TMJC Economics Unit 2023
JC2 H2 Economics 9570

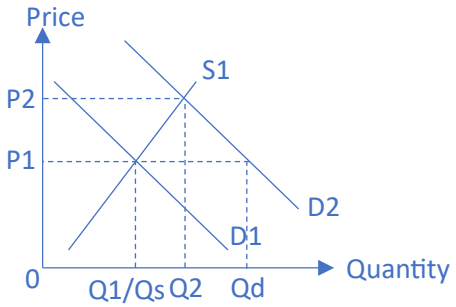
Suggested Answers

for Prelim Exam Paper 1

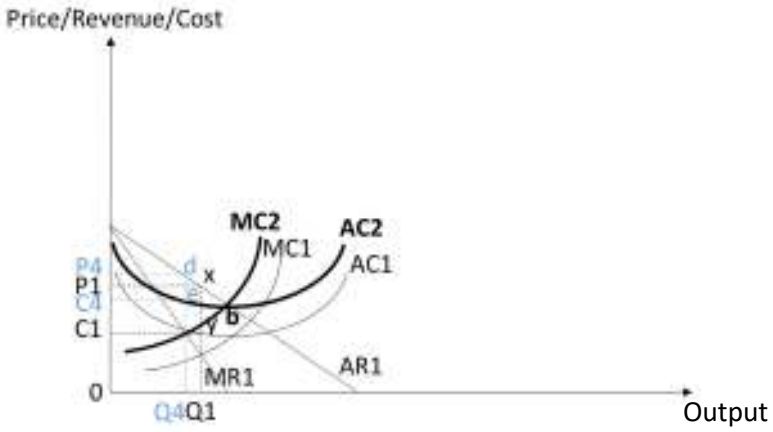
Question 1: Global warming and the ice cream industry

Suggested answer

(a)	**Using Table 1, explain why the demand for Blue Bell's ice cream is likely to be price-inelastic. [3]**
	Demand is likely to be price inelastic, as despite the fall in quantity sold as seen by the fall in unit sales of 4.8%, revenue as indicated by dollar sales has increased by 4.5%. When PED<1, the rise in price will bring about a less than proportionate fall in quantity demanded. Since TR = P x Q, the fall in quantity did not result in a fall in TR because the fall in TR due to the fall in quantity < rise in TR due to the rise in price. [Or TR increased despite the fall in Q because the fall in TR due to the fall in Q < rise in TR due to the rise in P, implying that P rose by a larger proportion/percentage.]
(b)	**Explain how the production of fossil-fuel-generated energy can be a source of negative externalities. [2]**
	'Effects of climate change arising from greenhouse gas emissions due largely to the burning of fossil fuels for energy' (Ext 2) → affects 3rd party such as Olympic athletes who are not involved in the production of fossil-fuel-generated energy as they incur medical costs due to heat exhaustion as a result of exposure to heatwaves without compensation.
(c)	**"And as temperatures soar, so do sales of a snack for which the Japanese notoriously have a sweet spot — ice cream." (Extract 2)** **Using a demand and supply diagram, explain the role of prices in restoring equilibrium in the Japanese ice cream market when 'temperatures soar'. [5]**
	Initial eqm E1 with price P1 & quantity Q1. The 'soaring temperatures' will lead to a favourable change in tastes and preferences. Consumers signal greater demand for ice cream by casting more dollar votes, represented by a rightward shift in DD curve to D2. The market is in disequilibrium as there is a shortage (Qd is more than Qs), resulting in an upward pressure on price. As price rises, this rations consumers who are unable to afford the goods out of the market (**rationing** function) leading to a fall in quantity demanded represented by a movement along D2. As price increases, this acts as a signal to producers to increase production (**signaling** function). The rise in price also has an **incentive** function as producers will be

