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\$\frac{1}{2}\text{Preliminary Examination for General Certificate of Education Advanced Level

ECONOMICS

Paper 2: Essays

20 August 2018
2 hours 15 minutes

Additional Materials: Answer Paper and 3 Essay Cover Pages

READ THESE INSTRUCTIONS FIRST

Write your student registration number 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, graphs or rough working.

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

DO NOT WRITE IN ANY OF THE MARGINS.

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.

Start each question on a new piece of paper.

At the end of the examination, fasten all your work securely with the cover pages given [one cover page for each question].

Fill in the necessary information on the cover page.

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

Answer **three** questions in total.

Section A

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

- 1 Rising cost of laying water pipes and continued income growth have contributed to the significant increase in price of water in Singapore. This is expected to affect the operations of the food and beverage industry.
 - (a) Explain why rising cost of laying water pipes and continued income growth may have contributed to the large increase in price of water. [10]
 - (b) Discuss how the above factors may impact the markets for restaurant and hawker food in Singapore. [15]
- 2 The petrol retailing industry in Singapore has long been dominated by a few large players such as Shell, Caltex, ExxonMobil and SPC.
 - (a) Explain how barriers to entry can affect a firm's price and output decisions. [10]
 - (b) Discuss whether a firm should mainly compete based on pricing strategies in an industry like petrol retailing. [15]
- 3 MediShield Life is a state insurance scheme that provides lifelong protection for all Singapore Citizens and Permanent Residents against large hospital bills. It has copayment features such as claim limits, deductible, and co-insurance to ensure that those insured share the burden of medical bills with the government.

Discuss the appropriateness of the Singapore government's approach in addressing the market failure due to imperfect information and asymmetric information in the market for healthcare and its related markets. [25]

Section B

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

4 Singapore's monetary policy has been centred on the management of the exchange rate instead of the management of interest rate.

Discuss whether the factors limiting the effectiveness of interest rate policy are key in determining the choice of exchange rate centred monetary policy instead of interest rate policy in achieving Singapore's macroeconomic goals. [25]

- **5** Brazil's Gross Domestic Product (GDP) contracted by 3.6% in 2016 and this has led to calls from policy makers to use discretionary fiscal policy to stimulate the economy.
 - (a) Explain why a government cannot rely solely on automatic stabilisers and instead uses discretionary fiscal policy to address the concerns of an economic recession.

 [10]
 - (b) Discuss whether demand management policies are more important than supply side policies in attaining inclusive economic growth for an economy experiencing recession. [15]
- **6** Evaluate the policies the Singapore government should adopt to improve global competitiveness in light of the potential conflicts with the achievement of macroeconomic goals. [25]

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2018 SH2 H2 Economics Prelims

Paper 2 - Essay Questions (Section A)

- Q1. Rising cost of laying water pipes and continued income growth have contributed to the significant increase in price of water in Singapore. This is expected to affect the operations of the food and beverage industry.
- (a) Explain why rising cost of laying water pipes and continued income growth may have contributed to the large increase in price of water. [10]
- (b) Discuss how the above factors may impact the markets for restaurant and hawker food in Singapore. [15]

Suggested Answer Outline:

Part (a)

Introduction

- The large increase in price of water can be attributed to relevant demand and supply factors as well as using price elasticity of demand (PED) and price elasticity of supply (PES).
- The demand factor would be the increased income growth and the supply factor would be the rising cost of laying water pipes.

Body

Demand factor combined with PES

- Continued income growth contributes to the increase in price of water. Given Singaporeans now have a higher disposable income, this would lead to a large increase in demand for luxury goods such thus leading to a large increase in demand for water as it is used for production of these goods.
- The increase in income leads to a more than proportionate increase in demand of water from D0 to D1, thus leading to a large rise in price of water.
- In addition, the supply of water is price inelastic which also contributes to the large increase in price.
 This is because it is difficult for Singapore to increase its supply of water quickly in response to an increase in price. Hence, an increase in demand leads to a more than proportionate increase in price of water from P0 to P1, ceteris paribus.

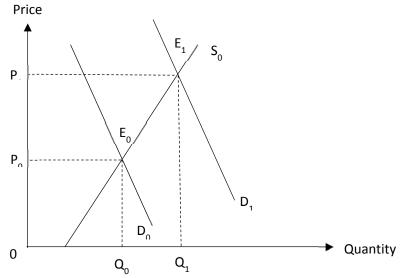


Figure 1: DD with PES in market of water

Supply factor combined with PED

The increase in cost of building water pipes can lead to an increase in price of water. The increase
in cost of producing water for Public Utilities Board (PUB), leads to a fall in supply of water from S0
to S1, thus leading to an increase in price.

