

TEMASEK JUNIOR COLLEGE  
Preliminary Examination 2019  
General Certificate of Education Advanced Level  
Higher 1

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## ECONOMICS

Paper 1 Case Study

8823/01

Thursday 29 August 2019  
3 hours

Additional Materials: One 12 Page Answer Booklet, one piece of writing paper for rough work

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### READ THESE INSTRUCTIONS FIRST

**Do not turn over until you are told to do so.**

Write your name and CG number on all the work you hand in.

Write in dark blue or black pen on both sides of the paper.

You may use a pencil for any diagrams, graphs or rough working.

Do not use staples, paper clips, glue or correction fluid.

Rough work can be done directly on the question paper, on the extra piece of writing paper, or in the answer booklet. If rough work is done in the answer booklet, cross it through before handing it in.

Answer **all** questions.

Indicate the question number clearly in your answers.

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

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This document consists of **9** printed pages and **3** blank pages



Temasek Junior College  
Economics

Answer **all** questions.

**Question 1: More of Wire-less? – The Market for Wireless Data**

**Table 1: 500MB Mobile Data Prices (in US Dollars)**

	2013	2014	2015	2016	2017
<b>Singapore</b>	11.99	11.84	7.27	7.24	7.24
<b>India</b>	3.38	3.24	4.04	2.53	2.78
<b>United States</b>	65.32	48.94	38.11	54.44	21.76

Source: *International Telecommunication Union Database*

**Extract 1: Asia’s digital economy is booming. So why are Singtel and Co struggling?**

A rude shock came after Singtel reported its net profits had fallen 43 per cent to S\$3.1 billion in the year to March – a 16-year low for the firm. Singtel chairman Simon Israel blamed the results on a “perfect storm” of intense competition and rising economic uncertainty. Telecommunication companies (Telcos) supply the internet economy’s very lifeline: connectivity and mobile data. Yet rather than riding the same wave of success, many are struggling. A large part of why the internet economy has taken off in such a big way is the falling costs of access, particularly mobile data. Market liberalisation in the Telco space started in the 2000s and has accelerated in the past few years. With more competitors flooding the market, Singapore now has 11 Telcos.

For now, the winners are the consumers. Singaporean undergraduate Xander Lim, for instance, is enjoying the battles between new and old players. His mobile phone is the first thing he reaches for when he wakes up, and it’s the last thing he checks before closing his eyes. While commuting to school, the 23-year-old is either listening to music on Spotify, reading Instagram updates or watching Netflix on his iPhone XS. “Data is dirt cheap so it’s not an issue downloading the stuff I want to watch,” he says.

Source: *South China Morning Post*, 13 July 2019

**Extract 2: Cheap data drives boom in Internet access in India**

India is bucking a global trend of decline in the growth of Internet access. India rose on the Affordability Drivers Index from 23rd rank in 2015 to eighth this year. India also scored the highest of all 61 countries studied for market competition in mobile telephony, which has helped mobile data costs plummet. This competition among Indian telecoms firms has intensified following the entry of Reliance Jio, a firm owned by Mr Mukesh Ambani, one of the world’s richest businessmen. It today offers a mobile data package for as little as 99 rupees (S\$2) that is valid for 28 days and offers 14GB of data.

The cheap mobile data access is in turn driving smartphone sales in India - more among males than females. Counterpoint Research says more than a billion smartphones will be sold in India over the next five years, taking the number of its users beyond 700 million by 2022. The number of Internet users is also projected to go up from 481 million last year to 762 million in 2022, according to the Internet and Mobile Association of India.

Mr Osama Manzar, the founder and director of the Delhi-based Digital Empowerment Foundation, says cheap and accessible Internet is boosting access to educational and entertainment content, as well as government services. "One cannot avail a single government service today without online intervention. This posed a big hindrance but the process has become much easier with more points of cheap Internet access in villages," he adds.

Source: *The Straits Times*, 29 November 2018

### Extract 3: Why USA's mobile data plans are the most expensive on earth

A new study has found that US wireless consumers pay some of the highest prices for mobile data in the developed world. According to a new study from Finnish research firm Rewheel, the US mobile data market has the fifth most expensive price-per-gigabyte smartphone plans among developed nations, and was the most expensive for mobile data overall.

Critics have pointed to high prices to connect to cellular towers that impact pricing for the end user and smaller competitors. They have also argued that the US government's Federal Communications Commission recently made these problems worse by lifting price caps on this uncompetitive sector.

Source: *Tech by Vice*, 21 Nov 2018

**Table 2: Comparison of USA mobile data plans**

Carrier	Unlimited data monthly cost	Data limit	Hotspot allowance*	Bundled streaming services included^
Sprint Unlimited Basic	\$60	50GB/month	500MB at LTE speeds	Hulu
T-Mobile Essentials	\$60	50GB/month	Unlimited 3G data speeds only	none

\*hotspots allow for the use of Wi-Fi instead of mobile data at certain locations. The fastest speed available for hotspots are LTE speeds.

^streaming services allow consumers to tap on third party apps for TV shows, music etc. 'Hulu' is a movie / TV shows streaming service.

Source: *c/net*, 4 Sep 2018

#### **Extract 4: Wireless@SG**

Surfing speeds on Singapore's free public Wi-Fi service Wireless@SG will be more than doubled to 5Mbps by the end of this year, as the Government sees the network as a key enabler of Singapore's Smart Nation vision.

"We must build first-class infrastructure for pervasive, seamless and high-speed connectivity to benefit citizens and businesses," Minister of State for Communications and Information Janil Puthuchery said, in announcing the upgrades in Parliament yesterday. He also added that Wireless@SG's current speed is faster than most public Wi-Fi services around the world. But because demand is increasing, there is a need to boost current speeds.

Singapore will also have the highest hotspot density in the world, calculated by the number of hotspots per inhabitant. Currently, it trails only Tokyo. Coverage expansion will target congested places such as hospitals, government buildings and community centres so more people can connect to the network without surfing slowdowns, a common bugbear. More public places such as hawker centres, train stations and retail malls will also be added to the list of Wireless@SG zones.

"But it is not the connectivity that makes us smart; it is what we do with it," said Dr Janil. "Operators can also use Wireless@SG to offer improved services such as cashless payment and location-based analytics. All this benefits consumers, businesses, and productivity."

One group of beneficiaries is low-income users. The idea is to allow Wireless@SG to complement existing efforts to bridge the digital divide between those who can afford the good and those who might not be able to.

Source: *The Straits Times*, 12 April 2016

#### **Extract 5: Economics of public Wi-Fi**

The basic economic objection to free public Wi-Fi is that any benefits to low income is unlikely to be realised. Free public Wi-Fi is unlikely to be strong in all areas and therefore locations with stronger Wi-Fi signals will simply bid up existing land and building prices.

Any benefit due to the free public Wi-Fi will be compensated by higher prices for local services (such as cafes and short-stay accommodation). For this reason, the target population of the free public Wi-Fi, which is presumably the lower income group, may experience no net benefit once general prices of the goods and services in any area is taken into account. The main beneficiary at the end of the day may just be the landlords in the area serviced by the free public Wi-Fi.

