Name:		Centre/Index Number:		Class:	

DUNMAN HIGH SCHOOL
Preliminary Examination
Year 6

Economics (Higher 2)
Paper 1 Case Study Questions

9570/01
16 September 2024
2 hours 30 minutes

No Additional Materials are required.

READ THESE INSTRUCTIONS FIRST

An answer booklet will be provided with this question paper. You should follow the instructions on the front cover of the answer booklet. If you need additional paper ask the invigilator for a continuation booklet.

Answer **all** questions.

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

This document consists of **7** printed pages including this cover page.

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Answer **all** questions.

Question 1: The impact of soaring prices

Table 1: Wheat production (million metric tons)

Country/Year	2018	2019	2020	2021	2022
Australia	17.6	14.5	31.9	36.2	40.5
China	131.4	133.6	134.3	136.9	137.7
Russia	71.7	73.6	85.4	75.2	92.0

Source: US Department of Agriculture, accessed 18 August 2024

Extract 1: Ukraine war to cause biggest price shock in 50 years

The war in Ukraine is set to cause the "largest commodity shock" since the 1970s, the World Bank has warned. It said disruption caused by the conflict would contribute to huge price rises for goods ranging from natural gas to wheat and cotton.

The increase in prices "is starting to have very large economic and humanitarian effects", a senior economist at the World Bank added. He said, "households across the world are feeling the cost of living crisis. We're particularly worried about the poorest households since they spend a larger share of income on food and energy, so they're particularly vulnerable to this price spike".

Wheat price is forecast to increase and reach new record highs in dollar terms.

"Wheat is one of the hardest agriculture exports to replace," according to a research note from the Bank of America. It points out that poor weather conditions in North America and China are likely to exacerbate the impact of Ukrainian supplies being reduced, something which will continue because the war has disrupted the spring planting season.

Demand was also shifting as importers rushed to find alternatives to Russian and Ukrainian grain. Thailand's rice shipments in the first two months of 2022 soared from the same time last year, according to Thai Rice Exporters Association data.

Source: adapted from Ukraine war to cause biggest price shock in 50 years - World Bank, BBC News, 27 April 2022 and Thai rice exports surge as Ukraine war roils global food supply, Nikkei Asia, 21 April 2022

Extract 2: Kellogg hikes sales forecast

Kellogg Co raised its 2022 sales forecast banking on more price increases to help counter the impact of supply shortages stemming from the war in Ukraine. Kellogg, which also makes Pringles and Eggo waffles, said it was increasing the pace of price hikes it pushes to consumers as costs soar.

Regarding shoppers swapping out Kellogg products for cheaper items, CEO Steve Cahillane said "we haven't seen evidence yet of that but as we look forward - just because inflation is so intense - our forecast is it will have pressure."

The company plans to emphasise the affordability of a bowl of cereal and milk as a meal in marketing and merchandising, Cahillane said. "It's convenient and it's very affordable when you think about the number of bowls," in a box, he said.

Russia's invasion of Ukraine is expected to hurt supplies in the second half of the year, Kellogg said, as that part of Europe is a major source of ingredients for packaged food companies. Kellogg has relied on palm oil from Indonesia due to the lack of sunflower oil from Ukraine, after the Russian invasion earlier this year, Cahillane said.

"There's been a lot of concern about Kellogg's ability to maintain profit, especially given the company's possible exposure to wheat from Eastern Europe," an economic analyst said.

Source: adapted from Kellogg hikes sales forecast as price increases offset impact of strike, Reuters, 5 May 2022

Extract 3: Policy moves curbing rising prices, but Singapore cannot fully escape impact of global inflation: MAS

Government actions here to combat inflation will dampen its pace over the next year but the Republic cannot completely insulate itself from global rising prices, said Mr Ravi Menon, managing director of the Monetary Authority of Singapore (MAS).

Inflation is surging in many countries around the globe owing to factors such as higher energy costs caused by the Russia-Ukraine war, and supply chain disruptions as many countries bounced back economically from the impact of COVID-19.

Over the past nine months, the MAS has tightened monetary policy through adjustments to the exchange rate for the Singapore dollar against a basket of the country's main trading partners. Mr Menon explained that MAS allows the trade-weighted exchange rate to appreciate faster when inflationary pressures build up to reduce imported inflation and restrain export demand. "Strengthening the exchange rate to try to fully offset the impact of global prices runs the risk of sharply curtailing growth and creating unemployment," he said.

Another key lever for controlling inflation is sound labour market adjustments to prevent entrenching inflation, said Mr Menon. "The relaxation of our border restrictions and resumption of foreign worker inflows should help to moderate labour cost pressures. To prevent a further build-up in labour cost pressures, it is important that the inflow of non-resident workers continues unimpeded," he said.

Source: Policy moves curbing rising prices, but S'pore cannot fully escape impact of global inflation: MAS, TODAY, 19 July 2022

Questions

(a) With reference to Table 1, compare the trend of wheat production in China, Russia and Australia from 2018 to 2022. [2]

(b) With reference to Extract 1:

(i) using a demand and supply diagram, explain **two** reasons why the price of wheat is expected to "reach new record highs". [5]

(ii) explain how the expected price spike could worsen inequity. [2]

(c) With reference to Extract 1, explain the likely cross price elasticity of demand between wheat and rice. [3]

(d) With reference to Extract 2, discuss the extent to which Kellogg will face a fall in profits amidst the various developments. [8]

(e) With reference to Extract 3, discuss the policy options for Singapore to combat inflation. [10]

[Total: 30]

Question 2: The market dynamics and demographic shifts in Southeast Asia (SEA)

Extract 4: Philippine peso: Catch me, I'm falling.

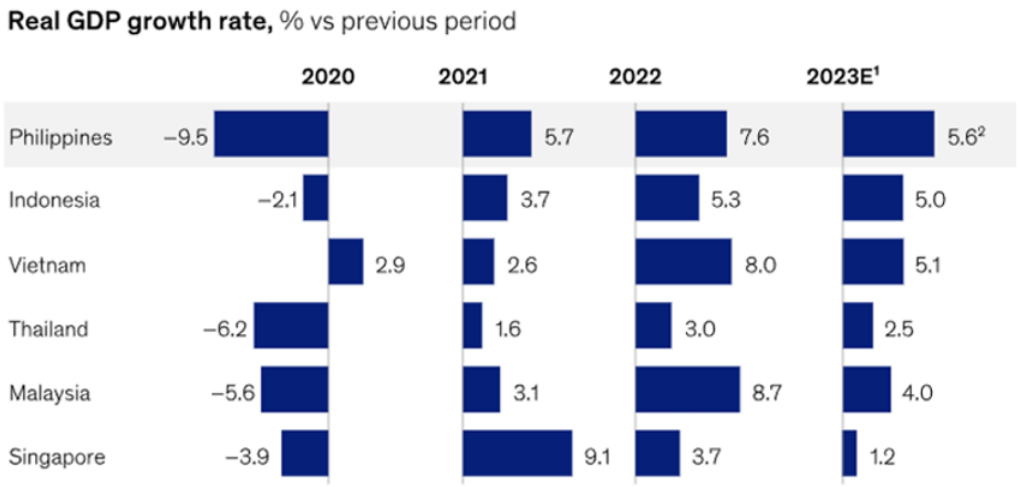
The Philippines peso has been hitting record lows, driving domestic inflation, and burdening Filipinos with rising prices of basic needs amidst floundering incomes and earnings. This trend has been exacerbated by the aggressive interest rate hikes by the United States (US) Federal Reserve since early 2022.

However, the peso's decline also highlights underlying weaknesses in the economy of The Philippines. The acceleration of the peso's decades-long depreciation coincides with liberalisation policies that have weakened domestic agricultural and manufacturing sectors. The depreciation makes imports more expensive, significantly raising the import bill as The Philippines relies heavily on imports due to underdeveloped domestic production. With no substantial domestic export response because the country produces few goods that attract global demand, there is limited potential for increasing export revenues to counterbalance the rising import costs.

This dual impact of external monetary policies and internal economic vulnerabilities underscores the complex challenges facing The Philippines economy.

Source: PH Peso: Catch Me I'm Falling, Philippine Statistics Authority, accessed 6 June 2024

Figure 1: Real GDP growth rate across Southeast Asian (SEA) countries



[1] Expected 2023 full year GDP using full year growth estimate for Indonesia, Malaysia, Singapore, Thailand and Vietnam
[2] Actual full year figure

Source: McKinsey & Company, accessed 6 June 2024

Table 2: Economic growth of The Philippines (at constant 2018 prices)

(in million Philippine pesos)	2020	2021	2022	2023
Gross Domestic Product	17,537,843	18,540,084	19,945,604	21,051,759
Gross National Income	18,858,016	19,179,405	21,075,715	23,278,228

Source: Philippine Statistics Authority (PSA), accessed 2 August 2024

Extract 5: The Philippines's unemployment rate rose

The Philippine's unemployment rate jumped to 3.9 percent in March, from 3.5 percent in February, The Philippines Statistics Authority (PSA) reported. That means there were two million Filipinos who were either jobless or out of business in March, up from 1.8 million in the preceding month. The rise in the jobless rate coincided with the announcement of an increase in the daily minimum wage for workers in the private sector, which affected the labour force participation rate.

The labour force participation rate is defined as:

$$\frac{\text{labour force}}{\text{working-age population}} \times 100\%$$

Meanwhile, job quality improved after the underemployment rate eased to 11 percent in March, from 12.4 percent previously.

According to the National Economic and Development Authority, the government's massive infrastructure push is expected to create opportunities in several priority sectors, such as energy, logistics, and tourism. The government will also explore opportunities for quality job growth in the mining sector, leveraging available technologies to develop value-added activities such as mineral processing.

Sources: adapted from The Philippines's unemployment rate rose, Inquirer Net, 8 May 2024 and Philippines' unemployment rate up to 4.1 pct in May, Xinhua, 6 June 2024

Extract 6: The growth in silver-economy related industries

As the world recovers from COVID-19, new opportunities and challenges have emerged, especially in the silver economy. The pandemic has accelerated the creation of innovative solutions for seniors, but the ongoing challenge is whether businesses can continue to meet the needs of an ageing population. Companies are leveraging artificial intelligence in healthcare, developing nutritious and easy-to-consume foods, and focusing on user-friendly technology for seniors. The silver economy spans various sectors, including healthcare, housing, food, leisure, tourism, and transport.

Countries like Singapore, facing a rapidly ageing population, are at the forefront of this economic shift. By 2030, one in four Singapore residents will be 65 or older. While this poses workforce challenges, it also presents significant opportunities. Singapore leads in silver economy potential, with a high capacity for elderly spending. The Asia Pacific silver economy is projected to be worth $4.6 trillion by 2025, serving 600 million seniors over 60.

These seniors are more educated, affluent, and tech-savvy, using smartphones for information, shopping, and social media. Businesses that offer innovative solutions aligned with their lifestyle and healthcare needs are likely to thrive in this lucrative market.

