



ST. ANDREW'S JUNIOR COLLEGE
PRELIMINARY EXAMINATIONS – 2017 (JC2)
General Certificate of Education Advanced Level
Higher 1

ECONOMICS

8819/01

28 August 2017
3 hours

Suggested Answers with Examiners' Comments

READ THESE INSTRUCTIONS FIRST

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

Section A

Answer **all** questions.

Section B

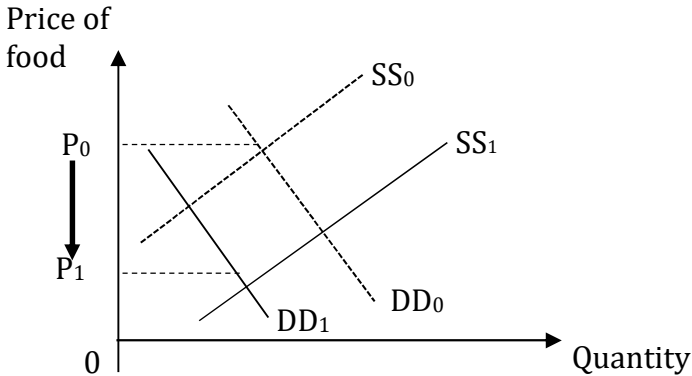
Answer **one** question.

At the end of the examination, fasten your answers for each question separately.

The number of marks is given in brackets [] at the end of each question or part question.

This document consists of **8** printed pages.

Suggested Answers for CSQ 1

(a)	(i)	Describe the trend in world food prices from 2011 to 2015.	[2]
		<p><u>Suggested Answer:</u></p> <p>World food prices generally fell from 2011 to 2015 [1], with the sharpest fall from 2014 to 2015 [1].</p>	
	(ii)	Using a diagram and Extract 1, explain one demand and one supply factor that could support the trend in world food prices from 2011 to 2015.	[4]
		<p><u>Suggested Answer:</u></p> <p>One demand factor that could support the fall in food prices would be the fall in demand for biofuels. Biofuels require food crops as a factor of production. As mentioned in extract 1, "Falling oil prices have also affected the demand for biofuels, made from crops like maize and potatoes," hence, the derived demand for food falls. [1]</p> <p>One supply factor that could support the fall in food prices would be the fall in cost of production for food. From extract 1, "Cheap oil contributed to abundant global supplies of food". Oil is an important factor of production for food, as it is used to run tractors, transportation, etc. Cheaper oil will cause COP of food to fall, resulting in increase in supply of food. [1]</p> <p>Diagram [1] below shows a simultaneous fall in demand and increase in supply of food.</p>  <p>Therefore, a simultaneous fall in demand and increase in supply of food resulted in a fall in price of food. [1] (extent of shift not needed)</p>	

(b)		From Extract 2, explain how the price elasticity of demand and price elasticity of supply of potatoes have changed over the years.	[4]
		<p><u>Suggested Answer:</u></p> <p>Price elasticity of demand (PED) for potatoes has increased over the years [1]. This is seen from extract 2, “potato has risen to become the third most important food crop” and the Chinese government’s “push for consumption of potatoes as a staple food”. This shows that the degree of necessity for potatoes have increased, resulting in demand for potatoes becoming relatively more price inelastic over the years [1].</p> <p>Price elasticity of supply (PES) for potatoes has also increased over the years [1]. From extract 2, “Enhanced technology and growing techniques, especially when it comes to controlled irrigation, have allowed potato farmers to be more productive with the same amount of land.” This shows that producers of potatoes are better able to increase spare capacity and factor mobility has improved, resulting in PES of potatoes [1].</p>	
(c)	(i)	Using Extract 4, explain the source of market failure.	[4]
		<p><u>Suggested Answer</u></p> <p>Extract 4 explains the case of negative externalities in the production of agricultural products [1].</p> <p>From extract 4, “harm to natural ecological systems is either unnecessary or outright undesirable,” and “more than 60 percent of irrigated agriculture and 85 percent of drinking water supplies dependent on it, groundwater is a vital resource of clean water for both rural and urban areas.” This shows that there is external costs incurred on 3rd parties, who are not involved in the economic transaction, such as other producers who also depend on the ecological system, and people who live near the farms and consumes ground water. [1]</p> <p>With the presence of MEC, there will be divergence between MPC and MSC, where $MSC > MPC$. [1]</p> <p>This leads to over-production of agricultural products, causing allocative inefficiency and hence market failure [1].</p> <p><i>Max 2m if no reference made to extract.</i></p>	
	(ii)	Comment on the options available to the Indian government as possible responses to the above market failure.	[6]
		<p><u>Suggested Answer</u></p> <p>1. Environmental taxation</p> <ul style="list-style-type: none"> ▪ this will reduce consumption and cut down on wastage 	

		<ul style="list-style-type: none"> ▪ problems include time lag, enforcement and the amount of tax to implement <p>2. Pollution permits</p> <ul style="list-style-type: none"> ▪ this will decrease the number of people tapping into the limited availability of groundwater ▪ problems include enforcement, who to get the permits to tap into the water <p>3. Subsidies for innovation into curtailing usage</p> <ul style="list-style-type: none"> ▪ R&D needs a lot of funding and results are often uncertain. Government subsidies will increase the private sector's investment into R&D ▪ problems include limited availability of government funds, uncertainty of results <p>4. Subsidies to encourage firms to recycle water</p> <ul style="list-style-type: none"> ▪ this will reduce the amount of groundwater used up ▪ problems include the acceptance of people to using recycled water and the enforcement of the policy <p><i>Identify 2 options and explain how they work [3]</i></p> <p><i>Explain the limitations or disadvantage of the 2 options [2]</i></p> <p><i>Make a stand, conclude [1]</i></p> <p><i>Max 3m if no reference made to extract.</i></p>	

