times, causality may not be clearly established as there are many events arising concurrently. Hence, considering the possible govt failure to estimate accurately and implementing the policies in a timely manner, yet there is an urgent need to respond promptly, a prudent/conservative govt tends to implement a combination of polices. Hence we see most govts in the west adopting expansionary MP (via QE) and contractionary FP (austerity), ie taking a short-term approach given the urgency. Yet in the above extracts, the more appropriate option seems to be expansionary FP with SS-side effect to address the stagnation (ie taking a long-term stand).*

L3 [7 – 8]	A balance, detailed and in-depth discussion, providing elaboration with relevant economic concepts on the arguments put forth.
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E [1 – 2]	[2] – A reasoned judgement [1] – an unexplained judgement

Markers' Comments:

- **Not relating to data/case material**: many gave theoretical answer of the 3 policies (fiscal, monetary, SS-side), without linking to case material -
    - Fiscal policy: majority talked about the increase in G & decrease in T, and carried on and on, regurgitating from the notes. Extract 6 talks about the increase in G on infrastructure, which many did not seem to notice.
    - Monetary policy: here, extracts did not specify the details (whether monetary policy is centered on interest rate or exchange rate). But Extracts 7 and 8 focus mainly on UK and EU, so the better choice would be to discuss on interest rate, rather than exchange rate.
    - SS-side policy: again, students regurgitated enhancing education and training to improve productivity to shift out AS curve when Extract 6 clearly mentions structural reforms which many could not explain clearly. This may show some gaps in content knowledge which students need to be careful of.

Essay Question 1

In 2011, the Brazilian government set price caps for gasoline. Most cars in Brazil can run on either gasoline or ethanol. Economic growth in Brazil has averaged just 1.3% over the past four years and price cap can help citizens keep cost of living low, especially in terms of public transport expenses.

Discuss the impact of the abovementioned event on on the market of gasoline and other related market in Brazil. [25]

Markers' Comments

A large number of candidates were aware that they needed to bring in the concepts of elasticities, demand and supply analysis and apply their analysis to at least 3 different markets to ensure that there is sufficient scope for a 25 marks question. They were aware that a price cap would bring down the price of gasoline. Many candidates also made good reference to the preamble by discussing the gasoline market, car market, public transport service market or the ethanol market, which were mentioned in the preamble.

However, most candidates failed to achieve the high L2 marks due to the lack of depth and accuracy in their analysis. Few candidates were able to correctly apply the price ceiling to analyse the impact of the price cap on the gasoline market. Out of those who attempted to do so, few students were able to provide a correct price ceiling diagram to aid their explanation. Many candidates simply claimed that a price cap would reduce the price of gasoline and hence increase demand and reduce supply of gasoline in the market. This is a grave mistake. A price change in the good itself should never lead to a movement of the demand or supply curve. A change in the price would only lead to a change in quantity demanded/supplied, which is reflected as a movement along the demand/supply curve, NOT a shift of the demand/supply curve.

Some students claimed that low economic growth would lead to a fall in income without clear explanation. Low economic growth could suggest that the national income is still increasing just that the rate of increase in slow. It is still possible for income level to rise. Good answers were able to explain that the low economic growth led to an expectation that income may fall in the future as the risk of a recession was heightened, hence the demand for goods (like car) is likely to fall.

Even though students were aware that they needed to bring in elasticity concepts in their analysis, most students limited their analysis to PED and PES, without bringing in XED and YED concepts explicitly.

Most answers limited their analysis to markets where there was either a shift in demand or supply, but not both. This would limit the depth of their analysis. For top L3 scores, students were expected to talk about simultaneous shifts in demand and supply for at least one market. To be able to do so, they would need to be selective in their choice of market while doing their essay plan, e.g. they should have selected the public transport service market.

Weak answers were not able to differentiate a complement from an input for production. They incorrectly claimed that gasoline is an input for cars to drivers and gasoline is a complement for running public transport services. The correct form should be: gasoline and cars are complements to drivers and gasoline is an input for running public transport services.

<u>Answer Outline</u>

Question analysis

Discuss: answer requires evaluation

Impact: Focusses on the impact on equilibrium price and quantity

Abovementioned event:

Gasoline and ethanol are substitutes for drivers since most cars can run on either fuel.

Price cap on gasoline means that is a price ceiling for gasoline which sets price below the equilibrium price to keep prices low for consumers.

Cars and gasoline are complements

Low economic growth could suggest that the demand for luxury good such as cars could be rising very slowly.

Market for gasoline: Price cap would keep the selling price of gasoline below equilibrium. Market does not clear and there is a risk of black market formation. Demand may increase due to low but positive economic growth.

Related markets: Cars, ethanol, transport services

Context: Brazil

Introduction

Explain the keywords in the question as explained above under *Question Analysis*

Body

<u>Market for Gasoline</u>

Point:

- Price ceiling affects the market outcome for the gasoline market.

Explanation/example:

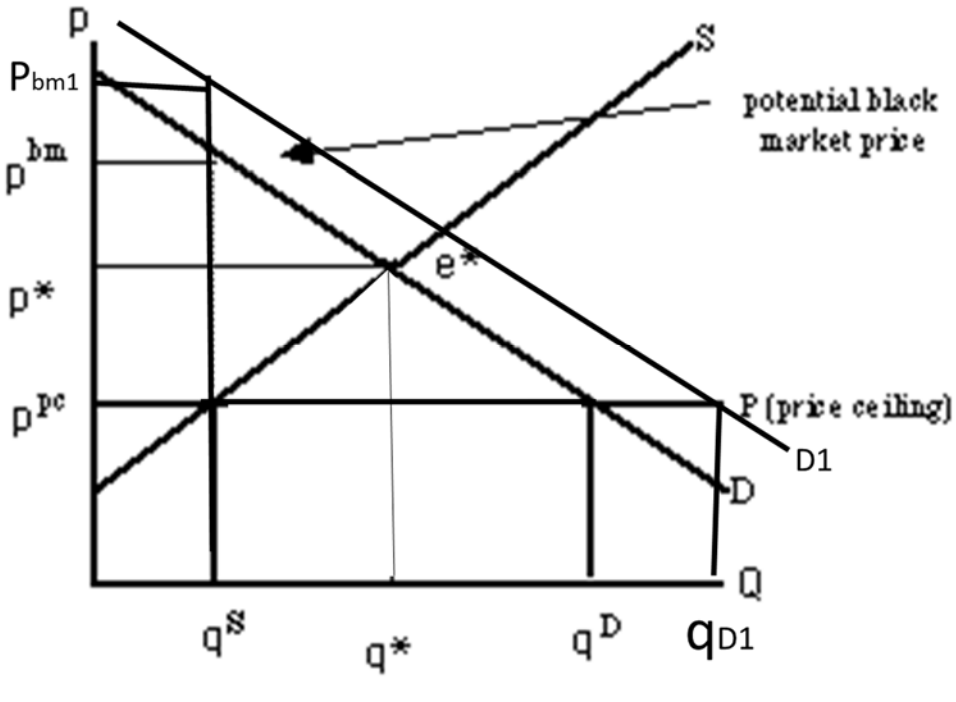
- Price ceiling is a government imposed price control to keep prices below the equilibrium price of P*.
- The intention is to keep prices low at P(pc) and keep gasoline a necessity affordable to the low income households.
- Producers are worse off since they have to charge a lower price
- With the imposition of the price ceiling, the market does not clear since quantity demand would be more than quantity supplied.
- The quantity consumed will be equal to the quantity supplied.

- There is a shortage of Qd-Qs in the market.

Link: Price ceiling causes the price to fall and the quantity consumed to fall in the gasoline market.

Evaluation:

- Black market may arises as producers are aware that consumers are willing to pay up till P(bm) when the quantity is Qs.
- If there is a black market due to poor government policing, the price P(bm) will be higher than the equilibrium price of P*.
- If the D is inelastic, the P(bm) will be much higher than if the D is elastic. In this case, the D for gasoline is likely to be elastic for car drivers since gasoline and ethanol are close substitutes.
- If the S is elastic, when price falls due to the price ceiling, it would lead to a more than proportionate fall in quantity supplied and hence the shortage of gasoline will be greater. S is likely to be elastic for gasoline since gasoline is durable and can be stored.



Point:

- Slow economic growth affects the market outcome for the gasoline market.

Explanation/example:

- Gasoline is a necessity needed to run vehicles needed for transportation.
- The income elasticity of demand for gasoline tends to be low and positive.
- When the income increases slightly, the demand for gasoline would rise less than proportionate.
- Overall the demand for gasoline is likely to increase slightly to D1.
- The shortage increases to Qd1-Qs.