Source: *Journal of Telecommunications and the Digital Economy*, February 2014

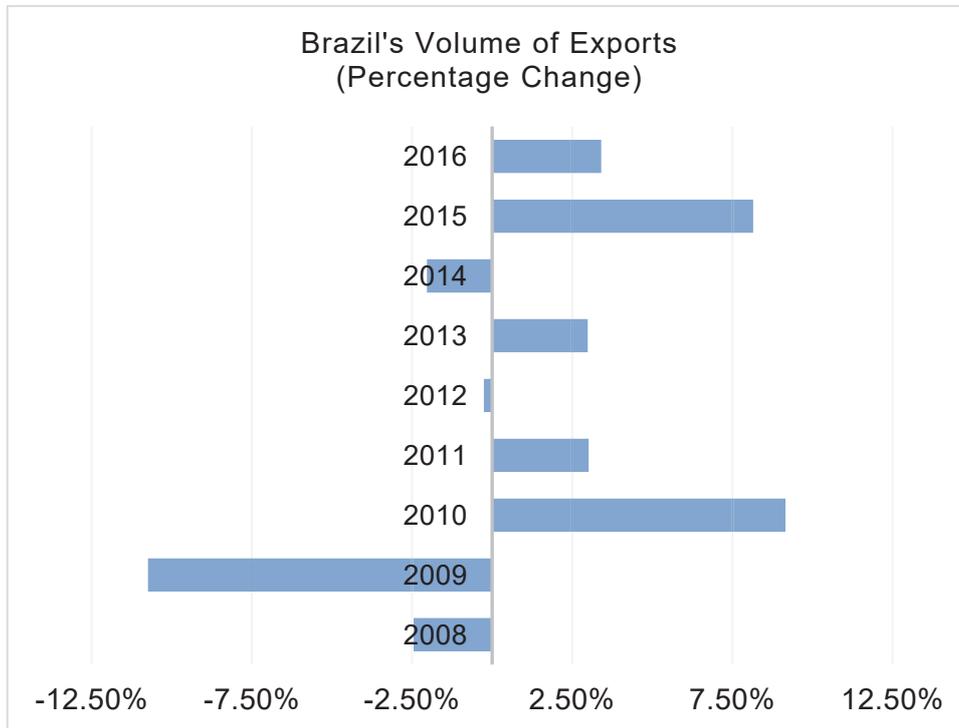
### Questions

- (a) (i) With reference to Table 1, compare the trend in mobile data prices in Singapore, India and the United States from 2013 to 2017. [2]
- (ii) Explain and comment on the likely impact of the events in Extract 1 on the revenue of Singapore's mobile data providers. [9]
- (iii) With reference to Extract 1, explain a function of price that influences consumer behaviour. [2]
- (iv) From Extract 2, identify a related market to mobile data and explain how the general trend in mobile data prices in (a)(i) would affect the related market. [4]
- (b) Using a diagram, explain the effect of the US government's action in Extract 3 on the consumer expenditure for mobile data plans. [4]
- (c) Suppose a US consumer is thinking of buying the '*Sprint Unlimited Basic*' data plan.  
Discuss the factors that the consumer should consider when making the above decision. [8]
- (d) (i) Explain why public Wi-Fi is considered to be a private good. [4]
- (ii) Discuss whether governments should follow Singapore's example of providing free public Wi-Fi. [12]

[Total: 45]

## Question 2: The Economics of Sports

**Figure 1: Change in export volume in Brazil (2008 to 2016)**



Source: *The World Bank*, accessed August 2019

### Extract 6: On your marks, get set, wait: traffic jams clog Rio ahead of Olympic Games

Special traffic regulations giving priority to athletes and VIP visitors to the Rio 2016 games have caused 20-kilometre traffic jams in the streets of Rio de Janeiro, days ahead of the opening ceremony.

City officials hope the congestion will be eased by a new metro extension, which opened on Monday – more than two years behind schedule. But for the duration of the Games, the gleaming new subway service will only be available to Olympic ticket and pass holders. Commuters will not be allowed to use the extension until the end of the year. The new metro is only a partial solution, however, because it stops more than 10 kilometres short of the Games venues. For the remainder of the journey, visitors will have to use buses or taxis.

To further reduce gridlock, schools will be closed for the duration of the Games and Mayor Eduardo Paes has declared four local holidays on key dates. Rio is the fourth worst city in the world for traffic jams, according to the TomTom Traffic Index. Even though the government has spent more than £800 million on new highways and rapid bus transport systems to alleviate the problems ahead of the Games, drivers often find journey times double or triple as a result of congestion, particularly around the Rodrigo de Freitas Lagoon (where the Olympic rowing will be staged) and on the road between the South Zone and Barra da Tijuca (the site of the Olympic Park).

Source: *The Guardian*, August 2016

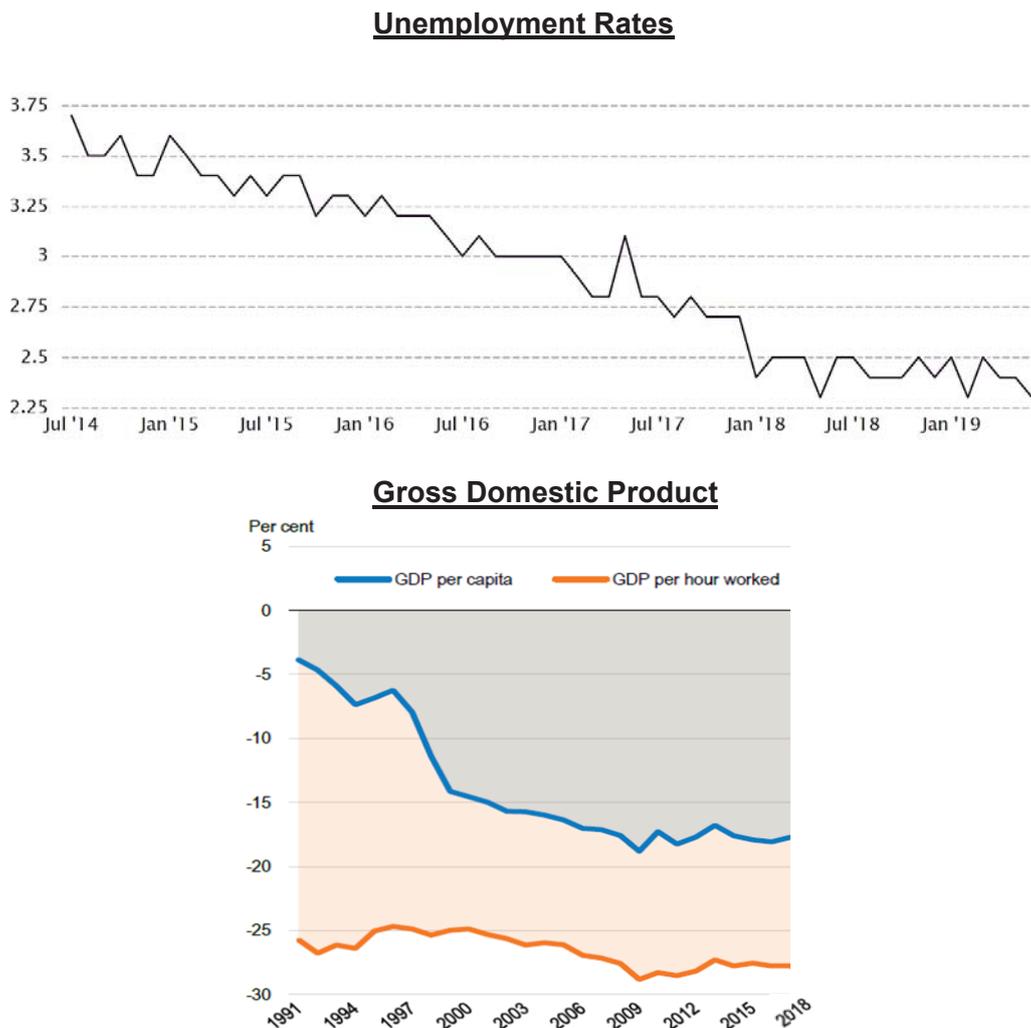
### Extract 7: A City Transformed

Since winning its bid for the 2016 Olympic Games seven years ago, Brazil's Rio de Janeiro has undergone a construction boom, including new sports venues, subway connections, and more infrastructure. One of the flagship transportation efforts, Rio built a new subway extension linking popular beach areas with the neighbourhood where the Olympic Park is located. Enormous investment has been pumped into transportation infrastructure projects throughout the city, including the VLT Carioca (the Rio de Janeiro Light Rail) in the port district. The rail connects Rio's domestic airport to a bus terminal and is aimed at revitalising the area.

The construction of the golf course, however, has stirred controversy. Golf is not widely played in Brazil, and though there is one small public course on the northern outskirts of Rio, Brazilian officials have touted the fact that after the Olympics, the course would become the first professional-quality public course in Brazil. But it was partially built on a protected nature reserve, angering local activists.

Source: *The Wall Street Journal*, August 2016

**Figure 2: Selected economic indicators for Japan**



Sources: CEIC data, Organisation for Economic Co-operation and Development

### **Extract 8: Tokyo 2020 Olympics will come and quickly go, but the legacy is all-important**

The legacy of an Olympics refers to the benefits that a host city and country gains once the event is over. That can take the form of new stadiums, redeveloped urban areas and updated transport networks. The history of Olympic legacies is a mixed one, filled with cautionary tales of overspending and waste. Understandably, Tokyo is anxious to avoid a similar fate. The huge cost of staging an Olympics, and the potential economic dangers for a host city, has thrown the issue of legacy into sharp focus in recent years. That was never more evident than at last summer's Rio Olympics.

