

TEMASEK JUNIOR COLLEGE
Preliminary Examinations 2017
General Certificate of Education Advanced Level
Higher 2

ECONOMICS

9757/01

Paper 1

Tuesday 29 August 2017

2 hours 15 minutes

Additional Materials: Answer Paper and Cover Page

READ THESE INSTRUCTIONS FIRST

Do NOT turn over this page until you are told to do so.

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

Write in dark blue or black pen.

You may use an HB pencil for any diagrams or graphs.

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

Hand in your answer scripts to each question separately.

Answer **all** questions.

Begin each question on a fresh sheet of paper.

At the end of the examination, fasten your work for each case study separately.

Attach the cover page to your work for Question 1.

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

This document consists of **7** printed pages and **1** blank page.



Temasek Junior College
Economics

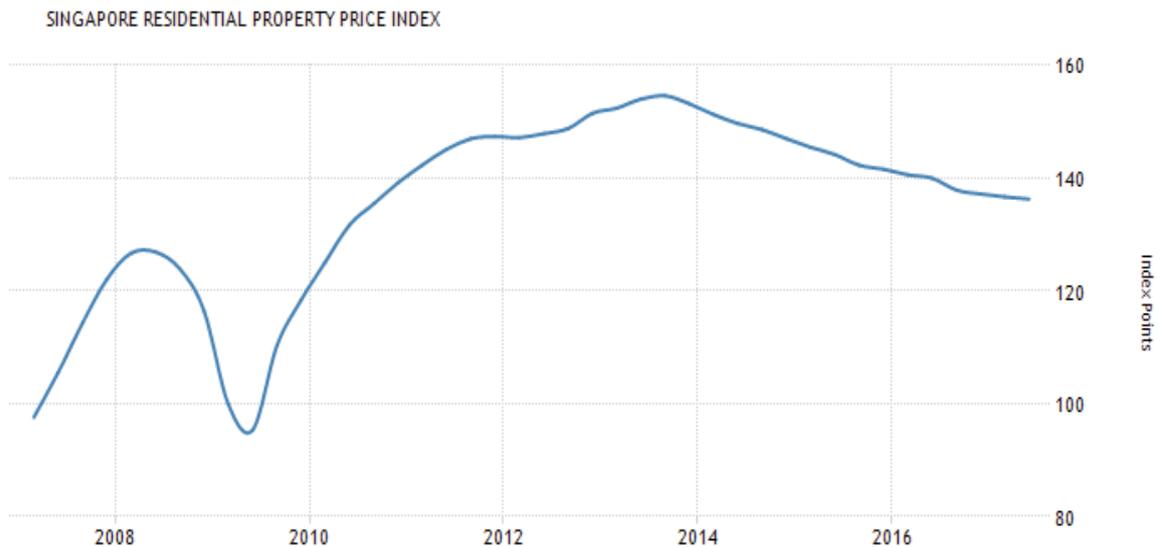
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Answer all questions.

Question 1

Real Estate Bubbles and Cooling Measures

Figure 1: Singapore Residential Property Price Index



Source: *Urban Redevelopment Authority, Singapore*

Extract 1: New HDB flats have remained affordable: HDB

To keep flats affordable for Singaporeans, the Housing and Development Board (HDB) has disbursed S\$1.6 billion in Additional CPF Housing Grants (AHG) to close to 83,000 households since 2006. It has also given out S\$297.61 million in Special CPF Housing Grants (SHG) since 2011 to almost 20,000 households, as of November 2015.

HDB gave this update in a media statement on Sunday (Jan 3). Eligible first-time buyers currently enjoy up to S\$80,000 in housing grants, comprising the AHG of up to S\$40,000 and the SHG, also up to S\$40,000.

More than 80 per cent of Singapore's resident population are housed in more than 900,000 public flats across the island and 95 per cent of them own the flats they live in.

Source: *Channelnewsasia.com, 2016*

Extract 2: Why a Chinese Real Estate Bubble Could Bring Down the Global Economy

Analysts are sounding the alarm about growing Chinese debt loads and a potential real estate bubble that threatens to dramatically slow growth in Asia, and which could be a drag on the entire global economy if it bursts.

In September, Ma Jun, the chief economist of the People's Bank of China's research bureau, argued that the Chinese government must take action to stamp out real estate speculation. "Measures should be taken to put a brake on the excessive bubble expansion in the property

sector, and we should curb excessive financing into the real estate sector," Ma said, according to a translation of a Chinese news report by Bloomberg News.

Other Chinese analysts have been even more vehement. "The dangers of overly inflated housing prices are huge," writes Hu Shuli, chief editor of Caixin Media in Beijing. "Indicators such as the ratio of mortgage payments to a buyer's income indicate that on a relative basis, China's current housing prices are now more expensive than those during Japan's property bubble, and are close to U.S. prices just before the global financial crisis exploded."

Chinese policymakers have instituted measures aimed at cooling the overheating housing market, with some cities imposing "local purchase restrictions, raising mortgage down payment ratios, and tightening developers' financing," according to Zhiwei Zhang, chief economist with Deutsche Bank Research. He also points out, however, that these measures may have simply led investors to funnel money into property into cities where real estate has been appreciating less quickly.

Source: *Fortune*, 2016

Extract 3: Cooling Measures for the Residential Property Market

The Government has implemented several rounds of measures to cool demand and expand supply, so as to moderate the increase in housing prices. While these measures have dampened speculative buying, the demand for residential property remains firm and prices have continued to rise.

The continued buoyancy of the property market reflects the very low interest rate environment and continued income growth in Singapore. These factors supported a record level of housing transactions last year, particularly from investment demand. Housing prices have also shown signs of reaccelerating in recent months, in both the private residential and HDB resale flat markets. Price increases, if not checked, will run further ahead of economic fundamentals and raise the risk of a major, destabilising correction later on.

The Government has therefore decided to implement a further set of measures to cool the private and public housing markets. These measures are calibrated to be tighter on property ownership for investment, as well as on foreign buyers. To discourage over-borrowing, financing conditions for housing have also been tightened. In addition, structural measures have been implemented to strengthen the policy intent of public housing and executive condominiums.

Deputy Prime Minister and Minister for Finance Mr Tharman Shanmugaratnam said: "The reality we face is that interest rates are extraordinarily low, globally and in Singapore, and continue to add fuel to our property market. We have to take this further round of measures now, to check recent market trends and avoid a more serious correction in prices further down the road."

Minister for National Development Mr Khaw Boon Wan said: "A large supply of public and private housing – up to 200,000 units in total – will be completed in the coming years. Coupled with the new measures, we will be better placed to ensure that housing remains affordable to Singaporeans."

Source: *Monetary Authority of Singapore*, 2013

Extract 4: Here's why it is time to thaw property cooling measures

Property prices are now at one of the most affordable levels on record. Singapore has averted a technical recession, posting 1.8 percent growth in gross domestic product (GDP) for the 4Q16, and an overall growth of 1.8% for the year, according to recent estimates from the Ministry of Trade and Industry.

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But with a subdued economic outlook both globally and in Singapore, as well as expectations of rising interest rates, house prices are under considerable pressure. Real estate consultant JLL said the residential property market is likely to remain stagnant with cooling measures still in place alongside slow economic growth.

Private home prices in Singapore softened further in the last quarter of 2016, for 13 consecutive quarters and reaching their lowest level in six years, as flash estimates from the Urban Redevelopment Authority (URA) showed at the beginning of January.

Source: *Singapore Business Review*, 2017

Questions

- (a) (i) From Figure 1, describe the trend of Singapore's residential property prices from 2010 to 2016. [2]
- (ii) Suggest two possible reasons for the trend identified in (i). [2]
- (b) Explain whether public housing fulfils the characteristics of a public good. [4]
- (c) Explain the possible impact of a bursting of the real estate bubble in China on Singapore's balance of payments. [4]
- (d) Using an economic framework, discuss how the factors mentioned in Extract 3 affect the markets for public housing and private housing in Singapore. [8]
- (e) As an economic advisor to the Singapore government, discuss whether you will recommend the removal of cooling measures in Singapore. [10]

[Total: 30]

Question 2

Global instability and Weakness

Table 1: Economic indicators of Greece

Year	Economic Growth (annual variation in % of GDP)	Unemployment Rate (%)	Public Debt (% of GDP)
2011	-9.1	17.9	172
2012	-7.3	24.6	160
2013	-3.2	27.5	177
2014	0.4	26.5	180
2015	-0.2	25	177

Source: *FocusEconomics*

Extract 5: Greece bailout agreement: key points

Greece has been told it must legislate by 15 July to introduce “quasi-automatic spending cuts” if it deviates from primary surplus targets. In other words, if it cannot cut enough to balance the books, it should cut some more. In the past, the troika of lenders (made up of the European Commission, European Central Bank, and the International Monetary Fund) has demanded that Greece commit to a budget surplus of 1% in 2015, rising to 3.5% by 2018. To achieve this, Greece has been told that it needs to pass measures to “improve long-term sustainability of the pension system” by 15 July. The country’s pensions system, and its perceived generosity relative to other eurozone states, has been a key sticking point in the past five months of negotiations with creditors. The troika believes that Athens can save 0.25% to 0.5% of GDP in 2015 and 1% of GDP in 2016 by reforming pensions.

The latest agreement demands measures for “the streamlining of the value-added tax (VAT) system and the broadening of the tax base to increase revenue”. One of the key objections from Greece’s creditors to its VAT system is a 30% discount for the Greek islands. Athens proposed a compromise on 10 July under which the exemptions for the big tourist islands – where the revenue opportunities are greatest – would end first, with the more remote islands following later.

Prime Minister Alexis Tsipras pledged to implement radical tax reforms to ensure the Greek oligarchy finally makes a fair contribution. The agreement thrashed out overnight would allow Greece to stand on its feet again, he said. Implementation of the reforms would be tough, he said, but “we fought hard abroad, we must now fight at home against vested interests”. He added: “The measures are recessionary, but we hope that putting Grexit to bed means inward investment can begin to flow, negating them.” The new deal also calls for “more ambitious product market reforms” that will include liberalising the economy with measures ranging from bringing in Sunday trading hours, to opening up closed professions. Greece’s labour markets must also be liberalised, the other eurozone leaders say. Notably, they are demanding Athens “undertake rigorous reviews and modernisation” of collective bargaining and industrial action.

Source: *The Guardian*, 13 July 2016

Extract 6: China economic growth slowest in 25 years

China's economy grew by 6.9% in 2015, compared with 7.3% a year earlier, marking its slowest growth in a quarter of a century. China's growth, seen as a driver of the global economy, is a major concern for investors around the world. The news comes as the International Monetary Fund said it expected China's economy to grow by 6.3% this year and 6% in 2017. Beijing had set an official growth target of "about 7%".

Chinese Premier Li Keqiang has said weaker growth would be acceptable as long as enough new jobs were created. But some observers say its growth is actually much weaker than official data suggests, though Beijing denies numbers are being inflated. After experiencing rapid growth for more than a decade, China's economy has experienced a painful slowdown in the last two years. It's come as the central government wants to move towards an economy led by consumption and services, rather than one driven by exports and investment, in view of weak external climate and excess capacity. But managing that transition has been challenging. Some argue that China's focus on creating an economy driven by consumption is misplaced. They say as the country attempts to rebalance its economy, it should focus on productivity to sustain high growth. "While higher consumption can support growth in the short run, there is little in economic theory that emphasises the expenditure side of GDP as a driver of growth," HSBC's John Zhu said in a note. He added that China's current stage of development would require more investment, not less, and that the country would rebalance naturally towards consumption and services in time.

It's said so often that it has become a financial markets cliché - when China sneezes, the rest of the world catches a cold. China's headline annual economic growth numbers are important to the rest of the world - but so too are other monthly economic data as they can provide a more in-depth look at the economy and where it's heading. Monthly industrial production and retail sales numbers for China were also released on Tuesday, with both December numbers coming in just slightly worse than expected. Industrial production - or factory output - expanded 5.9% in December, down from 6% in November. Retail sales grew 11.1%, down from 11.3% in November. "[The] health of the labour market, retail sales and industrial production data are all key indicators for growth," said Catherine Yeung from Fidelity International in a note. "When you look at China with this lens, we're not seeing a meltdown, just a slowdown," she added.

Source: *BBC News*, 19 January 2016

Extract 7: MTI narrows 2015 GDP growth forecast to 2.0 to 2.5 per cent

The global economy performed weaker than expected in the first half of 2015. For the rest of the year, global growth is expected to pick up gradually, although the pace of growth is likely to be uneven across economies. In particular, the advanced economies are expected to see a gradual pick-up in growth, while the growth outlook of regional economies has generally softened. The US economy recovered in the second quarter following the harsh weather conditions experienced at the start of the year. For the rest of 2015, the US economy is projected to grow at a modest pace, supported by private domestic demand. The Eurozone economy is expected to improve in the second half of the year, with growth supported by the quantitative easing measures implemented since March. However, growth in the bloc will likely remain modest due to sluggish labour market conditions. In Asia, China's growth is projected to ease, weighed down by the on-going property market correction and excess capacity in the heavy industries. Nonetheless, the stimulus measures implemented by the Chinese government are expected to contain downward pressures on the economy. Meanwhile, growth in key ASEAN economies is likely to be weighed down by weaker demand from China as well as softening domestic demand.

At the same time, several key downside risks in the external economic environment remain. In China, there is the risk of a sharper-than-expected correction in the real estate market, which

could have significant negative spill-over effects on construction and real estate investment activities. The recent sharp correction in China's stock market has also heightened the risks to China's growth. In particular, consumer sentiments and spending in China could be adversely affected if the correction in the stock market worsens. In the Eurozone, while Greece has averted the immediate risk of an exit from the bloc, there is continuing political uncertainty and the crisis could flare up again if the Greek government fails to adhere to the bailout terms. Finally, with low commodity prices, the appreciation of the US dollar and anticipated normalisation of US interest rates, regional countries could face capital outflows and added pressures on their currencies and asset markets.

In tandem with the expected gradual pick-up in the global economy, externally-oriented sectors such as finance and insurance and wholesale trade are likely to support growth in the Singapore economy in the second half of the year. However, sector-specific factors could continue to weigh on the growth of some externally-oriented sectors. For instance, sustained low oil prices could continue to dampen growth in the marine and offshore segment. On the other hand, domestically-oriented sectors such as the business services and information and communications sectors are expected to see modest growth. With the labour market expected to remain tight, growth in some labour-intensive sectors such as food services may be weighed down by labour constraints.

Source: *Ministry of Trade and Industry Singapore*, 11 August 2015

Extract 8: Singapore economy grew 2% in 2015, slowest since 2009

Singapore's economic prospects have softened since the start of this year amid a sharp fall in oil prices and global financial market volatility, the Ministry of Trade and Industry (MTI) said on Wednesday (Feb 24). MTI put out these forecasts alongside the release of data showing the Singapore economy grew a modest 2 per cent in 2015, the weakest rate of growth since 2009, when the global financial crisis shrank economic output by 0.6 per cent. Private economists say growth in 2016 will probably slow to 1.8 - 2.0 per cent.

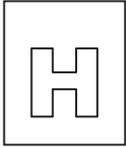
Source: *The Straits Times*, 24 February 2016

Questions

- (a) With reference to Table 1, explain why the Greek government should be concerned about its economy. [4]
- (b) With reference to Extract 5, comment on how the measures demanded under the Greek bailout agreement might impact the Greek economy. [4]
- (c) Discuss the possible considerations behind the Chinese government's attempt to rebalance its economy. [8]
- (d) Using an AD/AS diagram, explain how a tight labour market may affect general price levels in Singapore. [4]
- (e) In view of the data presented, discuss to what extent Singapore's central bank, the Monetary Authority of Singapore, might have to intervene in the market for Singapore dollars in order to achieve the government's macroeconomic objectives. [10]

[Total: 30]

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ECONOMICS

9757/02

Paper 2: Essay Questions

13 September 2017

2 hours 15 minutes

Additional Materials: Answer Paper, Cover Page

READ THESE INSTRUCTIONS FIRST

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

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

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

You may use an HB pencil for any diagrams or graphs.

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

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

Begin each essay on a separate sheet of answer paper.

At the end of the examination, fasten all your work securely together with the cover page.

Write the number of the questions attempted on the cover page.

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

This document consists of **3** printed pages and **1** blank page.

Answer **three** questions in total.

Section A

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

- 1** Malaysia will begin imposing its tourism tax from Aug 1 this year, according to details published on the Royal Malaysian Customs Department's website. Rates start from RM2.50 per room each night at a non-rated accommodation to RM20 per room each night at a five-star accommodation.

Source: Channelnewsasia.com, 2017

- (a) Explain how the imposition of the tax might affect consumers' expenditure and producers' revenue for different types of hotels in Malaysia. [10]
- (b) Discuss the factors the Malaysian government might have considered before deciding to impose the tourism tax. [15]

- 2** The operator of the upcoming Thomson-East Coast Line (TEL) will be the first to run a rail service under a contract similar to the model recently introduced for buses. The successful bidder will operate the new line for a fixed sum over a fixed period, while the Government collects fare revenue, the Land Transport Authority (LTA) said yesterday. This move aims to increase the contestability of the public transport market.

Adapted from: *The Straits Times*, 2016

Discuss whether making markets more contestable is the best approach to reduce the adverse effects of market dominance in the provision of bus and rail services in Singapore. [25]

- 3** MediShield Life, a basic health insurance scheme, covers all Singapore Citizens and Permanent Residents, even those with pre-existing conditions. Health insurance is insurance that covers the whole or a part of the risk of a person incurring medical expenses, spreading the risk over a large number of persons. Compulsory enrolment addresses the issue of adverse selection while features such as maximum claim limit, deductible and co-payment limit the extent of moral hazard.
- (a) Explain how adverse selection and moral hazard can lead to market failure in the market for health insurance. [10]
- (b) Assess the extent to which adverse selection and moral hazard, rather than any other potential market failure, is the major cause of government intervention in the market for health insurance in Singapore. [15]

Section B

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

- 4** The Federal Reserve raised interest rates on Wednesday, ending an extraordinary period of seven years of government intervention in the financial markets that started at the height of the recession. However, some have expressed concern about the move, urging the Fed to “avoid making a mistake” by raising interest rates.

Adapted from: *The Guardian*, 16 December 2015

Discuss the factors that the Federal Reserve could have considered when deciding to raise interest rates. [25]

- 5** China’s economic rise, in which GDP grew on average 10 per cent each year for more than a decade, has come at the expense of its environment and public health. Environmental degradation also poses a serious threat to China’s economic growth, costing the country roughly 3 to 10 per cent of its gross national income, according to various estimates.

(a) Explain the likely consequences of rapid economic growth. [10]

(b) Assess the possible options available to a government in attaining sustainable economic growth. [15]

- 6** “The Trans-Pacific Partnership (TPP) embodies what Singapore sees as the future of the Asia-Pacific. It will transform the region by reducing tariff and non-tariff barriers substantially for both goods and services, encouraging greater investment, and addressing new trade challenges in the modern economy.”

Minister Lim Hng Kiang, Minister for Trade

Source: Ministry of Trade and Industry, 06 Oct 2015

(a) Explain the determinants of Singapore’s pattern of trade. [10]

(b) Assess the extent to which smaller economies like Singapore would benefit more from the TPP than larger ones like the USA. [15]

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TJC Prelims 2017 (H2) CSQ1 Answers

- (a) (i) From Figure 1, describe the trend in Singapore's residential property prices from 2010 to 2016. [2]

Singapore's residential property prices were generally increasing from 2010 to 2016. [1] Prices increased steadily from 2010 to reach a peak in 2013 and have been on a gradual decline since. [1]

- (ii) Suggest two possible reasons for the trend identified in (i) [2]

Explain general increase:

The general price increase was probably due the "very low interest rate environment and continued income growth in Singapore" (Extract 3). Low interest rates indicate low cost of borrowing, thus raising affordability of housing and boosting demand for property. Continued income growth leads to higher purchasing power, also leading to higher demand for property. Higher demand for property thus explains the general price increase from 2010 to 2016. [1]

Explain gradual decline since 2013:

The gradual decline in prices since 2013 can be attributed to government's measures to "cool demand and expand supply, so as to moderate the increase in housing prices" (Extract 3). Dampened demand and increased supply thus led to prices slowing down after 2013. [1]

- (b) Explain whether public housing fulfills the characteristics of a public good. [4]

A public good is a good which is both non-excludable and non-rivalrous, resulting in total market failure and non-provision of the good.

Non-excludable means it is impossible or highly prohibitive to exclude non-payers from enjoying the good once it's produced, resulting in the free-rider problem. [1] Public housing not a public good as it is excludable. An HDB flat-owner has to first purchase the flat before being given the key to his apartment. HDB can also evict those who fail to make payments for their apartments.[1]

Non-rivalrous means consumption of the good by one individual does not diminish the quantity and quality enjoyed by others. [1] Public housing is not a public good as it is rivalrous. When one HDB flat has been sold to a family, there is one less HDB flat available for other families. It is impossible to house the entire community in an HDB flat without creating intolerable overcrowding. [1]

Hence, public housing does not fulfill the characteristics of a public good.

- (c) Explain the possible impact of a bursting of the real estate bubble in China on Singapore's balance of payments. [4]

China's real estate appears to be headed for a hard landing, with "the ratio of mortgage payments to a buyer's income" showing that "housing prices are now more expensive than those during Japan's property bubble" and "close to U.S.

prices just before the global financial crisis exploded”. [1]

“Excessive bubble expansion in the property sector” are associated with higher debt levels, and “analysts are sounding the alarm about growing Chinese debt loads”. A subsequent sharp correction of property prices may lead to rising defaults on mortgages and possibly bank failures, resulting in “a drag on the entire global economy.” [1]

Business and consumer confidence are likely to be negatively affected, causing Investment I and Consumption C to fall, and hence AD to fall, and through the reverse multiplier effect, national income to fall by a larger magnitude. This could lead to slower growth or even a recession in China, dampening its demand for imports, including imports from Singapore. As China is a significant export market for Singapore, a fall in demand by China will cause Singapore’s trade balance and hence its current account to deteriorate. [1]

Moreover, China’s investments abroad, including to Singapore, is likely to be greatly reduced due to troubles at home. With long-term capital inflows sharply reduced, Singapore’s capital account could deteriorate too. [1] With both current account and capital account deteriorating, a bursting of China’s property bubble is likely to cause Singapore’s Balance of Payments to worsen.

Note: Answers which argue that capital account could improve if “hot money” flows into Singapore due to its safe-haven reputation are acceptable.