- If black market forms, the price in the black market would be even higher at Pbm1.
- Quantity consumed does not change.

Link: Slow economic growth increased the shortage in the market for the gasoline.

Evaluation:

- If the government provides subsidy to gasoline sellers to encourage them to increase supply, they may be able to clear the market while maintaining a low price.

<u>Market for Cars</u>

Point: Price cap for gasoline and slow economic growth would affect the market for cars/

Explanation/Example:

- Cars and gasoline are complements. Gasoline is needed to run a car.
- The XED value is negative. When the price of gasoline falls due to the price cap, the demand for cars will increase.
- Cars are considered a necessity for transportation in a country like Brazil where public transport network may not be extensive in rural areas.
- YED value is positive but small.
- Overall the increase in demand is great because it is reinforced by two factors.
- This leads to a shortage and an upward pressure on the price of cars.
- Price would increase from P0 to P1 and equilibrium quantity would increase from Q0 to Q1.

Link: The abovementioned events would cause the market price and equilibrium quantity of cars to increase.

Evaluation:

- PES for cars is likely to be inelastic in the short run and elastic in the long run. In the short run, it is not possible to increase the quantity supplied quickly overnight when price increases because cars require complicate manufacturing process and there may not be spare capacity in the assembly plants.
- Therefore there is likely to be a more than proportionate increase in price (price hike) relative to the increase in quantity.
- In the long run, PES is likely to be elastic since firms can expand production capacity or import cars from other countries when price increases.
- Therefore there is likely to be a less than proportionate increase in price (small increase in price) relative to the increase in quantity.
- However, since the price cap leads to a shortage of gasoline, this may limit the growth in demand for cars since consumers are unable to purchase the gasoline needed to run the cars.
- Also, if a black market were to exist, the price of gasoline may increase instead and this could lead to a fall in demand for cars.
- Slow economic growth may also cause consumer pessimism and demand for big purchase items like cars may fall.

Market for Ethanol

Point: The price cap for gasoline and the slow economic growth can affect the market for ethanol.

Explanation/Example:

- Ethanol and gasoline are close substitutes since most vehicles can run on either ethanol or gasoline.
- XED value is positive and large. When the price of gasoline falls due to the price cap, the demand for ethanol would fall sharply as consumers switch to the cheaper gasoline to run their vehicles.
- This reinforces the fall in demand due to the slow rise in income.
- This leads to a surplus and a downward pressure on the price of ethanol.
- Price would fall from P0 to P1 and equilibrium quantity would fall from Q0 to Q1.

Link: The price cap for gasoline and the slow economic growth can cause the equilibrium price and quantity of ethanol to fall.

Evaluation:

- There may be other factors affecting the market for ethanol. For e.g. if the price of sugar cane for consumption increases, profitability increases and producers may prefer to produce sugar cane for consumption instead of using them for ethanol production. Hence there may be a fall in the supply of ethanol.
- It depends on the PES for ethanol. S is likely to be elastic since ethanol can be stored for a long period of them due to durability of stock. When the price of ethanol falls (sharp drop in price), the quantity supplied would fall by a greater proportion relative to the quantity supplied.

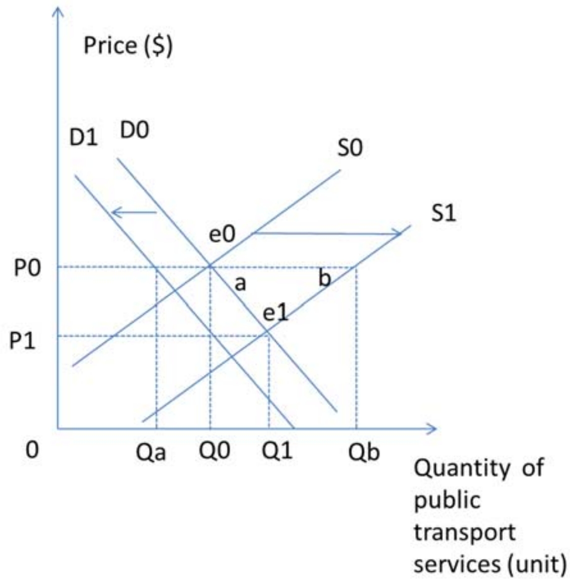
Market for Transport Services

Point: The price cap on gasoline and the slow economic growth can affect the market for transport services.

Explanation/Example:

- Gasoline is an input for the provision of public transport service since gasoline is needed to run buses.
- Reduction in gasoline price would lead to lower cost of production and higher profitability for transport firms.
- The supply of public transport service would increase.
- At the same time the slow economic growth could lead to a small fall in the demand for public transport services since public transport may be an inferior good (YED negative).
- Gasoline is a major factor of production to run buses and hence the increase in supply is likely to be great whereas the fall in demand is likely to be small since the increase in income is very small.
- There is a surplus in the market and this leads to a downward pressure on price.
- Equilibrium price falls and quantity increases.

- PED for public transport is likely to be inelastic since public transport may be largely used by the lower income group and they are unable to afford the much more expensive substitutes for cars. Hence there is a lack of close substitutes. This is likely to result in a larger than proportionate fall in price of public transport relative to the increase in quantity when the supply increases.
- PES for public transport is likely to be inelastic since it takes time to increase their supply of bus services as new buses may need to be purchases and drivers need to be trained. This is likely to result in a larger than proportionate fall in price relative to the fall in quantity when demand falls.
- Because PED and PES are inelastic, price fall is sharp.



Link: The abovementioned event causes a sharp fall in the equilibrium price of public transport services and an overall increase in equilibrium quantity.

Evaluation:

- Similarly, the lower cost of production holds true only if there is no formation of black market and public transport providers are able to purchase the cheaper gasoline despite the shortage.
- Ceteris paribus condition may not hold. E.g. PES may be elastic in rural areas (where bus frequencies tend to be lower). There is availability of spare capability to provide more bus services.

Conclusion:

- The impact of the events on the different markets depends largely on the relationship between gasoline and the other products and price elasticity concepts.
- Price cap on gasoline may not be sustainable if the gasoline producers face high cost of production and are unable to cover their COP when prices are low.
- The government needs to be wary of this potential problem as it could lead to a fall in supply and worsen the shortage if the gasoline firms shut down in the LR.

- In view of the recent development that the oil prices are falling due to the increased production of shale oil and output in OPEC countries, the price cap may no longer be effective when the market price falls below the maximum price set by the government. This can allow the market for gasoline to achieve low prices while clearing the shortage in the market without government intervention.
-

Knowledge, Application, Understanding, Analysis		
L3	*Sound analysis with good use of economics framework* - *DD/SS → price mechanism* - *Concepts of YES/XED/PED/PES to aid explanation* *Good scope of discussion* - *At least 3 related markets are discussed* - *Simultaneous shift analysis is included with explanation on which curve shifts more.w* *Good depth of analysis* - *Linkages made between each point* *Good application to the context*	***17 – 21***
L2	*Use of economics framework, e.g. demand and supply analysis with some elasticity concepts.* *Lack of scope of discussion, e.g. at most 2 markets are analysed* *Lack of depth of elaboration* *Lack application to the context*	***10 - 16***
L1	*Glaring conceptual errors made.* *Limited use of economics framework.* *Limited scope of discussion, e.g. only demand and supply analysis is applied without elasticity concepts OR only one market is discussed.*	***1 – 9***
Evaluation		
E1	*Made a judgment on the overall outcome of each market but not substantiated with analysis*	***1 - 2***
E2	*Made a judgement on the overall outcome of each market based on sound analyses*	***3 - 4***

Essay Question 2

Price of jet fuel has fallen 70 per cent in past two years, yet average cost of a transatlantic airline ticket was cut by just two per cent over same period.

(a) Explain how firms would determine price and output for their products in the markets. [10]
(b) Discuss whether marketing is more important than pricing policies for the airline industry. [15]

Markers' Comments

(a) A large number of candidates did not explain the shut-down rule which any firm should follow if it is to produce the output that results in profit maximisation. A good number of those who could explain the shut-down rule, however, did not distinguish between the short run and the long run. They therefore were unable to point out that when a firm decides whether or not to continue production in the SR, it looks to see if it could cover its SR variable costs.

The profit maximising firm will only continue production in the LR only if it could cover its total costs. Many candidates also did not explain clearly why the profit-maximising output level is where MC = MR; they could only state the condition and remained largely silent beyond that.

Apart from this issue, many candidates were able to explain the price and output determination for firms in the different market structures, viz perfect competition, monopolistic competition, oligopoly and monopoly. Many candidates, however, made errors in drawing the diagram of the kinked demand model of oligopoly.