Transport was also the most recognisable legacy of the last time Tokyo hosted the Summer Olympics, with the debut of the shinkansen (high-speed rail) nine days before the start of the 1964 Games. Japan has hosted the Winter Olympics twice since then, in Sapporo in 1972 and Nagano in 1998. The 1998 Olympics prompted Japan to extend its shinkansen service from Tokyo to Nagano, cutting the three-hour journey in half. But the tourism boost that organisers hoped would follow failed to materialise, and the purpose-built hotels struggled to attract guests. "The shinkansen arrived and they built new roads, and it made Nagano closer to Tokyo," said Ezawa, who authored two books criticising the cost of the Nagano Olympics. "But with less traveling time, it also meant the amount of people staying in hotels here dropped. There was also a lot of damage to the natural environment in Nagano."

Source: *The Japan Times*, January 2017

### **Extract 9: Growth is coming home – How a successful World Cup will boost the British economy as Brexit looms**

Obviously, England winning the World Cup would be a brilliant achievement in isolation, putting to bed decades of jokes and generally imbuing Britain with a sense of sporting pride not seen since the 2012 Olympics. There's another reason, however, to hope that Gareth Southgate's boys bring back the trophy – the economy.

In the two years since Britain voted to leave the European Union, the country's economy has undoubtedly suffered. The pound dropped sharply, pushing inflation up. In tandem with stagnant wage growth, this created a scenario where workers were seeing their take home pay decreasing. That lowered the amount they were willing to spend, denting both consumer confidence and retail sales. As sales fell, the wider economy stuttered and growth stalled.

Things could improve in the second and third quarter of the year, and amazingly, the World Cup should be at least partially the reason why. The improving economic picture is one reason that three members of the Bank of England's Monetary Policy Committee – the body responsible for setting interest rates in the UK – voted to raise rates at its June meeting.

The argument is simple, when England play well in the World Cup, England supporters are happier and are more inclined to spend on non-essential items. Furthermore, when the World Cup in general is happening, Brits are more likely to host parties and barbecues, spending significantly more on groceries than they otherwise would do. People are, of course, more likely to go to the pub and buy drinks. Britain is generally a consumer powered economy, so when people are buying, growth accelerates.

Source: *Business Insider Singapore*, June 2018

**Questions**

- (a) (i) With reference to Figure 1, describe the trend in Brazil's volume of exports from 2008 to 2016. [2]
- (ii) With the aid of a diagram, explain how the general trend above could have affected the external value of the Brazilian real. [3]
- (b) With reference to Extract 6, analyse how hosting the Olympics could result in market failure for the host country. [6]
- (c) Using Extract 7 and a production possibility curve diagram, identify and explain **two** benefits of hosting the Olympics to the host country. [6]
- (d) Assess how far the data provided suggest that hosting the 2020 Olympics will improve Japan's employment rate. [8]
- (e) Discuss whether the decision made by the Bank of England's Monetary Policy Committee (Extract 9) is appropriate for the UK economy. [8]
- (f) Using the information provided and/or your own knowledge, evaluate whether, on balance, a government should prioritise the pursuit of high rates of economic growth to raise the standard of living of its citizens. [12]

[Total: 45]

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H1 CSQ1

Suggested Answers

(a)	(i)	With reference to Table 1, compare the trend in mobile data prices in Singapore, India and the United States from 2013 to 2017. [2]
<p><b>General trend [1 mark]</b></p> <ul style="list-style-type: none"> <li>Mobile data prices are generally falling for all 3 countries.</li> </ul> <p><b>Refinement [1 mark]</b></p> <ul style="list-style-type: none"> <li>Mobile data prices fell by the greatest percentage in the US</li> <li>Mobile data prices fell by the smallest percentage in the India</li> <li>US and India experienced episodes of increase in mobile data prices but Singapore did not.</li> </ul>		
	(ii)	Explain and comment on the likely impact of the events in Extract 1 on the revenue of Singapore’s mobile data providers. [9]
<p><b>6 marks for providing a rigorous explanation</b></p> <ul style="list-style-type: none"> <li>Total revenue for the producer is given by the product of price and quantity sold. [1]</li> <li>“With more competitors flooding the market”, there is now an increase in supply in the mobile data market. / The “intense competition” saw more firms enter the mobile data market giving rise to an increase in supply. [1] <ul style="list-style-type: none"> <li>Given that mobile data can be seen as a necessity as it provides access to the internet on the go, the demand for mobile data is likely to be price inelastic. [1] As a result, the rise in equilibrium quantity is less than proportionate to fall in equilibrium price, ceteris paribus, bringing about a fall in total revenue. [1]</li> </ul> </li> <li>The “rising economic uncertainty” could have brought about lower willingness to purchase mobile data amongst the consumers and hence a decrease in demand. [1] <ul style="list-style-type: none"> <li>As a result, there is a fall in equilibrium price and quantity, ceteris paribus, giving rise to a fall in total revenue. [1]</li> </ul> </li> <li>Taking into account both events, total revenue for the mobile data providers is likely to fall.</li> </ul> <p><b>3 marks for providing a relevant comment</b></p> <p><u>Possible Comment 1</u></p> <ul style="list-style-type: none"> <li><b>[Assumption]:</b> The demand for mobile data may not be price inelastic given the prevalence of free WIFI which makes it a close substitute.</li> <li><b>[Magnitude]:</b> The likely impact on the total revenue for mobile data providers would then depend on the relative change in demand and supply. Given that mobile data can be seen as a necessity as it provides access to the internet on the go, the willingness of Singaporeans to purchase mobile data may not decline to a large extent even in the light of economic uncertainty AND/OR there is close to a 3-fold increase in the number of telcos from the initial 3 large operators comprising Singtel, Starhub and M1 which suggests a large increase in supply.</li> <li><b>[Stand]:</b> The total revenue for the mobile data providers could actually have increased.</li> </ul>		

Possible Comment 2

- **[Stand]:** The extent of the fall in revenue is likely to decrease over time.
- **[Time frame]:** The demand for mobile data is likely to become more price elastic over time as free WIFI becomes a closer substitute as it becomes more prevalent in the long run.

Alternative Approach

**6 marks for providing a rigorous explanation**

- Total revenue for the producer is given by the product of price and quantity sold. [1]
- "With more competitors flooding the market", there is now an increase in supply in the mobile data market. / The "intense competition" saw more firms enter the mobile data market giving rise to an increase in supply. [1]
- The "rising economic uncertainty" could have brought about lower willingness to purchase mobile data amongst the consumers and hence a decrease in demand. [1]
- There will be a fall in equilibrium price and an indeterminate change in equilibrium quantity, and consequently, an indeterminate change in total revenue for mobile data providers. [1]
- The extent of the fall in demand could arguably be greater than that of the increase in supply. Given the "rising economic uncertainty", consumers may experience a large degree of reservation in committing to mobile data plans, especially those with larger allowances, resulting in a large decline in willingness to purchase. [1]
- As a result, total revenue for the mobile data providers is likely to fall.

**3 marks for providing a relevant comment**

- **[Stand]:** Total revenue for firms could rise instead.
- **[Situation]:** The extent of increase in supply could well be greater than that of the fall in demand as there is close to a 3-fold increase in the number of telcos from the initial 3 large operators comprising Singtel, Starhub and M1 which suggests a large increase in supply.

(iii) With reference to Extract 1, explain a function of price that influences consumer behaviour. [2]

- The signalling function of the price mechanism influences consumer behaviour. [1]
- The downward pressure on mobile data prices sends a positive message to consumers to consume more data for activities like "listening to music on Spotify, reading Instagram updates or watching Netflix". [1]

OR

- The incentivising function of the price mechanism influences consumer behaviour. [1]
- The falling mobile data prices provides an incentive for consumers to consume more data for activities like "listening to music on Spotify, reading Instagram updates or watching Netflix". [1]

*Note: Allocative function and rationing function are not accepted as the former is more appropriate to describe the situation where producers respond to prices to direct resources away from overcrowded markets and toward markets that are underserved and the latter is*

*more appropriate to explain how goods/services are distributed to those consumers who value them most highly in situations of shortages.*

(iv) From Extract 2, identify a related market to mobile data and explain how the general trend in mobile data prices in (a)(i) would affect the related market. [4]

- A related market would be the market for smartphones. [1]
- Smartphones is a complementary good of mobile data. / Smartphones are in joint demand with mobile data. [1]
  - Consuming smartphones and mobile data, which provides access to the internet, together give rise to a higher combined utility through the use of applications than smartphones were to be used on their own.
- When prices of mobile data falls as shown in (a)(i), demand for smartphones increases [1].
- As a result, equilibrium price and quantity of smartphones increases. [1]

(b) Using a diagram, explain the effect of the US government's action in Extract 3 on the consumer expenditure for mobile data plans. [4]

- Consumer expenditure can be calculated by multiplying the price of each mobile plan by the quantity of mobile plans purchased (i.e.  $P \times Q$ )
- The US government's action is equivalent to a removal of the price ceiling at  $P_{max}$ , evidenced by the "lifting price caps on this uncompetitive sector." [1m for correct identification of government action from the case]
- The removal of the price ceiling would allow the market to correct the shortage of  $Q_3 - Q_1$  at the initial maximum price of  $P_{max}$ .
  - Hence there will be a rise in price from  $P_{max}$  to  $P_2$  and quantity from  $Q_1$  to  $Q_2$ , resulting in a rise in overall consumer expenditure (CE) from  $0P_{max}E_1Q_1$  to  $0P_2E_2Q_2$

[2m for correct identification of initial and final CE, and a recognition of the overall increase in CE.]

