Raffles Institution
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ECONOMICS

Higher 2

Syllabus 9570

Examiner's Report

Year 6 Timed Practice 2023

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ECONOMICS

Y6 H2 Timed Practice 2023

Paper 9570/01
Paper 1

Question 1 The Gig Economy

(a) With reference to Figure 1,

(i) Compare the number of private-hire car drivers and delivery riders in Singapore from 2018 to 2021. [2]

- Both the number of private hire car drivers and delivery riders increase over the period. However, the number of private hire drivers was consistently higher than that of delivery drivers over the period.

OR

- The number of private hire car drivers fell from 2020 to 2021 while the number of delivery drivers increased consistently over the period.

***Mark Scheme*:**
- *Similarities – 1m*
- *Differences – 1m*

Examiners' Comments:
- *Some students did not state a similarity in their comparison while others did not have a comparison for the overall time period from 2018 to 2021.*
- *Students should note the importance of using comparative words to highlight differences. The use of comparative words such as "both", "while" and "whereas" was missing in many scripts.*

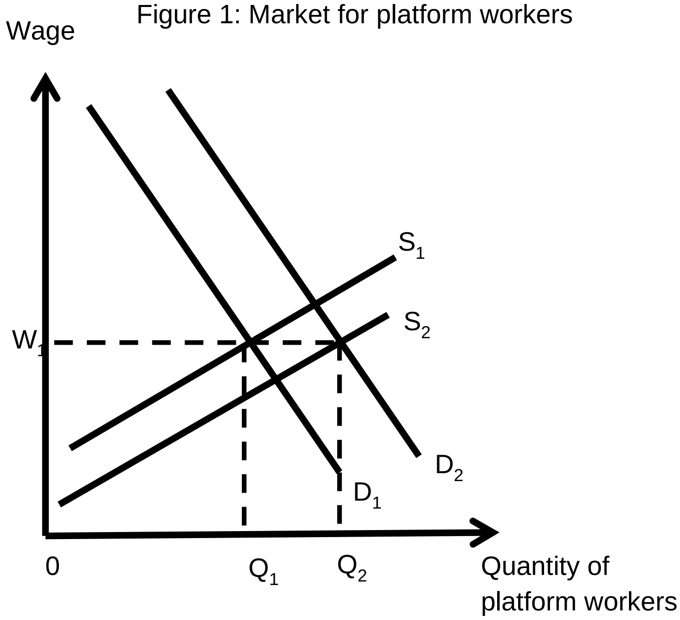
(ii) With the aid of a diagram, explain one demand and one supply reason for the change in number of platform workers in Singapore from 2018 to 2021. [5]

- The number of platform workers (private hire car drivers and delivery riders) generally increased from 2018 to 2021 (as seen from Figure 1).
- The increase in demand of platform workers is due to:
  - Increased demand for app services (from changing taste and preferences). Technology advancement resulting in development of platform apps leads to increased reliance on these platform services such as food delivery and ride sharing services (Ext 1: the rise of platform apps that allow you to order anything you desire with your phone and increased reliance on these platform services) → This leads to an increase in (derived) demand for platform workers.
- The increase supply of platform workers could be due to:
  - Increased unemployment level due to the pandemic, e.g. those from travel and tourism industries (Extract 1) → more workers who are now available for work and seeking work are willing and able to join the gig economy as it continued to offer job vacancies during the recession (Extract 1 & 2).

- Non-monetary (wage) incentives such as increased flexibility (Extract 1) of work conditions/ hours→ increase in supply of platform workers willing and able to offer their services at each wage level.
- Government policies→ higher job incentives for delivery workers (Ext 1: additional benefits for platform workers such as overtime pay and other legal protections; measures supporting training programmes and bolstering CPF savings of gig workers) → increase in the supply of workers willing and available for work at each wage level.
- Technology which reduces the BTE for workers to join the gig economy. Technology helps to reduce barriers for workers to enter the gig economy as lower-skilled workers have greater job mobility/less mismatch of skills with jobs associated with the gig economy → Workers are more willing and able to offer their services to work in the gig economy → increase in supply of platform worker. (Ext 1: delivery workers and private-hire car drivers who use online platforms to match their services with demand could make thousands a month).

- Due to the increase in demand and supply for platform services in the labour market, there will be a rise in the number of platform workers in Singapore/ increase in equilibrium quantity of workers as seen in Figure 1. Assuming that the increase in DD and SS is equal, at P1, equilibrium quantity increases from Q_1 to Q_2, and the equilibrium quantity of platform workers increases.

Figure 1: Market for platform workers



Note: it is equally acceptable to analyse ↑DD > ↑SS or↑DD < ↑SS.

<u>Mark Scheme</u>:
- *Explanation of one determinant of demand for labour with use of case material – 2m*
- *Explanation of one determinant of supply of labour with use of case evidence – 2m*
- *Accurate diagram showing the <u>labour</u> market changes – 2m*

<u>Examiners' Comments</u>:
This question was not done well. The gap lies in the general unfamiliarity with the demand and supply determinants in the labour market. Some common mistakes include:

- *There is a confusion between the market for the final services provided by platform companies and the labour market for the gig workers. The focus of this question is the labour market for gig workers.*

- *Lack of scope of factors explained:*
    - *Some students only utilised the pandemic as the reason for both the increase in supply and demand of labour. However, it is important to note that the pandemic is not sufficient to explain the entire time period from 2018 to 2021.*
- *Lack of depth of explanation:*
    - *There was no use of concepts like derived demand, or labour being a factor of production in providing the services to link the increase in the demand for the services to the demand for platform workers.*
    - *There was no link made to the willingness or ability to work to explain why supply of platform workers increased.*
    - *A good response should offer a combined effect for the overall change in equilibrium quantity of platform workers.*
    - *There was also a missing link from the equilibrium quantity of workers on the diagram to the "number of platform workers".*
- *Some scripts lacked the use of case evidence to support their explanation while others merely quoted case evidence without adequately explaining it with use of economic concepts.*
- *Many students drew the demand and supply diagram without clearly stating which market they were referring to. The diagram drawn should reflect the labour market with wage and quantity of platform workers labelled on the axes.*

(b) To what extent is the imposition of the minimum wage for gig workers an appropriate policy for Singapore? [8]

