



ECONOMICS

Paper 1

8819/01

Tuesday 29 August 2017

3 hours

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 name and CG number on all the work you hand in.
Write in dark blue or black pen on both sides of the paper.
You may use a HB pencil for any diagrams or graphs.
Do not use staples, paper clips, highlighters, glue or correction fluid.

Section A

Answer **all** questions.

Section B

Answer **one** question.

Begin each question on a separate sheet of answer paper.
Fasten your work for Section B and the cover page together.
Write the question that you attempted for Section B on the cover page.
Hand in your answer to each question **separately**.
The number of marks is given in brackets [] at the end of each question or part question.

This document consists of 8 printed pages.



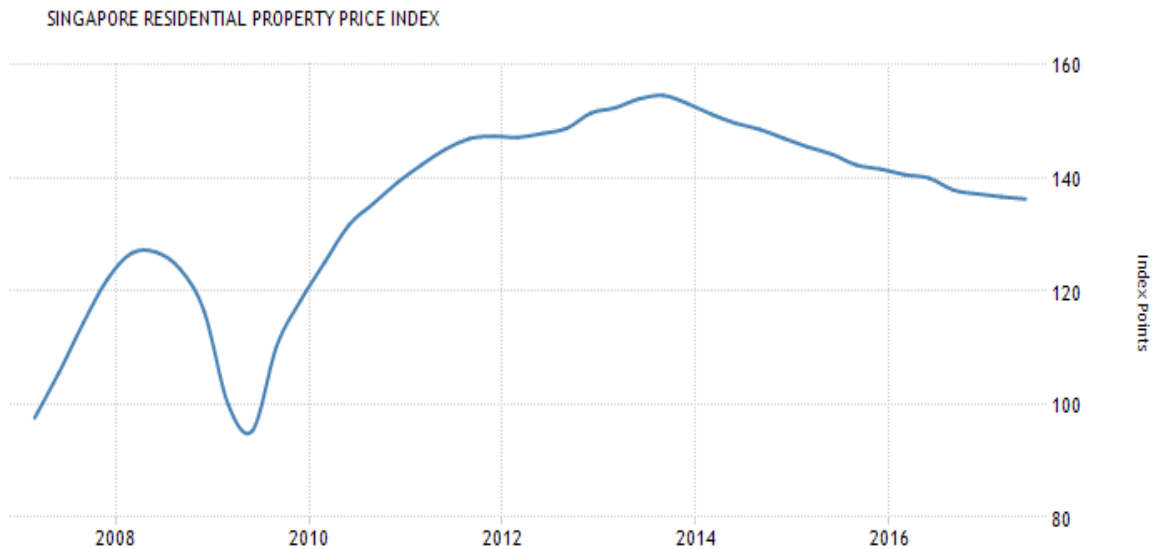
Section A

Answer **all** questions in this section.

Question 1

Real Estate Bubbles and Cooling Measures

Figure 1: Singapore Residential Property Price Index



Source: *Urban Redevelopment Authority, Singapore*

Extract 1: Public housing: A pillar of nation-building

A hallmark of the public housing programme has been Singapore's policy of home ownership. Started in 1964, the Home Ownership for the People Scheme gives home-owning citizens a tangible asset and stake in the country, and promotes rootedness and a sense of belonging among Singaporeans, thus contributing to the overall economic, social and political stability of Singapore.

Today, 82% of the population is housed in Housing and Development Board (HDB) estates, and the estates (comprising flats and a comprehensive range of facilities) have become a common point of emotional reference for the vast majority of Singaporeans. This "HDB Experience" has played an important role in bonding Singaporeans, in the same way that National Service and the education system have created common experiences among Singaporeans of all races and from all walks of life.

Source: *Civil Service College, retrieved Aug 2017*

Extract 2: New HDB flats have remained affordable: HDB

To keep flats affordable for Singaporeans, the 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 3: 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 US 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 4: 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 5: 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 per cent growth in gross domestic product (GDP) for the 4Q16, and an overall growth of 1.8 per cent for the year, according to recent estimates from the Ministry of Trade and Industry.

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 in Singapore’s residential property prices from 2010 to 2016. [2]
- (ii) Suggest two possible reasons for the trend identified in (i). [2]
- (b) (i) Explain why public housing is not a public good. [4]
- (ii) Explain why the government provides subsidies for public housing in Singapore. [4]
- (c) Explain the possible impact of a bursting of the real estate bubble in China on Singapore’s balance of payments. [4]
- (d) Analyse how the factors mentioned in Extract 4 affect the market for housing in Singapore. [6]
- (e) As an economic advisor to the Singapore government, discuss whether you will recommend the removal of cooling measures in Singapore. [8]

[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 6: 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 7: 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 8: 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 9: 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 (24 Feb). 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) (i) Explain the main causes of Greece's ballooning public debt. [2]
- (ii) With reference to Extract 6, comment on how the measures demanded under the Greek bailout agreement might impact the Greek economy. [4]
- (c) Explain the possible considerations behind China's attempt to rebalance its economy. [6]
- (d) Using an AD/AS diagram, explain how a tight labour market may affect general price levels in Singapore. [4]
- (e) (i) Explain how central banks such as the Monetary Authority of Singapore (MAS) could influence the external value of a country's currency. [2]
- (ii) In view of the data presented, discuss the extent to which MAS might have to intervene in the market for Singapore dollars in order to achieve the government's macroeconomic objectives. [8]

[Total: 30]

Section B

Answer **one** question from this section.

- 3** Malaysia will begin imposing its tourism tax on hotels from Aug 1 this year, starting from RM2.50 (S\$0.80) per room each night, according to details published on the Royal Malaysian Customs Department's website. Concurrently, recovery from the Global Financial Crisis has seen a rise in business activities and increasing income levels.
- (a) Explain how scarce resources are allocated in the free market. [10]
- (b) Discuss how the above factors may affect the total consumer expenditure on different types of hotels in Malaysia. [15]
- 4** The creation of the ASEAN Economic Community (AEC) has potentially significant consequences for the Singapore economy. ASEAN leaders established the AEC, one of whose aims is to promote freer movement of trade and capital in the region. Mr. Guy Harvey-Samuel, chief executive of HSBC Singapore, said that if the AEC is well implemented, Singapore's gross domestic product (GDP) would be 9.5 per cent higher by 2030.
- (a) Explain how you might use GDP to assess a country's living standards. [10]
- (b) Discuss whether the AEC would benefit Singapore's economy. [15]

TJC Prelims 2017 CSQ Answers (H1)

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

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

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

Explain reason for general trend - general increase in prices [1]:

"Very low interest rate environment" (Extract 3) indicates a low cost of borrowing, encouraging borrowing to buy big ticket items such as houses, thus boosting demand for property. OR "Continued income growth in Singapore" (Extract 3) leads to higher purchasing power and therefore higher demand for property.

Higher demand for property thus explains the general price increase from 2010 to 2016.

Explain reason for refinement - gradual decline since late 2013 [1]:

The gradual decline in prices since late 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.

Note: 1 mark for explaining general increase and 1 mark for explaining gradual decline since 2013.

- (b) (i) Explain why public housing is not 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 to prevent a person who has not paid from consuming the good. [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 is not a public good.