(d)	(i)	Explain what is meant by dumping as seen in Extract 5.	[2]
		<p><u>Suggested Answer</u></p> <p>Dumping refers to the sale of goods abroad at a price that is below the marginal cost of production or below the price at which the product is sold for in the domestic market.</p> <p>As seen in extract 5, potatoes sold in Brazil are “18% to 41% below the prices used by those same four European countries to export to the United Kingdom. Belgian prices apparently differ nearly 25%.”</p> <p>This could be seen as dumping by other nations into the Brazilian market.</p>	
	(ii)	Discuss whether the Brazilian government should impose ‘anti-dumping duty’ on frozen potatoes.	[8]
		<p><u>Question Analysis</u> Command: ‘Discuss whether’ → 2-sided analysis needed Content: ‘anti-dumping duties’ → reasons for and against protectionism Context: Brazil and other related international markets</p> <p><u>Schematic plan</u></p> <div style="text-align: center;"> <div style="border: 1px solid blue; padding: 10px; margin: 10px auto; width: 300px;"> <p>INTRO</p> <p>Define protectionism Give preview of answer</p> <p style="text-align: center;">-</p> </div> <div style="display: flex; justify-content: space-around; margin-top: 20px;"> <div style="border: 1px solid orange; padding: 10px; width: 45%;"> <p>THESIS</p> <p>Brazilian govt <u>should</u> impose anti-dumping measures</p> <p style="text-align: center;">-</p> </div> <div style="border: 1px solid orange; padding: 10px; width: 45%;"> <p>THESIS</p> <p>Brazilian govt <u>should not</u> impose anti-dumping measures</p> <p style="text-align: center;">-</p> </div> </div> <div style="border: 1px solid blue; padding: 10px; margin-top: 20px; width: 300px; margin: 20px auto;"> <p>Synthesis/Conclusion</p> <p>Make a reasoned judgement</p> <p style="text-align: center;">-</p> </div> </div> <p><u>Suggested Answer</u></p> <p><u>Introduction</u> Anti-dumping duty is a form of protectionist measure. Protectionism is defined as the setting up of trade barriers with the intention of protecting/sheltering domestic firms from foreign competition.</p>	

Body

Thesis: Brazilian government should impose anti-dumping duty on frozen potatoes to protect domestic employment, increase actual economic growth and improve BOP current account position.

There is evidence in extract 5, as mentioned in d(i), that frozen potatoes are being 'dumped' into the Brazilian market. An "anti-dumping duty" will protect Brazilian potato producers from the unfair competition from abroad by increasing the price of imported frozen potatoes. This will help to prevent Brazilian potato producers from being competed out of their own domestic market due to the cheaper prices of imported potatoes from abroad. Domestic potato producers may continue operation and **domestic employment can be secured**.

Furthermore, an increase in price in imported potatoes will cause quantity demanded for imports to fall. Assuming $PED_m > 1$, import expenditure for Brazil will fall, resulting in X-M component of AD to increase. An increase in AD will lead to an unplanned fall in stock inventories, firms step up on production, increase real national output/income via the multiplier effect. **Actual economic growth** will be experienced by Brazil.

A fall in import expenditure for Brazil will also **improve BOP current account** with less outflow of foreign currencies. Current account deficit will be reduced OR Current account surplus will be increased, depending on the initial position of Brazil's BOP current account.

Anti-thesis: However, the Brazilian government should not impose anti-dumping duty on frozen potatoes due to the potential loss of the benefits from free trade, and the possible disadvantages of protectionism

Imposing anti-dumping duty is considered a form of protectionist measure. If Brazil choose to do it, she may lose out on the potential benefit of free trade. As supported by the **theory of comparative advantage**, a country should specialise and produce/export goods and service that it has a lower opportunity cost in producing. The Europeans may indeed have a lower opportunity cost in producing potatoes compared to Brazil, which resulted in the lower prices charged by them in the Brazilian market. Hence, this may not be considered as 'dumping' by the European producers if they are truly able to produce at a much lower cost. Brazilian consumers will not be able to enjoy lowered potato prices, which results in greater consumer surplus, as a result of anti-dumping duties imposed by the Brazilian government. This **worsens global allocative efficiency** as prices are artificially raised.

Furthermore, firms that require frozen potatoes as a form of factor of production, such as fast food chains, may face increase in cost of production. They may then pass on the increase in COP to consumers in the form of higher prices, further reducing consumer surplus.

Also, as stated in extract 5, "European potato industry is currently examining how it can fight back". This represents a form of trade retaliation, which may cause other goods and services that Brazil imports from Europe

	<p>to experience as increase in price. If these imported goods in services from Europe include FOPs, it may cause COP to increase, SRAS falls, resulting in cost-push inflation. Brazilian exporters may also face a fall in revenue if the trade retaliation by Europe hits them badly.</p> <p><u>Synthesis/Conclusion</u></p> <p>All in all, whether the Brazilian government should impose anti-dumping measures on frozen potatoes depends on whether there is sufficient evidence to prove that European nations are indeed dumping potatoes to the Brazilian market. It is often difficult to prove that a country is practising dumping in the real world, hence it may be a tough choice for the government. Nonetheless, the government should weigh the potential pros and cons before deciding whether to impose the anti-dumping duties. If the potential harm outweighs the benefits, then the government should not impose the anti-dumping duties which causes trade retaliation from the Economic powerhouse – the Eurozone, which comes along with many other problems for the Brazilian economy.</p> <p><i>Or any other reasoned judgment.</i></p> <table><tr><th>Level</th><th>Knowledge, Application, Understanding and Analysis</th></tr><tr><td>L3 (5 – 6)</td><td>For a thorough and well-balanced answer that shows an understanding of the fundamental case for and against trade protectionism. Makes good reference to case material.</td></tr><tr><td>L2 (3 – 4)</td><td>For a balanced but undeveloped answer that has some analysis on the reasons for and against trade protectionism.</td></tr><tr><td>L1 (1 – 2)</td><td>For an answer that is largely descriptive and lacks a clear structure. Simple listing of reasons for and against protectionism. Or listing of other policies. No examples/reference to extract to substantiate points.</td></tr><tr><td colspan="2"></td></tr><tr><td>E2 (2)</td><td>Judgement is based on economic analysis and adequately substantiated.</td></tr><tr><td>E1 (1)</td><td>For an unexplained assessment, or one that is not supported by economic analysis.</td></tr></table>	Level	Knowledge, Application, Understanding and Analysis	L3 (5 – 6)	For a thorough and well-balanced answer that shows an understanding of the fundamental case for and against trade protectionism. Makes good reference to case material.	L2 (3 – 4)	For a balanced but undeveloped answer that has some analysis on the reasons for and against trade protectionism.	L1 (1 – 2)	For an answer that is largely descriptive and lacks a clear structure. Simple listing of reasons for and against protectionism. Or listing of other policies. No examples/reference to extract to substantiate points.			E2 (2)	Judgement is based on economic analysis and adequately substantiated.	E1 (1)	For an unexplained assessment, or one that is not supported by economic analysis.	
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Suggested Answers for CSQ 2