Source: adapted from Silver economy: Is the business of ageing a sunrise industry?, Enterprise Singapore, accessed 6 June 2024

Extract 7: Large parts of Asia are getting old before they get rich

A bulge in a country's working-age population is a blessing. Lots of workers support relatively few children and retired people. So long as the labour market can absorb a surge of jobseekers, output per head will rise. This can boost savings and investment, leading to higher economic growth and more productivity gains. Yet for countries that fail to seize this opportunity, the results can be grim — as many developing countries may soon discover.

Thailand is rapidly ageing, leading to a dwindling workforce and potential declines in productivity and growth, similar to Japan and South Korea. However, unlike these developed nations, Thailand is ageing before becoming wealthy. When Japan had a comparable elderly population, its income level in constant dollars was nearly five times higher. To protect its ageing citizens, many of whom are poor, Thailand's government will have to spend more on health care and pensions. This will make it harder to invest in productivity-boosting skills and infrastructure. This trend also affects other developing countries like Indonesia and The Philippines, where ageing occurs at lower income levels.

Source: adapted from Large parts of Asia are getting old before they get rich, The Economist, 12 October 2023

Questions

(a) Using Extract 4, explain how 'external monetary policies' contributed to the depreciation of the peso. [2]

(b) With reference to Figure 1, identify the country with highest projected real GDP growth. [1]

(c) Using AD-AS analysis, explain **two** factors that might limit the real GDP growth of The Philippines. [4]

(d) With reference to Extract 5:

(i) Explain how the change in the minimum wage rate is likely to affect the labour force participation rate. [3]

(ii) Discuss the usefulness of the unemployment data for drawing conclusions about how living standards has changed in The Philippines. [8]

(e) With reference to Table 2, explain the difference between gross domestic product (GDP) and gross national income (GNI). [2]

(f) Discuss whether an ageing population would lead to undesirable consequences for an economy. [10]

[Total: 30]

Name:		Centre/Index Number:		Class:	

DUNMAN HIGH SCHOOL
Preliminary Examination
Year 6

Economics (Higher 2)

Paper 2 Essay Questions

9570/02
9 September 2024
2 hours 30 minutes

Additional Materials:
No Additional Materials are required

READ THESE INSTRUCTIONS FIRST

An answer booklet will be provided with this question paper. You should follow the instructions on the front cover of the answer booklet. If you need additional paper ask the invigilator for a continuation booklet.

Answer **three** questions in total, of which **one** must be from Section A, **one** from Section B and **one** from **either** Section A or Section B.

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

This document consists of **3** printed pages including this cover page.

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Answer **three** questions in total.

Section A

One or two of your three chosen questions must be from this section.

1 Engaging in regular exercise can improve one's physical health, elevate one's mood, and reduce the risks of developing chronic diseases. To encourage regular exercise, the Singapore government provides free exercise classes in neighbourhoods and near workplaces.

(a) Explain why exercise classes, if left to market forces, might be allocated inefficiently. [10]

(b) Discuss whether free provision is the best policy to ensure the efficient allocation of exercise classes in Singapore. [15]

2 Adverse weather conditions have affected sugar yield. Concurrently, there is a growing consumer trend towards sugar-free alternatives due to rising health concerns.

(a) Explain the different impacts of the above events on consumer expenditure on sugar. [10]

Governments have a choice of policies to address the causes of the rising sugar prices or manage the consequences of the rising sugar prices on consumers.

(b) Discuss which one of the above approaches is more appropriate to manage the increase in the cost of living. [15]

3 From McDonald's to Coca-Cola to Hershey, corporate executives and investors concerned about the effects on rising input prices on profits are preoccupied with one word: elasticity.

(a) Explain why some firms might shut down while others might reduce production without shutting down when faced with a surge in input prices. [10]

(b) Discuss the extent to which a firm's response to rising input prices is influenced by the level of competition it faces. [15]

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Section B

One or two of your three chosen questions must be from this section.

4 Rising oil prices and a stronger baht have led to a deterioration in Thailand's trade position.

(a) Explain how a stronger Thai baht (THB) amidst rising oil prices might affect its economy. [10]

(b) Discuss whether expenditure-switching or expenditure-reducing policies would be more effective to improve Thailand's trade position. [15]

5 Malaysia was facing stagflation amid drags within supply chains and a lethargic recovery in international tourism.

(a) Explain the reasons behind the stagflation in Malaysia. [10]

(b) Discuss whether achieving strong economic growth is always the priority for governments. [15]

6 In light of a larger global economic presence, Vietnam aims to increase the percentage of skilled workers to 30% by 2025, bridging the economic gap with a new high-speed train network and driving further development in the renewable energy industry.

(a) Explain **two** reasons why Vietnam's comparative advantage might change over time. [10]

(b) Discuss the perspective that globalisation poses more benefits than costs for emerging economies like Vietnam. [15]

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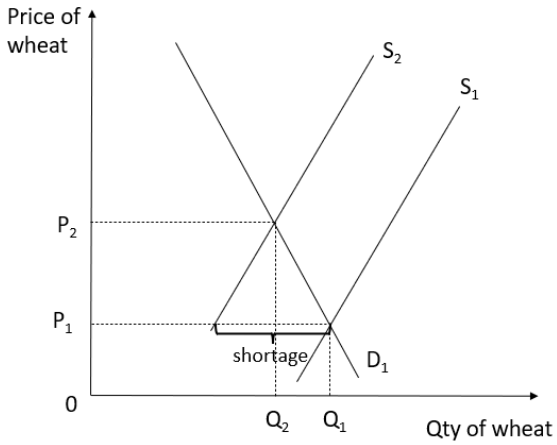
DUNMAN HIGH SCHOOL
Preliminary Examination
Higher 2 Economics
Suggested Answers and Mark Schemes

Paper 1 Q1

(a)		**With reference to Table 1, compare the trend of wheat production in China, Russia and Australia from 2018 to 2022.**	**[2]**
		Any 2 of the following Similarity • All three countries experienced an increase wheat production from 2018 to 2022 [1] Difference • China consistently produced the most amount of wheat while Australia produced the least amount of wheat [1] • Between 2018 and 2022, Australia's wheat production increased by the largest percentage / increased the most while China's wheat production increased by the smallest percentage / increased the least [1]	
(b)		**With reference to Extract 1:**	
	(i)	**using a demand and supply diagram, explain <u>two</u> reasons why the price of wheat is expected to "reach new record highs".**	**[5]**
		Answer to explain why wheat prices rose significantly i.e. to include both the direction and magnitude of change in price Identify any of the following 2 reasons [2] *[Supply factor]* • Supply disruptions due to the war => wheat cannot be transported out of Russia and Ukraine => fall in supply • Supply disruptions due to the war => disruptions in the spring planting season => fall in supply • Poor weather conditions in North America and China => fall in supply *[Price elasticity of demand]* • DD is price inelastic as there are few close substitutes to wheat which is a key ingredient to make staple foods such as bread, noodles and pasta Diagram [1]	

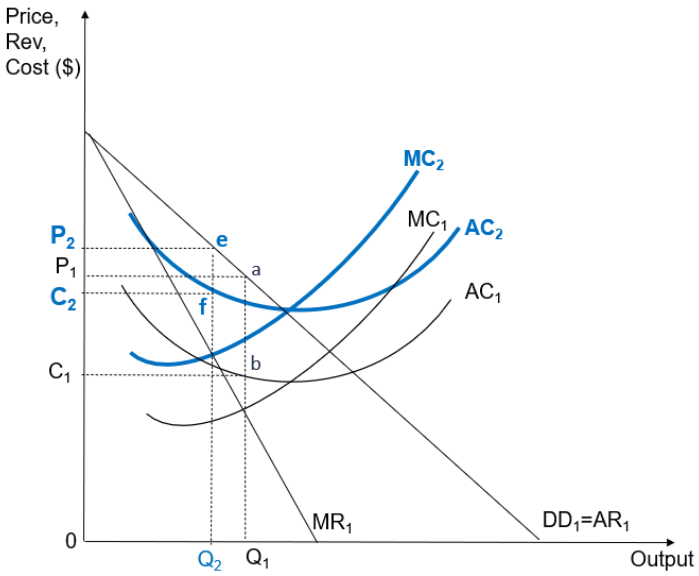


Explanation of why the price of wheat is expected to "reach new record highs" [2]

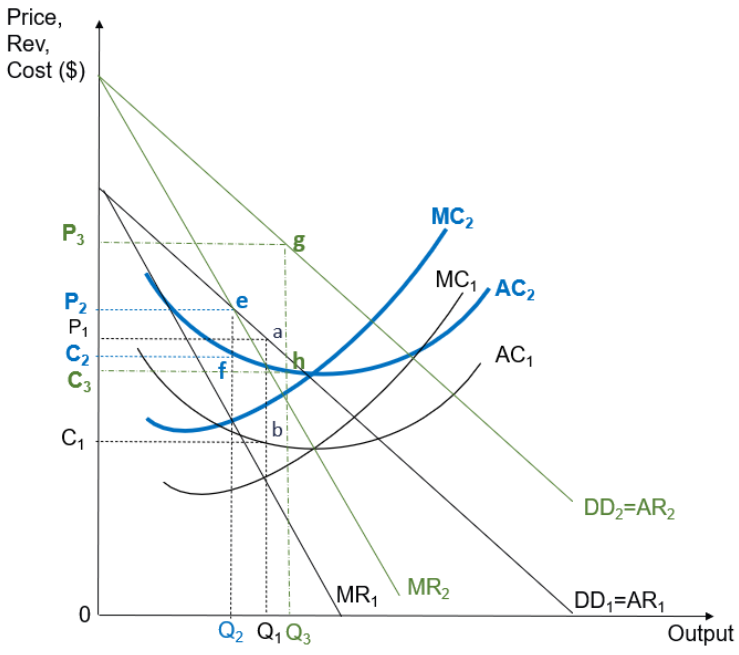
- *[direction of price change]* Explain the shortage at original price P_1, resulting in an upward pressure in prices
- *[magnitude of price change]* As there are several factors causing the supply of wheat to fall, there is a significant fall in supply hence a large shortage at original price, resulting in a need for a large increase in price to clear the shortage to arrive at the new equilibrium price P_2 *(diagram should show a significant leftward shift in the supply curve)*
  OR
- As demand for wheat is price inelastic, quantity demanded is less responsive to price changes. Hence, with fall in the supply, there is a need for a large increase in price to clear the shortage to arrive a the new equilibrium price P_2 *(diagram should show a leftward shift in the supply curve and a price inelastic demand curve)*

(ii)		**explain how the expected price spike could worsen inequity.**	**[2]**
		Low-income households spend most of their income on essential goods e.g. food [1] and with rising wheat prices, these households may not have any income left to spend on other goods and services resulting in lower utility. [1]	
(c)		**With reference to Extract 1, explain the likely cross price elasticity of demand between wheat and rice.**	**[3]**
		Positive XED value as wheat and rice are substitutes [1]. The size of the XED value depends on the closeness of substitutes e.g. if they are considered close substitutes the XED value will be large. [1] The rise in the price of wheat causes rational consumers to switch to the substitute good resulting in a rise in the demand for rice. [1]	
(d)		**With reference to Extract 2, discuss the extent to which Kellogg will face a fall in profits amidst the various developments.**	**[8]**
		R1: War in Ukraine likely to result in fall in profits Explain how supply disruptions of grain and sunflower oil resulted in a rise in grain and sunflower oil prices. As grain and sunflower oil are key ingredients in the production of Kellogg' products, there is a rise in AC (from AC_1 to AC_2)	

and MC (from MC_1 to MC_2) and hence a fall in profits from Area C_1P_1ab to Area C_2P_2ef.