[1m for correctly drawn and labelled diagram.]

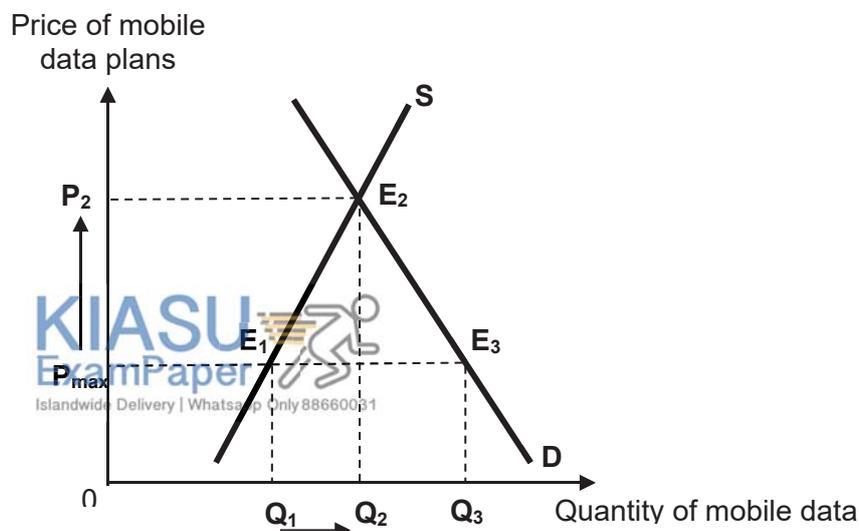


Figure 1: Market for mobile data plans

<b>(c)</b>	Suppose a US consumer is thinking of buying the ‘ <i>Sprint Unlimited Basic</i> ’ data plan.  Discuss the factors that the consumer should consider when making the above decision. <span style="float: right;">[8]</span>
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<b>Command word/phrase</b>	“Discuss”	Discussion of different factors and their relative importance
<b>Content</b>	“factors... in... decision-making”	The decision-making framework will come in useful here to help frame the answer
<b>Context</b>	“data plan”	Extract 1 and Table 2 would be useful in crafting the various benefits and costs

**Introduction:**

- In making a decision on the data plan to buy, the consumer should be taking into account his constraints, benefits and costs, while taking into account information and perspectives from different sources.

**Key argument 1: The consumer should also be considering his benefits in making the decision.**

- As seen in Table 1, should the consumer pick ‘Sprint Unlimited Basic’ data plan, he would be able to get a free video streaming service in Hulu and would derive utility from that good.
- Another benefit would be the 50MB of data, as well as the ability to get 500MB wireless access at LTE at selected hotspots. The data could be used for activities that he can derive utility from, such as “listening to music on Spotify, reading Instagram updates or watching Netflix”, as seen in Extract 1.

**Key argument 2: The consumer should also be considering his costs in making the decision.**

- First, he has to consider the upfront monetary cost of \$60 per month in signing up for the ‘Sprint Unlimited Basic’ plan.
- In addition, the consumer should also consider his opportunity cost, which is the value of the next best alternative forgone. Assuming the next best alternative is ‘T-Mobile Essentials’, the forgone benefits are the unlimited WiFi hotspot access at 3G speeds and 60GB/month from the T-Mobile plan

**Key argument 3: The consumer should be considering his constraints in making the decision. (one of the following points below would suffice, or any other logical constraint)**

- One constraint would be that of the consumer’s monthly budget for data plans. The consumer should be considering how much he is willing to set aside for his data needs. As budget needs to be set aside for other needs (e.g. such as food and housing), should the budget set aside for data be less than \$60, he would likely need to look for another data plan beyond those found in Table 2.
- Another constraint would be the amount of time he has for data usage. He has approximately 28-31 days a month to use data and therefore he should be asking

himself how much data can feasibly be used in a given month, given his usage habits.

- Another constraint would be the accessibility of the wireless hotspot points – for example, he should be considering if they are near his home/work location. This would limit the hotspot benefits of the data plans.

**Evaluative conclusion:**

- **[Stand]** In making the decision on whether to buy the ‘Sprint Unlimited Basic’ plan, the consumer should be weighing the benefits and costs.
- **[Situation]** Should the consumer be a very heavy data user, the 50GB per month would bring a lot of utility to the consumer and it is likely that the benefit would outweigh the costs
- **[Magnitude]** The most important factor is likely to be the constraints that the consumer is facing as it can influence both the benefits and costs faced by the consumer. If he has a budget constraint, this would automatically limit number of alternatives to be considered when thinking about one’s opportunity cost. If he has limited time to use data or is unable to access any nearby hotspots, the value of the benefits would be significantly reduced.

Level	Knowledge, Application/Understanding, and Analysis	Marks
L2	For a well-developed answer that <ul style="list-style-type: none"> <li>• analyses at least 2 factors that a consumer has to consider in his decision-making, and</li> <li>• actively refers to case materials in explaining the factors</li> </ul> <i>For answers that do not consider opportunity costs, cap at 4m. For answers that do not consider constraints, cap at 5m.</i>	4 – 6 (5)
L1	For an underdeveloped answer that <ul style="list-style-type: none"> <li>• has limited scope of factors considered (e.g. only 1 factor considered), and/or</li> <li>• lacks economic rigour in analysing the factors, and</li> <li>• has little or no reference to case materials</li> </ul>	1 – 3 (2)
Level	Evaluation	Marks
E	Answer provides a clear assessment of the relative importance of the factors and/or considers how the factors can influence each other.	1 – 2

**(d) (i)** Explain why public Wi-Fi is considered to be a private good. [4]

- Public Wi-Fi is considered to be a private good because it is excludable and rivalrous.
- It is excludable because while it is free in Singapore; it is feasible and not overly expensive to restrict access to only people who are willing to pay for it, for example, only providing passwords to individuals who paid for the service. [2]
- It is rivalrous because with every additional person using the public Wi-Fi, the connection speed is likely to slow for other consumers. [2]

*Note: Candidates are credited the full 2m for accurate application of each characteristic.*

(ii) Discuss whether governments should follow Singapore’s example of providing free public Wi-Fi. [12]

<b>Command word/phrase</b>	“Discuss”	This is a single policy discussion question
<b>Content</b>	“governments should follow Singapore’s example...”	In deciding whether to follow Singapore’s policy, the benefits and limitations/ unintended consequences of the policy need to be considered.
<b>Context</b>	“free public Wi-Fi”  “government”	The context is on free public Wi-Fi and therefore Extracts 4 and 5 would come in particularly useful.  There is no context given to the ‘other government’ in question – can take advantage in your evaluation!

**Introduction**

- The provision of free public Wi-Fi can be justified on both macroeconomic and microeconomic grounds, and we can consider the impact in terms of economic growth, efficiency and equity.