- (ii) Explain why the government provides subsidies for public housing in Singapore. [4]

The consumption of public housing generates positive externalities as home-ownership “promotes rootedness and a sense of belonging among Singaporeans, thus contributing to the overall economic, social and political stability of Singapore”, benefitting other Singaporeans. [1]

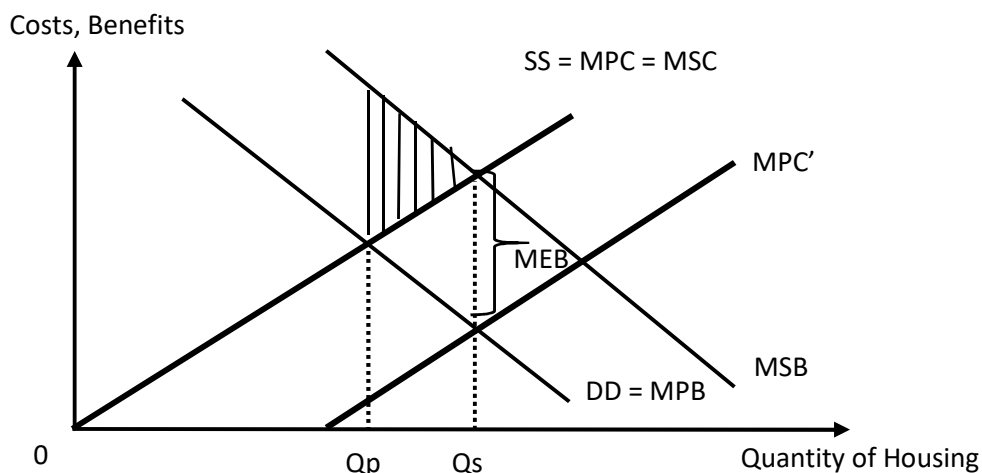


Figure 1: Positive Externalities in the Market For Housing

[1m for diagram]

Figure 1 shows the market for public housing. Marginal Social Benefit (MSB), which is the benefit derived by society, exceeds Marginal Private Benefit (MPB) by Marginal External Benefit (MEB), which represents the positive spillover effects on other people, ie political and social stability for everyone. Consumers only take into account their own MPB, ie the enjoyment of owning a house, and fails to take into account the benefit to others. Assuming no external costs, the private outcome Q_p occurs where $MPB = MPC$ and is lower than the socially optimal outcome of Q_s which occurs where $MSB = MSC$, leading to underconsumption. This results in a deadweight loss of the shaded triangle area, and an allocatively inefficient outcome. [1]

Therefore, there is market failure and this may justify government intervention in the form of subsidies. Giving producers a per unit subsidy that is equal to the MEB lowers their production cost and shifts the MPC down to MPC' . The new private equilibrium output of Q_p' where $MPC' = MPB$ now coincides with the social equilibrium output of Q_s where $MSC = MSB$. Allocative efficiency is achieved as output is raised to the socially optimal level. [1]

Note: Alternative reasons would be to improve equity in the distribution of public housing or to address underconsumption of merit goods - on top of the problem positive externalities, there is also an element of imperfect information as individuals are not fully aware of the benefits that public housing-ownership might bring to themselves, such as being financially secure as an asset-owner.

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

A bursting of the real estate bubble in China would mean a sharp drop in the

property prices, leading to a fall in the level of wealth. This causes individuals and firms to feel poorer and hence cut back on their consumption and investment respectively. [1]

As consumers in China cut back on their spending on both domestically and imported goods and services, their demand for Singapore's exports is likely to fall, because China is a significant export market for Singapore. Therefore, Singapore's export revenue is likely to fall, causing the trade balance and hence current account to deteriorate. [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 trigger a banking crisis as banks become increasingly saddled with bad loans that were used to finance the purchases of these assets. Banks may find difficulty in lending to other business, which hampers production and investment. There may also be bank failures, lowering business and consumer confidence. [1]

Therefore, 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, analyse how the factors mentioned in Extract 4 affect the market for housing in Singapore. [6]

The market for 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. Households are more willing to borrow to consume big-ticket items such as housing and hence, demand for housing increases. [1]

This is coupled with continued income growth, which boosts households' purchasing power and hence demand for housing. [1]

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, causing demand to fall. [1]

Whether overall demand increases or falls depends on which factor has a stronger impact. It is likely that cooling measures will be a more important factor as they affect market sentiment significantly, and could lower economic growth and thus income growth, overall causing demand for housing to fall. [1]

Examining supply factors

Housing supply will rise due to the “completion of 200,000 units” in the years ahead. [1]

Overall impact

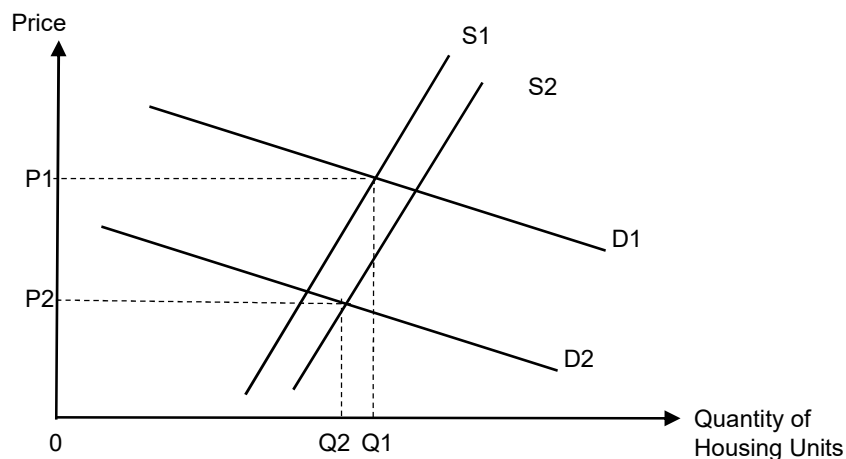


Figure 2: Concurrent shifts in demand & supply of housing market

[1m for diagram]

The combined impact of the fall in demand and increase in supply is represented in Figure 3. Demand is likely to fall more, from D1 to D2, than supply increase, from S1 to S2, and the fall in housing prices is more significant, from P1 to P2 than the fall in quantity, from Q1 to Q2. This is because 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 will not be significant in the immediate term. Moreover, current owners are likely to hold out and wait for a price recovery before selling, thus limiting the increase in supply. [up to 3]

Note: This question has a broad scope and there are many possible analyses that students can write to earn marks. Students are expected to determine the scope of the answer based on the number of marks allocated.

Marks are also awarded for elasticity analysis.

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, ceteris paribus. Supply for 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 falls, price falls, leading to a less than proportionate increase in quantity supplied of housing as $PES < 1$. [1]

A relevant elasticity concept when supply changes is price elasticity of demand (PED), which measures the responsiveness of quantity demanded for a given change in own-price, ceteris paribus. Demand for housing is likely to be price-elastic ($PED > 1$) as expenditure on housing forms a high proportion of a typical buyer's income. When supply increases, price falls, leading to a more than proportionate increase in quantity supplied of housing as $PED > 1$. [1]

- (e) As an economic advisor to the Singapore government, discuss whether you will recommend the removal of cooling measures in Singapore. [8]

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	Mark s
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.	4-6
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.	1-3
E	Evaluative judgement and comments based on economic or contextual analysis.	1-2

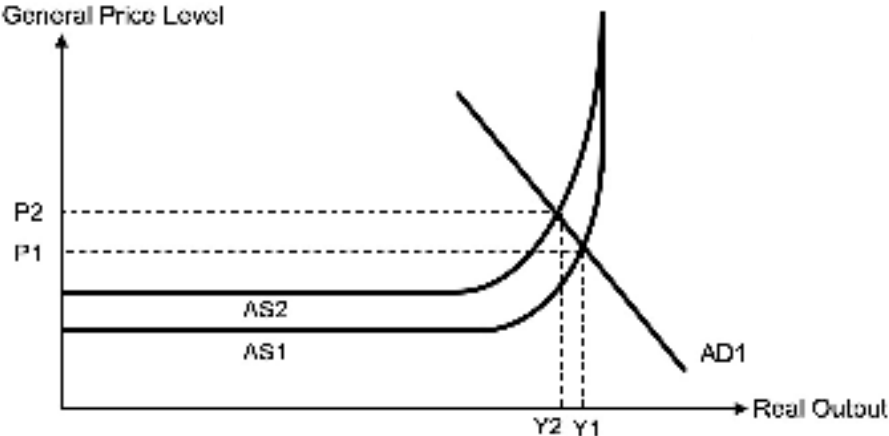
TJC Prelims 2017 CSQ2 Answers (H1)

(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 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)	(i) Explain the main causes of Greece's ballooning public debt.	[2]
	<p>A country's ballooning public debt may be due to rising government expenditure and/or falling tax revenue. In the case of Greece, there is a government budget deficit that is financed by borrowing.</p> <p>As implied in Extract 5, the possible causes of Greece's ballooning public debt may be due to rising government expenditure due to its pensions system which has "perceived generosity relative to other Eurozone states". [1]</p> <p>Apart from this, there are clear issues brought up by the troika of lenders (European Commission, European Central Bank and the International Monetary Fund) in terms of Greece's tax system where Greece provided a "30% discount for the Greek islands" and a possible unfair contribution to taxes by the Greek oligarchy. This implies falling tax revenue collected by the Greek government. [1]</p>	
	(ii) With reference to Extract 6, comment on how the measures demanded under the Greek bailout agreement might impact the Greek economy.	[4]
	<p>Based on Extract 6, 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>[1m for an explanation of any of the contractionary measure – negative impact.]</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>	
(c)	<p>Explain the possible considerations behind China’s attempt to rebalance its economy.</p>	[6]
	<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</p>	<p>Addressing what rebalancing meant.</p> <p>Background information on</p>