(a)	(i)	Compare the trend in the balance of trade between UK and EU between 2012 and 2015 with that of UK and non-EU over the same period.	[2]
		<p><u>Suggested Answer</u></p> <p>There was an <i>increasing trade surplus</i> between UK and non-EU while an <i>increasing trade deficit</i> between UK and EU over the period of 2012 to 2015.</p>	
	(ii)	Using economic analysis, explain one possible reason for the trend observed in balance of trade between UK and EU between 2012 and 2015.	[2]
		<p><u>Suggested Answer</u></p> <p><u>Any demand or supply factors is acceptable:</u></p> <p>As observed in (a)(i), balance of trade between UK and EU has seen an increasing trade deficit.</p> <p>One possible reason could be UK's export revenue to EU has fallen, assuming import expenditure remains constant.</p> <p>A <i><u>persistent fall</u></i> in the demand for UK's exports to EU could be due to a change in tastes and preferences towards UK's goods, contributing to an increasing fall in UK's export revenue between 2012 and 2015, assuming ceteris paribus, this would lead to a rising trade deficit between UK and EU.</p> <p><i>Or candidates can explain via UK's demand for EU's imports has risen between 2012 and 2015.</i></p>	

(b)		Explain how a change in UK's trade balance could affect UK's budget balance.	[4]
		<p><u>Suggested Answer:</u> As stated in Extract 6, UK has been facing a budget deficit from 2010 and current account deficit has widened.</p> <p>A rising trade deficit meant there was a fall in net export ($X - M$) which lead to a fall in AD ceteris paribus, resulting in negative economic growth. [1]</p> <p>This has also affected UK's budget balance, which was having a budget deficit. This implied that UK's government expenditure was greater than tax revenue. [1]</p> <p><u>Either ONE of the Answer Below:</u> [1]</p> <ul style="list-style-type: none"> UK's government tax revenue from personal and corporate income tax could decrease due to negative economic growth from a fall in net export and thus leading to a fall in wages and profits respectively. UK's government may also be required to distribute greater unemployment benefits as more people could be unemployed due to a fall in export, hence increasing welfare spending. <p>Thus, a change in UK's trade balance, in this case trade deficit, could also affect UK's budget balance negatively, resulting in large budget deficit. [1]</p>	
(c)		Use the concept of opportunity cost to explain one effect on each of firms and government arising from the inflow of migrants in UK.	[4]
		<p><u>Suggested Answer</u></p> <p>Opportunity cost means the next best alternative foregone when a choice / decision is made by the different economic agents.</p> <p><u>Effect on Firms:</u> With a rising inflow of migrants in UK, firms may employ cheaper migrants to produce goods and services which would allow the firms to drive down their cost of production, thus leading to higher profits, assuming ceteris paribus. This can be seen from Extract 7, as many migrants tend to depress wages in low wages sectors.</p> <p>Thus, the opportunity cost of hiring migrant workers could be better quality goods and services being compromised as they could have been produced by hiring better skilled domestic workers. This could also lead to forgone profits that could have been generated from better quality products.</p> <p><u>Effect on Government:</u> With a rising inflow of migrants in UK, there would be an increase in government spending to provide services such as healthcare and housing benefits to the migrants' workers. This can be seen from Extract 7 as these migrants were entitled to a range of benefits such as housing, healthcare and financial assistance.</p>	

		<p>Thus, the opportunity cost of funds directed towards migrants to provide such benefits would be the forgone benefits such as higher productivity could have been achieved if the funds had been spent on training instead.</p> <p>Note: any relevant opportunity cost example with sound economic analysis is accepted. However, the choice being made and the next best alternative that firms and governments need to foregone has to be clearly explained.</p>	
(d)		Using the information and your own knowledge, explain how Britain benefits from free trade with EU.	[4]
		<p>Suggested Answer: From Extract 6, Britain has been an attractive destination for FDI given its preferential trade access to the EU.</p> <p><u>Any TWO Benefits:</u></p> <ul style="list-style-type: none"> ➔ Increase in FDI and $(X - M)$ leads to a rise in investment expenditure and net export respectively $\rightarrow \uparrow AD$, ceteris paribus $\rightarrow \uparrow$ real national income \rightarrow leading to positive economic growth. ➔ At the same time, an increase in real national output would lead to a fall in inventories, firms would hire more factor of production such as labour $\rightarrow \uparrow$ derived demand of labour \rightarrow leading to a reduction in unemployment. ➔ An increase in FDI and trade, assuming net export $\uparrow \rightarrow$ would lead to an improvement in both capital and financial account and current account, thus Britain could also see an improvement in their balance of payment account position. 	

(e)		To what extent can theory of comparative advantage be used to explain UK's pattern of trade?	[6]						
		<div>Question Analysis:</div> <table><tr><td>Command Word</td><td>To what extent</td></tr><tr><td>Content</td><td>Theory of CA/ pattern of trade</td></tr><tr><td>Context</td><td>UK</td></tr></table>	Command Word	To what extent	Content	Theory of CA/ pattern of trade	Context	UK	
Command Word	To what extent								
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		<div>Schematic Plan:</div> <div>Introduction: Define pattern of trade</div> <div>Thesis: Theory of CA can be used to explain UK's pattern of trade</div> <div>Anti-thesis: Other demand factors can be used to explain UK's pattern of trade instead</div> <div>Evaluation: Justified stand on the extent of whether theory of CA can be used to explain UK's pattern of trade.</div>							
		<div>Suggested Answer:</div> <div>Introduction:</div> <div><ul style="list-style-type: none">Pattern of trade refers to the volume and composition of trade between a country and the rest of the world.Determinants of pattern of trade are based on both demand and supply factors.Supply factors such as the differences in factor endowment, government policies, FTAsDemand factors such as tastes and preferences, rising affluence and changes in population sizes and demographics.</div> <div>Body 1: Theory of Comparative Advantage (CA) can be used to explain UK's Pattern of Trade</div> <div>Differences in Factor endowment – Theory of Comparative Advantage</div> <div><ul style="list-style-type: none">Theory of comparative advantage states that, under certain conditions, countries can benefit from specialisation of producing goods and services which they have comparative advantage in and trade for goods and services in which they do not have comparative advantage in.It's an important factor in determining the relative productivity of an economy in production of certain goods and services based on their factor endowments, which thus affect a country's CA.This means that country with relatively lower opportunity cost of producing certain goods and services compared to other countries should specialise in the production of those goods and services they are more efficient in.Countries should then import goods and services that they do not have comparative in as opportunity costs of producing these goods within that country are higher.</div> <div><ul style="list-style-type: none">➔ E.g. UK could have a lower opportunity cost in the production of more capital and skilled intensive products.➔ As stated in Extract 7, UK experienced 'brain drain' due to thousands of talented workers leaving the country.➔ With relatively abundant amounts of such capital / technology / skilled labours. UK's could export capital / knowledge-intensive goods such</div>							

as motor vehicles and pharmaceutical products as shown in **Table 1**.

