

ai)	<p>Describe the trend in market expenditure of insulin drug in China from 2007 to 2012.</p> <p><u>Answer Requirements</u></p> <p>General Trend (1m)</p> <p>Refinement (1m)- try to look at the exception.</p> <p>Strengths</p> <ul style="list-style-type: none"> Most students <i>are able to describe the general trend as increasing trend.</i> <p>Weaknesses</p> <ul style="list-style-type: none"> However some did not use the line data for YOY Growth to get the refinement mark. Instead they used the overall trend line when there was a more accurate depiction of the rate of change from the YOY line. Few wrote “fall in expenditure” in 2010 when it was the rate of rise that had fallen. <p><u>Answer</u></p> <ul style="list-style-type: none"> There is a generally rising market expenditure of insulin drug in China from 2007 to 2012. (1m) There was a spike in expenditure in 2009 (1m) OR there was an increase at a decreasing rate from 2009 to 2010(1m) 	[2]
ii)	<p>Using demand and supply analysis, explain the above general trend.</p> <p><u>Answer Outline</u></p> <ol style="list-style-type: none"> Rise in demand (det – no of diabetics) with evidence. Rise in supply (det – cost of prod.) with evidence. Diagram – must be referenced. Extent of DD shift > extent of SS shift → Rise in P&Q → Rise in TE = PxQ. 	[4]



Strengths

- Most students could correctly identify the demand (DD) evidence and link it to a correct diagram.

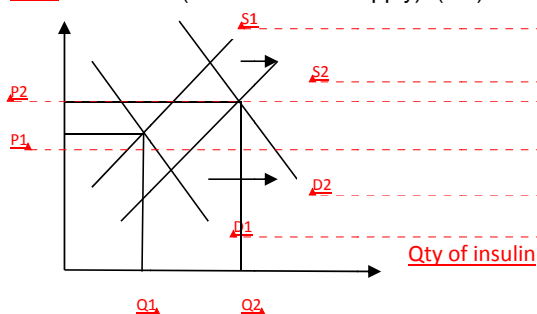
Weaknesses

- However most students could not identify the supply (SS) evidence even though the question specifically says DD-SS analysis.
- For the demand shift evidence found was often not linked to the non-price determinant of demand.
- Some cited a fall in supply due to tax on insulin. However this is not the context in China where subsidies are given for the drug.
- Diagrams that were not referenced were not awarded the diagram mark.
- The final link to the question was not present for some. I.e. Students linked to equilibrium Q only and did not link back to Market expenditure which is $P \times Q$.
- Some students mistook it as govt. expenditure
- Some students used PES to explain the trend. But PES does not explain why the rate of rise was slowing down

Answer

According to the first extract there is a rise in demand due to the (determinant of demand) increase in number of consumers in the market who are affected by diabetes and insulin is an important drug for these patients (evidence) . (1m)

Furthermore, there is an evidence of rise in supply due to the (evidence) health insurance subsidies which will lower the cost of prc Price insulin (determinant of supply). (1m)



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	<p style="text-align: center;">Q1 Q2</p> <p>In this case, <u>demand has most likely increased (from D1 to D2) by a larger extent than the supply (from S1 to S2)</u> due to the “dramatic rate” of rise in the number of diabetes patients. Thus, equilibrium Price has increase from P1 to P2 and equilibrium quantity has increased from Q1 to Q2. The rise in price and quantity would lead to the <u>rise in total expenditure</u> on insulin. (1m)</p>	
bi)	<p>In light of Extract 2 explain the case for govt. intervention in the market for insulin, the drug for diabetes.</p> <p><u>Answer Outline</u></p> <ol style="list-style-type: none"> 1. Free market equilibrium and society's optimal (1m) 2. Identify source of externality (MEB with e.g. from extract) 3. Existence of positive externality OR imperfect information and divergence between MSB and MPB (1m) 4. Underconsumption of merit good (1m) 5. Link to the diagram (1m)→ X-axis to be labelled as qty of insulin <p><u>In the case of an answer from non-efficiency point of view</u></p> <p>→ Need to rationalize why govt. would want to subsidise the drug when it is too expensive. Max 3m for this way of analysis</p> <p>→ Equity based rationale — Sake of equity - access to insulin drug for all.</p> <p>Strengths</p> <ul style="list-style-type: none"> • Students who were able to identify the question to be a market failure question were able to apply the 7-steps process well, link to correct sources with a properly labelled diagram. They also tried to make use of the evidence in the extract. <p>Weaknesses</p> <ul style="list-style-type: none"> • However the weak scripts did not address the question as they misinterpreted the question to be explain how government intervenes in the market to bring insulin prices down. This lead them to use the demand supply framework instead. 	[5]



	<ul style="list-style-type: none"> • A number of students identified the source as 'diabetes' i.e. labelled the x-axis as no. of diabetic pple →HOW CAN DIABETES BE A SOURCE??! It is not a consumption or production activity. It is one of the negative consequences of bad eating habits/unhealthy living (a source of –ve externality). • Some students argued from positive externality of production p.o.v. These arguments tend to be weaker as they could not clearly show how underproduction was harmful for the society in the case of insulin. • Many students did not support the answer with evidence from the extract. • Many did not state the conditions for social optimal levels of output to be achieved. • Many stated under consumption without stating the amount QfQs. • There were those who argued from the equity point of view for government intervention. This was accepted. They needed to rationalize why governments would want to subsidise the drug when it is too expensive. Max 3m for this way of analysis. <p><u>Answer</u></p> <p>Diabetes is a chronic disease and there is a need to cure it or keep it under control. Thus, insulin in this case would be considered to be a merit good which, when consumed at the right amount, will lower the extent of damage that diabetes would cause on the individual and to the society. According to extract 2 diabetes not only causes damage to the individual's health but also imposes a cost on the society by lowered productivity and a burden on the govt./health care authorities. If insulin is consumed at the right amounts by the individuals, these problems can be avoided.</p> <p>In a free market, in the absence of the govt., individuals will only consume insulin upto the point Qf where their $MPC=MPB$. In this case, the MPC is the price they have to pay, which according to the extract is very high (so lower income group may not be able to afford it) and the MPB is the lower blood glucose level or good health. But they do not realize the MEB that they can generate by consuming the insulin which would be higher productivity for the society, lower burden on family/govt. Due to the presence of the MEB, $MSB>MPB$. The patients will also have a lower perceived MPB as compared to the actual</p>	
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	<p>MPB (higher productivity of self in the future and avoid other health problems) from consuming the drug. Assuming there are no MEC, $MSC=MPC$. Overall, the society's optimal is at $MSC=MSB$ at Q_s. Thus, there will be under-consumption of Q_f amount, leading to a dead weight loss as shown by the shaded area in the diagram. Thus, govt. needs to subsidise the drug to lower the MPC and bring the consumption to the society's optimal.</p>	
bii)	<p>Assess if subsidising insulin helps to ensure efficient and equitable access to healthcare for diabetic patients in Singapore.</p> <p><u>Answer Requirements</u></p> <p>Command: Assess</p> <p>Content: Market failure policies</p> <p>Context: Singapore healthcare</p> <ol style="list-style-type: none"> 1. Use of policy (subsidies) to correct the market failure. <ul style="list-style-type: none"> -Show how subsidies will lead to efficiency and equity (both must be shown) in healthcare. 	[8]



	<p>2. Limitations of subsidies in achieving efficiency & equity.</p> <p>3. Analyse an alternative policy</p> <p>4. Take a stand. (<i>Keep in mind Singapore's context.</i>)</p> <p>Strengths</p> <ul style="list-style-type: none"> Those who answered part bi) correctly were able to answer this question well- analysed the pros and cons of subsidies. Some good answers compared this policy with moral suasion. Very good answers took a well justified stand. <p>Weaknesses</p> <ul style="list-style-type: none"> Many student did not analyse both efficiency and equity. Either one was explained. Those who tried to explain how subsidies lead to allocative efficiency did not explain the process of achieving efficiency well for example, what amount of subsidy is required, how it lowers the MPC etc. Many students incorrectly wrote that subsidy will increase the MPB. Students failed to use the Cost/Benefit framework analysis when showing how subsidies will/or will not lead to efficient allocation of resources. These answers tended to lack rigor in analysis. Comparison of subsidies with other policies was not done. Many answers did not make a stand. <p><u>Answer</u></p> <p>Without govt. intervention there will be under-allocation of resources in the health care market and price of some drugs may be beyond the reach of certain patients. As such, it is important for the govt. in Singapore to adopt certain policies to ensure this disease can be kept under control, especially considering the already small labour pool of the economy which needs to be highly productive at all time. The ageing population in Singapore also requires the govt. to take special attention to healthcare services.</p> <p><u>Subsidies in healthcare will ensure efficiency and equity</u></p> <p>When govt. subsidises healthcare for diabetes, the MPC of availing the services/drugs will fall. If the subsidies are correctly measured and are thus, equal to the amount of the MEB, MPC will fall until it is equal to</p>	
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**Setting the
tone for the
essay.**