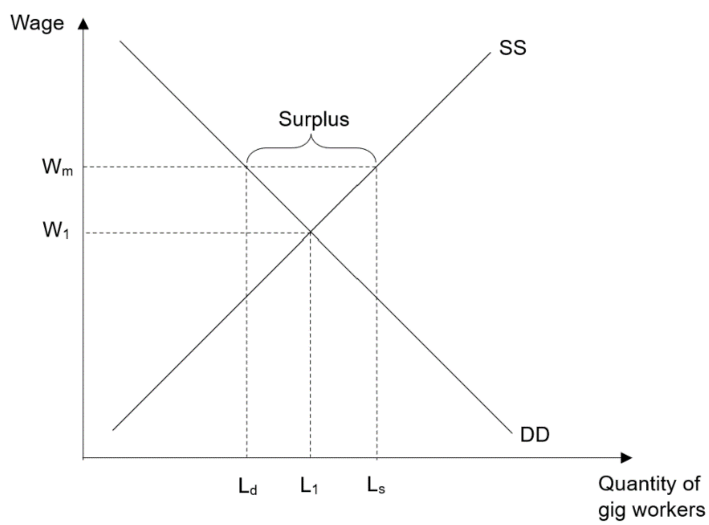
Introduction

- Clarify the aim of government intervention in Singapore's gig economy is to "provide more sustained support for lower wage workers" (Extract 3)

<u>Thesis: Imposition of a minimum wage for gig workers is an appropriate policy measure</u>

- Define: a minimum wage set by the government below which firms are legally prohibited from paying to their workers
- Explain how a minimum wage works in the gig economy:
    - Without a minimum wage policy, the gig workers' wages are determined by the demand and supply for gig workers as shown in Figure 2

Figure 2: Market for gig workers



  - For a minimum wage policy to be effective, the Singapore government needs to set it above the prevailing wage level at W1.
  - For instance, with a minimum wage at Wm, the policy would be appropriate as it effectively raise the wage from W1 to Wm, providing better support for low wage gig workers

- Elaborate on how this minimum wage policy may be appropriate in Singapore's context:
  - As seen by the survey done in US, "1 in 7 gig workers earned less than the federal minimum wage (Extract 2), Singapore's gig workers may be similarly facing low and unstable wages, leading to a wide income gap between the gig workers and the non-gig workers. In comparison with the world's other advanced economies, Singapore already has a relatively higher Gini coefficient around 0.45, indicating a high level of income inequality present in our society. Thus, a minimum wage for gig workers would be appropriate for Singapore as it can help to reduce income gap in our society by increasing the wage of low-income gig workers, leading to lower income inequality in Singapore.
  - As shown in Figure 1 of case material, the number of gig workers in Singapore has grown quite substantially overtime. Thus, a minimum wage policy would be appropriate as higher wages will allow more households to consume more and better goods and services, leading to higher material welfare for a rising proportion of our labour force.

<u>Antithesis: Imposition of a minimum wage for gig workers may not be an appropriate policy measure</u>

- it may increase the level of unemployment for platform workers in the gig economy.
  - As the wage of workers increases from W1 to Wm, platform companies will be less willing and able to hire as many gig workers due to the rising costs. This decreases the quantity demanded for gig workers who offer such services from L1 to Ld, leading to retrenchments.
  - At the same time, the higher wages would incentivise more workers to join the gig economy and seek employment opportunities in this market. Thus, the quantity supplied of gig workers increases from L1 to Ls.
  - At Wm, Ls is higher than Ld, creating a persistent surplus of workers who want to seek employment in the gig economy but are faced with only limited job vacancies offered by the platform companies, resulting in an inefficient use of scarce labour resources.
  - The level of unemployment increases as gig workers who are available for work and actively seeking jobs is not able to secure one, supported by gig workers' worries that "If the delivery fee rises, customers will think twice before ordering food on the platform and this may mean less jobs for riders." (Extract 3)
  - Thus, while a minimum wage policy can help to increase the wages for gig workers who continue to have a job, it may not be appropriate as many gig workers may lose their jobs instead.
- [Possible evaluation]: as labour is a critical factor of production in the provision of gig services, wage costs take up a large proportion of the firms' cost of production. The wage costs increase for platform companies will translate to consumers paying more for delivery fees (Extract 3) and hence order fewer delivery services and rides. Consequently, the fall in demand for workers will result in further unemployment if wage rates remain at Wm. Thus, a minimum wage would not be an appropriate policy in Singapore.
- it may be hard to implement such an industry-specific minimum wage without hurting the flexibility offered by gig work
  - As mentioned in Extract 3, with a minimum wage, riders may have to be assessed based on stricter "conditions and performance tiers". This means riders and drivers may thus have to work with less flexible hours and more stringent work requirements, making gig work lose one of its main perks on offering flexible work conditions and reducing the workers' incentive to work for this industry
  - This may make many riders and drivers less willing to offer their services even with a higher wage offered by the minimum wage law
- it may worsen the problems of "rising fares" (Extract 5) already existing in Singapore.

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  - if the platform companies pass on the higher wage costs as higher prices to the customers, it would add to the problem of "rising fares" in Singapore, worsening consumer welfare
- it may increase cost of production for firms and turn away FDIs into Singapore's gig economy as our labour costs rise due to the minimum wage policy. As the cost of production increases, the firms will be less willing and able to provide gig services at each price level. Hence, the supply of the final service would fall, resulting in a rise in equilibrium price and a fall in equilibrium quantity of the service provided. This would reduce the consumer surplus in the gig service market as there are less service available at a higher price.

<u>Conclusion and Evaluation:</u>

- Overall, a minimum wage policy may be limited in its appropriateness in Singapore's context because:
  - While wages for some gig workers can be increased, it may hurt job security for other workers, especially during times of hardship – meaning that gig economy may be losing its most important edge, that is, flexibility (Extract 3) and cushioning effects during times of crisis such as the pandemic (Extract 1).
  - It could worsen consumer welfare further amidst rising fares in ride-hailing and delivery industries.
  - The feasibility of imposing such an industry-specific minimum wage may be low because many gig workers work multiple roles and for multiple companies (e.g. a private-car driver can driver for both Grab and Gojek). It would be difficult for Singapore government to mandate a single wage level for all gig workers.

OR

- A minimum wage policy can be appropriate to a large extent for Singapore as:
  - It may help to alleviate the "perennial issue" of shortage of riders and drivers in our delivery and ride-hailing industry (Extract 5) as more gig workers are incentivised to join the industry with better remunerations.
  - After all, the "uncertain income" (Extract 5) earned by platform workers is one of the key reasons why there's a labour shortage in Singapore's ride-hailing and delivery industry as workers tend "to choose a full-time job for income stability instead of driving for ride-hailing companies" (Extract 5).