- UK could also have a higher opportunity costs in the production of more labour-intensive products. This could be seen from the high migrants' influx which were from low numeracy skills. UK should thus import more labour intensive and lower value-added electronic equipment and mechanical products.
- Also in **Table 1**, UK has imported precious metals and mineral fuels which could imply that they lack such natural resources.

All the above showed that due to theory of CA, it has affected UK's pattern of trade → i.e. in term of the volume and composition of goods and services they export and import.

Body 2: Demand Factors could also be used to explain UK's Pattern of Trade

Differences in Affluence (particularly in emerging economies)

- ❖ Emerging economies such as China has experienced relatively stronger rates of economic growth. This can be seen from **Extract 8, para 2** which stated that there is remarkable growth of emerging markets.
 - This could lead to higher demand for goods and services produced overseas e.g. tourism-related services → resulted in greater export of such goods and services from UK to these emerging economies.
 - This can be seen from **Table 1**, which showed that China is one of UK's top export partners.

Differences in Tastes and Preferences

As seen in **Table 1**, although UK's export motor vehicles, mechanical appliances and pharmaceutical products, they also import them. This could be due to UK citizens' preference for foreign products in these categories, seeking greater choice and wider variety.

Other possible reasons could be due to globalisation, it had led to FDI flows and outsourcing such that lower value-added products / processes are made in lower cost developing countries and then exported back to UK. These exports could be further processed into higher value-added products and exported from UK to trade partners such as Germany and France.

For example, electronic equipment parts can be made in other countries but the final processes could be assembled in UK and then exported from UK to its trade partners.

Evaluative Conclusion:

From the data given, theory of comparative advantage can only be used to explain UK's pattern of trade to a small extent. As seen from **Table 1**, most of the UK's top export and imports products are largely similar. Thus, other factors such as tastes and preferences, coupled with increasing globalisation could have been a more plausible explanation that affect UK's pattern of trade more accurately.

		Level	Knowledge, Application, Understanding and Analysis		
		L3 (5 – 6)	<ul style="list-style-type: none"> • Both theory of comparative advantage (CA) and other factors are well-explained, linking it to the pattern of trade in UK. • Case materials / examples are well-utilised. • A substantiated judgment given to justify whether theory of CA can be used to explain UK's pattern of trade to a larger or smaller extent – otherwise, max 5m. 		
		L2 (3 – 4)	<ul style="list-style-type: none"> • Both theory of CA and other factors explained but no linking to UK's pattern of trade. • Both factors explained but not well-developed. • Case materials / examples given or stated but are not well-explained. 		
		L1 (1 – 2)	<ul style="list-style-type: none"> • Either theory of CA or other factors identified and explained. • No link to UK context. • Smattering of points. 		

(f)		Discuss whether the potential problems faced by UK are likely to be more serious than problems faced by EU members' countries if Brexit were to take place.	[8]						
		<p><u>Question Analysis:</u></p> <table><tr><td>Command word</td><td>Discuss</td></tr><tr><td>Content</td><td>Impact on the macroeconomic aims Brexit</td></tr><tr><td>Context</td><td>UK and EU member countries</td></tr></table>	Command word	Discuss	Content	Impact on the macroeconomic aims Brexit	Context	UK and EU member countries	
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		<p><u>Schematic Plan:</u></p> <p style="text-align: right;"><u>Introduction:</u></p> <p>Explain what is Brexit and brief description of the potential problems faced by UK and EU members' countries</p> <p><u>Thesis: Potential Problems faced by UK are likely to be more serious than problems faced by EU members' countries if Brexit were to take place</u></p> <p>Explain the potential problems faced by UK in term of the negative impact on the macroeconomic aims</p> <p><u>Anti-thesis: Potential Problems faced by EU members' countries are likely to be more serious than problems faced by UK if Brexit were to take place</u></p> <p>Explain the potential problems faced by EU members' countries in term of the negative impact on the macroeconomic aims.</p> <p style="text-align: right;"><u>Evaluation:</u></p> <p>Conclude stand on whether UK or EU members' countries are likely to face a more serious problem</p>							
		<p><u>Suggested Answer:</u></p> <p><u>Introduction:</u></p> <p>Brexit refers to Britain leaving the European Union (EU). The potential problems facing UK and EU member countries are likely to have negative impact on their macroeconomic aims.</p> <p><u>Body:</u></p> <p><u>Potential Problems faced by UK</u></p> <p>As stated in Extract 8, para 3, UK could lose preferential trade access to EU.</p> <p>➔ If trade barriers are imposed on UK's exports to EU, it could lead to a fall in export revenue and assuming ceteris paribus, worsen net exports ➔ ↓ AD ➔ ↓ real national income ➔ leading to slower or negative economic growth. This is especially detrimental to UK's economy given the strong trade ties between UK and EU.</p> <p>➔ At the same time, a fall in export would worsen current account position ➔ ceteris paribus ➔ leading to worsening of balance of trade ➔ eventually affect its balance of payments account.</p>							

- Loss of preferential trade access to EU may also reduce UK's attractiveness as an investment destination as stated in both **Extract 6** and **8** → Fall in foreign direct investment (FDI) would impact both actual and potential economic growth negatively since investment expenditure is a component of AD and a fall in FDI would also mean a fall in productive capacity, leading to a fall in long run aggregate supply respectively.
- Plummeting stock markets might lead to an outflow of portfolio investment → worsening its capital and financial account (KFA) position → thus BOP, ceteris paribus.
- Weakening pound might lead to imported inflation. This is because weakening pound would cause imported goods and services to be relatively more expensive in domestic currency. This would reduce UK's price stability.
- Restriction in labour flow might lead to higher cost of production (COP) in UK → short run aggregate supply curve would shift to the left → this would further increase UK's general price level → leading to inflation. At the same time, resulted in a fall in real national income → worsen UK's economic growth and increase unemployment.

Potential Problems faced by EU Members' Countries

As stated in **Extract 8, para 4**, UK is the second largest economy in the Europe.

- If UK leaves EU, EU members might suffer from a fall in export revenue due to the '*possible rise in trade barriers*' by the UK on EU's goods and services. Data from **Table 1** also shows that EU members are enjoying trade surplus with UK and this might be reversed if UK were to exit from the EU.
- Fall in net exports could similarly lead to negative economic growth or recession and higher unemployment in EU due to a fall in AD. The extent of the negative impact could be more strongly felt in EU members' countries with stronger trade links with the UK, such as Germany and France as shown in **Table 1**.
- Uncertainty and diminished image of EU as stated in **Extract 8** could lead to a fall in FDI due to bleak economic outlook of the investors. This might further worsen recession and BOP [*as explained above*]
- Restriction in labour into UK from the EU might worsen unemployment in EU especially in Eastern European economies shown in **Extract 8**.