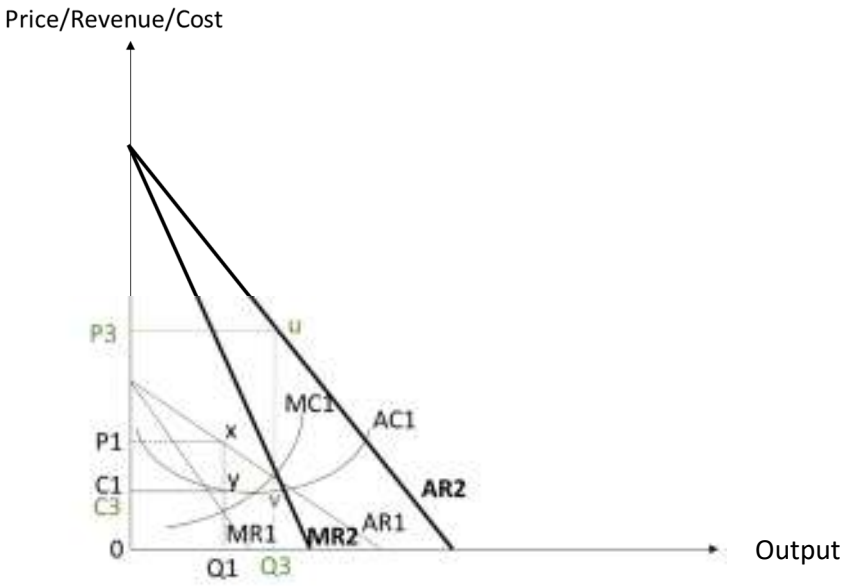
	incentivised by the higher prices to increase production to earn more revenue and profit. Therefore, quantity supplied rises represented by a movement along S1. As qty demanded falls and quantity supplied rises, the shortage is eventually eliminated and an equilibrium is reached at E2, where Qd=Qs and equilibrium quantity rises to Q2 ("so do sales") and price rises to P2. Accompanying DDSS diagram [1] 
(d)	**Using an example, explain a benefit to an Australian ice cream maker of producing on a larger scale for international markets. [2]**
	[explain iEOS with regards to the context given] Larger scale of production → firms can split the production processes into separate tasks. Specialisation and division of labour can increase the efficiency of labour. There is less time loss in workers switching from one operation to another. By performing the same actions repeatedly, workers become more efficient in their jobs. **[explain the impact of iEOS on firm's cost]** Thus average cost of production is lowered as output increases. This is a benefit to a profit-maximising ice cream maker as it increases profits assuming no change in TR.
(e)	**With reference to Extract 1, discuss the factors that Tillamook would have considered in its decision to add extra cream in its production of ice cream during the pandemic. [8]**
	Tillamook's objective as a firm is to maximise profits by increasing TR & reducing TC. To decide to add extra cream despite the pandemic, the benefit of that decision was projected to outweigh the cost. **Requirement 1: Profit-maximising firm's rational DM & costs of adding extra cream** **<u>Costs: How adding extra cream might increase COP and lower profits</u>** • Adding extra cream will lead to an increase in the firm's MC & AC

- Moreover, during the pandemic, the 'supply chain disruptions' that led to shortage of raw materials and higher input prices will further exacerbate the increase in the firm's MC & AC from MC1 & AC1 to MC2 & AC2.
- Price rises from P1 to P4, and quantity falls from Q1 to Q4. This leads to a fall in the firms profits fall from P1xyC1 to P4deC4, c.p.



Requirement 2: Benefits - How adding extra cream might increase revenue and increase profits

- Closure of ice cream shops during pandemic has reduced the availability of close substitutes. At the same time, there is greater need for comfort food during crisis causing favourable change in taste and preferences. This leads to an increase in the DD (AR) & MR for store-bought ice cream
- In anticipation of the higher demand during the pandemic, Tillamook might have sought to leverage on this increase in DD by maintaining/improving its non-price competitiveness & product differentiate itself from rest of store-bought ice cream through quality of ice cream ("best ice cream" due to "adding of extra cream") by continuing to add extra cream → favourable change in tastes and preferences → further increase DD (AR) & MR + DD (AR) more price-inelastic due to product differentiation which retains/maintains consumer loyalty. AR & MR shift right from AR1 and MR1 to AR2 and MR2 as demand rises and become more price-inelastic.
- Price rises from P1 to P3, and quantity from Q1 to Q3. This will increase firm's profits from P1xyC1 to P3uvC3, c.p.



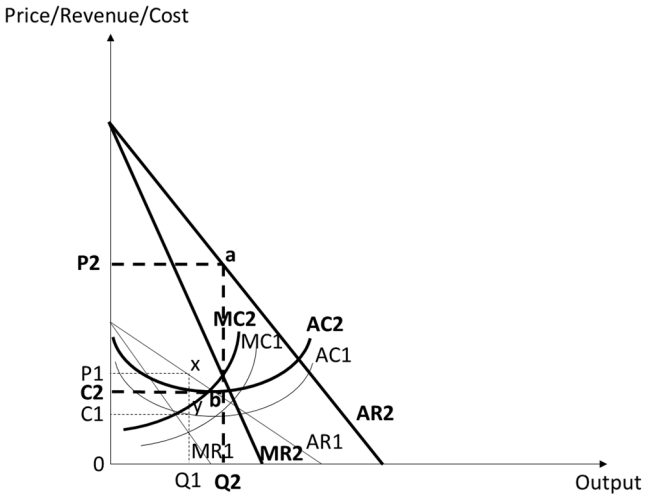
Evaluation: Constraint + Extent/Likelihood

- Constraint: Reaction of other rivals → copy strategy or other strategies to compete with Tillamook. Competition (likely non-price since pandemic likely to increase COP and put pressure on prices) from other established brands might limit effectiveness of product differentiation and the increase in AR & MR as well as reduction in price-inelasticity of demand.
- Extent/Likelihood: However, as there is a overall increase in DD for all store-bought ice cream, Tillamook is still likely to still observe a rise in its DD(AR) & MR, albeit smaller, even if rivals were to embark on non-price strategies to compete with it. Moreover, cost constraints particularly during the pandemic which led to hikes in factor cost → reduce ability of rival firms to compete via product differentiation