	<p>the MEB at the quantity that ensures efficient allocation. With fall in MPC (by the amount of MEB), private individuals will consume at $MPB=MPC$ and thus <u>society's optimal can be reached in this market</u>. If left to market forces, as seen in the previous answer, drugs for diabetes and may be, general health care for diabetes will be under-consumed. Making the services affordable by subsidizing them also allows for the lower income group (evidence says that subsidies will be given to the eligible patients and based on paying status) to be able to afford the drug/healthcare facilities, thus ensuring <u>equitable access</u>. Without the subsidies, as the extract says about the case in different countries, many will not be able to afford the drug. Given the income gap in Singapore, this may become a pertinent problem. Thus, subsidies are required to ensure efficiency and equity.</p> <p><u>Subsidies in healthcare for diabetes may not ensure efficiency and equity</u></p> <p>It will be hard to measure the correct amount of subsidies as it is hard to have an accurate quantitative value for the MEB. Miscalculation will either lead to over/under allocation and thus, efficient allocation will not be reached and there will be wastage of finite resources which could have been used elsewhere. It may also lead to over-reliance on govt. subsidies and thus, the healthcare providers may not have the incentive to lower the cost/look for alternative ways to lower the price of the services.</p> <p>Although in Singapore subsidy is only granted to those who need it most (according to the extract), there is always a chance of exploiting it. Individuals may under-declare their income (tuition teachers, for example) and thus, those who genuinely need the benefit may be deprived from it as there will be a limit to how much subsidies govt. can provide. At the same time, patients diagnosed with diabetes but not yet in the need to depend on diabetes medicines/drug may start</p>	<p>Context of Sg.</p> <p>Explain HOW it achieves efficiency</p> <p>Explain HOW it achieves equity</p> <p>Limitations in terms of achieving efficiency</p>
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		<p>Singapore's context are consistent.</p> <p>Clear analysis on HOW the policy achieves efficiency and equity with the aid of a diagram. The answer is two-sided and is well elaborated.</p> <p>Alternative policy has been analysed. This could be something from the extract or outside of it.</p> <p>Equity required only to get L3-6</p>		
	L2	<p>The answer attempts to explain HOW the policy achieves efficiency and/or equity. The answer is two sided but lacks depth. Evidence and Singapore's context have been used but inconsistently. The answer attempts to present two-sided arguments.</p> <p>Alternative policy has been analysed but not in detail. (at least an attempt has been made)</p>	3-4	
	L1	<p>Superficial answer that doesn't make any attempts to explain HOW the policy achieves efficiency and equity. The answer lacks depth of elaboration and use of evidence/Singapore's context.</p>	1-2	
	E2	<p>Justified stand based on Singapore's context had been provided (and the answer attempts to provide solutions)</p>	2	
	E1	<p>Stand taken on whether subsidies are effective but not justified.</p>	1	
c)	<p>Explain how the increase in attractiveness of medical suites in Singapore will affect the resource allocation in the market for private residential property.</p> <p><u>Answer Requirements</u></p> <ul style="list-style-type: none"> • Explain the concept of Competitive Supply • Demand/ supply framework. (Diagram not needed) • Link back to how resource allocation in the market for private 			[3]



	<p>residential property is affected.</p> <p>Strengths</p> <ul style="list-style-type: none"> Most students could identify that this was a question on competitive supply. <p>Weaknesses</p> <ul style="list-style-type: none"> Those who were able to identify the relationship as competitive supply, did not justify why the goods are in competitive supply. i.e. the use of similar resources like land. While many knew intuitively less resources will be allocated to private residential property and stated this they did not augment this with explicit demand supply analysis to show how this conclusion was reached. This showed lack of economic analysis in their answers. The weak scripts claimed increased attractiveness lead to a rise in SS rather than DD displaying that they were not linking the rise in DD or SS to it's determinants. In other words, the explanation of the related market case was very weak → qty supplied of one market and supply in another market was not very well brought out. <p><u>Answer</u></p> <p>Medical suites and private residential property are likely to be in <u>competitive supply as they use similar resources for construction</u>. These resources would include- land, the builders/workers and even the capital. (1m)</p> <p>As demand for medical suites increases from, <u>price of these suites will increase (assuming Supply doesn't change) and so will generate higher expected returns. Thus, the quantity supplied of medical suites will rise.</u> (1m)</p> <p>This will leave less resource to be allocated for the construction of private residential property, leading to a <u>fall in supply and a rise in price of these properties. This is supported by the evidence in extract 3 which shows that rising development of medical suites will send warning signs for the private residential property.</u> (1m)</p> <p><i>**No diagram is required as it is only a 3m question</i></p> <p><i>***use of evidence is a must to secure the 3rd mark</i></p>	
d)	Discuss the impact on SOL as a result of foreign investment in	[8]



	<p>hospitals in China.</p> <p><u>Answer Requirements</u></p> <p><i>Command:</i> Discuss→ requires two-sided analysis. The answer must present various perspectives and should have a clear stand/synthesis</p> <p><i>Content</i>→ FDI (understand the meaning of FDI) and SOL→material/non-material, Impact→positive, negative</p> <p><i>Context</i>→ Hospitals in China</p> <p><u>Outline</u></p> <p><u>Rising FDI in the hospitals in China will lead to a higher SOL</u></p> <ul style="list-style-type: none"> • Rising FDI → Growth in GDP and employment → Material SOL <p><u>Rising FDI in the hospitals in China will not lead to a higher SOL</u></p> <ul style="list-style-type: none"> • Rising FDI → Pollution & Foreign control of industry → Non-Material SOL <p><u>Synthesis</u></p> <p>Strengths</p> <ul style="list-style-type: none"> • A number of students attempted to divide in terms of material and non-material SOL and so these answers hit atleast Low/high L2. <p>Weaknesses</p> <ul style="list-style-type: none"> • Many did not see the importance of giving a proper definition of SOL which is symptomatic of many other essays where students fail to define the keyword of the question and lose the opportunity to frame their thinking about the question and it's required depth of analysis. For e.g. if they properly defined SOL, they would have realised that there is the non-material aspect that needs to be covered too and would have reached level three marks. • There was a lack of clear links between the upside or downside of FDI inflows and material SOL. E.g. Students need to show that a rise in GDP means greater access to goods and services therefore a rise in material SOL. • Most students did not make good and detailed used of the evidence provided in the extracts as a result, they were not able to reach L3. 	
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	<p><u>Answer</u></p> <p>Standard of living refers to the overall quality of life in an economy and can be divided into material and non-material SOL. Material SOL refers to the amount of goods and services that an individual has access to in an economy and is determined by the inflation rate, Real GDP per capital and unemployment rate in an economy. Non-material SOL takes in to account the intangibles of life and is generally determined by the level of education and health care facilities as can be measured by literacy rate and infant mortality rate respectively, level of pollution etc. in the country. It is thus, quite clear from the definition that having more investments in healthcare would tend to have an impact on the SOL. However, it is also important to analyse the impact when this healthcare investment has not originated domestically but has been received from the foreign investors. In this context, China's economy will be analysed- an economy which has fast growth in terms of GDP, yet the healthcare has not been accessible to all, according to the extract. It is also a country with growing diabetes according to the extract and also, ageing population.</p> <p><u>Rising FDI in the hospitals in China will lead to a higher SOL</u></p> <p>Increase in FDI would lead to rising AD for the country and would also lead to rise in AS as it builds the capacity for the nation in terms of healthcare facilities. Overall, with the rise in healthcare investment, it will bring in increased GDP (as economic activity in the country has increased), assuming everything else remains constant. The new hospitals in China (with investment from HongKong, Macau etc.) will also generate more employment opportunities for the locals in healthcare services. Together, the <u>material SOL</u> will improve for the economy.</p>	<p>Definitions</p> <p>Linking to the question</p> <p>Link to the context to set the tone</p> <p>Brief link to GDP and employment and material SOL</p>
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	<p>The extract also shows that Chinese nationals have not had access to good healthcare system. Opening up the market to FDI in healthcare will thus, have many benefits. <u>Firstly</u>, it will increase competition/increase supply in the country for healthcare and so the prices will be lowered. This will make it more affordable for a larger proportion of the population. <u>Secondly</u>, the increase in the number of hospitals and healthcare services will also make it more accessible for the population (evidence: number of locations where foreign investors can set up hospitals will rise). <u>Thirdly</u>, the FDI, according to the extract, will lower the burden on the public hospitals which means they can now re-allocate the resources (“modernize the sector” according to the extract) to improve the quality of their services. Meanwhile, foreign investments/hospitals are likely to come with better medical infrastructure.</p> <p>Together, a competitive price (low price), more numbers of healthcare providers and improved quality of services, <u>the non-material SOL will improve</u> as the Chinese nationals can now avail cheaper, yet better healthcare. This will be especially true for the ageing population who are in most need and also patients suffering from chronic diseases like diabetes, but were not able to afford the treatment previously.</p> <p><i>(**Important note to markers: Any 2 of the above points to link to the non-material SOL will be sufficient to hit L3, but answer must have good use of evidence)</i></p> <p><u>Rising FDI in the hospitals in China will not lead to a higher SOL</u></p> <p>The foreign investment in the healthcare in China may not employ the locals but instead, have medical practitioner from their own countries. Thus, it may not increase the <u>material SOL</u> in China via rise in employment rate as was initially claimed/predicted.</p> <p>With regard to <u>non-material SOL</u>, the extract does throw light on some</p>	<p>Link to non-material SOL and link to the evidence /context</p>
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	<p>doubts prevailing over the control/ownership of the healthcare facilities by the foreign investors. If they gain a control on this sector of strategic importance, they may exploit the consumers by charging a very high price. In this case, the healthcare facilities will not be made available to all and will end up worsening the existing inequity issues that prevails in Chinese healthcare sector. The domestic sector may not be able to compete with the foreign investors which may lead to them being crowded out/downsized of the healthcare industry and thus, this key sector will become vulnerable to external shocks. Overall, the non-material SOL will decline.</p> <p>(**Additional points: During the construction stage of the hospitals/healthcare institutions there might be noise pollution/air pollution which may lower the <u>non-material SOL</u> in the country)</p> <p><i>Overall Conclusion</i></p> <p>Opening up the healthcare sector is more likely to bring benefits to the nation with growing ageing population and chronic diseases. It increases competition and variety. The negative impacts can be easily minimized by govt. having substantial control/monitoring on the pricing and other strategies of the foreign healthcare providers. Also, the govt. may protect the domestic industry with some aids/subsidies in the initial years and make it competent to compete with the foreign investors before opening up the sector entirely. This will ensure that the sector always has participation of both the domestic healthcare providers/govt. hospitals and also the foreign healthcare services. Drawing example/evidence from other countries will show that having foreign participation in the healthcare services has done more good than harm to the domestic healthcare sector.</p> <table border="1" data-bbox="229 1653 997 1845"> <tr> <th>Levels</th><th>Descriptors</th><th>Marks</th></tr> <tr> <td>L3</td><td>The answer analyses <u>both positive and negative impacts</u> on <u>material and non-material SOL</u>. <u>Case evidence</u> has been used</td><td>5-6</td></tr> </table>	Levels	Descriptors	Marks	L3	The answer analyses <u>both positive and negative impacts</u> on <u>material and non-material SOL</u> . <u>Case evidence</u> has been used	5-6	<p>Link to the evidence and back up of content to show possible threats to non-material SOL</p> <p>Stand</p> <p>Justification</p>
Levels	Descriptors	Marks						
L3	The answer analyses <u>both positive and negative impacts</u> on <u>material and non-material SOL</u> . <u>Case evidence</u> has been used	5-6						