R2: Successful marketing may help Kellogg raise its profits
Successful marketing strategy of emphasising the affordability of Kellogg's cereals would increase demand for Kellogg's cereal and cushion the negative impact of rising costs. This could result in an increase in profits to Area C_3P_3gh.



<u>Evaluative comments/conclusion</u>
Overall, the impact of the developments mentioned in Extract 2 on Kellogg's profits depends on the extent of impact on its costs and revenue.

- If Kellogg's was able to find close substitute inputs e.g. palm oil from Indonesia as a substitute for sunflower oil, its costs may not rise so significantly and hence profits may not be so severely affected.
- Alternatively, the impact on its revenue depends on whether consumers continue to demand for Kellogg's products. Extract 2 suggests that Kellogg expects consumers to switch to cheaper alternatives as food prices rise significantly which will mean a fall in demand for Kellogg's cereal and hence revenue which would hurt its profits.

L2	Answers in this level will provide a balanced answer that considers both the rise in cost and the possible increase in revenue with reference to the case material. Includes analysis of the impact of the developments on Kellogg's profits with reference to a diagram.	4-6
L1	Answers in this level will have some knowledge and understanding about how the developments affect Kellogg's profits. Analysis could be one-sided or two-sided but with gaps in explanation.	1-3
E	For an answer that arrives at a conclusion after considering the relative effects on the firm's cost and revenue.	1-2

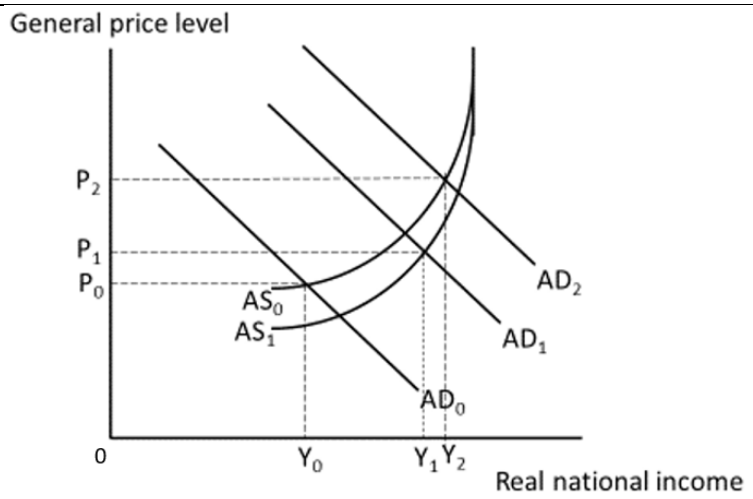
(e) With reference to Extract 3, discuss the policy options for Singapore to combat inflation. **[10]**

Singapore facing cost-push inflation due to e.g. higher energy costs caused by the Russia-Ukraine war and demand-pull inflation as economies recover from COVID-19.

R1: Managed appreciation of SGD

Explain how allowing the 'trade-weighted exchange rate to appreciate faster'

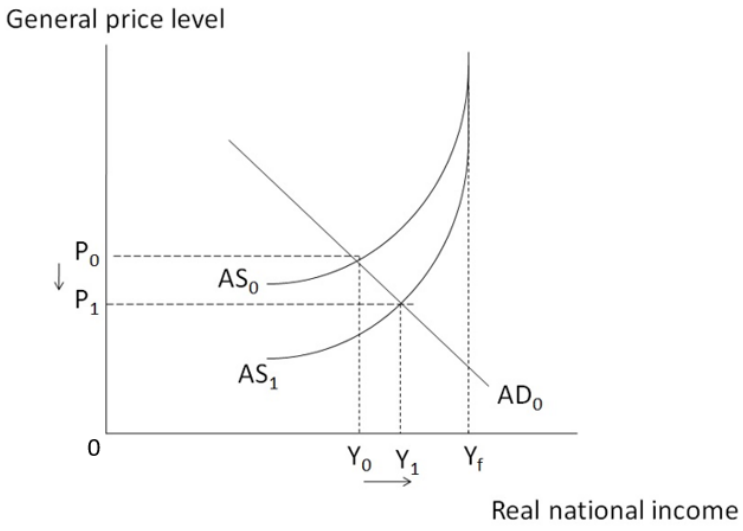
- lowers the price of imported inputs which lowers unit COP and results in an increase AS from AS_0 to AS_1
- increases the price of Singapore's exports in foreign currency and lowers the price of imports in SGD. Assuming Marshall-Lerner condition holds, there will be a fall in (X-M). In addition, as imports are cheaper, domestic consumers will switch away from domestic goods and services resulting in a fall in Cd. Overall, there is a slowdown in the increase in AD from AD_0 to AD_1 instead of AD_2.
- The combined effect of the managed appreciation lowers inflationary pressure as GPL would increase only modestly from P_0 to P_1.



EV: However, this policy could result in unintended negative consequences on growth and employment as real national income would only rise to Y_1 instead of Y_2.

R2: Relaxation of foreign worker policy

Explain the resumption of foreign worker inflows should help to moderate labour cost pressures which lowers unit COP and results in an increase AS from AS_0 to AS_1. Firms facing market competition pressure pass on part of the cost savings to consumers, lowering GPL from P_0 to P_1 which will help to relieve inflationary pressure.



Conclusion

Between the two policy options, managed appreciation directly addresses the root cause of the inflation. Most significantly, the strengthening of the SGD directly combats the rising food and energy prices. In addition, the stronger SGD helps to dampen the rise in AD which is the other source of inflation. On the other hand, the relaxation of foreign worker policy helps to reduce unit COP but does not directly address the root cause of the inflation.

[nature of the economy] As a small and open economy highly reliant on imported inputs, the impact of imported inflation is very significant especially

		when the rise in price is that of essential goods – oil and food. Hence, these policies can at best manage the rise in prices but not likely to result in fall in prices. L2 — Answers in this level will consider both at least two policies. Answers would explain how the policies address the inflation using a tool of analysis such as a diagram and include reference to the case material. — 4-7 L1 — Answers in this level will show limited understanding of how the policy works. Analysis could include only one policy or two policies but with gaps in explanation. — 1-3 E — Evaluative comments that consider the effectiveness of the policies based on various factors. A conclusion must be provided. — 1-3	

Paper 1 Q2

(a)	Using Extract 4, explain how 'external monetary policies' contributed to the depreciation of the peso. [2] Extract 4 'aggressive interest rate hikes by the United States' relative to PH, led to a net capital outflow of Peso {1m} This leads to a surplus of peso at current exchange rate. In a free float market, the value of peso depreciates against other currency. {1m}	
(b)	With reference to Figure 1, identify the country with highest projected real GDP growth. [1] Vietnam Note: Data on Philippines shows actual growth rate, rather than *projected* growth rate	
(c)	Using AD-AS analysis, explain **two** factors that might limit the real GDP growth of The Philippines. [4] One AD and one AS factor for scope • [AS] Rising cost ➔ higher uCoP ➔ decrease AS, limiting the overall increase in real GDP • [AD] Weak X competitiveness (consider price / non-price, derived from extract) ➔ impede rate of growth of X, limiting the overall increase in real GDP	
(d)	With reference to Extract 5:	
	(i)	Explain how the change in the minimum wage rate is likely to affect the labour force participation rate. [3] Minimum wage rate is raised **[1]**, c.p. → incentivising increase in Qs of L, i.e. more people join the labour force **[1]** Since Labour Force Participation Rate = (Labour Force / Working-age Population) × 100 Hence, the rise in minimum wage rate will cause LFRP to increase. **[1]**
	(ii)	Discuss the usefulness of the unemployment data for drawing conclusions about how living standards has changed in The Philippines. [8] **Useful** Higher in UN+ ➔ falling income and purchasing power ➔ fall in mSOL and non-material SOL in the case of higher stress associated with Un+ **Not useful** To conclude that SOL has reduced in PH from the 'jump in u/e rate' may be misleading: • Extract 5: This duration given is too short only one month to have any impact on SOL • Extract 5: Job quality has improved with the underemployment rate falling → more workers are taking on full-time employment rather than part-time employment → increase in hh income • Extract 5: the increase in u/e is partly due to the increase in minimum

wage → for the group of low-wage workers who remain in employment, they enjoy higher hh income

This increased income enables individuals to afford more goods and services and a better quality of life, including better housing, healthcare, education, and leisure activities.

Evaluation

While the unemployment rate is one important economic indicator, the statement about unemployment rising to 3.9% in the Philippines provides an incomplete and limited view of changes in the standard of living. To fully assess changes in living standards, you would need to look at a broader set of factors, eg

- ❖ HDI factors (includes Life Expectancy at Birth, Average and Expected Years of Schooling, Gross National Income per Capita). This makes it a more holistic measure of living standards, as it reflects the ability of people to live long, educated and purchasing power for needs and wants.

- ❖ Gini coefficient

(e) With reference to Table 2, explain the difference between gross domestic product (GDP) and gross national income (GNI). [2]

While GDP includes the income generated within a country's borders, GNI includes the income of nationals earned abroad and excluding the income of foreigners within the country. **[1]**

The excess of GNI over GDP (Table 2: in PH, GNI > GDP) means that there is a net income inflow into PH. **[1]**

(f) Discuss whether an ageing population would lead to undesirable consequences for an economy. [10]

Requirement 1 / Thesis: Adverse economic effects of ageing population

- ❖ Extract 7 'straining healthcare systems and necessitating increased spending on healthcare and pensions, which limits investment in skills and infrastructure'.
  - Limited fiscal budget diverted to healthcare for elderly instead on improving quantity/quality of FOP ➔ limits potential economic growth.