Suggested answer scheme

(a) Introduction

- A firm is defined as the unit that employs factors of production to produce commodities that it sells to other firms, households or the government.
- Firms are assumed to maximize their profits, which are the difference between total revenue (TR) and total costs (TC) of production.

Body

Para 1

- There are two rules that any firm should follow if it is to produce the output that results in maximum profits.
- **Rule 1. The shut-down rule**
- First, firms should only produce output if TR is equal to, or greater than TVC.
- If there is no output for which TR is equal to or greater than TC, then output should be zero.
- This is called the shut-down rule, because it shows when a firm that is currently producing should stop doing so.
- The reason for this is that the firm's variable cost can be avoided by ceasing production.

Para 2

- Because different costs are avoidable in the short and the long runs, this rule has 2 applications, one for the short run, and the other for the long run. It is important to distinguish between the two of them.
- **Shut down condition in the short run**
- The short run (SR) is the time period in which at least one factor is fixed, such as plant and equipment, and thus cannot be increased.
- Inputs that can be varied in the short run are variable factors such as labour.
- When a firm decides whether or not to continue production in the SR, it looks at its short run variable costs (SRVC) and is unrelated to its fixed costs (FC), which are unavoidable since they have to be incurred even if the firm does not produce at all.

Para 3

- The firm should not produce at all if for all levels of output the TVC of producing that output exceeds the TR derived from selling it (or if AVC > AVR).
- If the firm cannot earn enough revenue to cover the variable costs of production, then the most profitable course would be to shut down for that time period.
- The price at which the firm can just cover its AVC and is therefore indifferent between producing and not producing is called the **shut-down price**.

Para 4

- **Shut-down condition in the long run**
- The long run (LR) is the time period in which all factors can be varied within the confines of given technology. All factors are variable.
- The profit-maximising firm will continue production and stay in business in the LR only if it can cover its total costs.
- Covering SR variable costs is not sufficient. If this is not possible, the firm should close down in the LR.
- ***Para 5***
- **The rule for the best output for the firm to produce**
- The second rule is that if a firm should produce at all, the output at which profits are maximised is where marginal cost (MC) is equal to marginal revenue (MR).
- Suppose a firm finds that at its present level of output, the cost of making another unit (MC) is less than the revenue gained by selling it (MR).
- Total profit could therefore increase by producing this marginal unit.
- The opposite case is also true: the firm should not produce the additional unit if MC > MR.
- The profit-maximising output level is therefore, where MC = MR
- ***Para 6***
- In the case of firms in perfect competition where there are a large number of buyers and sellers and each firm, being an insignificant player in the market, is thus a price taker, the profit maximization level of output for the firm is where MC = MR, with MC rising from below and the firm charges a price P_e as determined by the market forces of demand and supply.
- ***Para 7***
- In the case of a monopoly firm which also derives its profit maximising price and output positions by MC = MR, the firm sets a price P much higher than its MC, thus being allocative inefficient.
- ***Para 8***

- In the case of oligopolies in which a few large firms dominate the market and are characterised by mutual interdependence, the kinked demand curve is one such market model. Prices are rigid where the profit-maximising level (MC = MR) is and firms do not try to match any increase in price but will match any price reduction exercised by their rivals.
- ***Para 9***
- ***Conclusion***
- In conclusion, although it is generally true that firms follow the rules as set out above in their output and price decisions, they might also be influenced by other factors such as sales revenue maximisation, profit satisficing, and the principal-agent problem. Thus, in the last situation when ownership and control of the firm are separated, the self-interest of agents will tend to make price and output decisions that result in profits lower than which principals act as their own agents.

Knowledge, Application, understanding and Analysis		
L3	Clear and well developed explanation of how firms determine the price and output that includes the main goal of firms, the shut-down rule in the SR and LR, the profit-maximising condition, and brief mention of the other goals of firms and the various market structures.	**8 – 10**
L2	Developed explanation which shows understanding of how firms determine the price and output decisions of firms including shut-down rule but without the profit-maximising condition [7] Less developed explanation which shows understanding of profit maximisation condition but excluding the shut-down rule [6] Some understanding of how firms determine price and output decisions with less developed explanation. [5]	**5 – 7**
L1	An answer which shows some knowledge of the decision making process of the firms in price and output.	**1 - 4**

(b) Discuss whether marketing is more important than pricing policies for the airline industry. [15]

Markers' Comments

(b) Some candidates wrongly assumed that firms in the airline industry operate in a monopolistically competitive market structure instead of oligopoly. Many candidates were aware of the rationale for the avoidance of price competition arising from interdependence among a few large firms in the airline industry and what this entailed.

Relatively fewer candidates recognised that pricing strategies (price reductions) could successfully be undertaken if cost savings due to improvements in technology could be made if PED for the service is greater than unity. However, if marketing could make the firm's airline services more demand price inelastic, then increasing its price could help the firm to increase its profits.

Few candidates correctly concluded that airlines should not depend on only one strategy but to use both marketing and pricing strategies effectively to raise and maximise profits.

Introduction

- Like all firms in economic theory, the aim of firms in the airline industry is assumed to maximise profit.
- In order to do so, the firm must reduce its total cost of producing the service and increase TR from sales of its service.
- Alternatively, the profit maximization rule where MC = MR applies to the firm in the airline industry.

Body

Para 1

- The airline industry is likely to be an oligopoly and is dominated by a few large firms because of high barriers to entry.
- This is because the business requires huge capital investments such as its fleet of aircraft.
- For such a market structure, non-pricing strategies such as marketing and promotion is arguably more effective than price strategies to increase profits.

Para 2

- This is because the airlines may want to avoid price competition and a price war as explained by the kinked demand theory.
- This theory arises from interdependence among the few firms in the airline industry, for example in Singapore firms such as Jetstar, Tiger Airways, Scoot, SilkAir and Singapore Airlines.
- This means that firms watch out for the actions of their rivals and react accordingly. Hence, a fall in price of airfare for Jetstar will only increase quantity demanded for its services by a smaller extent and cause a fall in its total revenue.
- This is because the gain in total revenue from the smaller percentage rise in quantity demanded is unable to offset the loss in revenue from the greater fall in price.
- Assuming total cost remaining unchanged, such pricing changes where the kink occurs will only cause total profits to fall.

Para 3

- Hence in order to compete successfully, an airline can affect demand positively by increasing air travellers' willingness to go on board their planes through marketing strategies such as through promotions and advertising programmes that aim to differentiate and distinguish their services.
- For example, in order to attract more customers, the airline might advertise aggressively and provide attractive on-board amenities such as dining, entertainment, books and magazines, wireless streaming of blockbuster hits and chart topping music to their personal laptops.
- It can also plan for family holiday specials.

- Its marketing strategies can also aim to reach more customers through e.g. fairs, internet booking, etc.

Para 4

- Hence if the airline's efforts at marketing are successful, the demand for its flights at the same price will rise.
- Moreover, if the marketing brings about brand loyalty, the demand for its services will also become more price inelastic.
- Hence marketing programmes to promote the business in place of pricing strategies could be a more important strategy to be undertaken by the airline industry.
- Increasing demand and making its demand more prices inelastic through marketing and promotion might be a better strategy to sustain its growth in the long run.

Para 5

- Although the theory of oligopolistic behaviour suggests an avoidance of pricing strategy, as long as the firm is able to reduce price due to e.g. new and cheaper technology or cost of aircraft per passenger in operating the airline business, the firm should do so to increase sales revenue if PED for her service is greater than unity.
- However, if marketing makes the firm's airline services more distinctive and differentiated from its rivals', and if its PED < 1, then it might consider raising its price in order to increase sales revenue and profits.

Para 6

- However, assuming a kinked demand curve, if the oligopolistic airline firm's condition is such that its MC rises beyond the vertical 'discontinuity' section of the MR curve, then its price may need to be changed accordingly.
- In the case of airline collusion, pricing strategies in the form of price leadership might occur. This is when one firm becomes the market leader and other firms in the airline industry follow its pricing example. However, collusive agreements are usually illegal.

Conclusion

- In conclusion, marketing programmes to promote the airline business in place of pricing strategies might be necessary to sustain its growth of in the long run. In addition, if oligopolistic behaviour suggests an avoidance of pricing strategy, as long as the firm is able to reduce price due to e.g. new and cheaper technology in operating the airline business, the firm in reality should do so to increase sales revenue. Hence, although it is true that marketing strategies are important, it may not be necessarily be more important than pricing strategies.
- Airlines should not depend on only one strategy but use both marketing and pricing strategies effectively to raise the profits of its business. As a final note the preamble hints that some collusion might be taking place in the airline industry. The challenge is really to have some public policy to keep airlines competing rather than colluding and using their competitive energies to

improve their services and to lower costs rather than spending excessively on their marketing efforts.