- (d) Using an economic framework, discuss how the factors mentioned in Extract 3 affect the markets for public housing and private housing in Singapore. [8]

The markets for public and private housing in Singapore is affected by various demand and supply factors. The demand factors include “very low interest rate environment and continued income growth in Singapore” as well as macro-prudential cooling measures by the government aimed at preventing the formation of a property bubble. On the supply side, “a large supply of public and private housing – up to 200,000 units in total – will be completed in the coming years”. The overall impact on equilibrium price and quantity depends on the extent of the shift in demand compared to the shift in supply, as well as the price-elasticity of demand (PED) and price-elasticity of supply (PES) for housing.

Examining demand factors

The demand factors mentioned in the extracts work in opposing ways. Low interest rates indicates low cost of borrowing for home-buyers and together with continued income growth, boosts their purchasing power and hence demand for housing. However, the macro-prudential cooling measures on “property ownership for investments as well as on foreign buyers” reduces speculative demand for property, raising expectations of a price fall, resulting in demand falling. Whether overall demand increases or falls depends on which factor has a stronger impact. The cooling measures are aimed at “property ownership for investment” and targetted “on foreign buyers”, and are likely to affect private housing more than public housing, which is bought for owner-occupation and are off-limits to foreign buyers. Hence, moving forward, demand for private housing is likely to fall while demand for public housing could continue to increase.

When demand changes, the relevant elasticity concept is Price Elasticity of

Supply (PES), which measures the responsiveness of quantity supplied for a given change in own-price. Supply for both public and private housing is likely to be price-inelastic ($PES < 1$) as it takes a few years for developers to bid for land and build housing units in response to a price change. When demand for public housing increases, price increases, leading to a less than proportionate increase in quantity supplied of public housing as $PES < 1$. When demand for private housing falls, price falls, leading to a less than proportionate fall in quantity supplied of private housing as $PES < 1$.

Examining supply factors

Supply for both private and public housing will rise due to the completion of 200,000 units coming on-stream. When supply changes, the relevant elasticity concept is Price Elasticity of Demand (PED), which measures the responsiveness of quantity demanded for a given change in own-price. Demand for public housing is likely to be price-inelastic ($PED < 1$) as it can be considered a necessity as every household needs a roof over their heads. When supply for public housing increases, price falls, leading to a less than proportionate increase in quantity demanded. Demand for private housing is likely to be price-elastic ($PED > 1$) given that it forms a large proportion of a typical buyer's income. When supply for private housing increases, price falls, leading to a more than proportionate increase in quantity demanded.

Overall impact on Public Housing

The combined impact of the fall in demand and increase in supply on the market for public housing is represented in Figure 1. Demand is likely to increase only a little, from D1 to D2, as macroprudential measures aimed at private housing are likely to have a dampening effect on buyer sentiment in the public housing market too. Buyers are likely to be cautious even though income is growing and interest rates are low. Supply is likely to increase more significantly, from S1 to S2, as the government is determined to ensure affordability and availability of housing to young Singaporeans. Overall, equilibrium price is likely to fall from P1 to P2, but equilibrium quantity is likely to increase more significantly from Q1 to Q2, resulting in total expenditure in the public housing market increasing slightly from $P1 \times Q1$ to $P2 \times Q2$.

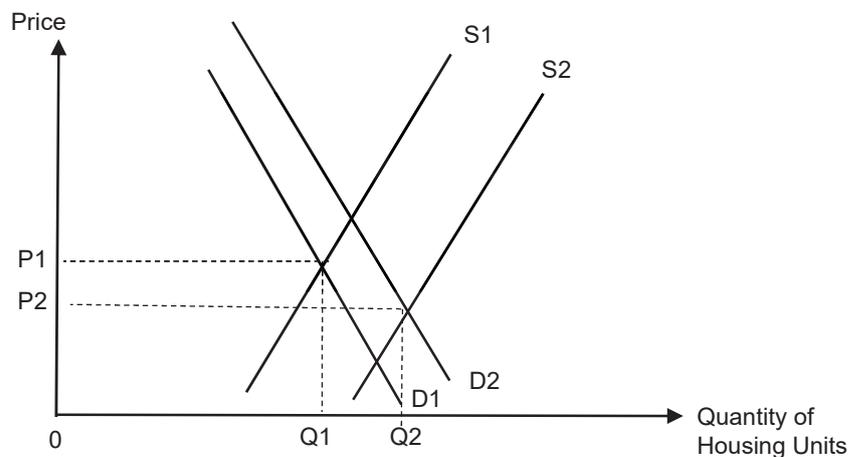


Figure 1: Concurrent shifts in demand & supply of Public Housing

Overall impact on Private Housing

The combined impact of the fall in demand and increase in supply on the market for private housing is represented in Figure 2. Demand is likely to fall significantly, from D1 to D2, as cooling measures have a strong impact on consumer and investor sentiment, resulting in expected price falls in the housing market, and buyers holding back their purchases. While there is a large supply coming on-stream, this is likely to be spread out over a few years, and may not be significant in the immediate term. Moreover, current owners are likely to hold out and wait for a price recovery before selling, thus dampening supply. Overall, equilibrium price is likely to fall from P1 to P2, and equilibrium quantity is likely to fall less significantly from Q1 to Q2, resulting in total expenditure in the public housing market falling from $P1 \times Q1$ to $P2 \times Q2$.

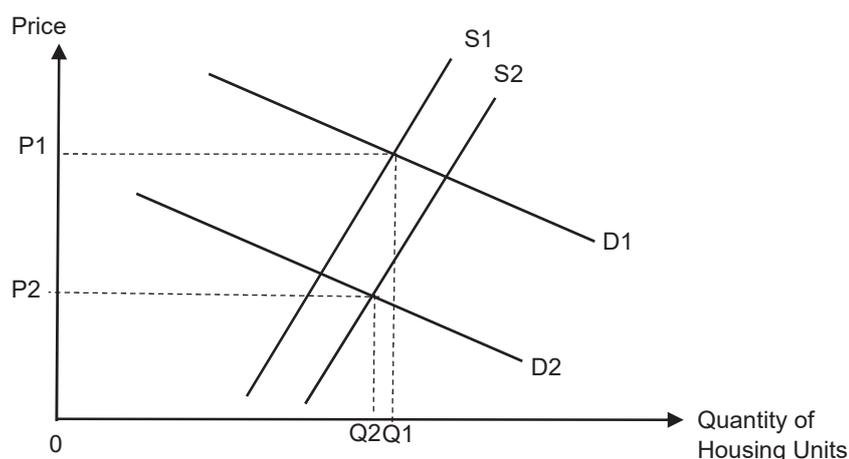


Figure 2: Concurrent shifts in demand & supply of Private Housing

Levels of Response Marking Scheme (LORMS)

Levels	Descriptor	Marks
L2	A well-developed answer with consistent demonstration of economic rigour. Makes use of case materials and elasticity concepts to arrive at conclusion on impact on market for both public and private housing. Both demand and supply factors are analysed.	4-6
L1	Consistent lack of economic rigour and narrow scope, with little differentiation made in analysis between public and private housing. Capped at this level if case materials not used.	1-3
E	Evaluative judgement and comments with synthesis on overall impact of both demand and supply factors on both markets.	1-2

- (e) As an economic adviser to the Singapore government, discuss whether you will recommend the removal of cooling measures in Singapore. [10]

Macro-prudential property cooling measures were first imposed to prevent a property bubble from forming as well as to ensure affordability of housing in Singapore. According to Extract 3, in 2013, further measures were adopted as according to Minister for Finance then, "interest rates are extraordinarily low" and "continue to add fuel to our property market". These measures were said to be

needed in order to “avoid a more serious correction in prices further down the road.”

Thesis Point 1: Property prices have fallen, thus achieving original intent of cooling measures.

There is merit to the argument that cooling measures should be removed. Firstly, these measures have borne fruit and achieved their original intent. According to Extract 4, “property prices are now at one of the most affordable levels on record.” URA data also shows that private home prices have fallen for “13 consecutive quarters” to reach “their lowest level in six years.”

Thesis Point 2: Interest rates are rising, thus dampening speculative demand

Moreover, real estate consultant JLL argues that “house prices are under considerable pressure” given “subdued economic outlook both globally and in Singapore” as well as “expectations of rising interest rates.” Property prices are highly-sensitive to interest rates movements. Singapore is a price-taker and its interest rates track US interest rates closely. US interest rates have bottomed as its economy recovers from the sub-prime crisis. Higher interest rates raise the cost of borrowing for buyers, and this lowers their purchasing power, reducing demand for property. As such, there is less need for cooling measures to rein in demand and they can be removed without fear of speculative demand being fuelled by hot money returning to the market.

Thesis Point 3: Removal of cooling measures could help boost economic growth

Extract 5 noted that in 2017, Singapore’s GDP growth stood at 1.8%, narrowly averting a recession. Hence, the removal of cooling measures could boost consumption and investment in the property development market. As such, the aggregate demand could increase. Since Singapore is still on the phrase of economic recovery, there could still be excess resources, allowing the real output to increase further, thereby boosting economic growth.

Anti-Thesis Point 1: Global interest rates are still at historic lows

Although US interest rates have bottomed out, they are still at historically low levels. As mentioned by Minister Tharman, “The reality we face is that interest rates are extraordinarily low, globally and in Singapore, and continue to add fuel to our property market.” Low interest rates means continued affordability for buyers of property and removal of cooling measures could encourage speculative buying again. **There is thus a need to be cautious about making such a move.**

Anti-Thesis Point 2: China factor

Chinese policymakers have instituted measures aimed at cooling the overheating housing market, and analysts expect “these measures may lead investors to funnel money into property in cities where real estate has been appreciating less quickly.” These cities include Singapore, and if cooling measures are removed prematurely, demand from China investors could cause the property market to reach exuberant levels again.

Conclusion

The government is rightfully cautious when deciding whether to remove the cooling measures. Removal of cooling measures sends a strong signal to the market and could fuel speculative buying again. This is especially so in Singapore where there is latent demand for property given the Asian culture of preference for property ownership. On the other hand, these measures are forms of market distortions, which cause allocative inefficiency. The government thus faces a fine balancing act between maximising societal welfare, ensuring equitable outcomes and preventing macroeconomic instability. The most important factor that the government might consider is likely to be the supply-demand conditions, as a huge surplus could lead to sharp falls in prices, which could cause an economic downturn. Given the present market conditions and global economic environment, I would recommend a wait-and-see approach and not recommend a removal of the cooling measures.

Levels of Response Marking Scheme (LORMS)

Levels	Descriptor	Marks
L2	A well-developed balanced answer with economic analysis that thoroughly explains whether property cooling measures in Singapore should be removed, with reference to case material.	5-7
L1	Lacks balance: One-sided answer that rigourously explains EITHER why Singapore's property cooling measures should be removed OR why they shouldn't be removed. OR Lacks rigour: Two-sided answer that is not thoroughly explained OR merely lifting evidence from the passage but no clear link to the issues. OR Lacks reference to case material and the application to the issues.	1-4
E	Evaluative judgement and comments based on economic or contextual analysis. Answers are able to synthesise the arguments for and against and come to a stand.	1-3

2017 TJC Preliminary Examinations H2 Economics (9757) Paper 1

CSQ 2 Suggested Answers

(a)	With reference to Table 2, explain why the Greek government should be concerned about its economy. [4]
<p>As seen in Table 2, data indicates Greece suffering from negative economic growth (-0.2%), high unemployment rates (25%) and high public debt (177% of GDP) in 2015. With reference to a government's macroeconomic objectives and the trend from 2011 till 2015, these are causes of concern for the Greek government.</p> <p><u>Negative economic growth: [2m]</u> Greece has been experiencing negative rates of growth since 2011, with the exception of 2014. [1] This implies that national income has been falling, affecting purchasing power of consumers. This results in a reduction in willingness and ability of consumers to demand goods and services, adversely affecting material standards of living.</p> <p>OR</p> <p>It would also impact producers who may reduce the level of production as inventories start to accumulate. As such, producers may lay off workers as the demand for labour is derived from the demand for their products. This can be reflected in the high levels of unemployment in Greece.</p> <p><u>High unemployment rates: [2m]</u> Unemployment rates have fluctuated above 20% since 2012. [1] As citizens are unable to find or hold onto a job, this reduces both their material and non-material standard of living. As the unemployed no longer earn income, there is a sharp fall in their purchasing power, hence, their ability and thus level of consumption. This reduces their material standard of living.</p> <p>OR</p> <p>As unemployment rates are high, the expectation of finding a new job tends to be low, resulting in high levels of stress and negative emotions in those who are actively seeking employment – non-material standard of living are adversely affected.</p> <p>OR</p> <p>High unemployment rates may further tax government budget as large amount of resources are spent on unemployment benefits. This further worsens the high public debt in Greece.</p> <p><u>High public debt: [2m]</u> Greece has been suffering from high public debt of around 170% of their GDP. [1] This is a key constraint on government policy as the Greek government will be restricted in their employment of expansionary fiscal policy to boost the economy and push it out of a recessionary slump or to reduce demand-deficient unemployment.</p> <p>OR</p> <p>It will also restrict government expenditure on providing necessary welfare benefits to low-income households and those unemployed. This reduces the government's ability</p>	

	<p>to improve its citizens' standards of living, which should have been a key objective of any government.</p> <p><i>Any 2 points for a full 4 marks.</i></p>
(b)	<p>With reference to Extract 5, comment on how the measures demanded under the Greek bailout agreement might impact the Greek economy. [4]</p>
	<p>Based on Extract 5, Greece has been called upon by the troika to introduce “quasi-automatic spending cuts” in order to achieve their commitment of a “budget surplus of 1% in 2015, rising to 3.5% by 2018”. As such, Greece has been told that it needs to improve the sustainability of pension system, implement tax reforms as well as to liberalise the economy. In a nutshell, these requires the Greek government to cut down on spending and to increase it tax revenue. [1]</p> <p>This has a clear contractionary effect on the Greek economy as a reduction in pension payments, will result in a fall in aggregate demand (AD). This will also reduce the purchasing power of pensioners, reducing their consumption levels (C). Tax reforms include a removal of tax exemptions for big tourist islands, broadening of the tax base and the revision of taxes to better target the wealthy Greeks. These will bring about an increase in tax revenue, but will depress export revenue (X) since tourism levels will be affected given higher tax rates. Households and firms will also be affected, both experiencing higher tax rates, reducing disposable income as well as post-tax profits. Households will decrease their level of consumption (C) while firms, seeing that investments are less profitable, will reduce their level of investment (I). Given a fall in C, I and X, there will be a combined fall in AD. This fall in national income will further reduce income-induced consumption, resulting in a multiplied reduction in AD (reverse multiplier process).</p> <p><i>[1m for an explanation of any of the contractionary measure – negative impact.]</i></p> <p>As such, while the measures demanded under the Greek bailout may be aimed as achieving a budget surplus, the immediate impact is a contractionary one on the economy, further worsening the current economic growth of -0.2% as seen in Table 2, resulting in a significant cause of concern as demand-deficient unemployment may be exacerbated, further lowering standards of living in Greece. [1]</p> <p>This is acknowledge by Prime Minister Alexis Tsipras as he agreed that the measures are “recessionary”. However, he is hopeful as these measures are the better of two evils, the other being Grexit.</p> <p><i>[A Grexit situation may result in a collapse of confidence in the government and the Greek economy, further worsening the current situation. It will also mean a loss in bailout, resulting in the defaulting of Greece on its debts, which may lead to massive recessionary pressures in the Eurozone (contagion effect), adversely affecting Greece.]</i></p> <p>In committing to these measures and liberalising the labour market, it may aid in improving the confidence level of households and firms in the Greek economy, allowing for “inward investment... to flow”. Such inflow of capital will aid in revitalising the Greek economy given an increase in I which will increase AD. Stronger confidence in the economy and obtaining the bailout will also improve expectations of the economy, allowing for greater possible foreign direct investments and domestic investment by firms. [1m for positive impacts of measures]</p>

	<p>In the short run, measures demanded are recessionary, but they are in place to reduce the fundamental issue faced by Greece – high public debt.</p> <ul style="list-style-type: none"> •
(c)	<p>Discuss the possible considerations behind the Chinese government’s attempt to rebalance its economy. [8]</p>
	<p><i>Question interpretation:</i></p> <ul style="list-style-type: none"> • <i>What is meant by China’s attempt to “rebalance its economy”?</i> • <i>How will this impact China’s economy?</i> • <i>Given these impacts, what were possible considerations by the government – taking into account concerns by other economic agents (households & firms)</i> <p>As seen in Extract 6, China’s attempt to rebalance its economy is a “move towards an economy led by consumption and services, rather than one driven by exports and investment, in view of weak external climate and excess capacity”. In doing so, it is a deliberate shift away from its traditional drivers of growth, resulting in weaker growth, something that Chinese Premier Li Keqiang has accepted, “as long as enough new jobs were created”.</p> <p>In China’s rapid rise as an emerging market, a key thrust has always been its strong export demand. With abundance of labour and natural resources, China has comparative advantage in the trading of labour-intensive products and this drove its manufacturing sector to greater heights, especially coupled with a weak currency. The government’s willingness to support its export industries can’t be overlooked as China developed strong trade surpluses against most of its trading partners, most notably the United States of America. As export quantity (X) increases, this increases the aggregate demand for goods and services, boosting economic growth in China. Apart from strong export figures, China’s government was also active in attracting foreign direct investments into the country, as well as to improve government investments (G) internally, developing rural parts of the country to further increase economic capacity. Once again, this increases the investment (I) and government expenditure (G) components of aggregate demand, boosting economic growth in China. G, I and X combined to result in China “experiencing rapid growth for more than a decade”.</p> <p>However, with global instability as seen in major economic powers such as the Eurozone and USA, the Chinese government seems keen on reducing the country’s exposure to such volatility. USA was badly affected by the 2008-2009 Great Recession, which effectively crippled the world’s largest economy, adversely affecting global demand for exports. The Eurozone has to deal with Greece’s debt crisis (Extract 5) while ensuring that other weakening countries within the Eurozone continue to sustain. As these major economies look inwards to solve their own issues, it negatively affects China’s export figures, hence, a key consideration by the Chinese government would be to reduce China’s vulnerability to such external shocks, where China’s growth is not dependent on the rise and fall of its trading partners.</p> <p>Years of posting positive growth through increase government expenditure in rural areas has also results in major towns being constructed but these are left barren and unutilised. This is the case of China’s “ghost cities”, which reflects the excess capacity that was mentioned in Extract 6. It also represents government revenue that can be put to better use in improving infrastructure in key cities or between ports rather than to expand development in rural areas prematurely. As such, another key consideration by the Chinese government in their attempt to rebalance its economy is the excess capacity which reflects poor government budgeting.</p>

However, as China looks to create an economy “driven by consumption”, it has proven challenging, with expected growth of “6.3% and 6%” respectively in 2016 and 2017. This has been deemed as a “painful slowdown”, coming from the rapid double-digit growth previously driven by exports and investments. While consumption is a component of aggregate demand and maybe able to “support growth in the short run”, there are those who believe that “there is little in economic theory that emphasises the expenditure side of GDP as a driver of growth”. With the fall in key economic figures – industrial production and retail sales, this further reflects a possible mistake by the Chinese government. Such negative economic sentiments from the private sector may result in a loss of confidence in the economy, further retarding economic growth as firms reduce production and investment in the short run as production and investment projects are expected to be less profitable. Likewise for consumers, who may reduce consumption, seeing how China may be heading towards an economic slowdown. Such expectations can adversely affect the government’s plan of rebalancing and is a clear consideration that needs to be accounted for. As national income increases at a slower rate, so will the increase in income-induced consumption, throwing a spanner in the works for China as it aims to depend on consumption as a key driver of growth. A fall in production figures may also reflect slower employment rates, further reducing consumption levels in China.

All that said, the Chinese government would have weighed these various considerations in its move to rebalance the economy. While growth has slowed and is below its official target of “about 7%”, it is still positive. As mentioned by Catherine Yeung, this is not a meltdown but a merely a slowdown. Nonetheless, the government needs to stem the loss in confidence in the economy if it wishes to push for stronger domestic consumption figures. A rebalancing towards services will also require adequate support in terms of infrastructure as well as the training of labour. As the skillset required to thrive in the service sector is vastly different as compared to those in the manufacturing sector, deliberate action needs to be taken by the government to reflect a strong commitment to this rebalancing.

Levels of Response Marking Scheme (LORMS)

Levels	Descriptor	Marks
L2	A well-developed answer with consistent demonstration of economic rigour. Makes use of case materials and provides sufficient scope in analysis.	4-6
L1	Answers lack of economic rigour and/or have narrow scope in analysis. Capped at this level if there is no reference to case materials.	1-3
E	Evaluative judgement and comments with synthesis. Possibly on overall impact of perspectives, providing a valued opinion on the government’s rebalancing attempt.	1-2

(d) Using an AD/AS diagram, explain how a tight labour market may affect general price levels in Singapore. [4]

A tight labour market implies that the economy is close to full employment and recruitment becomes difficult. This is evident in Extract 7 where “growth in some

labour-intensive sectors such as food services may be weighed down by labour constraints". [1]

In order to increase production, firms will have to compete with each other for labour, thus bidding up wages. This results in an increase in cost of production for firms, reducing aggregate supply in Singapore. [1]

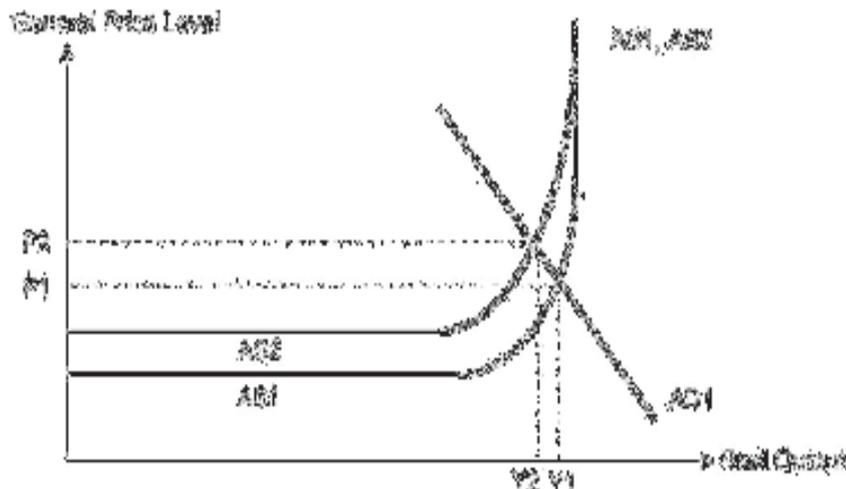


Figure 1: Impact of a tight labour market in Singapore

1m for an accurately drawn diagram.