- ❖ Extract 7 Compared to those elderly in Japan who have higher purchasing power, countries like Thailand will face lower Cd and demand for goods and services □ deters investment

- ❖ Extract 7 'ageing population' □
  - dwindling workforce ➔ forces up wages ➔higher uCOP ➔AS falls ➔ cost-push inflation and fall in RNY
  - lower inter-generational transfer of income ➔less wealth/savings to pass on to future generation ➔ lower future SOL
  - dwindling workforce ➔ declining tax revenue + higher healthcare spending □ worsening fiscal budget position

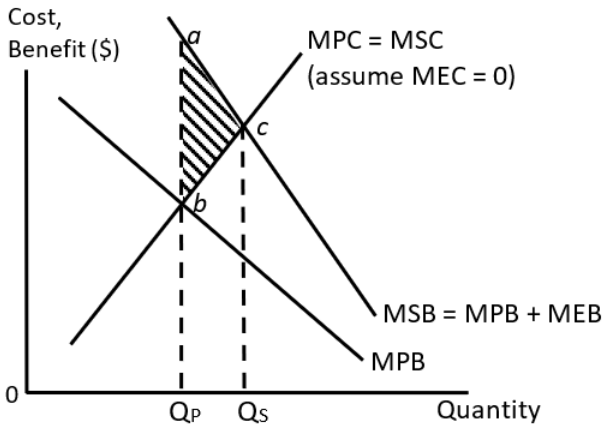
Requirement 2 / Antithesis: Ageing population may bring about some benefits

Extract 6

The pandemic has accelerated the creation of innovative solutions for seniors

	Demand for such solutions which cater to the needs of an ageing population increases ➔ expected total revenue increases ➔ eRORi relative to COB increases ➔ net returns ➔ investment increases ➔ AD increases ➔ AD song ➔ RNY increases, demand-deficient unemployment ❖ AS increases • Higher productivity increases as more Fop are available • At the same time, lower uCOP can be pass to csrs are lower prices ❖ In the end, countries eg Singapore gets to enjoy non-inflationary AEG and higher PEG Evaluation It depends on type and nature of governments
	[Total: 30]

Paper 2 Q1

1	**Engaging in regular exercise can improve one's physical health, elevate one's mood, and reduce the risks of developing chronic diseases. To encourage regular exercise, the Singapore government provides free exercise classes in neighbourhoods and near workplaces.**	
	(a)	**Explain why exercise classes, if left to market forces, might be allocated inefficiently. [10]**
	R1: Presence of positive externalities Participating in exercise classes and therefore regular exercise brings about positive externalities. The marginal private cost (MPC) of engaging in exercise classes is cost of the class. The marginal private benefit (MPB) is the additional benefit derived from improved physical health, mood improvement and reduction in the risks of developing chronic diseases which translates to savings on healthcare costs or improved productivity resulting in a higher salary. Rational and incentive-driven individuals will consume **the private equilibrium output of Q_P, where MPB = MPC**. Participating in exercise classes generates marginal external benefit (MEB). Other parties who do not take part in the exercise classes enjoy third party benefits e.g. employers experience reduced costs and hence more profits as their employees who exercise regularly are more productive; taxpayers pay lower taxes as the government spends less on healthcare costs and hence does not need to collect as much tax revenue with a healthier population; other firms and individuals benefit from increased foreign investment with a healthier workforce.  Figure 1 The **existence of the MEB raises the marginal social benefit (MSB) above MPB** i.e. MSB > MPB. Assuming that there are no negative externalities, MPC=MSC. The **socially optimum output should be Q_S, where MSB = MSC**. Individuals acting in pursuit of their self-interest, **disregard the MEB** and consume only up to Q_P, hence there is **under-consumption**. The under-consumption of Q_PQ_S means that the additional benefits to society could have gained is area Q_pacQ_s and the additional costs avoided is area Q_pbcQ_s. As the additional benefits society could have gained is greater than the additional costs avoided, there is a **deadweight loss of area abc**. <L> Hence, the presence of positive externalities results in allocative inefficiency in the market for exercise classes.	

R2: Consumer imperfect information/ignorance

Consumers underestimate the benefits of taking exercise classes which ensures the engagement in regular exercise. Consumers **may not be aware of the full extent of benefits** of participating in exercise classes e.g. improved physical health, mood improvement and reduction in the risks of developing chronic diseases which translates to savings on healthcare costs or improved productivity resulting in a higher salary. Hence, they **underestimate the benefits** of participating in exercise classes and $MPB_{perceived} < MPB_{actual}$. The MPC of engaging in exercise classes is cost of the class.

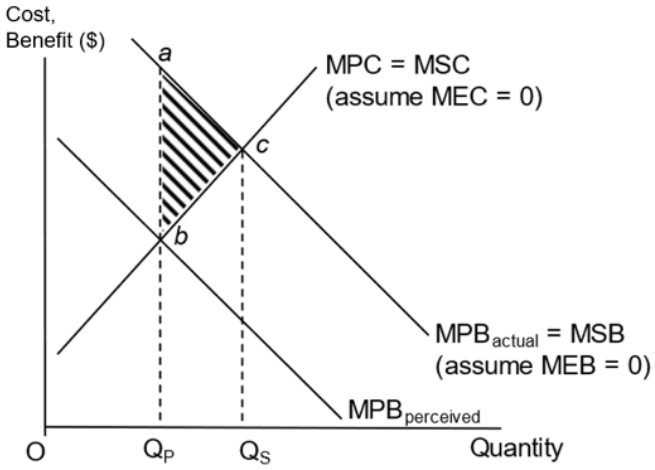


Figure 2

Shaped by **incomplete or inaccurate information**, consumers will thus consume exercise classes up to the **private equilibrium level Q_P where $MPB_{perceived}$ = MPC**. Assuming no externalities, the MSB is the actual MPB while the MSC is the MPC. Hence the **socially optimum quantity is at Q_S, where MSB = MSC**.

The **under-consumption of Q_PQ_S** units of exercise classes results in the loss of additional benefit to society measured by the area $Q_P acQ_s$. At the same time, it also allows the society to avoid additional costs equal to the area $Q_P bcQ_s$. As the loss of additional benefits exceeds the additional costs avoided, which results in **deadweight loss of area *abc***.

Level	Knowledge, Application, Understanding and Analysis	Marks
L3	Thorough explanation of why the presence of positive externalities and consumer imperfect information results in the inefficient allocation of exercise classes. Clear explanation with good use of economic theory and supported by a tool of analysis such as a diagram. Good application of the context in the answer.	8-10
L2	An undeveloped or incomplete answer which considers why both the presence of positive externalities and consumer imperfect information results in the inefficient allocation of exercise classes OR A well-developed answer which considers only one reason why exercise classes might be allocated inefficiently.	5-7

		An attempt at including diagrams but may not be accurately drawn or referenced with incomplete explanation.	
	L1	A descriptive and unexplained answer. Major conceptual mistakes present in the explanation. Inaccurate or absence of diagrams.	1-4

(b) Discuss whether free provision is the best policy to ensure the efficient allocation of exercise classes in Singapore. [15]

R1: Free provision can ensure the efficient allocation of exercise classes in Singapore

One policy to ensure the efficient allocation of exercise classes is the government providing these classes free to all consumers who wish to participate. The Singapore government has done so e.g. through the Health Promotion Board (HPB)'s free exercise classes conducted around community spaces like housing estates or near the workplace. Individuals can book these free exercise classes through the Healthy 365 app for example.

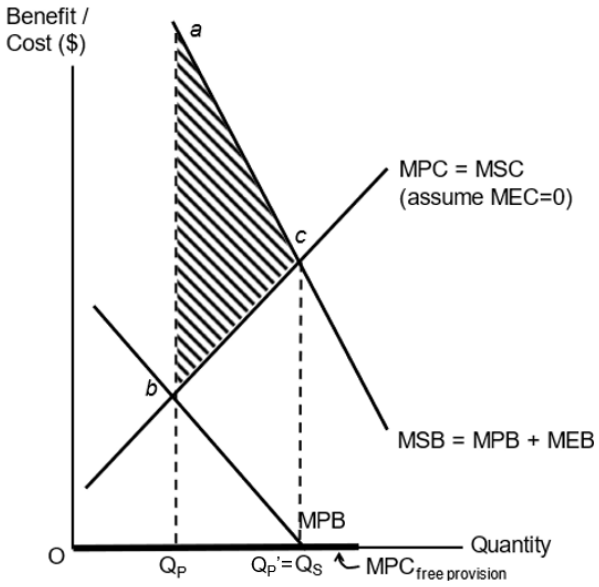


Figure 3

With free provision, MPC becomes zero. The new private optimum level of consumption occurs where MPB = MPC = 0. Consumption has increased from Q_P to Q_P' which coincides with Q_S, the socially-optimal output where MSB=MSC. Hence, an efficient allocation of exercise classes is achieved.

<u>Limitation</u>
It is difficult to determine the exact socially optimal level of output as the necessary information is simply too vast. Hence it is difficult for the government to determine with reasonable accuracy the amount exercise classes it should provide for free. Free provision may need to over-consumption and a greater deadweight loss than the original deadweight loss caused by the under-consumption of exercise classes resulting in a greater loss of economic welfare than if the government had not done anything i.e. there is government failure.
OR

While the exercise classes are provided for free, the voluntary nature of signing up for the classes leaves the decision to the individual. If consumers decide not to sign up for the classes, free provision would not increase consumption to the socially-optimal output level.

R2: Public education can ensure the efficient allocation of exercise classes in Singapore

The government can close the information gap by providing accurate, comprehensive and timely information through public education. The Singapore government has done so through its Healthier SG strategy which includes working closely with partners such as HPB and SportSG to share the benefits of taking exercise classes to ensure regular exercise which brings about significant benefits to one's physical and mental health. Such information through websites and social media, public education messages through traditional media (TV and newspapers), road shows, etc. With more complete and accurate information, the government seeks close the gap between the $MPB_{perceived}$ and MPB_{actual}. With reference to Figure 2 in part a, the $MPB_{perceived}$ increases, shifting it closer towards MPB_{actual}, and the private equilibrium output (Q_P) towards the socially-optimal output (Q_S).

Limitation
While government efforts to share comprehensive and timely information can be extensive through multiple platforms and with close collaboration with multiple agencies/partners, the information may not reach some consumers who neither use the internet, social media platforms nor engage in traditional media. It also difficult to assess the effectiveness of public education e.g. is the information provided sufficient or easily understood. Hence, the outcome of the policy can be quite uncertain.

Other possible policies:
Credits/subsidies for producers which lowers their MPC and hence price of exercise classes to encourage greater participation and move the private consumption level towards the socially-optimal output.

Conclusion/Evaluative comments
Stand: Whether free provision is the best policy to ensure the efficient allocation of exercise classes in Singapore depends on various factors such as whether it addresses the root cause of the inefficient allocation of exercise classes and the time taken for each policy to take effect.

Substantiation:
[root cause] There are two reasons why exercise classes, if left to market forces, might be allocated inefficiently, 1) positive externalities and 2) consumer imperfect information. Assuming government has perfect information and is able to determine the socially-optimal output, free provision can be considered the best policy as it can directly address the allocative inefficiency caused by the presence of positive externalities resulting in the consumption of exercise classes at the socially-optimal output level. However, if the main cause of allocative inefficiency is due to consumers having incomplete/inaccurate information, free provision can address the under-consumption due to consumer imperfect information but does not target the root of the problem which is the information gap present. Hence, would not be considered the best policy in this case.