<u>Mark Scheme</u>

Knowledge, Application, Understanding, Analysis		
L1	▪ *Smattering of points and not directly linked to question* ▪ *Descriptive answer without the use of an analytical framework* ▪ *Conceptual inaccuracies.* ▪ *Lack reference to the case material.*	***1 - 3***
L2	▪ *A balanced answer with economic rigour in explaining the effects of the policy on the wage and employment levels in the labour market for gig workers* ▪ *A well-elaborated answer that elaborates on the appropriateness and inappropriateness of the policy in Singapore's context*	***4 - 6***
Evaluation		
E1	*A judgement with some substantiation but not well supported with economic analysis/case context*	***1***
E2	*Judgment supported by economic analysis and is contextualized to the given question/ case material*	***2***

Examiners' Comments:

This question was not done well. Some common mistakes include:

- *Quite a number of students answered the question without demonstrating the basic understanding of how a minimum wage policy works. It's important to define minimum wage and explain the condition for an effective minimum wage.*
- *Many students confused a minimum wage in the labour market of gig workers with a minimum price in the market for gig services. Please note that a minimum wage does not mean that there will be a minimum price in the service market.*
- *Some students suggested that the rationale for the minimum wage is to create job security. Such a response overlooked the effect of a minimum wage on unemployment.*
- *Many students applied the explanation of a minimum price policy in the goods market to this question on minimum wage and argued that "the government will incur high budget deficit because they have to buy up the surplus workers". Please note that it is important to apply your economic concepts to the correct question context. The government will not buy up the surplus of workers and in fact cannot buy up and store them.*
- *Some students provided a purely theoretical analysis of the appropriateness of the minimum wage policy without utilising the context of Singapore. It's important to elaborate further on how the policy can be appropriate or not appropriate in Singapore's context.*
- *On the flip side, some students did not have any economic framework to back up their analysis of minimum wage policy and answers were purely descriptive. Many failed to identify unemployment in the labour market diagram.*
- *Some answers had too much focus on alternative measures such as training, which is not what the question was asking. The focus of the question is only on the appropriateness of a minimum wage.*
- *For evaluation, instead of answering to the question on the extent to which minimum wage policy is appropriate in Singapore, many students directly went into what other policies can be used. While it can be part of the evaluation, it is important to note that the function of the final evaluation is a judgement to the question, i.e., a weighed consideration of the thesis and antithesis that had been analysed. Do form a final judgement based on your analysis first before extending to other insights.*

(c) (i) Identify the market structure in the ride hailing market in Singapore. Justify your answer. [2]

Oligopoly. In terms of market concentration ratio, the top 3 firms make up 83% of ride hailing services (Figure 2).

Mark scheme:

- *Correct identification - 1m*
- *Clear substantiation with use of evidence – 1m*

Examiners' comments:

- *While most students were able to correctly identify oligopoly as the market structure, many did not refer to the chart and link it to the market concentration ratio.*

(c) (ii) Discuss whether the potential merger between Grab and Gojek would likely be the main cause of continued 'rising fares' for ride hailing services. [8]

Introduction

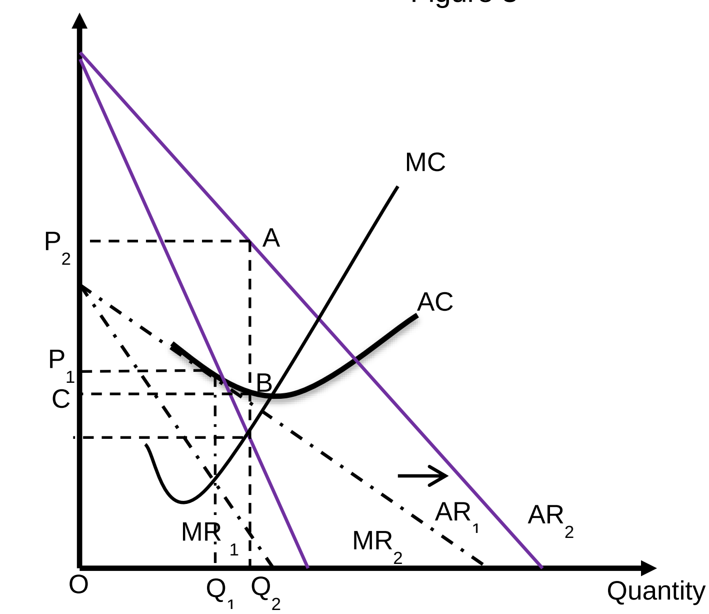
- Define merger (horizontal integration in context of Grab and Gojek). Horizontal integration occurs when a firm combines with or takes over a similar firm at the same stage of production to form a single entity and in the case of Grab and Gojek, provision of ride hailing services.
- Assuming firms are profit maximizing and produce until the profit maximizing output where MC=MR.

Body:

Thesis: potential merger between Grab and Gojek is the main cause of rising fares.

- Potential merger results in an increase in combined market share and greater market dominance for Grab and Gojek. This will lead to an increase in demand and an increase in price setting ability and an increase in total revenue and in turn the firm's profits since there is a reduction in competition. → AR increases from AR1 to AR2 and price elasticity of demand falls (due to availability of less substitutes) → at the new profit maximizing output at Q2 where MC=MR2 → **profit-maximising price increases from P1 to P2** and increases firm's ability to raise price over its marginal costs of production (the gap between P and MC widens) → worsens allocative inefficiency as seen in Figure 3 (AE not the focus of the question).

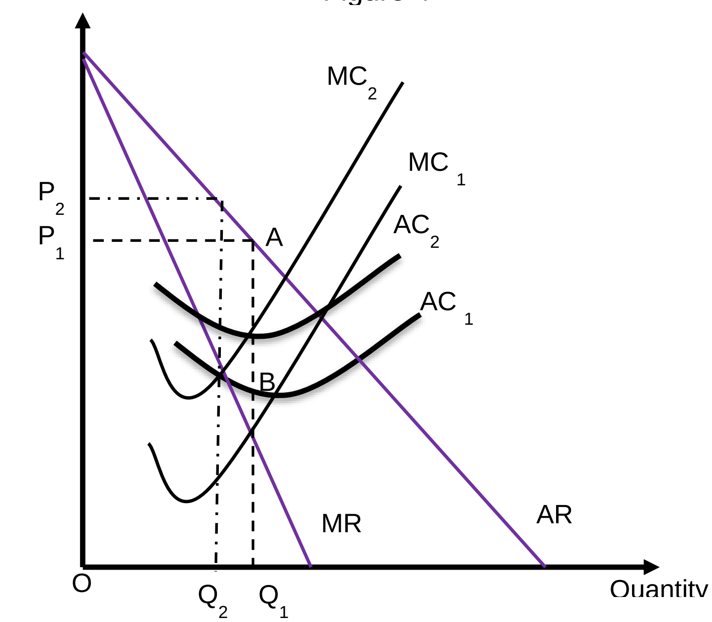
Figure 3



Anti-thesis: other factors may be the main cause of rising fares.

- Increased demand for ride-hailing services in the ride hailing market (ext 5: higher demand for rides as more employees returned to the workplace)→ increased AR and MR for ride hailing companies/ firms such as Grab and Deliveroo→ increase in profit maximizing output and price to P2 for ride hailing firms.
- Rising cost arising from higher labour cost due to shortages of drivers and petrol cost (ext 5: Fewer drivers resulting in driver shortage issues, rising petrol prices and operational costs)→ increase cost of ride hailing services due to higher cost of production → increase cost of ride hailing services of firms → fall in MC and AC (MC and AC curves shift up to MC2 and AC2)→ at the new profit maximizing output where MC2=MR → fall in profit maximizing output and higher prices as seen in Figure 4.