<u>Evaluation Conclusion</u>

- Whether TR increases more or TC increases more depends on
  (i) How successful Tillamook is in leveraging on the rise in DD for store-bought ice cream via the improvement/maintenance of quality
  (ii) whether it has strategies such as technology to mitigate the rise in cost
- As a profit maximising firm,Tillamook has gone ahead with the decision. This implies that Tillamook projected the benefits of adding extra cream to outweigh the cost of adding extra cream because **[any 1]**
  - as the need for familiarity and comfort grows amidst uncertainty, Tillamook predicted that maintaining the quality and taste of its ice cream through the continued practice of adding extra cream would enable it to leverage on the above sentiments and so increase its demand and revenue significantly
  - moreover, it had leveraged on the use of technology (probably due to accumulated supernormal profits that it has amassed over its many years in operation) to stockpile cream in large amounts, and automate its production processes such that it did not need to pay more for raw materials and labour during the pandemic → extent to which costs increased was limited

- Hence overall rise in P (from P1 to P2) and quantity (from Q1 to Q2) and a rise in profits (from P1xyC1 to P2abC2) since the rise in TR more than offsets the rise in TC **[optional diagrammatic reference]**



Mark scheme

Levels	Descriptors	Marks
L2	For a <u>well-developed</u> balanced answer which thoroughly uses the case material to explain at least 2 factors that Tillamook would have considered in its decision to add extra cream in its production of ice cream during the pandemic.	4-6
L1	For an <u>underdeveloped</u> answer which attempts to use the case material to explain at least 1 factor that Tillamook would have considered in its decision to add extra cream in its production of ice cream during the pandemic. Smattering of points / factors or answer that is irrelevant.	1-3
Evaluation 2m		
E2	Well justified judgement with economic reasoning / comparison.	2
E1	Provide a judgement with weak justification / no comparison.	1

(f)	**International trade can have both positive and negative effects on a country.** **Using the theory of comparative advantage, discuss how engaging in international trade might affect Australia's living standards. [10]**
	Requirement 1: Explain, using the TOCA, how engaging in international trade affects <u>MATERIAL</u> SOL The theory of comparative advantage (CA) states that even when a country has absolute advantage over another in production, both countries can gain from mutual trade if each country specialises in producing and exporting the good or service in which it can produce at lower opportunity cost i.e., has CA. Australia has CA in the production of premium dairy products i.e., the ability to produce it at a lower opportunity cost. This is made possible given their relatively abundant resources such as land & cows. As such, Australia should specialize and export its dairy products. The increase in exports revenue will bring about an increase in AD. The rise in income from the initial rise in AD causes a rise in income-induced consumption resulting in a further increase in AD. As one's spending becomes another's income there will be multiple increases in AD & thus real output. Ceteris paribus, household will experience an increase in income which assuming population is unchanged means higher income per capita and thus more willingness and ability to consume goods & services. This leads to an increase in material SOL. In addition, the increase in real output will lead to an increase in aggregate demand for labour since labour is a derived DD. This reduces demand-deficient unemployment. Since a larger proportion of labour force gainfully employed, earning income and able to consume goods and services, this will improve material SOL. **Possible EV:** To consider income inequality However, the increase in material SOL does not necessarily benefit everyone in the economy. Should the increase in real output be accompanied by the widening of the income gap, it would then imply that the increase in income only benefits the rich at the expense of the poor. As we saw in the case of Australia which used to have CA in minerals production, it faces challenges as it loses CA in minerals production over time. There would be a rise in income inequality as factor owners supplying FOPs to the thriving dairy industries earn greater factor rewards compared to those supplying to sunset minerals industries. **[link back to the question]** This would imply that the higher material SOL will only be applicable to the higher income earners.

Requirement 2: Explain, using TOCA, how engaging in international trade affects <u>NON-MATERIAL</u> SOL

Specialising in the dairy products which Australia has CA in and exporting it increases AD, real output and employment. As more people are gainfully employed and so less anxious and desperate over making ends meet. The lower crime rates leading to safer neighbourhoods, this would bring about an increase the quality of life and thus non-material SOL.

However, as Australia specialize and trade dairy products, it would imply that firms will have to increase production as it caters to a larger market. In doing so, it 'leaves a carbon footprint' as more production and transportation increases energy usage and production, giving rise to carbon emissions which result in heatwaves and flooding which would destroy homes and lives. This lowers the quality of life and thus non-material SOL. Moreover, the rearing of more cows will further contribute to global warming as they emit methane when digesting their food. This would further lower the non-material SOL as people will be more prone to health problems.

At the same time, should a country fully specialise in the production of the good it has CA in, it will also face challenges should the country lose CA of the good over time. In the case of Australia, losing CA in the production of minerals will bring about consequences such as structural unemployment. There will be a fall in demand for labour in the minerals industries since there will be a fall in demand for Australia's minerals. As those who are displaced are unable to get a job in a sunrise industry such as the dairy product industry due to a mismatch of skills, this gives rise to structural unemployment. The rise in unemployment will further worsen the non-material SOL in the country as the unemployed who experienced a loss in income might face greater stress due to their financial instability and worry about supporting their family. In worst case scenarios, they may resort the theft just to ensure that they could make ends meet. This will worsen the quality of life and thus non-material SOL.