[time period] Free provision of exercise classes as compared to public education would take a shorter time to increase the consumption of these classes and increase

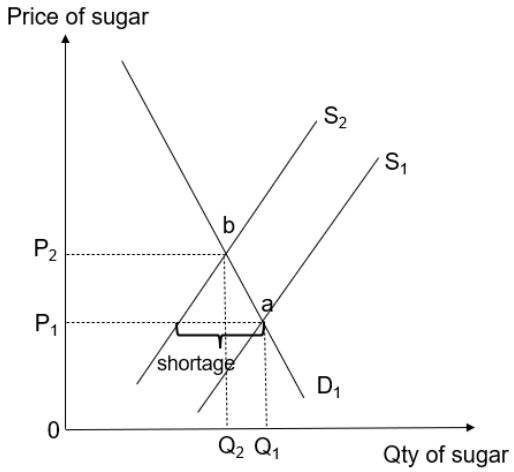
the socially-optimal output level. In order for public education to successfully narrow the gap between $MPB_{perceived}$ and MPB_{actual} , a longer period of time is required to reach all segments of the community.

Other considerations:

- *Extent of allocative inefficiency*
- *Certainty of outcome*

Level	Knowledge, Application, Understanding and Analysis	Marks
L3	Thorough discussion of at least two policies to ensure the efficient allocation of exercise classes in Singapore. Clear explanation with good use of economic theory and supported by a tool of analysis such as a diagram. Good application of the context in the answer.	8-10
L2	An undeveloped or incomplete answer which considers two policies to ensure the efficient allocation of exercise classes in Singapore OR A well-developed answer which considers only one policy. An attempt at including diagrams but may not be accurately drawn or referenced with incomplete explanation.	5-7
L1	A descriptive and unexplained answer. Major conceptual mistakes present in the explanation. Inaccurate or absence of diagrams.	1-4
	Evaluation	
E3	An answer that has two evaluative judgements / decisions that are supported by the arguments presented in the answer and linked to the context of the question. Includes a summative conclusion which supports whether free provision is the best policy (or otherwise).	5
E2	An answer that makes an attempt at evaluation to support whether free provision is the best policy but with limited scope / depth in evaluative judgements. Answer may not include a conclusion.	3-4
E1	An answer that gives unsupported evaluative statement(s) about whether free provision is the best policy OR one well-explained evaluative judgement.	1-2

Paper 2 Q2 Suggested Answer

2	**Adverse weather conditions have affected sugar yield. Concurrently, there is a growing consumer trend towards sugar-free alternatives due to rising health concerns.**	
	(a)	**Explain the different impacts of the above events on consumer expenditure on sugar. [10]**
	Consumer expenditure refers to the amount spent on a particular good or service. It is calculated by price multiplied by quantity of a good. **R1: Impact of adverse weather conditions on consumer expenditure on sugar** Adverse weather conditions such as drought and flood can greatly reduce sugar output which reduce the ability of producers to supply sugar in the market. There is a **fall in supply** illustrated by a leftward shift in the supply curve from S_1 to S_2. Holding demand constant, at original price P_1, there is a shortage of sugar causing an upward pressure on prices. As the price rises, utility-maximising consumers, constrained by their budget, reduce quantity demanded. In addition, the units of output that can only be produced at higher marginal cost now become profitable at higher prices, incentivising firms to increase quantity supplied to capture the positive marginal profits. The process will continue until the equilibrium price eventually rises to P_2 where quantity demanded exactly balances quantity supplied and the shortage is eliminated, removing further pressure on the market to adjust. The new equilibrium quantity falls to Q_2.  Figure 4 As sugar is a key component in everyday diet, it is considered a necessity. Furthermore, there are few close substitutes for sugar. This suggests that the **demand for sugar is price inelastic**. When price increases, there will be a less than proportionate fall in quantity demanded, as consumers cannot readily switch to other goods that satisfy the same want. A rise in price of sugar would result in a less than proportionate fall in quantity demanded of sugar. This means that given a fall in supply, the increase in consumer expenditure due to the increase in price is larger than the fall in consumer expenditure due to the less than proportionate fall in quantity. <L> Overall, there is an **increase in consumer expenditure** on sugar from Area $0P_1aQ_1$ to Area $0P_2bQ_2$.	

R2: Impact of growing consumer trend towards sugar-free alternatives due to rising health concerns on consumer expenditure on sugar

Rising health concerns about consumption of sugar which could result in problems such as increased risk of heart disease which resulted in the growing consumer trend towards sugar-free alternatives. This results in a fall in demand for sugar illustrated by a leftward shift in the demand curve from D_1 to D_2. Holding supply constant, at the original price P1, there is a surplus which causes a downward pressure on prices. As the price falls, quantity demanded rises as utility-maximising consumers, constrained by their budget, are now willing and able to buy larger quantities. In addition, the units of output that can only be produced at higher marginal cost become unprofitable. Profit-maximising firms cut back output to avoid the marginal losses, reducing quantity supplied. The process will continue until the equilibrium price eventually falls to P_2 where quantity demanded exactly balances quantity supplied and the surplus is eliminated, removing further pressure on the market to adjust. The equilibrium quantity falls to Q_2.

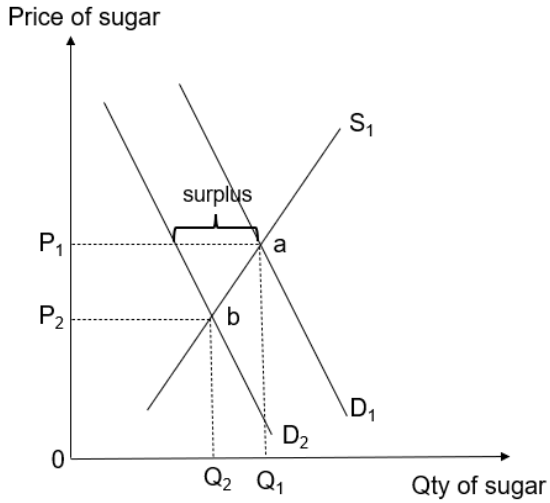


Figure 5

<L> Overall, the fall in the demand for sugar which results in fall in the equilibrium price and quantity leads to a **fall in consumer expenditure** on sugar from Area $0P_1aQ_1$ to Area $0P_2bQ_2$.

Level	Knowledge, Application, Understanding and Analysis	Marks
L3	Thorough explanation of why the presence of positive externalities and consumer imperfect information results in the inefficient allocation of exercise classes. Clear explanation with good use of economic theory and supported by a tool of analysis such as a diagram. Good application of the context in the answer.	8-10
L2	An undeveloped or incomplete answer which considers why both the presence of positive externalities and consumer imperfect information results in the inefficient allocation of exercise classes OR A well-developed answer which considers only one reason why exercise classes might be allocated inefficiently.	5-7

		An attempt at including diagrams but may not be accurately drawn or referenced with incomplete explanation.	
	L1	A descriptive and unexplained answer. Major conceptual mistakes present in the explanation. Inaccurate or absence of diagrams.	1-4

Governments have a choice of policies to address the causes of the rising sugar prices or manage the consequences of the rising sugar prices on consumers.

(b) Discuss which one of the above approaches is more appropriate to manage the increase in the cost of living. [15]

R1: Addressing the <u>cause</u> of rising sugar prices to manage the increased cost of living – subsidies for producers

From the preamble, the cause of rising sugar prices is due to a fall in the supply of sugar hence governments can consider policies to increase the supply of sugar to lower the price of sugar and manage the increased cost of living. For example, the Chinese government has provided subsidies to sugar producers for research and development (R&D) to increase the supply of sugar. These subsidies will support producers to conduct R&D to grow more hardy crops which are less susceptible to weather changes which will help to improve sugar yield. This will increase the supply of sugar as illustrated by a rightward shift of the supply curve from S_1 to S_2. At the original price P_1, there is a surplus creating a downward pressure on prices. The market will adjust until the equilibrium price eventually falls to P_2 where quantity demanded exactly balances quantity supplied and the surplus is eliminated. <L> The subsidies help to lower sugar prices and hence lower the cost of living as sugar is used in the everyday diet of most households.

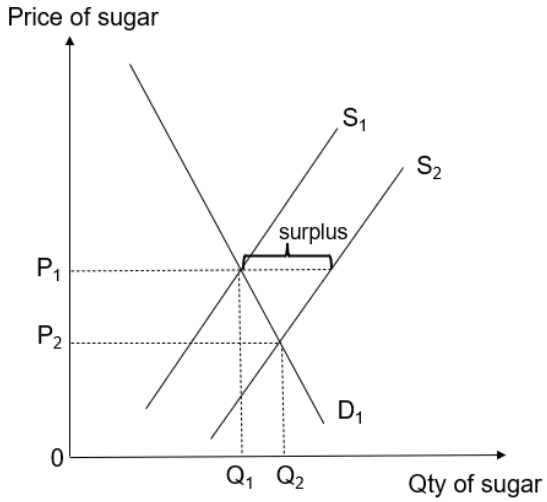


Figure 6

Limitation:
(consider one of the following)

- Such spending on subsidies, without compensating spending cuts in other areas or tax increase, would lead to a worsening of the government's budget position.
- Opportunity cost of subsidy: For a government intent on keeping its spending under control, spending on subsidies in one industry would then have to come at

	the expense of other areas of spending e.g. education which may affect the quality of labour resulting in negative effects on growth. *Alternatively, candidates can explain how a government can provide an indirect subsidy which lowers producers' marginal cost relative to marginal revenue. Producers hence respond by increasing supply to capture the positive marginal profit.* *Alternative policies* • *Export ban: Countries which export sugar can restrict exports to maintain domestic supply of sugar / increase the domestic supply of sugar, which would keep domestic sugar prices from rising / result in a fall in the price of sugar* • *A government could release sugar from its stockpile to increase the domestic supply of sugar which would result in a fall in the price of sugar* **R2: Addressing the consequence of rising sugar prices to manage the increased cost of living – Vouchers for low-income households** With an increase in the price of sugar, households will face an increase in the cost of living as sugar is used in the everyday diet of most households. Government can provide sugar vouchers which allow households to have access to sugar for free. This will reduce household spending on sugar and manage hence manage the rise in the cost of living. Strength/Limitation *(consider one of the following)* • Providing sugar vouchers only for low-income households who spend most of their income on daily necessities is a targeted approach at supporting those who would be more adversely affected by the rising sugar prices • *(similar as above)* Analyse the effects of government spending on these vouchers which could worsen of the government's budget position • *(similar as above)* Analyse the opportunity cost of government spending on these vouchers <u>Conclusion/Evaluative comments</u> The more appropriate approach to managing the increase in the cost of living due to rising sugar prices depends on factors such as time taken for the approach to take effect, country characteristics and the government's budget position. *[time period]* A policy like subsidies which address the cause of rising sugar prices would take a longer time to take effect as compared to the administration of sugar vouchers which manage the consequence of rising sugar prices. Hence, if the government needs to quickly address the rising sugar prices to support the needs of especially the low-income households, managing the consequences of rising sugar prices would be a more appropriate approach. [*country characteristics]* Providing subsidies for sugar producers to increase the supply of sugar which addresses the causes of rising sugar prices would be more appropriate for a country that produce sugar e.g. Brazil and China as compared to a country like Singapore which does not produce sugar. Hence, sugar-producing countries which have the option of increasing the production of sugar would likely find addressing the cause of rising sugar prices more appropriate as compared to country which does not have the capability to address the issue in such a manner. [*government budget*] The more appropriate approach depends on whether the government has sufficient funds to carry out the policy. The policy which is less costly

on the government budget e.g. export ban which addresses the cause of rising sugar prices would be the more appropriate policy.