Figure 4



Overall Synthesis and Evaluation:

- Price increase can be caused by both the potential merger and other such as demand and cost factors.
- Potential merger not necessarily be the main cause of higher fares as it remains oligopolistic where there is high mutual interdependence between firms - the ride hailing firms may continue to engage in price competition as seen in Extract 4 where companies engage in aggressive price wars to increase market share as they do not see the potential merger as a threat especially if the combined market share is not significantly higher. (Ext 4: While Grab has a large market share in the ride-hailing and food delivery industries in Singapore, Gojek has a much smaller share in ride-hailing and a limited pie in food delivery and consumers still have other options in ride-hailing and food delivery such as FoodPanda, Deliveroo and Ryde).
- Moreover, merger may not result in continued rising prices.
  - Merger may not necessarily result in continued higher fare since merger can lead to greater cost savings from greater exploitation of internal economies of scale due larger scale of production of transport services (Ext 4: with large sums of capital raised, Grab is investing into the creation of detailed digital maps to help make transport and delivery services more efficient). This results in falling cop and falling fares→ increased productive / cost efficiency where the merged firm can pass on cost-savings to consumers via lower price and prices of ride hailing services can fall in the long run.

***Mark Scheme*:**

Knowledge, Application, Understanding, Analysis		
L1	▪ *Underdeveloped analysis that lacks use of relevant profit maximizing framework* ▪ *Significant conceptual gaps in analysis* ▪ *Limited/poor use of evidence from extracts* ▪ *No link to economic theory of framework*	***1 - 3***
L2	• *Well-developed and balanced analysis with good use of firm's level analysis on the causes behind rising fares that considered the impact of the merger as well as changes in firm's demand and cost factors that affected prices*	***4 - 6***

	• *Good economic rigour* ▪ *Good use of evidence from case material to support the answer*	
	Evaluation	
E1	*A judgement with some substantiation but not well supported with economic analysis/case context*	***1***
E2	*Judgment supported by economic analysis and is contextualized to the given question/ case material*	***2***

Examiners' Comments

A handful of students did not manage to attempt this question. Time is a scarce resource, and it is important to plan and manage your time well during the examination. What's not written will not earn you any marks, no matter how brilliant your ideas can be. Learn from this experience and work on time management.

- *Many students did not use the firm's analysis in their answers despite identifying that the ride-hailing services market was oligopolistic in (c)(i).*
- *In explaining the effects of potential merger between Grab and Gojek, many students only explained how, with one less competitor in the market, the demand for Grab's services will become less price elastic but missed out the point on how the merged firm will have a larger combined market share and the firm's demand/AR and MR will increase. Please note that the effect on BOTH rising DD/AR & MR and falling PED will need to be explained.*
- *Many students did not explain the firm's profit maximising condition in leading to a higher price charged by Grab after merger and simply expected the diagram to speak for them. However, a diagram not explained is as good as not drawn. Please remember to explain your arguments and diagrams in full in writing.*
- *Some students were misled by the case evidence and discussed price wars at length in the answers. Such an approach drifted away from the focus of the merger.*
- *Some students spent a considerable amount of time and energy in arguing how the merger may lead to falling fares, rather than explaining other factors that may account for rising fares in their answer. However, this is not directly answering the question. The question asks for causes of continued rising fares, so your main analysis needs to focus on the merger and other factors being the causes of an increase in fares, rather than a decrease in fares.*
- *There were a few students who confused merger with a collusion – please note that it is different.*

Other general examiners' comments for CS1:

- *Many students did not have proper labelling for their diagrams, including the title, the axes, the curves on the diagram, etc. It's important to label the title of the diagram especially when you have multiple diagrams/markets in a question.*
- *Some students need to improve on their presentation and/or organisation of ideas. Using a ruler for diagrams, providing adequate and clear paragraphing, having a coherent and logical flow for your points as well as not writing excessively in margins will all be important for the readers to better understand and comprehend your brilliant ideas.*
- *A few students did not follow the instruction on starting each case study on a new piece of paper. It's important to make sure all instructions are properly followed in your future examinations, including the A levels.*

Question 2 Spotlight on the Arab World

(a) With reference to tables 1 and 2,

(i) compare the number of private-hire car drivers and delivery riders in Singapore from 2018 to 2021. [2]

- ***Similarity*** – **Both** Egypt and Qatar registered a current account deficit in 2020.
- ***Difference*** – **However**, the current account deficit of Egypt worsened while it improved for Qatar from a deficit to a surplus in 2021.

<u>Mark Scheme</u>:

- *Similarity between the two countries – 1m*
- *Difference – 1m*

<u>Examiners' Comments</u>:

- *In general, most students managed to identify a similarity and a difference succinctly.*
- *Some students were not able to compare the current balance position using key terminologies.*
    - *Current account positions should be described as either deficit or surplus. Egypt's current account is in a deficit, while Qatar's is in a surplus.*
- *Students need to describe the change in current account position using words such as worsened and improved.*
- *Far too many students did not use comparative words to highlight the similarity using propositions such as BOTH and difference using HOWEVER.*

(ii) identify which country has a higher cost of living in 2021. Justify your answer. [2]

- Identify the country with the higher cost of living – Qatar has a higher cost of living compared to Egypt in 2021.
- Explain the choice – Based on Tables 1&2, the real GDP per capita (PPP-adjusted) is only 1.5 times higher than its real GDP per capita in USD in Qatar compared to Egypt where it is almost 3 times more. This suggests that 1 unit of USD can purchase less goods and services in Qatar compared to Egypt due to the higher cost of living (i.e. the same basket of goods cost more in Qatar compared to Egypt).

<u>Mark Scheme</u>:

- *Identification of the country – 1m*
- *For justification of the degree to which PPP adjusted real GDP per capita for Qatar is higher than is real GDP per capita in USD compared to Egypt. – 1m*

<u>Examiners' Comments:</u>

- *Most students were able to identify Qatar as the country with a higher cost of living but only a few managed to explain the reason to account for the difference in the cost of living.*
- *A large number of students used CPI data to account for the difference in the cost of living.*
  ✗ CPI data is used to explain the <u>change in the cost of living over time</u> but not the absolute level of cost of living for the given year, in this case, 2021.
  ✓Only the PPP adjusted real GDP data in comparison to the real GDP in USD allows us to identify the differences in the cost of living between countries for a given year.
- *While most students were able to show a clear understanding that the real GDP per capita and the PPP adjusted GDP per capita should be compared, they were not able to make the inference that a same basket of goods will cost more in Qatar compared to in Egypt.*

(b) (i) Using an appropriate diagram, explain <u>two</u> causes of inflation in Egypt. [5]

Students are required to explain any two types of inflation – demand pull and cost push using a relevant diagram.