<p>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 and private investments 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 and private sector budgeting.</p> <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</p>	<p>China. <i>(can be summarised)</i></p> <p>1st key consideration – reduce vulnerability to external shocks.</p> <p>2nd key consideration – excess capacity.</p> <p>Private sector expectations that might contradicts government's objectives.</p>
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	<p>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.</p> <p>*Answers need to minimally include government’s and private sector’s interpretation of the rebalancing, and thus, a balanced consideration. Either a 2 + 1 (2m each) or a 1 + 1 (3m each) → needs to be rigorous.</p>	
(d)	<p>Using an AD/AS diagram, explain how a tight labour market may affect general price levels in Singapore.</p>	[4]
	<p>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]</p> <p>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]</p> <p>A fall in aggregate supply is reflected as an upward shift of the AS curve from AS₁ to AS₂, as seen in Figure 1. Assuming ceteris paribus, the fall in AS will then result in an increase in general price levels from P₁ to P₂. [1]</p>  <p style="text-align: center;"><u>Figure 1: Impact of a tight labour market in Singapore</u></p> <p><i>*1m for an accurately drawn diagram.* Candidate can also explain it as a rightwards shift of AD along the upward sloping portion of AS.</i></p>	

<p>(e)</p>	<p>(i) Explain how central banks such as the Monetary Authority of Singapore (MAS) could influence the external value of a country's currency.</p> <p>Central banks influence the external value of the country's currency by influencing the demand and/or supply of the currency in the foreign exchange market. When a central bank such MAS would like to appreciate the Singapore dollar, they may choose to increase the demand of the Singapore dollar by buying up Singapore currency in the foreign exchange market using their foreign exchange reserves. [1]</p> <p>Given an increase in the demand of the currency, value of the currency in the foreign exchange market will increase, leading to an appreciation in the currency. [1]</p> <p><i>*Candidates can also explain through influencing supply of the currency.*</i></p>	<p>[2]</p>
	<p>(ii) In view of the data presented, discuss to what extent MAS might have to intervene in order to achieve the government's macroeconomic objectives.</p> <p><i>Question interpretation:</i></p> <ul style="list-style-type: none"> • <i>Given the data presented in the case, what are the issues that may result in Singapore not achieving its macroeconomic objectives?</i> • <i>How can the Singapore dollar be influenced in order to mitigate these issues?</i> • <i>To what extent will MAS's intervention be effective in mitigating these issues?</i> • <i>What are alternative policies that can be implemented in order to achieve the government's macroeconomic objectives?</i> <p>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.</p> <p>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</p>	<p>[8]</p>

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 as a weak global climate is unlikely to impose inflationary pressures in Singapore. In order to combat the weakened demand for our exports, MAS could engineer a depreciation of the Singapore dollar, 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. *Singapore reliant on imported inputs.* 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
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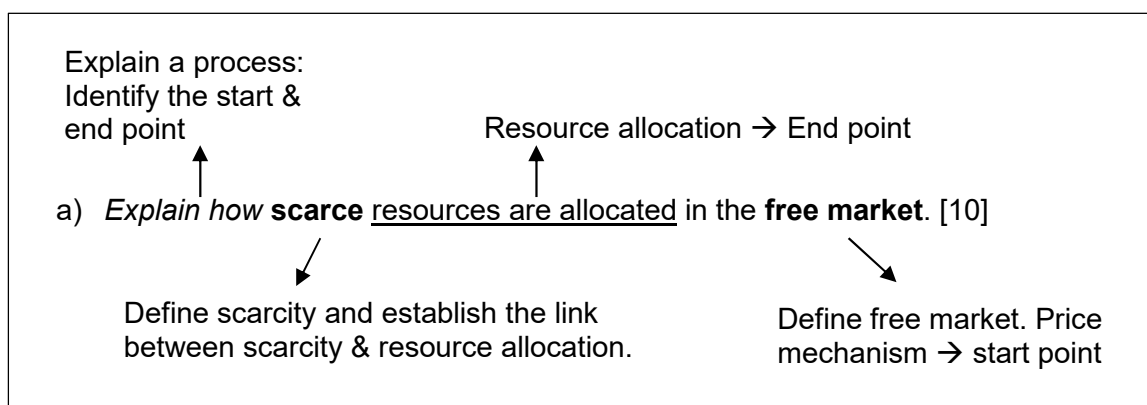
L2	A well-developed balanced answer with economic analysis that thoroughly explains the possible objective of the government, and thus the extent of intervention by MAS, with clear conceptual understanding, coupled with reference to case material.	4-6	
L1	<p>Lacks balance: One-sided answer that rigourously explains how MAS can intervene in order to achieve the objective of the government.</p> <p>OR</p> <p>Lacks rigour: Two-sided answer that is not thoroughly explained OR merely lifting evidence from the passage but no clear link to the issues.</p> <p>OR</p> <p>Lacks reference to case material and the application to the issues.</p>	1-3	
E	Evaluative judgement and comments based on economic or contextual analysis.	1-2	

Suggested Answer for H1 Prelim EQ3

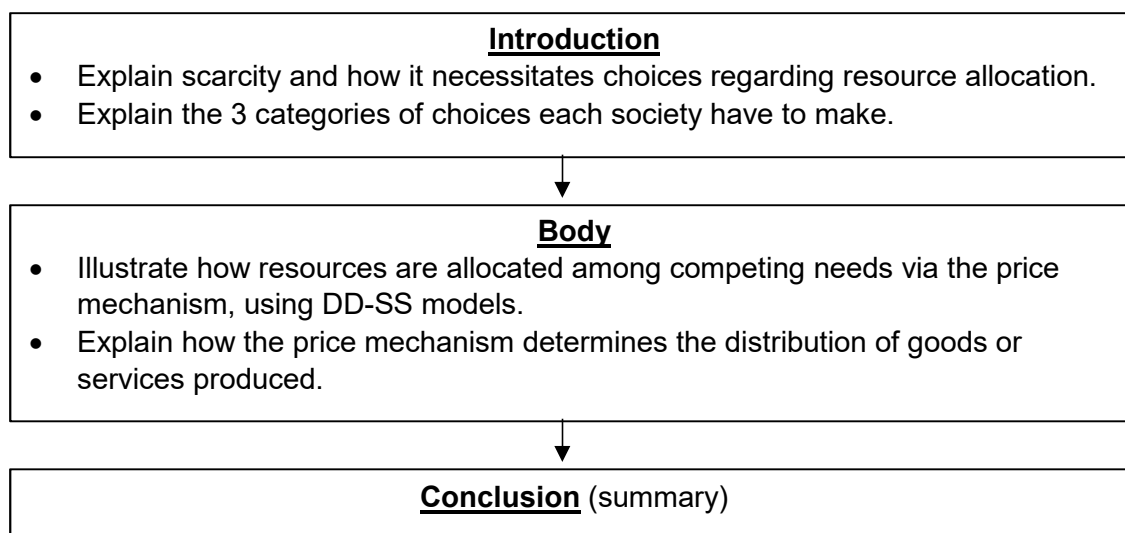
Malaysia will begin imposing its tourism tax on hotels from Aug 1 this year, starting from RM2.50 (S\$0.80) per room each night, according to details published on the Royal Malaysian Customs Department's website. Concurrently, recovery from the Global Financial Crisis has seen a rise in business activities and increasing income levels.