Candidate can also explain it as a rightwards shift of AD along the upward sloping portion of AS.

A fall in aggregate supply is reflected as an upward shift of the AS curve from AS_1 to AS_2 , as seen in Figure 1. Assuming ceteris paribus, the fall in AS will then result in an increase in general price levels from P_1 to P_2 . [1]

(e) In view of the data presented, discuss to what extent Singapore’s central bank, the Monetary Authority of Singapore, might have to intervene in the market for Singapore dollars in order to achieve the government’s macroeconomic objectives. [10]

Question interpretation:

- Given the data presented in the case, what are the issues that may result in Singapore not achieving its macroeconomic objectives?
- How can the Singapore dollar be influenced in order to mitigate these issues?
- To what extent will MAS’s intervention be effective in mitigating these issues?
- What are alternative policies that can be implemented in order to achieve the government’s macroeconomic objectives?

A significant macroeconomic objective that seems to be adversely affected in Singapore would be its economic growth. As mentioned in both Extract 7 and 8, “Singapore’s economic prospects have softened” and “grew a modest 2 per cent in 2015, the weakest rate of growth since 2009”. Extract 7 explicitly lays out the various reasons for Singapore’s modest growth, citing reasons across various countries and sectors. In order to achieve stronger growth figures, MAS could provide certain adjustments to Singapore’s currency, possibly boosting export figures whilst reducing cost-push inflation in Singapore.

As a small and open economy that is export-oriented and import-reliant, Singapore is extremely vulnerable to external instabilities. As mentioned in Extract 7, global economy has been weaker than expected in the first half of 2015 and uneven growth is further expected across countries in the second half – “advanced economies are expected to see a gradual pick-up in growth, while the growth outlook of regional economies has generally softened.” These global powers have internal issues to handle, with the anticipation of US recover, Eurozone’s management of the Greek crisis as well China’s rebalancing. As the US, Eurozone and China’s economies are projected to have a modest pace of growth, Singapore’s export sector may face weakening demand. Key ASEAN economies are also adversely affected by these major economies, posting weaker growth, thus, further affecting Singapore’s exports. The combined weaker increase in demand for Singapore’s exports has an adverse impact on our aggregate demand and thus, economic growth. Apart from these, other factors also impact Singapore’s economic growth, such as sustained low oil prices as well as a tight labour market.

As Singapore faces both external and internal pressures, MAS’s timely adjustment of the Singapore dollar could aid with improving Singapore’s economic growth. It is vital to acknowledge that MAS’s objectives tend to revolve around maintaining inflationary pressures in Singapore. However, given the current unstable global economic climate, and weaker global growth, inflation seems to be a secondary concern relative to the weakening growth rates. In order to combat the weakened demand for our exports, MAS could engineer a depreciation of the Singapore dollar *link to (i), allowing our exports to gain price competitiveness as it will be relatively cheaper in foreign currencies. As such, this will help alleviate the softening in the demand for our exports, boosting aggregate demand (AD), thus, improving economic growth. This depreciation will also mean that imports are relatively more expensive in domestic currency, resulting in consumers switching to cheaper local alternatives, increasing consumption (C), further increasing AD and economic growth.

However, Extract 7 also makes it clear that external demand is picking up, and “externally-oriented sectors... are likely to support growth in Singapore economy in the second half of the year”. We are told that the “US economy recovered in the second quarter” and is “projected to grow at a modest pace”. The Eurozone economy is also “expected to improve in the second half of the year” while “stimulus measures implemented by the Chinese government are expected to contain downward pressures on the economy”. All these point towards a recovering external sector for Singapore, thus, a less significant impact on Singapore’s economic growth in the future. Therefore, any rash depreciation of the Singapore dollar may exacerbate inflationary pressures upon the improvement of export demand in the relevant sectors like “finance and insurance”, as well as “wholesale trade”.

Apart from possibly worsening demand-pull inflation in Singapore, the depreciation may also result in cost-push inflation as cost of imported inputs are more expensive in domestic currency. **Given that Singapore is already experiencing a tight labour market – “labour market expected to remain tight”, the depreciation would further worsen cost-push inflation, directly contradicting with MAS’s objective of reducing inflationary pressures in Singapore.**

Extract 7 and 8 both present a case of falling oil prices as a key reason for a dip in economic growth in Singapore. As oil prices fall, it “dampen growth in marine and offshore segment” as the demand for marine and offshore services is derived from the demand for oil. Given the low prices, firms that run oil-rigs will start to cut production as it is no longer profitable to drill for oil since drilling for oil results in greater cost of production than revenue. As it continues to dampen growth in the sector, it may result

in loss of jobs as firms cut employment and begin to retrench workers in order to reduce cost of production. As such, this results in a possible fall in national income, further dampening economic growth. In light of this situation, the depreciation of the Singapore dollar will actually further reduce the amount of profits earned by these firms since profits earned in Singapore dollar will translate to lower profits in foreign currency. Thus, MAS's action may adversely affect the marine and offshore industry.

Due to the multi-faceted issues that Singapore faces, there is a limit to the effectiveness of MAS's intervention via changes in the value of the Singapore dollar. On hindsight, instead of a depreciation, maintaining the value of the Singapore dollar, rather than a gradual and modest appreciation, may be sufficient to ease pressures for Singapore exports. Apart from that, there is a need for the Singapore government to consider alternative policies to further strengthen the domestic economy, reducing its vulnerability to external shocks (i.e. global financial market volatility – Extract 8). These policies need to be more targeted in order to influence the relevant sectors that are worse off, rather than a broad depreciation of the Singapore dollar which is clearly blunt and lacking in precision to specifically impact the correct sectors and to tackle the root cause. Pre-emptive policies may also be required, seeing how the recovery of global prospects is fragile. Sentiments in China, the Eurozone, US and ASEAN countries have yet to fully recover and may worsen given certain triggers such as a “sharper-than-expected correction in the real estate market” for China and possible failure of the Greek government to “adhere to the bailout terms”.

In conclusion, as Singapore braces itself for its “weakest rate of growth since 2009”, the situation is still not all bad as growth is still in the positive region. Given Singapore's unique nature of being a small and open economy, it is inevitable that it will be affected by global forces and the performance of major economic powers. That said, well-targeted policies to stimulate the domestic economy and to build resilience may fare better, rather than an aggressive MAS exchange rates policy. In this sense, the Singapore government has continued to provide GST vouchers to offset the pain of the slowing growth, increased skills retraining and upgrading efforts to increase productivity of labour, increasing their relevance and bargaining power, as well as to bring forward the construction of infrastructure in an attempt to increase government expenditure, boosting AD.

Levels of Response Marking Scheme (LORMS)

Levels	Descriptor	Marks
L2	A well-developed balanced answer with economic analysis that thoroughly explains the possible objective of the government, and thus the extent of intervention by MAS, with clear conceptual understanding, coupled with reference to case material.	5-7
L1	Lacks balance: One-sided answer that rigourously explains how MAS can intervene in order to achieve the objective of the government. OR Lacks rigour: Two-sided answer that is not thoroughly explained OR merely lifting evidence from the passage but no clear link to the issues. OR	1-4

		Lacks reference to case material and the application to the issues.		
	E	Evaluative judgement and comments based on economic or contextual analysis. Answers are able to synthesise the arguments for and against and come to a stand.	1-3	

2017 TJC Prelims H2 Economics (9757) – EQ1

1) Malaysia will begin imposing its tourism tax from Aug 1 this year, according to details published on the Royal Malaysian Customs Department's website. Rates start from RM2.50 per room each night at a non-rated accommodation to RM20 per room each night at a five-star accommodation.

Source: Channelnewsasia.com, 2017

- a) Explain how the imposition of the tax might affect consumers' expenditure and producers' revenue for different types of hotels in Malaysia. [10]
- b) Discuss the factors the Malaysian government might have considered before deciding to impose the tourism tax. [15]

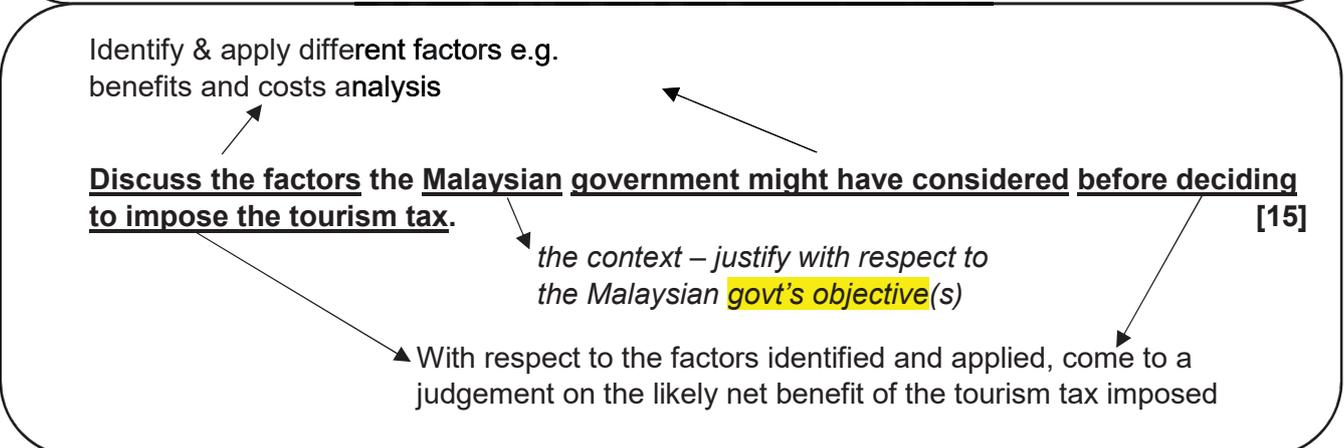
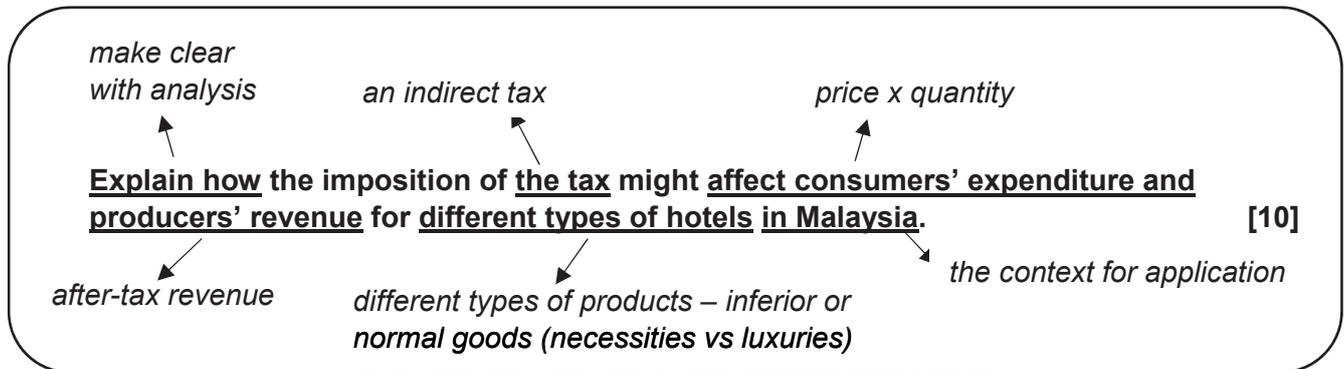
Question Interpretation

(a)

- What is the tourism tax in Malaysia?
- How is the consumers' expenditure / producers' revenue calculated?
- How about the after-tax revenue?
- How do the various effects differ across different types of hotels in Malaysia? What is/are the determining factors of the differences?

(b)

- What is/are the objectives of government?
- What are the likely objectives (benefits) for the Malaysian government?
- What are the likely unintended consequences (costs)?
- Overall, how is it likely that the Malaysian government decides to impose the tourism tax? What likely determinants are there for net benefits of the tax imposed?



(a) Schematic Plan

Introduction (*Set the context with relevant definitions*)

Define the tourism tax in Malaysia
Identify the different types of hotels in Malaysia

Body

Explain the impact of the tourism tax on different types of hotels in Malaysia
Explain with relevant diagram(s)

- Fall in supply, ceteris paribus, hence increase in price and fall in output
- The impact on consumers' expenditure depends on the PED which is likely to differ across different types of hotels.
- Define PED.
- Apply the determinants of PED → consumers' expenditure falls if demand is elastic, increase when demand is inelastic
- Producers' (after-tax) revenue fall. The more elastic demand the demand, the more difficult it is for the producers to shift the tax burden to the consumers hence the greater the fall in the producers' revenue
- While the extent of the impact in absolute terms differs according to the tax rates, it may be proportionately similar against the producers' revenue or the consumers' expenditure

Conclusion

While taxes is often the key source of revenue to finance government expenditure, they are also often designed as a policy instrument in managing an economy.

(b) Schematic Plan

Introduction:

Set the context and identify factors to apply and analyse

The tourism tax in discussion is a new tax imposed. The likely impact on the relevant parties of the society, directly or indirectly related to the hotel industry, need to be carefully considered before a final decision is made. There are likely larger impact on the economy as a whole too.

While the Malaysian government hopes to achieve some desired outcomes (potential benefits), it needs to consider the likely opportunity costs too, explicit or implicit.

Benefits

- Explain how **the state of the Malaysian economy** determine the government's decision to impose the tourism tax
- The Malaysia economy faces declining growth rate in recent years, government budget deficit and a weakening currency (1MDB debt crisis in 2014)
- The purpose of the tourism tax could be to raise revenue for general government spending, including investment in the tourism industry.
- The boost to tourist arrivals with the weaker currency that makes Malaysia a relatively cheaper destinations provides the platform for the government to impose the tourism tax for the necessary revenue.
- The tourism tax could help to counter the loss in gains from trade as a result of its undervalued currency due to the speculation against its currency.

Costs

- Explain the **unintended consequences** on different interest groups in the economy, and the economy at large using the AD/AS framework
- Fall in profitability of the hotel industry and the auxiliary industries (e.g. restaurants, transport, tourist attraction and leisure activities, recreational, cultural and sporting, tour agent, retail industries)
- Fall in export revenue with falling tourist arrivals, fall in AD and contractionary impact on the economy with rising unemployment and economic slowdown. Falling X leads to a weaker currency too.
- Likely distortionary impact on resource allocation with an under-allocation of resources to the hotel industry. However, this should be minimal as long as the government invests the revenue collected in the tourism sector
- Likely inflationary impact with an indirect tax imposed but likely negligible being not a general tax

Evaluative conclusion

(comment with respect to the factors raised above, some examples shown below - 3 points suffice)

- The governments must bear in mind the likely conflicts in objectives such as the policies can be calibrated more effectively to achieve the intended outcome without causing other problems
- Despite the risk of unemployment, the Malaysia government might go ahead with the tourism tax as the risk is **lower with the relatively weak currency**
- Given the relative **weak Malaysia currency**, the concern over the loss of tourist arrivals and the foreign exchange **earnings is likely minimal**
- To the extent that **the impact on the tourism sector is not expected** to result in a loss of foreign exchange earnings, **the government would impose the tourism tax.**
- Overall, the Malaysia government has to be careful not to dampen tourist arrivals with the tourism tax. The plan for investment in tourism infrastructure must follow through.
- In view of the likely supply-side policy on tourism infrastructure development using the tax revenue raised, the overall impact appeared positive in the long run and motivated the government to go ahead with the tourism tax
- Perhaps the most important/relevant decision to be made then is the way and the extent to which the tourism tax is to be imposed.

(a)

Suggested Answer	Comments
<p><u>Introduction</u> The tourism tax to be imposed in Malaysia refers to taxes imposed on tourists (or foreigners) staying at paid lodgings in Malaysia (the Malaysians are exempted from it completely). It is an indirect tax and the amount of tax imposed depends on the type of accommodation with a higher amount imposed on higher-rated hotels.</p> <p>A highly rated or a 5-star hotel in Malaysia such as Shangri-La Hotel offers a more comprehensive list of complementary facilities and services in addition to accommodation such as restaurants, room service, laundry, fitness centre, pool, spa, bar, wi-fi. Zero-rated hotels are those providing the bare minimum of basic accommodation service often called budget hotels or even backpacker's hostel.</p>	<p><i>Set the context with relevant definitions</i></p> <p><i>More examples - Grand Millennium, Shangri-La Hotel, Mandarin Oriental, Grand Hyatt, G Hotel Gurney</i></p>
<p><u>Body</u> The impact of the tourism tax on different types of hotels in Malaysia. Explain with relevant diagram(s)</p> <ul style="list-style-type: none">• Taxes are compulsory payments to the government by law• The tourism tax is an indirect tax• An indirect tax imposed leads to a fall in supply as the producers attempt to collect it from the consumers. Ceteris paribus, in general, the price (room rate) increases and the output (occupancy rate) falls• The impact on consumers' expenditure depends on the PED which is likely to differ across different types of hotels.• Define PED – a measure of the degree of responsiveness of quantity demanded to a change in price of the good itself, ceteris paribus.• Five-star hotels are likely to enjoy an inelastic demand for their accommodation services given that they are likely to have wealthy clientele whereby their proportion of income spent of the hotel service is minimal. Their regular customers are likely to include a large pool of business tourists where the service is more of a need and hence demand more inelastic• On the other hand, the non-rated hotel is likely to attract mainly less wealthy budget travellers hence facing a more elastic demand• Apply the determinants of PED → Consumers' expenditure increases if demand is inelastic since the fall in quantity bought is proportionately less than the increase in price paid. The reverse is true when demand is elastic.• While the consumers pay a higher price, the producers receive a lower price after tax. Producers' (after-tax) revenue fall. The more elastic demand the demand, the more difficult	<ul style="list-style-type: none">• <i>General impact of an indirect tax imposed</i>• <i>Largely depending on the price elasticity of demand</i>• <i>Differing price elasticity of demand faced by different types/classes of hotels</i>• <i>Apply PED to analyse the differing impact</i>

<p>it is for the producers to shift the tax burden to the consumers hence the greater the fall in the producers' revenue</p>	
<p><u>Conclusion</u></p> <ul style="list-style-type: none"> • While the Malaysia government collects more tax revenue, both consumers and producers are worse off in general. • All else equal, the greater the tax rates, the greater the impact on the consumers and producers. However, it is likely proportionately similar (against the producers' revenue or the consumers' expenditure). • While taxes is often the key source of revenue to finance government expenditure, they are often designed as a policy instrument in managing an economy too. 	<ul style="list-style-type: none"> • <i>Generally both consumers and producers are worse off.</i> • <i>The impact also depends on the tax rates</i> <p><i>Link to (b)</i></p>

(b)

Suggested Answer	Comments
<p><u>Introduction</u></p> <p>The tourism tax in discussion is a new tax imposed. The likely impact on the relevant parties of the society, directly or indirectly related to the hotel industry, need to be carefully considered before a final decision is made. There are likely larger impact on the economy as a whole too.</p> <p>While the Malaysian government hopes to achieve some desired outcomes (potential benefits), it needs to consider the likely opportunity costs too, explicit or implicit.</p>	<p><i>Set the context and identify factors to apply and analyse how the Malaysian government might have considered them before deciding to impose the tourism tax</i></p>
<p><u>Benefits</u></p> <ul style="list-style-type: none"> • The main purpose of the tourism tax could be to raise revenue for general government spending • Explain how the state of the Malaysian economy determine the government's decision to impose the tourism tax • The Malaysia economy faces declining growth rate in recent years, government budget deficit and a weakening currency (1MDB debt crisis in 2014) • The boost to tourist arrivals with the weaker currency that makes Malaysia a relatively cheaper destinations provides the platform for the government to impose the tourism tax for the necessary revenue. • The tourism tax could help to counter the loss in gains from trade as a result of its undervalued currency due to the speculation against its currency. 	<p><i>Explain how the state of the Malaysian economy determine the government's decision to impose the tourism tax</i></p>

<p><u>Costs</u></p> <ul style="list-style-type: none"> • Explain the unintended consequences on different interest groups in the economy, and the economy at large using the AD/AS framework • Fall in profitability of the hotel industry and the auxiliary industries (e.g. restaurants, transport, tourist attraction and leisure activities, recreational, cultural and sporting, tour agent, retail industries) • Fall in export revenue with falling tourist arrivals, fall in AD and contractionary impact on the economy with rising unemployment and economic slowdown. Falling X leads to a weaker currency too. • Likely distortionary impact on resource allocation with an under-allocation of resources to the hotel industry. However, this should be minimal as long as the government invests the revenue collected in the tourism sector • Likely inflationary impact with an indirect tax imposed but likely negligible being not a general tax 	<p><i>Explain the unintended consequences on firms, households and their welfare, and the economy at large</i></p>
<p><u>Evaluative conclusion</u></p> <ul style="list-style-type: none"> ○ The governments must bear in mind the likely conflicts in objectives such as the policies can be calibrated more effectively to achieve the intended outcome without causing other problems ○ Despite the risk of unemployment, the Malaysia government might go ahead with the tourism tax as the risk is lower with the relatively weak currency ○ Given the relative weak Malaysia currency, the concern over the loss of tourist arrivals and the foreign exchange earnings is likely minimal ○ To the extent that the impact on the tourism sector is not expected to result in a loss of foreign exchange earnings, the government would impose the tourism tax. ○ Overall, the Malaysia government has to be careful not to dampen tourist arrivals with the tourism tax. The plan for investment in tourism infrastructure must follow through. ○ In view of the likely supply-side policy on tourism infrastructure development using the tax revenue raised, the overall impact appeared positive in the long run and motivated the government to go ahead with the tourism tax ○ Perhaps the most important/relevant decision to be made then is the way and the extent to which the tourism tax is to be imposed. 	<p><i>Comment with respect to the factors raised above, some examples shown below - 3 points suffice</i></p>

(a) LORMS

	Knowledge, Application / Understanding and Analysis	
L3	<p>Answers that clearly explain how the possible impact of the Malaysia tourism tax on the consumers' expenditure and producers' revenue of the different types of hotels in the country, through applying the concept of price of elasticity demand and its relevant determinants, 'non-rated accommodation vs five-star accommodation'.</p> <p>Answers in this range are characterised by strong and well-structured paragraphs with relevant and complete diagrams.</p>	8 – 10 (9)
L2	<p>Insufficient rigour: Answers that insufficiently analyse how the Malaysia tourism tax might affect the consumers' expenditure and producers' revenue of the different types of hotels in the country, or contain some minor errors in the analysis.</p> <p>Lack of scope: Answers that do not analyse the impact on the producers' after-tax revenue capped at 5m.</p>	5 – 7 (6)
L1	<p>Answers may have some knowledge of the relevant concepts but with significant conceptual errors or a superficial description of how the Malaysia tourism tax might affect the consumers' expenditure and producers' revenue of the different types of hotels in the country.</p>	1 – 4 (3)