Explain the causes of demand-pull inflation in Egypt (any 1 point)

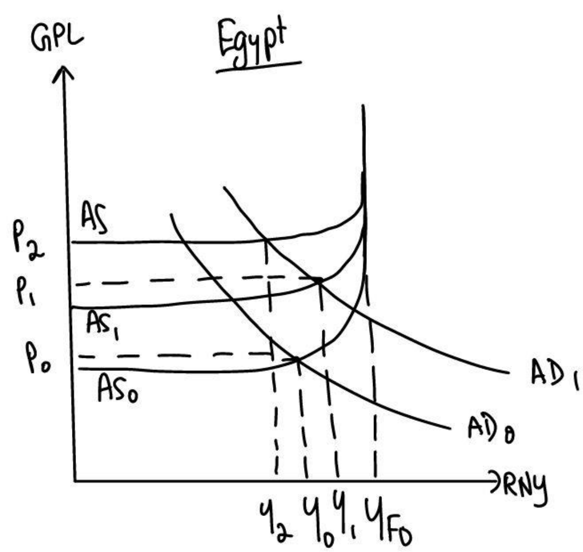
- High government expenditure arising from "ambitious reform program since 2016 to overhaul the country's battered economy" (Ext 6, Para 2).
- Depreciation of the Egyptian pound suggests that one unit of domestic currency fetches fewer units of foreign currencies "amid a dramatic slide of its currency" (Ext 6, Para 1).
- Therefore, the price of exports in foreign currency decreases, while the price of imports in Egyptian pound increases. As a result, the quantity of exports increases while quantity of imports decreases, causing NX to increase.
- As a result of higher government expenditure and net exports, AD increases from AD_0 to AD_1.

Students may consider other reasons for the demand-pull inflation in Egypt:

- Disruptions in trade caused by war in Ukraine.
    - Increase in demand for oil exports from Egypt as countries switched to Egyptian oil due to sanctions on Russian oil. This would result in increase in X and hence NX and AD.
    - Decrease in M as Egyptians switched to the readily available domestically produced oil and other goods and services, increasing C_D. This would result in increase in AD.
- Government reforms (Ext 7) may result in increase in I and hence AD.

Explain the causes of cost push inflation in Egypt (any 1 point)

- With depreciation of the Egyptian pound, imported factors of production such as wheat becomes more expensive in terms of domestic currency, causing the cost of production to increase.
- With supply disruptions caused by the coronavirus pandemic and Russia-Ukraine war (Ext 6, Para 2), there will be a shortage of **key factors of production** such as wheat and fuel, leading to an increase in price of factors of production. This causes the cost of production to increase as "most of its imports traditionally come from eastern Europe" (Ext 6, Para 2).
- As a result, AS falls from AS_0 to AS_1.



Diagrammatic Analysis:

- Since demand-pull and cost-push inflation can occur together, the increase in AD together with the fall in AS will cause the GPL to rise from P_0 to P_2.
- This is because at the **original price level P_1, there is a shortage as the aggregate quantity demanded for goods exceeds the aggregate quantity supplied**.
- The resulting shortage will cause some consumers to bid higher prices for the limited goods. As GPL increases, firms will be incentivized to produce more goods and services in expectations of higher profits.
- However, as the economy approaches full employment as a result of an increase in AD, firms compete for scarce resources to increase output production, prices of FOP will increase, bringing about a rise in cost of production. To maintain its profitability, firms then attempt to pass on the cost increases to consumers by increasing price levels to P_1.
- Extension (only needed for higher mark inflation qn): If price levels are expected to continue to increase, workers would start bargaining for higher nominal wages to maintain their purchasing power (real wages). There will be a further rise in cost of production resulting in a further upward shift of the AS curve from AS_1 to AS_2. This will generate a rise in the price level to P_2 as firms pass on the higher cost of production to consumers in the form of higher price levels, reflecting Egypt's fight with "surging inflation" (Ext 6, Para 4).

<u>Mark Scheme</u>:

- *Identify and explain the cause of demand-pull inflation – 2m*
- *Identify and explain the cause of cost push inflation – 2m*
- *Explains only <u>one cause of inflation</u> with a relevant diagram OR explains only <u>one event</u> to explain different types of inflation (i.e. explains how depreciation of the currency causes demand pull and cost push inflation) – max 3m*
- *If there is an incomplete diagram (no GPL, no axes label, no AD, no AS) and/or no adjustment process to explain why GPL increases – max 4m*

<u>Examiners' Comments</u>:

- *In general, students were able to identify the sources of inflation correctly. However, many students did not manage to provide a rigorous explanation of the causes of inflation using relevant economics analysis.*
- *Many students only managed to explain one cause of inflation or explained one event e.g. depreciation OR supply chain disruptions – to explain two different sources of inflation. As such, the scope of analysis was limited and was not given the full credit.*
- *Some students also copied excessive amount of case evidence without linking them to relevant economics analysis and framework. Case evidence should only be used to support economic analysis, not used to simply replace it.*

  ✗ With supply disruptions caused by the coronavirus pandemic and Russia-Ukraine war will result in cost-push inflation.

  *✓ With supply disruptions caused by the coronavirus pandemic and Russia-Ukraine war (Ext 6, Para 2), there will be a **global shortage of key factors of production** such as oil and wheat. This will **increase the price of factors of production** and hence the **cost of production of goods and services** in the F&B sectors as well as manufacturing sectors. This will cause **AS to decrease** as firms will be less willing and able to offer goods and services for sale at the same price level due to **lower profitability**.*
- *Students who identified imported inflation as a source of inflation were not able to link it to the CPI basket to get the full credit.*

  ✗ Supply disruptions will affect trade channels and hence increase the price of imported goods and services, resulting in imported inflation.

  ✓ Supply disruptions will affect trade channels and hence increase the price of imported goods and services, resulting in imported inflation as it would increase in cost of the same basket of goods as reflected by the increase in CPI.

- *Some students mentioned that a fall in imported factors of production from Russia will result in a fall in the productive capacity and hence result in cost-push inflation.* ***The focus of fall in SS of imported FOP should be on COP not Yf.***
- *A large number of students did not draw an accurate diagram to show inflation. Diagrams must have all the axes labelled and be accompanied by adjustment process to explain why GPL increases. Students should also make reference to the diagram in the prose – for example GPL increases from P0 to P1.*
- *Explanation of the adjustment process also tended to be weak. Students can use one of the following adjustment processes:*
  - *Since demand-pull and cost-push inflation can occur together, the increase in AD together with the fall in AS will cause the GPL to rise. This is because at the* ***original price level P_1, there is a shortage*** *as the aggregate quantity demanded for goods exceeds the aggregate quantity supplied.*
  - *As AD rises and exceeds AS, there is an* ***unplanned decrease in stocks and inventories resulting in a shortage****, creating an upward pressure on prices.*
  - *As the AD approaches full employment,* ***due to limited spare capacity****, there is a shortage of resources that causes firms to offer higher prices for the factors of production, resulting in a higher cost of production which the firms pass on to the consumers in the form of higher price levels.*

(b) (ii) Explain why the government in Egypt is taking measures to "tackle surging inflation" and restore price stability. [2]

Question requirement: Students need to provide ***any one of the reasons*** *below to explain the costs of higher inflation.*

- **Deteriorates balance of trade position** – A relatively higher domestic inflation rate in Egypt compared to its trading partners will cause exports to become relatively more expensive in foreign currency (assuming no change in the exchange rate) and imports to become relatively cheaper in domestic currency. As a result, export revenue falls while import expenditure rises as consumers switch away from the relatively more expensive domestically produced goods, deteriorating the BOT. The current account balance of Egypt, which is largely made up of balance of trade deteriorated further from a deficit of $11.2 billions to $18.4 billions in 2021 (Table 1).