		well to support the arguments. Understanding of the healthcare sector and its nature in China is evident throughout.		
	L2	The answer attempts to link foreign investments in healthcare to <u>both material and non-material SOL</u> however, the <u>positive and negative impacts are not well developed</u> , i.e., the answer has a tendency to be one-sided (mostly positive or negative impacts analysed). Answer attempts to link to the case evidence but not consistently. Low L2- Largely one sided but used both material/non-material SOL and also uses case evidence.	3-4	
	L1	The answer does not make use of evidence from the CSQ and does not link to both material and non-material SOL (ie., links to either one only).	1-2	
	E1	Overall stand taken on whether it is good or bad for China's SOL to have foreign investment	1	
	E2	Stand taken is well justified by reasons and suggesting possible ways to minimize the problems .	2	

CSQ2

(ai)	Describe the trend in the exports of goods and services as a percentage of GDP for China. [2]



	<p><u>Suggested Answer:</u></p> <p>General Trend: Overall % shows a <u>falling/decreasing</u> trend. [1]</p> <p>Refinement: <u>Sharp fall</u> between <u>2006 and 2009</u>. (or any period between 06 to 09) [1]</p> <p><i>Note: We do not accept the answer: "lowest % in 2009" as it is not a trend. Neither are we accepting any other refinements as they are not nearly as significant as the sharp fall between 06-09.</i></p>
	<p><u>Examiners Comments:</u></p> <ul style="list-style-type: none"> • Some candidates merely describe periodic changes (i.e. from Year X to Year Y without pointing out what was significant) • A handful gave description of trends i.e. describing it year by year/period by period. They failed to realise that they need to give an overall trend, followed by a refinement. • Some just went on to compare between years. • Some did not qualify the extent of the fall from 06 to 09 • Many did not specify the period of sharp fall, and stated that the sharp fall occurred in 2009, which is factually inaccurate. • A significant handful of scripts pointed out insignificant refinements such as the small increases in some periods.
aii)	<p>Consider whether the above trend allows us to make a judgement on China's Balance of Trade. [3]</p>
	<p><u>Suggested Answer:</u></p> <p>Definition of BOT: <u>Difference</u> between a country's <u>export revenue and import expenditure</u> [1]</p> <p>Explaining the effect of the fall in X on BOT, ceteris paribus: <u>Fall in X should lead to a fall in BOT</u> / worsening of BOT. [1] (<i>BOT deficit will not be accepted.</i>)</p> <p>Explaining that whether this will lead to an adverse BOT requires us to look at the <u>relative decrease between export and import values</u>, i.e. if import values are falling as well, there may not be a fall / decrease in BOT. [1]</p> <p>(Or</p> <p>Explaining that data given is merely a <u>percentage of the overall GDP</u>: Since the data given only shows BOT as a percentage of the overall GDP, it does not give us enough information to make a judgment on the relative change of the BOT as the percentage change could have arisen due to a change in GDP and not BOT. [1])</p> <p>Conclusion: We are <u>unable to make a judgment</u> on China's BOT based on the above data. [1]</p> <p><i>(conclusion mark only given if: both fall in X and the ambiguous change in M were</i></p>



	<i>explained)</i>							
	<p><u>Examiners Comments:</u></p> <ul style="list-style-type: none"> • Most did not define BOT. • Many did not explain effect of fall in X on BOT, ceteris paribus. • Many equated BOT to BOP, failing to realise the difference between the 2. Many also thought that BOT = CA. • Many used the terms 'exports' and 'imports' to refer to both volumes and revenue/expenditure. This is confusing and students should take notice to use clearer terms (export revenue, import expenditure, volume of exports etc.). • Some students erroneously thought that exports referred to (X-M). 							
(b)	<p><u>With reference to Extract 1, assess if Asian markets should embrace globalization. [6]</u></p>							
	<p><u>Suggested Answer:</u></p> <p><u>Thesis: Globalization is necessary/beneficial for Asian markets.</u></p> <p>Benefit: With trade, countries can now import goods from different countries and regions. This <u>enhances consumer choice</u> since there is now a tremendous range and variety of goods that they can choose from.</p> <p><i>Evidence: Asian firms face global competition at home. Thanks to social media and the internet, they are now influenced by trends around the world. So in many industries companies in emerging Asia face competition from global firms <u>selling to customers whose tastes are more globally influenced than before.</u></i></p> <p><i>(Or any other relevant point from extract)</i></p> <p><u>Anti-Thesis: Globalization might be harmful/detrimental to Asian markets.</u></p> <p>Cost: In order to allow existing domestic firms to go global involves significant restructuring of existing business models. This might lead to an <u>increase in unemployment in certain sectors</u> for locals due to processes such as outsourcing to other emerging economies.</p> <p><i>Trying to become a multinational is the hardest path to going global. It involves wrenching change, great risk, lots of scrutiny and the <u>disposal of peripheral businesses in order to concentrate resources.</u></i></p> <p><i>(Or any other relevant point from extract)</i></p> <p><u>Conclusion: Asian markets need to embrace globalization, as evidenced: "In most industries it is hard to stay competitive without being active worldwide. Insularity does not work."</u></p> <table border="1" data-bbox="220 1783 1099 1850"> <tr> <th>Levels</th><th>Knowledge, Application, Understanding and Analysis</th><th>Marks</th></tr> <tr> <td></td><td></td><td></td></tr> </table>		Levels	Knowledge, Application, Understanding and Analysis	Marks			
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	L3	Well-balanced answer that clearly analyses the benefits and costs of globalisation in the context of the extracts. It includes both evidence from the extract and economic theory <i>Overall conclusion is required for 6marks.</i>	5-6
	L2	Two sided answers with incidental use of economic theory that is not based on the context of the extracts. Also for answers that consists of incorrect economic theories or if explanation is too brief or lacking in evidence.	3-4
	L1	One-sided answer that doesn't consider the benefits and costs; "To embrace or not to embrace.	1-2
	<p><u>Examiners Comments:</u></p> <ul style="list-style-type: none"> • Most students were able to give 2 sided arguments but failed to explain with the relevant theory or evidence. • Some just quoted evidence without any links to economic concepts. • Some also did not synthesise after providing both sides of arguments. • Many students argued that globalisation was not necessary for China due to their large domestic sector being sustainable instead of focusing on the harmful/detrimental effects of globalization. This answer was accepted but students will need to refer closely to extract evidence that clearly shows this rise in domestic demand being sufficient for sustainable economic growth in China. 		
c)	Explain two ways in which Free Trade Agreements have benefitted the Singapore Economy. [4]		
	<p><u>Suggested Answer:</u></p> <p>Theory: Increased trade increases GDP, which raises material SOL. [1] Evidence: (Extract 2) Total bilateral trade has risen 70 per cent in the same time to US\$67.9 billion. [1]</p> <p>Theory: Increased capital flow into Singapore which could lead to an increase in both actual and potential economic growth. [1] Evidence: (Extract 2) The US-Singapore Free Trade Agreement (FTA) has raised bilateral trade and made Singapore the largest recipient of US investment in the Asia Pacific as of 2012. [1]</p> <p>Theory: Increased employment opportunities for Singaporeans both locally and abroad and the inflow of foreign labour who could share their expertise to help improve the Singapore economy. [1] Evidence: (Extract 2) The FTA has raised Singapore's profile in the US and allows easier movement of people between the countries [1]</p> <p>Any 2 reasons for 4 marks.</p>		



	<p><u>Examiners Comments:</u></p> <ul style="list-style-type: none"> • Most could find the evidence from the extract but were either inaccurate or did not link it clearly to a theoretical explanation of the benefits of FTA. • Most used the extract evidence of increased bilateral trade by 70%. It should be noted that the rise in bilateral trade may not guarantee that net exports for Singapore had indeed increased. It may have meant that there was more overall trade between the 2 countries. To be more accurate, students need to state the assumption that the rise in bilateral trade has led to a growth of exports revenue by more than the import expenditure for Singapore. • Some only explained benefits of one flow (trade/investment/labour) and gain only half credit. Students should realise that since FTAs affects trade, labour and investment flows. Thus, the discussion of one flow is not enough. Some students provided two different pieces of evidence that points towards only one flow, e.g. trade. Such answers were also only given half credit because of the lack of scope. • Those who explained labour flows tended not to link to benefits using economic analysis. i.e. increase in LRAS.
(d)	<p>Using AD/AS analysis, explain how a “combination of easy money and a tight labour market” can lead to inflation. [5]</p>
	<p><u>Suggested Answer:</u></p> <p>Inflation is defined as a sustained increase in the general price level. General Price Level is defined as the average price of goods and services in an entire economy. It is reflected in the intersection of aggregate demand and aggregate supply.</p> <p>Easy money as mentioned in the extract leads to a greater availability of credit where a rise in global liquidity which leads to a fall in the interest rate. This induces greater consumer spending. This rise in consumption leads to an increase in the economy's Aggregate Demand. [2]</p> <p>A tight labour market makes it more difficult to find and hire labour. This increase the firm's cost of production and thus, decrease the economy's Aggregate Supply. [2]</p> <p>The combined effect of a rise in AD and a fall in AS will lead to an unambiguous rise in the General Price Level, and thus leads to inflation. [1]</p>
	<p><u>Examiners Comments:</u></p> <ul style="list-style-type: none"> • Many students could not identify what it meant by 'easy money' or 'tight labour market'. Many related 'easy money' to either 'money that is easily earned' or that somehow consumers now have a higher disposable income due to easy money. Both were not accepted. Others related 'easy money' to 'hot money' or capital inflow, but were not able to explain how this might have resulted in increased money supply could lower interest rates. • Some related 'tight labour market' to SG being at full employment level. However, given the context of the case material, it is more likely to be a