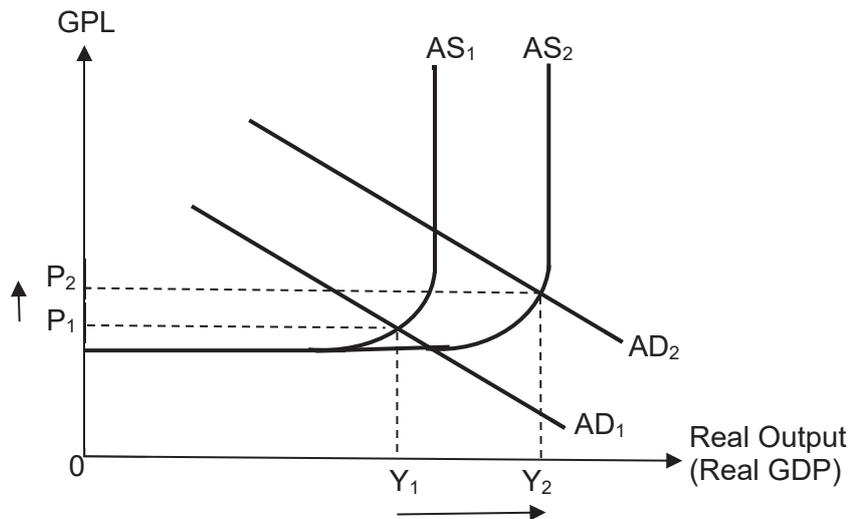
**Thesis – choose 1-2 out of the following three arguments:**

**Thesis 1: The promotion of free public Wi-Fi could help to generate sustained growth in the long run.**

- In the short run, the promotion of free public Wi-Fi will require a large amount of Government expenditure on infrastructure to boost connectivity around a city. It could also increase consumption as purchasing of goods become more convenient with online shopping. This, coupled with a multiplier effect where the initial increase in income would lead to further increases in induced consumption, would lead to a rise in AD.
- In the long run, the free public Wi-Fi would increase productivity and innovation among businesses. As mentioned in Extract 4, "Operators can also use Wireless@SG to offer improved services such as cashless payment and location-based analytics," which are all evidences of improved productivity.
  - As the quality of labour and entrepreneurs grow over time, this would lead to a rise in AS as well.



Fig 1: Sustained Growth in the economy



- As seen in the figure above, taken together, the increase in AD and AS would lead to an increase in income from  $Y_1$  to  $Y_2$ , with mild increases in general price levels from  $P_1$  to  $P_2$  – indicating that sustained growth has taken place.

**Thesis 2: The promotion of free public Wi-Fi could help to achieve equity in the market for data access.**

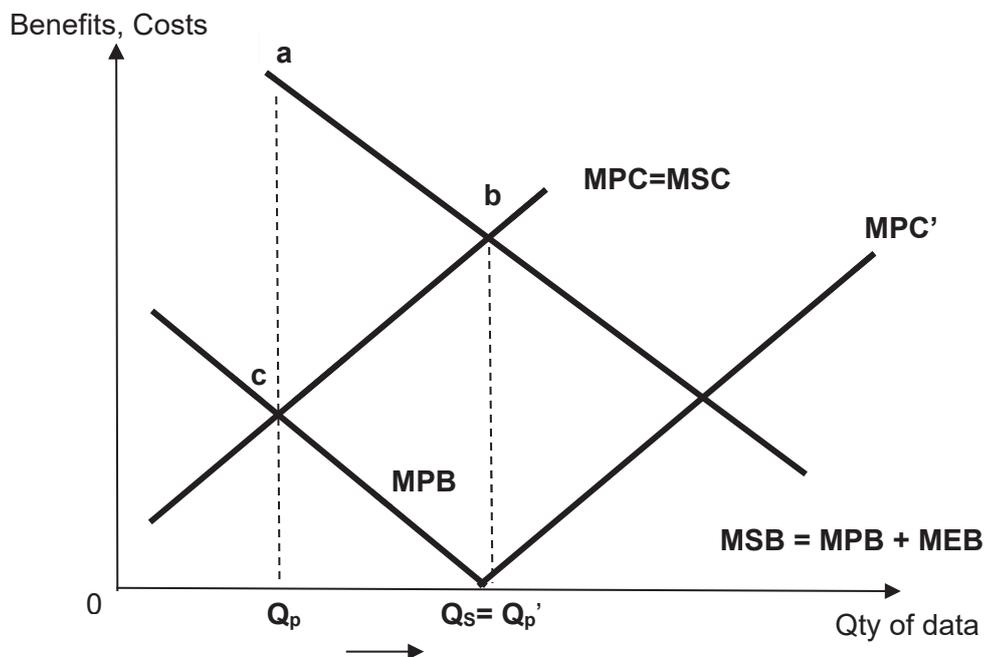
- In developed countries such as Singapore, data can be seen to be a necessity in people's everyday lives as it gives ready access to information for work or entertainment for leisure.
- If this is left to the free market, the price of data may become too expensive for low-income consumers due to the expensive mobile data plans.
- As a result, the low income may not get access to essential government services online (Extract 2 – “cannot avail a single government service today without online intervention”) if Wi-Fi is not readily available. The direct provision of free public Wi-Fi would thus help to increase equity in the market for data access.

**Thesis 3: The promotion of free public Wi-Fi could help to promote greater efficiency by correcting under-consumption due to positive externalities in consumption in the market for data.**

- **<P: Private Decision>** When deciding to consume additional data, the consumer considers only his own private benefit such as the utility of the data, and private cost such as the cost of mobile plans.
- **<E: External Benefit>** However, the use of data results in external benefits as well, such as the increased productivity of the workforce, or new ideas to spur production in other firms.
- **<T: Third Parties>** The firms who were not involved in the consumption of Wi-Fi by workers and are therefore considered third parties.

- **<D>** Due to existence of marginal external benefits (MEB), there is a divergence between Marginal Private Benefits (MPB) and Marginal Social Benefits (MSB) by the amount of MEB. Assuming no negative externalities, Marginal Social Costs (MSC) = Marginal Private Cost (MPC).
- **<Q<sub>p</sub> vs Q<sub>s</sub>>** In the free market, out of self-interest, consumers consume Q<sub>p</sub>, where MPC = MPB. However, the social optimal outcome is Q<sub>s</sub>, where MSB=MSC. Since Q<sub>p</sub><Q<sub>s</sub>, there is consumption of data.
- **<D>** Due to the underconsumption of (Q<sub>s</sub>-Q<sub>p</sub>), society loses benefits of area Q<sub>p</sub>abQ<sub>s</sub>, which is less than the cost -savings of area Q<sub>p</sub>cbQ<sub>s</sub>, resulting in a deadweight loss of the area abc. The price mechanism fails to allocate resources efficiently, the market fails and society's welfare is not maximised.
- As a result, the direct provision of Wi-Fi would cause a fall in MPC, increasing the consumption from Q<sub>p</sub> to Q<sub>p</sub>' = Q<sub>s</sub> and removing the deadweight loss, achieving allocative efficiency.

Fig 2: Positive Externalities in data consumption



**Anti-Thesis – choose 1-2 out of the following three arguments:**

**Anti-Thesis 1: Countries should not provide free public Wi-Fi as the gains in equity may not be realised**

- As argued in Extract 5, free Wi-Fi can actually just lead to increased property prices for landlords instead of truly serving the poor. (supported by Extract 5)
- This is because in areas where the free Wi-Fi is stronger, more businesses would sprout up to take advantage of the improved connectivity.
  - For example, a café would be set up in an area where the free Wi-Fi connection is strong and charge relatively expensive prices for its coffee.
  - This would result in the poor still being unable to access the free Wi-Fi because to do so, they would have to dine at the café in the first place.

**Anti-Thesis 2: Countries should not provide free public Wi-Fi as there could be a large opportunity cost involved.**

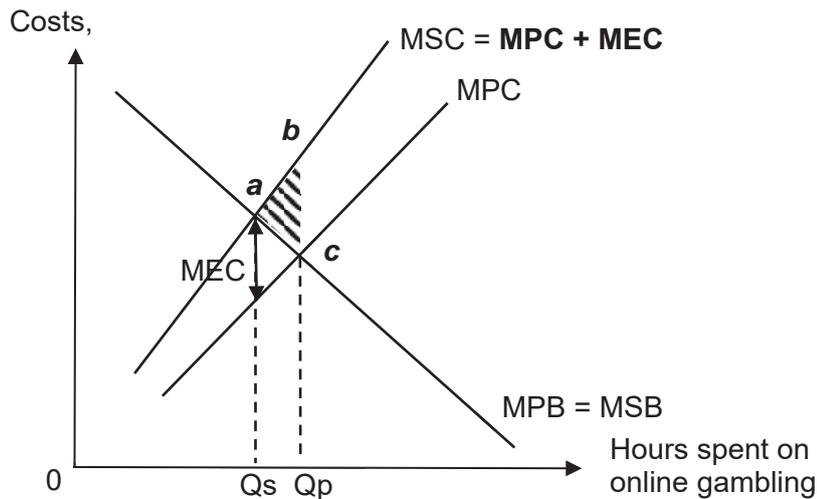
- There could be a strain on the government budget due to extensive spending on the networks required for free public Wi-Fi to be set up.
  - The opportunity cost of the spending would be any gains in allocative efficiency in merit goods such as education/ healthcare market if the government had chosen to spend the money there.