- **Rising cost of living** will deteriorate the standard of living – Low-income households are likely to face a greater burden (Ext 1, Para 3) of the rising cost of living arising from the surging inflation. Hence assuming their nominal wage does not increase to match the rising price levels, it will lead to a fall in real wages, deteriorating the material and non-material SOL of the low-income households. Furthermore, it will result in rising social tension as nearly "30% of Egyptians live in poverty" (Ext 1, Para 3).

Mark Scheme:

- *Any one reason well explained – with links to either SOL or KEI – 2m*

Examiners' Comments:

- *This question was attempted well by most students and majority managed to secure the full 2m for their answers.*
- *However, there were some students who provided two reasons without substantiation on why the Egyptian government is taking measures to restore price stability. It is important to look at the marks allocation when attempting the question. For a 2m question, one well elaborated reason to explain the benefit of restoring price stability or the negative consequence of high inflation is sufficient.*
- *A number of students managed to identify the negative impact of inflation on I, C or S and hence the AD or AS. However, they were not able to explain how these changes on AD or AS will affect*

the key economic indicators such as economic growth, unemployment, and balance of payments. As such, full credit was not given for incomplete or partial explanation.

- *Some students identified how high inflation affects SOL but were not able to elaborate how it will reduce an individual's ability to buy same quantity or quality of goods as before due to the fall in their real income and purchasing power.*

(c) According to Extract 6, "Egypt hiked interest rates by 300 basis points to 17.25%".

Using the <u>case material</u> and <u>your own knowledge</u>, assess the relative importance of interest rates to a firm in deciding whether to invest in Egypt. [6]

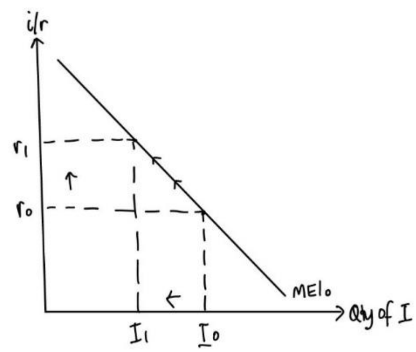
Students are required to explain the <u>different determinants/factors</u> that influence a firm's decision to invest using the MEI theory in addition to interest rates and decide which is the most important determinant of investment in Egypt. Students can use a range of determinants based on their own knowledge and apply to the context provided to answer this question, in addition to the information provided in the case materials. Students may interpret the question to suggest that there are other factors that could have deterred I other than interest rates or even stimulate I despite the rise in interest rates.

Introduction

- Define investments – act of acquiring new fixed capital assets eg. plants and machines (known as '<u>fixed capital formation'</u>), and the accumulating of inventories such as raw materials, semi-finished goods and finished goods held by the producer (known as '<u>changes in physical stocks'</u>) to be transformed into final goods and services.
- State the factors that influence a firm's decision to invest in Egypt: interest rate, corporate tax, business confidence and any other factors that affect a firm's profitability and hence willingness and ability to invest.

Explain the importance of interest rates to a firm in deciding whether to invest in Egypt.

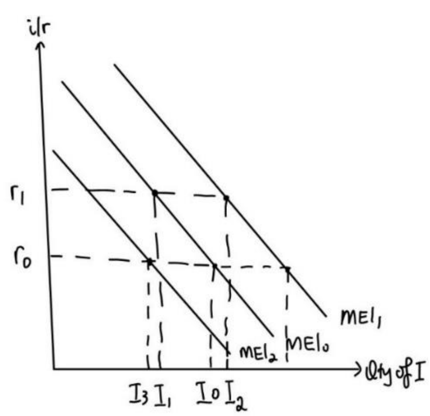
- According to the MEI theory, firms will undertake an additional investment project as long as the expected rate of return (MEI) is greater than or equal to the cost of borrowing (interest rate).
- Hence, a hike in the interest rates by 300 bps by the central bank of Egypt is likely to increase the cost of borrowing to undertake an additional investment project.
- As such, firms are unlikely to invest since there is negative relationship between the interest rate and the quantity of investment. At a higher cost of borrowing, there will be fewer investment projects that will yield a rate of return that is greater than or equal to the cost of borrowing, as such it will reduce the willingness and ability of firms to undertake an additional investment project.
- This is illustrated by an upward movement along the MEI_0 curve, reflecting lower quantity of investment at I_1 at a higher interest rate of r_1 compared to the number of investment projects that are more profitable I_0 at a lower interest rate of r_0.



Explain any <u>one other factor</u> that is important to a firm in deciding whether to invest in Egypt.

- **Business confidence/political climate**
  - Poor business confidence (Ext 7, Para 4) affects the expected profitability of the firms, deterring local and foreign firms from undertaking expansion plans.
  - "Gloomy economic forecasts" and "deepening global recession" (Ext 7, Para 4) suggest poor business outlook. Falling income and global recession will force consumers to withhold spending in expectations of potential loss in income in the future. This will hurt the future revenue generated from the sales of goods and services by firms, and hence their future profitability on the additional investment project.
  - As such, firms are likely to expect profitability to be lower from undertaking further investment projects, causing the MEI curve to shift to the left to MEI2. There are fewer investment projects that are profitable as illustrated by the diagram below where quantity of investments falls to I_3 at the same level of interest rate r_0.

- **Government policies**
  - According to extract 7, the government has taken measures to make it easier to do business in Egypt, aimed at incentivising firms to undertake investments and attract FDIs. Prime Minister Madbouly cited that "measures to boost investment opportunities in various economic sectors" and "create an environment conducive to investment" (Ext 7, Para 2) remains a top priority. This may **remove any regulation for firms to set up businesses (removing the barriers to entry in different sectors of the economy)**, hence making it easier for them to enter certain industries without any legal BTE and set up their production facilities easily in Egypt (for FDIs) or allow local firms to continue their expansion plans without much administrative barriers. This will minimise the cost of expanding production facilities in Egypt and hence maximise the rate of return from the additional investment projects.
  - Government policy may also include a cut in corporate income taxes – **a cut in corporate taxes will increase the after-tax profits** for firms. Hence, the firms will be more willing and able to invest as the MEI curve shifts to the right to MEI_1, suggesting that at the same level of interest rates, more investment projects are profitable now due to the higher after-tax rate of returns as illustrated by the MEI, increasing the quantity of investments from I_0 to I_2 even with the hike interest rates to r_1.