• The demand for water is price inelastic due to its high degree of necessity in subsistence and production of goods. There is also a lack of close substitutes to water. Hence, a fall in supply leads to a more than proportionate increase in price of water from P0 to P1, ceteris paribus.

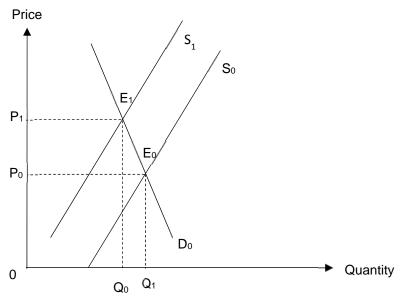


Figure 2: SS with PED for market of water

Simultaneous shifts with price mechanism

• With a simultaneous increase in demand and fall in supply of water, at original price P0, there is a shortage of Q0Q1. This exerts an upwards pressure on price resulting in a significant increase in price of water from P0 to P1.

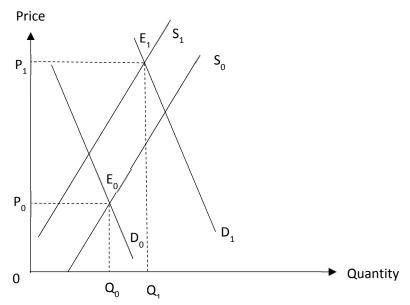


Figure 3: Simultaneous shifts in market of water

Conclusion

 Overall, demand and supply factors combined with inelastic demand and supply led to an increase in price of water significantly which has an adverse impact on the operations of the food and beverage industry.

Marks Scheme:

a	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Levels	Descriptors

	For an answer that demonstrates knowledge, understanding, application and analysis:
	✓ EXCELLENT breadth that considers the following economic concepts in explaining multiple and balanced perspectives, viewpoints, relationships and factors. ALL points chosen should be of relevance and significance in answering the question.
L3 8 - 10	 ✓ EXCELLENT depth in economic analysis that reflects the following in ALL explanations. ✓ Accurate use of economic concepts, clear elaboration, and precise use of economic terminologies, language and phrasing.
	The answer should also be supported by: ✓ Well-labelled and well-referred to diagram(s) / tool(s) of analysis drawn with precision (where appropriate).
	 ✓ Relevant examples and accurate use of facts. ✓ Logical structure.
	For an answer that demonstrates knowledge and understanding but lacks application and
	 analysis: At least GOOD breadth that considers the following economic concepts in explaining multiple and balanced perspectives, viewpoints, relationships and factors. MOST points chosen should be of relevance and significance in answering the question.
L2 5 - 7	 At least GOOD depth in economic analysis that reflects the following in MOST explanations. Accurate use of economic concepts, clear elaboration, and precise use of economic terminologies, language and phrasing.
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High	For an answer that demonstrates knowledge but lacks understanding, application and analysis: > INSUFFICIENT breadth that considers the following economic concept(s). Point(s) chosen may be of relevance but may not be of significance in answering the question.
L1 3 - 4	 INSUFFICIENT depth in economic analysis that may reflect the following: Lack of accuracy in the use of economic concepts, lack of clarity in elaboration, and lack of precision in the use of economic terminologies, language and phrasing.
Low L1 1 - 2	 For an answer that: Is irrelevant in analysis but may contain an introduction that addresses the question or contains no economic analysis but may contain a few statements that are relevant to the concepts required to answer the question. Contains fundamental conceptual errors in analysis.

Part (b)

Introduction

• The impact on the market for restaurant and hawker food is determined by the change in equilibrium price and quantity in these markets. Equilibrium is attained when the demand curve intersects with the supply curve. The above factors of increased price of water and continued income growth would affect the markets for restaurant and hawker centre differently by changing both supply and demand of their markets.

Body

Version 1 (excellent depth by focusing on total revenue changes) Impact on restaurant food

• The increased cost of water leads to a fall in supply of restaurant food, ceteris paribus, due to increase in cost of production. This is seen from an upward shift of supply curve from S0 to S1. Given that demand for restaurant food is price elastic, this fall in supply leads to a smaller fall in quantity from Q0 to Q1 relative to the larger increase in price of restaurant food from P0 to P1. This leads to a fall in total revenue given area 0P1E1Q1 is smaller than area 0P0E0Q0.