- (a) Explain how scarce resources are allocated in the free market. [10]
- (b) Discuss how the above factors may affect the total consumer expenditure on different types of hotels in Malaysia. [15]

Question Dissection



Schematic Plan



Suggested Answer for H1 Prelim EQ3

Suggested Answer	Comments
<p>The central problem of economics is scarcity, which refers to the situation where limited resources are insufficient to meet society's unlimited wants and needs. Due to scarcity, it is inevitable that choices have to be made and every choice involves sacrifice. In economics, the value of the next best alternative that had to be forgone to satisfy a particular want is termed opportunity cost.</p> <p>All societies face the same fundamental economic problem of scarcity and require a method of allocating scarce resources. There are three main categories of choice, arising from the problem of scarcity, to be made in any society: 'what and how much', 'how' and 'for whom' to produce. How these decisions are made depends on the economic system of the society. The free market refers to an economic system where all economic decisions are taken by individual households and firms, and with no government intervention.</p> <p>In a free market, resources are allocated via the price mechanism. Any change in demand or supply in one market affects the product and factor prices within that market and also other related markets. Producers and consumers respond to these price changes by channeling resources from declining markets to expanding ones. Thus, scarce resources are automatically allocated among competing uses.</p> <p>Suppose, in Figure 1(a), the demand in the market for hotel accommodation increases from D_1 to D_2, resulting in a shortage of $Q_1 - Q_5$ at the original price level P_1. The shortage creates an upward pressure on price, which <u>signals</u> to producers a need for resources to be employed into the hotel market. The higher price raises the profitability of providing hotel accommodation, thus providing the <u>incentive</u> for firms to produce more, thus increasing quantity supplied.</p>	<p><i>Define scarcity and explain how scarcity necessitates choices regarding resource allocation</i></p> <p><i>A summary followed by a detailed illustration of how the price mechanism allocates scarce resources among competing needs</i></p> <p><i>Trigger – an \square in DD for hotel</i></p> <p><i>Explain the price mechanism adjustment process – shortage \rightarrow upward pressure on price \rightarrow \square Qs.</i></p>

Figure 1(a): Market for hotel accommodation

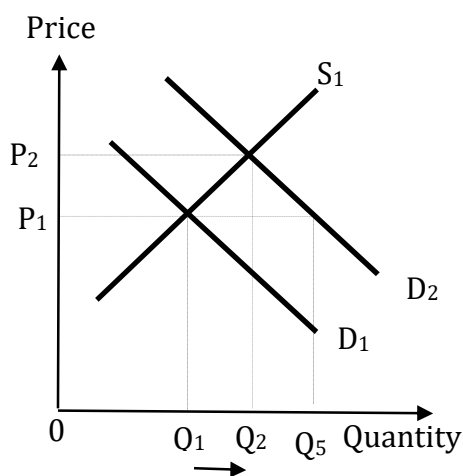
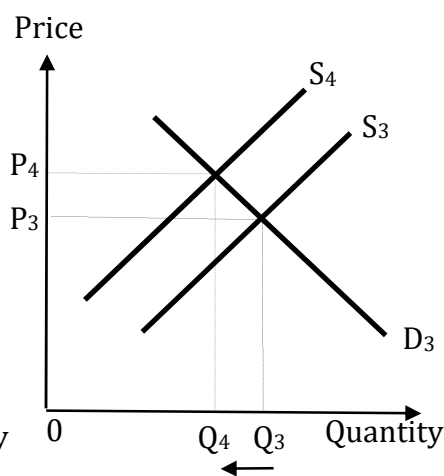


Figure 1(b): Declining market



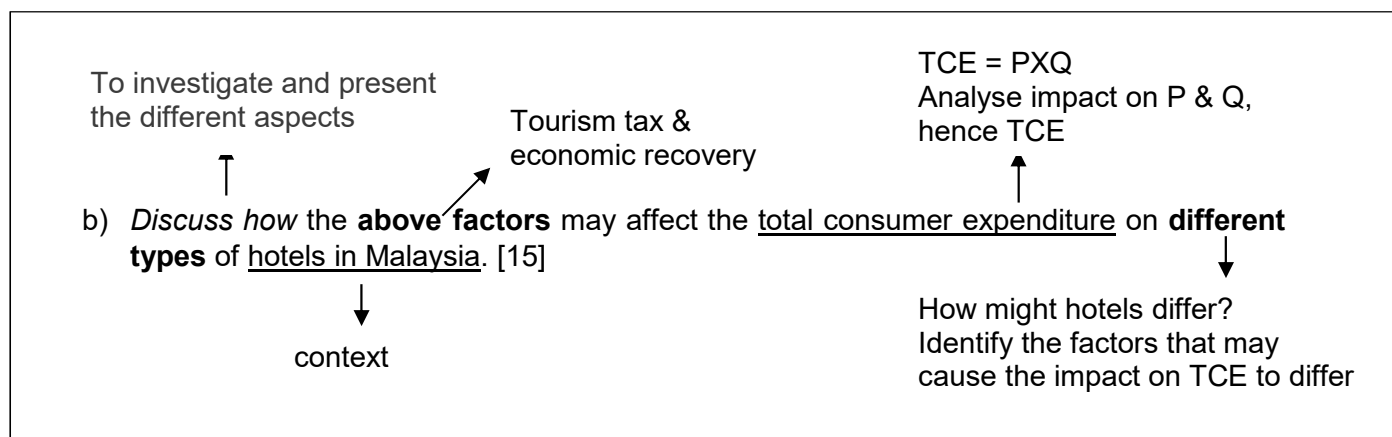
Suggested Answer for H1 Prelim EQ3

<p>To raise output, firms in the hotel market employ more resources, which increases the demand and prices of relevant factors of production. Rising factor prices however, results in higher production costs for firms in other markets. For instance, the higher demand for buildings is likely to increase the rental costs for office buildings, causing firms in other markets to experience a higher cost of production and therefore a fall in supply. In Figure 1 (b), the decrease in supply in the declining market is illustrated by a leftward shift of the supply curve from S_3 to S_4. The equilibrium price in the declining markets rises from P_3 to P_4 while the equilibrium quantity falls from Q_3 to Q_4.</p> <p>At the same time, the upward pressure on prices in the hotel market will cause consumers who are unwilling to pay more to drop out of the market, thus decreasing quantity demanded. Price will continue to increase until P_2 where the shortage is eliminated.</p> <p>Overall, the increase in demand for hotel accommodation causes equilibrium price to rise from P_1 to P_2 and the equilibrium quantity to rise from Q_1 to Q_2. The fall in the equilibrium quantity from Q_3 to Q_4 in the declining market and the rise in the equilibrium quantity from Q_1 to Q_2 in the hotel market shows how the price mechanism can adjust to <u>allocate</u> resources away from the declining market towards the production of hotel accommodation which is in higher demand. The rise in price allows hotel accommodation, which is in shortage, to be <u>rationed</u> to consumers who are able and willing to pay at the higher price P_2. In conclusion, in a free market, resources are allocated among competing needs via the price mechanism.</p>	<p><i>Explain how resources may be diverted away from declining markets Show that resources are diverted towards hotel market</i></p> <p><i>Continuation of the price mechanism adjustment process – upward pressure on price → □ Qd</i></p> <p><i>Explain how the price mechanism determine the distribution of service produced</i></p>
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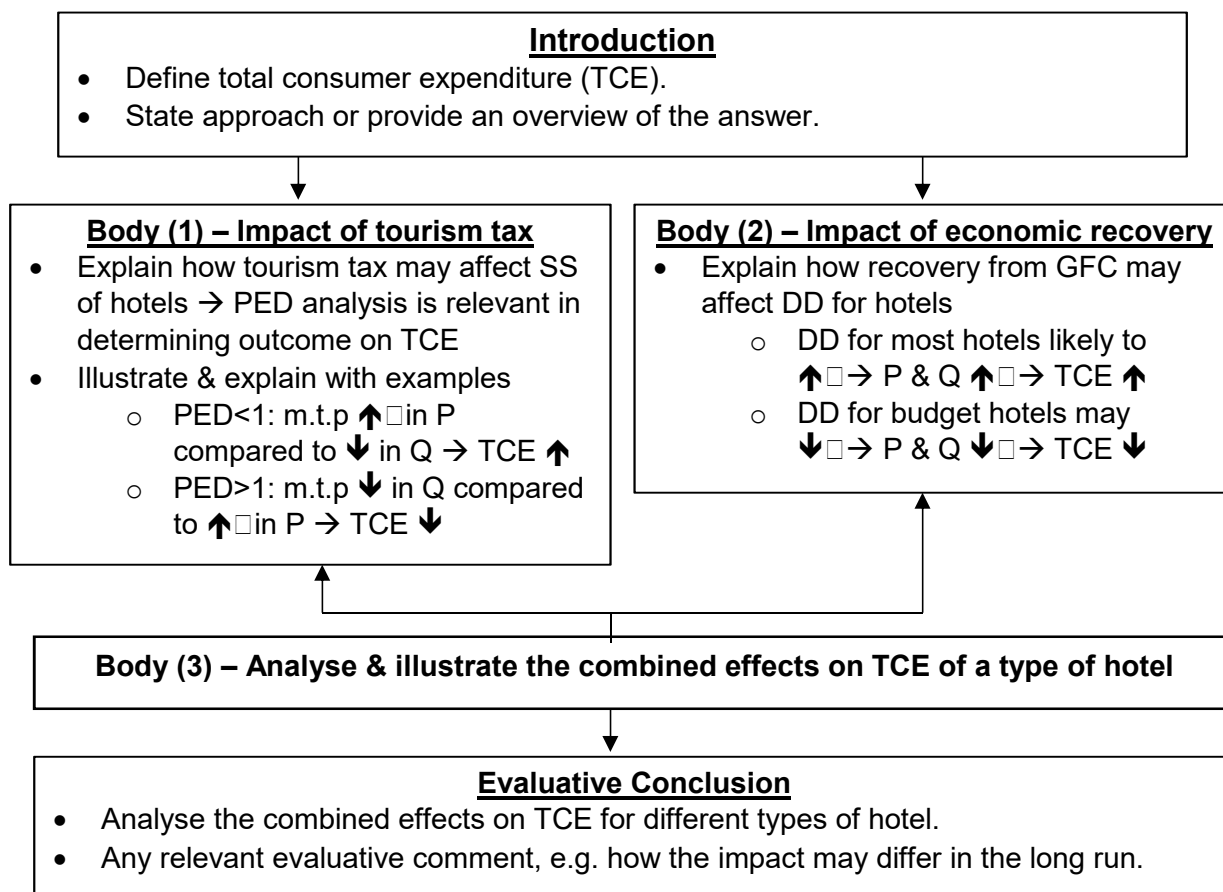
Mark Scheme