(b) LORMS

	Knowledge, Application / Understanding and Analysis	
L3	<p>Thorough analysis of assess the costs and benefits of the tourism tax, with application to the given context and with relevant examples.</p> <p>Answers in this level are characterised by well-structured paragraphs AND a logical flow of arguments.</p>	8 – 10 (9)
L2	<p>Answers that gives a descriptive explanation of the various costs and benefits of the tourism tax</p> <p><u>OR</u> Answers may be lop-sided in nature</p> <p><u>OR</u> Answers may demonstrate rigour and scope in analysis, BUT without adequate application to the Malaysia context</p> <p><u>OR</u> Answers that appear largely rehearsed in a generic manner.</p>	5 – 7 (6)
L1	<p>Answers may have some knowledge of the relevant costs and benefits of the tourism tax but with significant conceptual errors or are very descriptive.</p> <p><u>OR</u> Answers that are largely descriptive and have limited application of economic concepts.</p> <p><u>OR</u> Answers that contain serious and pervasive misconceptions.</p>	1 – 4 (3)
	Evaluation/Synthesis	

E3	<p>Conclusion / judgement based on a good synthesis or an evaluative appraisal that built around the factors considered by the Malaysian government in its decision on the tourism tax.</p> <p>Provides an insightful, and convincing evaluative comments supported by economic or contextual analysis, demonstrating good awareness of the Malaysia context.</p>	4 – 5
E2	<p>For evaluative statements made not analysed in line with the factors considered by the Malaysian government in its decision on the tourism tax or not supported by economic or contextual analysis with respect to the Malaysia context.</p>	2 - 3
E1	<p>For an unsupported or unexplained evaluative statement.</p>	1

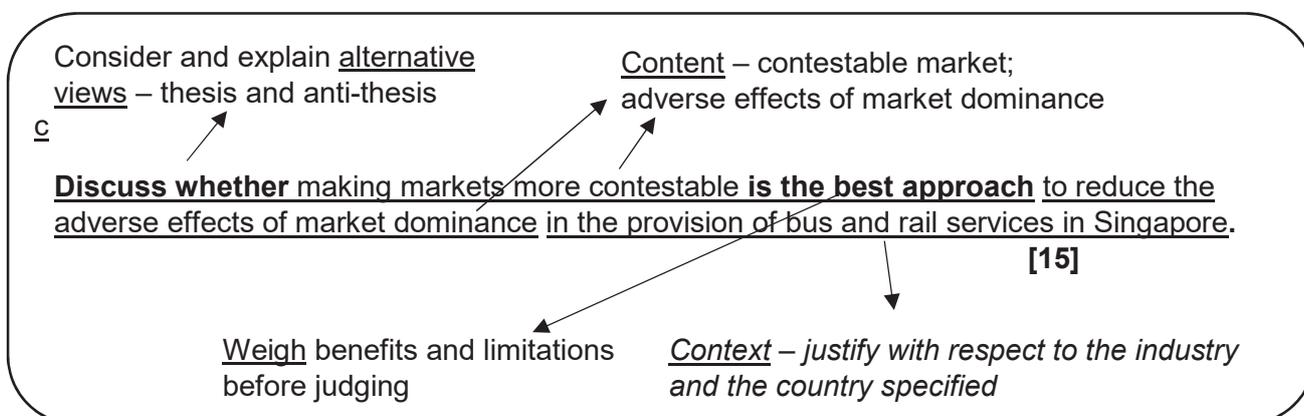
The operator of the upcoming Thomson-East Coast Line (TEL) will be the first to run a rail service under a contract similar to the model recently introduced for buses. The successful bidder will operate the new line for a fixed sum over a fixed period, while the Government collects fare revenue, the Land Transport Authority (LTA) said yesterday. This move aims to increase the contestability of the public transport market.

Adapted from The Straits Times, 2016

Discuss whether making markets more contestable is the best approach to reduce the adverse effects of market dominance in the provision of bus and rail services in Singapore.

[25]

Question Interpretation



Introduction

- Define market dominance.
- Define contestability.



The adverse effects of market dominance in the provision of bus and rail services in Singapore

- Limit output and increase price. But P is regulated by Public Transport Council (PTC).
- Still incumbent big firms e.g. SMRT and SBS can limit output to save on costs.
- X-inefficient due to complacency. Redundant factors of production (e.g. capital / labour being employed) → contributes to productive inefficiency.
- Service standards could be poor due to complacency.



Government making markets more contestable is the best approach to reduce the adverse effects of market dominance



It could help

- Contracting model: lowers barriers to entry as it takes away the high set up cost of running bus and rail services (give some examples). New firm(s) could enter the market at the next bid.
- Incumbent operator could lose rights to operate services after “fixed period” → loss of profits.
- Need to increase standards in order to win the next bid.
- Need to keep costs low in order to be the lowest bid. → forced to be productively efficient (define).

Possible limitations of the contestable market approach

- “Hit and run” strategy by firm that won the contract: firm can exit at lower costs → not compelled to stay in the market and up the service standards.
- Firm reducing costs to win the bid by price advantage could sacrifice service standards (e.g. fewer trains / poorer services).



There may be alternative approaches

- More effective regulation / stronger penalties.
Evaluation: this has shown that it is not working very well. Despite fines issued to operators in-lieu of breakdowns, problems continue.
- More operators, thereby increasing competition directly.
Evaluation: natural monopoly argument. Firms could shut down or require govt support (i.e. impact on budget).
- Encouraging other modes of public transport
 - Cycling (bike share / infrastructure)
 - Taxis (esp. Uber / grab)

Forces the incumbent firms to up their game and improve service standards. Falling dd / more price elastic also forces train and bus operators to reduce costs → promotes productive efficiency.

Evaluation: cycling unlikely to be close substitutes. Govt may have reservations about having too many taxis as it may contribute to congestion and affects the prices / wages of drivers.

[Other possible alternative methods include nationalising of the industry, subsidising certain groups of commuters]

Synthesis / Conclusion / Evaluation (supported weighing to answer question)

Recognise that there are theoretical benefits and limitations to contestability.

Alternative policies incur trade-offs (encouraging other modes of public transports), has shown they are ineffective (stricter regulation), or might be non-viable due to small size of market (natural monopoly).

Furthermore, firms as profit maximisers over time, are likely to want to stay in the market. Hence, less likelihood of hit and runs. It might be a risk, albeit a small one that govt has to take when awarding contract. Limiting the period of the contract may be a solution.

Suggested Answer	Comments
<p><u>Introduction</u></p> <p>Market dominance typically often occurs when there are high entry barriers resulting in one or a few firms dominating the industry/market with large market share such as their strong market power enable them to create artificial scarcity to jack up prices for higher profits. A market is said to be contestable when incumbent firms face relatively high risk of potential rivals in the market as a result of lack of high entry barriers or where the existence of legal barriers are not within the firms' control. To pre-empt the ills of market dominance, the government could make markets more contestable. This essay aims to discuss if such is the best approach to reduce the adverse effects of market dominance.</p>	<p><i>Set the context in relation to the question</i></p>
<p><u>Adverse effects of market dominance in context of question.</u></p> <p>Typical adverse effects of market dominance includes the observation where the firm could limit output and increase price. As shown in Fig. 1, a firm that dominates the market faces a relatively price inelastic demand curve as there are few or no substitute to its goods or services. As a profit maximiser, it produces at output Q_0, where the marginal cost (MC) is equal to the marginal revenue (MR). This is because at output levels lower than Q_0, the firm can gain more revenue than costs, whereas at output levels higher than Q_1, the firm incurs more costs than revenue. At the Q_0, the firm can charge price P_0, which is higher than the MC. This means that at the marginal level of output, the society values the good more than the cost of producing it. Society's welfare is hence not maximised.</p> <p>However in Singapore, bus and train fares, are regulated by the Public Transport Council. Hence, the dominant firms – SMRT and SBS – are unlikely to adversely affect commuters by increasing prices. That said, they could choose to compromise on the service output by increasing the interval between each bus or rail. This could be done to reduce the operating cost to maintain their profits.</p>	<p><i>Explain the <u>adverse effects of market dominance in the provision of bus and rail services in Singapore</u></i></p> <p><i>Theoretical adverse effects</i></p> <p><i>Recognise the role of PTC in the contest of question</i></p>

<p>The graph plots Average bus/train fare on the vertical axis and Output of bus/rail services on the horizontal axis. Three curves are shown: Marginal Cost (MC), Marginal Revenue (MR), and Average Revenue (AR). The MC curve is upward-sloping and convex. The MR curve is downward-sloping and steeper than the AR curve. The AR curve is downward-sloping and linear. The intersection of MR and MC determines the profit-maximizing quantity, Q0. A vertical dashed line from Q0 on the x-axis meets the AR curve at price P0 on the y-axis. A horizontal dashed line from P0 on the y-axis meets the AR curve at Q0 on the x-axis. A horizontal dashed line from C on the y-axis meets the MC curve at Q0 on the x-axis.</p> <p style="text-align: center;">Fig. 1</p> <p>As dominant firms that are protected by high barriers to entry (e.g. government licensing and high set up costs), SMRT and SBS could maintain high levels of supernormal profits over the long run, without fear of these being eroded by new entrants. The firms could hence become complacent and employ more factors of production (e.g. machinery, labour) than they really need. This creates the problem of x-inefficiency, which leads on to productive inefficiency. The issue of complacency, together with the possibility of reducing output, could lead to falling service standards.</p>	<p><i>Highlight issues with service standards</i></p> <p><i>X – inefficiency.</i></p>
<p><u>Evaluating “contestability”</u></p> <p>The contracting model lowers the barriers to entry and exit in the bus and rail services as set up costs are absorbed by the government. Infrastructural development and vehicles are owned by the government. The operators are only responsible for running the bus and rail services. Therefore, more firms would find it viable to enter the market. The market is also made more contestable as the incumbent firms are not assured of the long term supernormal profits. At the end of each contract term, the government would open up bidding for the next contract. Should the incumbent firm be found unsuitable due to high prices or poor service standards, the firm might not be awarded the next contract. Hence, there is a high threat to its future market share and hence profits while the firm is still dominating the market.</p> <p>In this way, the firm is “kept on its toes” while it is dominating the market. It will have to increase or uphold service standards in order to win the next bid. As the firm’s revenue is now a flat fee awarded by the government, it is incentivised to keep its operating costs low in order to maintain its profits. This could potentially bring about productive efficiency, overcoming the x-inefficiencies associated with market dominance.</p>	<p><i>Explain how government making markets more contestable could reduce the adverse effects of market dominance</i></p>

<p>However, it is also possible that making markets more contestable may not overcome the adverse effects of market dominance. A firm that has won the contract may decide not to continue bidding for the next contract. This could be due to the firm finding it not profitable to be operating bus or rail services in Singapore in the future. As such, during the term of that contract, the firm might deliver a poor service standard. Furthermore, in its effort to protect its profit margin, a firm may cut back on services and the employment of other factors of production in order to cut costs. Again, this may be to the detriment of service standards.</p>	<p><i>Possible limitations of making markets more contestable.</i></p>
<p><u>Evaluating alternative approaches</u></p> <p>Making markets more contestable is not the only way to reduce adverse effects of market dominance. One direct way is to have more effective regulation and stronger penalties for incumbent dominant firms. For the buses and rail services in Singapore, the government has typically resorted to issuing fines to the firms if they do not meet service standards. Unfortunately, the regulation and penalties do not seem to be effective as service disruption of MRT services continue.</p> <p>Another option may be to directly increase competition directly by having more operators operating on more bus and rail lines. This allows commuters to have more choice over the route of travel and with which company would they want to travel with. The introduction of competition could see a fall in the demand, and an increase in the price elasticity of demand for each firm's service. Unfortunately, Singapore has a small market and the scope for building multiple transport lines is limited. If the market is shared out across more firms, demand may fall so low for each firm that none of the firms is able to earn at least normal profit at any level of output.</p> <p>Furthermore, the bus and rail industry is likely to have substantial internal economies of scale. With high set up costs and relatively low additional cost of providing services to an additional commuter, resources might be better utilised with big firms that cater to sizeable segments of the markets. At higher levels of output, average cost of each firm dominating the market is therefore lower.</p> <p>Thirdly, the rise of bike sharing and private hire vehicles (e.g. Uber and Grab) has brought about higher competition for public transport such as busses and rails. Competition within the bike sharing and taxi industry could cause the price of these alternative modes of transports to be lowered. These factors could cause a fall in the revenue of these public transport. In response, the bus and rail firms might be considering ways to improve their service standards, thereby overcoming the adverse effects of market dominance.</p> <p>However, cycling are unlikely to be close substitutes for busses and rails. Government may also have reservations about having too many private hire cars in the industry as it is currently seen as a "poor use of human capital" and also erodes the revenue of taxi driver. Having too many private hire cars and taxis in the streets may also</p>	<p><i>Explain other or alternative approaches that may be better or complementary</i></p>

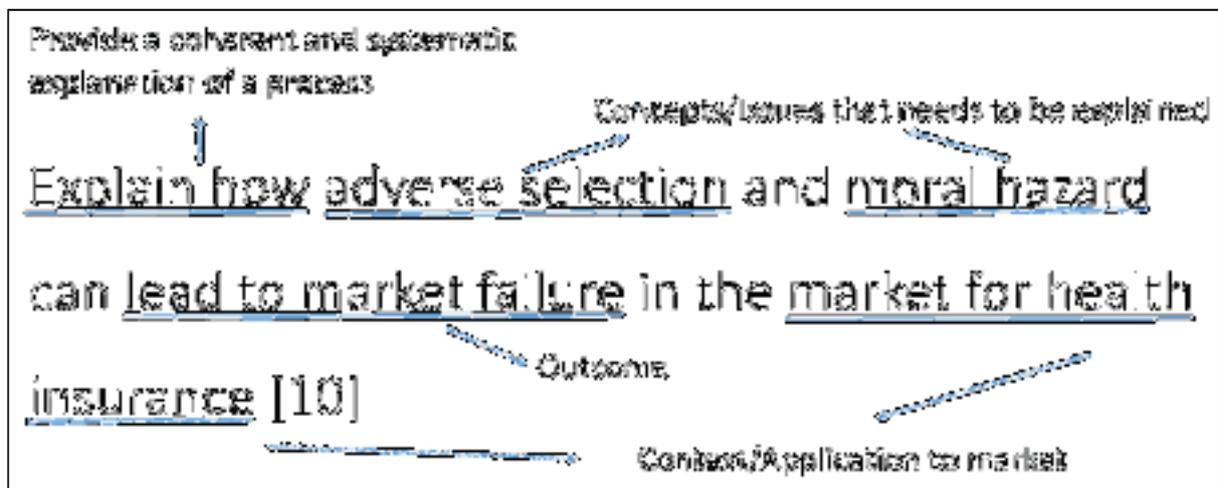
<p>tread on another pain point in the government's microeconomic policy making – reducing traffic congestion.</p>	
<p><u>Synthesis / Conclusion / Evaluation</u></p> <p>Making markets more contestable is not the only solution to reduce the adverse effects of market dominance. As argued in the essay, making the bus and rail industry more contestable also does not guarantee that service standards would improve. However, we could see that alternative policies incur significant policy trade-offs (as in the encouragement of cycling and private hire industry), have been proven ineffective (as in the current mode of penalising poor service), and are non-viable due to the small size of Singapore's market (as seen in the option of increasing competition).</p> <p>Furthermore, firms do not just aim to maximise profit over one time period. It is not illogical to assume that most operators would want to bid to extend their contracts to reap another block of revenue. Hence there is a lower likelihood of "hit-and-run" companies offering poor services after winning a bid. To better keep operators on their toes, limiting the length of the contract could be a solution, but this has to be balanced against the costs of disruptions due to frequent changes, or from the paperwork for the bidding that could come with it.</p> <p>Overall, for now, making the market more contestable seems to be the best option unexplored when it comes to reducing the effects of market dominance in the rail and bus industry of Singapore.</p>	<p><i>Weighing pros and cons.</i></p> <p><i>Lending more weight to preferred option.</i></p> <p><i>Proposing refinement to further strengthen chosen option.</i></p> <p><i>Judgement.</i></p>

Level	Knowledge, Comprehension, Analysis and Application	Marks
L3	<p>For answers that exhibit balanced and rigorous analysis of the adverse effects of market dominance and how making the market contestable helps to reduce it plus 2 other possible alternative approaches with their limitations, using economic framework and with reference to the preamble.</p> <p>Answers that only include limitations of just one approach are capped at a maximum of 17m</p> <p>Answers that do not include limitations at all are capped at a maximum of 15m</p>	15 – 20 (18)
L2	<p>Answers that have incomplete or descriptive explanation of how making the market contestable helps to reduce the adverse effects of market dominance such as failing to consider its limitations OR possible alternative approaches (Lop sided answers)</p> <p>OR Answers that do not demonstrate use of an economic framework to organise and structure the essay.</p>	9 – 14 (12)

	OR Answers that have insufficient depth and/or rigour in the explanation of economic concepts, relationships and theory.	
L1	Descriptive and superficial answers.	1 – 8 (6)
Level	Evaluation, Synthesis	Marks
E3	Conclusion / judgement on whether making the market contestable in helping to reduce the adverse effects is the best approach derived through a clear synthesising process and framework using real world knowledge.	4 - 5
E2	Attempted synthesis on whether making the market contestable in helping to reduce the adverse effects is the best approach. There are however some logical flaws and inaccuracies in the synthesising process.	2 - 3
E1	For an answer that gives an unsupported statement on whether making the market contestable in helping to reduce the adverse effects is the best approach.	1

- 3) MediShield Life, a basic health insurance scheme, covers all Singapore Citizens and Permanent Residents, even those with pre-existing conditions. Health insurance is insurance that covers the whole or a part of the risk of a person incurring medical expenses, spreading the risk over a large number of persons. Compulsory enrolment addresses the issue of adverse selection while features such as maximum claim limit, deductible and co-payment limit the extent of moral hazard.
- Explain how adverse selection and moral hazard can lead to market failure in the market for health insurance. [10]
 - Assess the extent to which adverse selection and moral hazard, rather than any other potential market failure, is the major cause of government intervention in the market for health insurance in Singapore. [15]

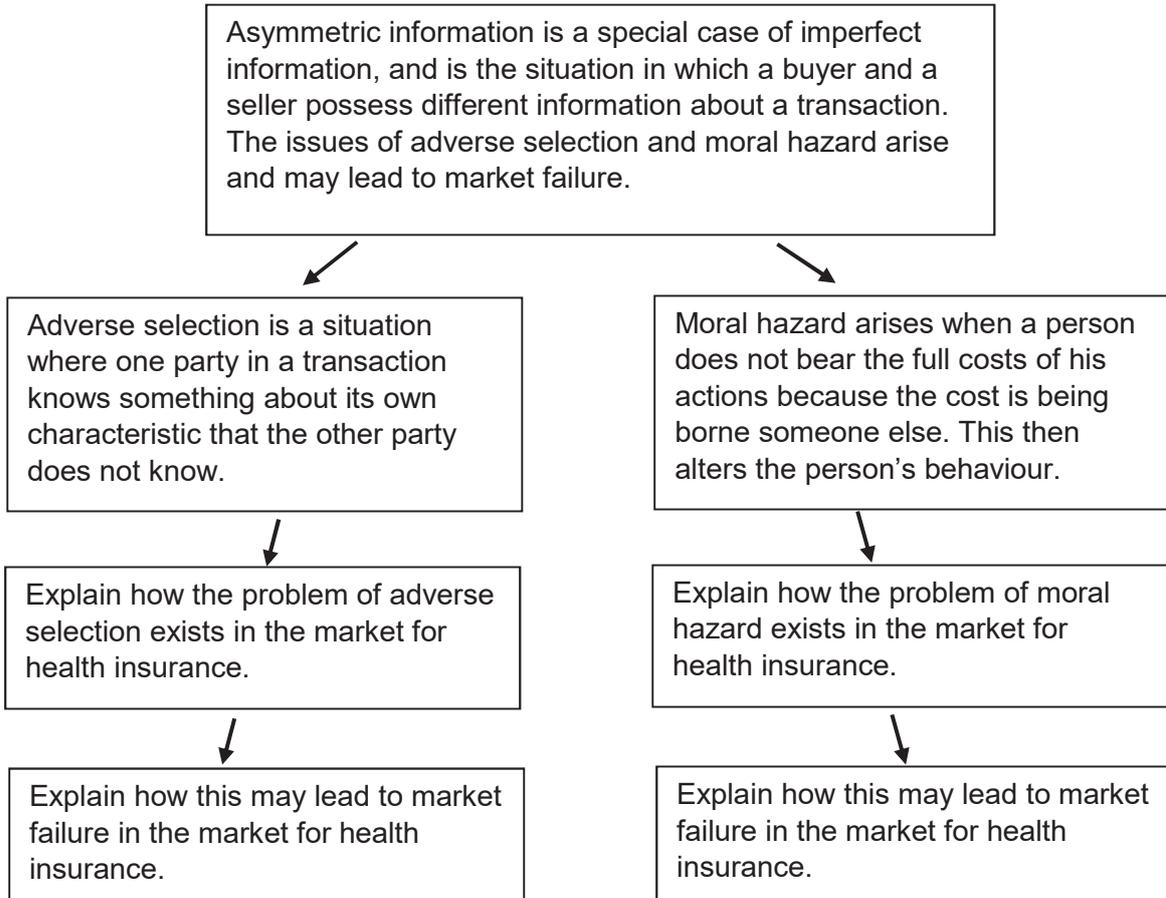
Question Dissection



Question Interpretation

- What are adverse selection and moral hazard?
- How do the issues of adverse selection and moral hazard arise in the market for health insurance?
- How do the issues of adverse selection and moral hazard result in market failure in the market for health insurance?

Schematic Plan



Introduction

Asymmetric information is a special case of imperfect information, and is the situation in which a buyer and a seller possess different information about a transaction. Specifically, it occurs when a buyer or seller enters an exchange with another party who has more information. Similar to markets with imperfect information, asymmetric information interferes with the efficient function of a market and makes it extremely difficult to make accurate decisions when conducting transactions. This essay part examines the problems of asymmetric information, in particular, adverse selection and moral hazard, and how they lead to market failure.

Body 1: Adverse selection

Adverse selection is a situation where one party in a transaction knows something about its own characteristic that the other party does not know. Adverse selection is often referred to as a hidden information problem in a market, where for example sellers may know more about a product than a customer in product markets. In other words, adverse selection is the process by which “undesirable” members of a population of buyers or sellers are more likely to participate in a voluntary exchange.