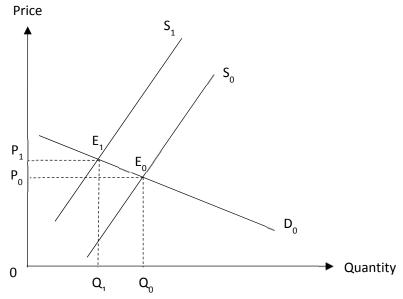


Figure 1: SS with PED for restaurant market

- With an increase in income, this leads to an increase in demand for restaurant food, ceteris paribus.
 The demand for restaurant food is income elastic as it is a luxury good. Thus, the increase in demand is more than proportionate given the increase in income from D0 to D1, leading to a large increase in both price and quantity of restaurant food.
- It is likely the increase in demand would outweigh the fall in supply.
- Overall, this would lead to a shortage in the market for restaurant food, leading to an upward
 pressure on price until shortage is resolved, hence the equilibrium price increased from P0 to P1
 and quantity increased from Q0 to Q1. Total revenue increases as area 0P1E1Q1 is greater than
 area 0P0E0Q0.

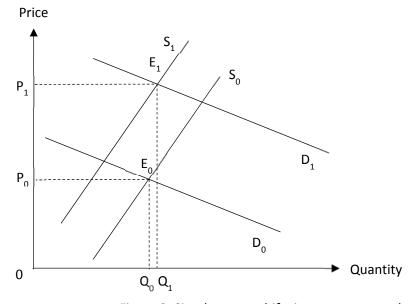


Figure 2: Simultaneous shifts in restaurant market

Impact on hawker food (normal good)

• The increased cost of water is likely to increase the cost of production of hawker food in the same manner as restaurant food. Thus, supply of hawker food decreases. The demand for hawker food is price inelastic due to the lack of close substitutes. Hence, the fall in supply leads to a large increase in price relative to the smaller fall in quantity of hawker food. This leads to a fall in total revenue as area 0P1E1Q1 is smaller than area 0P0E0Q0.

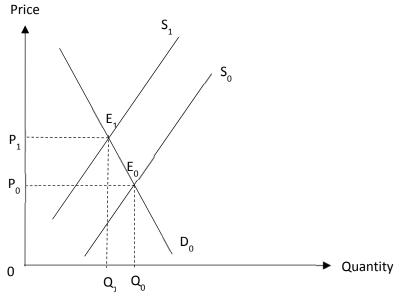


Figure 3: SS with PED for hawker food market

- The increase in income of Singaporeans would lead to an increase in demand for hawker food as it is a normal good. Hawker food is a necessity and the demand for hawker food is income inelastic. Hence an increase in income leads to a less than proportionate increase in demand for it from D0 to D1, leading to a small increase in both price and quantity of hawker food.
- The increase in demand is likely to be smaller than the fall in supply of hawker food as demand for hawker food is income inelastic. At initial price, there exists a shortage which exerts an upward pressure on price until it is eliminated, hence overall price of hawker food increases significantly from P₀ to P₁ and quantity decreases marginally from Q₀ to Q₁. Total revenue still increases as area 0P₁E₁Q₁ is bigger than 0P₀E₀Q₀.

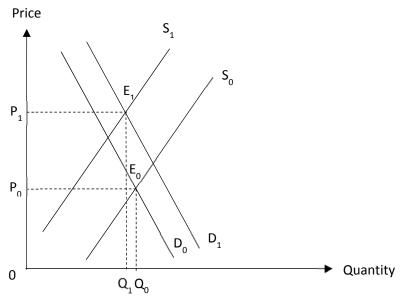


Figure 4: Simultaneous shifts for hawker food market

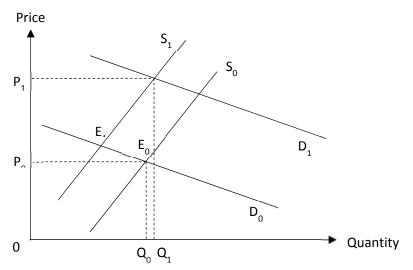


Figure 1: Simultaneous shifts in restaurant market

Evaluation Conclusion

- The above analysis assumes that there are no other factors mentioned in the preamble happening which may not be the case in reality
- In addition, the above analysis may be altered if the YED values changed. For example, wealthy Singaporeans may view restaurant food as necessities, hence an increase in income leads to a less than proportionate increase in demand.