Overall conclusion: There will be an increase in Australia's SOL

In light of the challenges brought by specialisation and trade, the Australian government may implement policies to minimize the negative impacts on SOL such as implementing taxes or subsidise education and training. Assuming the government has the right information to ensure these policies are effective in targeting the root cause of the problems, they would be successful in minimising the negative impacts on SOL. Thus, overall, the positive impacts will outweigh the negative impacts of specialisation and trade.

Moreover, with the higher income per capita, the Australian government will be able to earn more income tax revenue as income taxpayers are pushed up higher income tax brackets. Therefore, the government would have more financial resources to implement these policies and would thus be more effective in minimising the negative impacts on SOL.

Mark scheme

Level	Knowledge, Application, Understanding & Analysis	Marks
L2	• Well-developed answer: analyse both the positive & negative impacts of Australia's SOL as it engages in international trade based on the Theory of Comparative Advantage • Thorough use of economic analysis. • Use of relevant evidence from the extracts. • Limited or no inaccuracies in explanation.	5 – 7
L1	• Underdeveloped answer on the impact of Australia's SOL as it engages in international trade. • Some use of economic analysis. • Some use of evidence from the extracts. • Some inaccuracies in explanation.	1 – 4
Evaluation		
E2	An overall stand is made regarding the overall impact on Australia's SOL as it engages in trade, with reference to key criteria and well analysed and developed justification.	2 – 3
E1	Attempt to give an evaluative comment but point is not well substantiated/developed.	1

[Total: 30]

Question 2: Economic challenges arising from external imbalances

Suggested answer

(a)		**With reference to Figure 1, compare the current account balances of the G7 countries in 2018.**	**[2]**
		Difference 1: Surpluses vs deficits **[1m]** Germany, Japan, and Italy have current account surpluses while France, USA, Canada and UK have current account deficits. **Difference 2: Magnitude** of the surpluses and deficits **[1m]** • Germany has the largest surplus while UK has the largest deficit. OR • Italy has the smallest surplus and France has the smallest deficit. **Difference 3: Comparison** of current account balances with **G7 average [1m]** • The deficits of France, USA, Canada and UK are greater than the G7 average which is a deficit. • The sum of the deficit outweigh the sum of the surpluses giving rise to G7 average of a deficit.	
(b)		**Explain a possible problem (Extract 4) that Singapore could face as a result of its current account position as shown in Table 2.**	**[3]**
		Interpretation from Table 1 and inference of a possible problem from Extract 4 • From Table 1, it shows that Singapore is experiencing a rising current account surplus over the years. In Extract 4, it mentioned that countries with excessive surpluses face different challenges, ~~is~~ as they may face protectionist measures imposed on them by the trading partners. **Explain the problem arising from protectionist measure by the trading partners** • Increasing surplus in the current account of Singapore (Table 1) could result in a current account deficit of its major trading partners such as UK and US (Figure 1). To protect domestic employment in their own economies, these trading partners may try to impose protectionist measures such as tariffs (Extract 4), to discourage imports from Singapore assuming the trade with Singapore has been significant in contributing to the trade deficits. • The increase in prices of exports from Singapore brought about by the trade restrictions imposed on Singapore could result in a slower rise in export revenue earned by Singapore or even fall in its export revenue assuming that PEDx > 1. Hence this would dampen the rise	

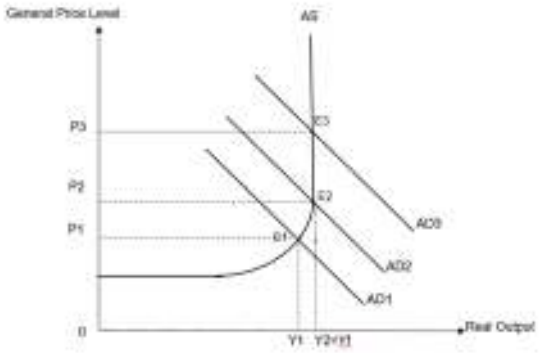
in AD or even lead to a fall in AD in Singapore which would result in a fall in Singapore's real GDP and actual growth and rising unemployment.

Note:

- Apart from an ADAS model, students can also use a tariff diagram to support their explanation as long as they are able to explain a possible economic problem that is linked to one of the macro goals