**Anti-Thesis 3: Countries should not provide free public Wi-Fi as there negative externalities in consumption of the internet.**

This is primary due to the easy access to online activities such as online gaming or online gambling

- **<P: Private Decision>** When deciding to spend an additional hour on online gambling, the consumer considers only his own private benefit such as his potential winnings and private cost such as the cost of data and the money he is gambling. Note that with free Wi-Fi, the private cost would be especially low.
- **<E: External Cost>** However, the consumption of online gambling results in external costs as well, such as the possibility of family members having to pay to fund the consumer's gambling addiction.
- **<T: Third Parties>** The family members of the online gambler are not involved directly in the consumption of online gambling and are therefore considered third parties.
- **<D>** Due to existence of marginal external costs (MEC), there is a divergence between Marginal Private Costs ( $MPC_{actual}$ ) and Marginal Social Costs (MSC) by the amount of MEC.
- **<Q<sub>p</sub> vs Q<sub>s</sub>>** In the free market, out of self-interest, consumers consume  $Q_p$ , where  $MPC_{perceived} = MPB$ . However, the social optimal outcome is  $Q_s$ , where  $MSB = MSC$ . Since  $Q_p > Q_s$ , there is over-consumption of online gambling.
- **<D>** Due to the overconsumption of  $(Q_p - Q_s)$ , society experiences an additional cost of area  $Q_p b a Q_s$ , which is more than the additional benefits of area  $Q_p c a Q_s$ , resulting in a deadweight loss of the area  $abc$ . The price mechanism fails to allocate resources efficiently, the market fails and society's welfare is not maximised, leading to allocative inefficiency.

Figure 3: negative externalities from online gambling



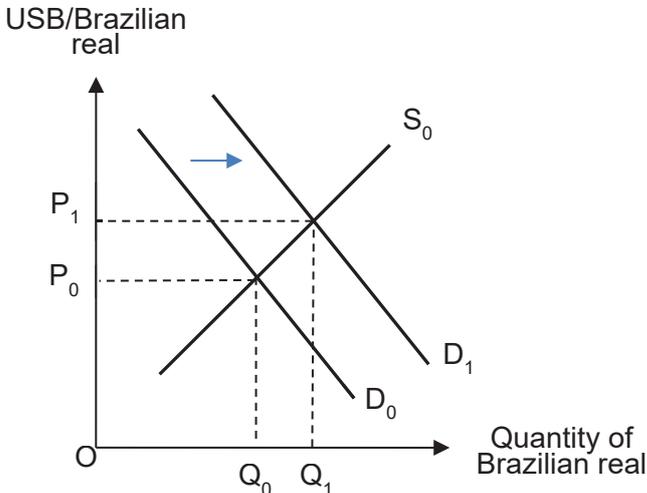
**Note: 3 key arguments (2 benefits + 1 cost or 2 costs + 1 benefit) would suffice for the maximum L marks!**

**Evaluative conclusion (a reasoned stand plus a max of 2 ATMS angles would suffice):**

- **[Stand]** The provision of free public Wi-Fi would bring about a set of benefits and costs to a city but the extent of the benefits and costs would differ based on the city in question.
  - **[Situation]** Whether a government should adopt Singapore's model of free public Wi-Fi depends on the country in question. The opportunity cost may be greater for a less-developed country as they might need to sacrifice spending in other more strategic and urgent sectors that can spur actual economic growth, such as road infrastructure.
  - **[Situation]** One reason why Singapore is able to enact free public Wi-Fi is due to our relatively small size and relative low incidence of absolute poverty. Other cities/countries may face a bigger challenge due to their larger size and the amount of ghettos/undeveloped areas that would be difficult to reach.
- **[Magnitude]** Given that there are potentially both positive and negative externalities arguments involved in the consumption of data, the efficiency argument is relatively weak in helping make a decision and government should focus more on the potential of Wi-Fi to spur growth.
- **[Alternatives]** To ensure that the benefits from free public Wi-Fi are truly realised, governments can have accompanying supply-side policies to enhance the effectiveness of free public Wi-Fi, such as courses for workers and companies on how to leverage on wireless systems to improve productivity.

Level	Knowledge, Application/Understanding, and Analysis	Marks
L3	<p>For a well-developed answer that:</p> <ul style="list-style-type: none"> <li>• is balanced by analysing the benefits of the policy and its costs/unintended consequences;</li> <li>• supports analysis with relevant economics concepts and tools of analysis; and</li> <li>• supports analysis with good use of the case material pertaining to free public Wi-Fi</li> </ul> <p>Note: Candidates will not receive full credit if analysis does not cover both macro and micro aspects.</p>	6 – 9
L2	<p>For an underdeveloped answer that:</p> <ul style="list-style-type: none"> <li>• is unbalanced, e.g. only positive or negative effects of the policy analysed; and/or</li> <li>• lacks economic rigour in the analyses of the benefits/costs of the policy; and/or</li> <li>• lacks use of the case material pertaining to free public Wi-Fi to support analysis.</li> </ul>	3 – 5
L1	For an answer that only shows a weak understanding of the micro and/or macro goals of a government.	1 – 2
E	Up to 3 marks for valid evaluative judgement on the overall effect of impact of free public Wi-Fi to governments.	1 – 3

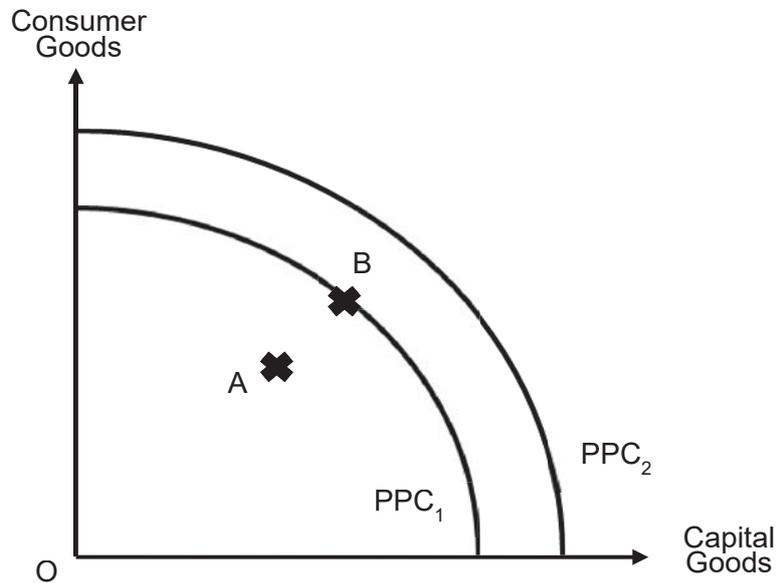
**H1 CSQ 2**  
**Suggested Answers**

(a)	(i) With reference to Figure 1, describe the trend in Brazil's volume of exports from 2008 to 2016. [2]
<p><b>General trend</b> [1]: Brazil's volume of exports generally increased from 2008 to 2016</p> <p><b>Refinement</b> [1], any 1 of the following:</p> <ul style="list-style-type: none"> <li>• fluctuated during the period</li> <li>• largest fall in export volume from 2008 to 2009</li> <li>• greatest increase in 2010</li> </ul>	
(ii) With the aid of a diagram, explain how the general trend above could have affected the external value of the Brazilian real. [3]	
<p><b>Increase in demand for the Brazilian real</b> [1]: As Brazil's export volume generally increased from 2008 to 2016, there will be a general increase in the demand for the Brazilian currency in the same period. This is represented by a rightward shift of the demand curve for Brazilian real from <math>D_0</math> to <math>D_1</math> in Figure 4.</p>	
<p><b>Appreciation of the Brazilian real</b> [1]: The increase in the demand for the Brazilian currency puts an upward pressure on the external value of the Brazilian currency and results in an appreciation of the Brazilian real, represented by the increase in price of Brazilian real from <math>P_0</math> to <math>P_1</math>.</p>	
<div style="text-align: center;">  </div>	
<p style="text-align: center;"><u>Figure 4: Market for Brazilian real</u></p>	
<p><b>Accurate diagram</b> showing increase in demand for the Brazilian currency and the appreciation of the Brazilian currency. [1]</p> <p style="text-align: center;"><small>NIASU ExamPaper Islandwide Delivery   Whatsapp Only 88660031</small></p>	