Marks scheme:

Levels	Descriptors
L3 8 - 10	For an answer that demonstrates knowledge, understanding, application and analysis: EXCELLENT breadth that considers the following economic concepts in explaining multiple and balanced perspectives, viewpoints, relationships and factors. ALL points chosen should be of relevance and significance in answering the question. EXCELLENT depth in economic analysis that reflects the following in ALL explanations. Accurate use of economic concepts, clear elaboration and precise use of economic terminologies, language and phrasing.
	 The answer should also be supported by: Well-labelled and well-referred to diagram(s) /tool(s) of analysis drawn with precision (where appropriate). Relevant examples and accurate use of facts. Logical structure.
	For an answer that demonstrates knowledge and understanding but lacks application and analysis: > At least GOOD breadth that considers the following economic concepts in explaining multiple and balanced perspectives, viewpoints, relationships and factors. MOST points chosen should be of relevance and significance in answering the question.
L2 5 - 7	 At least GOOD depth in economic analysis that reflects the following in MOST explanations. Accurate use of economic concepts, clear elaboration, and precise use of economic terminologies, language and phrasing.
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	Logical structure.
	Logical Structure.
High L1 3 - 4	For an answer that demonstrates knowledge but lacks understanding, application and analysis: INSUFFICIENT breadth that considers the following economic concept(s). Point(s) chosen may be of relevance but may not be of significance in answering the question. INSUFFICIENT depth in economic analysis that may reflect the following:
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Low L1 1 - 2	 For an answer that: Demonstrates POOR breadth and POOR depth in economic analysis. Is irrelevant in analysis but may contain an introduction that addresses the question or contains no economic analysis but may contain a few statements that are relevant to the concepts required to answer the question. Contains fundamental conceptual errors in analysis.
Levels	Descriptors
E3 4 - 5	For an evaluation that contains A synthesis of earlier economic arguments to arrive at relevant judgements/decisions (i.e. answer the question). Well-explained criteria-based evaluative comments supported by accurate and clear analysis to provide fairness in views. A good summative conclusion.
E2 2 - 3	 For an evaluation that contains Relevant judgement(s)/decision(s) (i.e. answer the question) that may not follow from earlier economic arguments. Criteria-based evaluative comment(s) supported by analysis to provide fairness in views but the comment(s) may not be well-explained, may be unclear and/or may be inaccurate at times.
E1 1	For an evaluation that contains Relevant but unexplained evaluative judgement(s)/statement(s) i.e. evaluative judgement(s)/statement(s) not supported by analysis or A relevant conclusion.

- Q2. The petrol retailing industry in Singapore has long been dominated by a few large players such as Shell, Caltex, ExxonMobil and SPC.
- Explain how barriers to entry can affect a firm's price and output decisions. [10]
- Discuss whether a firm should mainly compete based on pricing strategies in an industry like petrol retailing. [15]

Suggested Answer Outline:

Part (a) Introduction

Barriers to entry refer to the various forms of restrictions or obstacles which prevent/deter new firms from entering a market to compete with incumbent firms. They could either be natural (e.g. economies of scale/ownership of key resources) or artificially erected (e.g. legal barriers; branding).

Body

0

1. Perfectly Competitive market with totally no barriers to entry

Perfect Competitive Market

- In a perfectly competitive market, the non-existence of barriers to entry allows for a large number of firms, each with no market power and is a price taker.
- Since there are no barriers to entry, new firms can easily enter the market, resulting in a highly competitive market with many sellers.
- This is reflected by the perfectly elastic demand curve faced by the PC firm.
- Therefore, each perfectly competitive firm becomes a price taker and sells at a profit-maximizing level of output, where MC=MR and at the market price determined by the market demand and supply.

Perfect Competitive Firm

Q(LR)Q(SR)

Output

S_1 Price/Revenue/Costs **LRMC** Price LRAC S_2 P_1 P₁ $P_1 = AR_1 = MR_1$ С $P_2 = AR_2 = MR_2$ D Quantity 0

Fig 1: Long run adjustment of the Perfect Competitive firm

- From Figure 1, we see that in the short run, the market demand and supply determined the price at P1. Output for all profit maximising firms will be at MC=MR.
- Hence, a perfectly competitive firm which is a price-taker enjoys supernormal profits in the shortrun. It produces an output of Q(SR) where MC=MR1 and P1 is above average cost (AC). price at
- However in the long run: such supernormal profit, represented by the area P1abc will attract new firms into the market.
- When new firms are attracted into the industry, the market supply increased.
- Firms will continue entering the industry until each firm charges P2 and earns only normal profit in the long-run, with profit-maximizing price P2 equals to average cost (LRAC and LRMC).