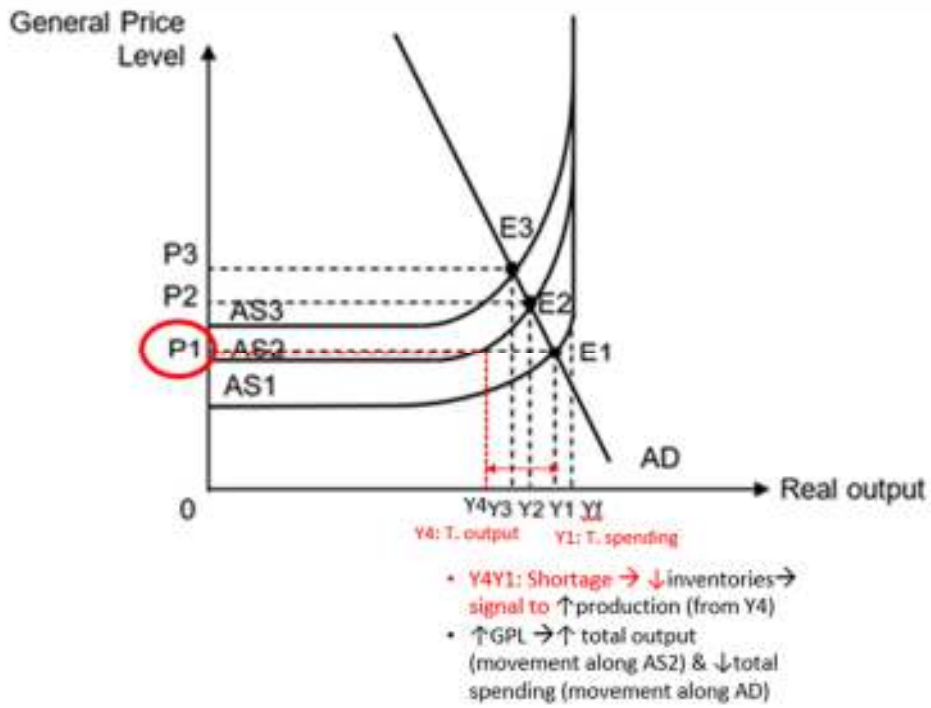
Given that this question requires students to explain a "possible problem", they can propose other challenges faced by Singapore such as **demand-pull inflation**. Rising (X-M) could lead to persistent increase in AD leading to demand-pull inflation.

The increase in net exports will result in an increase in AD, ceteris paribus.



- As illustrated in Figure 1 above, assume that the Singapore economy is **operating near full employment** where the initial equilibrium is at E1. The increase in net exports increase AD causing total spending to exceed total output resulting in a **shortage** at OP1. As there **is limited spare resources**, firms will have to **bid up factor prices** causing **GPL to rise from P1 to P2**. There is a movement up along the AD & AS curve.
- However, as AD continues to increase from AD2 to AD3, due to the persistent **increase in net exports** over the years as shown in Table 1, the persistent increase in AD creates a situation of **sustained excess demand** in the economy and brings about a **sustained increase in general price level from P2 to P3** and hence **demand-pull inflation.**

(c)		**With reference to Extract 7:**	
	(i)	**Explain how <u>surging BOP deficits</u> and a <u>floating exchange rate</u> could have resulted in Sri Lanka's inability to import basic supplies.**	**[3]**
		1. <u>Explain changes in DD/SS of currency</u> • Assuming the <u>surging BOP deficits</u> are due to falling export revenue. The fall in export revenue earned by Sri Lanka, ceteris paribus would result in ***a fall in demand for its currency***. **<u>OR</u>** • Assuming the <u>surging BOP deficits</u> are due to increasing import expenditure. The increase in import expenditure incurred by Sri Lanka, ceteris paribus would result in ***an increase in supply for its currency***. 2. <u>Explain MAP</u> • Under a floating exchange rate system with government intervention, the resulting **<u>surplus</u>** <u>of the currency</u> at the initial ER will exert a **<u>downward pressure</u>** <u>on the ER</u> causing its ***depreciation***. o Surplus / downward pressure on the ER o Fall in DD for currency **reinforced** increase in SS of currency. 3. <u>Explain how depreciation of currency makes imports more expensive in domestic currency and reduce ability of country to import</u> • As the currency depreciates, <u>a unit of currency can buy less imports</u> since the ***imports become more expensive in its domestic currency***. Hence reducing in its inability to import.	
	(ii)	**Explain how an import ban on synthetic fertilisers and pesticides could possibly contribute to inflation in Sri Lanka.**	**[4]**
		<u>Step 1:</u> Explain the trigger: Rising unit cost of production due to import ban on these raw materials Due to an import ban on these raw materials, farmers are <u>forced to turn to more expensive organic farming methods</u> which **increases** the **unit cost of production** of crops of rice. Individual market supply curves shift left. This results in a <u>leftward shift of SRAS from AS1 to AS2</u> if enough individual market supply curves are impacted. Note: Students can also explain how the import ban <u>reduces the supply of raw materials</u>, resulting in an <u>increase in prices of raw materials</u>, thereby <u>increasing the unit cost of production</u> of crops of rice.	