Knowledge, Application, Understanding and Analysis		
L3	Well-developed and balanced discussion on the arguments of marketing strategies in contrast to pricing policies for the airline industry, that includes points such as promotions and advertising and improvements in services provided and making demand for services more price inelastic, interdependence and the kinked demand curve which yield the solution of sticky prices,	**9 - 11**
L2	Less developed and balanced discussion that shows some ability to put forth the case for marketing as opposed to pricing policies for the airline industry.	**5 - 8**
L1	An answer which shows some knowledge of the arguments between marketing and pricing in the airline industry.	**1 - 4**

Allow up to 4 additional marks for Evaluation		
E2	For an evaluative discussion that is based on economic analysis i.e. one that considers that although marketing strategies are important it might not necessarily be more important than pricing strategies - with evaluative reasoning.	**3 - 4**
E1	Weak explanation of judgement put forth.	**1 - 2**

Essay Question 3

The Liquor Control Act, which was passed in Parliament in January 2015, aims to minimise public disorder and disamenities arising from drinking in public. Under the Act, drinking is banned from all public places from 10:30pm to 7am and retail shops are not allowed to sell takeaway alcohol.

a) Explain why Singapore regulates drinking in public areas. [10]

Markers' Comments

Most candidates are able to identify one of the 2 market failures namely, negative externality. Many were unable to see that there is also imperfect information in this market. As a result, many students were able to attain high L2 marks but not many were able to attain L3. Students who failed to achieve high L2 because they were unable to provide accurate elaboration of negative externality (e.g. Instead of saying social optimal level of output is at Qs, students should be able to tell the examiners how Qs is derived (MSB=MSC)).

Overall, the question was relatively well done. Only a handful of candidates failed to do well for this

question as they gave analysis which is largely flawed.

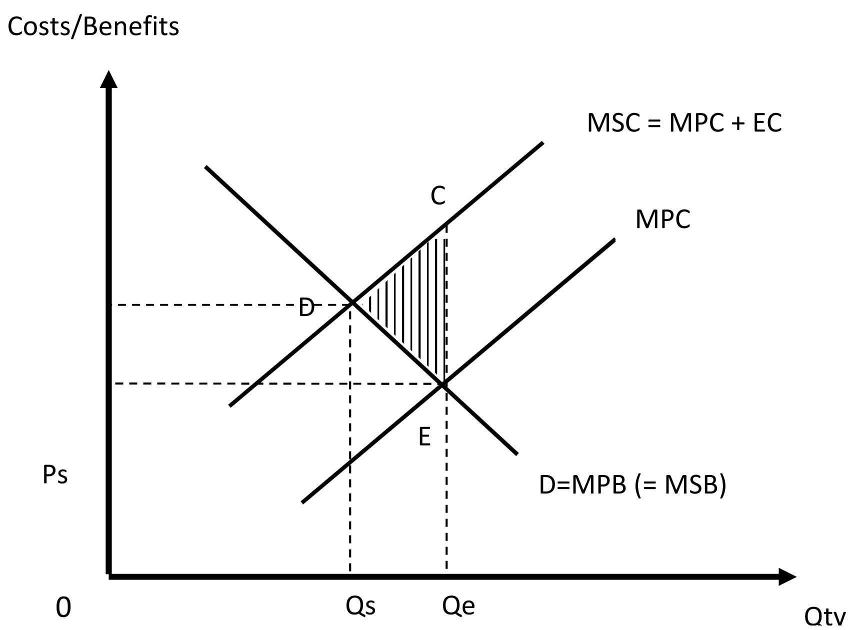
Suggested Answer (a)

Market failure: Negative externality & imperfect information

Negative externalities refer to the external costs imposed on someone other than the consumers or producers of the product, for which no compensation occurs. ***(i.e. harmful effect on 3rd parties).*** Individual decision makers are not internalising all the costs that society is bearing.

Thus, when negative externality is generated during an economic activity, the ***marginal social costs are <u>higher</u> than the marginal private costs***.

The private benefit enjoyed by the individual consuming the alcohol is the satisfaction from consumption while the private cost could be the cost of purchasing the alcohol. However, during the consumption process, ***negative externality*** is generated as the bad behaviour alcohol consumers exhibits after consumption as well as the noise pollution. This negative externality causes a divergence between MSC and MPC as illustrated in the figure below:



In the figure above, the demand curve, D, reflects the MPB of the consumer from the consumption of an additional unit of alcohol while the MPC which is the additional cost of consuming an additional unit of alcohol. The individual consumer will only consider the private costs and benefits, ignoring the negative externalities and will consume up to the point where **MPB = MPC** (private efficiency). As such, **Qe** is being produced.

However, the external cost generated from the consumption of alcohol creates a divergence between MPC and MSC, i.e. MSC is higher than MPC. On the other hand, since there is no external benefit incurred, MSB = MPB = D. As such, at market equilibrium output, Qe, **MSC is greater than**

MSB, meaning that the society values an extra unit of good less than what it would cost the society to produce it.

The **socially efficient level of output** should be where MSC = MSB, ie. at output **Qs**. At market equilibrium Pe, the good is under- priced as the true price should be at Ps. Therefore, the price mechanism **over-allocates** resources to the production of the good since Qe > Qs, that is, there is an over-production of the good. Area ECD represents the **welfare/deadweight loss** to society as a result of this over-allocation of resources. Therefore, the market fails to allocate resources efficiently because it does not take into account the external cost and market failure arises.

Consumers also do not perceive correctly how bad a particular product is for them: either they do not have the right information or they simply lack some relevant information. Individual consumers tend to be myopic and are assumed to be short-term utility maximisers. They may not be fully informed about the long-term harm of consuming alcohol. The characteristic of alcohol is that the consumer is believed by the authorities to undervalue the harm it provides. Consumers tend to under-estimate the private cost of consuming it. The drinker may not be fully aware of the health risks of consuming alcohol and hence over-consumes alcohol.

Knowledge, Application, understanding and Analysis		
L3	Clear and well developed explanation of both market failures with appropriate examples.	8 – 10
L2	Developed explanation which shows understanding of at least one of the two market failures without examples. [7] Less developed explanation which shows understanding of market failure. [6] Some understanding of negative externalities with some errors. [5]	5 – 7
L1	An answer which shows some knowledge of market failure with inaccuracies in explanation.	1 - 4

Suggested Answer (b)

Assess whether The Liquor Control Act is the best policy in minimising public disorder. [15]

Markers' Comments

Candidates were generally able to identify and argue for the different policies to handle the market failures. However, most of them provided a pure theoretical analysis with little reference to the examples in the question. Thus, even good answers were only able to attain a low L3 due to the lack of appropriate examples.

Students should also note that the policies selected should resolve the market failures involved. In this case, legislation and taxation would resolve negative externality while education and campaign can help to make information more perfect, reducing market failure arising from imperfect information. In addition, when discussing taxation as a policy to reduce negative externality, students should be mindful to include theoretical analysis (e.g. Explain that the tax should be equivalent to the MEC and this is so that consumers can internalise the external cost). Though diagrams are appreciated, analyses which are well explained (even without a diagram) will be given its due credit too.

Government regulation is the process of controlling production or consumption activities through laws and administrative rules. In the case of **negative externalities**, laws like The Liqour Control Act, can be used to prohibit or regulate behaviour that imposes the external costs. Public consumption of liquor is prohibited from 10:30pm to 7am and all retail shops are prohibited from selling alcohol.

Thesis: Regulation is the best policy.

Government has more perfect knowledge and therefore can produce at the social optimal level. The regulation ensures that there is certainty in the outcome and the maximum amount of negative externality generated is controlled under the regulation.