Impact of No barriers to entry on firm's price and output decisions

- Perfect competitive firms are price takers in both SR and LR. Price is determined by the market equilibrium where DD=SS
- Output of the firm is determined where MC=MR in order to maximise profit

2. Monopolistic firms in industries with high barriers to entry

- Conversely, the existence of high barriers to entry protects a monopoly from potential competitors, limiting the market to one dominant seller.
- As a result, the industry demand curve is in fact the monopolist's demand curve, which is downwards sloping demand in Figure 2. This means that a monopolist has its ability to set its own price, unlike a perfectly competitive firm which has to be a price taker.
- Similarly, a monopolist profit-maximize at MC=MR, with price P1 and quantity Q1.

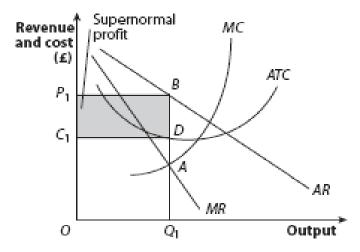


Fig 2: A monopolist equilibrium (short and long-run)

In the LR:

The existence of high barriers to entry allows a monopoly to set profit-maximizing price with supernormal profits, both in the short-run and long-run.

• With high barriers to entry preventing the entry of new firms, the monopolist's supernormal profit is not competed away by potential competitors and hence is able to retain its supernormal profits in the long-run.

Impact of High barriers to entry on firm's price and output decisions

- Monopoly is a price setter in SR and LR
- Price and output are set at the profit-maximising level where MC=MR

Conclusion

• From the above analysis it is clear that barriers to entry play a key role in price and output decisions of firms in a market.

Marks Scheme:

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	✓ Relevant examples and accurate use of facts.

	Logical structure.
L2 5 - 7	For an answer that demonstrates knowledge and understanding but lacks application and analysis: At least GOOD breadth that considers the following economic concepts in explaining multiple and balanced perspectives, viewpoints, relationships and factors. MOST points chosen should be of relevance and significance in answering the question. At least GOOD depth in economic analysis that reflects the following in MOST explanations. Accurate use of economic concepts, clear elaboration, and precise use of economic terminologies, language and phrasing. The answer should also be supported by: Diagram(s) / Tool(s) of analysis that may not be well-labelled, may not be well-referred to and may not be drawn with precision (where appropriate). Example(s). Examples may lack accuracy Logical structure.
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Low L1 1 - 2	 For an answer that: Is irrelevant in analysis but may contain an introduction that addresses the question or contains no economic analysis but may contain a few statements that are relevant to the concepts required to answer the question. Contains fundamental conceptual errors in analysis.

Part (b)

Introduction

Firms in such an industry operate in an oligopolistic market. A key characteristic of such a market
is mutual interdependence between the few dominant firms in the industry, where the actions of
one firm will directly impact the other firms in the industry.

Body

Petroleum retailing industry in Singapore Market features:

- Few large, dominant firms relative to market size (e.g., Singapore Petroleum Company (SPC), ExxonMobil, Shell, Caltex)
- Significant barriers to entry
- Differentiated product.
- Due to the existence of a few dominant firms in the market selling a differentiated product, petrol
 retailers, are notable examples of non-collusive (competitive) oligopolies due to the unique
 characteristic of mutual interdependence.
- Anti-Thesis 1: This uniformity in price and price rigidity can be explained using the kinked demand-curve model ie Why firms in such an industry do not commonly compete based on price strategies.

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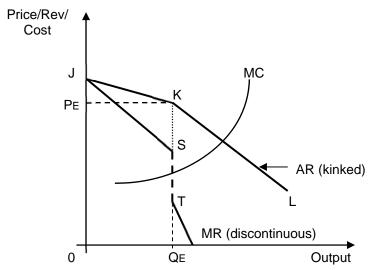


Fig 3: Kinked Demand curve of firm in Oligopolistic market

- Assuming rival petrol firms do not match price increases, if say SPC raises its price independently above PE, it will find its quantity sold fall more than proportionately as most of his customers will switch to the relatively cheaper substitute in ExxonMobil, Shell and Caltex, resulting in a fall in revenue. Hence, at output prices above PE, the oligopolist faces a relatively price-elastic demand (AR) curve.
- By the same argument, as rival firms are assumed to match any price reduction, when SPC lowers its price, it will not sell proportionately more of its output and revenue will fall, so it faces a relatively price inelastic demand curve at prices below PE.
- The price is 'rigid' at PE as oligopolistic firms in such an industry have little incentive to independently change prices for fear of the impact of the reaction of their rivals.