People who buy insurance usually know much more about their general health than any insurance company can hope to know, even if it insists on medical examinations. As a result, adverse selection arises. If health insurance rates are set at the same level for everyone, then health insurance is a better deal for those who are unhealthy than for those who are healthy and likely never to have a claim. Because unhealthy people are more likely to want insurance, the proportion of unhealthy people in the pool of insured people increases. This forces the price of insurance to rise, and more healthy people, aware of their low risks, elect not to be insured. This further increases the proportion of unhealthy people among the insured, which forces the price of insurance up more. This process continues until nearly all the people who want to buy insurance are unhealthy to a certain extent. At that point, selling insurance becomes unprofitable so the insurance market collapses, resulting in what economists call a ‘missing market’. Even though health insurance can generate much welfare for society, the absence of such a good means that total market failure has occurred.

Body 2: Moral Hazard

Another problem associated with asymmetric information is the problem moral hazard, which arises when a person does not bear the full costs of his actions because the cost is being borne someone else. The person therefore has a tendency to engage in behaviours which he otherwise would not have engaged in, thus raising the probability of an adverse outcome which is detrimental to society.

Moral hazard arises in health insurance as the incentive to lead a healthy lifestyle is reduced when the medical bills of the insured is fully covered by the insurer. Also the insured is likely demand a higher quantity and quality of healthcare than if he was uninsured as he does not have to incur any out-of-pocket payments for such treatments. Such behaviour inevitably raises the cost and lowers the profits for insurance companies. In addition, health insurance companies cannot ascertain which of its potential clients will engage in such adverse behaviours and the extent that they will engage in. If they could, insurers would charge higher premiums for those who are more susceptible to moral hazard. In contrast, buyers of insurance will definitely know their own tendency for moral hazard. Thus insurance policies tend to attract people who are more susceptible to moral hazard, which in the long run could lead to escalating premiums and potentially missing markets and total market failure, which are problems that are similar to those associated with adverse selection.

Conclusion

The next part of the essay examines whether the issues of adverse selection and moral hazard justify government intervention in the market for health insurance in Singapore

Level	Knowledge, Comprehension, Analysis and Application	Marks
L3	For answers that exhibit rigorous and clear explanation about possible reasons why adverse selection and moral hazard can lead to market failure with application to the health insurance market.	8 – 10 (9)
L2	Answers that have insufficient economic rigour in explaining why adverse selection and moral hazard can lead to market failure with application to the health insurance market. <i>Theoretical explanation of moral hazard and adverse selection with minimal application to the health insurance market will be capped at 5 marks.</i>	5 – 7 (6)
L1	Descriptive and superficial answers that mainly describes how adverse selection and moral hazard can lead to market failure. <i>Answers with no application to the health insurance market will be capped at 4 marks.</i>	1 – 4 (3)

- b) Assess the extent to which adverse selection and moral hazard, rather than any other potential market failure, is the major cause of government intervention in the market for health insurance in Singapore. [15]

Question Dissection

Take a judgement and justify how far you agree or disagree

Thesis points

Assess the extent to which adverse selection and moral hazard, rather than any other potential market failure, is the major cause of government intervention in the market for health insurance in Singapore [15]

Anti-thesis points

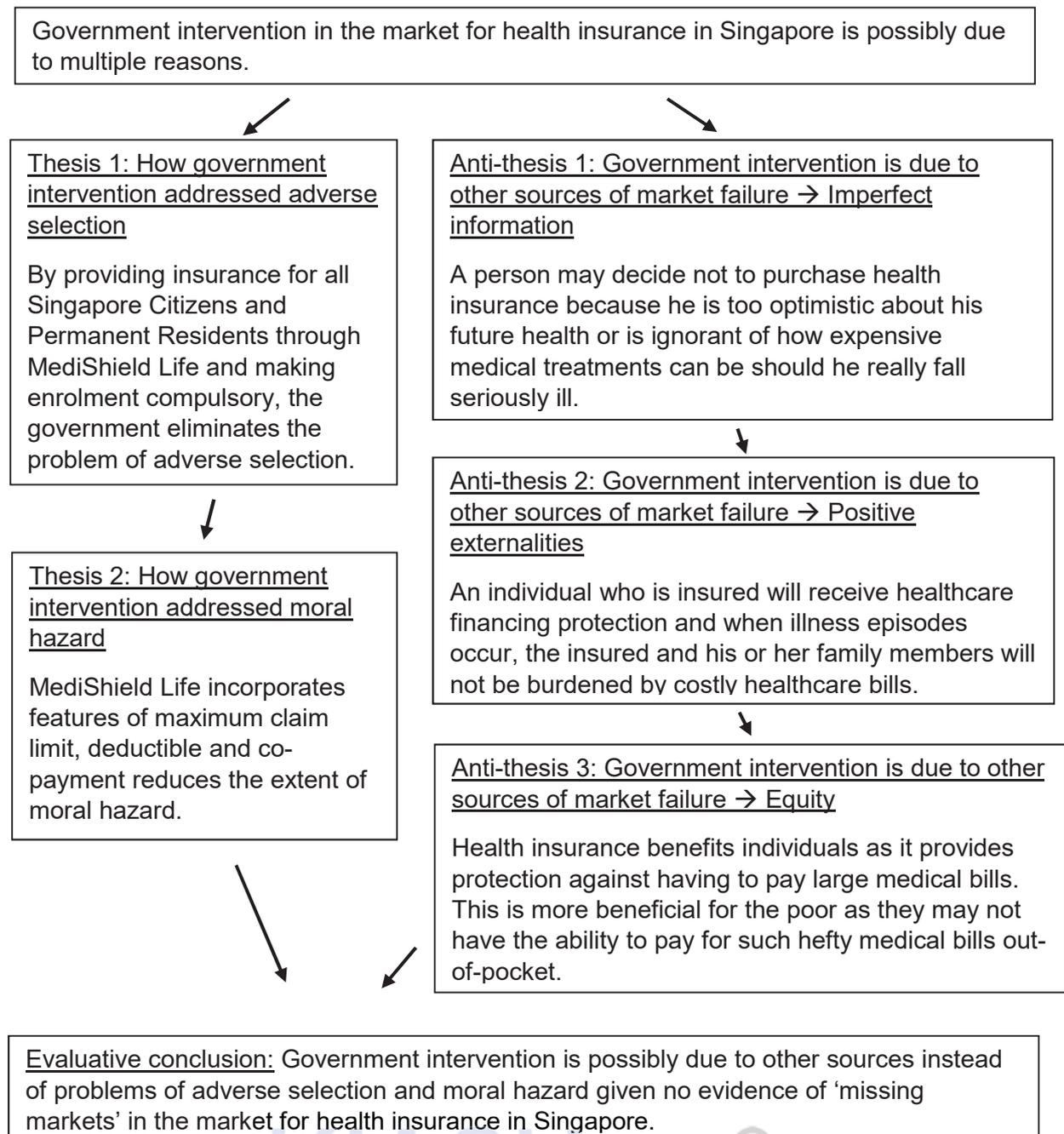
Explain why the gov't intervenes

Context/Application in market

Question Interpretation

- How does the government intervene in the market for health insurance in Singapore to deal with adverse selection and moral hazard?
- What are other reasons for government intervention in the market for health insurance in Singapore?
- To what extent government intervention in the market for health insurance in Singapore is due to adverse selection and moral hazard?

Schematic Plan



Introduction

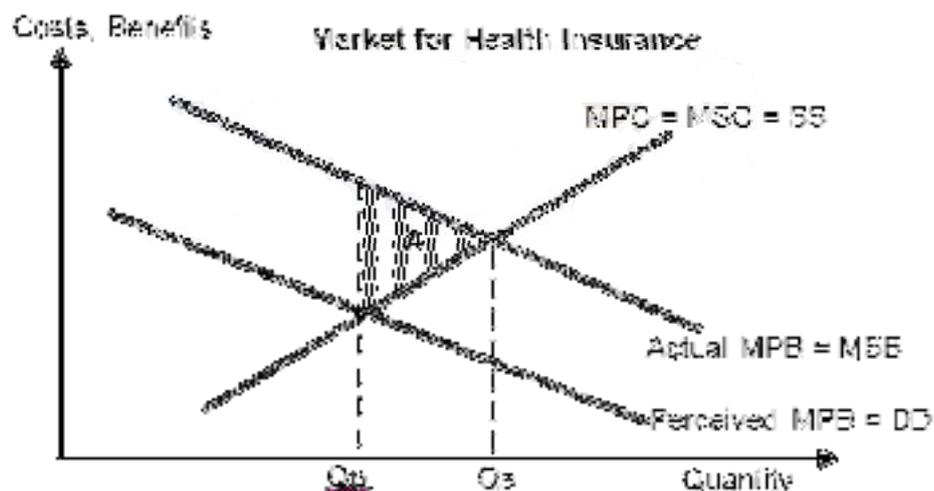
As explained in part a, the issues of adverse selection and moral hazard could result in total market failure in the market for health insurance. This suggests a need for government intervention in the market for health insurance in Singapore. This essay part first examines the method the Singapore government has intervened in the market for health insurance and how it addresses the issues of moral hazard and adverse selection before suggesting other potential sources of market failure in the market for health insurance that could be the causes of government intervention.

Body 1: Thesis – How Singapore government intervention addresses the issues of moral hazard and adverse selection

By providing insurance for all Singapore Citizens and Permanent Residents through MediShield Life and making enrolment compulsory, the government eliminates the problem of adverse selection. Higher-risk individuals are unable to self-select and enrol in insurance schemes and lower-risk individuals are also mandated to remain in the scheme. MediShield Life incorporates features of maximum claim limit, deductible and co-payment. A maximum claim limit prevents exploitation of the scheme through incurring exceptionally large medical bills. A deductible is the amount an individual has to pay out-of-pocket before the insurance kicks in. It reduces the extent of moral hazard for less costly small illness episodes but once the insured is aware that his or her medical bill has exceeded the stipulated deductible amount, it is totally ineffective in addressing the issue of moral hazard. A co-payment is a percentage of the total medical an insured has to pay out-of-pocket and this ensures the marginal cost of consuming healthcare services is not zero. While mechanisms of maximum claim limit, deductible and co-payment reduce the extent of moral hazard, it does not totally eliminate the issue.

Body 2: Anti-thesis – Other reasons for intervention: Imperfect information

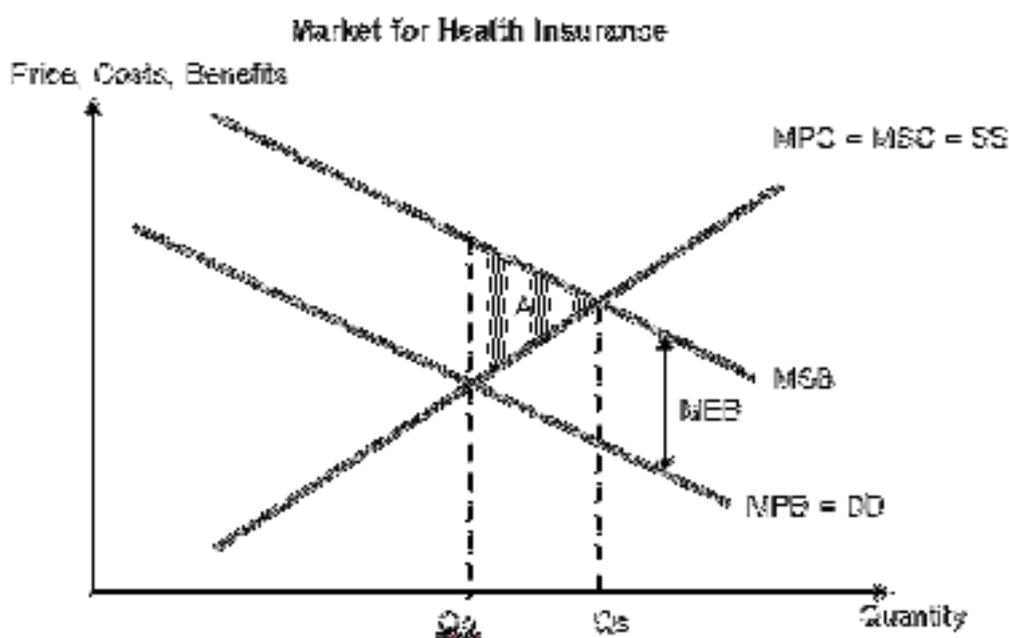
There are other reasons that explain government intervention in the market for health insurance in Singapore. Firstly there could be imperfect information about the benefits of health insurance. In such a scenario, health insurance will be under-consumed if left to the free market because some individuals are unable to factor in the full private benefits of consumption. In other words, the perceived marginal private benefit is less than the actual marginal private benefit. A person may decide not to purchase health insurance because he is too optimistic about his future health or is ignorant of how expensive medical treatments can be should he really fall seriously ill.



In the above, the market demand DD is the perceived MPB. However the actual MPB, which is also the MSB, lies above the perceived MPB. The private outcome is Q_p where perceived $MPB = MPC$, whereas the social outcome is Q_s where $MSB = MSC$. Between Q_p and Q_s , as $MSB > MSC$, the loss in potential welfare of area A (deadweight loss) can be recovered if output were raised from Q_p to Q_s . Since $Q_p < Q_s$, the good is under consumed. This will then warrant government in the market for health insurance in Singapore perhaps in the form of creating awareness and education campaigns.

Body 3: Anti-thesis – Other reasons for intervention: Positive externalities from consumption

Secondly, positive externalities can arise from consumption from health insurance. Positive externalities refer to the benefits enjoyed by third parties from the consumption or production of a good. An individual who is insured will receive healthcare financing protection and when illness episodes occur, the insured and his or her family members will not be burdened by costly healthcare bills.



Marginal External Benefits (MEB) is the additional benefits enjoyed by third parties from the consumption of health insurance. When there are positive externalities, the full benefit to society includes both the private and external benefits. Marginal Social Benefit is therefore the sum of both Marginal Private Benefits and Marginal External Benefits. In the above figure, positive externalities results in MSB exceeding MPB by the amount equal to MEB . Assuming that there are no negative externalities, the market supply curve SS , the MPC and the MSC are identical. Without government intervention, the private equilibrium is at output Q_p where $MPB = MPC$. The social equilibrium is however at output Q_s , where $MSB = MSC$. Between Q_p and Q_s , as $MSB > MSC$, the loss in potential welfare of area A can be recovered if output were raised from Q_p to Q_s . Since $Q_p < Q_s$, health insurance is said to be under-consumed. This will then warrant government in the market for health insurance in Singapore perhaps in the form of providing subsidies for consumption of health insurance.

Body 4: Anti-thesis - Other reasons for intervention: Equity

Equity refers to an outcome where society's welfare is distributed fairly and evenly. When income and wealth are distributed across households in a very unequal manner, the rich would

be consuming the majority of the society's resources, and often in a very wasteful manner, while the poor would end up with not just unfulfilled wants, but also unfulfilled needs. If some of the consumption can be reallocated from the rich to the poor, then the poor would definitely be made much better off while the welfare of the rich may only fall marginally if at all. Seen in this light, a society with a very uneven distribution of income and wealth must be in a situation where total social welfare is lower than what is possible. Thus income and wealth inequality can be seen as a source of market failure.

Health insurance benefits individuals as it provides protection against having to pay large medical bills. This is even more beneficial for the poor as they may not have the ability to pay for such hefty medical bills out-of-pocket. Singapore government intervening in the provision of basic health insurance can be also be deemed as benefiting the poor more than the rich as the rich will likely have existing insurance coverage. Furthermore, taking into consideration the possible waiver of premiums for the poor, there results in some form of redistribution of income.

Evaluative Conclusion

The issues of adverse selection and moral hazard can potentially lead to total market failure of a missing market in the market for health insurance. In reality, the occurrence of it is however far and few. Furthermore, the existence a thriving private health insurance market in Singapore supports the view that the likelihood of a total market failure is perpetually zero, thus the issues of adverse selection and moral hazard clearly are not the major cause of government intervention in the market for health insurance.

As for imperfect information about the benefits of health insurance, the extent of imperfect information differs from individual to individual. Offering compulsory basic health insurance in the form of MediShield while does not address the root cause, mandatory enrolment in the scheme ensures an increase in consumption of health insurance, albeit basic coverage. A more targeted method of government intervention could be through awareness campaigns aimed at the less educated.

As for the case for intervention due to positive externalities arising from consumption from health insurance, the likelihood of it being the main reason for government intervention depends on the extent of MEB. Should the extent of MEB be small, perhaps the government will not intervene in the market. Given that most Singaporeans have a compulsory medical savings account in the form of Medisave, the positive externalities arising from consumption from health insurance is arguably small.

Given growing income inequality in Singapore, perhaps ensuring equity is the major cause of government intervention **for the market for health insurance in Singapore**. Alternatively, non-economic reasons such as **gaining political popularity given growing concerns over the cost of healthcare in Singapore could part explain government intervention for the market for health insurance in Singapore**.

Level	Knowledge, Comprehension, Analysis and Application	Marks
L3	For answers that exhibit <u>rigorous</u> explanation of how Singapore government intervention addresses the issues of moral hazard and adverse selection and the other reasons for government intervention in the health insurance market in Singapore. Answers are <u>well organised</u> , use <u>appropriate economic diagrams</u> and include <u>application to Singapore's context</u> in analysis	8 – 10 (9)

L2	<p>Answers which do not rigorously explain how Singapore government intervention addresses the issues of moral hazard and adverse selection and the other reasons for government intervention in the health insurance market in Singapore.</p> <p>OR</p> <p>Answers which rigorously explain how Singapore government intervention addresses the issues of moral hazard and adverse selection but inadequately addresses the other reasons for government intervention in the health insurance market in Singapore.</p> <p>OR</p> <p>Answers which rigorously explain the other reasons for government intervention in the health insurance market in Singapore but does not explain how Singapore government intervention addresses the issues of moral hazard and adverse selection.</p> <p><i>An answer which has no application to Singapore's context will be capped at 7 marks (excluding evaluation marks).</i></p>	5 – 7 (6)
L1	Descriptive and superficial answers that mainly states the reasons for government intervention in the health insurance market in Singapore.	1 – 4 (3)
Level	Evaluation, Synthesis	Marks
E3	Conclusion / judgement on which is the major cause of government intervention in the health insurance market in Singapore based on criteria. (E.g. Elimination, Priorities of the government)	4 - 5
E2	Attempted judgement on which is the major cause of government intervention in the health insurance market in Singapore based on criteria. (E.g. Elimination, Priorities of the government). There are however some logical flaws and inaccuracies.	2 - 3
E1	For an answer that gives a statement with limited justification on which is the major cause of government intervention in the health insurance market in Singapore.	1

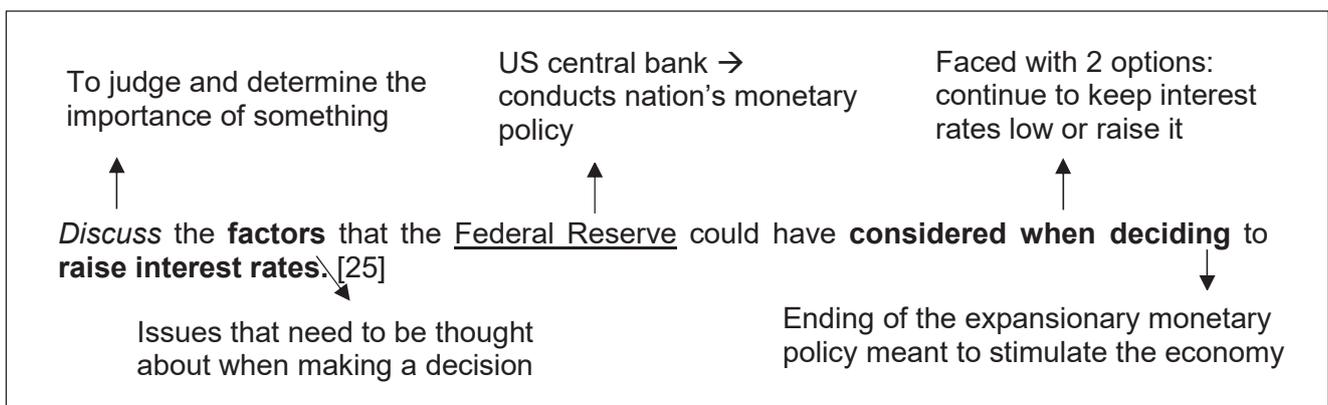
2017 H2 Prelims EQ4 Suggested Answer

The Federal Reserve raised interest rates on Wednesday, ending an extraordinary period of seven years of government intervention in the financial markets that started at the height of the recession. However, some have expressed concern about the move, urging the Fed to “avoid making a mistake” by raising interest rates.