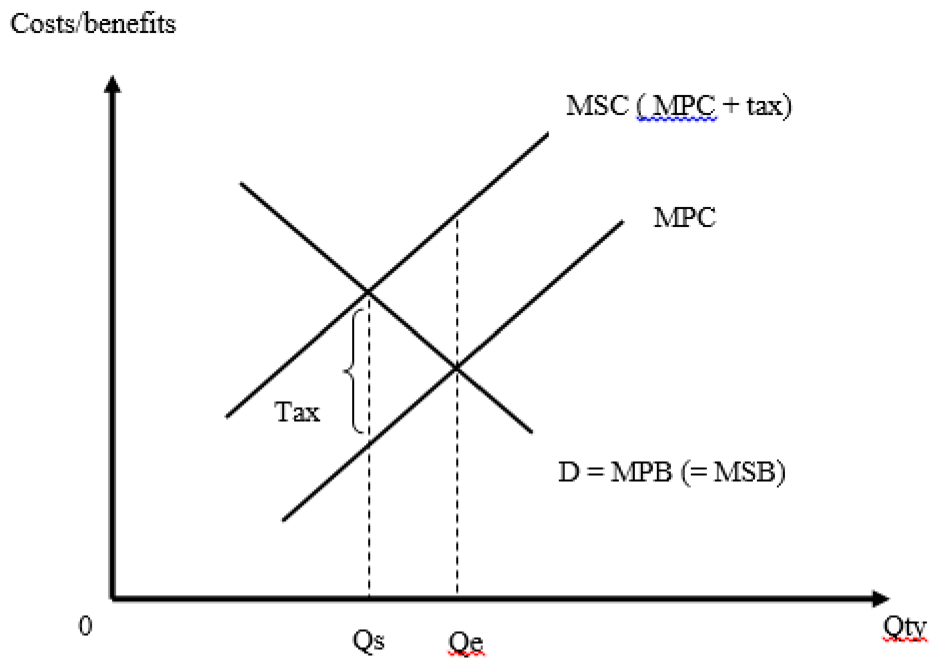
In comparison, it is also relatively easier to understand, implement and monitor when The Liquor Control Act is imposed. Random checks or checks based on public complaints can be made and public who found to have flouted the regulation will be heavily fined. Huge fines can be imposed to deter individuals from flouting the regulation imposed.

Anti- thesis: Regulation is not the best policy because there can be other better policies. At the same time, government may fail.

However, it is understandable that regulation may not be the best policy since it is a blunt tool and it does not pinpoint on punishing only those who contribute to generating the negative externalities for the consumption of alcohol. In addition, frequent checks are required to ensure that the regulation is being followed. This can incur additional policing and inspecting cost to the government. Government may also fail to estimate accurately the social optimal level of output and thus, too may still allow the public to consume too much alcohol, leading to negative externalities.

Other policies might yield better results in attempting to correct the negative externalities generated from consumption of alcohol. In Singapore, other policies like the Liquor Tax and educating the public about the harms of long- term consumption of alcohol is being adopted.

In budget 2014, liquor tax was raised by 25% of the existing rate. The existing liquor tax ranges from $60-$88 per litre of alcohol. The taxation imposed should be equal to the external cost from the consumption of alcohol. The market equilibrium (where MPC = MPB) will give a quantity Qe which is higher than the socially efficient level Qs (where MSC = MSB). The market does not take into consideration the external costs involved.



The government can impose a ***tax equal to the marginal external cost***. This is the monetary valuation of the harm imposed on society due to the negative externality. By doing so, government attempts to compel the consumers to ***internalize the external costs.*** This raise the drinker's marginal private cost (i.e cost of production will increase) and the supply curve will shift to the left to S' (MPC raised to the same level as the MSC). Hence, consumers will be induced to consume less and move towards the socially efficient level Qs. At this equilibrium, MSB=MSC. The over allocation of resources is corrected as there will not be over consumption. This eliminates the deadweight loss, arising from over consumption prior to the imposition of the tax. Allocative efficiency is achieved.

However, it is noticeable that the external cost generated from the consumption of alcohol might be hard to estimate. Inaccurate estimation can lead to under/ over- correction of the market failure. This might worsen the existing situation.

The Health Promotion Board has been actively engaging Singaporean in educating them the long term harms of consuming alcohol excessively. Such measures allow the external cost from the consumption of alcohol to be made known to the individuals. It is hoped that, as a result, demand for alcohol would be discouraged. The demand curve will shift leftwards, lowering the equilibrium output to bring it into correspondence with the optimal output. Since these campaign are not enforceable by law, the advice might not be heeded due to ingrained habits and excessive drinking may continue to exist as a problem in the society. It is also noted that time is needed for one to change their behaviour and thus, the impact of educating the public might take effect gradually. These activities can be funded using the liquor tax revenue generated.

Government may consider using a combination of these above mentioned policies since each policy have its pros and cons. Having a combination of policy will allow the government to possibly achieve the best outcome as the policies could complement each other (e.g. regulation creating a discernible difference in the short run and education solving the problem in the long run) when attempting to tackle the negative externality generated from consumption of alcohol.

Knowledge, Application, understanding and Analysis		
L3	Well-developed and balanced discussion on various policies which can be used to resolve the issue of overconsumption of alcohol. Policies mentioned are well contextualised to Singapore and are appropriate.	**9 - 11**
L2	Less developed and balanced discussion that shows some understanding of the different policies which can be used to correct negative externalities and imperfect information.	**5 - 8**
L1	An answer which shows some knowledge of the policies to correct the above mentioned market failures.	**1 - 4**

Allow up to 4 additional marks for Evaluation		
E2	For an evaluative discussion that is based on economic analysis i.e. one that considers that although marketing strategies are important it might not necessarily be more important than pricing strategies - with evaluative reasoning.	**3 - 4**
E1	Weak explanation of judgement put forth.	**1 - 2**

EQ4) Discuss the impact of the weakening of a currency and low productivity on different economies. (25m)

Markers' Comments

Students who attempted this question generally were able analyse how currency weakening would affect export revenue and import expenditure, hence affecting the current account. Very weak answers simply stopped at analysing how the BOT will be affected, without linking it to other macroeconomic issues. Stronger candidates remembered that analysing the 'impact of economy(s)' required them to explain how the 4 macroeconomic aspects would be affected.

When it came to analysing low productivity, students did much poorer. Students either ran out of time or did not know how lowering of productivity could lead to cost push inflation and the knock-on effects on the other macroeconomic objectives of different economies.

Students did not score high L3 marks due to a lack of comparison of effects between different types of economies. While most students were able to use Singapore as an example well, how the effects from currency weakening and low productivity would be different for other countries was not developed adequately.

Impacts of a weakening currency (external and internal)

Improvement of BOP

BOP improves as domestic good and services will become relatively cheaper. Assuming the Marshall – Lerner condition holds, this will lead to an increase in net exports (NX), improving BOP through the current account. Furthermore, a weakening of the currency will reduce the costs of investing in terms of foreign currency, leading to an increase in inward foreign direct investments, improving the BOP through the capital account.

Economic Growth

This increase in net exports also represents an injection into the circular flow of income, resulting in a multiple expansion of domestic employment, output and income, through the multiplier effect. Most economies are likely to meet the Marshall - Lerner condition as demand for exports is likely to be price elastic due to competition from other countries.

Comparison between different economies (USA vs SG)

Different countries would experience relatively different levels of growth, depending on the size of their multiplier. For an economy like SG's, an increase in NX will have a limited effect on economic growth, due to SG's small multiplier.

With her compulsory savings system (CPF) and culture of thrift, along with her high dependence on imports, this implies that she has a relatively high level of MPS and MPM, resulting in a small multiplier value. A weakening of the currency would probably has a smaller impact on SG's economic growth as compared to another economy like the USA.

A weakening of the currency may even have a contractionary effect on SG's economic growth if her export products become less price competitive globally due to a higher cost of production, brought about by higher imported cost. During times of normalcy, it is possible that a weakening of currency may hurt SG's export competitiveness more than that of US due to higher threat of inflation, and hence greater negative impact on SG's national income than on US.

USA, being the top destination for FDIs will likely to benefit more than SG from a weakening of the currency as well. With even more FDIs entering the country, the US economy will experience an even greater increase in employment and economic growth as compared to many other economies, including SG.

This however, may not be true if the economy is already near full employment. A further increase in AD will lead to demand pull inflation, which may reduce investors' confidence within the economy instead.

Impacts of low productivity (external and internal)

Worsening of BOP

Cost of production will be higher as more input is required to produce the same amount output as before. Exports will be less price competitive due to an increase in cost of production. An increase in price would lead to a more than proportionate decrease in quantity demanded, resulting to a fall in

NX, worsening BOP through the current account. Low productivity will also make an economy less attractive to foreign direct investments, leading to an increase in outward flow of investments, worsening the BOP through the capital account.

Demand – deficient unemployment

A reduction in NX and I will lead to a fall in AD, increasing levels of unemployment through the reverse multiplier process. Firms also cannot afford wage increases, leading to depressed income tax receipts for the government, indirectly contracting the economy even further.

Growth

Low productivity restricts sustained economic growth as a lack of increase in productivity would limit the rate at which productive capacity increases (assuming there are other factors causing productive capacity to increase). As such, AS would shift right slowly and that acts as a constraint on the rate of sustained economic growth.

Comparison between different economies (UK vs SG)

Singapore, being a small and open economy will be very reliant on trade for growth. Being export driven, Singapore's exports has to be price competitive globally to ensure economic growth. Furthermore, due to her lack of natural resources, Singapore imports almost all her materials for production. A low productivity rate, coupled with a weakening currency (more expensive now to import materials for production) would means that SG's level of exports will be significantly affected due to an increase in cost of production. With SG's trade making up 326% of her GDP, a drop in export levels will lead to reduction in AD, ceteris paribus. An increase in unemployment level through the reverse multiplier would hence result.