2. Anti- Thesis 2: Non-Price Competition is largely the main strategy for firms in such an industry to compete

- Hence petrol retailers largely focus more on non-price strategies. These include both product differentiation and product innovation.
- Firms in an oligopolistic industry have the ability to invest in R and D and due to their ability to earn supernormal profits in the long run due to high barriers to entry. They also have the incentive to do so due to the keen competition with their rivals.
- Hence petrol companies also invest in finding more efficient and cleaner fuel and advertise heavily through the mainstream media.
- Through such non-price strategies, the petrol firm can increase the demand for their product and hence earn higher revenue.

3. Anti-Thesis 3: However, it does not mean the Oligopolies do not adopt any price strategies at all. (Tacit collusion)

- Although collusion is not allowed by laws against anti-competitive practices (e.g. price fixing or cartel. There is possibility of tacit collusion in the form of price leadership in oligopoly markets that have one significant dominant firm/ leader.
- However, this means that oligopolies generally do not use pricing strategies unless they choose to collude instead of compete.

4. Anti-Thesis 4: Oligopolies may also choose to form cartels to fix prices instead of compete

- A formal and contractual collusive agreement is called a cartel. A cartel may be defined as a group
 of firms (Oligopolies) which agree to cooperate and act jointly in setting their output as a group or
 fixing the price of their product. The Organisation of the Petroleum Exporting Countries (OPEC) is
 probably the best known of all cartels.
- More commonly, a cartel will decide to restrict their output in the market (thus raising the price), or
 fix the price of their product. For example, OPEC decides on the output of oil they will produce in
 the form of production quotas for each member country.

- 5. Thesis: However, at times, oligopolies do engage in price war to gain market share
- Although oligopolies are often characterised by price rigidity, price competition is not altogether absent among some oligopolies. In fact, price competition can be intense and described as 'price wars'.
- Sporadic price wars happen among the major petrol retail outlets in Singapore. However, price wars often last for a very short period of time.
- In some cases, the dominant oligopolistic firm may deliberately lower its price below the profit maximising level in order to drive out its competitors. This is known as predatory pricing.

Evaluative Conclusion

- Due to the nature of such an oligopolistic industry, where a few dominant firms exist, the industry is characterised by mutual interdependence of the firms which leads to price rigidity and the lack of use of pricing strategies to compete. This can be seen by how firms appear to follow a price leadership model, although explicit collusion is not allowed in Singapore.
- Hence with the exception of very rare price wars, firms in such an industry largely compete based on non- price strategies such as branding, customer loyalty and R and D in order to continue to increase their market share and profits in the long run.

Marks Scheme

Levels	Descriptors
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	 ➤ INSUFFICIENT depth in economic analysis that may reflect the following: ✓ Lack of accuracy in the use of economic concepts, lack of clarity in elaboration, and lack of precision in the use of economic terminologies, language and phrasing.
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Q3. MediShield Life is a state insurance scheme that provides lifelong protection for all Singapore Citizens and Permanent Residents against large hospital bills. It has co-payment features such as claim limits, deductible, and co-insurance to ensure that those insured share the burden of medical bills with the government.

Discuss the appropriateness of the Singapore government's approach in addressing the market failure due to imperfect information and asymmetric information in the market for healthcare and its related markets. [25]

Suggested Answer Outline

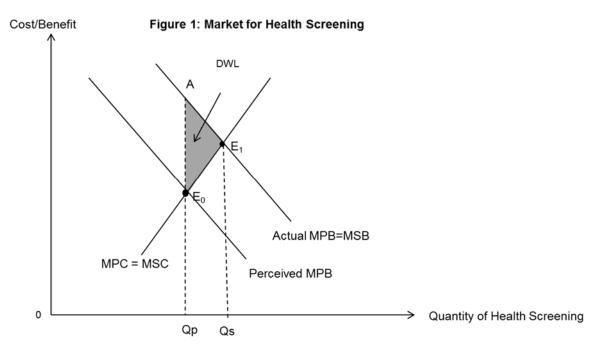
Introduction

- State the sources of market failure in the market of health insurance.
- State the policies to address these sources of market failure.

Body

Explain imperfect information as the source of market failure in the market for healthcare

- Define imperfect information:
 - o Imperfect information occurs when the economic agents (consumers or producers) are unable to accurately value the true cost and/or benefit of a good or service because they have inaccurate, incomplete, uncertain, or misunderstood data and therefore make potentially "wrong" decision.
- In the market of healthcare, there could be imperfect information about the benefits of "consuming" healthcare. This means that there is a difference between the value of the perceived benefit and the actual benefit.
- When the consumers go for health screening, they only consider perceived MPB and Marginal Private Cost (MPC) which is the cost of health screening. Hence, as shown in figure 1, they will consume at Qp unit of health screening. However, the actual MPB is higher than the perceived MPB. This means the socially optimum level of output is at Qs unit. As Qp is less than Qs, there is an under-consumption of health screening.
- With an under-consumption of QpQs, there is the welfare loss/deadweight loss to the society which
 is the area AE1E0. There is a need to increase output to Qs unit of healthcare to increase social
 welfare and to achieve allocative efficiency.