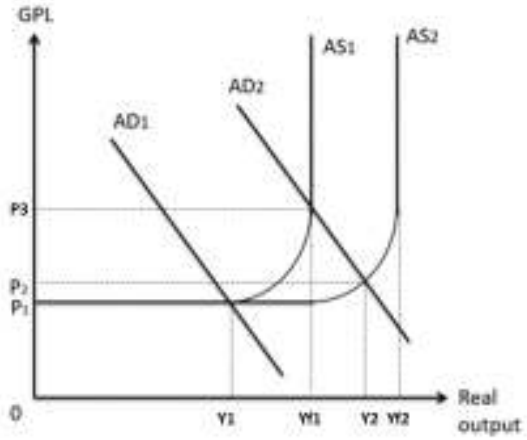
<u>Step 2:</u> Explain the adjustment process from one equilibrium to another

As illustrated in above figure, this leads to a **shortage** of output which provides an **<u>incentive for producers to raise prices</u>** <u>causing GPL to rise/</u> **<u>upward pressure in GPL</u>**<u>.</u> There is a <u>movement up along the AD and AS curves</u>. The process continues until a new equilibrium is reached at E2 where AD = AS2.

<u>Step 3:</u> Complete inflationary process analysis (AS2 → AS3)

One important condition for cost-push inflation to occur is that <u>unit cost of production must be increasing persistently</u>. As <u>prices of imported raw materials and oil continue to rise as suggested in c(i),</u> unit cost of production rises again. AS curve <u>shifts further from AS2 to AS3</u>. The higher unit cost is passed onto the consumers and price increases from P2 to P3, resulting in **cost push inflation.**

(d)		**The current account deficits experienced by the UK can be financed by creating capital inflows via their capital and financial accounts (Extract 5).** **Assess the impacts that such capital inflows can have on the UK economy.**	**[8]**
		Introduction: The deficit in UK current account needs to be financed and one possible way is to finance it is to create capital inflows via their capital and financial accounts. That is, UK needs to be an attractive location for short term capital inflows or foreign direct investments (FDI) (Extract 5). **Requirement 1: Internal impacts on the UK economy** (EG, employment, price stability & SOL) **arising from increase in long term capital flows.** An inflow of FDI can lead to an increase AD leading to favourable impact on growth, unemployment & price stability if the ***FDI helps to build productive capacity.*** **[Impact of FDI flows in the SR]** An increase in FDI will lead to an increase in AD to AD1 (shown in the diagram below) as I increases, ceteris paribus. The rise in income from the initial rise in AD causes a rise in income-induced consumption resulting in a further increase in AD. As one's spending becomes another's income there will be multiple increases in AD until a new equilibrium is reached where real output increases by a multiplied amount from Y1 to Yf1 thereby achieving actual economic growth. Given that the demand for labour is a derived demand, the increase in real output would reduce demand deficient unemployment. **EV**: If there was a lack of spare capacity, this increase in FDI could result in demand pull inflation resulting in price instability. OR FDI inflows typically helps an economy to generate new growth engines which would usually hire more higher skilled labour. This could result in structural unemployment if there was immobility of labour in the UK economy. **[Impact of FDI flows in the LR]** Investment in capital goods will also bring about an increase in the productive capacity of an economy as the country's net capital stock increases. This will lead to an increase in AS from AS1 to AS2 resulting in an increase in full employment level of output from Yf1 to Yf2.	



[Overall impact] With a rise in both AD and AS, actual growth is achieved as real output increases from Y1 to Y2 at lower GPL, P2 instead of P3. That is **sustained growth** is achieved since actual growth can occur at **lower GPL or stable prices**. With rising income, assuming income per capita also increases, per person in the country can enjoy more goods and services hence improving their material SOL.

Requirement 2: External impacts on the UK economy (BOT and Current account) **arising from increase in long term capital flows.**

The increase in FDI into UK helps to improve UK competitiveness in the form of digitalization and innovation in new industries through the transfer of knowledge and technology (Extract 6). This would increase efficiency in production and lower the price of domestically produced g&s including exports, leading to an increase in the value of exports (X), assuming price elasticity of demand (PED) > 1.

However, at the same time, imports become relatively more expensive. As such, consumers switch to locally produced g&s, leading to a fall in imports expenditure. The rise in exports revenue & fall in imports expenditure would cause a **balance of trade deficit** to decrease.

However, in the long run, the profits earned by the foreign companies will be repatriated out of UK. This leads to an outflow of income in the current account. Moreover, if such foreign investments lead to the hiring of foreign labour or foreign skilled workers, the wages they earn as income may be remunerated abroad. This would also lead to an outflow of income in the current account. The changes in the income balance & current transfer could result in a worsening of the **current account** over time.

EV: However, if UK remains attractive as a destination for investment by the foreigners, foreign companies are likely to plough back the profits

earned to further expand their businesses in UK. Hence the outflow of currency via the income balance may not be significant to cause a worsening of the current account of UK.

Conclusion: OVERALL impacts that such capital inflows can have on the UK economy.

The **impact of long-term capital inflows** through inflows of FDI are **largely positive** on the UK economy as the inflows can increase the AD and AS of the economy. This is necessary given the magnitude of outflow of FDI post-Brexit (Extract 6). Even though UK has a relatively large domestic market as a medium size economy, such significant outflow is still likely to carry adverse implications on its employment outlook and standard of living.

Given the importance of such long term capital flows to the UK economy, it is important that UK manages its public finance to avoid persistent budget deficits and ballooning debt, which could lead to a cut in credit ratings. As mentioned in Extract 5, the loss of interest in UK assets by the foreigners could result in capital flight and this would not only make it difficult to fund its current account deficit and this can lead to undesirable effects on its exchange rate and its economy.