For UK, a low level of productivity will present a different set of problems altogether. With a low reliance on trade, UK's economic growth is driven by domestic consumption. With low levels real wages, there would be lower levels of consumer spending, contracting UK's economic growth significantly, and increasing levels of unemployment as well.

This unemployment problem may even be exacerbated if foreign firms decide to outsource their production to countries where cost of production is lower. With globalisation, the movement of labour from one country to another is made even easier, where production processes can be monitored remotely through advanced levels of technology. This will result in structural unemployment, giving rise to a greater number of UK citizens unemployed.

For both countries, a low level of productivity would imply a low level of output. This would reduce the SOL of the citizens as there are now less goods or services made available for consumption.

Low levels of productivity will also reduce economies' potential economic growth levels. Which economies will be affected more will be dependent on which economies remain more attractive to FDIs despite the low productivity levels.

Other factors may also lead to differing impacts on economies. For example, if a country like China, is one of the few main exporters of rare metals, the demand for her rare metal will be considered price inelastic globally. A weakening of the currency would do them more harm than good as this would means lower revenue earned from their export sales of rare metal.

The extent of the severity of problems due to low productivity would also depend on which economies have better policies in place to mitigate the problems or even raise productivity directly.

Developed economies may be in a better position than developing economies to implement restructuring of the economy, to mitigate problems of low productivity.

At the same time, slower growth in productivity would likely result in slower growth in aggregate demand, which might offset some of the upward pressure on inflation, especially if economies are already operating near the full level of employment. Growth in consumer spending would probably weaken as lower business profits limit stock market gains, thereby reducing household wealth. More foresighted consumers might also reduce spending, perceiving that the prospects for growth in real wages are not as bright.

In summary, weakening of a currency and low levels of productivity would have differing impacts on different economies. All these would be dependent on the different characteristics of the various economies.

Level	**Descriptors**	**Marks**
L3	For an answer that has a thorough analysis of how a weakening of the currency and low productivity affects different kinds of economies. Answer is also able to compare the extent of the problems for different kinds of economies.	17-21
L2	Undeveloped answer that explains the impacts of a weakening of currency and low productivity. If analysis is developed but no/minimal comparison is made between different economies, max 12 marks.	10-16
L1	For an answer that shows superficial analysis on how a weakening of currency and low productivity affects an economy. Conceptual errors are evident.	1-9
E2	Evaluation justified based on analysis.	3-4
E1	For an unjustified evaluation	1-2

EQ5 (a) Explain the limitations of expansionary interest rate policy to help alleviate the problem of falling aggregate demand (10).

Markers' Comments

- **Out of focus**: Quite a number of students did not read the question carefully and concentrated their discussion on how the expansionary monetary policy (centred on interest rate) works to increase AD. The relevant part on the policy limitations became too short to score well.
- **Misconceptions**:
  1. a significant handful analysed the effect of i/r on Investment, FDI and hot money wrongly. These students tend to confuse them (domestic I vs FDI vs hot money) and 'lump' them all up to treat them having the same effect when i/r falls.
     Correction:
     - domestic i/r = domestic cost of borrowing (COB). So domestic i/r ↓, domestic I ↑ as COB ↓.
     - FDI is not affected by domestic i/r as the foreign investors would most likely acquired the loanable funds from their own country before coming over to the host country for investment. Rather, FDI is more affected by political and economic conditions of the host country.
     - Hot money would flow out when domestic i/r ↓, since foreign investors are now more attracted to the (relatively) higher i/r offered by other countries.
  2. hot money ≠ investment. Outflow of hot money does not mean fall in I & fall in AD! Hot money is financial investment which does not involve any production of goods & services (eg portfolio investment in stocks and shares and making capital gains from i/r and ER differences across countries). Whereas investment is the change/increase in capital stock, which means there are more machinery to increase production of goods & services. Hence investment involves the actual production of capital goods.
  3. Money SS (circulated inside the economy) ≠ SScurrency in the foreign exchange market (outside the economy). So for expansionary monetary policy, ↑ money supply does not mean ER ↓ (because SScurrency would not increase)!
- Weak arguments:
  - Students claimed time lag as a limitation for expansionary monetary policy (centred on interest rate). This shows students are not reading the newspapers, but merely doing rote-learning from notes. When central bank announces changes in i/r, the effect is fairly fast, eg when Federal Reserve hinted in raising i/r in US, the stock markets worldwide could immediately respond showing the negative market sentiments. Hence time lag as a limitation is not a strong argument. This limitation is more significant for SS-side policy.
  - Quite a number argued that this expansionary monetary policy could lead to dd-pull inflation and the overall effectiveness of the policy is reduced. Although theoretically correct, this must be evaluated with reference to the context. In the preamble, Japan was suffering from 'deflationary depression', in such a pessimistic state, the threat of a dd-pull inflation is highly unlikely. Even if the inflation really happens, it would be positively viewed as Japan has overcome the 'deflationary depression'.

Intro:

Brief explanation of how expansionary interest rate policy is supposed to increase AD.

(↓i/r, ↓ cost of borrowing, C & I ↑, AD↑)

Development:

Limitations to consider

1) pessimistic outlook of the future, making C & I interest inelastic

   Demand for consumption and/or investment may be interest inelastic. Lower interest rates may be insufficient to encourage consumers and firms to take up loans particularly when consumer and business sentiments are poor (pessimism) with the 'deflationary depression' experienced in Japan (and the rising threat of global economic crisis). The increase in consumption and Investment may not be significant enough to cause AD to rise significantly and hence the problems of output gap may still persist.

2) Small multiplier effect due to high MPS

   In countries where leakages (withdrawals) – savings, taxes and imports – are high, the multiplier effect is weak, rendering the monetary policy less effective. Hence AD might not rise significantly to resolve the problems of falling AD. In the context of Japan where there is high savings rate (attitude towards thrift), size of multiplier effect would be small, hence it may not fully alleviate the problem of a falling AD.

3) Inability to cut interest rate (context of Japan) – liquidity trap

   Interest rates in Japan is already at low levels and near to zero (as the central bank tries to stimulate the weak economic conditions with several cuts in i/r), hence the ability for further cuts will be difficult. Once nominal interest rate is reduced to zero, there is no room for further rate cuts.

4) Effects of deflation on real interest rate and investment (context of Japan)

   With the problem of deflation that persists in Japan, there could be the problem of a rise in real interest rates (real i/r = nominal i/r – inflation rate). This situation will lead to an unintended negative impact on both households and firms. Households in Japan will still prefer to save than spend and hence consumption will continue to fall. At the same time, falling prices will make it difficult for firms to predict returns and make debts harder to pay off thus cutting back on their investment spending. Overall, deflation will only worsen the problem of falling AD in Japan.

Conclusion:

Given the above limitations that could make the expansionary monetary policy (centred on i/r) ineffective, the Japanese govt and central bank need to consider other policies to help further stimulate the weak economy. Over the years, the efforts by the Japanese govt and central bank were not very successful and many economists described the Japanese economy as experiencing a 'loss decade' of stagnation. Perhaps the magnitude of the policies needs to be intensified and/or the authorities must really identify the root cause(s) of the macroeconomic problems to truly overcome this 'loss decade' of stagnation.

Level	Descriptors	Marks
L3	A well-developed discussion (clear and detailed explanation) of 3 main limitations of the expansionary monetary policy centred on i/r, <u>with reference to the given context (of Japan)</u>	8-10
L2	High L2: A detailed explanation of 2 main limitations of the expansionary monetary policy centred on i/r (<u>without</u> reference to the context of Japan) Low L2: limited explanations (with gaps or errors) of 1 or 2 limitation(s) of the expansionary monetary policy centred on i/r	4-7
L1	Explanation of how the expansionary monetary policy centred on i/r works to address falling AD (ie main focus of the essay on policy limitations is not adequately discussed) and/or the policy limitations mentioned are not developed with details and accuracy	1-3

EQ5(b) Discuss whether the Japanese government should prioritise tackling deflation over reducing a budget deficit. (15m)

Markers' Comments

- **Losing focus**: quite a number lost the focus and concentrated on discussing the policies (including the policy limitations) that can help to address the macro-problems of deflation and budget deficit. Please read and interpret question carefully and avoid regurgitating all the content from notes which may not be relevant.
- **Misconception**: Many mistaken budget deficit (G>T) as BOT/BOP deficit (X<M), hence all the associated discussion were irrelevant. This misconception has been continuously being highlighted and reminded (to students), yet candidates were still repeating such mistake!