	Knowledge, Application / Understanding and Analysis	
L3	<p>Answers that explain scarcity and the rationale for resource allocation.</p> <p>Answers analyse thoroughly how the price mechanism influences the allocation of scarce resources to produce desired goods and services which are distributed to consumers who are able and willing to pay.</p> <p>Answers in this level are characterised by well-structured paragraphs AND a logical flow of arguments.</p>	7 – 10
L2	<p>Answers may have good knowledge of price mechanism, i.e. may illustrate the working of the price mechanism or the DD/SS framework using an example WITHOUT making reference to resource allocation.</p> <p>OR</p> <p>Answers may explain how the price mechanism influences the allocation of scarce resources to produce desired goods and services BUT lack rigour.</p>	4 – 6
L1	<p>Answers may have some knowledge of the price mechanism but with significant conceptual errors or are very descriptive.</p>	1 – 3

Question Dissection



Schematic Plan

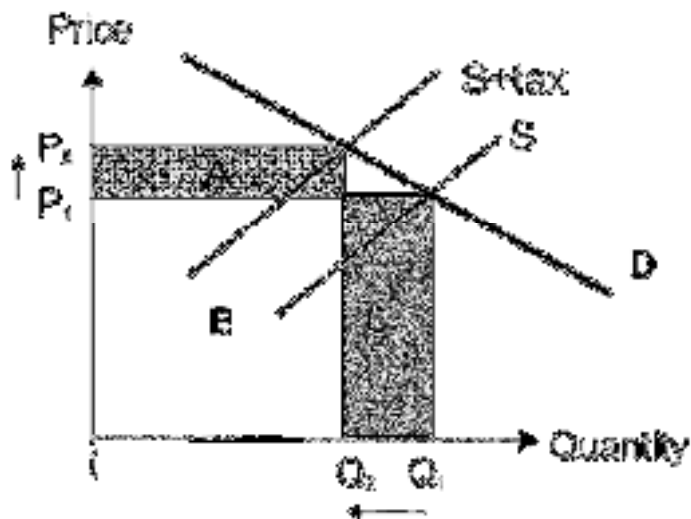


Suggested Answer for H1 Prelim EQ3

Suggested Answer	Comments
<p>Total consumer expenditure is equal to price multiplied by quantity. The imposition of tourism tax and the recovery from the Global Financial Crisis will have differing impact on the expenditure on different types of hotels in Malaysia, depending on their price elasticity of demand (PED).</p> <p>The tourism tax on hotels is an indirect tax that raises producers' marginal cost because they will need to incur the additional costs of paying the tax. This thus causes the supply of hotel to fall, which may result in an increase in equilibrium price and a fall in equilibrium quantity. As total consumer expenditure is equal to price multiplied by quantity, the concept of price elasticity of demand is relevant in analysing the impact on total consumer expenditure.</p> <p>Price elasticity of demand measures the responsiveness of quantity demanded of a good to a change in its price, ceteris paribus. Demand for a hotel may be price inelastic if it possesses unique feature(s) that make it less substitutable, e.g. theme park hotels like the Legoland Hotel, which is situated next to Legoland, has fully LEGO-themed bedrooms, and provide exclusive theme park packages that allow guests early entry to the theme park. Demand for a hotel may also be price inelastic if it is located in inaccessible areas where there are limited alternatives for accommodation, e.g. the hotels in Genting Highlands. Consumers may therefore be less sensitive to price changes as there are no or few close substitutes, and hence, an increase in its price is likely to result in a less than proportionate fall in quantity demanded. With reference to Figure 2, due to the imposition of tourism tax, a fall in supply from S to $S+tax$ is likely to cause equilibrium price to increase more than proportionately from P_1 to P_2 relative to the fall in quantity from Q_1 to Q_2. Hence, the increase in consumer expenditure from paying higher prices (represented by area A) is likely to be greater than the fall in consumer expenditure from buying lesser quantity (represented by area C). Overall, total consumer expenditure for hotels with inelastic demand is likely to increase.</p>	<p><i>Define total consumer expenditure (TCE).</i></p> <p><i>Provide an overview of the answer.</i></p> <p><i>Explain the impact of tourism tax on supply of hotels.</i></p> <p><i>When supply changes, PED analysis is relevant in determining impact on TCE.</i></p> <p><i>Define PED.</i></p> <p><i>Apply determinants of PED to account for a hotel with inelastic demand.</i></p> <p><i>Analyse the impact of the tourism tax on the TCE on a hotel with inelastic demand, using a DD-SS model.</i></p>
<p>Figure 2: Market for Legoland Hotel</p>	

On the other hand, if a hotel has many close substitutes, or has a low degree of necessity, e.g. a luxurious 5-star hotel, consumers may be more sensitive to price changes. Hence, demand for the hotel may be price elastic and an increase in its price is likely to result in a more than proportionate fall in quantity demanded. With reference to Figure 3, given a fall in supply from S_1 to S_2 due to the imposition of tourism tax, prices are likely to increase less than proportionately from P_1 to P_2 relative to the large fall in quantity from Q_1 to Q_2 . Hence, the increase in consumer expenditure from paying at higher prices (represented by area A) is likely to be smaller than the fall in consumer expenditure from buying lesser units (represented by area C). Overall, total consumer expenditure for hotels with elastic demand is likely to decrease.

Figure 3: Market for a 5-star luxury hotel



With the rise of Airbnb, demand for hotels are becoming more price elastic due to the greater availability of substitutes. Therefore, the imposition of taxes is likely to cause the total consumer expenditure for most consumers to fall.

At the same time, recovery from the Global Financial Crisis has seen a rise in business activities and increasing income levels. With a rise in business activities, there may be more business trips or conferences to Malaysia, which may result in an increase in demand for hotels. With increasing income levels, more consumers may be able to afford overseas holidays, increasing the demand for hotels too. As demand increases, price and quantity are likely to increase, resulting in an increase in total consumer expenditure.

However, for the lower-end or budget hotels, the increasing income levels may cause the tourists to switch to stay in non-budget hotels, increasing the demand for non-budget hotels and lowering the demand for budget hotels. In this case, equilibrium price and quantity of budget hotels are likely to fall, resulting in a fall in consumer expenditure.

Apply determinants of PED to account for a hotel with elastic demand.

Analyse the impact of the tourism tax on the TCE on a hotel with elastic demand, using a DD-SS model.