Level	Knowledge, Application, Understanding and Analysis	Marks
L3	Thorough discussion of both approaches through the analysis of two policies to manage the increase in the cost of living caused by rising sugar prices. Clear explanation with good use of economic theory and supported by a tool of analysis such as a diagram. Good application of the context in the answer.	8-10
L2	An undeveloped or incomplete answer which considers both approaches to manage the increase in the cost of living caused by rising sugar prices OR A well-developed answer which considers only one approach. An attempt at including diagrams but may not be accurately drawn or referenced with incomplete explanation.	5-7
L1	A descriptive and unexplained answer. Major conceptual mistakes present in the explanation. Inaccurate or absence of diagrams.	1-4
	Evaluation	
E3	An answer that has two evaluative judgements / decisions that are supported by the arguments presented in the answer and linked to the context of the question. Includes a summative conclusion which supports which approach is more appropriate.	5
E2	An answer that makes an attempt at evaluation to support which approach is more appropriate but with limited scope / depth in evaluative judgements. Answer may not include a conclusion.	3-4
E1	An answer that gives unsupported evaluative statement(s) about which approach is more appropriate OR one well-explained evaluative judgement.	1-2

Paper 2 Q3 Suggested Answer

From McDonald's to Coca-Cola to Hershey, corporate executives and investors concerned about the effects on rising input prices on profits are preoccupied with one word: "elasticity".

(a) Explain why some firms might shut down while others might reduce production without shutting down when faced with a surge in input cost. [10]

(b) Discuss the extent to which a firm's response to rising input prices is influenced by the level of competition it faces. [15]

Part (a)

R1: Why some firms might shut down when faced with a surge in input cost

Surge in i/p costs could raise AC above AR over all levels of o/p, yielding subnormal profit.

1.1 Short-run shutdown

The firm cannot avoid the fixed cost even if it chooses to shut down. What it can avoid, however, is the variable cost. Hence, the firm is better off ceasing production when TR < TVC or AR (P) < AVC.

i. Shutting down: Avoid the TVC altogether and limit the loss to only TFC

ii. Continuing production: The loss would also include the part of the TVC that the TR fails to cover

iii. Comparing (i) and (ii): Rational loss-minimising decision is thus to shut down.

[May support with diagram / numerical example]

1.2 Long-run shutdown

In the long run, firms must make at least normal profits to stay in the industry. Otherwise, it is better to leave the industry altogether. This is because with all factors of production variable in the long run, it is better to earn nothing (and avoid all costs) than to incur losses, which is in line with producers' profit-maximising objective.

R2: Why other firms might reduce production without shutting down when faced with a surge in input cost

2.1 Short-run subnormal profit

The firm cannot avoid the fixed cost even if it chooses to shut down. What it can avoid, however, is the variable cost. For the firm to continue production and incur variable cost must mean that the revenue is able to at least cover this cost.

When TR > TVC, even if TR is less than TC (i.e. AC < AR < AVC), there will still be a loss but

i. Continuing production: TR not only covers all of TVC but goes towards covering part of TFC

ii. Shutting down: TR falls to zero, with nothing to cover any part of TFC

iii. Comparing (i) and (ii): Rational loss-minimising decision is thus to continue production.

[May support with diagram / numerical example]

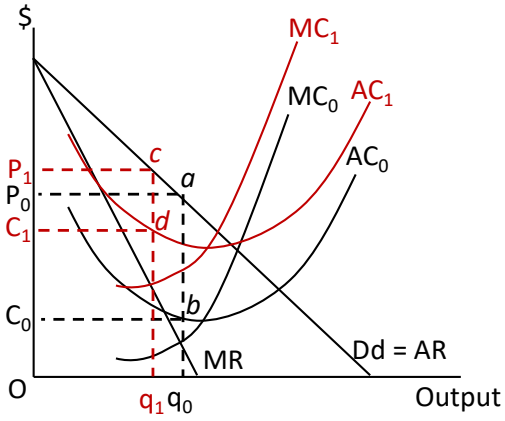
2.2 Diminished supernormal profit

Where firms were initially earning significant supernormal profits, the surge in i/p cost could just diminish the size of the supernormal profits. Rational decision is for firms to continue production to continue to enjoy supernormal profits, albeit at a lower level.

[May support with diagram / numerical example]

2.3 Either scenario (2.1 & 2.2), firms would still nonetheless reduction output

Assuming the firm was originally producing at its profit-maximising output, i.e. MC_0 = MR and MC cuts MR from below. The surge in i/p cost raises MC above MR. A rational firm will cut back production until the point where a new profit-maximising equilibrium is achieved at MC_1 = MR.



Mark scheme

To enter L3 candidates should explain the reasons for both the firm's decision to shut down and the firm's decision to produce at a lower output without shutting down.

To access the top of L3, adjustment to a new profit-maximising (loss-minimising) quantity is expected.

L3 Band [8–10 marks]
L2 Band [5–7 marks]
L1 Band [1–4 marks]

Part (b)

R1: Response depends on the level of competition in the industry

R1.1 Less intense competition

- Dd curve facing the firm is likely to be relative inelastic (relate to closeness & availability of substitutes), enabling it to be better able to pass on the increase in variable cost to protect its profits.
- Firms are likely to be making LR supernormal profits. Increase in cost may simply reduce the size of its supernormal profit without threatening its very survival.

Implication

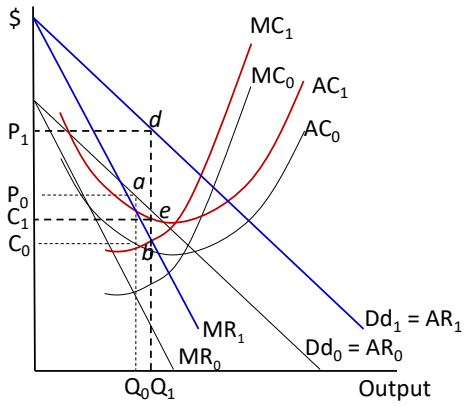
- May simply charge higher prices without more active strategies

R1.2 More intense competition

- Converse is true for a firm that faces more intense competition
- Less able to pass on cost increase + low level of supernormal profit (or even normal profit)

Implication:

- loss-minimising consideration could entail firms choosing shutdown over continuing production
- larger impetus to find ways to (choose one, illustrate with real-world example)
  - keep down cost increase e.g. product redesign to reduce reliance on the i/p that are experiencing sharp price increase (rather than using pure wheat flour, bakeries may include cheaper flour types into the mix) → reduce the magnitude of increase in MC & AC → may help to avoid subnormal profit <insert graph>
  - create product differentiation → even as cost increase, the dd and AR increase → avoid subnormal profit <insert graph>
  - diversify to seek new markets of growth → even as profit shrinks in one market, rising dd and TR from another market could help to reverse the fall in profit (see diagram below)



R2: Response does not entirely depend on the level of competition in the industry

Firms as profit maximisers would actively employ strategies to protect their profits when faced with adverse market conditions.

In fact, in industries with less intense competition, firms have more options when responding to cost increase (given past supernormal profits).

[choose one, illustrate with real-world example]

- More extensive, high-budget marketing campaigns to increase dd and create product differentiation <diagram>
- Product and process innovation → create more appealing products which crs are willing to pay higher prices for; improved production techniques to cut costs <diagram>

- Acquisition

Evaluation

Depends on

- **Nature of good** – luxury / non-necessities v.s. necessities. In the case of non-necessities → crs are willing to give up consumption (high PED) → limit to how much firms are able to pass on the cost increase even with limited competition in the market → still necessary to actively employ strategies to protect profits
- **Gov policies** – Excessive price increase may draw regulators attention → firms need to explore other options to protect their profits amidst rising cost, even with limited competition in the market

Mark scheme

To enter L3 candidates should analyse responses of firms in markets with intense competition v.s. markets with more limited competition.

L3 Band [8–10 marks]
L2 Band [5–7 marks]
L1 Band [1–4 marks]

Evaluation marks:
Well-argued evaluative judgements on firms' considerations with a summative conclusion on the extent to which the level of competition matters to firms' decision making in their response to rising input prices.

E3 Band [5 Marks]
E2 Band [3–4 Marks]
E1 Band [1–2 Marks]

Paper 2 Q4

Rising oil prices and a stronger baht have led to a deterioration in Thailand's trade position.

(a) Explain how a stronger Thai baht (THB) amidst rising oil prices might affect its economy. [10]

(b) Discuss whether expenditure-switching or expenditure-reducing policies would be more effective to improve Thailand's trade position. [15]

Part (a)

R1: Stronger THB helps to cushion the adverse economic effects of rising oil prices

[+] stronger THB reduces P_M in THB terms, including prices of imported oil (Thailand as oil importer) → moderates the increase in uCOP and subsequent decrease in AS → minimising the adverse effects on GPL, RNY and u/e

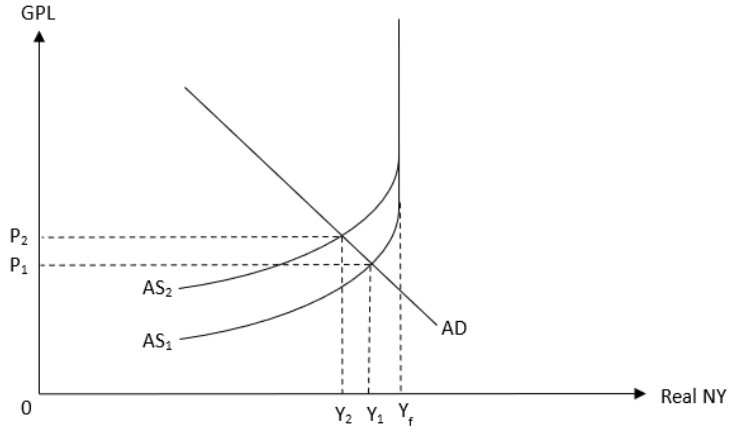


Figure 2: Cost-push Inflation

R2: Stronger THB will further weaken the economy that has to deal with the effects of rising oil prices

A stronger baht means that Thai firms and households give up fewer baht to buy the same import while foreign firms and consumers have to give up more of their currency to buy Thai's exports, ceteris paribus.