Intro:

Explain what deflation (negative inflation rate ie a sustained, inordinate fall in GPL) and budget deficit (G > T) is.

Development:

Thesis – Government should prioritise tackling deflation

- **Analyse the negative impacts of deflation:**

    - Deflation may reflect the pessimism of households and firms which may decrease spending and increase unemployment. Expecting future prices to be lower, consumers hold back consumption as prices fall, for goods to get cheaper before buying. (Consumption expenditure falls and Savings increase). In addition there will be reduction in investment spending because businesses lose confidence in the economy and invest less as prices of their goods and services fall, and profit margins are reduced. There'll be fall in C → fall in I → fall in AD → EG falls and the vicious cycle carries on with falling C→ falling I (Paradox of Thrift).

  - The fall in AD and NY may also mean that the amount of direct tax revenue collected is reduced. On the other hand, unemployment and welfare benefits tend to rise leading to rise in G. Both the rise in G and the fall in tax revenue due to the inbuilt automatic stabilizers will lead to a worsening budget balance. Less government budget or funds will then be less available for government, which could be used for spending on public services by the government. Hence deflation could actually worsen the state of the fiscal deficit and hence a government may still need to be more concerned with deflation.

- In addition, deflation may cause foreign investors to shun away from investing in the country, due to lower prospects of increase in profit margin. Hence there will be net outward investment – leading to worsening capital and financial account. Assuming ceteris paribus, this may cause Balance of Payment to worsen.
- Deflation results in a rise in real debt burden: Deflation will cause debt burdens to rise for households that have borrowed in the past. Many consumer and corporate debts are fixed, including fixed mortgages and personal loans, and repayments do not fall as prices fall, making the real price of the debt rise. For firms, falling prices also create a debt burden because, although revenues fall, debt repayments may remain at the old level, increasing the real debt burden.

- **Explain how fiscal budget deficit may not be harmful if it is temporary in nature – due to cyclical factors:**
  - Fiscal Deficit has beneficial effects as the government could be trying to stimulate the economy by increasing G spending to stimulate the economy and reduces tax collection to encourage greater consumption and investment by households and firms respectively. This is done through reducing income tax leading to higher disposable income - to higher purchasing power for households – Higher consumption from households. In addition, a fall in corporate tax will lead to a higher profit margins and hence leading to higher investment expenditure by firms
  - On the other hand, the government continues to spend on its people by increasing its social security spending, incurring higher spending on unemployment benefits. This results in a rise in G and fall in T rise of AD (explain via inventories, production, output and income) and hence real national income, output and employment via the multiplier effect.

Anti Thesis – Government should prioritise reducing a budget deficit.

- **Explain how fiscal budget deficit is harmful to the economy**

- If the budget deficits persist over an extended period of time, the increasing (govt or public) debt may place a burden on the society in terms of debt servicing. The govt has to increase taxes in the future. Hence, the future generations will not enjoy as high a standard of living as they should. There is a trade-off with future spending on needed development expenditure such as physical infrastructure, healthcare and education which can lower standard of living.
- A large and persistent national debt affects consumers and investors' confidence in the ability of the government to repay its debt and perpetuates the risk of sovereign debt default. If the sovereign state does defaults on its payment, this could lead to massive loss of confidence in the economy, thereby leading to fall in C and I thus leading to falling AD and falling EG and rising unemployment. Hence the current priority may be on austerity to reduce the current budget deficit and debt problem. Hence deflation may be less of a concern to the Japanese govt.
- Consequently, the rise in government debt may cause a reduction in the investor's confidence. This will lead to adverse effect on both Short Term capital movements (hot money) and Long Term investment (FDI).
- With the fall in the net inward investment, this leads to fall in Aggregate Demand, assuming other determinants of AD remain constant and economy is operating at the Intermediate range, there will be a multiple fall in real national income, output and employment - leading to contractionary effect on the economy. In addition, capital and financial account will worsen → BOP will worsen.

It is important to note that in the case of the Japanese economy described in the preamble, the concern about crowding out effect from government borrowing to finance the budget deficit may be insignificant as the prevailing i/r is close to zero (i.e. liquidity trap) and the 'deflationary depression' would mean that government need not fight for the limited loanable funds with private investors (I tends to be low with 'deflationary depression'). The other concern about external debt may also not apply to the Japanese case since most of the government bonds (government borrowing) are bought by domestic households and firms.

Conclusion:

Stand: Clearly both deflation and unsustainable fiscal deficit have undesirable consequences.
But if a choice needs to be made as to which problem is more important, it depends on the severity of the respective problem & priority of government at the point in time.
In the context of Japan, deflation as a more immediate threat whereas budget deficit may not pose serious short term problem for Japan as the budget deficit can be temporary financed through government bonds. However, the government of Japan should not postpone the budget deficit problem for too long (to escalate into a serious one like those experienced in some EU member countries – Greece, Spain, Italy) as the threat of the aging population may mean higher public health spending for the nation which could pose further future debt problems for the government of Japan in the future.

Level	Descriptors	Marks

L3	A balanced and well-structured response containing well-developed analysis of how deflation/budget deficit may be a greater cause of concern different impacts i.e. negative impacts of deflation and budget deficit. Able to compare the extent of the 2 problems (deflation vs budget deficit) & **relate to the context of Japan**.	9-11
L2	A balanced response containing theoretical analysis of effects (negative impacts) of **deflation and/or fiscal deficit, without highlighting clearly why deflation or fiscal deficit is more serious (a cause of concern)** Little/minimum impact to compare the extent of the problems and no/minimal reference to the Japanese case.	5-8
L1	Mere listing of points A one-sided, short (limited development) answer, considering only limited impacts of deflation or fiscal deficit. Answer contains errors and inaccuracies.	1-4

E2	Reasoned judgment with reference to the context. Able to identify and **explain judging criteria** (what does it depends on) in explaining whether deflation or fiscal deficit should be a cause of concern. AND Able to **make a stand (with the justification made earlier)**	3-4
E1	Mainly unexplained evaluation	1-2

EQ6) Protectionism is more desirable than globalisation. Discuss. (25m)

Markers' Comments

This question was relatively well done compared to other essays. Of the 124 who attempted this question less than 10% received a failing mark. The primary reason for this was incomplete work most likely due to poor time management.

Of the remainder, almost all candidates were solidly grounded in their arguments presenting a well-balanced narrative that discussed the desirability of both protectionism and globalisation. However, many students floundered firstly, when discussing the negative impacts of both the thesis and anti-thesis statements and this seems an issue of inadequate planning before writing the essay as well as being unable to manage time well. Secondly, students are required to make a stand as to which was more desirable and while all passing candidates did argue for one or the other few did it convincingly. These two concerns differentiated the small group of students who scored level 3 marks. The better scorers were also able to give appropriate real-life examples, demonstrating their ability in applying and analysing the issues at hand.

Students who were able to synthesize the two opposing view and establish an acceptable middle ground in terms of time frame (SR vs LR), nature and the size of economies, and overcoming conflicts of macro-economic goals were able to score higher evaluation marks.

Intro:

Define globalisation: Globalisation refers to the process that integrates a freer flow of goods, services, capital and people of most economies, making countries increasingly dependent upon each other.

Define protectionism: Protectionism refers to restriction of international trade. It prevents consumers and producers reaching the equilibrium price and quantity that would prevail in a free market.

Methods of protectionism include tariffs and non-tariff barriers such as quotas.

<u>Thesis (1): Protectionism is desirable (Any 2-3 arguments)</u>

(a) to protect local industries (DCs) and Infant Industries (LDCs context) and safeguard employment

Firstly, protectionism might be desirable because it can protect local industries for developed countries (DCs) and infant industries for less developed countries (LDCs).

For instance, in the case of DCs, as imports increase, domestic firms will have to lay off workers as a result of fall in domestic output.

This can lead to structural unemployment, particularly in industries which have lost comparative advantage.

LDCs may want to protect infant industries that have the potential to develop a comparative advantage in the future, when they eventually become efficient to compete internationally.

This is because an infant industry needs time to grow develop its efficiency to the point where it would be able to compete with foreign competitors without any protection.

(b) to protect against 'unfair' foreign competition such as dumping and subsidies

Second, governments may want to protect against 'unfair' foreign competition such as when foreign firms sell their goods below marginal cost i.e. dumping.

The government thus prevents imports from being 'dumped' onto the domestic market.

Thus it reduces the possibility of foreign firms forcing domestic firms out of the market in order to gain monopoly power.