Apply analysis to the real world context & evaluate the likely PED & outcome on TCE

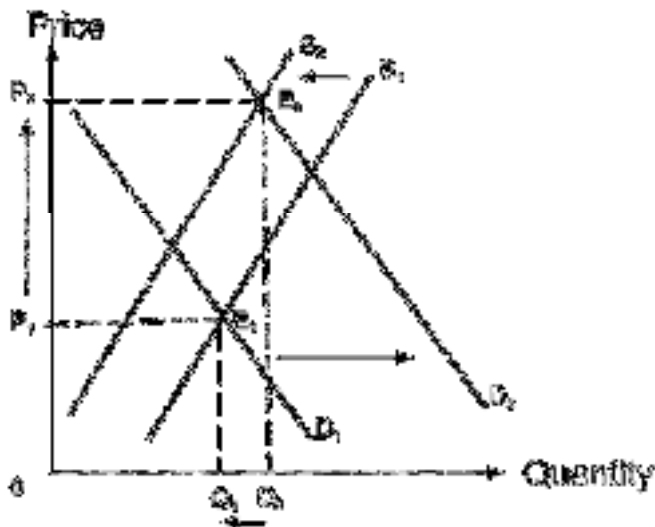
Analyse the impact of recovery from the GFC on the demand & application to TCE for most hotels.

Application of understanding regarding changes in demand factors to provide an alternative view.

Combining the effects of tourism tax and economy recovery, for a non-budget hotel with a price inelastic demand, total consumer expenditure is likely to increase, while for a budget hotel with a price elastic demand, total consumer expenditure is likely to fall. In the case of a non-budget hotel with a price elastic demand, or a budget hotel with a price inelastic demand, the impact on total consumer expenditure is indeterminate.

Figure 4 below illustrates the impact of the 2 factors on the market for a non-budget hotel with a price elastic demand. Suppose the economic recovery increases demand significantly from D_1 to D_2 and the tourism tax causes a relatively smaller fall in supply from S_1 to S_2 , the equilibrium price is likely to increase significantly from P_1 to P_2 while the equilibrium quantity falls slightly from Q_1 to Q_2 . Overall consumer expenditure increases from $OP_1E_1Q_1$ to $OP_2E_2Q_2$.

Figure 4: Market for non-budget hotel with price elastic demand



In the long run, if the government uses the tax consumer expenditure collected to improve tourism infrastructure, more tourists may be attracted to visit Malaysia, resulting in an increase demand for hotels, and hence an increase in total consumer expenditure.

Synthesis/Evaluation
 – Analyse the combined effects of the 2 events on different types of hotels.

Synthesis – Illustrate the impact on TCE for one of the uncertain outcomes.

An evaluative comment on the long run impact of the tax.

Suggested Answer for H1 Prelim EQ3

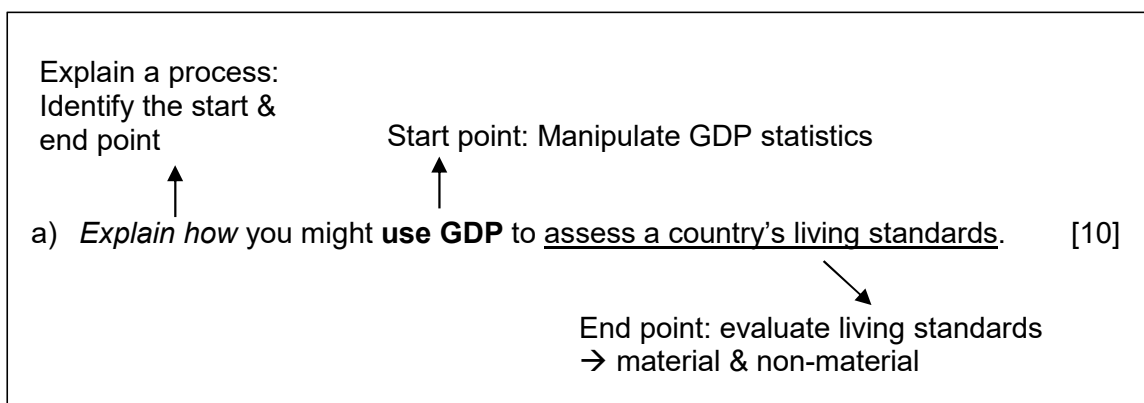
	Knowledge, Application / Understanding and Analysis	
L3	<p>Answers that use the relevant elasticity concept to analyse thoroughly the impact of the 2 factors on the total consumer expenditure on different types of hotels.</p> <p>Answers in this range are characterised by strong and well-structured paragraphs with relevant and complete diagrams.</p>	9 – 11
L2	<p>Insufficient rigour: Answers that inadequately analyse the impact of the 2 factors on the total consumer expenditure on different types of hotels. There is little application of the relevant elasticity concept and/or contain some minor errors in the analysis.</p> <p>Insufficient scope: Answers that analyse thoroughly the impact of 1 factor on the total consumer expenditure on different types of hotels OR Answers that analyse thoroughly the impact of the 2 factors on the total consumer expenditure on hotels in general.</p>	5 – 8
L1	A very superficial description of how the 2 factors may impact the total consumer expenditure on different types of hotels.	1 – 4
	Evaluation/Synthesis	
E2	<p>For an answer that synthesizes economic arguments to arrive at a well-reasoned conclusion.</p> <p>Insightful, and convincing evaluative comments are supported by economic or contextual analysis, demonstrating good awareness of real world context.</p>	3-4
E1	For an answer that gives an unsupported evaluative statement(s).	1-2

Suggested Answer for H1 Prelim EQ4

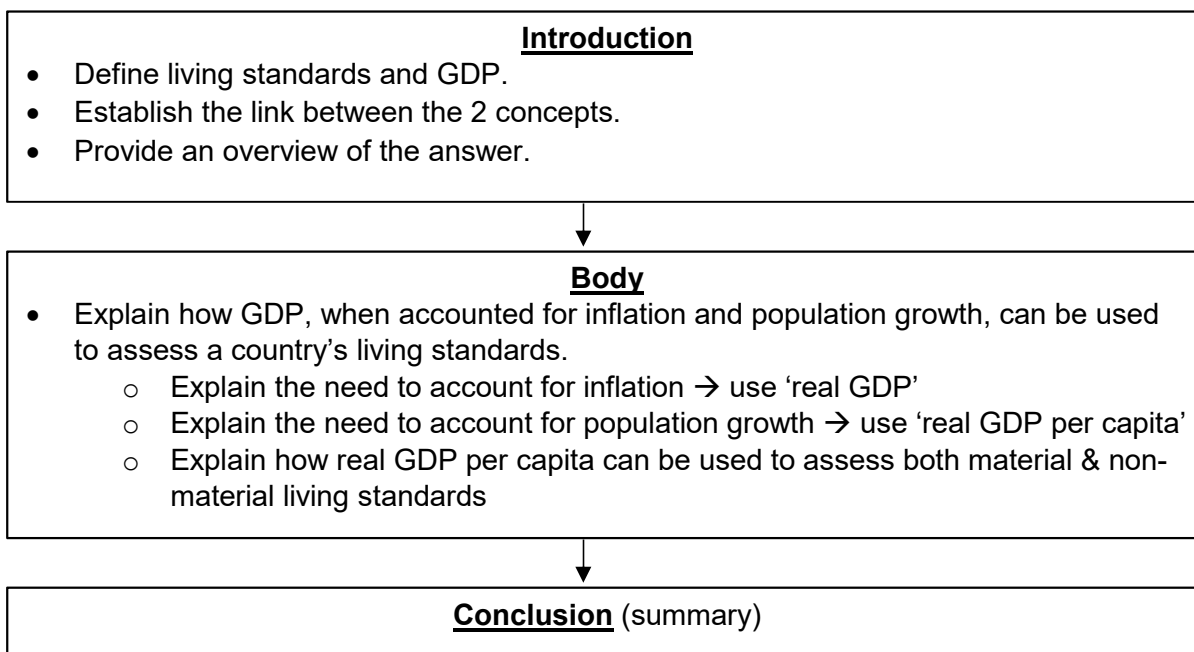
The creation of the ASEAN Economic Community (AEC) has potentially significant consequences for the Singapore economy. ASEAN leaders established the AEC, one of whose aims is to promote freer movement of trade and capital in the region. Mr. Guy Harvey-Samuel, chief executive of HSBC Singapore, said that if the AEC is well implemented, Singapore's gross domestic product (GDP) would be 9.5 per cent higher by 2030.