<b>(b)</b>	With reference to Extract 6, analyse how hosting the Olympics could result in market failure for the host country. [6]
<ul style="list-style-type: none"> <li>The hosting of the Olympics resulted in 20 kilometre traffic jams in the city. Visitors attending the Olympic events by car have contributed to these traffic jams. Thus, there is the problem of negative externalities being generated.</li> </ul> <p><b>Explain the private benefit and private cost (1 mark for an explanation of either the marginal private benefit or marginal private cost)</b></p> <ul style="list-style-type: none"> <li>The marginal private benefit of road usage for visitors attending the Olympic events include the increased convenience they would gain from getting to the event by car</li> <li>The marginal private cost of road usage for visitors attending the Olympics include the price of the taxi fare</li> </ul> <p><b>Explain the external cost of road usage on third parties</b></p> <ul style="list-style-type: none"> <li>The marginal external cost imposed on third parties, such as firms in the country (1 mark for identification of third parties), include a decline in productivity resulting from workers who are held up on the way to work as road users “often find journey times double or triple as a result of congestion” near Olympics venues (1 mark for explanation of external costs on third parties)</li> </ul> <p><b>Explain the market failure with reference to the over-allocation of resources and deadweight loss</b></p> <ul style="list-style-type: none"> <li>This marginal external cost results in a divergence between marginal private cost and marginal social cost (1 mark)</li> <li>The visitors who attend the Olympics only consider their private benefits and private costs, and ignored the external costs imposed on third parties.</li> <li>The private equilibrium level of road usage occurs at <math>Q_p</math> where <math>MPB = MPC</math> whereas the socially optimal level of road usage occurs at <math>Q_s</math> where <math>MSB = MSC</math>. (1 mark)</li> <li>This results in an over-utilisation of roads and causes deadweight loss as well as allocative inefficiency as social welfare is not maximised. (1 mark)</li> </ul> <p>*It is also possible for candidates to explain that there was an overproduction of the Olympic games.</p>	
<b>(c)</b>	Using Extract 7 and a production possibility curve diagram, identify and explain two benefits of hosting the Olympics to the host country. [6]
<p><b>One benefit of hosting the Olympics is actual growth [3]:</b></p> <ul style="list-style-type: none"> <li>Greater utilisation of resources [1] to meet the increase in investment and/or government expenditure as a result of hosting the Olympics [1]</li> <li>PPC to illustrate actual growth [1]: movement from Point A to Point B in Figure 1 (operating within the PPC to operating on the PPC)</li> </ul> <p><b>Another benefit of hosting the Olympics is potential growth [3]:</b></p> <ul style="list-style-type: none"> <li>Increase in investment and/or government expenditure can increase productive capacity [1], such as infrastructure projects improving the quantity and/or quality of resources available in the economy [1]</li> </ul>	

- PPC to illustrate potential growth [1]: outward shift of the PPC from  $PPC_1$  to  $PPC_2$  in Figure 1

\*Cap at 4 marks for explanations involving ONLY potential growth or ONLY actual growth.



**Figure 1: Production Possibility Curve for Brazil**

(d) Assess how far the data provided suggest that hosting the 2020 Olympics will improve Japan's employment rate. [8]

<b>Command word/phrase</b>	Assess how far	Consider several options or arguments and weigh them up so as to come to a conclusion/judgement about their effectiveness or validity
<b>Content</b>	improve employment rate	Derived demand for labour to increase, or that labour could get jobs.
<b>Context</b>	Hosting the 2020 Olympics... Japan	Building of infrastructure (G), increased local (C) and foreign tourists (X), possibility of private sector investments (I) → increases AD.  But also note the left vacant infrastructure after olympics hosted in other cities (Nagoya, Rio etc.) + GDP per capita and productivity of Japan falling while Olympics is being organised (Fig. 2).

**Thesis: *The data suggests that hosting the 2020 Olympics can improve Japan's employment rate***

- More labour is demanded in the construction industry, a relatively labour-intensive industry, to support infrastructure projects ahead of the Olympics (Extract 8: “new stadiums, redeveloped urban areas and updated transport networks”), which results in a fall in demand-deficient unemployment
- Anticipated surge in tourist arrivals (Extract 8: “purpose-built hotels” and “tourism boost”) may lead to firms hiring more factors of production and the derived demand for labour increases, reducing demand-deficient unemployment
- After winning the bid to host the 2020 Olympics, Japan's unemployment rate has decreased (Figure 2 shows a decline in unemployment rate since July 2014), which suggests that hosting the 2020 Olympics might have contributed to improving Japan's employment rate

**Anti-thesis 1: *The data suggest that hosting the 2020 Olympics does not improve Japan's employment rate***

- While tourism-related industries anticipate a surge in tourist arrivals, past experience might have dampened business confidence (Extract 8: “But the tourism boost that organisers hoped would follow failed to materialise, and the purpose-built hotels struggled to attract guests”), hence firms might refrain from hiring new labour on a permanent basis and instead rely on technology and/or temporary workers

**Anti-thesis 2: *The data is insufficient to conclude that hosting the 2020 Olympics can improve Japan's employment rate***

- While labour is needed in the construction industry to support infrastructure projects, the data does not provide information on the extent of impact on labour employment
  - The construction industry might be driven by new building technologies and the increase in labour employment might not be significant, and/or
  - The construction industry could be reliant on foreign labour instead of the local population
- The data provided does not indicate the extent of impact on permanent employment
  - While more workers might be temporarily hired before the Olympics to build infrastructure as well as during the Olympics to cope with the surge in tourist arrivals, higher unemployment results once the projects are completed and the subsequent contraction in economic activity after the Olympics
- While Figure 2 shows a fall in unemployment rate since July 2014, the data is insufficient to conclude if this was indeed due to hosting the 2020 Olympics or other factors, since no information is given about which industries had expanded and demanded more labour in this period

**Evaluative conclusion**

- **[Stand]** The data provided suggests that Japan's employment rate might not improve from hosting the 2020 Olympics. The eventual impact depends on
- **[Situation]** The global economic situation plays a large part in determining the extent to which Japan's employment rate can improve from hosting the Olympics as that would determine the extent of tourist arrivals, for example

- **[Magnitude]** extent to which Japan's construction industry depends on local workers for the infrastructure projects

Level	Knowledge, Application/Understanding and Analysis	Marks
L2	<p>For an answer that:</p> <ul style="list-style-type: none"> <li>• Provides a rigorous analysis of the positive and negative effects of hosting the 2020 Olympics on Japan's employment rate</li> <li>• Is well-supported with case material</li> </ul> <p>* Cap at 5 marks for responses that DO NOT utilise unemployment data</p>	4-6
L1	<p>For an answer that:</p> <ul style="list-style-type: none"> <li>• Provides a limited analysis of the positive <u>or</u> negative effects of hosting the 2020 Olympics on Japan's employment rate</li> <li><b>OR</b></li> <li>• Identifies the positive <u>and</u> negative effects of hosting the 2020 Olympics on Japan's employment rate with little/no economic analysis</li> <li>• Might or might not have used the case material</li> </ul>	1-3
Level	Evaluation	Marks
E	For a well-reasoned assessment of the extent to which the data provided suggests that Japan's employment rate will improve from hosting the 2020 Olympics.	1-2

(e)	Discuss whether the decision made by the Bank of England's Monetary Policy Committee (Extract 9) is appropriate for the UK economy. [8]	
<b>Command word/phrase</b>	Discuss...  Decision... Appropriate...	Present key points for both sides of the argument (for and against) in detail and come to a conclusion. There should be some evidence of balance, though not necessarily of equal weighting.  The appropriateness of an action would require an analysis of the context in which it is being implemented in in order to determine how the decision would interact with other factors in order to determine the overall impact.
<b>Content</b>	decision made by the Bank of England's Monetary Policy Committee (Extract 9)...	According to extract 9, England's Monetary Policy Committee has decided to raise interest rates. This is a contractionary (interest rate) monetary policy.
<b>Context</b>	UK economy	The UK economy is currently facing: <ul style="list-style-type: none"> <li>• Depreciation of the pound → inflation</li> <li>• Stagnant wage growth</li> <li>• Poor consumer confidence and retail sales</li> <li>• Stalled growth</li> </ul> The UK economy is also expected to grow <b>IF</b> England plays well in the <b>upcoming</b> World Cup