Note:
Students may also choose to consider the inflow of short-term capital to analyse the impacts on the UK economy.

- **[+ ve impact]** Inflow of hot money → ↑ supply of loanable funds □ ↓interest rates → ↑C & I → ↑AD → expansionary impact on the economy

OR

- Hot money inflows → increase DD for pound → appreciation of pound → addresses imported cost-push inflation

- **[-ve impact]** appreciation of pound → ↓(X-M) assuming that MLC holds → ↓AD → contractionary impact on the economy.
  - BOT/current account deficit → depreciation → results in imported cost push inflation

Mark Scheme:

Levels	Descriptors	Marks
L2	• Two-sided developed answer: considering both internal and external impacts + positive and negative impacts on the UK economy	4-6

			when its current account deficits is financed through inflows of capital. • Thorough use of economic analysis. • Use of relevant evidence from the extracts. • Limited or no inaccuracies in explanation.		
		L1	• Underdeveloped answer on the possible impacts on the UK economy arising from capital inflows. • Some use of economic analysis. • Some use of evidence from the extracts. • Some inaccuracies in explanation.	1-3	
		Evaluation 2m			
		E2	Well justified judgement with economic reasoning on the likely impacts of capital inflows on the UK economy based on assumed conditions using evidence from the case materials or own knowledge.	2	
		E1	Attempt to give an evaluative comment but point is not well substantiated/developed.	1	
(e)		**Discuss whether the UK should adopt supply-side policies rather than pursue free trade agreements to reduce its trade deficit.**			**[10]**
		Introduction: Negative consequence of rising trade deficit for the UK economy Increasing trade deficit may bring about costs to the UK economy such as negative growth and lower material SOL. Via the reverse multiplier effect, in which one's reduction in spending reduces another's income, there will be multiple decrease in production, output and national income should net exports fall. Real output decreases by the multiplier effect and thus results in negative growth. Assuming population size unchanged, there will be a fall in per capita income which suggests a fall in purchasing power and hence lower ability to consume goods and services thereby lower material SOL. It is therefore necessary for UK government to intervene with appropriate policies to mitigate the harmful impacts. **<u>Requirement 1:</u> Explain how SS-side policies work to reduce the trade deficit in the current account for UK**		

		Supply-side policies are designed to improve quantity, quality, and mobility of factors of production. UK can use a variety of supply-side policies to increase the quality of infrastructure/level of technology, such as increasing connectivity through transport lines and providing emerging industries with infrastructure. Generally, supply-side policies reduce trade deficit in the current account by enabling an economy to develop new comparative advantages by increasing export non-price &/or price competitiveness. **[Improve non-price competitiveness]** For example, the UK government can provide grants, subsidies, or tax incentives to encourage innovation and investment in research and development. These policies lower the cost of conducting R&D, incentivising firms to conduct more R&D, enabling firms to **improve** the **quality of its products, decrease the PED** and **increase** the **demand for its exports, increasing its export revenue.** As domestically produced goods and services (G&S) in UK become more competitive and assuming that XED > 0, UK households could switch away from imports towards these domestically produced G&S. This results in a **fall in import expenditure.** This will **reduce** the **trade deficit**, as export revenue increases while import expenditure falls. **[Improve price competitiveness]** Moreover, with better production methods or processes, the firms will be able to improve productivity and generate more output with the given inputs, thus lowering unit costs of production. This will improve the price competitiveness of the exports and result in a rise in quantity demanded of exports. Assuming demand for the exports is price elastic, PEDx >1 (i.e. many close substitutes in the global market), there will be a rise in export revenue as the higher revenue gained from the more than proportionate rise in quantity demanded will outweigh the loss in revenue from the fall in price of exports. This will **reduce** the **trade deficit**, ceteris paribus. **Possible EV:** **[E/ Criterion: time period, uncertainty & context in UK]** Given that UK's poor export performance is attributed to its lack of competitiveness and low productivity (Extract 6), the time taken for supply side policies to work its way to have any tangible effects on any improvement on export competitiveness might take way too long and the outcome is highly uncertain. **[E/ Re & O]** In addition, investments in R&D may worsen the balance of trade position in the short run as it may involve high import expenditures on capital goods from foreign countries, especially if there is an exodus of FDI by up to 17% between 2020 and 2021 post-Brexit. (Extract 6) This leads to a worsening of the BOT in the short run, making supply side polices highly ineffective.	

[E/C: availability of fiscal surplus and fiscal sustainability]
[E/Re & O]: However, the opportunity cost incurred from spending on supply-side policies means that consumers may not be able to benefit in other areas. For example, funds spent on R&D subsidies cannot be used for other policies that may help improve SOL, especially if there are other pressing concerns such as improving healthcare in the light of an ageing population or increasing transfer payments to lower-income households who are structurally unemployed with the rise of technology and artificial intelligence or development of new growth engines due to FDI inflows as mentioned in part (d). This makes supply side policies inappropriate.