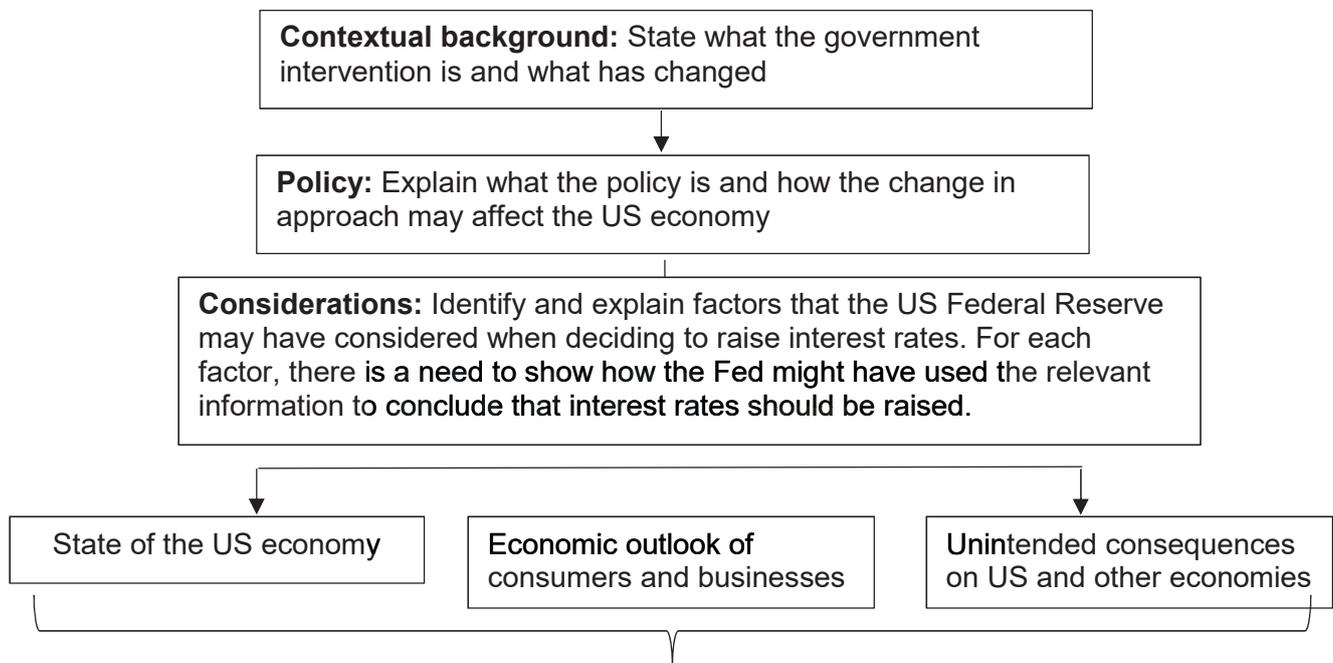
Source: adapted from The Guardian, 16 December 2015

Discuss the factors that the Federal Reserve could have considered when deciding to raise interest rates. [25]

Question Dissection



Schematic Plan



Evaluative conclusion

- Explain which of the considerations likely played the greatest role in influencing the Fed’s decision and justify why
- Consider if the most important/relevant decision to be made is whether to raise interest rates or rather the pace or extent to which interest rates are raised

Suggested Answer	Comments
<p><u>Introduction</u></p> <p>The subprime mortgage crisis that happened in 2008 led the US Federal Reserve to engage in expansionary monetary policy in an attempt to stimulate economic growth. The policy aims to increase money supply and lower interest rates in order to increase growth. In deciding to raise interest rates, there are several factors that the central bank could have considered. This essay will analyse the considerations that the central bank might have made when deciding to raise interest rates, and assess the relative importance of them in influencing the Federal Reserve's decision.</p>	<p>Set the context and give an overview of the essay in the introduction</p>
<p><u>Explanation of Expansionary Monetary Policy</u></p> <p>Expansionary monetary policy aims to increase aggregate demand (AD) and hence economic growth in US in the wake of the financial crisis. The reduction in interest rates lowers the cost of borrowing and increases the ability and willingness of households to borrow to purchase big-ticket items, thus increasing consumption. Firms are also encouraged to borrow due to higher expected profitability, which increases their willingness and ability to expand scale of production, thereby increasing investment expenditure. This increase in consumption and investment increases AD and triggers the multiplier effect, where subsequent rounds of increase in income-induced consumption results in a multiplied increase in national income and employment.</p> <p>Raising the interest rates from near-zero levels signals the end of expansionary monetary policy by the central bank. Doing so, would however slow down the increase in AD and hence the growth rate of US.</p>	<p>Explain the aim and effects of the Federal Reserve's policy of low interest rates</p> <p>State what the change in policy approach entails</p>
<p><u>Considerations of US Federal Reserve</u></p> <p>One of the considerations in deciding to raise interest rates could be the current state of the US economy, specifically its growth rate, inflation rate and employment rate. Since the aim of low interest rates was to stimulate economic growth, interest rates may be raised as the economy showed signs of recovery and growth. This coupled with an increase in jobs creation and employment rates would indicate that the economy is on the upswing, and that there is an increase in material living standards. By continuing to keep interest rates at very low levels, it is possible that inflationary pressures result, which could depress living standards.</p> <p>As shown in Figure 1, AD was initially at a low level represented by AD1 in the wake of the financial crisis. Low levels of interest rates would increase consumption and investment, causing AD to increase to AD2, bringing about a rise in real output and employment. However, in a persistent low interest rates environment, the continual increase in AD would cause the economy to approach the full employment output level as shown by</p>	<p>State the first factor – state of the US economy</p> <p>Explain how the factor may influence the Fed to raise interest rates</p> <p>Analyse using AD/AS model why state of the US economy may influence the Fed's decision</p>

Y_f , giving rise to overheating. The rise in inflationary pressures is shown by a continual rise in general price level from P_1 to P_2 , and then from P_2 to P_3 . The resultant demand-pull inflation caused by the easy availability of cheap money would lead to falling purchasing power of consumers. They are able to consume less goods and services than before, and hence material standard of living may worsen.

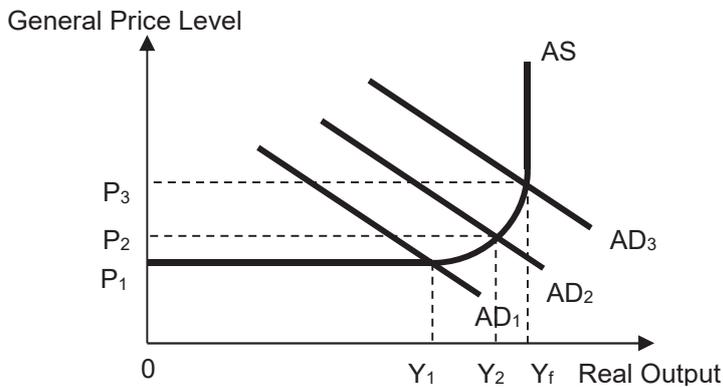


Figure 1: Inflationary pressures in US

On the other hand, if the growth in the economy remains sluggish, or if the upswing in growth is only temporary, it would not be wise for the central bank to raise interest rates. Raising interest rates would dampen spending and investment, which jeopardises any economic recovery brought about by the low interest rates. Hence, the Federal Reserve would probably have considered the growth rate and inflation rate of the economy when deciding to raise interest rates, in order to prevent a worsening of economic performance and living standards.

A second consideration that the Federal Reserve probably had, is the economic outlook of consumers and businesses, and how it may be affected by a rise in interest rates. An increase in interest rates by the central bank could indicate improved economic sentiments and confidence by the Federal Reserve that economic recovery is on track. Such a move is therefore likely to boost the confidence of consumers and firms, encouraging spending and investment. The increase in consumption and investment would increase AD and further strengthen the growth of the US economy. In addition, the increased business and investor confidence arising from the raising of the interest rates would also likely attract foreign direct investment (FDI) into US, further increasing AD and national income.

However, if consumers and businesses are pessimistic about the economic prospects, raising the interest rates may not do much to boost their confidence in the long-term recovery of the economy. For instance, US exports and investments could be hampered by the slowdown in China's growth, as well as the uncertainty surrounding the eurozone and the economic future of Europe and the global economy. This could have resulted in weaker consumer and business confidence in their future incomes and profits respectively. In this case, instead of boosting spending and investment, the rise in interest rates could be untimely, and cause a

Explain how the factor may influence the Fed not to raise interest rates

State the second factor – economic outlook

Explain how the factor may influence the Fed to raise interest rates

Explain how the factor may influence the Fed not to raise interest rates

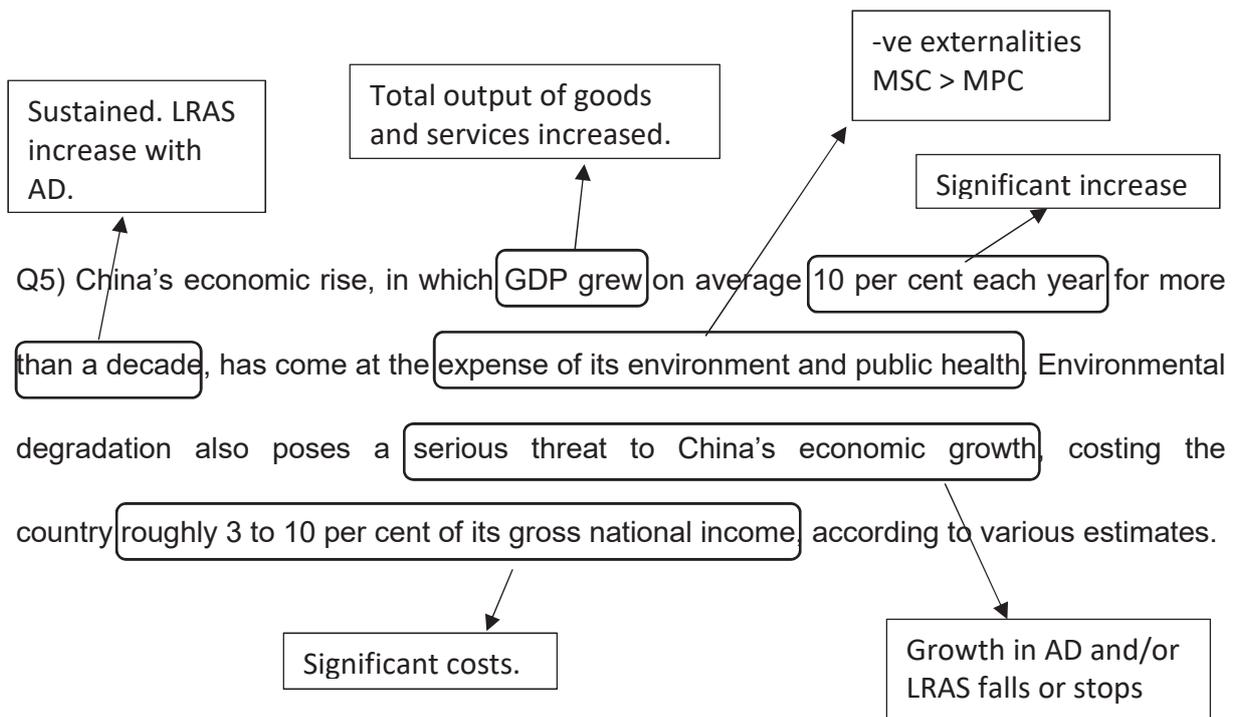
<p>drag in the economy's growth instead. Hence, the Federal Reserve would likely have considered firms' and household's expectations of future economic growth and concluded that sentiment was optimistic enough such that interest rates can be raised without dragging down the economy.</p> <p>Another key factor that the Federal Reserve would probably have considered is the possible unintended consequences arising from the raising of interest rates that could adversely affect US economic growth. A rise in interest rates would increase the rate of returns to deposits, which attracts inflow of short-term capital. This causes an increase in demand for US dollar in the foreign exchange market, causing an appreciation of the currency. A stronger US dollar would increase the price of US exports in terms of foreign currency and lower the price of imports in terms of domestic currency. This reduces quantity demanded for US exports and increases that for imports, thus causing a fall in net exports. This may result in a fall in AD unless improved consumer and business sentiments bring about a much larger increase in consumption and investment, offsetting the fall in net exports. In deciding to raise interest rates, the Federal Reserve would likely have concluded that the fall in net exports is not a significant threat to the economy's growth, as the increase in consumption and investment would be sufficient to boost the economy.</p> <p>In addition, raising of US interest rates can have unintended consequences on the economies of emerging markets. The relatively higher interest rates in US results in significant short-term capital outflows from emerging countries such as parts of Latin America and Asia. The subsequent depreciation of their currencies would not only lead to imported inflation and a slowdown of their growth, but also increase their debt burden in terms of US dollars. The weakening of their currencies and higher interest rates would make it more difficult for these countries to finance foreign debt, which could trigger a debt crisis. This could put a dampener on US economic recovery as emerging markets cut back on trade and global investments, as they struggle to service their debts.</p>	<p>State the third factor – unintended consequences on US and other economies</p> <p>Explain the unintended consequences of a rise in interest rates on the US economy</p> <p>Explain the unintended consequences of a rise in US interest rates on the other economies</p>
<p><u>Evaluative conclusion</u></p> <p>One of the main reasons for the US Federal Reserve to raise interest rates, was the fear of the economy overheating due to a prolonged period of near-zero interest rates. Inflationary pressures could dampen consumption and investment, which reduces growth at a time when US begins to show signs of economic recovery.</p> <p>Hence, in my opinion, I believe that the main consideration that influenced the Federal Reserve's decision to raise interest rates is the state of the US economy, which would also affect the economic outlook of households and businesses. Economic indicators in 2015 show a steady growth rate of about 2.4 per cent and a drop in unemployment rate to 5 per cent. Keeping interest rates at extremely low levels will eventually trigger inflationary pressures, which threaten growth, running counter to the policy's initial aim of stimulating growth.</p>	<p>Establish the Fed's reason for deciding whether to raise interest rates</p> <p>Based on the objective of the change in policy approach, explain what is likely the key consideration of the Fed</p>

<p>Given that the US is a large economy where domestic consumption and investment are large components of its AD, it is unlikely that the fall in price competitiveness of its exports would significantly dampen its growth. In addition, the Federal Reserve may also not factor in the impact on the emerging markets when making the decision to raise interest rates. However, given the increasing interconnectedness of the global economy, it may be necessary to give greater consideration to the impact on other economies arising from the Federal Reserve's monetary policies.</p> <p>Perhaps the decision to be made by the central bank was not a binary one where it simply decides whether to raise interest rates or not. Rather, what was more relevant as a consideration, is the extent and pace to which interest rates are raised. Given that interest rates have broad macroeconomic implications not just for the US economy but also for other economies, it would be wise for the Federal Reserve to adopt a cautious 'wait-and-see' approach where interest rates are raised gradually in response to signs of a robust US economic recovery, which would also bode well for the rest of the world economies.</p>	<p>Explain which may be the least relevant or significant consideration of the Fed</p> <p>Provide additional insight on what is the more relevant or important decision to be made here (challenge the implicit assumption in the question)</p>
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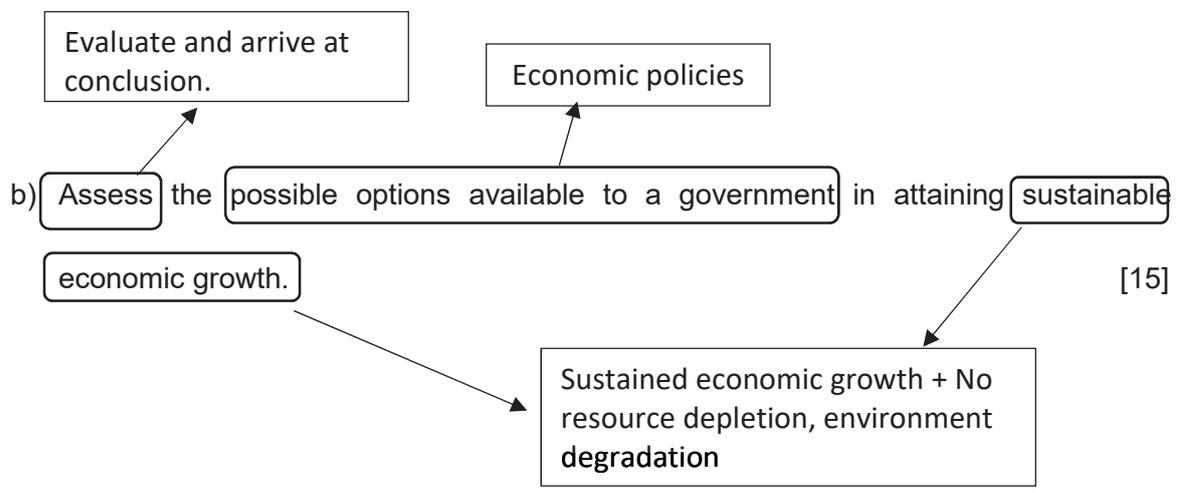
Mark Scheme

Knowledge, Application / Understanding and Analysis		
L3	<p>For an answer that thoroughly analyses how raising of interest rates may affect the US economy, as well as the factors that may influence the Federal Reserve's decision. Answer demonstrates rigour and scope in analysis.</p> <p>At least 3 factors are provided in the analysis.</p>	15 – 20 (18)
L2	<p>For an answer that has good knowledge of how raising of interest rates may affect the US economy, as well as the factors that may influence the Federal Reserve's decision. However, analysis is undermined by insufficient rigour and scope.</p> <p>Answer may provide robust explanations of how raising interest rates may affect the US economy but lack analysis of the factors that affect the Federal Reserve's decision.</p> <p>Answers that provide analysis of 2 or fewer factors will be capped at L2.</p>	9 – 14 (12)
L1	<p>Answer may have some knowledge of how raising of interest rates may affect the US economy, and the factors to be considered. However, the answer has significant conceptual errors or is very descriptive.</p>	1 – 8 (5)
Evaluation/Synthesis		
E3	<p>Insightful conclusion/judgement on the relative importance of the factors in determining the Federal Reserve's decision to raise interest rate. Synthesis makes it clear that one or more of the factors are more important than the others in the central bank's decision of whether to raise interest rate. Evaluative comments are provided based on the US economy's specific set of circumstances, with reference made to the factors.</p>	4 – 5

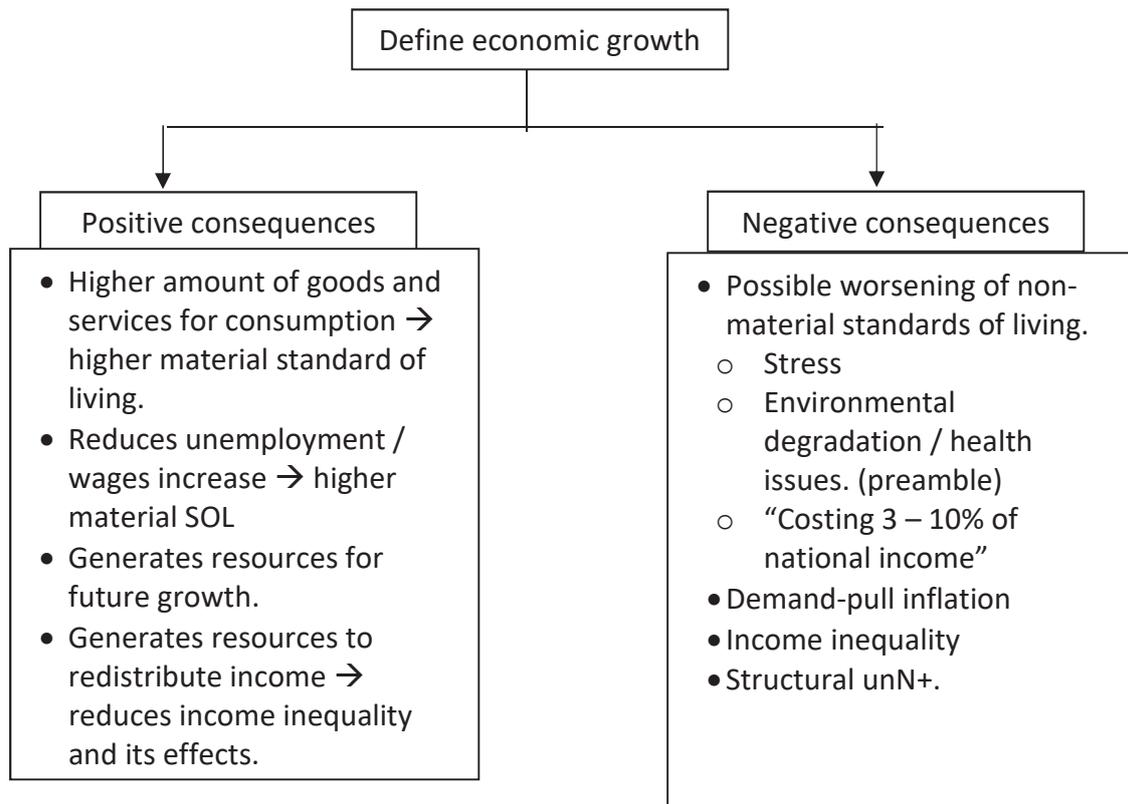
E2	Attempted synthesis on the relative importance of the factors in determining the Federal Reserve's decision to raise interest rate. However, there are some logical flaws and/or inaccuracies in the synthesising process.	2 – 3
E1	For an answer that gives an unsupported statement on the relative importance of the factors in determining the Federal Reserve's decision to raise interest rate.	1



a) Explain the likely consequences of rapid economic growth. [10]

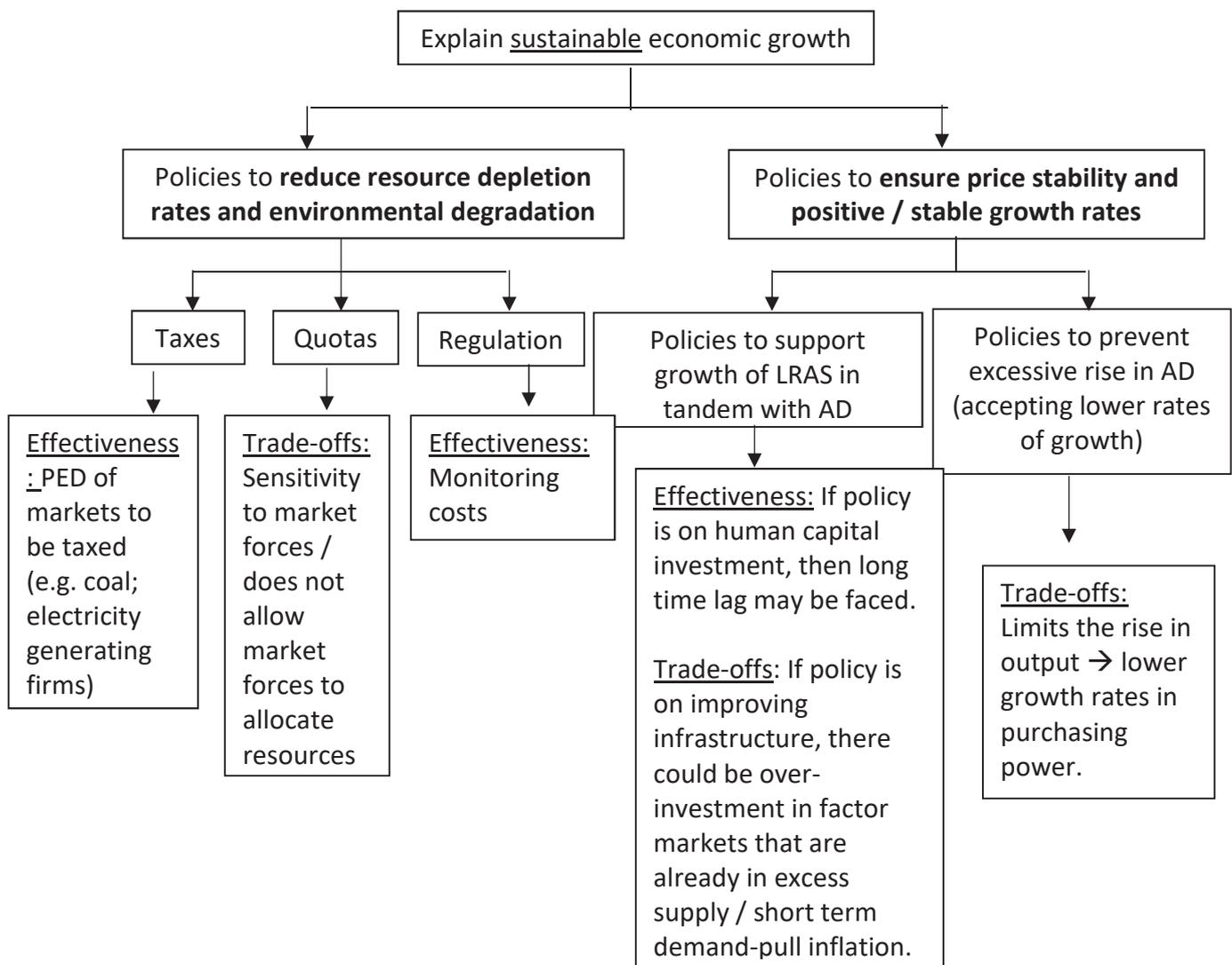


Part (a)



*Focus on RAPID. Answers must consider this adjective.