Thesis: Potential Problems faced by UK are likely to be more serious than problems faced by EU members' countries if Brexit were to take place

As stated in **Extract 8, para 4**, more than 50% of Britain's trade flows with EU and in **Extract 8, para 2**, it also showed their deep integration in terms of economy, military and culture between UK and EU → thus, leaving EU might lead to potential shrinking of market for UK. As such, UK might not be able to exploit economies of scale significantly, leading to higher COP and

	<p>could lead to a loss of export competitiveness. On the other hand, EU members' countries belong to a single market and are able to trade freely among themselves, thus they might choose to import similar goods and services from within the EU rather than import from the UK.</p> <p>Given UK's reliance on FDI especially to cover their current account deficit, it might be a more serious problem for the UK as loss of access to EU might lead to a fall in FDI in UK → instead there might be an increase of FDI in some EU members' countries such as Germany to gain access to EU markets. Further, as stated in Extract 6, para 2, it stated that if there were to be Brexit, investors might diminish markedly as Britain would be a less attractive destination for FDI if the UK has loss their preferential trade access to the EU. Not only FDI in UK would be negatively affected, <i>'European investors also hold most of Britain's short-term liabilities'</i> → all these would have worsen UK's KFA position.</p> <p><u>Anti-thesis: Potential Problems faced by EU members' countries are likely to be more serious than problems faced by UK if Brexit were to take place</u></p> <p>Weakening pound might lead to a fall in EU net exports to UK assuming PED of exports and imports are greater than one while it may lead to rise in UK net exports to EU, thus benefiting UK.</p> <p>EU proposed regulation such as tax on financial services as stated in Extract 8, para 2 might make UK financial services more attractive and lead to a fall in export competitiveness of EU financial services as compared to UK financial services. By <i>'striking better deals'</i> with emerging markets such as China and US, UK goods and services could be more export competitive than EU goods and services in these markets, thus worsening EU's net exports, ceteris paribus.</p> <p>Redirection of Eastern European migrants from UK into EU member countries such as Germany as stated in Extract 8, para 4 might depress wages and lead to structural unemployment in these countries.</p> <p><u>Evaluation:</u></p> <p>In the short-term, both UK and EU members' countries are likely to face potential problems due to possible Brexit. However, the potential problems seem to be more serious for UK as it might see an immediate greater fall in FDI and net exports as compared to EU members' countries.</p> <p>In the longer-term, problems faced by EU might be more serious as UK competes with EU for trade deals and might be able to negotiate better deals as compared to EU. EU regulations might harm key sectors such as financial services. Diminished EU image might eventually lead to a fall in FDI, worsening economic growth as well as BOP. Greater burden on EU budget due to a fall in contribution as well as increase in spending on benefits as EU migrants flow out of UK into EU might reduce its ability to manage Eurozone problems as well as policies to enhance competitiveness of EU.</p>					
	<table><tr><td colspan="2">Knowledge, Application, Understanding and Analysis</td></tr><tr><td>L3 (5 – 6)</td><td><ul style="list-style-type: none">• Potential problems faced by BOTH UK and EU members' countries if Brexit were to take place are well-elaborated with economic framework and analysis.</td></tr></table>	Knowledge, Application, Understanding and Analysis		L3 (5 – 6)	<ul style="list-style-type: none">• Potential problems faced by BOTH UK and EU members' countries if Brexit were to take place are well-elaborated with economic framework and analysis.	
Knowledge, Application, Understanding and Analysis						
L3 (5 – 6)	<ul style="list-style-type: none">• Potential problems faced by BOTH UK and EU members' countries if Brexit were to take place are well-elaborated with economic framework and analysis.					

			<ul style="list-style-type: none"> • Well-developed answers addressing the seriousness of the problems faced by BOTH UK and EU members' countries – without this explanation, max 5m. • Analysis supported with strong evidence from the case materials. 	
		L2 (3 – 4)	<ul style="list-style-type: none"> • Potential problems of UK and EU are stated and explained. • Case materials / examples stated with no explanation. 	
		L1 (1 – 2)	<ul style="list-style-type: none"> • Potential problems of UK and/or EU stated with no elaboration. • No case materials nor examples given to support analysis. 	
		E2 (2)	A substantiated judgment which considers whether UK or EU members' countries would face a greater problem if Brexit were to take place.	
		E1 (1)	A judgment without substantiation.	

Question 3

Plans to achieve a 'car-lite' society, which is to reduce the use of private cars in Singapore, will cost the government S\$36 billion. The Government is expected to invest this amount over the next five years, as it seeks to improve rail reliability and make public transport the preferred way to get around.

- (a) Explain how the use of private cars leads to market failure and consider whether public transport can be regarded as a public good. [10]
- (b) Discuss whether improvement to public transport alone is the best way to achieve a car-lite society. [15]

(a)	Explain how the use of private cars leads to market failure and consider whether public transport can be regarded as a public good.	[10]
<u>Question Analysis:</u>		
Command		Explain and consider
Content		Market failure, public good
Context		private cars, public transport
<u>Schematic Plan</u>		
<u>Introduction:</u> <ul style="list-style-type: none">- Define market failure		
<u>Body 1: Explain how use of private cars lead to market failure</u> <ul style="list-style-type: none">- State the source of market failure- Use of cost-benefit analysis to show how use of private cars lead to inefficient allocation of resources		<u>Body 2: Consider whether public transport can be regarded as public good</u> <ul style="list-style-type: none">- Define public good- Explain whether public transport is rival in consumption- Explain whether public transport is excludable in consumption- Conclude if public transport is a public good
<u>Conclusion:</u> <ul style="list-style-type: none">- Explain the need for government intervention in the use of private cars to bring about allocative efficiency		
<u>Suggested Answer:</u>		
<u>Introduction:</u> <p>Market failure occurs when the free market fails to allocate resources efficiently, resulting in an inappropriate amount of goods and services produced/consumed and thus a deadweight loss is incurred. Market failure may occur in a market for goods that generate externalities or a market for public goods.</p>		
<u>Body 1:</u> <p>In the use of private cars, car owners are consuming car journeys in traveling to various destinations. In their decision to consume car journeys, they would consider their Marginal Private Cost (MPC) and Marginal Private Benefit (MPB).</p>		