- a) Explain how you might use GDP to assess a country's living standards. [10]
b) Discuss whether the AEC would benefit Singapore's economy. [15]

Question Dissection



Schematic Plan



Suggested Answer for H1 Prelim EQ4

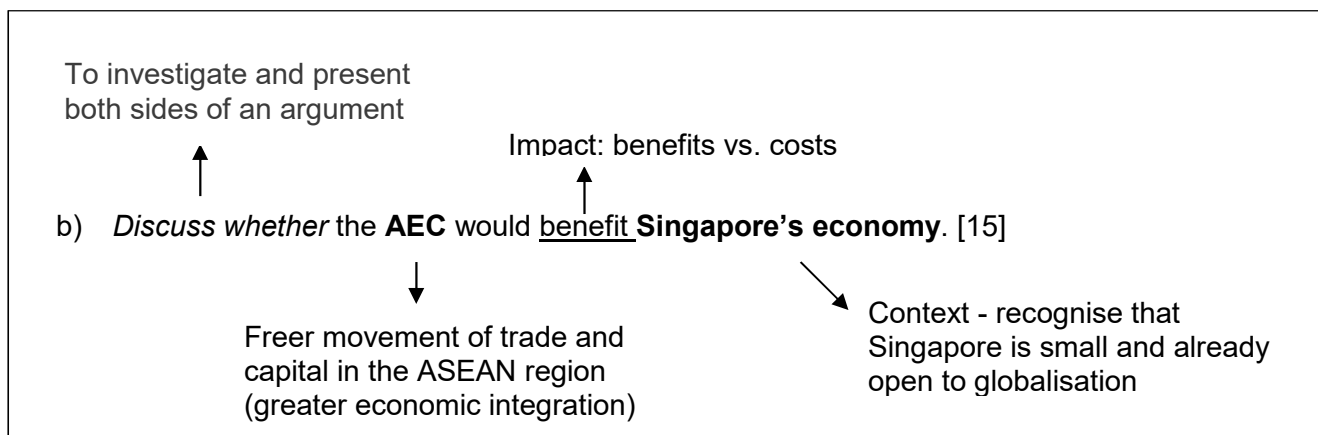
Suggested Answer	Comments
<p>Standard of living can be divided into two categories, material and non-material. Material standard of living refers to the bundle of goods and services available to the average citizen per year. Non-material living standard can be defined as the quality of life and measurements usually include stress levels, healthcare and education standards, and the state of environment. Although gross domestic product (GDP) is not a perfect indicator of standard of living, it is a measure that is commonly used.</p> <p>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. GDP is widely used as a measure of national income. After accounting for inflation and population growth, real GDP per capita can be used to assess a country's living standards.</p> <p>As GDP measures the total spending on goods and services in all markets in the economy, if total spending rises from one year to the next, the economy must producing a larger output of goods and services, and/or goods and services are being sold at higher prices. To measure the total quantity of goods and services available to citizens more accurately, price changes have to be accounted for. Real GDP is GDP measured in constant prices, i.e., in terms of the prices ruling in some base year. This would eliminate changes in prices and reflect how much real output has changed from one year to another.</p> <p>Furthermore, to measure the quantity and quality of goods and services available to the average citizen per year, population growth has to be accounted for. Real GDP per capita is measured by dividing real GDP over the size of the resident population. A rise in real GDP per capita indicates a rise in real income per capita, and hence a likely rise in the <u>material standard of living</u> because with a higher income, individuals can afford greater amount and better quality goods and services.</p> <p>In addition, higher income per capita may lead to higher tax revenue for the government, enabling it to spend more not only on basic necessities like health or education, but also sanitation, potable water supply, pollution reduction and arts/culture. Empirical evidence shows that countries with higher real GDP per capita, also score higher in indicators of quality of life such as life expectancy and infant mortality rates. Thus, higher real GDP per capita may also lead to higher <u>non-material standard of living</u>.</p> <p>In conclusion, if we take into account both inflation and the size of the population, though imperfect, GDP can be used to assess a country's living standards in both the material and non-material aspects.</p>	<p><i>Define standard of living – material & non-material.</i></p> <p><i>Establish link between standard of living & GDP.</i></p> <p><i>Define GDP.</i></p> <p><i>Provide an overview of the answer.</i></p> <p><i>Explain the need to account for inflation to derive real GDP.</i></p> <p><i>Explain the need to account for population growth.</i></p> <p><i>Explain how real GDP per capita can account for material standard of living.</i></p> <p><i>Explain how real GDP per capita can account for non-material standard of living.</i></p> <p><i>Summary of answer</i></p>

Suggested Answer for H1 Prelim EQ4

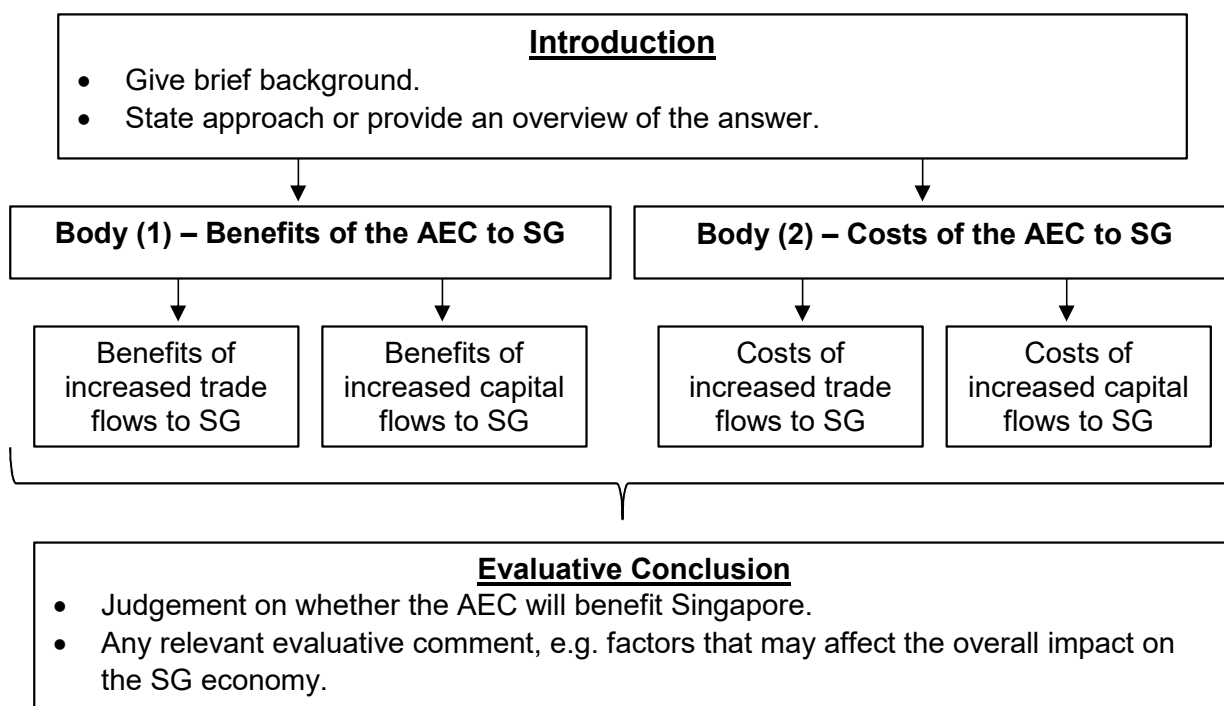
Mark Scheme

	Knowledge, Application / Understanding and Analysis	
L3	<p>Answers explain thoroughly why there is a need to account for inflation and population growth.</p> <p>Answers explain thoroughly how real GDP per capita might reflect a country's material and non-material living standards.</p> <p>Answers in this level are characterised by well-structured paragraphs AND a logical flow of arguments.</p> <p>Answers that fail to explain how real GDP per capita might reflect non-material living standards will be capped at 8 marks.</p>	7 – 10
L2	<p>Answers explain thoroughly how GDP might reflect a country's material (and non-material) living standards BUT fail to explain why there is a need to account for inflation and/or population growth.</p> <p>OR</p> <p>Answers explain how GDP, when accounted for inflation and population growth, might reflect a country's material (and non-material) living standards BUT lack rigour.</p>	4 – 6
L1	<p>Answers may have some knowledge of the concept of standard of living and/or GDP, with significant conceptual errors or are very descriptive.</p>	1 – 3