Requirement 2: Explain how FTAs work to reduce the trade deficit in the current account for UK

Free Trade Agreements (FTAs) are binding agreements between two or more countries to reduce or eliminates certain barriers to trade in goods, services, and investments. This means, easy access to other countries to conduct business activities.
In theory, according to the principle of comparative advantage, when countries specialise in the production of goods for which they incur a relatively lower opportunity cost and subsequently trade with each other, this benefits all countries involved by allowing them to consume beyond their Production Possibilities Curve (PPC).

FTAs provide opportunity to expand trade between countries. This enables countries to have access to enlarged global markets thereby increasing the demand for export(X).

Through freer trade via FTAs, export revenue (X) increases. Assuming that X is more the import expenditure (M), a country can enjoy a BOT surplus, from a BOT deficit.

Furthermore, increased foreign direct investment (FDI) flows into the country due to lowering of trade restrictions can result in transfer of knowledge and technology and raising productivity (Extract 6) which can help to improve UK export competitiveness of UK. With the influx of foreign firms into UK, domestic firms would be forced to be more dynamically efficient and channel their accumulated supernormal profits to carry out process and product R&D. Assuming that product R&D is successfully carried out, this could help to reduce the PED if these products feature unique characteristics.
Export revenue (X) increases as the demand for UK produced goods increases. Assuming that X is more the import expenditure (M), a country can enjoy a BOT surplus, from a BOT deficit.

Possible EV:

		[E/C: time period] **[E/Re & O]:** FTAs also result in ↓import tariffs, especially in the short run → may lead to ↑import expenditure especially if domestically produced goods in the UK is not competitive (Extract 6, para 4) and attempts to improve its competitiveness through transfer of technology and knowledge takes time to materialize → assuming ↑import expenditure > ↑export revenue → may cause current account deficit in the UK to worsen in the short run, making FTAs ineffective. **[E/C: Unintended consequences]** **[E/Re & O]:** With the removal of almost all trade barriers for the trading partners, UK could be susceptible to dumping carried out by its trading partners. If so, this could worsen UK's trade deficit, rendering FTAs ineffective. **Conclusion:** **[E/C]** Whether UK should adopt supply-side policies rather than pursuit of trade agreements to reduce its trade deficit will depend on the causes of trade deficit, nature of the economy and her economic situation. **[E/C #1: severity of problem & time period]** **[E/Re #1]** Given that **Brexit** has resulted in a **sharp reduction of UK trade openness, FTAs** could be a **better measure** that can improve the balance of trade when economy is experiencing a large and persistent BOT deficit as they can offer an <u>immediate addressing of the pressing problem.</u> With FTAs, volume of exports can increase directly with unrestricted access to foreign markets, whereas **SS-side policies** would typically **take effect more in the long run** and cannot provide a quick enough solution to the pressing problem. **[E/O #1]** Hence, **signing of FTAs** would be **better than supply side policies** for UK to access more exports markets. Having said that, the improvement in trade deficit brought about by the <u>signing of FTAs</u> is likely to be <u>limited and short-lived if the root-cause for the BOT deficit – lack of competitiveness, is not addressed.</u> **<u>OR</u>** **[E/C #2: Root cause of the trade deficit i.e., the lack of competitiveness (Ext 6)]** Given the **lack of competitiveness** as suggested in Extract 6, product and process innovation is very important for UK as it address the root	

cause of the trade deficit i.e., the lack of competitiveness. Innovation is key to improve the quality and reduce the prices of their exports.

[E/ Re & O #2]

While it is also possible for UK to improve its export competitiveness through possible technology or knowledge transfer brought about by the FTAs, **SS-side polices** would be **more purposeful** than signing of FTAs for UK to reduce its trade deficit in a **more sustainable & reliable fashion**. Furthermore, it may not be easy to establish FTAs. As seen in Extract 6 since Brexit UK only managed to sign only two FTAs with Australia and New Zealand. Having said that, signing of FTAs will result in removal of tariffs, hence when prices of imported inputs fall, unit cost of production will fall, SRAS will increase, thus helping UK to increase their competitiveness as well. Hence, supply side policies are more effective than FTAs.

Mark Scheme:

Level	Descriptors	Marks
L2	• Two-sided developed answer – consider the pros and cons of ss-side policies and FTAs in reducing trade deficit. • Thorough use of economic analysis. • Use of relevant evidence from the extracts. • Limited or no inaccuracies in explanation.	5 – 7
L1	• Underdeveloped answer on the pros and cons of ss-side policies and FTAs in reducing trade deficit. • Some use of economic analysis. • Some use of evidence from the extracts. • Some inaccuracies in explanation.	1 – 4
Evaluation		
E2	An overall stand is made as to whether UK should adopt ss-side policies rather than pursue FTAs to reduce its trade deficit with reference to a key criterion of judgement and well analysed and developed justification. Max 2m (e.g. two evaluative points explained OR one point that is well-developed) but without an overall stand to address the question.	2 – 3
E1	Attempt to give an evaluative comment but point is not well substantiated/developed.	1

			[Total: 30]