Conclusion/overall judgement

- **Overall stand –** Decide whether interest rate is the most important factor that a firm will consider in its decision to invest in Egypt.
- **Explain the stand –** Whether interest rate is the most important relative to the other factors depends on the type of firms (domestic vs MNCs), size of interest rate hike as well as the time frame (expectation of future potential hikes in interest rates) as well as the elasticity of the MEI

curve (if the MEI is interest elastic, firms are unlikely to undertake additional investments at the higher interest rate since the cost of borrowing is likely to be the most important factor influencing its decision in investing in Egypt).

Mark Scheme

Knowledge, Application, Understanding, Analysis		
L1	▪ *Smattering of points and not directly linked to question* ▪ *Descriptive answer without the use of an analytical framework* ▪ *Conceptual inaccuracies.* ▪ *Lack reference to the case material.*	***1 - 3***
L2	▪ *A balanced answer with economic rigour in explaining the effects of the policy on the wage and employment levels in the labour market for gig workers* ▪ *A well-elaborated answer that elaborates on the appropriateness and inappropriateness of the policy in Singapore's context*	***4 - 6***
Evaluation		
E1	*A judgement with some substantiation but not well supported with economic analysis/case context*	***1***
E2	*Judgment supported by economic analysis and is contextualized to the given question/ case material*	***2***

Examiners' Comments:

- *Most students managed to use the MEI theory to explain the relationship between interest rates and investments, but few managed to develop the analysis with sufficient rigour.*
- *A handful of students simply copied case materials to identify the other factors that influences a firm's decision to invest in Egypt but were unable to elaborate using economics analysis/theory to explain how the factor affects profitability from the additional investment.*
- *Some students mentioned that a higher interest rate increases the rate of returns from investment. This is a serious conceptual error. A higher interest rates increases the rate of returns from savings; not those investments in fixed capital assets undertaken by firms.*
- *Evaluation tended to be weak where that was no comparison between interest and other factors in the context of Egypt.*

(d) According to Extract 3, "hosting the World Cup serves as a vehicle to achieve the Qatar National Vision 2030 to transform Qatar into a global society".

To what extent will hosting the FIFA World Cup allow Qatar to achieve sustainable economic growth? [8]

Students are expected to give a well-balanced answer in discussing the effects of hosting of the FIFA World Cup on sustainable economic growth. Students should use the AD/AS framework to explain why hosting of the FIFA World Cup will achieve sustained economic growth which is a pre-requisite to achieving sustainable economic growth. Students also need to consider how sustainable economic growth may not be achieved due to excessive resource depletion and negative impact on the environment and arrive at a synthesized conclusion with reference to the case evidence.

Introduction

- Define sustainable economic growth: A rate of growth that can be maintained without creating significant environmental problems to ensure the quality of the existing factors of production does not deteriorate to achieve economic growth in the future **AND** slow down the pace of resource depletion by ensuring an optimum resource utilization in a manner that sustains economic growth for future generations with greater availability of scarce resources (intergenerational equity).

- State that sustained economic growth (actual and potential economic growth) is a prerequisite to achieving sustainable economic growth.
- A possible measurement of sustainable economic growth – Green GDP is used to measure sustainable growth which is an index of economic growth with the environmental consequences of that growth factored into a country's conventional GDP. Green GDP monetizes the loss of biodiversity, and accounts for costs caused by climate change.

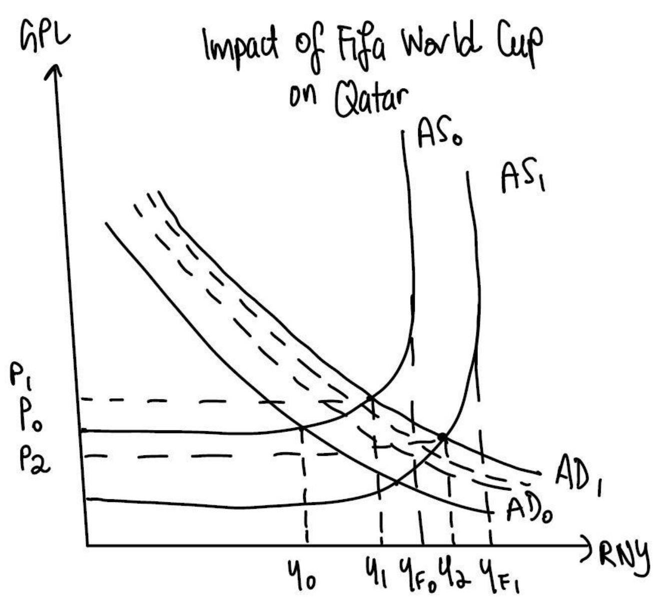
Body:

Thesis: Explain why hosting the FIFA World Cup will allow Qatar to achieve sustainable economic growth.

T1: Hosting the World Cup → Increase in AD due to rise in G, I, X and C and Increase in AS due to rise in productive capacity → sustained economic growth

- The government spend "$220 billion since it won the rights to host the men's World Cup more than 12 years ago" and "much of that went into the construction of a new metro system, roads, a new airport, neighborhoods and even an entirely new city" (Ext 8, Para 1) → rise in G
- Private investments are also likely to increase in expectations of higher profitability in sectors such as "event management" and "sports commercialization" (Ext 8, Para 3).
- Furthermore, the World Cup is estimated to increase tourism and consumption of domestically produced goods and services related to the event such as football merchandise, ticket sales and etc, contributing to higher X and C.
- The government has also expanded its airports to increase the annual passenger handling capacity to over 70 million (Ext 8, Para 2), increasing the productive capacity of the economy.

The rise in G, X, I and C will lead to an increase in AD from AD_0 to AD_1 which will result in a more than proportionate increase in RNY from Y_0 to Y_1 via multiplier process, promoting actual economic growth. The rise in AS due to rise in productive capacity cause by increase in I and G → potential growth. This results in sustained economic growth in Qatar.



T2: Hosting the World Cup will lead to sustainable growth

- Government spent large sums of money to build “state-of-the-art air-conditioned stadiums and the planting of thousands of trees” (Ext 8, Para 4).
- This spending on environmentally friendly stadiums and improving the public transport infrastructure may reduce the negative impact on the environment by reducing pollution/carbon emission or the pace of resource depletion by ensuring the scarce resources are used more efficiently to ensure that there are scarce resources available for future generation (intergenerational equity) to achieve economic growth in the future.
- Additionally, planting more trees may help to reduce the negative impact of carbon emission and minimise the negative impact of carbon emissions such as health of its people, global warming and the potential environmental destructions arising for climate change. This helps to preserve the quality and quantity of resources in the future to promote economic growth for future generations.