	<p>situation of falling LRAS due to increase in cost of production due to falling productivity as a result of the ageing population.</p> <ul style="list-style-type: none"> • Some did not label AD/AS diagram properly or did not draw it at all. • Most students could identify AD increase and AS falling but could not explain the reasons behind the increase or decrease properly. 								
(e)	<p>Discuss the view that “exchange rate policy is still relevant for Singapore” [10]</p>								
	<p><u>Suggested Answer:</u></p> <table border="1"> <tr> <td>Introduction</td><td> <p>The Singapore economy is a small and open economy, with a small and limited pool of resources and is import-dependent. It has a large reliance on the external sector and a focus on outward oriented policies. Therefore, exchange rate policy has always been relevant for Singapore. This essay seeks to discuss if this is still the case.</p> </td></tr> <tr> <td colspan="2"> <p><u>Thesis: Singapore effectively employs the exchange rate policy.</u></p> </td></tr> <tr> <td>Point</td><td> <p>Singapore’s small size and lack of natural resources means that most of our basic necessities and raw materials have to be imported. Singapore’s total trade (X+M) is about three times that of GDP. Given Singapore’s small size, it does not influence world prices and is a price taker. Producers and consumers in Singapore have to accept prices dictated by global supply and demand conditions. As a result, the exchange rate directly affects the prices we pay.</p> </td></tr> <tr> <td>Elaborate and Examples</td><td> <p>MAS operates a managed float regime for the Singapore dollar. The trade-weighted exchange rate is allowed to fluctuate within a policy <u>band</u>, the level and direction of which is announced semi-annually to the market. The band provides a mechanism to accommodate short-term fluctuations in the foreign exchange markets and flexibility in managing the exchange rate.</p> <p>In the context of Singapore, an appreciating Singapore dollar results in lower prices of foreign goods and services imported into Singapore. This has the direct effect of lowering the prices that the economy pays for final goods and services imported into Singapore. If the imports are factor inputs, it has the added effect of lowering the cost of production of firms, as evidenced from the extract “... global oil prices have risen by an average of 16 per cent per year between 2010 and last year. But with a strong local currency, local petrol pump prices have increased by only 8 per cent over the period.”</p> <p>An appreciating Singapore dollar would also help to lower both demand-pull and cost-push inflation. As mentioned in the extracts, “if the MAS did not allow the Singdollar to appreciate, headline inflation would have been about 2.5 percentage points higher than the 4.6 per cent rate last year.”</p> </td></tr> </table>	Introduction	<p>The Singapore economy is a small and open economy, with a small and limited pool of resources and is import-dependent. It has a large reliance on the external sector and a focus on outward oriented policies. Therefore, exchange rate policy has always been relevant for Singapore. This essay seeks to discuss if this is still the case.</p>	<p><u>Thesis: Singapore effectively employs the exchange rate policy.</u></p>		Point	<p>Singapore’s small size and lack of natural resources means that most of our basic necessities and raw materials have to be imported. Singapore’s total trade (X+M) is about three times that of GDP. Given Singapore’s small size, it does not influence world prices and is a price taker. Producers and consumers in Singapore have to accept prices dictated by global supply and demand conditions. As a result, the exchange rate directly affects the prices we pay.</p>	Elaborate and Examples	<p>MAS operates a managed float regime for the Singapore dollar. The trade-weighted exchange rate is allowed to fluctuate within a policy <u>band</u>, the level and direction of which is announced semi-annually to the market. The band provides a mechanism to accommodate short-term fluctuations in the foreign exchange markets and flexibility in managing the exchange rate.</p> <p>In the context of Singapore, an appreciating Singapore dollar results in lower prices of foreign goods and services imported into Singapore. This has the direct effect of lowering the prices that the economy pays for final goods and services imported into Singapore. If the imports are factor inputs, it has the added effect of lowering the cost of production of firms, as evidenced from the extract “... global oil prices have risen by an average of 16 per cent per year between 2010 and last year. But with a strong local currency, local petrol pump prices have increased by only 8 per cent over the period.”</p> <p>An appreciating Singapore dollar would also help to lower both demand-pull and cost-push inflation. As mentioned in the extracts, “if the MAS did not allow the Singdollar to appreciate, headline inflation would have been about 2.5 percentage points higher than the 4.6 per cent rate last year.”</p>
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	Evaluation	However, the effectiveness of exchange rate policy can be undermined by the presence of time lags and lack of perfect knowledge and reliable information. Due to these lags in monetary policy, MAS formulates and conducts monetary policy in a forward looking manner based on reasonable assumptions of economic outlook and possible negative shocks.
	Link	It is important to note that exchange rate policy does not work alone in Singapore, but also include a mix of fiscal and supply-side policies.
	<u>Anti-Thesis: Singapore needs to focus more on other policies</u>	
	Point	Singapore should also make full use of its limited resources and maximise their per unit output. The most abundant resource in Singapore would be their labour force and hence, it is crucial to develop and stretch this labour force by using Supply Side policies to raise productivity.
	Elaborate and examples	<p>The increase in productivity will increase the maximum potential of Singapore economy and will lead to an increase in aggregate supply of Singapore. Thus, there will be potential economic growth for Singapore. Increasing the productivity will also increase the average wage rate of the workers and that will increase their ability to consume more.</p> <p>In Singapore, “A key prong in our restructuring strategy has been to <i>provide firms with strong support</i> for every investment that can improve productivity.” This is done through a variety of measures such as the <i>Productivity and Innovation Credit (PIC) scheme</i> and the Continuing Education and Training (CET) system.</p>
	Evaluation	However, supply side policies may not be effective in curbing inflations for Singapore as training the labour force usually faces large, significant time lags. The training process is also voluntary and it may take a while to complete. Many domestic investors may downsize their production level whereas the foreign investors may look for other neighbouring countries where labour cost is lower and there are more growth opportunities.
	Alternative Points	<p>Students could also consider the below policy but it should not be the focus of the anti-thesis:</p> <p>1) Fiscal Policy - In Singapore, policies often also have fiscal effects as they involve large amounts of government spending which can help to increase aggregate demand and hence national income, as can be seen from the extract, “<i>This extension will cost the</i></p>



		<p><i>Government a total of \$3.6 billion.</i>" This would result in actual economic growth as well as a fall in cyclical unemployment. However, fiscal policy is rather limited in use in Singapore due to our small multiplier. Although, this may still help in this 'era of slow growth.'</p> <p>2) Trade Policy - In addition to domestic-based fiscal and supply side policies, Singapore also needs to continue its stance in taking an outward oriented approach to trade. Beyond simply utilising exchange rates to manage the costs on foreign imports, Singapore needs to also aggressively pursue globalisation measures. One such way is to have multiple long-term partnerships with other trade partners through the signing of Free Trade Agreements. Examples include the US-Singapore FTA, the Sino-Singapore FTA etc.</p> <p>However, the MAS needs to take care of maintaining a stable exchange rate to ensure the success of trade policies. A rise in the external value of our currency can undermine export competitiveness whilst a fall in the external value may make imports more costly. Fluctuations in exchange rate might lead to investors finding it hard to estimate costs and profits. This will have an impact on businesses dealing with export and import of goods.</p>
	Conclusion	<p>Thus, exchange rate policy still relevant. However, given the multi-faceted nature of the economy, the government should consider combining its policies. These policies that will have impact on both the AD and the AS for the Singapore economy, Furthermore, the government can also push for greater trade integrations with other countries such as joining economic cooperations and signing FTAs. These trade policies will invariably help to support the existing demand management and supply side policies and help the government achieve its macroeconomic aims. While currency appreciation in Singapore is able to lower inflation, it does nothing in terms of creating more jobs or to increase the rate of economic growth. The 2 policies will have to be combined for a greater effect.</p>
	Levels	Knowledge, Application, Understanding and Analysis
	L3	Well-balanced answer that shows deep analysis in terms of the relevance of both the exchange rate and other policies, in particular supply side policy in the context of Singapore.
		Marks
		7-8



	L2	Undeveloped attempt to analyse the relevance of the 2 policies. The answer mainly looks at the pros and cons of exchange rate policy, without bringing in other policies. Or it just brings in policies in a cursory manner, without addressing the idea of whether exchange rate is still relevant..	4-6
	L1	Answer that presents limited understanding of the policies mentioned and that the scope of analysis of the policy in the context	1-3
	E2	Judgement is made on the effectiveness of the policy with good substantiation (possible alternative suggestion)	2
	E1	Unexplained judgement on the effectiveness of the policy	1
	<p>Examiners Comments:</p> <ul style="list-style-type: none"> Many students explained that exchange rate policy reduces AD and thus reduces demand pull inflation. Although this may be true, since (X-M) will fall following an appreciation, this does not touch on the key of why Singapore adopts Exchange rate policy. The key rationale behind the MAS exchange rate policy is primarily meant to prevent imported inflation. An appreciation of our currency allows us to buy imported goods and services / factor inputs at a cheaper price, given our stronger currency. This is important to us, given our dependency on imports. This meant some students were confused as to whether imported inflation is demand-pull or cost-push inflation. Imported inflation is seen as cost push inflation due to more costly raw materials for Singapore. Therefore, students need to clearly analyse the relevance of exchange rate policy in terms of its ability to control this particular type of cost push inflation. Many students did not give an alternative policy or gave it briefly with little relevance to the context. The context touched on Supply-side policy to a great extent. Unfortunately, this evidence provided was used to a limited extent by many students. Many students also analysed by saying that exchange rate policy is irrelevant in SG. While this is not conceptually erroneous, students should avoid this as it invariably weakens the essay analysis, making it difficult to reach a L3 standard. Arguments should be made both for and against the policies themselves. The actual 'relevance' or 'effectiveness' of a particular policy cannot be the result of the 'irrelevance' or 'ineffectiveness' of other policies. Some students did not realise that Singapore is unable to employ the interest rate policy or the money supply tool, due to the Open economy Trilemma. 		