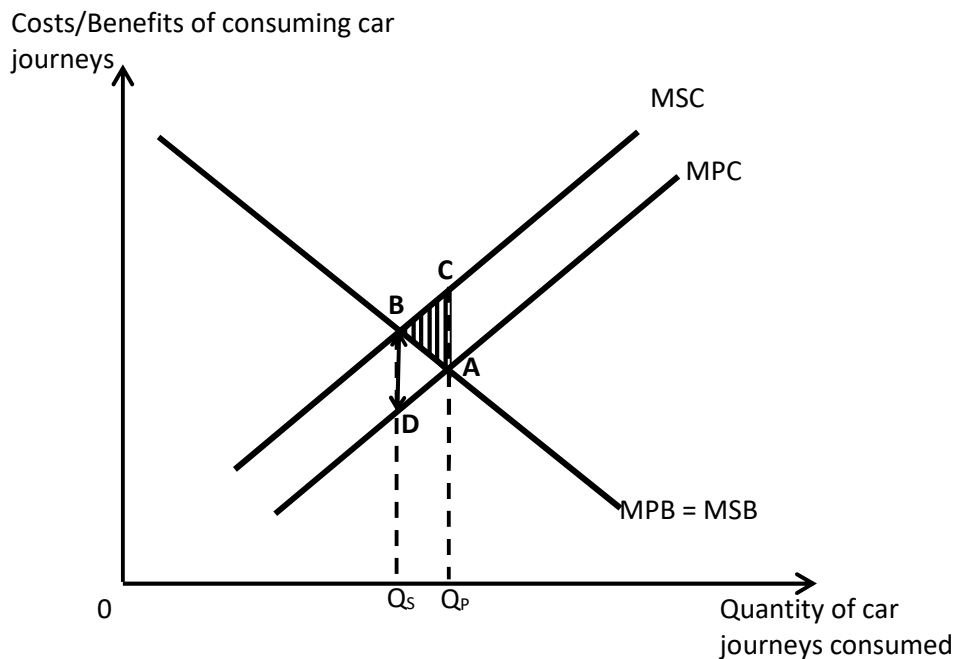
MPC which is the cost of using the car to themselves, includes price of fuel used and parking fee; MPB which is the benefit derived from using the car can be the convenience they have from using the car to travel.

The amount of car journeys consumed would be determined at a level where the private level of satisfaction is maximised, which is determined by the condition $MPC=MPB$.

However, in their decision to consume car journeys, an external cost is incurred by third parties who include other road users and pedestrians on the road.

This would include the healthcare cost incurred by pedestrians as a result of the car journeys due to the pollution emitted by the car or the loss of productivity by other road users due to the congestion generated.

These costs constitute the Marginal External Cost (MEC). Due to the presence of MEC, the Marginal Social Cost (MSC) would exceed MPC. Assuming no positive externality generated, $MPB=$ Marginal Social Benefit (MSB). The socially optimal amount of car journeys is determined by the condition $MSC=MSB$. The situation can be depicted in the graph below



From the diagram above, it can be seen that the private level of car journeys consumed (Q_p) is greater than the socially optimal level (Q_s). This means that there is an over-consumption of car journeys. As a result, a deadweight loss of area ABC is incurred by society and there is an over-allocation of resources, thus market failure.

Body 2:

A public good has the characteristics of non-rivalry and non-excludability in consumption. To determine if public transport is a public good, it must be examined to see if it exhibits these 2 characteristics.

Non-rivalry in consumption means that the consumption of the good by one user does not decrease the amount of the good available to be enjoyed by other users. In other words, there is no additional cost incurred to provide the good to an additional user. In the case of public transport, when a person boards the train or bus, there is less space in the bus or

train for other users. In order for the bus or train service to be provided for an additional user, more train space would need to be created and thus a cost is incurred to provide the service to an additional user. As such public transport is rival in consumption.

Non-excludability in consumption means that there is no effective way to prevent non-payers from consuming the good. In the case of public transport, non-payers are effectively prevented from using the public transport service. This is evident from the gantries at the MRT stations which prevent anyone who does not pay from using the train service. As such public transport is excludable in consumption.

Given that public transport is both rival and excludable in consumption, it is not a public good.

Conclusion:

Given the market failure in the use of private cars, there is a need for government to intervene to correct the market failure so as to bring about allocative efficiency in various markets.

Level	Knowledge, Application, Understanding and Analysis
L3 (7 – 10)	<ul style="list-style-type: none"> - Answer provides clear analysis of the market failure in the use of private cars, using cost-benefit analysis - Provides contextualised examples of MPB, MPC and MEC - Answer provides clear explanation of whether public transport is a public good by comparing it against the 2 characteristics of public goods - Provides specific examples in the context of public transport
L2 (5 – 6)	<ul style="list-style-type: none"> - Answer provides brief analysis of the market failure in the use of private cars, with some attempt at using cost-benefit analysis - Answer provides clear explanation of whether public transport is a public good by comparing it against the 1 of the characteristics of public goods OR a brief explanation by comparing against the 2 characteristics of public goods - Examples are missing or not set in the context of private cars and public transport
L1 (1 – 4)	<ul style="list-style-type: none"> - Analysis of the market failure in the use of private cars does not use cost-benefit analysis - Answer provides brief explanation of whether public transport is a public good by comparing it against the 1 of the characteristics of public goods OR lacks any comparison against the characteristics. - No examples provided

(b)	Discuss whether improvement to public transport alone is the best way to achieve a car-lite society.	[15]
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Question Analysis:

Command	Discuss
Content	Policies to correct market failure
Context	Public Transport Car-lite society

Schematic Plan:

Introduction:

- Explain what a car-lite society would mean in economic terms
- State the relationship between private cars and public transport

Thesis: Improvement to public transport can achieve a car-lite society

- Explain how improvement to public transport will achieve car-lite society
- Explain the advantages of improvement to public transport

Anti-thesis: Improvement to public transport cannot achieve a car-lite society

- Explain limitations of improvements to public transport
- Explain alternative policy

Conclusion:

- Take a stand
- Elaborate on stand using economic analysis

Suggested Answer:

Introduction:

Achieving a car-lite society would be to reduce the number of car journeys consumed and thus reduce the total amount of external costs generated, which is caused by both pollution and congestion. One way that the government could achieve this is to improve public transport which is an alternative to the use of private cars.

Thesis:

Improvement to public transport, which includes improving rail reliability, could reduce the time taken to travel via public transport as well as improve the comfort and convenience in taking public transport.