Explain asymmetric information as the source of market failure in the market of health insurance

Define asymmetric information

Asymmetric information is a case where one party in the market (either buyers or sellers)
has more information about the product than the other resulting in a distortion of incentives
and inefficient market outcomes

Adverse selection

- Adverse selection occurs when due to asymmetric information; potential buyers can only offer an average price between that of good-type and bad-type. Thus, this leads to good-type leaving the marker as the price offered is too low. The eventual outcome of adverse selection is the case where the market is only left with the bad-type and hence, the market will eventually collapse as no consumer is willing to pay the amount for the bad-type good.
- o In the market of healthcare, adverse selection is more likely to exist in the context of health insurance. People who buy health insurance usually know much more about their general health than any insurance company can hope to know. As a result, insurance companies will raise their premiums to cover their losses which force the price of insurance to increase.
- Therefore, the health insurance market can fail completely because insurance companies will not want to sell health insurance to unhealthy people as that can become really unprofitable.

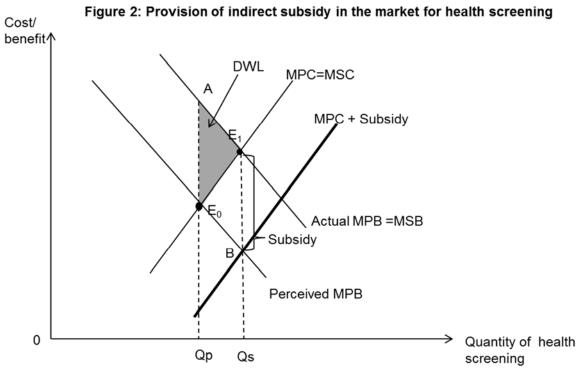
Moral hazard

- Moral hazard exists when one party to a transaction has the ability to shift costs onto other party and thus engages in more risky activities that could be 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 covered by the insurance.
- o Hence, the insurance companies might raise the premiums to deal with increase in costs.

Explain how Singapore government's approaches address imperfect information in the market for healthcare

1. Provision of subsidies

- Define subsidy
- In Singapore, the healthcare services providers include polyclinics, public hospitals and private hospitals. Polyclinics and public hospitals receive subsidies from government so that they can provide subsidised medical services to the patients.



• With reference to figure 2, the amount of indirect subsidy should be equal to E1B which is the gap between actual and perceived MPB. This will shift MPC downwards to MPC + subsidy. Consumers

will now be able to consume at socially optimal level of output as perceived MPB cuts MPC + subsidy at Qs unit of health screening.

- With an increased consumption, there will be a removal of deadweight loss (DWL) to society.
- Limitations/Evaluation:
 - o The implementation of the indirect subsidy might cause strain in the government budget.
 - Even though subsidy is able to increase the consumption level to the socially optimum level of output, it does not address the imperfect information.

2. Education/campaign/advertisements

- Singapore government also undertakes education and campaigns to encourage residents to go for various types of healthcare services such as health screening or immunisation by informing the public of the benefit of consuming healthcare.
- Limitations/Evaluation:
 - o The effectiveness of such policies depends on the receptiveness and the willingness of the consumers to digest the information provided and to go for the health screening.
 - It might also take a long time for the consumers to change their lifestyle and habit.

3. Regulation

• Government also has regulations to ensure that certain healthcare services are consumed. This is to ensure that such services are consumed at the socially optimum level of output.

Explain how Singapore government's approaches address asymmetric information in the market for healthcare

MediShield Life

- In addition to subsidies, Singapore government has also implemented 3M framework (Medisave, MediShieald Life, and MediFund), the financial framework that incorporates personal responsibility with risk pooling and community support, to ensure that healthcare is affordable for all.
- MediShield Life is a compulsory basic health insurance plan, administered by Central Provident Fund (CPF), which helps to pay large hospital bills and selected costly outpatient treatment, such as dialysis and chemotherapy.
- The co-payment feature of MediShield helps to better share the burden of the medical costs with the insured which helps in addressing the excessive medical claims due to moral hazard.
- Limitations/evaluation:
 - As MediShield is compulsory and provided at the subsidised rate, it might cause strain in the government budget.