	<ul style="list-style-type: none"> An important point for students to note is that it is important to answer case study questions with the context in mind. Many students talked about exchange rate and supply side policy and how these policies can be used, as well as their disadvantages. However, they did so without considering the problem we are trying to settle i.e. inflation. For example, many students suggested depreciation of the exchange rate as being relevant to Singapore's economic growth objective. This is problematic as it: Firstly, does not address the question requirement, which is whether exchange rate policy is still relevant to maintaining price stability by lowering inflation. Secondly, it is implied by the case evidence that Singapore's exchange rate policy stance is a gradual appreciating one.
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Question 3

Globalisation has intensified trade between countries but there are also trade-offs - permanent structural change and, volatile short-term capital flows have threatened macroeconomic stability, with low economic growth and unemployment as the main concerns.
Adapted from Global Research Centre, 2012

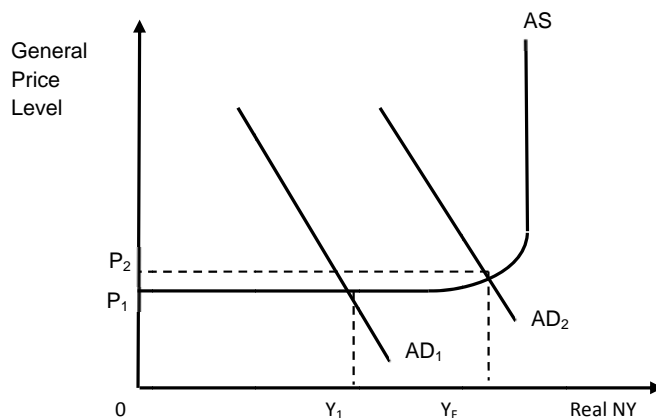
- a) Explain the benefits of globalisation to Singapore. [10]
- b) Discuss whether the use of demand management policies can solve the problems stated in the preamble. [15]

-
- a) Explain the benefits of globalisation to Singapore. [10]

<p>Introduction</p> <p>Globalisation refers to the increasing integration and interdependence of the world's economies arising from increased trade and greater international mobility of factors like capital, labour and enterprise. Factors such as the liberalization of markets and technological advancement in transportation and communications have contributed to this trend, with different impacts on economies around the world.</p> <p>In this essay, we will explain the various benefits via the increased trade, capital flows and labour movement in the context of our Singapore economy.</p>	<p>Taking into account pre-amble and key words</p> <p>Overview</p>
<p>Body Point 1: Increased Trade</p> <p>Singapore is very dependent on international trade for its economic growth as external demand accounts for at least 60% of our total aggregate demand.</p> <p>And according to the theory of comparative advantage, i.e., where each country specializes in production and exporting goods with lowest opportunity cost. In this context, Singapore will be able to gain in terms of efficiency in allocation of resources and welfare increase if it specialises and exports goods with comparative advantage - capital intensive products like pharmaceuticals and chemicals. The consumers in Singapore will also be able to enjoy greater choice of goods and services, with enhanced quality and lower prices with</p>	<p>Contextualised explanation of Comparative Advantage</p>



With globalization, the physical size and lack of natural resources have become less of a constraint as it has helped opened up new markets for Singapore's exports. In the past years, there has been rising foreign demand for Singapore-made goods and services such as education and health, boosting economic growth. This will increase the demand for our exports and there will be an increase in (X-M) and AD. National income and employment will increase as a result, leading to a higher standard of living. With reference to Figure 1 below, the increase in AD from AD_1 to AD_2 leads to an increase in real national income via the multiplier from Y_1 to Y_2 . Employment will be increased as well due to the greater demand of goods & services in the economy, leading to greater production from firms.



Globalisation has enabled Singapore firms to become global in scope and reap huge economies of scale. For example, globalised firms can target consumers throughout the world and seek out the lowest cost countries through off-shoring and outsourcing which is to relocate production and parts of the production process. An example is SIA which has already outsourced their IT processing and customer-relations services to other firms in countries like India which can perform the same functions but at much lower costs.

Example

Body Point 2: Increased Capital Flows

Singapore's openness to capital inflows and outflows can further boost its productivity growth with increase in AD and LRAS.

Firstly, with its financial sectors which are fully open to international capital inflows and to foreign ownership, Singapore can benefit from global best practice in financial intermediation and corporate governance. Improved financial systems enable a more efficient allocation of capital to its most

Contextualised explanation of benefits of increased capital flows

productive uses, making for stronger productivity growth. This will result in an increase in AD and LRAS, enabling sustainable potential economic growth. This is illustrated in Fig 2 where the full employment level of output increased from Y_{F1} to Y_{F2} . The increased in productive capacity of the economy will also lower the inflationary pressure on the economy with a lowered GPL from P_1 to P_2 . An example will be the continued expansion of our financial sector with the concentration of global financial institutions in the Marina Bay Financial Center.

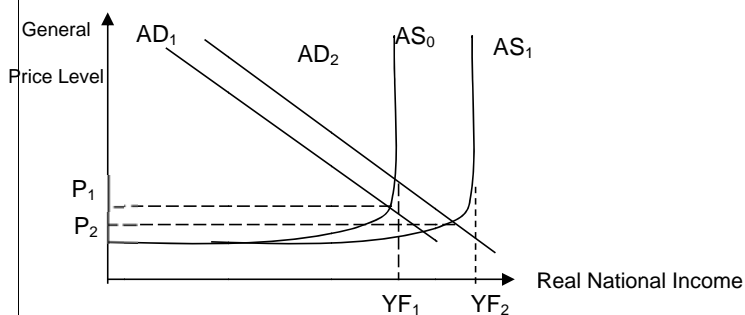


Fig 2: Sustainable EG – Increase in AD & AS

Secondly, foreign direct investment inflow is very important to Singapore because it brings in capital as this will not only reduce the constraints of the lack of funds domestically but also gives Singapore access to export markets. This will lead to a rise in AD and national income. Additionally, FDI brings in technology which will raise the overall productivity and LRAS, increasing the potential economic growth.. Foreign direct investment outflow enables local firms to increase their productivity at home by relocating some tasks to other countries where they can be accomplished more efficiently. Therefore, firms in Singapore will also be able to establish presence in foreign markets and remain competitive. Singapore's balance of payments will likely improve due to the improvement in capital and financial accounts More and better home employment will be provided as well when our local firms go global – Hyflux and its export of water technologies to emerging economies such as South Africa and China.

Example

Example

Body Point 3: Increased Labour Movement

New technology and skills are transferred from areas of relative abundance to relative scarcity. With a lack of natural resource, foreign workers which are a cheaper source of labour can help to alleviate the skills shortage and supplement the labour resources to build the Singapore economy. This is evident in the labour intensive construction industry with the influx of lower wage

Contextualised explanation of benefits of increased labour



<p>foreign workers from developing countries. Foreign talent is also needed to help develop Singapore's R&D capabilities which is crucial to the long term productive growth of the Singapore economy. An example will be the growth in the Singapore aviation and machinery industry with the setup of the Rolls-Royce engine plant in Seletar.</p> <p>Singaporeans who are skilled can command high wages both domestically and overseas and will be exposed to the best practices of MNCs like Nestle, Microsoft and Coca Cola. Their skills are further enhanced through on-the-job training. Similarly, local firms which hire skilled foreign labour and capital can benefit from technology transfer. This technology transfer and the influx of labour will increase the LRAS and leads to greater potential growth for Singapore.</p>	<p>movement</p> <p>Example</p>
<p>Conclusion</p> <p>In conclusion, globalization has brought about significant benefits to the Singapore economy via the increase in trade, capital and labour flows. This is most evident in the positive impact on our economic growth and the increased consumer income and welfare.</p> <p>But the intensification of such global processes has its trade-offs as well and we will discuss what the problems are and importantly, the range of policies used and their effectiveness in the next part of the essay.</p>	<p>Link to next part of essay</p>

Knowledge, Understanding, Application and Analysis		
L3	<p>Developed explanation of the benefits of globalization via the 3 flows (trade, capital and labour) with linkage AD/AS and to the nature of Singapore economy (Small and Open)</p> <p>'Developed' – Explanation of benefits of increased trade, capital and labour flows and contextualized to the Singapore economy.</p> <p>8m: Link to AD/AS and mentioning of 3 flows with contextualization</p> <p>9 – 10m: Both inflows and outflows must be covered in context of Singapore economy</p>	7- 10
L2	<p>Underdeveloped explanation of the benefits of globalization via the 3 flows (trade, capital and labour) with linkage to the nature of Singapore economy (Small and Open)</p> <p>'Underdeveloped' – Failure to explain all 3 flows (increased trade, capital and labour flows) and contextualized to the Singapore economy</p> <p>6m and above: Good link to AD/AS and some contextualization</p> <p>Max of 4m for detailed contextualized explanation for 1 flow</p>	4 - 6