In Singapore, the Singapore government has attempted to improve the public transport system by creating more MRT lines to reach more parts of Singapore as well as develop more bus interchanges at stops along the MRT lines so that the bus network will work together with the MRT lines to increase the convenience of traveling to various places.

The government has also bought more environmentally friendly buses so that they emit less harmful gases when traveling on the roads.

All these would make public transport a closer substitute for use of private cars.

Furthermore, given that the price of consuming public transport services is lower than the cost of producing car journeys, some car users may choose to substitute using public transport for using private cars.

This would lead to a fall in the demand for car journeys.

An advantage of focusing on the improvement of public transport as a means to achieving a car-lite society is that it provides road users a viable alternative to the use of private cars, given that there is a necessity to travel either for work, school or recreation.

The reduction in external costs to society as a result of the improvement to public transport depends on the mode of public transport that is improved.

If it is the rail system, then there will significantly reduce the pollution and congestion issue because the use of trains do not emit harmful gases nor contribute to road congestion.

If it is an improvement in the bus system, then the reduction in pollution and congestion is less because the use of buses still emits harmful gases and contributes to congestion.

Anti-thesis:

However, there are several limitations which make the improvement to public transport unsuitable to achieve a car-lite society. First would be the responsiveness of the target audience in order for the improvement of public transport. If the private car users do not view public transport and private cars as substitutes, then the magnitude of the fall in demand will be fairly small.

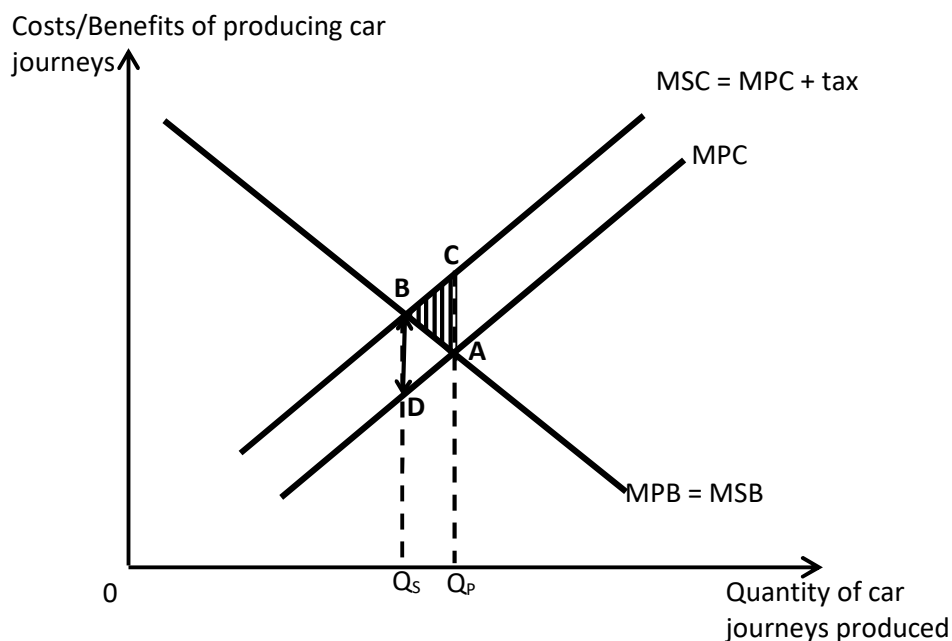
As such, implementing a policy which only consist of improving public transport, is insufficient in bringing about a car-lite society.

Instead, the government could consider implementing a tax that will make consuming car journeys more expensive and thus reduce the consumption of car journeys.

The per-unit tax should be the value of MEC at Q_s .

With the tax levied, this would cause the car owners to internalise the MEC in their decision of deciding to consume a car journey. This would shift MPC upward by the value of MEC at Q_s so that the MPC will coincide with the MSC. This would then cause the private level of consumption of car journeys to be equal to the socially optimal level.

In Singapore the Electronic Road Pricing (ERP) Scheme is implemented at various locations around Singapore with the aim of reducing the congestion on the road during certain hours of the day e.g. morning and evening peak hour. By implementing a charge to use the road during those times, the government hopes that those who drive will use other roads or consider taking public transport instead.



A difficulty that the government faces in implementing this policy is determining the amount of tax to levy as the MEC cannot be monetised. However, any form of tax would result in lower consumption of car journeys and thus a move towards a car-lite society.

Conclusion:

In conclusion, improving public transport alone is not the best way to achieve a car-lite society. Its effectiveness is dependent on road users' views of public transport.

Instead the government can consider using a mix of policies that would discourage the use of private cars through various ways. One such mix of policies would be to include a tax that makes cars more expensive to use and improvement in public transport. That way, road users will both be less inclined to consume car journeys and more inclined to consume public transport services instead. Furthermore, the tax revenue received from the tax can be used to finance the improvement of public transport.

Level	Knowledge, Application, Understanding and Analysis
L3 (9 – 11)	<ul style="list-style-type: none"> - Answer makes good use of tools of economic analysis to answer how a car-lite society can be achieved - Examples are well-used
L2 (6 – 8)	<ul style="list-style-type: none"> - Answer makes good use of tools of economic analysis to answer how a car-lite society can be achieved - Examples are mentioned but not elaborated upon
L1 (1 – 5)	<ul style="list-style-type: none"> - Answer does not make use of tools of economic analysis to answer how a car-lite society can be achieved - No examples are mentioned
E2 (3 – 4)	<ul style="list-style-type: none"> - Judgment with elaboration using economic analysis
E1 (1 – 2)	<ul style="list-style-type: none"> - Judgment without elaboration

Question 4

- (a) Explain the two possible conflicts in macroeconomic goals that a government may face. [10]
- (b) Assess the view that certain policies are better suited in attaining favourable balance of payments position than other policies. [15]

(a)	Explain the two possible conflicts in macroeconomic goals that a government may face.	[10]
<u>Schematic Plan</u> <div><div>State Four Macro Goals</div><div><div>Conflict #1</div><div>Conflict #2</div></div></div>		
<u>Suggested Answer</u> <p><u>Introduction</u></p> <ul style="list-style-type: none">- All governments aim to attain the four macroeconomic goals:<ul style="list-style-type: none">o Sustained economic growtho Full employmento Low inflation rateo Favourable balance of payment- Possible conflicts may arise when a government attempts to achieve all four goals. <p><u>Body</u></p> <ul style="list-style-type: none">- Explain why all governments have these four macroeconomic goals:<ul style="list-style-type: none">o Sustained economic growth<ul style="list-style-type: none">▪ Positive and stable increase in real national income▪ Increase material SOLo Full employment<ul style="list-style-type: none">▪ Minimise opportunity cost in terms of goods/services forgone▪ Minimise strain on government budget, especially for welfare stateso Low inflation rate<ul style="list-style-type: none">▪ Encourage consistent and continuous spending.▪ Minimise redistributive effect among population (borrowers vs lenders, etc)o Favourable balance of payment<ul style="list-style-type: none">▪ Avoid drain on foreign reserves or, worse, excessive borrowing which incurs interest payments▪ Shore up confidence in investors, both foreign and local.		