Part (b)



Conclusion

Main observations:

Due to the breadth of the notion of sustainable development, a broad range of microeconomic and macroeconomic policies are required.

Macroeconomic policies tend to be supply-side centric. However, these must be well-targeted on the right factor markets.

Governments might also face trade-offs in short term economic growth rates or “sacrifice” the interests of particular groups.

Implications: Therefore, governments need to conduct extensive studies and research to reduce the imperfect information faced when implementing the policies. This might increase the effectiveness of the policies and reduce the unintended consequences, realising the goal of sustainable growth.

Suggested Answer for Part (a)

<p>Economic growth occurs when the real output of a country increases. It is commonly measured by the percentage increase in real gross domestic product (GDP) annually. GDP is defined as the value of all output produced by factors located within the geographical boundary of the country, regardless of the ownership of factors of production, over a given time period. Many countries have gone through rapid rates of economic growth, such as China's double digit growth of about 10 per cent over the last decades. Rapid rates of economic growth brings about both positive and negative consequences.</p>	<p><i>Introduction</i></p>
<p>One of the positive consequences of rapid rates of economic growth is that the amount of goods and services for consumption will grow very quickly. This increases the material standard of living of households and individuals living the country. For example, rapid rates of economic growth in East Asia for most of the second half of the 20th century helped many households and individuals out of poverty, leading to a general rise in material standards of living.</p>	<p><i>Positive consequence 1</i></p>
<p>To support an increase in output, a higher number of labour is required in production processes. The derived demand for labour thus increases. As a result, more labour is being employed, resulting in a fall in unemployment rates. As more individuals are receiving wages, their purchasing power increases, leading to improvements in material standards of living. Furthermore, an increase in the demand for labour could push up the average wage rates, also contributing to higher purchasing power, ceteris paribus. Again, this contributes to higher material standards. For example, Singaporeans have experienced higher incomes over the years due to rapid rates of economic growth in the 1970s through to 1990s.</p>	<p><i>Positive consequence 2</i></p> <p><i>(Note that consequences 1 and 2 can be lumped together in a more succinct way)</i></p>
<p>Furthermore, rapid rates of economic growth means that national income is increasing rapidly. As a result, tax revenue could increase rapidly, providing the government with more financial resources to conduct transfers to the needy groups of the population. The tax revenue can also be used to fund government investments in areas such as infrastructure, education and healthcare. Success in doing so might improve the capital stock of the country, as well as productivity of human capital. These lead to higher productive capacity and long term economic growth.</p>	<p><i>Positive consequence 3</i></p>

However, there are downsides to economic growth rates that might occur at too rapid a rate.

Negative consequences

Firstly, economic growth that occurs due to indiscriminate usage of natural resources and high level of pollution will create the problem of unsustainable growth. When natural resources such as arable land are used excessively to achieve the rapid economic growth, the land might lose its fertility, causing productive capacity of the economy to fall. Pollution of land and water due to discharge of industrial and household wastes could cause the land and water to be unusable. Again, this leads to a fall in productive capacity of the economy. Hence, while growth rates could be rapid currently, if it happens due to excessive use of or through damaging natural resources, then the high growth rate might not sustain into the future or even fall significantly. High rates of pollution also causes individuals to incur healthcare costs. As mentioned in the preamble, the high levels of pollution had created healthcare problems and environmental damage, costing the country about 3 – 10% of the GDP. This amount will be used by the government to fund restorative projects for the environment and to subsidise the higher individual healthcare costs, leaving less funds available to tackle the economic problems in the country.

(1)

Link to preamble where suitable

Secondly, rapid rates of economic growth could be due to a rapid expansion of the components of the aggregate demand. This creates a situation where prices of factors of production and goods are bid up. This creates the problem of demand-pull inflation. This occurred widely in Asia before the Global Financial Crisis of 2008/09, where inflation due to strong demand exceeded 5 per cent in most countries.

(2)

Last but not least, rapid rates of economic growth could increase income inequality. If the economic growth is based on rapid economic restructuring, then workers in the “sunrise” industries could receive higher levels of wages due to increasing levels of demand. Conversely, workers in “sunset” industries could receive lower wages due to lower levels of demand, hence widening the income gap. One example of this is in Singapore, where high-skilled, white collar jobs in export-oriented business services are paid highly while low-skilled jobs such as those in construction sectors tend to be lowly paid.

(3)

At the same time, if economic restructuring sees an expansion of the high-skilled industries and a contraction of low-skilled industries, then low skilled workers who are retrenched may not be able to find jobs in the high-skilled sector due to occupational

<p>immobility. Hence, these low-skilled workers are likely to lose their wages. As such, rapid rates of economic growth due to economic restructuring could cause income inequality to worsen.</p> <p>While trying to reap the benefits of economic growth, governments try to avoid running into problems caused by growth rates that are too rapid. This then calls for the “right” policies that bring about “sustainable growth”.</p>	<p><i>Quick conclusion to part (a) – link to part (b)</i></p>	
Knowledge, Application / Understanding and Analysis		
L3	<p>Rigorous analysis of <u>both</u> positive and negative consequences of rapid economic growth rates.</p> <p>Sufficient scope: At least 2 positive consequences that are of different nature, and at least 1 negative consequence (or 1 positive + 2 negative).</p>	<p>8 – 10 (9)</p>
L2	<p>Either a rigorous analysis but with insufficient scope, Or sufficient scope but with some errors in terms of rigour.</p> <p>Answers in this range are likely to be characterised by:</p> <ul style="list-style-type: none"> - Lacking in some accuracy, - Cover only two impacts of economic growth, - Fail to capitulate on the word “rapid rates” - Focus only on the positive or negative consequence but with sufficient rigour on either side. 	<p>5 – 7 (6)</p>
L1	<p>Descriptive and superficial answer. Answers in this range are likely to make assertions about the consequences of economic growth without substantial economic analysis.</p>	<p>1 – 4 (3)</p>

Part (b)

<p>Sustainable growth indicates a rate of growth that can be maintained without creating other significant economic problems (e.g. resource depletion, environmental degradation, and rapidly rising prices), particularly for future generations. It implies a positive and stable growth rate over an extended period of time. Because the pursuit of self-interest by households and private firms need not necessarily take into account of these economic problems and the welfare of future generations, governments frequently have to intervene in order for economic growth to be sustainable. This essay assesses the policies to serve two different outcomes. One set of policies are targeted at reducing resource depletion and preventing excessive environmental degradation. The other set of policies seek to ensure price stability and long term growth rates that are positive and relatively stable.</p>	<p><i>Introduction – explanation of the notion of sustainable growth.</i></p> <p><i>Direction of essay briefly provided due to breadth and potential complexity.</i></p>
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Many governments turn to the use of taxation to reduce resource depletion and environmental degradation. For example, Singapore plans to tax the emission of greenhouse gases via a new carbon tax scheme. The tax will likely cost between \$10 and \$20 per tonne of emissions. It will generally be applied on the largest emitters of greenhouse gases, such as power stations and direct emitters. With this tax, the marginal private cost of these firms increase from S_0 to S_1 (Fig. 1). As a result, the quantity of industrial output reduces from Q_0 to Q_1 , thereby reducing the pollution caused by carbon-intensive mode of productions.

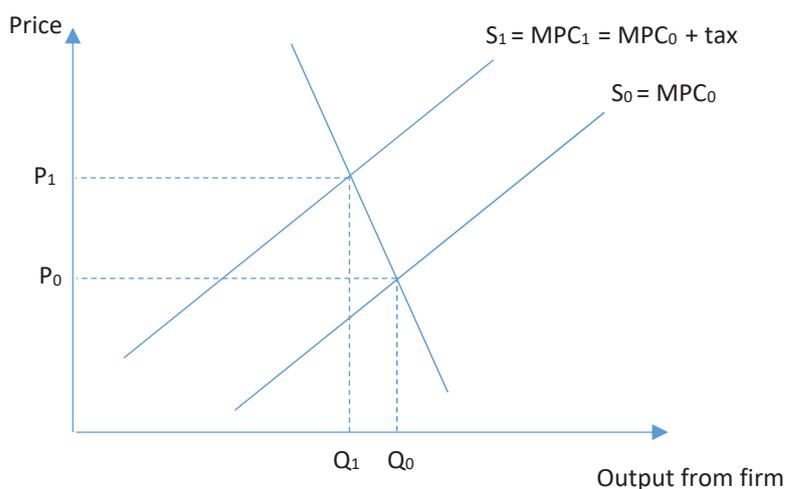


Fig. 1: Market for power generation

One drawback of the use of tax is that one unit of tax may not effectively in industries where the demand is price inelastic. Power plants produce electricity – a good that has very little substitutes. The demand tends to be price inelastic. The power generators could easily pass on the higher cost of production to consumers as higher electricity bills without suffering a substantial fall in quantity demanded. As such, the output of carbon-intensive goods might not fall substantially. Although the government could arguably impose a substantially high tax to “force” a big fall in output, this might have other implications such as raising the industrial cost of production, thereby eroding the economy’s competitiveness.

Furthermore, the imposition of carbon taxes may result in greater inequity. Unfortunately, necessities, for which consumers have the lowest sensitivity to prices, would see the largest price increases as households do not have the option of going without them. In addition, the lowest-income households spend the largest proportion of their income on necessities. Therefore, carbon taxes may result in the largest erosion of the purchasing power of the poorest households. Hence, the impact on low-income households

Policy objective 1: controlling output that are associated with high pollution and resource exhaustion.

Example taken from:

<http://www.straitstimes.com/singapore/environment/singapore-budget-2017-6-things-to-know-about-the-new-carbon-tax-tweaked>

Assessing (discussing) taxation tool to achieve policy objective 1

Local evaluation – implement complementary policies to mitigate unintended consequences

must be assessed carefully and the government may introduce a separate rebate to deal with the consequent inequity, if necessary.

Other tools that governments may use are quotas and regulation. Quotas restrict the amount of production by firms that cause pollution and environmental degradation. For example, China restricts the amount of harvesting of wild plants that are grown in the semi-arid areas. This reduce the output of herbs and food that are produced using these wild plants as ingredients. Many northern Chinese cities also set regulation on the amount of greenhouse gases that might be emitted by firms, particularly the energy generators. This aims to reduce the amount of external costs incurred by the society brought about by these industrial activities.

The problem with the use of administrative tools such as quotas and regulation is that they require high levels of monitoring and policing. In China, many firms and individuals are caught and penalised every year for breaching the quotas and regulation. The need for administration and policing, particularly in a big country like China might cost the government substantial operating costs. The opportunity cost of this is the other aspects of government expenditure that could be made, such as in education and healthcare, although arguably, the control of pollution and environmental degradation might reduce the need for publicly financed treatment on related diseases.

Another set of strategies frequently associated with supporting sustainable growth is to avoid “growth-at-all-cost” approach. In Figure 2, while aggregate demand could potentially increase to AD_1 from AD_0 through the aggressive use of expansionary demand management policies such as fiscal and monetary tools, the government is willing to allow a slower rate of growth in AD, to AD_1' instead. The outcome of this is that growth is slower, but avoids the strong rise in general price level (GPL) as associated with the rise in AD to AD_1 (to P_1' rather than P_1). The economy is also not at full employment of output, which indicates that natural resources are utilised to the point exhaustion – a situation frequently associated with high rates of pollution. Some resources are left available for future generations.

Other tools to support policy objective 1.

Discussing other tools to support policy objective 1.

Policy objective 2: avoid growth at all cost. Leave some resources for future. Avoid demand-pull price instability.

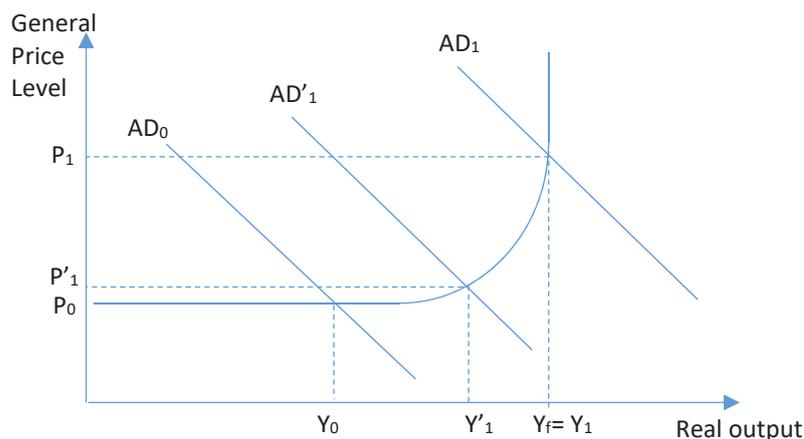


Fig 2

An example of the adoption of this approach can be seen in today's China, which chooses the "new normal" economic growth rate of about 6%. The "new normal" is indicative of the Chinese government's anticipation of slower but perhaps more sustainable economic growth. This means that the government may abstain from taking broad stimulus measures despite slowing growth. The central government could hold back on tools that are associated with trying to increase AD – fixing the Chinese renminbi at a low rate to promote export growth, and offering cheap loans to public and private firms to carry out investment expenditure.

In adopting this approach however, governments have to settle for a lower rate of economic growth, which might mean that the demand for labour might increase at a slower rate relative to the growth in size of the labour force, thereby potentially allowing unemployment rates to rise. Wages may also increase more slowly or be seen as stagnating. This might cost the government some political credits.

Thirdly, there are the policies to support the growth of the economy's productive capacity. Many governments, such as Singapore's, tries to achieve this by spending on physical infrastructure such as transport facilities, as well as social infrastructure such as education and healthcare. By spending on education, the quality of education could improve, resulting in more productive workers. By spending on healthcare, general health levels could improve, again leading to a more productive workforce that calls in sick less. The above therefore contribute to sustained increase in the productive capacity, causing AS_0 to increase to AS_1 , shifting full employment level of output from Y_f to Y_{f1} (Figure. 3).

Good to have diagrams. With them explained, you will not miss out on points for analytical rigour.

Not forgetting examples. Taken from contextual knowledge.

Discussing policy objective 2.

Policy objective 3: Increase LRAS to sustain growth and lower inflationary pressures.

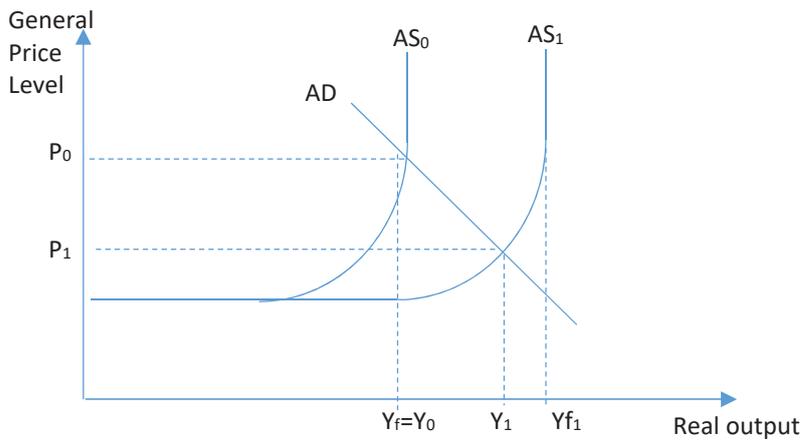


Fig. 3

As shown in Fig. 3, if the policies are successful, the full employment level of output demarcated by Y_f increases from Y_f to Y_{f1} . As a result, output could increase from Y_0 to Y_1 , and general price levels decrease from P_0 to P_1 . This reflects economic growth that is supported by increase in productive capacity, as well as lower pressures on inflation.

The drawbacks on these policies is that they require high amounts of government spending. While they generally pose less problems for government that run budget surpluses such as Singapore, governments such as those in the US might have less ability to do so as they incur a budget deficit. Borrowing to finance these spending might then “crowd out” private consumption and investments as the price of loanable funds gets pushed up. This might therefore adversely affect households’ material standards of living and private entrepreneurship.

Due to the breadth of the notion of sustainable economic growth, a broad range of microeconomic and macroeconomic policies is required to bring about sustainable economic growth.

What is first necessary, is for the government to be willing to take into account the full consequences of the pursuit of rapid economic growth. While it has its positives, it is undoubtedly a double-edged sword that can result in irreversible damages to both the economy as well as the environment, as seen in the case of China. As such, long term microeconomic and macroeconomic policies that look beyond mere short term benefits are important.

Discussing policy objective 3.

Conclusion: Quick summary.

Insight on government’s perspective, with reference to the preamble.

<p>The microeconomic policies of preventing excessive environmental degradation could have macroeconomic implications, where resources are preserved for use in future generation. The macroeconomic policies must then be targeted at the supply-side of the economy (i.e. the factor markets) in order for growth to be sustainable in the long term.</p> <p>The challenge, however, is that the right factor markets must be identified, amidst the uncertainty of outcomes. For example in Singapore, despite years of investing in what is perceived as high quality education, productivity gains had been mediocre. Controlling of output and factor income might also cause governments to incur political costs that they are able to absorb.</p> <p>All in all, sustainable economic growth requires a whole-society's approach that is long term in nature. As seen in this essay, while many policies are relevant, they each have their drawbacks and unintended consequences. The implication is that governments need to undergo a sound cost-benefit analysis backed up by robust market research to overcome the imperfect information they face.</p>	<p><i>Further insights on policies.</i></p> <p><i>Evaluation: insights on the difficulty in increasing LRAS.</i></p> <p><i>Overall conclusion and implications on governments as the decision makers for economic policies.</i></p>
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Knowledge, Application / Understanding and Analysis		
L3	<p>Answer that evaluates policies targeted towards achieving sustainable economic growth.</p> <p>Analyses of policies are rigorous and accurate, supported by suitable examples.</p> <p>Scope-wise, policies span across <u>both</u> macroeconomic policies to:</p> <ul style="list-style-type: none"> - achieve positive growth over an extended period of time and - microeconomic policies to reduce the problems of resource depletion or environmental degradation. 	8 – 10 (9)
L2	<p>For an answer that is lacking in scope. Analyses that cover only macroeconomic policies to achieve sustained, rather than sustainable economic growth will be capped in this range.</p> <p>For an answer that contains some errors, leading to an inaccurate and incomplete analysis.</p>	5 – 7 (6)
L1	<p>For a superficial and descriptive answer, or where there are substantial conceptual errors.</p>	1 – 4 (3)

E3	For the top range of evaluation marks, answers could contain:	4 – 5
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	<ul style="list-style-type: none"> - Recognition of assumptions that must hold in order for the policies to work. - Weighing of which policies might work better to achieve sustainable economic growth. - Further insights on the formulation of policies or decision making process that helps a government achieve its objective of sustainable economic growth. 	
E2	<p>Random and brief evaluative comments that appear incidentally rather than systematically crafted to support the analysis. There is no evaluative conclusion to answer the question.</p> <p><u>OR</u> where evaluative skills are demonstrated only in the conclusion where a systematic evaluation of the policies is conducted.</p>	2 – 3
E1	For unsupported and brief evaluative comments that appear in silo in the analysis or as the conclusion.	1

2017 H2 Prelims EQ6 Suggested Answer

“The Trans-Pacific Partnership (TPP) embodies what Singapore sees as the future of the Asia-Pacific. It will transform the region by reducing tariff and non-tariff barriers substantially for both goods and services, encouraging greater investment, and addressing new trade challenges in the modern economy.”