L1	Smattering of some valid points with no/ not appropriate examples.	1 - 3
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- b) Discuss whether the use of demand management policies can solve the problems stated in the preamble. [15]

<p><u>Introduction</u></p> <p>Beside the positive impacts, globalisation has also inevitably brought about its challenges and related problems. As stated in the preamble, the main macroeconomic problems faced will be low economic growth (actual and potential) and high unemployment (cyclical and structural) due to increased vulnerability from external shocks.</p> <p>Demand management policies refer to the use of fiscal and monetary policy in influencing the economy. Fiscal policy involves the use of government expenditure and taxation while monetary policy refers to the deliberate use of money supply, interest rates or exchange rates to adjust the level of economic activity in an economy.</p> <p>This essay will explore if demand management policies are appropriate in dealing with the above macro problems, within the context of Singapore economy</p>	<p>State macro problems from preamble</p> <p>Define Fiscal policy and Monetary policy.</p> <p>Overview</p>
<p><u>Body</u></p> <p><u>Thesis: Demand management policies are effective in solving low actual economic growth and high cyclical unemployment</u></p> <p>In times of a global recession, a fall in aggregate demand will lead to a fall in economic activities, thus resulting in lower actual economic growth and higher demand-deficient (cyclical) unemployment. To deal with low economic growth and high cyclical unemployment, our government may want to implement expansionary demand management policies. This can be achieved via the use of fiscal or monetary policy (exchange rate).</p> <p>Expansionary fiscal policy will directly increase AD to correct low actual economic growth and high cyclical unemployment. There can be an increase in government expenditure spending and/or decrease in direct taxes to boost the level of aggregate demand. This will reduce cyclical unemployment and increase actual economic growth. For example the Singapore government can increase spending on social welfare programmes such as the Pioneer Generation Package. It can also reduce income tax rates which will increase consumers' disposable income and hence lead to an increase in consumption and a rise in AD. Likewise, a decrease in corporate taxes will increase after tax profits and an increase in firms' ability to invest, leading to a rise in I and hence AD. This increase in AD would increase the employment of resources which in turn result in an increase in factor income payment such as wages and rental income. This injection of extra income leads to more spending, which creates further incomes, and so on. The multiplier effect refers to the final increase in national income arising from any new injection of spending, resulting in an economic growth. The increase in AD, as illustrated in Fig 1 below, will</p>	<p>Point Explain</p> <p>Illustrate</p> <p>Example</p>



increase the national income via the multiplier effect from Y_1 to Y_2

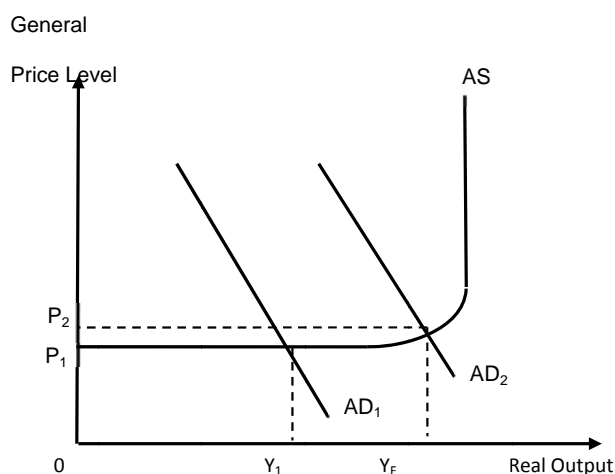


Fig 3: Increase in AD

Diagram

Illustrate

Example

Evaluation

As Singapore is a small and open economy where it heavily depends on trade to grow, boosting domestic demand may not increase AD significantly as net exports are a major component of GDP. Therefore, expansionary monetary policy can also be implemented with the use of exchange rate policy. During a recession, a government might depreciate its currency to boost net export earnings. This is because when a currency, for e.g. SGD, is weakened, price of Singapore's exports will be relatively lower in terms of foreign currency and price of foreign imports into Singapore will be relatively higher in terms of SGD. Assuming Marshall-Lerner condition ($PED_x + PED_m > 1$) holds, net export earnings will increase, causing an increase in AD. This will lead to higher actual economic growth and reduced cyclical unemployment as illustrated in Fig 1.

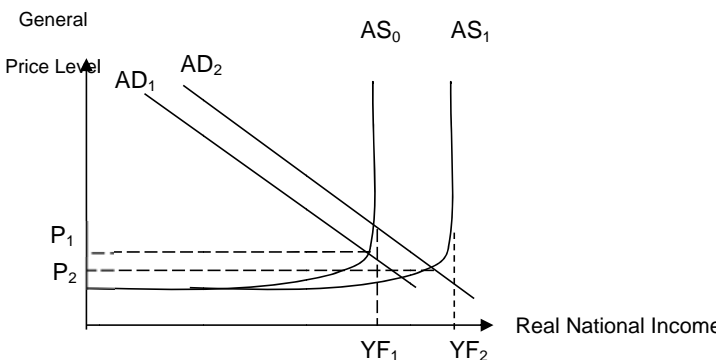
Although demand management policies are effective in addressing the macro problems of low economic growth and high unemployment, these policies do come with their limitations.

The expansionary fiscal policy might not be able to bring about the desired extent of economic growth due to the small multiplier in Singapore where there is high savings rate in the form of compulsory CPF contribution and high import content of our production. Even if there is a GST offset package or Workfare Income Supplement, a large portion of the income might be saved instead of being spent on goods and services. Also, due to our reliance on imports, a depreciation of exchange rate may cause cost-push inflation and hence loss of export price competitiveness. If price of exports were to become higher due to inflation, despite the fall in exchange rate, quantity demanded for exports might not rise. Assuming $PED_x > 1$, export earnings might not increase and hence exchange rate policy might not result in economic growth.



<p>Hence, there is a need for the use of alternative macro policies in complementing demand management tools in solving low economic growth and high unemployment.</p>	<p>Link</p>
<p><u>Anti-Thesis: Alternative policies are more effective in solving low potential economic growth and high structural unemployment</u></p> <p>Demand-side policies could bring about actual economic growth but the growth might be limited or short-lived as an economy might be undergoing some structural problems as stated in the preamble. In this case, demand-side policies are ineffective in bringing about sustainable potential economic growth, and structural unemployment as the root cause of structural deficiencies is not addressed.</p> <p>If an economy, especially one such as Singapore is undergoing some structural changes such the loss of comparative advantage and declining industries, there might be long-term issue of labour market rigidity and declining labour productivity. This will in turn causes a loss in export competitiveness. When there is a loss in export competitiveness, Singapore's net exports earnings and AD might not increase. The lack of increase in AD and LRAS will cause slow or stagnant growth and structural unemployment in Singapore.</p> <p>Therefore, there is a need for Singapore economy to implement supply-side policies by creating new comparative advantage to improve the overall productivity of the economy. Interventionist measures will involve a need for the government to fund assistance schemes in implementing trainings for the workers to reduce structural unemployment and hence increase the labour productivity. An example would be the Productivity and Innovation Credit (PIC) and Innovation and Capability Voucher (ICV) where subsidies and cash payouts are awarded to businesses investing in productivity. Similarly, job portals and job fairs organized by agencies such as Workforce Development Agency can reduce frictional unemployment due to information asymmetry between workers and employers.</p> <p>Market oriented supply side measures such as reduced red tape and other impediments to investment and risk taking will free up markets for investments and leads to greater productivity growth. Establishment of intellectual property rights will also help to create incentive for firms to innovate and increase efficiency and consumer choice. The Intellectual Property Office of Singapore protects the interests of businesses with trademarks and copyrights regulations.</p> <p>It is only when overall productivity increases will export competitiveness improve to boost export earnings and create more actual growth in the future. The</p>	<p>Point</p> <p>Explain</p> <p>Illustrate</p> <p>Example</p> <p>Illustrate</p> <p>Example</p>



<p>increased in productivity and retraining schemes will reduce structural unemployment in Singapore as well. This increase in AD together with the increase in LRAS will lead to sustainable potential economic growth. This is illustrated in Fig 2 where the full employment level of output increased from Y_{F1} to Y_{F2}. The increased in productive capacity of the economy will also lower the inflationary pressure on the economy with a lowered GPL from P_1 to P_2.</p>	<p>Illustrate</p>
 <p>General</p> <p>Price Level</p> <p>AD_1 AD_2</p> <p>AS_0 AS_1</p> <p>P_1</p> <p>P_2</p> <p>Y_{F1} Y_{F2}</p> <p>Real National Income</p>	<p>Diagram</p>
<p>Fig 4: Sustainable EG – Increase in AD & AS</p> <p>Though supply side policies will seek to address the root cause of structural deficiencies and loss of productivity, it might not be able to resolve demand deficient unemployment totally. The effects of supply side policies will take time to be realized in the economy due to time lags. Also, the government measures will involve significant government funding which may lead to the worsening of the fiscal position of our government. The receptiveness of the retraining and upgrading schemes might be low, especially in older workers and thus render the programmes ineffective.</p>	<p>Evaluation</p>
<p>Beside the use of supply side policies, trade policy in the signing of Free Trade Agreements can also expand Singapore's export markets which will lead to a rise of our export revenue. There will also likely to be an increase in opportunities for Foreign Direct Investment and as such, the AD will increase leading to a growth in our economy and reduced unemployment. The signing of FTAs will increase the mobility of factors of production and more avenues for imports, especially in important reliant Singapore, and this will decrease the prices of imports and thus reduce the cost of production. An example will be the ongoing discussion of the Trans Pacific Partnership between the Pacific economies and Singapore and the mutual benefits to be reaped with increased trade, capital and labour flows. As such agreements involve multi-lateral relations with various economies; trade policies usually will be subjected to significant time lags and thus ineffective in the short run.</p>	<p>Illustrate</p> <p>Example</p> <p>Evaluation</p>
<p>Conclusion</p>	<p>Synthesis</p>