**Introduction**

- The Bank of England's Monetary Policy Committee opted to raise interest rate (Extract 9)
- Context: the UK economy was recovering from a time where "the wider economy stuttered and growth stalled" (Extract 9)

**Thesis: *The decision to raise interest rate can benefit the UK economy***

- Reduce demand-pull inflation: Higher interest rate increased the cost of borrowing, resulting in fall in consumption expenditure and investment expenditure, which leads to a fall in AD and reduces any demand-pull inflationary pressures that the recovering UK economy might be experiencing
- Reduce cost-push inflation: Higher interest rate could make the interest rates in the UK relatively higher than in other countries, resulting in greater hot money inflows and an appreciation of the UK pound as the demand for the UK pound increased. Appreciation helps to reduce imported inflation (Extract 9: "The pound dropped sharply, pushing inflation up." implies appreciation of the pound can reduce inflation)

**Anti-thesis: *The decision to raise interest rate might have a negative impact on the UK economy***

- Recovery in the UK is potentially temporary (Extract 9: “when England play well in the World Cup, England supporters are happier and are more inclined to spend on non-essential items”)
  - In this case, consumption expenditure is a significant component of the UK’s AD (Extract 9: “Britain is generally a consumer powered economy, so when people are buying, growth accelerates.”) and the increase in interest rate was likely to have a significant contractionary impact after the world cup
- The fall in AD could hamper the economy’s recovery and cause it to slip back into slow/negative growth and raise demand-deficient unemployment

**Evaluative conclusion**

- **[Stand]** Whether the decision to raise interest rate by the Bank of England’s Monetary Policy Committee is appropriate depends on the state of the UK economy.
- **[Situation + Magnitude]** Should the UK economy be operating near/at its productive capacity, the benefits of the Committee’s decision to raise interest rate (i.e. reduce inflationary pressures) would likely outweigh the costs of doing so (i.e. slow/negative growth and higher demand-deficient unemployment), and hence the decision would be appropriate.
- **[Situation + Time frame]** Given the broader economic context of Britain’s exit from the European Union (“Brexit”), however, the UK economy’s long-term economic outlook is likely to be pessimistic and the optimism that followed sporting excellence at the World Cup could be short-lived. As such, the decision to raise interest rate might not be appropriate as it could cause the economy to slip back into a period of weak/negative economic growth, higher demand-deficient unemployment and possibly deflation.

Level	Knowledge, Application/Understanding and Analysis	Marks
L2	For an answer that: <ul style="list-style-type: none"> <li>• Provides a rigorous analysis of the positive and negative effects of higher interest rate on the UK economy</li> <li>• Is well-supported with case material</li> </ul>	4-6
L1	For an answer that: <ul style="list-style-type: none"> <li>• Provides a limited analysis of the positive <u>or</u> negative effects of higher interest rate on the UK economy</li> <li><b>OR</b></li> <li>• Identifies of the positive <u>and</u> negative effects of higher interest rate on the UK economy with little/no economic analysis</li> <li>• Might or might not have used the case material</li> </ul>	1-3
Level	Evaluation	Marks
E	For a well-reasoned assessment of the extent to the decision to raise interest rate is appropriate for the UK economy.	1-2

<b>(f)</b>	Using the information provided and/or your own knowledge, evaluate whether, on balance, a government should prioritise the pursuit of high rates of economic growth to raise the standard of living of its citizens. <span style="float: right;">[12]</span>
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<b>Command</b>	“evaluate”	Provide a balanced argument and a judgement at the end
<b>Content</b>	“prioritise the pursuit of high rates of economic growth”  “standard of living”	Need to consider actual growth. The term “prioritise” also hints at the need to consider other macroeconomic goals.  Material and non-material standard of living
<b>Context</b>	“Using the information provided and/or your own knowledge”	Examples can be from the case materials or from elsewhere

**Introduction**

- Define standard of living; consider material and non-material aspects
- State the macroeconomic aims of the government: sustained economic growth, price stability, full employment
- High rates of economic growth here refers to actual growth i.e high rates of increase in the real national output of an economy

**Development 1: High rates of economic growth can raise standard of living**

- Increase material SOL: higher real national income will result in higher real GDP per capita and households having higher incomes and purchasing power. This allows them to enjoy more goods and services. Thus, material SOL increases. For example, Brazil’s hope is that hosting the Olympic Games would result in additional stimulus for its economy via an increase in G and AD, resulting in higher incomes for its population and greater material SOL.
- Increase non-material SOL: higher real national income results in higher tax revenue for the government and increases its ability to spend on areas that improve non-material SOL, like education and healthcare. Increased government spending on education can result in increased literacy rates whereas raised spending on healthcare can possibly extend the life expectancy of the population. Also, the building of transport infrastructure can help to increase the convenience of people who travel about for work or leisure. For example, extract 7 mentioned that Rio built many transport infrastructure projects throughout the city.

**Development 2: High rates of economic growth might not improve standard of living**

- Material SOL might not improve for all citizens. This is because there could be the case of structural unemployment with high rates of economic growth. Structural unemployment is a case where there is a mismatch between the skills that unemployed workers possess and the skills that the job vacancies require. As sunrise industries expand, there would also be sunset industries that are declining and firms in these sunset industries might retrench their workers. If these workers do not have the right skill sets that the current job vacancies require, there would be

a rise in structural unemployment. Therefore, the high rates of economic growth might only increase the material SOL of households employed in expanding industries but might worsen the material SOL of those who have become structurally unemployed.

- Worsen non-material SOL: higher levels of national output could result in greater environmental pollution, especially if the expanding industries use methods that generate pollution (Extract 7: “partially built on a protected nature reserve”; Extract 8; “damage to the natural environment”) and/or the firms fail to properly treat industrial waste before discharging them into the environment. Higher pollution levels may worsen the health of people in the country, thereby reducing their life expectancies.

### **Development 3: Price stability and full employment (i.e. the other macro aims can also improve standard of living**

- Price stability can also have a positive impact on the material SOL of the country. Price stability prevents the erosion of the real value of money and helps to ensure that the purchasing power of households is maintained, thus having a positive impact on the material SOL.
- Full employment can improve standard of living too as it ensures that the benefits of high rates of economic growth are shared across more sectors/households in the country. With more people being employed, purchasing power of these consumers would rise and they would be able to buy more goods and services, thus raising the material SOL of the country. Furthermore, there would be a fall in the crime rates as the opportunity costs of committing crimes would increase, making the country a safer place to live in and improving the non-material SOL.

### **Evaluative Conclusion**

- **[Stand]** Whether a government should prioritise the pursuit of high rates of economic growth to raise the standard of living of its citizens depends on the economic conditions of the country.
- **[Situation]** In countries that are operating below its productive capacity, the government can consider pursuing high rates of economic growth to raise the standard of living of its citizens. However, countries that are operating near full employment might want to prioritise other macroeconomic aims such as price stability, to ensure that the benefits of the high rates of economic growth on standard of living can be sustained
- **[Situation]** It also depends on the stage of the development of the country. If the country is a less developed one like Cambodia, the high levels of poverty there would necessitate a higher focus on economic growth rates to lift the population out of poverty and improve their material standard of living. On the other hand, if the country is a more developed one like Japan, poverty levels are much lower and most people have their basic needs fulfilled. In such a situation, the focus could then be on improving their non-material standard of living. For example, the government could increase spending on healthcare and raise its efforts to reduce pollution levels, therefore increasing life expectancy.

Level	Knowledge, Application/Understanding and Analysis	Marks
L3	For an answer that: <ul style="list-style-type: none"> <li>Provides a rigorous analysis of the positive and negative effects of prioritising high rates of economic growth on standard of living, and how prioritising other macroeconomic aims can raise standard of living</li> </ul>	6-9
L2	For an answer that: <ul style="list-style-type: none"> <li>Provides a limited analysis of the positive <u>or</u> negative effects of prioritising high rates of economic growth on standard of living, <u>and/or</u> how prioritising other macroeconomic aims can raise standard of living</li> </ul> <p><b>OR</b></p> <ul style="list-style-type: none"> <li>Identifies the impact of achieving macroeconomic aims on standard of living with little/no economic analysis</li> </ul>	3-5
L1	For a largely irrelevant <b>OR</b> highly descriptive <b>OR</b> conceptually erroneous response	1-2
Level	Evaluation	Marks
E	For a well-reasoned assessment of whether a government should prioritise high rates of economic growth to improve standard of living for its citizens.	1-3