As the domestic currency appreciates against foreign currencies, prices of the country's exports increase in foreign currency terms while prices of imports decrease in domestic currency terms, causing the quantity demanded for the country's exports to decline and the quantity demanded of imports into the country to rise, the extent to which depends on the relevant price elasticity of demand. The more price elastic the demand, the larger the change in quantity demanded in response to a given change in price, ceteris paribus.

At the same time, depending on the degree of substitutability between imports and domestically-produced goods and services, the falling import prices might induce domestic consumers to switch to imports, away from domestically-produced goods and services, decreasing C_d.

Assuming Marshall-Lerner condition holds, i.e. $|PED_X| + |PED_M| > 1$, the price changes in exports and imports will induce sufficiently large changes in quantity demanded in the opposite direction to cause export earnings (TR_X) to decrease *relative to* import spending (TE_M).

<L> Reinforce the effect of rising oil price (Thailand being an oil importer, and $|PED_{oil}| < 1$) → further worsening of BOT (preamble)

<L> With rising oil price decreasing AS, strengthening of THB creates further contractionary effect (via AD) → deepening the decrease RNY and increase u/e

<add the AD shift to previous graph>

Mark scheme

To enter L3 candidates should analyse how the factors given the pre-amble affect the economy, anchoring on economic goals.

L3 Band [8–10 marks]
L2 Band [5–7 marks]
L1 Band [1–4 marks]

Part (b)

Requirement 1a: Explain how expenditure-switching policies work to correct BOT deficit.

Expenditure-switching policies aim to shift domestic consumer spending from foreign goods to domestically-produced goods, thereby reducing import expenditure. Additionally, these policies seek to encourage foreign consumers to purchase domestically-produced goods instead of imports, thereby increasing the country's export revenue. One example of an expenditure-switching policy is the government's investment in research and development to enhance the price and non-price competitiveness of exports through supply-side measures.

For instance, Thailand has invested in R&D to enhance the quality and efficiency of its rice production.

Through product innovations such as high-yield, disease-resistant rice varieties and advanced farming techniques, Thailand has been able to increase the productivity and quality of its rice. These advancements allow Thai rice to stand out in the global market, increasing taste and preferences in favour of Thailand rice, leading to higher export demand and export revenue.

The use of technology and innovation helps Thai exporters offer products at competitive prices. With increased productivity, each input, such as a worker, can now produce more output, which reduces the average cost of production. These cost savings can be passed on to consumers in the form of lower prices. As the prices of Thailand's exports become cheaper, assuming the price elasticity of demand (PED) for these exports is elastic, there will be a more-than-proportionate increase in the quantity demanded, thereby increasing export revenue.

Requirement 1b (limitations of using supply-side policies to correct trade deficit)

[Topic sentence] Supply-side policies often take a long time to yield results and might not be effective in solving trade deficit in the short term.

During the initial phase, they may not have a significant impact on the trade deficit because structural changes and improvements in productivity and competitiveness are gradual.

Even with improved productivity, a country might still face intense competition from other nations with advanced technologies or lower production costs. This can limit the impact of supply-side policies on improving export performance.

Implementing supply-side policies, such as investing in infrastructure or education, can be costly. These high upfront costs may strain public finances and divert resources from other essential areas.

Requirement 2a: Explain how expenditure-reducing policies work to correct BOT deficit.

[Topic sentence] Alternatively, Thailand can use expenditure-reducing in the form of contractionary fiscal policy to correct trade deficit.

By cutting government spending or increasing direct taxes, several effects on aggregate demand.

- Increasing corporate taxes reduces after-tax profits for businesses. This reduction in profitability can diminish the incentives for firms to invest in new projects, expand their operations.
- Raising income taxes decreases the net disposable income of households. With less disposable income, consumers have reduced purchasing power, which leads to lower levels of consumption.
- Cutting government spending directly impacts AD by reducing government expenditure on goods, services, and public projects.

Overall, these measures lead to a decline in aggregate demand.

Suppose there is a decrease in AD such that AD shifts from AD_3 to AD_4. As AD falls, firms add the unsold goods to their inventories. The unplanned investment signals to firms to decrease output in the next production cycle and in so doing, decrease their demand for factors of production, including labour. As national income (output) falls, income-induced consumption decreases, causing another round of decrease in AD, setting off the reverse multiplier. Eventually, real national income contracts from Y_1 to Y_2, moving further away from the full employment level of national income Y_f.

(insert graph)

By reducing AD and national income, households purchasing power falls. This leads to a fall in demand for goods and services including imports. As such, import expenditure falls and BOT position improves.

Requirement 2b: Limitations of expenditure-reducing policies

[Topic sentence] The effectiveness of deflationary policies in correcting a trade deficit depends on how well these policies align with other economic objectives and conditions.

The effectiveness of deflationary policies in addressing a trade deficit largely depends on whether they align with or conflict with other economic objectives. For instance, if the trade deficit is driven by demand-pull inflation, deflationary policies can be effective in addressing both the inflation and the trade deficit simultaneously. However, if a country has not yet achieved full employment or currently experiencing low growth, implementing contractionary

policies to correct the trade deficit may have unintended negative consequences, such as exacerbating unemployment and potentially slowing economic growth.

Evaluation:

Depends on
- root causes of the trade deficit
- prevailing economic conditions
- short-term vs long-term

Mark scheme

To enter L3 candidates should analyse the advantage and limitation of each type of policy to address trade deficit.

L3 Band [8–10 marks]
L2 Band [5–7 marks]
L1 Band [1–4 marks]

Evaluation marks:
Well-reasoned evaluative judgments on which is a more effective policy to correct trade deficit.

E3 Band [5 Marks]
E2 Band [3–4 Marks]
E1 Band [1–2 Marks]

Paper 2 Q5 Suggested Answer

Malaysia was facing stagflation amid drags within supply chains and a lethargic recovery in international tourism.

a) Explain the reasons behind the stagflation in Malaysia. [10]
b) Discuss whether achieving strong economic growth is always the priority for governments. [15]

Part (a)

Introduction:

Define stagflation

- Stagflation refers to a situation characterized by high unemployment, rapid inflation, and a depressed level of real output. It results from the combined effects of cost-push inflationary pressures and the deflationary consequences of reduced real purchasing power faced by an economy.

Requirement 1: Explain how lethargic recovery in international tourism affect the internal macroeconomic goals.

[insert graph]

[Topic sentence] The reopening of borders after COVID-19 has led to a significant rebound in international tourism, which not only stimulates economic growth but also reduces demand-deficient unemployment and alleviates demand-pull inflation.

Many people who had postponed trips during the pandemic are now traveling internationally, leading to an increase in tourist arrivals. An increase in tourism spending will improve the balance of trade since it increases total export revenue.

As AD increases, ceteris paribus, firms will have to draw down inventories to meet the unanticipated increase in demand. The unplanned disinvestment signals to firms to increase output in the next production cycle to restore inventories to optimal levels. In doing so, firms demand more factor inputs (including labour) and pay out more factor income. As national income rises, income-induced consumption (Cd) increases, causing another round of AD growth and triggering the multiplier effect, where additional spending generates more income, which in turn leads to more spending. However, each successive round of consumption grows smaller due to leakages in the form of savings, taxes, and imports. Eventually, the multiplier process ends, and a new equilibrium in national income is reached when $\Delta J = \Delta W$.

The economy is initially operating with spare capacity with initial real national output Y0, below the full employment level of national income Yf. With the increase in AD, reinforced by the multiplier, a rightward shift of AD from AD0 to AD1 leads to an increase in real national income from Y0 to Y1, moving closer to the full employment level, Yf, ceteris paribus. This represents actual growth as real national income rises. Employment also increases during this process. At the same time, as firms demand more factors of production, the increased competition for these inputs drives up factor prices.

However, the recovery of international tourism is lethargic due to lingering health concerns, including new variants of COVID-19, may cause some travellers to remain cautious about international travel, so AD increases by a smaller extent, rising to AD2 instead of AD1. As a result, RNY increases only from Y0 to Y2 instead of Y1, and GPL increases from P0 to P2

instead of P1. Demand-deficient unemployment is also higher when RNY increases by a smaller extent.

Requirement 2 Explain how 'drags within supply chains' affect the internal macroeconomic goals

[Topic sentence] 'Drags within supply chains' have led to cost-push inflation, resulting in lower economic growth and higher demand-deficient unemployment in Malaysia.

The Russia-Ukraine conflict has caused significant disruptions in global supply chains, affecting the availability of various goods. For Malaysia, which relies on global supply chains for many of its imports, such as wheat and oil, these disruptions lead to shortages and higher prices for imported goods. As a result, this drives up domestic prices and contribute to cost-push inflation.

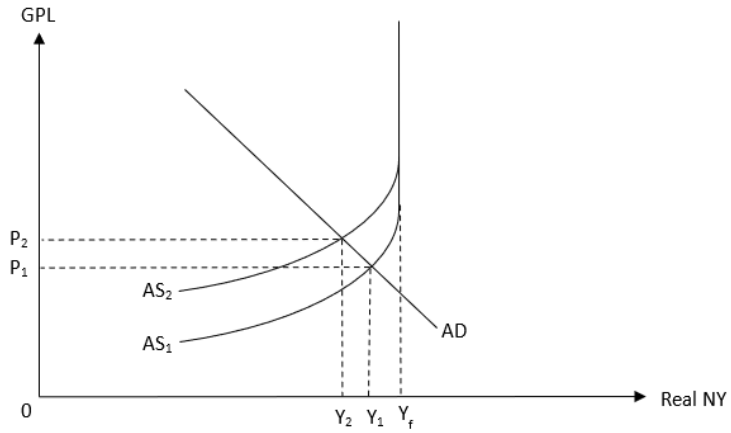


Figure 2: Cost-push Inflation

When firms experience increases in unit cost of production independent of AD factors, the same output will be supplied by firms only at higher prices. In Figure 2, this is represented by the upward shift of the AS curve from AS_1 to AS_2. Firms respond to the higher unit cost by partly decreasing output and partly increasing price of final goods and services to protect their profits. As firms cut back production, demand for factors of production also fall. Ceteris paribus, unemployment increases. Overall, the general price level rises from P_1 to P_2 and real national income falls from Y_1 to Y_2, further below the full employment level of real national income Y_f.

Conclusion:

Overall, rising AD and falling AS reinforce each other, driving the GPL to increase at a faster rate. At the same time, higher cost-push inflation, as firms reduce production, offsets or diminishes the growth in RNY resulting from the sluggish rise in tourism. Consequently, Malaysia faced either very low economic growth or possibly a recession. This combination of factors ultimately led to stagflation in Malaysia.

Mark scheme

To enter L3 candidates should analyse how the factors given the pre-amble led to a stagflation in Malaysia.

L3 Band [8–10 marks]
L2 Band [5–7 marks]
L1 Band [1–4 marks]

Part (b)

Requirement 1a

[Topic sentence] Strong economic growth is a priority for governments because it underpins several key factors essential for enhancing the standard of living.