<p><u>Stand</u></p> <p>In conclusion, though a combination of fiscal and monetary policies can be used to resolve demand deficient unemployment and low actual economic growth, other policies in the form of supply side and trade policies should be supplemented to address structural unemployment and potential growth.</p> <p><u>Justification and Recommendation</u></p> <p>Moreover, if the economy is experiencing excessive actual growth, has reached its full employment level of output, demand management policies will not bring about further economic growth. In such situation, the government should implement supply-side policies to create potential growth in order for actual growth to take place in the future.</p> <p>If the economy is suffering structural deficiencies such as skills mismatch and ageing population, demand-side policies might not be sufficient in bringing sustainable economic growth. There might also be a loss of comparative advantage that lower the export competitiveness and cost competitiveness. In this situation, demand-side policies have to be complemented with supply side policies to increase the productivity levels of our economy and increase potential growth. Trade policy will also be effective in expanding the export markets and increase export revenues leading to economic growth.</p> <p>Note: To tackle the issue of volatile short term capital flow, a lowering of interest rates could be employed via the Monetary Policy. But the magnitude and frequency of changes to interest rates must be monitored as sudden drop in the interest rates could lead to a sudden capital outflow which is potentially damaging to the economy.</p>	
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Knowledge, Application, Understanding and Analysis		
L3	<p>Clear and well developed answer with clear analysis on the significance and limitation of Demand side AND Supply side policy in dealing with 3 of the 5 macro issues.</p> <p>9m: Link to 3 macro goals will suffice</p> <p>10 – 11m: Provide a genesis of how the globalization and the conditions stated in preamble lead to the macro issues AND some link to the 4 macro goals</p>	9-11
L2	<p>Underdeveloped two sided analysis: Explaining how Demand side policies (both FP and MP) and Supply side policy works AND discussing their limitations but,</p> <ul style="list-style-type: none"> Failed to attribute each policy to addressing a specific source of EG or unemployment 	6-8



	<ul style="list-style-type: none"> Underdeveloped explanation either of how policies work or their limitations <p>8m: Must at least mention Supply side policy with links to preamble</p> <ul style="list-style-type: none"> Max of 6m for detailed contextualized explanation of one demand side policy (FP or MP) with limitations 	
L1	<p>For an answer that is one-sided with superficial analysis or conceptual errors.</p> <p>One sided analysis includes:</p> <ul style="list-style-type: none"> High L1: Undeveloped answers with some analysis on the significance and limitation of only either Demand side or Supply side Explaining how Demand side and Supply side works with little or no discussion of their limitations No links to the preamble <p>Max of 5m for detailed contextualized explanation of one demand side policy (FP or MP) without limitations</p>	1-5
Evaluation		
E2	Judgment is based on economic analysis and adequately substantiated	3 – 4
E1	<p>Up to 2m -</p> <p>Direct comparison between demand side and alternative policies or</p> <p>Make a stand without justification</p>	1 – 2



Question 4

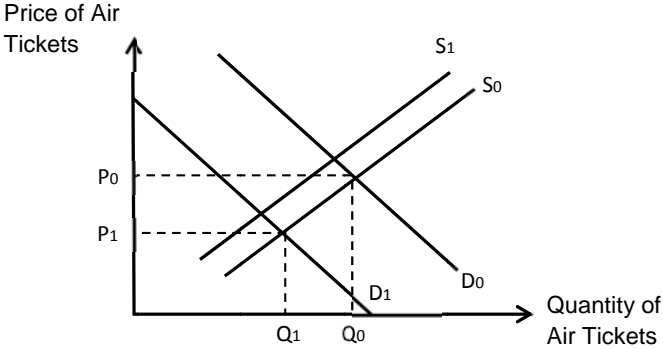
The airline industry has been battered by the recent aviation accidents. Amidst growing fears in consumers, the EU Commissioner for climate change announced a planned increase in the carbon emission tax on all flights.

- a) Explain how the factors in the preamble will impact the price and output in the airline industry. [10]
- b) Discuss what determines whether consumers or producers are more likely to bear the cost of the carbon emission tax. [15]

- a) Explain how the factors in the preamble will impact the price and output in the airline industry. [10]

<u>Introduction:</u> Equilibrium is a state of rest where there is no tendency for any change. In any market, it is the meeting of demand and supply that cause the system to achieve equilibrium. In the market for air tickets in the airline industry, the market equilibrium will then refer to a state where the quantity demanded equals the quantity supplied, such that there are neither shortages nor surpluses. In this essay, I will be looking at how the 'recent aviation accidents' and 'carbon emission tax', as mentioned in the pre-ample, will affect the market equilibrium in the market for air tickets.	Define 'market equilibrium' Contextualise: Look at the market for air tickets Overview
<u>Body: Paragraph 1</u> The recent aviation accidents will lead to a change in the consumers' tastes and preferences as they develop a fear of flying. This will affect the demand curve in the market for air tickets. Consumers' tastes and preferences change over time and changes against a good or services will reduce its demand. Due to the recent aviation accidents which lead to increased fear of flying, consumers will be less willing to purchase at tickets at each and every price. As such, the demand for air tickets will shift to the left, as shown in Figure 1, where the demand curve shifts from D_0 to D_1 . Therefore, an undesired change in consumers' tastes and preferences will cause the demand for air ticket to decrease.	Point: Fear of flying leading to change in tastes & preferences. Elaboration: How tastes and preferences affects demand. Link back to question
<u>Body: Paragraph 2</u> An increase in the carbon emission tax by the authorities will raise the cost	Point: Government



<p>of production in the provision of flights. This will affect the supply curve in the market for air tickets.</p> <p>Carbon emission tax is part of the cost in the provision of flights and air tickets. As the EU Commissioner for climate change announced a raise in the carbon emission tax, this means the airline carriers will have to pay higher taxes with their provision of flights. The cost of production for airline carriers will now increase and hence, this will cause the supply of air tickets to shift to the left, as shown in Figure 1, where the supply curve shifts from S_0 to S_1. Now, at each and every price level, there is now a decrease in quantity supplied of air tickets.</p> <p>Thus, an increase in the cost of production for the airline carriers would cause the supply for air tickets to decrease.</p>	<p>Policy</p> <p>Elaboration: How rise in carbon emission tax affects supply.</p> <p>Link back to question</p>
<p><u>Body: Paragraph 3</u></p> <p>With both the demand and the supply for air tickets decreasing, depending on the magnitude of change in demand and supply, three possible outcomes can occur.</p>  <p>Figure 1: Market for Air Tickets</p> <p>If the fall in demand is proportionately greater than the fall in supply, both the equilibrium price and equilibrium quantity of air tickets will fall. However, if the fall in demand is proportionately lesser than the fall in supply, then the equilibrium price will rise but the equilibrium quantity will fall. On the other hand, if the fall in demand is proportionate to the fall in supply, then equilibrium quantity will fall, but the equilibrium price will remain unchanged. Hence, in all these three possible outcomes, we know that equilibrium quantity of air tickets will definitely decrease, but the change in equilibrium price will be indeterminate as it depends on the relative magnitude of shifts in demand and supply.</p> <p>As there are substitutes available for air travel (land/sea transport) and coupled with the increased fear of flying, the demand for air tickets is expected to fall more than proportionately than the drop in supply. In the</p>	<p>Point: 3 possible scenarios</p> <p>Diagram</p> <p>Elaboration: Possible outcomes of the 3 scenarios</p> <p>Example of most likely scenario</p>



<p>short run, the quantity supplied of flights will not drop drastically as the airline carriers will have existing fleets in operation. Hence, the first case, i.e. where the fall in demand is proportionately greater than the fall in supply, is most likely to happen. This can be seen in figure one, where equilibrium price decreases from P_0 to P_1, and equilibrium quantity decreases from Q_0 to Q_1.</p>	<p>Link back to question</p>
<p><u>Conclusion: Stand and justification</u></p> <p>In conclusion, a change in the consumers' tastes and preferences and a rise in cost of production due to higher emission taxes will cause the demand and supply to decrease for air tickets. This will cause both the demand and supply curve to shift to the left, with a larger decrease in demand to be expected. Therefore, a decrease in both equilibrium price and quantity will be the most likely identified outcome as aforementioned in the market for air tickets.</p>	<p>Summarise and restate points.</p>

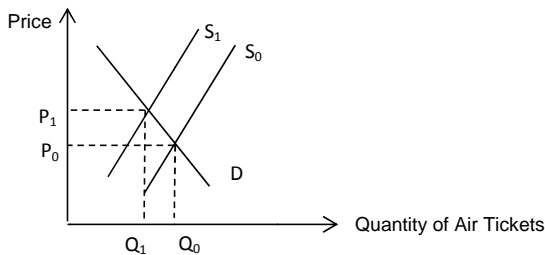
Knowledge, Understanding, Application and Analysis		
L3	<p>Answer addresses the question using sound economic concepts to show the outcome of the events on the relevant market.</p> <p>Demand and Supply concepts used are correctly with all 3 possible outcomes well explained. A justified outcome on the equilibrium price and quantity is observed. Context is consistently alluded to.</p>	7 - 10
L2	<p>Answer addresses the question using some economic concepts to show the outcome of the events.</p> <p>Demand, Supply and Equilibrium concepts used are explained to some detail. No possible equilibrium outcome is observed or justified. Context is occasionally alluded to.</p>	5 - 6
L1	<p>Answer do not addresses the question or does so using poor economic concepts to show the outcome of the events.</p> <p>Concepts used are poorly explained. Context is largely ignored.</p>	1 - 4

b) Discuss what determines whether consumers or producers are more likely to bear the cost of the carbon emission tax. [15]