(c) to correct a BOP deficit

If a country is experiencing a BOT deficit (or a current account deficit) ceteris paribus, it would lead to a BOP deficit (i.e. import expenditure > export revenue).

Thus, in order to reduce this deficit, it may impose trade barriers on imported goods which reduces import expenditure, thus reducing the BOT deficit, assuming export revenue remains unchanged.

(**d) to diversify the economy and improve self-sufficiency**

Many developing countries have traditionally exported primary products such as food and raw materials.

World demand for these products however is fairly income inelastic and grows relatively slowly compared with that for manufactures.

Hence, free trade is clearly not an engine of growth for countries specialising in primary production.

Instead it may be a valid argument for developing countries to protect or promote its manufacturing industries.

Thesis (2): Protectionism can be more beneficial than globalisation

Firstly, globalisation often leads to rising competition in the global arena that results in the fall in export competitiveness and employment issues for those countries that are unable to keep up.

Falling export-price competitiveness will lead to a more than proportionate reduction in the volume of exports, ceteris paribus, especially if the demand for their exports is price-elastic.

As a result, export revenue will fall, signalling to the domestic firms to cut back on production, thus leading to an increase in (structural) unemployment.

If the government of these DCs implement protectionist barriers, it will help protect these domestic firms from increasing international competition at least in the short run.

Evaluation: However, this may lead to a huge cost of financing, in which the governments in these LDCs many not have the necessary budget to do so.

If they resort to borrowing from international sources, they might lose a degree of sovereignty or might lead to future debt repayment problems.

Second, protectionism shields the country from excessive vagaries of globalisation and limits the volatility of external shocks affecting trade and capital flows.

As a result of these volatile external shocks, the economy can swing from high prosperity to sharp economic recession or "hard landing".

Third, protectionism might be more beneficial because it protects workers and reduces the risk of rising income inequality under globalisation.

This is because globalisation would lead to an increase in demand for and hence high wages for those highly-skilled workers.

However, it also results in forcing down the wages of unskilled labour, thus leading to widening income gap between skilled and unskilled workers.

Antithesis (1) Globalisation is beneficial

On the other hand, globalisation can also be beneficial because the freer flows of trade, capital, labour and ideas can lead to an increase in exports and foreign direct investment (FDI), and subsequently an increase in actual and potential growth.

Explain Positive effects on the economy→ Increase in net X and I (+ve) → EG and higher material standard of living if economies produce goods and services according to their CA:

For an economy which participates in international trade in general according to its comparative advantage, the removal of trade barriers on one's exports in the global market will enlarge its export markets.

Analyse the macroeconomic effects on an economy embracing globalisation:

Internal/ domestic economy (SR): When net X and I increase→ multiple increases in AD and NY via K → economic growth → lower unemployment rate

Draw and analyse AD-AS diagram and explain effects

Internal/ domestic economy (LR):

Higher I→ rise in AS due to higher productive capacity→ AS increases in the LR→ LRAS curve shifts to the right increased potential growth and further increases in NY via the multiplier and accelerator process.

All these will translate to higher material SOL as higher income leads to an increase in purchasing power for goods and services.

External economy (SR): Higher net X→ improvement of the current account→ ceteris paribus, improvement of the BOP→

Also: Higher FDI inflows→ strengthening of the capital and financial account and BOP, assuming ceteris paribus.

External economy (LR): Higher FDI flows can help an economy in developing new niche areas to remain globally competitive, such as the development of the biotechnological, biomedical and pharmaceutical industries in Singapore

Evaluation: Link to conflict of macroeconomic goals→ possibility of ER appreciation if left to free market forces→ lose export-price competitiveness

Evaluation: Link to conflict of macroeconomic goals→ can lead to demand-pull inflation in the SR if an economy is operating near or at classical range of the AS curve

Anti-thesis (2): Globalisation can be more desirable than protectionism

Explain disadvantages of protectionism (i.e. arguments against protectionism) & how globalisation can help to achieve better results/ costs & challenges than protectionism (i.e. reduction in inefficiency etc.)

Whilst protectionist barriers can help to protect domestic firms and safeguard home employment, it will probably result in more inefficiencies in the long run, with deadweight losses.

All these will result in greater misallocation of resources and persist even in the long run.

On the other hand, globalisation benefits the economy, as long as countries produce according to their comparative advantages.

In the long run it is possible that globalisation leads to an increase in efficiency and gains for all in in the long run, though there could be disparities in the short run. However, having said that, whether globalisation can be more desirable than protectionism depends on the following factors:

1) Nature of the economy: Globalisation will be more desirable than protectionism for small and open economies such as Singapore and Hong Kong, because trade is their engine of growth. Net exports (X-M) is their most important component in their AD.

Thus, if these small and open economies embrace globalisation, they will tend to enjoy higher economic growth and also higher material standard of living.

Degree and nature of protectionism (i.e. reason for protectionism:

If an economy protects its economy in the short run to avoid the possibility of hard landing due to external shocks, then protectionism might be more desirable, as it allows the economy to smooth out possible cyclical and structural unemployment.

3) Whether or the government have policies in place to circumvent the negative impacts of globalisation:

If they have the necessary policies in place, then the negative impacts of globalisation would be minimized while they maximise the gains from globalisation.

Singapore has in place demand-management policies to solve macroeconomic instabilities in the short run and long-run supply side policies to help ease the low-skilled workers into the sunrise industries.

For example, the SkillsFuture Programme helps workers to upgrade their skills as well as to help them with career progression and life-long employment.

Evaluative conclusion:

Despite the ills of globalisation, advancements in technologies have seen an increasing number of countries embracing globalisation and the benefits of trade in goods and services and investment.

However, with increasing interconnectedness of countries, protectionism may be valid in the short run should unfair trade practices occur, or adjustment of time needed for countries to reallocate resources in response to changing international demand and supply conditions .

Condensed Outline:

Intro:

- Define protectionism and globalisation
- Instruments used to protect (tariffs, quotas etc)

Development:

Protectionism is desirable (Thesis)

- Protect local and infant industries (For both DCs and LDCs)
- Protect against damaging and unfair practises
- Protect to correct BOP deficit
- Protect to diversify, strategic industries

Protectionism is more beneficial than globalisation (Thesis)

- Negative effects of globalisation
- Rising competition → need to protect workers
- Curb volatility of AD and economic growth

Globalisation is desirable (Anti-thesis)

- Positive effects
- Increase in NX and material SOL
- Macro effects on economy (SR → AD increases, national income increase via multiplier, LR → AS increases through higher productivity capacity)

Conflicts –

1) ER appreciates
2) DD pull inflation

Disadvantages of protectionism

- High cost of protectionism
- Ineffective, trade wars, retaliation, beggar – thy – neighbour effect

Disadvantages of globalisation

- Dependency
- Widening income disparity

Conclusion:

Depends on nature of economy, why and when protectionism is needed. SR may be possible but not LR.

Knowledge, Application, Understanding and Analysis		
Level	**Descriptor**	**Marks**
High L3	For a well-developed answer that explain the 2 theses and anti-theses in a very detailed manner, with application to appropriate real-life examples for a comprehensive analysis and to support the choice of argument in a more compelling manner.	**19 – 21**
Low L3	For a well-developed answer (i.e. either 2 theses & 1 anti-thesis ***or*** 1 thesis & 2 anti-theses) that uses appropriate real-life examples for a comprehensive analysis and to support the choice of argument in a more compelling manner.	**15 - 18**
High L2	For an underdeveloped answer that uses appropriate real-life examples to analyse and to support the choice of argument in a rather compelling manner. **OR** For an underdeveloped answer that provides 1 thesis and 1 anti-thesis (lack of scope) but is still able to provide appropriate real-world examples to support the choice of argument in a rather compelling manner.	**11 - 14**
Low L2	For an answer that provides two-sided answers but is underdeveloped for either the thesis or the anti-thesis **[Max 10m]** For an answer that provides a one-sided answer (i.e. protectionism is better than globalisation ***or*** globalisation is better than protectionism)	**8 - 10**
L1	Mere listing of theoretical knowledge of the positive and negative impacts of globalisation or protectionism, but with some conceptual errors displayed.	**1 – 7**
Evaluation		
E2	**Well-presented and evaluative conclusion** that answers that acknowledges which is more desirable, and recognises at the same time that there are both benefits and costs for protectionism and globalisation, though the latter is the more inevitable scenario. Could propose other longer-term policies/ initiatives to reduce / minimize the costs of globalisation since the latter is more inevitable and the	**3 – 4**

	scenario that most countries embrace. → extend/ extrapolate to the future	
E1	**Brief** or **vague** conclusion that contains unjustified evaluations, recognising that there are costs and benefits without stating a stand (i.e. which is ***more*** desirable?)	**1 - 2**