Hence, hosting the FIFA World Cup will allow Qatar to achieve sustainable economic growth.

Anti-Thesis – Hosting the FIFA World Cup will not allow Qatar to achieve sustainable economic growth

AT1: it may result in further negative impact on the environment, reduce the quality of factors of production available for future generation, and increase the pace of resource depletion that will adversely affect intergenerational equity and hence economic growth for future generations.

- With construction of large-scale metro system, stadiums, and hotels to accommodate the tourists for the events either through higher government spending or investments, Qatar needs to clear land to make way for such constructions, resulting a faster pace of deforestation. This increases soil erosion, increasing the risks of flooding and climate-related disasters that destroys scarce resources, adversely affecting intergeneration equity.
- Furthermore, with the airport expansion in Qatar, there will be more air traffics and passenger flows that will increase the size and rate of carbon emission. This contributes to increases pollution that deteriorates the quality of resources available for future generation, limiting the extent of economic growth for future generations.
- According to Ext 8, Para 4, “the tournament is projected to emit a total of 3.6 million tons of carbon dioxide according to FIFA” and experts claim that Qatar has “underestimated the event's true emission output and climate impact”, suggesting that hosting the FIFA World Cup will not allow Qatar to achieve sustainable economic growth due to the likely higher negative impact on the environment.

AT2: Students may argue that sustained growth will not be achieved as rise in G/I/X/C is temporary.

Conclusion and Overall Evaluation:

- Overall stand – Decide the extent to which hosting of the FIFA World Cup will allow Qatar to achieve sustainable economic growth.
- Explain your stand with refence to the context of Qatar:
  - Magnitude of change in G (influenced by government budget) and I (influenced by other factors such as i/r, corporate taxes, business confidence) which will ultimately affect the rate of resource depletion, size of negative impact on the environment.
  - Degree of government spending on adoption of renewable energy as well as green technology to reduce carbon emission/pace of resource depletion.
  - Degree of environmental regulation to minimise the negative impact on the environment and pace of resource depletion. Even though Qatar is a developed country, environmental laws may be very laxed, affecting the commitment of the government and firms to take measures to minimise the negative impact on the

environment or use scarce resources more efficiently or even adoption of green technologies.

- Further, external factors such as rising fuel prices caused by the global shortage of oil may encourage oil rich countries such as Qatar to leverage on this opportunity and increase the pace of fuel extraction to enjoy higher rent/revenue from fuel sale, increasing the pace of resource depletion and hence undermining intergenerational equity and sustainable economic growth (less resources will be available for future generations to enjoy economic growth). According to Table 2, oil export as a % of merchandise exports is around 84%, suggesting the high contribution of oil export revenue to its current account which improved to a surplus of \$26.4 billion in 2021 compared to the deficit of \$2.9 billion previously, owing to the rising oil prices.
- However, with greater international pressure for countries to meet their carbon emission commitments, Qatar will have no choice but to diversify its sources of exports and reduce their reliance on oil to achieve economic growth. Moreover, there will be greater incentive to adopt greener technologies with stronger global push or implement green fiscal measures to ensure intergenerational equity to foster economic growth for future generations.

▪ As such, based on the case materials provided, hosting the FIFA World Cup will not allow Qatar to achieve sustainable economic growth in the short term as there are other factors that affects its ability to achieve this goal.

<u>Mark Scheme</u>:

	Knowledge, Application, Understanding, Analysis	
L1	▪ *Smattering of points not directly linked to question.* ▪ *No or weak theoretical framework and/or glaring conceptual errors – NO AD/AS framework.* ▪ *One-sided answer that has only AT – explains why hosting the FIFA World Cup will result in unsustainable economic growth.* ▪ *Answers that do not explain sustained economic growth as a prerequisite to sustainable economic growth or only explains sustained economic growth with no link to sustainable economic growth – max 3m* ▪ *Limited development of analysis* ▪ *No use of case materials*	***1 - 3***
L2	▪ *Rigorous economic analysis with reference to the AD/AS framework.* ○ *Accurate and well-labelled diagram* ○ *Clear explanation of how sustained economic growth can result in sustainable economic growth.* ▪ *Balanced answer – with well-developed thesis and anti-thesis.* ▪ *One-sided answer that* ***only explains why hosting the FIFA World Cup allows Qatar to achieve sustainable economic growth*** *– max 4m* ▪ *Good use of case material.*	***4 - 6***
	Evaluation	
E1	▪ *An unexplained conclusion /judgment or mere repetition of points discussed.* - *Students must make a judgement if overall hosting the FIFA Word Cup allows Qatar to achieve sustainable EG.*	***1***
E2	▪ *A judgment/conclusion supported by reasons / economic analysis.* - *Students can explore the ability of the Qatari government in achieving sustainable economic growth.* - *Other factors that may hinder the achievement of sustainable economic growth.*	***2***

Examiners' Comments

- *Students did not have sufficient time to complete the essay which translated into a lack of detailed economic analysis and use of appropriate economic framework.*
- *Some students also used a number of unexplained shorthand notations (such as ↑X, ↑AS and ↑AD, ↑RNY) in their essays with the assumption that these notations are universally understood. Students are reminded to spell out these notations and explain what they mean at the first instance when they are used to avoid hindering the fluency of economic arguments and essay flow.*
- *A large number of students were unable to provide a balanced discussion and only explained how hosting the FIFA World Cup will or will not allow Qatar to achieve sustainable economic growth.*
- *Some students simply provided a descriptive explanation on how hosting the event allows the country to achieve sustainable economic growth without addressing the prerequisite of achieving sustained economic growth using the AD/AS framework.*
- *Better scripts explained how hosting the FIFA World Cup allows the country to achieve sustained economic growth and hence sustainable economic growth by linking it to how it can achieve intergenerational equity by reducing the pace of resource depletion and minimise the negative impact on the environment. However, the quality of analysis varied. The best responses linked resource depletion to the impact on potential economic growth which is a prerequisite for sustainable economic growth with the AD-AS framework.*
- *Students are reminded to explain and elaborate on each idea presented. Instead of just stating the relationship between variables, candidates should explain why:*
    - *An increase in AD will lead to an increase in real NY*
    - *An increase in I or (X-M) leads to an increase in AD.*
    - *An increase in quantity and quality of fop and/or technology advancement will lead to an increase in productive capacity.*
- *In terms of evaluative comments, the quality of responses was often poor that they were rather summative rather than one that demonstrates a synthesis that is well-formed and insightful which shows a clear understanding of issues with reference to the context of Qatar.*
- *A number of students explained how hosting of the FIFA World Cup affects standard of living which is not required by the question and not the testing intent of the question.*
- *Some students still labelled the horizontal axis in AD/AS diagrams as Q. It should be labelled real national income or national output.*

********END********

"There is no elevator to success, each one of us has to take the stairs." ~ Zig Ziglar

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