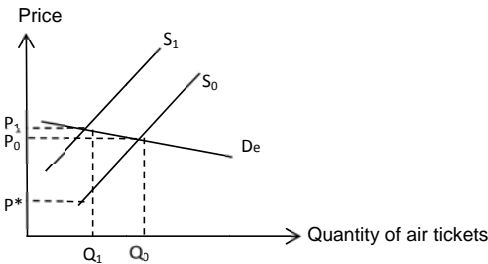
Command words:	'Discuss' - Provide relevant arguments for and against an issue. 'discuss... whether' – the question has a stand incorporated in
Content:	'Incidence of Tax' – Demand and Supply, relative PED and PES
Context:	'Carbon Emission Tax' – imposed on airline carriers for all flights, increases costs of production, reduces supply
Approach	Students will need to show whether producers or consumers are likely to



	<p>bear the burden of the carbon emission tax imposed.</p> <p>Students should use the DDSS analysis to show the effect of a tax</p> <p>Students should then use elasticity analysis to show who is likely to suffer more from the tax (relative elasticity)</p> <p>Students need to back their analysis with evidence to prove why demand or supply is relatively more elastic or inelastic.</p>
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<p><u>Introduction:</u></p> <p>Carbon emission taxes are imposed by the government on producers as explained in part (a) as such the producers are responsible for the collection and payment of such taxes. Producers are thus able to pass on the burden of taxes to consumers. Consumers hence end up paying for the taxes indirectly in the form of higher prices. The burden of the tax can be passed onto consumers depending on the price elasticity of demand and price elasticity of supply for the product.</p> <p>This essay serves to discuss who is likely to bear a larger burden of the tax. To do that, we need to consider the effects of the tax using demand and supply analysis before moving on to determine the burden of the tax using the relative elasticity concepts.</p>	<p>Contextualise</p> <p>Overview</p>
<p><u>Body: Paragraph 1</u></p> <p>An imposition of the carbon emission tax on the airline carriers will increase the cost of production in the provision of flights. The supply curve will experience a leftward shift, because at each and every price, producers will now be less willing and able to produce. The diagram below shows the outcome.</p>  <p>Fig 2: Market for Air Tickets</p> <p>With reference to Fig 2, the initial equilibrium is at P_0Q_0. The fall in supply due to a tax will lead to a leftward shift in supply from S_0 to S_1. This will cause the equilibrium price to rise to P_1 and the equilibrium quantity to fall to Q_1. The extent of change in equilibrium prices of air tickets will then</p>	<p>Point 1: How tax affects SS</p> <p>Elaboration</p> <p>Example: Graph</p> <p>Link to next paragraph</p>



<p>help us to establish whether consumers or producers will bear the larger burden of the carbon emission tax imposed on the airline carriers.</p>	
<p>Body: Paragraph 2</p> <p>While a tax will increase the cost of production, we need to consider the relative price elasticity demand and supply to determine who bears a larger burden of the tax. We consider the case of a demand that is relatively more price elastic than supply here.</p> <p>Fig 3 below looks at the case of a relatively price elastic demand and relatively price inelastic supply curve.</p>  <p>Fig 3: PED Elastic & PES Inelastic</p> <p>PED for airlines is likely to be price elastic when we consider travelers on leisure trips or short distance travels. This is because there are many substitutes in the modes of travel to choose from for short distance trips and the degree of urgency is not that high for leisure travel, thus making the demand for flights to be relatively price elastic. This means consumers will be very responsive to any change in price, <i>ceteris paribus</i>.</p> <p>On the other hand, supply for airlines is likely to be price inelastic. This is because there it takes time and sufficient financial capital to increase the number of fleets/airplanes as a response to any change in price. This means producers will not be very responsive to any change in price, <i>ceteris paribus</i>.</p> <p>Comparing the PED and PES, it is quite clear that, in this case PED is more elastic than PES. This means any change in price will bring more responsiveness from consumers as compared to producers for airlines. If the price of air-travel increases, quantity demanded of it will fall more than proportionately and thus, producers will suffer from a fall in Total Revenue. Thus, they will try to pass less burden of tax to the consumers to prevent such losses. Consumers shoulder less of the tax burden whereas producers shoulder more burden of the tax.</p> <p>With reference to Fig 3, the consumer's burden of tax is by considering the difference between the new price and the old price. The reason for the increase in price is due to the imposition of carbon emission tax leading to a leftward shift in supply. Therefore the burden of tax for consumers is P_0 to P_1. To determine the producer's burden of tax, we need to look at the remainder of the tax to be paid. At the new quantity,</p>	<p>Point 2: Comparing Demand is Price Elastic and Supply is Price Inelastic</p> <p>Example: Graph</p> <p>Elaboration of burden of taxes</p>



the vertical gap P^*P_1 between the new supply curve and the old supply curve is the tax amount. Hence, the remainder P^*P_0 is the burden of tax borne by producer. **Therefore, we can deduce that the incidence of tax is less on the consumers with a relatively elastic PED as compared to producer with a relatively elastic PES.**

In certain cases though, the demand for flights can be relatively more price inelastic when compared with the PES.

Body: Paragraph 3

Fig 4 below looks at the case of a relatively more price inelastic demand with a price inelastic supply curve.

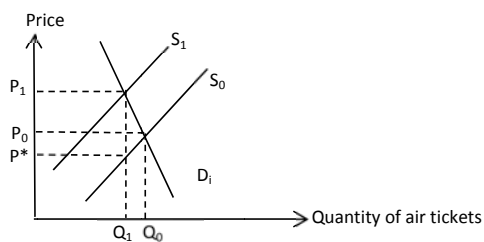


Fig 4: PED Inelastic and PES less Inelastic

PED for airlines is likely to be price inelastic when we consider business travelers or long haul travels. This is because there is a lack of close substitutes in the modes of travel to choose from for long distance trips and the degree of urgency is high for business travel, thus making the demand for flights to be relatively price inelastic. This means consumers will not be a responsive to any change in price, ceteris paribus.

On the other hand, supply for airlines is likely to be price inelastic as determined earlier.

Comparing the PED and PES, it is quite clear that, in this case PED is more inelastic than PES. This means any change in price will bring less responsiveness from consumers as compared to producers for airlines. If the price of air-travel increases, quantity demanded of it will fall less than proportionately and thus, producers will not suffer from a fall in Total Revenue. Thus, they will try to pass more burden of tax to the consumers

With reference to Fig 4, the consumer's burden of tax is by considering the difference between the new price and the old price. The reason for the increase in price is due to the imposition of carbon emission tax leading to a leftward shift in supply. Therefore the burden of tax for consumers is P_0 to P_1 . To determine the producer's burden of tax, we need to look at the remainder of the tax to be paid. At the new quantity, the vertical gap P^*P_1 between the new supply curve and the old supply curve is the tax amount. Hence, the remainder P^*P_0 is the burden of tax borne by producer. **Therefore, we can deduce that the incidence of tax is higher on the consumers with a relatively inelastic PED as compared to producer with a relatively less inelastic PES.**

[Link to next paragraph](#)

Point 3: Comparing PES

Example: Graphs

Elaboration of burden of taxes

[Link: Summary of point](#)



<p><u>Conclusion: Stand and justification</u></p> <p>In conclusion, it is likely that the supply is relatively more price inelastic than the demand for air tickets in the short run. While it is true that the certain consumers have a price inelastic demand for air tickets, more consumers are likely to be responsive to the price changes and have a relatively more price elastic demand for it. Furthermore, the air ticket prices are significant in proportion to the incomes of most consumers. On the contrary, airline carriers are not able to change its size of operational fleets in the short run due to binding contracts.</p> <p>As a result, it is likely that producers will bear a bigger burden of the carbon emission tax, especially in the short run.</p> <p>It is important to note that the analysis will be different when we take into consideration of factors that changes the relative elasticities such as time period for adjustments and availability of close substitutes for air planes.</p> <p>The ceteris paribus assumption was made when analyzing the incidence of tax on consumers & producers. If this assumption is relaxed (ie, demand fall as stated in the preamble), then there will be too many changes in variables and thus, the final effect on incidence of tax will be indeterminate.</p> <p>Also, larger and more established airlines (eg: Emirates, SIA) tend to be those that pollute the most. But due to their ability to make demand for their air tickets more price inelastic (marketing of the unique experience thus no close substitutes), larger airlines can tend to pass more of the burden to consumers in the form of higher air ticket prices.</p>	<p>Make a stand</p> <p>Justification</p> <p>Additional Perspectives</p>
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Knowledge, Understanding, Application and Analysis		
L3	<p>Answer addresses the question using sound economic concepts to show burden of tax. Both PED and PES Concepts used are correctly and well explained. Context is consistently applied to the airline industry.</p> <p>Argument is well developed and displays clear understanding of the two sides of the issues.</p>	9 - 11
L2	<p>Answer addresses the question using economic concepts to show burden of tax to some extent. Both PED and PES concepts used are explained to some extent.</p> <p>Context is somewhat alluded to. Argument is not well developed and displays some understanding of the two sides of the issues, or fails to provide a strong alternative view.</p>	6 - 8
L1	<p>Answer doesn't address the question using economic concepts to show burden of tax to some extent.</p> <p>PED and/or PES concepts are not used or very poorly and incorrectly explained. Context is largely ignored. Argument is poorly developed and</p>	1 - 5



	displays almost no understanding of the two sides of the issues. (1 sided, max 5 marks)	
Evaluation		
E2	Answers comes to a reasoned judgement and provides sound economic justification	3 - 4
E1	Answers tries to come to a reasoned judgement, but doesn't provide sound economic justification	1 - 2