Minister Lim Hng Kiang, Minister for Trade

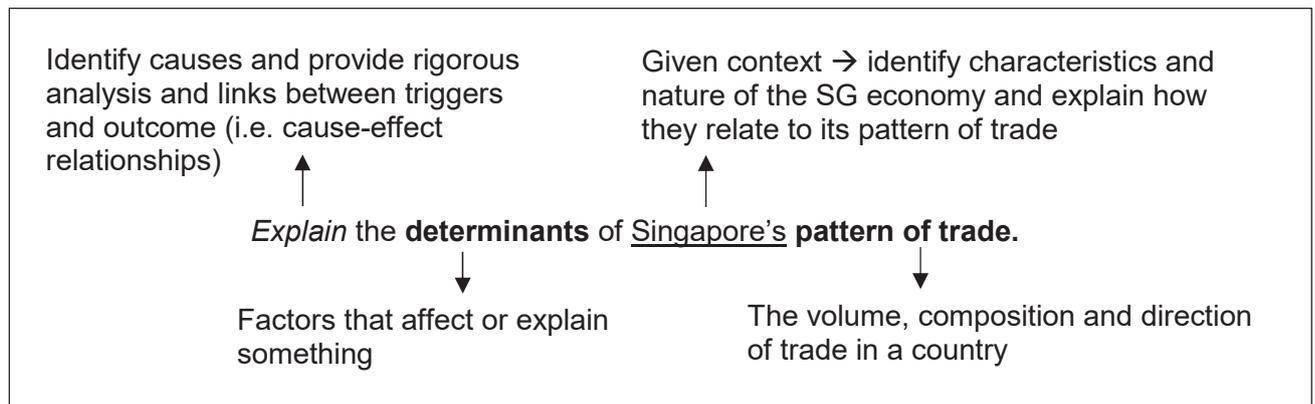
Source: Ministry of Trade and Industry, 06 Oct 2015

(a) Explain the determinants of Singapore’s pattern of trade. [10]

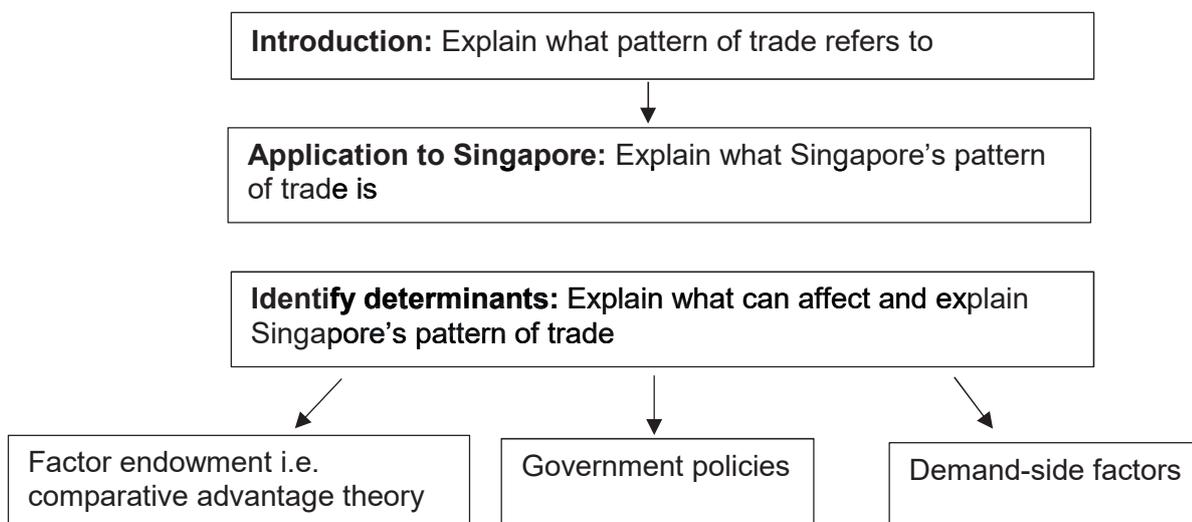
(b) Assess the extent to which smaller economies like Singapore would benefit more from the TPP than larger ones like the USA. [15]

(a) Explain the determinants of Singapore’s pattern of trade. [10]

Question Dissection



Schematic Plan



Suggested Answer	Comments
<p><u>Introduction</u></p> <p>Pattern of trade refers to the composition, volume and direction of a country's trade. Composition of trade refers to what is being exported or imported, while volume of trade refers to the real value of goods and services that is being exchanged. Lastly, direction of trade refers to the direction of exports and import flows. This essay will look at three key determinants of Singapore's trade patterns, namely, its factor endowments, demand-side factors, and finally, the role of government policies.</p>	<p>Define pattern of trade</p> <p>Overview of essay</p>
<p><u>Determinants of Singapore's pattern of trade</u></p> <p>Singapore's factor endowments is a key determinant of its pattern of trade. This can be explained by the theory of comparative advantage, which forms the underlying basis of Singapore's direction and composition of trade. A country has a comparative advantage in producing a good if it is able to produce it at a lower opportunity cost than other countries. Being a small economy with a lack of natural resources and a small population size, Singapore does not have a comparative advantage in land-intensive and labour-intensive production. The opportunity costs of producing land-intensive goods such as crops are too high, given the high costs of land in Singapore. Likewise, the shrinking labour force due to an ageing population and declining birth rates further increases the opportunity cost of producing labour-intensive goods like apparel and footwear. Hence, Singapore is a net importer of both land and labour-intensive goods.</p> <p>On the other hand, Singapore is a net exporter of chemical products, machinery and transport equipment as it has a comparative advantage in the production of such capital and technology intensive products. Singapore has a highly-educated population that provides it with a ready pool of high-skilled labour. In addition, being an economy that is open to capital flows, the inflow of FDI has also facilitated technological progress and the improvement in the quality of domestic capital goods. The availability of highly productive capital and labour thus allows Singapore to enjoy a comparative advantage in skill and technology-intensive goods and services such as medical devices and financial services.</p> <p>Besides supply-side factors, demand-side factors also account for Singapore's pattern of trade. Changes in demand levels can affect Singapore's pattern of trade. The rise and opening up of emerging economies like China and Vietnam has led to an increase in the demand for goods and services that Singapore produces, such as financial and logistical services, leading to an increase in the volume of Singapore's exports. Similarly, with the rise in production levels due to a larger number of foreign and local firms, the demand for imported raw materials and factor inputs has also risen. This has therefore led to an increase in the volume of imports by Singapore.</p>	<p>State first determinant – factor endowments</p> <p>Define key concept – comparative advantage</p> <p>Explain why Singapore does not have comparative advantage in land-intensive and labour intensive production</p> <p>Explain why Singapore has comparative advantage in high-tech, high value-added production</p> <p>State second determinant – demand-side factors</p> <p>Explain why Singapore's trade volume with the rest of the world has increased</p>

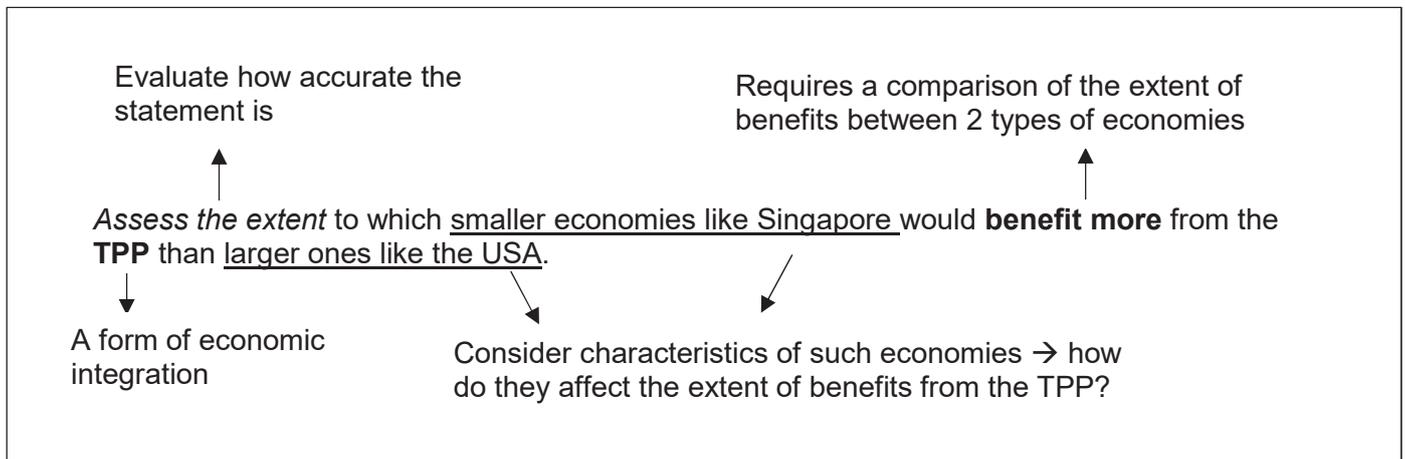
<p>Lastly, Singapore's pattern of trade is also heavily influenced by government policies. The Singapore government has put in place policies to move Singapore up the value chain by developing high-technology knowledge-intensive industries such as the aerospace and biomedical sectors. For instance, the Singapore government devoted large amounts of funds to develop its biomedical sciences industry by providing key research infrastructure and facilities in the form of Biopolis, an international research and development centre. Doing so has enabled Singapore to grow its pharmaceutical, healthcare and medical technology industries by fostering exchange of ideas and collaborations among the research community located there. Hence, deliberate government policies to develop strategic sectors has enabled Singapore to export increasingly high-value added and knowledge-intensive goods and services to the rest of the world, thus changing its composition of exports and pattern of trade.</p>	<p>State third determinant – government policies</p> <p>Explain how government policies can affect the composition of Singapore's exports</p>
<p><u>Conclusion</u></p> <p>In summary, Singapore's trade patterns can be explained by a variety of factors, including comparative advantage theory, demand-side reasons, as well as government policies. The active signing of FTAs such as that of the TPP can also influence Singapore's trade with other countries, which will be analysed in (b).</p>	<p>Summarise the key determinants of Singapore's trade patterns and provide a link to (b).</p>

Mark Scheme

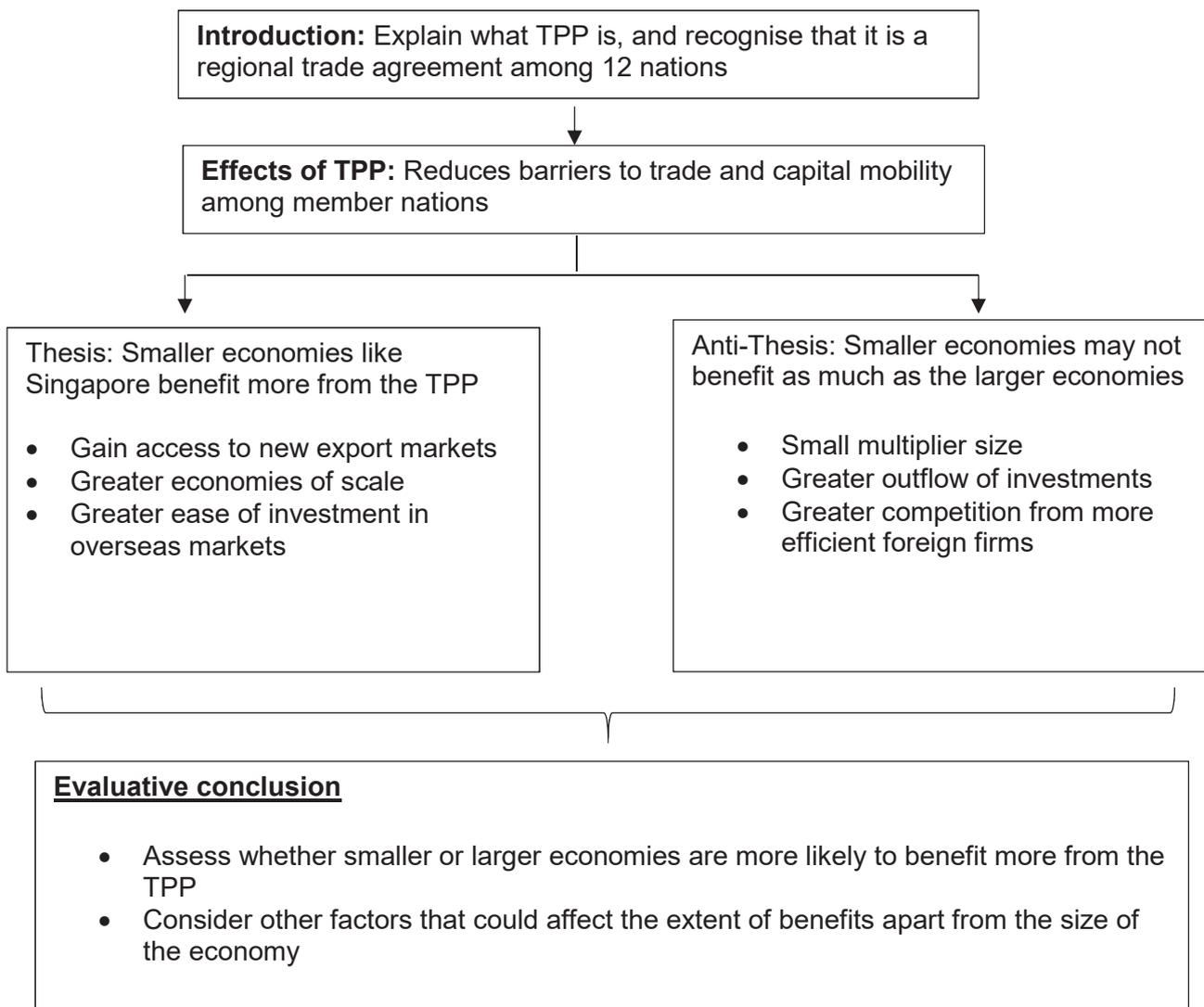
	Knowledge, Application / Understanding and Analysis	
L3	<p>For an answer that thoroughly analyses the determinants of Singapore's pattern of trade, with scope and rigour. Answer analyses how Singapore's pattern of trade is determined largely by comparative advantage theory <u>and</u> 2 other determinants.</p> <p>Answer shows good application to the Singapore's context with the use of appropriate examples.</p>	8 – 10 (9)
L2	<p>For an answer that shows an understanding of the determinants but inadequately analyses how they affect Singapore's pattern of trade.</p> <p>Answer has limited scope, and did not analyse how Singapore's pattern of trade is determined by comparative advantage theory or only analyses 2 or fewer determinants.</p>	5 – 7 (6)
L1	<p>For an answer that is descriptive and superficial, lacking in development. Major conceptual errors that affect the accuracy of the essay may also be present.</p> <p>Answer only analyses 1 determinant of Singapore's pattern of trade, where the determinant is <u>not</u> comparative advantage theory.</p>	1 – 4 (3)

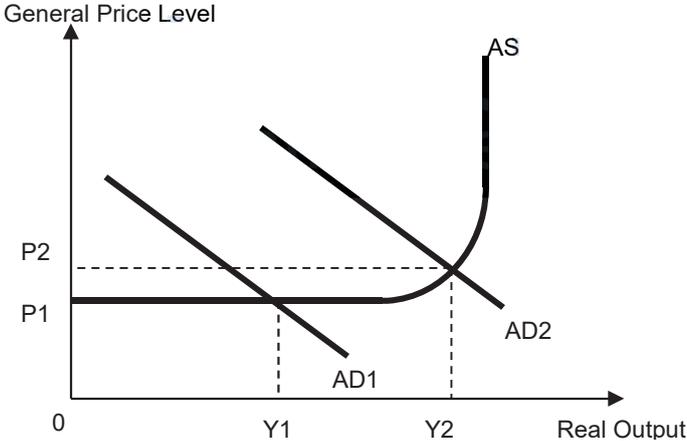
(b) Assess the extent to which smaller economies like Singapore would benefit more from the TPP than larger ones like the USA. [15]

Question Dissection



Schematic plan



Suggested Answer	Comments
<p><u>Introduction</u></p> <p>The Trans-Pacific Partnership (TPP) is a regional trade agreement between 12 nations, including Singapore, Vietnam and the United States. It aims to create a common market where trade barriers are removed to allow free trade among member countries, as well as free movement of capital. With increased trade and capital mobility with other countries, there are various benefits and costs to smaller and larger economies like Singapore and the US. This essay will analyse the difference in the extent of benefits to smaller and larger economies, and assess who stands to benefit more from joining the TPP.</p>	<p>Explain what the TPP is</p> <p>Provide an overview of the essay</p>
<p><u>Thesis: Smaller economies like Singapore benefit more from the TPP</u></p> <p>Joining the TPP allows smaller economies like Singapore to overcome any weaknesses in external demand to enjoy greater actual growth arising from a rise in exports. With the removal of tariff and non-tariff barriers to trade, the TPP allows Singapore to gain access to new export markets in particular that of Canada and Mexico which it does not currently have FTAs with. As Singapore has a limited domestic market and is therefore extremely dependent on external demand for its growth, greater access to the markets of the member countries, would bring about an increase in its export demand and hence aggregate demand (AD), thus stimulating its growth.</p> <p>As shown in Figure 1, an increase in export demand raises Singapore's AD and causes it to shift rightwards from AD1 to AD2. This increase in demand for goods and services results in an increase in firms' derived demand for labour as they increase output in the next production cycle. The resultant increase in income levels leads to a rise in income-induced consumption, which causes a further rise in AD. The subsequent rounds of increases in income-induced consumption and AD results in a multiplied increase in national income and real output, as represented by the increase in real output from Y1 to Y2.</p>  <p>Fig 1: Actual growth from increase in exports</p>	<p>Thesis (1) – TPP allows smaller economies to export to a larger market</p> <p>Explain how exporting to a larger market increases actual growth</p>

On the other hand, for larger economies like the US that have a large domestic market, consumption and investment are likely to make up a larger proportion of their AD as compared to external demand. The rise in net exports arising from the TPP would thus have a relatively less significant impact on their growth.

Hence, being part of the TPP benefits smaller economies like Singapore more than larger economies like the US, as freer trade in the region allows these economies to overcome a slowdown in external demand to achieve further growth.

Another key benefit of the TPP to smaller economies would be the greater economies of scale that could be enjoyed by domestic firms. Being able to produce and export to a larger market enables Singapore firms to reap substantial economies of scale. This could take the form of technical economies of scale such as the use of large machines that allow output to be produced at a lower unit cost. The purchase of such large machines may not have been economically viable previously with a smaller export market and hence lower output level. The presence of such economies of scale therefore leads to lower costs and also lower prices should firms pass on the cost savings to households, thus benefiting consumers. Domestic firms in larger economies like the US would probably have been able to enjoy substantial economies of scale even before the opening of new markets under the TPP, due to their large domestic markets.

In addition, the removal of restrictions to foreign direct investment (FDI) in the member countries means Singapore firms would be able to invest more easily in businesses in the member nations. For instance, there is likely to be an increase in Singapore's direct investment in private healthcare and telecommunications services in emerging markets such as Brunei and Vietnam. Such increased direct investment abroad would bring about greater inflow of income payments in the form of profits to Singapore in the long run, when such businesses become profitable, thus increasing its gross national product (GNP) and material standard of living, ceteris paribus. Expanding overseas is especially important for Singapore firms as a way to boost their profits given the relatively small size of the domestic market. Also, moving their operations overseas may help these firms to lower their labour costs, as they can tap on the larger pool of labour in the overseas markets, thus mitigating the effects of high labour costs due to a small local workforce. In contrast, the extent of such benefits brought about by increased outward FDI is likely to be smaller for larger economies such as the US and Japan as local firms already benefit from the large domestic markets and a ready pool of labour.

Explain how benefit of exporting to a larger market is less important to a larger economy

Summarise the first argument

Thesis (2) – TPP allows firms in smaller economies to enjoy EOS

Thesis (3) – TPP allows greater investment overseas which allows smaller economies to overcome their small domestic market

Anti-Thesis: Smaller economies may not benefit as much as the larger economies

With fewer restrictions to the flow of capital among member nations, they are likely to enjoy a rise in FDI from other member countries. This increases AD, and results in a rise in real output and national income via the multiplier process. With a larger multiplier size, a given increase in FDI will result in a much larger increase in national income and real output in larger economies as compared to smaller ones like Singapore due to a large marginal propensity to import. In addition, in response to the relaxation of barriers to capital flows, it is likely that firms in member countries like Japan may choose to invest in countries with larger markets such as the US, as the potential profits may be much higher. Hence, countries with a larger consumer base may see a much larger increase in FDI from member nations as compared to smaller economies like Singapore.

Moreover, with the possible increased outward FDI from smaller economies like Singapore, there is a likelihood that jobs may be lost to workers in the member countries such as Malaysia and Vietnam, resulting in a rise in unemployment. This is likely to be less of a concern to larger economies like US and Japan, where it is argued that outward FDI may be less prevalent than smaller economies like Singapore.

Further, the elimination of import tariffs may lead to greater competition with imports from foreign firms, thus reducing the profits of local firms especially those in smaller economies. The domestic firms in smaller economies tend to be smaller than those in larger economies due to the lack of economies of scale. With higher average costs of production, these firms may not be able to compete with the cheaper imports from larger foreign firms. An example would be the agriculture and livestock industries in Vietnam, which would likely struggle to compete against their more cost efficient counterparts in larger economies like US and Canada. The switch from consuming locally produced goods to foreign imported ones would lead to a fall in domestic consumption and a rise in import volume, causing a fall in the economy's AD and hence economic growth.

Anti-thesis (1) – Smaller economies may benefit less due to smaller multiplier size and less FDI inflow

Anti-thesis (2) – Smaller economies may benefit less due to loss of jobs from increased outward FDI (a direct counterargument to Thesis (3))

Anti-thesis (3) – Smaller economies may benefit less due to greater competition from larger economies

Evaluative conclusion

As an economy with a **small domestic market and a lack of natural resources**, Singapore **has always adopted a pro-globalisation stance**. The **relaxation of barriers to trade and capital flows within the TPP** would certainly bring benefits to smaller member nations like Singapore and Vietnam, particularly in terms of increased exports and overseas investment. Such benefits are arguably less significant for larger economies like the US and Japan, which already benefit from the large size of their domestic markets. Hence, smaller economies tend to benefit more than bigger economies to a large extent.

Assess whether a smaller or larger economy is likely to benefit more and why

<p>However, though it may appear that smaller economies being more reliant on trade and foreign investments may benefit more from being part of the trade pact, the benefits to Singapore in particular, are likely to be marginal. This is because Singapore has always been an economy that is open to trade and capital flows, with limited import tariffs. In addition, it already has FTAs with more than 30 trading partners, including many within the TPP. Hence, any benefits from increased exports and FDI are probably much smaller than a less open economy like Peru.</p> <p>Hence, instead of the size of the economy, other characteristics may be more relevant in determining the extent of benefits from joining the TPP. These characteristics could be the degree of openness or the stage of development of the economy. A less open developing economy like Peru would likely gain much more from joining the TPP, as compared to an already open and developed economy like Singapore.</p> <p>How much an economy may benefit from the TPP also depends on the ability of the government to minimise the costs of increased foreign competition. The Singapore government has adopted measures to enhance the attractiveness of Singapore as an investment destination, such as the provision of infrastructure and tax incentives. Various supply-side measures have also been implemented to raise the productivity of its workforce and attract or retain FDI. Such proactive measures allow Singapore to mitigate the costs from joining the TPP, and provides a sharp contrast to the US, which has decided to leave the TPP in light of the possible adverse impacts on its economy.</p>	<p>Comment on the relevance of size of economy in determining the extent of benefits by considering other aspects of the economy</p> <p>Recognise that how much a country benefits from the TPP also depends on its ability to mitigate the costs arising from it</p>
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Mark Scheme

Knowledge, Application / Understanding and Analysis		
L3	For an answer that thoroughly analyses how size of the economy affects the benefits of joining the TPP. Answer demonstrates rigour and scope in analysis , and shows clear comparison between the two types of economies.	8 – 10 (9)
L2	For an answer that shows good knowledge of how size of the economy affects the benefits of joining the TPP. Answer may demonstrate rigour and scope in analysis, but do not show clear comparison between the two types of economies. Answer may have good knowledge of how size of the economy affects the benefits of joining the TPP but analysis is undermined by insufficient rigour and scope .	5 – 7 (6)
L1	Answer may have some knowledge of how size of the economy affects the benefits of joining the TPP. However, the answer has significant conceptual errors or is very descriptive .	1 – 4 (3)
Evaluation/Synthesis		

E3	Insightful conclusion/judgement on the importance of the size of the economy in determining the benefits of joining the TPP, and which type of economy is likely to benefit more. Synthesis makes it clear that due to the differing characteristics of the economies, some benefit more than others from joining the TPP.	4 – 5
E2	Attempted synthesis on the importance of the size of the economy in determining the benefits of joining the TPP, and which type of economy is likely to benefit more. However, there are some logical flaws and/or inaccuracies in the synthesising process.	2 – 3
E1	For an answer that gives an unsupported statement on the importance of the size of the economy in determining the benefits of joining the TPP, and which type of economy is likely to benefit more.	1