Firstly, if economic growth outpaces population growth, it leads to an increase in per capita real income. This means that the average income per person rises, even when adjusting for inflation, providing individuals with more purchasing power. Higher per capita income typically allows citizens to enjoy a better standard of living by affording more goods and services, improving overall economic well-being.

Secondly, economic growth generally leads to more job creation, which helps reduce unemployment rates and provides better job prospects. As businesses expand and new industries emerge, the demand for labour increases, leading to higher wages and improved employment conditions. With more stable and better-paying jobs, individuals and families can invest in better housing, access higher-quality healthcare, and pursue advanced education, all of which contribute to an elevated quality of life.

Thirdly, as the economy grows, it generates increased tax revenues for the government. These additional funds can be reinvested into public services and infrastructure projects, such as transportation networks, utilities, and public facilities. Improved infrastructure enhances the efficiency and accessibility of services, making daily life more convenient and improving overall non-material standard of living.

Requirement 1b

Limitations: When an economy is near full employment, resources are already being utilized at or near their maximum capacity. Pursuing strong economic growth in this context can lead to excessive demand for goods and services, which can push up prices and cause hyperinflation. If inflation becomes too high, it can erode purchasing power and create economic instability.

Requirement 2

[Topic sentence] However, in addition to pursuing strong economic growth, governments may prioritize other macroeconomic goals such as alleviating inflation and reducing structural unemployment.

Governments should prioritize alleviating inflation because high inflation erodes the internal value of money and reduces purchasing power, leading to economic uncertainty. Rapidly rising prices increase the cost of living, disproportionately impacting low and fixed-income households. Additionally, when inflation rates are high and unpredictable, firms struggle to accurately forecast future revenue and costs. They also face difficulties in determining whether price increases for specific goods are due to rising demand or general inflation. These uncertainties complicate the estimation of expected returns on investment, increasing investment risk. If firms anticipate lower expected rate of returns on investment compared to the cost of borrowing which leads to lower net returns, they may reduce their investment, which can worsen economic growth and exacerbate demand-deficient unemployment, ultimately harming the economy. [insert graph]

Addressing unemployment is a crucial priority for governments because it has significant implications for economic stability and performance. One of the key concerns is prolonged unemployment can lead to a degradation of skills or hysteresis. Workers who remain unemployed for extended periods may find that their skills become outdated or less relevant to the current job market. This makes it harder for them to find new employment, even when economic conditions improve. Skill loss contributes to a higher long-term unemployment rate, as these individuals struggle to re-enter the workforce. Extended periods of unemployment can also lead to a psychological impact, where individuals become discouraged and lose confidence in their ability to find work. As a result, some may exit the labor force entirely, reducing the quantity and quality of FOP in the economy. In a worst-case scenario, this may limit the growth of AS or causing PPC to fall inwards. In other words, reducing the potential capacity of the economy. [insert graph] Long-term unemployment can lead to increased reliance on unemployment benefits, placing a financial burden on the government. This reliance can strain public resources and reduce the funds available for other essential services.

Improving the trade balance is also a vital macroeconomic goal for governments. A favorable trade balance, characterized by higher exports relative to imports, can boost domestic production, create jobs, and stimulate economic growth [insert graph]

Evaluation

Depends on

- prevailing economic conditions
- stage of economic development
- magnitude and extent of the economic issues
- time period

Mark scheme

To enter L3 candidates should analyse the benefits and costs of prioritising strong economic growth and focus on other macroeconomic goals if necessary.

L3 Band [8–10 marks]
L2 Band [5–7 marks]
L1 Band [1–4 marks]

Evaluation marks:
Well-reasoned evaluative judgments on how governments should prioritize their goals under varying circumstances.

E3 Band [5 Marks]
E2 Band [3–4 Marks]
E1 Band [1–2 Marks]

Paper 2 Q6

In light of a larger global economic presence, Vietnam aims to increase the percentage of skilled workers to 30% by 2025, bridging the economic gap with a new high-speed train network and driving further development in the renewable energy industry.

Source: Source of Asia, June 2023

(a) Explain two reasons why Vietnam's comparative advantage might change over time. [10]

(b) Discuss the perspective that globalisation poses more benefits than costs for emerging economies like Vietnam. [15]

Part (a)

Define comparative advantage: A country has a comparative advantage over another in the production of a good if it can produce the good at a lower opportunity cost than the other country.

R1: Government policies

Gov efforts at human capital development (increase % of skilled labour) will allow Vn to develop comparative advantage in higher-end manufacturing which are more skills- and technology-intensive, shifting away from low-end manufacturing. The improved productivity / efficiency in higher-end manufacturing means that Vn is now able to produce the same units of o/p with fewer inputs (that have to be diverted away from the production of other goods), reducing the opportunity cost incurred. **<L>** Where the opportunity cost of producing higher-end manufactured goods in Vn falls below that of other countries, it is said to enjoy a comparative advantage.

[May also explain gov policy of infrastructure development or policy to develop the renewable energy sector]

R2: Economies of scale

Foreign investors' initial interest in Vn despite it not being the lowest-cost producer, was driven by their desire to diversify their suppliers (also known as "China +1" strategy). However, where there exists significant internal economies of scale to be gained, expansion of the scale of production in Vn allows its prs to enjoy cost savings (falling LRAC). Over time, the opportunity cost of producing low-end manufactured goods would decline. **<L>** Where the opportunity cost of producing lower-end manufactured goods in Vn falls below that of other countries, it is said to develop a comparative advantage.

[May illustrate with diagrams]

Mark scheme

To enter L3 candidates should explain two distinct reasons for changes in comparative advantage, i.e. dynamic changes, not static comparative advantage.

To access the top of L3, application to Vietnam (e.g. use information from preamble) is expected.

L3 Band [8–10 marks]
L2 Band [5–7 marks]
L1 Band [1–4 marks]

Part (b)

Define globalisation: Globalisation is the increasing integration of economies around the world, particularly through the movement of goods, services, capital, people (labour) and knowledge (technology) across international borders.

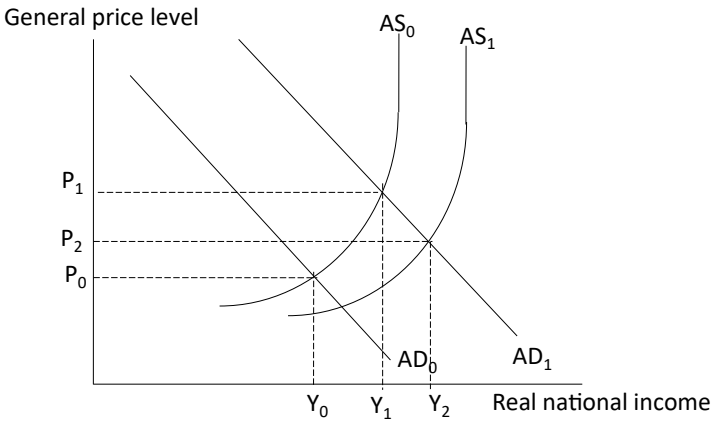
R1: Benefits of globalisation for emerging economies like Vietnam

Given relative abundance of surplus labour, emerging economies tend to enjoy comparative advantage in primary industry and/or lower-end manufacturing:

- **[T]** main exports of primary products (e.g. dragon fruit) and lower-end manufactured goods (e.g. consumer durables)
- **[K]** attract inward foreign investment in these industries. MNCs tend bring to the country technology transfer

Benefits to the economy:

- Where the increase TR_X > any increase in TE_M, **<L>** this could help the economy reduce its BOT deficit, or even create a growing BOT surplus, enabling the country to accumulate foreign reserves
- Increase AD (X and I) + Increase AS (expansion of productive capacity through increase capital stock + tech transfer) → **<L>** employment creation, sustained, non-inflationary growth



Point evaluation:
Extent of benefits depends on the availability of spare capacity / existence of supply bottlenecks which could limit the magnitude of increase in RNY and create inflationary pressure in the SR

R2: Costs of globalisation for emerging economies like Vietnam

[K] Excessive dependence on foreign capital exposes emerging economies to volatility / instability

- With MNCs tending to be footloose, the relocation of MNCs to other lower-cost countries would have the opposite effect – loss of export revenue, decrease in AD, **<L>** increase unemployment

[K] Foreign capital attracted to emerging economies to take advantage of natural resources, weaker environmental standards, etc. **<L>** May result in unsustainable growth.

[T] [K] Unevenness of development across regions. The better-connected regions would be better positioned to reap the gains from globalisation. Lower transport / logistics costs, access to cheap and reliable electricity all help to lower uCOP, adding to price competitiveness of X and raising eRORI attracting investors. The expansion of economic opportunities raises income and employment in these regions, leading to widening of Y gap → **<L>** non-inclusive growth

[L] Where economic opportunities are limited in the emerging economy, its citizens (esp. high-skilled workers) may choose to seek better opportunities overseas → reduction in quantity and quality of labour → **<L>** limit potential economic growth

Point evaluation:
With greater attention focused on meeting CO2 emissions goals, Vn has also been moving towards the development of its renewable energy sources. This puts the economy in a good position to attract firms which are committed to meeting their environmental obligations. The move also suggests that the Vn gov is pre-emptively taking steps to support sustainable growth even as the economy opens itself up to trade and capital flows.

[illustrate with AD/AS diagram]

Evaluation

Contextualise to emerging economies: Much catching up in terms of moving up the value chain, raising GDP per capita and other human development measures, etc.

- Globalisation enables Vn to tap on external resources and expertise to support its economic development, much more than what it could achieve on its own.
- Recognising that even as it brings benefits, globalisation exposes the economies to risks which, compared to the advanced economies with strong institutions (track record of strong governance, strong rule of law), emerging economies might be ill-equipped to manage.

No shortage of emerging economies that have successfully transited to middle- and upper-middle income economies through globalisation. It all depends on how the gov manages the benefits and costs:

- e.g. redistribution policies to ensure more inclusive growth
- e.g. higher stream of tax revenue (from globalisation-led growth) → development of human capital through spending on education and healthcare, spending on decarbonisation efforts → inclusive and sustainable growth
- e.g. above effort on human capital development and infrastructure spending, well-targeted grants → support structural changes → continue to develop new areas of comparative advantage (link to part a) → even as some production relocate to lower-cost countries, new investment activities take their place → sustained growth, keeps down structural u/e
- e.g. higher stream of tax revenue (from globalisation-led growth) → build up fiscal reserves which can be drawn up for macroeconomic stabilisation in periods of cyclical downturn or facilitate structural change

Mark scheme

To enter L3 candidates should discuss both benefits and costs of globalisation to emerging economies, covering at least two out of the three dimensions of trade, capital and labour flows.

L3 Band [8–10 marks]
L2 Band [5–7 marks]
L1 Band [1–4 marks]

Evaluation marks:
Well-argued evaluative judgements about the benefits and costs with a summative conclusion about whether benefits of globalisation outweigh the costs in the context of emerging economies.

E3 Band [5 Marks]
E2 Band [3–4 Marks]
E1 Band [1–2 Marks]