Question Dissection



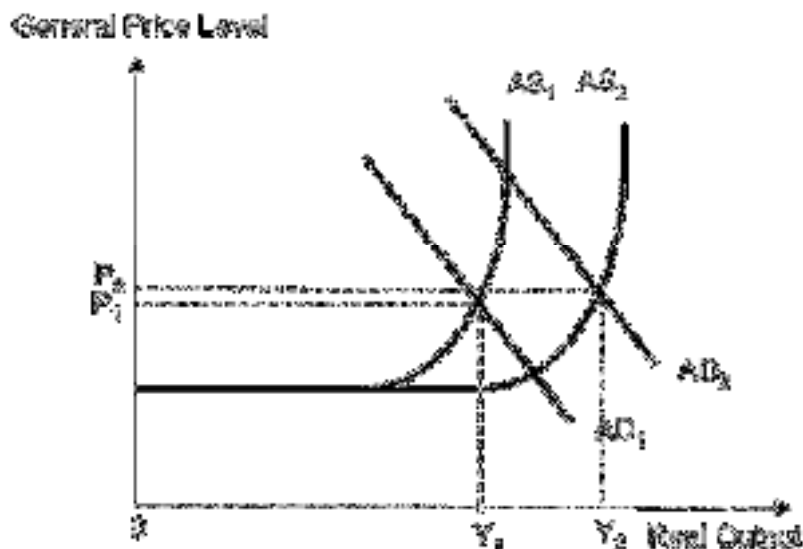
Schematic Plan



Suggested Answer for H1 Prelim EQ4

Suggested Answer	Comments
<p>One of the aims of the ASEAN Economic Community (AEC) is to promote freer movement of trade and capital in the region, which can have potentially significant consequences for the Singapore economy. This essay seeks to examine the potential benefits and costs of the AEC, before forming a judgement on whether the AEC would benefit Singapore's economy.</p> <p>The theory of comparative advantage states that provided the opportunity costs of producing various goods differ in two countries, a country is able to enjoy higher consumption levels if it were to specialise in goods in which it has comparative advantage in, and trade the good for other goods in which it has a comparative disadvantage. With lower trade barriers and freer trade in the AEC, a greater degree of specialisation based on comparative advantage is encouraged and Singapore is likely to benefit from higher consumption possibilities, increasing the material standard of living.</p> <p>In addition, with the reduction of trade barriers and the freer flow of goods that will ensue under the AEC, firms in Singapore can market and sell their goods and services more easily to the 630 million people that make up the population of all 10 ASEAN states. This prospect is extremely beneficial amidst the global economic slowdown, which hampers Singapore's growth in external demand. Furthermore, the growing middle-income class in ASEAN is likely to demand for more luxury consumer goods, creating opportunities for Singapore to export her consumer products and services. With increase in exports (X), aggregate demand (AD) and real output may increase, leading to faster economic growth. In fact, it is predicted that Singapore's GDP will be 9.5 per cent higher by 2030 if the AEC is well implemented. The economic growth is also likely to increase the derived demand for labour, lowering unemployment levels.</p> <p>Furthermore, the promotion of freer movement of capital may contribute to both actual and potential growth in Singapore. There may be increased capital flows from the other ASEAN countries into Singapore. At the same time, with the business-friendly environment in Singapore, export-oriented FDI from non-ASEAN countries may also increase, as firms outside of the AEC may seek to establish their production in Singapore to export to the region. As shown in Figure 1, the increase in capital flows increases investment levels in Singapore, increasing AD from AD₁ to AD₂. In the long run, the greater capital accumulation causes long-run aggregate supply to increase from AS₁ to AS₂. Overall the real output increases from Y₁ to Y₂ while general price level increase P₁ to P₂. The AEC can be said to act as an engine of growth as it enables Singapore to achieve sustained economic growth without significant upward pressure on the general price level.</p>	<p><i>Give brief background.</i></p> <p><i>State approach.</i></p> <p><i>Benefit of increased trade flows – higher consumption possibilities</i></p> <p><i>Benefit of increased trade flows – greater access to the ASEAN markets → ↑ X → higher economic growth and lower unemployment</i></p> <p><i>Benefit of increased capital flows – ↑ long-term capital inflow, especially export-oriented FDI from non-ASEAN countries → engine of growth</i></p>

Figure 1: Impact of increase in investment



However, with freer trade, as Singapore increases the degree of specialisation in the production of goods in which she has comparative advantage, workers in the declining industry in which Singapore does not have a comparative advantage may face a fall in derived demand for their labour. This may result in a rise in structural unemployment, which refers to unemployment due to mismatch between the skills of the unemployed and those required by producers seeking factors of production. Also, the increased specialisation may widen income inequality as demand for highly-skilled labour in the “sunrise” industries increases, causing wages to rise, while wages in the “sunset” industries fall due to the lower demand for labour.

Furthermore, Singapore may offshore her production processes to lower-wage ASEAN countries to lower cost of production and boost exports price competitiveness. However, this may lead to loss of job opportunities for domestic workers and worsen structural unemployment if they lack the skills to take on jobs in other industries.

In addition, the AEC may increase Singapore’s reliance on Multinational Companies (MNCs), and this may make her more vulnerable to the footloose nature of MNCs. For example, MNCs might pull out of Singapore in the event of global recessions or when other countries offer better investment conditions. Without strong support of domestic companies and industries, Singapore may face greater difficulty in cushioning falls in national income when there is an outflow of FDI. In fact, Singapore’s reliance on MNCs to fuel economic growth has been blamed for the absence of home-grown companies the likes of Korea’s Samsung and Taiwan’s Acer and there are calls to grow local SMEs, which stay in Singapore through highs and lows of our economy, unlike MNCs which choose their locations based on economic considerations.

Cost of increased trade flows – rise in structural unemployment and income inequality

Cost of increased capital flows – worsen structural unemployment

Cost of increased capital flows – vulnerable to long-term capital outflows

Suggested Answer for H1 Prelim EQ4

Given that Singapore's economy is already highly liberalised, the extent to which the AEC may hasten changes in comparative advantage and hence result in greater structural unemployment and income inequality is likely to be less significant. Comparatively, amidst the global economic slowdown driven by the weakening in Europe and US as well as China, the benefits of an easier access to the ASEAN markets are likely to be heightened. While Singapore has been an active member within ASEAN, intra-ASEAN trade and investment is still minimal, contrary to the proximity of these nations. As such, AEC further provides Singapore with a greater diversification of its trade and investment portfolio, moving beyond the traditional partners in the West as well as China. While greater integration might increase vulnerability, the AEC may have been an attempt to hedge against the vulnerability of Singapore's traditional partners. Overall the benefits of increased integration are likely to outweigh the challenges.

Whether AEC would benefit Singapore also depends on Singapore's ability to maximise the benefits and mitigate the costs. Firms may want to focus on consumer sectors that cater to the increasingly affluent middle class in ASEAN, and the Singapore government can continue to provide subsidies to local SMEs to help them lower their costs of production so that they can survive and compete with the MNCs, as well as to help them expand to the ASEAN markets and tap on the opportunities there. Instead of constantly looking at how FDIs might enter Singapore to aid in our economic development, the AEC is a great opportunity for local firms to consider entering the largely under utilised ASEAN markets, under the guidance and support of IE Singapore.

Evaluative conclusion – weigh the extent of costs against the extent of benefits

Evaluative comment – depends on firms' or governments' ability to maximise the benefits & mitigate the costs.

Suggested Answer for H1 Prelim EQ4

Marks Scheme

	Knowledge, Application / Understanding and Analysis	
L3	<p>Answers that analyse thoroughly the benefits and costs of rising trade and capital flows under the AEC, applied to the context of Singapore.</p> <p>Answers recognise the nuance that Singapore is already open to globalisation, and therefore centre the analysis on the benefits and costs of having <u>a greater degree of integration</u> (instead of analysing the benefits and costs of moving away from autarky towards free trade and capital flows)</p> <p>Answers in this range are characterised by strong and well-structured paragraphs with relevant and complete diagrams.</p>	9 – 11
L2	<p>Insufficient rigour: Answers that inadequately analyse the benefits and costs of rising trade and capital flows under the AEC, applied to the context of Singapore.</p> <p>Lacks application: Answers lack application to the context of Singapore and AEC OR Answers fail to recognise the nuance that Singapore is already open to globalisation, and centre the analysis on the benefits and costs of moving away from autarky towards free trade and capital flows.</p> <p>Insufficient scope: Answers that analyse thoroughly the benefits or costs of rising trade and capital flows under the AEC, applied to the context of Singapore.</p>	5 – 8
L1	A very superficial description of the benefits or costs of increased trade and capital flows.	1 – 4
	Evaluation/Synthesis	
E2	<p>For an answer that synthesizes economic arguments to arrive at a well-reasoned conclusion.</p> <p>Insightful, and convincing evaluative comments are supported by economic or contextual analysis, demonstrating good awareness of real world context.</p>	3-4
E1	For an answer that gives an unsupported evaluative statement(s).	1-2