Conflict #1 – Full Employment and Low Inflation

- To achieve full employment
 - Govt increases AD
 - Firms hire more fop, including labour, to meet increase in AD
 - When economy produces near full employment level of output, GPL rises faster and faster (higher and higher inflation) as higher prices are needed to induce further rise in output due to higher cost of production.
 - Conflict arises.

Conflict #2 – Sustained Economic Growth and Favourable BOP Position

- To achieve sustained economic growth
 - Govt increases AD
 - National income rises via k process
 - As income rises, households increase import expenditure on more or better quality goods and services.
 - Assuming *ceteris paribus*, BOP deficit position may occur and persist over time.
 - Conflict arises.

Other possible conflicts:

- Sustained Economic Growth and Low Inflation

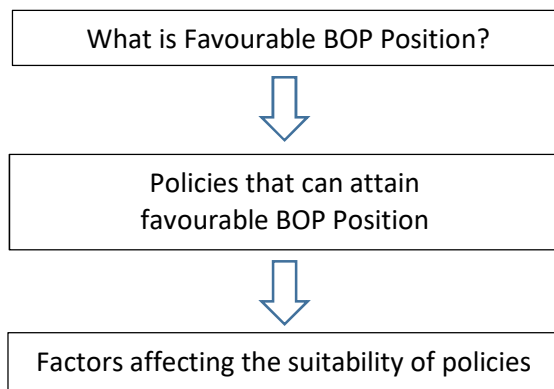
Conclusion

The above are two of the various conflicts in macroeconomic goals that a government may face.

Level	Knowledge, Application, Understanding and Analysis
L3 (7 – 10)	<ul style="list-style-type: none">- Well-structured and coherent answer.- Comprehensive and well-developed answer that relies on economic analysis and explains two distinct conflicts covering at least THREE macroeconomic goals. Use of simple examples (real-life or hypothetical) is required to earn top marks.
L2 (5 – 6)	<ul style="list-style-type: none">- For an answer that shows understanding of the question but nevertheless not well-explained (e.g. inadequate depth or errors in the use of economic analysis).- Answer only covers at most TWO macroeconomic goals – max 6m.
L1 (1 – 4)	<ul style="list-style-type: none">- For an answer that is too general and mere listing of factors without elaboration.- Answer contains conceptual errors.

(b)	Assess the view that certain policies are better suited in attaining favourable balance of payments position than other policies.	[15]
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Schematic Plan:



Suggested Answer:

Introduction

- Various policies could be employed by a government to attain a favourable BOP position.
- However, not all policies are equally suitable to do so due to the various constraints and circumstances an economy may face.
- Hence, to ensure higher success of achieving favourable BOP position, a government may decide to employ a suite of policies.

Body

- Framework:
 - o State what is favourable BOP position – avoidance of large and persistent BOP deficit.
 - o Explain the main causes of BOP deficit in CA and KFA.
- Policies:
 - o Identify any 3 policies that could help achieve favourable BOP position.
 - o E.g. currency depreciation, import restrictions, attracting inward FDI, etc.

Constraint/Factor/Circumstance #1 – Likelihood of Retaliation

- Import quota is one way to reduce BOP deficit.
- It reduces import expenditure by curbing the previously unlimited goods and services being imported into the country.
- However, if trade relations with supplier country are less than cordial, implementation of quota is likely to face retaliation (e.g. EU vs China over solar panel).
- Though import expenditure would fall, so would export revenue due to resistance faced by domestic exporters while attempting to sell to trading partners.
- Policy may not be suitable, as seen especially during global recessions.

[Students can also explain currency war in the same vein.]

Constraint/Factor/Circumstance #2 – Time Lag

- Enhance non-price competitiveness to maintain favourable BOP position
- Provide incentive (subsidies/grants) to firms which engage in R&D
- Even in the face of rising import expenditure, the higher export revenue would help to achieve favourable BOP position
- However,
 - o Time lag may delay enhancement to non-price competitiveness.
 - o Export revenue may not rise sufficiently to offset rise in import expenditure.
 - o May not attain favourable BOP position

Constraint/Factor/Circumstance #3 – Degree of Import Reliance

- Expenditure-switching policy – aims to switch from spending on imports to spending on locally produced goods and services ('buy local').
 - o Import expenditure falls, assuming export revenue constant → achieve favourable BOP position
- Not likely to succeed if economy is highly reliant on imported goods/services/raw materials (e.g. Singapore) due to its own lack of natural resources to satisfy the needs and wants of its population.

Conclusion/ Evaluation

Indeed, some policies are more suitable to achieve a favourable BOP position than others. Two large set of factors are: nature of the domestic economy as well as that of others. Hence, the government would need to first understand the constraints/threats it faces before choosing the appropriate mix of policies to best attain a favourable BOP position. Over time, changes in economic conditions/constraints/outlook may warrant a review of the policy tools and their efficacies. The government will then need to put together an updated mix of policies to continue to achieve favourable BOP position.

Level	Knowledge, Application, Understanding and Analysis
L3 (9 – 11)	<ul style="list-style-type: none"> ▪ Balanced argument with well-thought through and comprehensive set of factors dealing with deficits in both CA and KFA. ▪ Conceptually sound and well-elaborated explanation using economic tools/concepts/terms. ▪ Examples given are appropriate.
L2 (6 – 8)	<ul style="list-style-type: none"> ▪ A balanced approach explaining at least one factor to reduce CA deficit and another to reduce KFA deficit. ▪ Elaboration is incomplete and may contain some errors. ▪ No examples provided to illustrate the points made.
L1 (1 – 5)	<ul style="list-style-type: none"> ▪ Primarily descriptive, not using economic concepts/terms in the answer. ▪ Minimal explanation/elaboration. ▪ Major errors although there is relevance to question.
E2 (3 – 4)	<ul style="list-style-type: none"> • Judgement is substantiated with economic analysis.
E1 (1 – 2)	<ul style="list-style-type: none"> • Judgement is not substantiated or substantiated without economic analysis.