Evaluative Conclusion

 Whether Singapore government's approach in addressing the presence of imperfect and asymmetric information in the market of healthcare is appropriate depends on the sustainability of the policies. Some of the policies require public financing which might cause strain in the government budget.

Marks Scheme

Descriptors
For an answer that demonstrates knowledge, understanding, application and analysis: ✓ EXCELLENT breadth that considers the following economic concepts in explaining multiple and balanced perspectives, viewpoints, relationships and factors. ALL points chosen should be of relevance and significance in answering the question. → EXCELLENT depth in economic analysis that reflects the following in ALL explanations. ✓ Accurate use of economic concepts, clear elaboration and precise use of economic terminologies, language and phrasing. The answer should also be supported by:

Well-labelled and well-referred to diagram(s) / tool(s) of analysis drawn with precision (where appropriate). Relevant examples and accurate use of facts. Logical structure. For an answer that demonstrates knowledge, understanding, application and analysis: At least VERY GOOD breadth that considers the following economic concepts in explaining multiple and balanced perspectives, viewpoints, relationships and factors. MOST points chosen should be of relevance and significance in answering the question. At least VERY GOOD depth in economic analysis that reflects the following in MOST Low L3 explanations. Accurate use of economic concepts, clear elaboration, and precise use of 15 - 17 economic terminologies, language and phrasing. The answer should also be supported by: > Well-labelled and well-referred to diagram(s) / tool(s) of analysis drawn with precision (where appropriate). Relevant example(s) and accurate use of facts. Logical structure. For an answer that demonstrates knowledge and understanding but lacks application and analysis: At least GOOD breadth that considers the following economic concepts in explaining multiple and balanced perspectives, viewpoints, relationships and factors. MOST points chosen should be of **relevance** and **significance** in answering the question. At least GOOD depth in economic analysis that reflects the following in MOST explanations. High L2 ✓ Accurate use of economic concepts, clear elaboration, and precise use of 12 - 14 economic terminologies, language and phrasing. The answer should also be supported by: Diagram(s) / Tool(s) of analysis that may not be well-labelled, may not be wellreferred to and may not be drawn with precision (where appropriate). Example(s). Logical structure. For an answer that demonstrates knowledge and understanding but lacks application and analysis: > At least SUFFICIENT breadth that considers the following economic concepts in explaining multiple and balanced perspectives, viewpoints, relationships and factors. SOME points chosen should be of relevance and significance in answering the Low L2 question. 9 - 11 At least SUFFICIENT depth in economic analysis that reflects the following in SOME explanations. Accurate use of economic concepts, clear elaboration, and precise use of economic terminologies, language and phrasing. The answer should also be supported by:

High L1 5 - 8	 Diagram(s) / Tool(s) of analysis that may not be well-labelled, may not be well-referred to and may not be drawn with precision (where appropriate). Example(s). Logical structure. For an answer that demonstrates knowledge but lacks understanding, application and analysis: INSUFFICIENT breadth that considers the following economic concept(s). Point(s) chosen may be of relevance but may not be of significance in answering the question. INSUFFICIENT depth in economic analysis that may reflect the following: Lack of accuracy in the use of economic concepts, lack of clarity in elaboration, and lack of precision in the use of economic terminologies, language and phrasing. Minimal or no contextualisation.
Low L1 1 - 4	 Demonstrates POOR breadth and POOR economic analysis. Is irrelevant in analysis but may contain an introduction that addresses the question or contains no economic analysis but may contain a few statements that are relevant to the concepts required to answer the question. Contains fundamental conceptual errors in analysis.
Levels	Descriptors
E3 4 - 5	Descriptors For an evaluation that contains ➤ A synthesis of earlier economic arguments to arrive at relevant judgements/decisions (i.e. answer the question). ➤ Well-explained criteria-based evaluative comments supported by accurate and clear analysis to provide fairness in views. ➤ A good summative conclusion.
E3	For an evaluation that contains A synthesis of earlier economic arguments to arrive at relevant judgements/decisions (i.e. answer the question). Well-explained criteria-based evaluative comments supported by accurate and clear analysis to provide fairness in views.

Paper 2 – Essay Questions (Section B)

Q4. Singapore's monetary policy has been centred on the management of the exchange rate instead of the management of interest rate.

Discuss whether the factors limiting the effectiveness of interest rate policy are key in determining the choice of exchange rate centred monetary policy instead of interest rate policy in achieving Singapore's macroeconomic goals. [25]

Suggested Answer Outline:

Introduction

- Monetary policy involves the manipulation of interest rates or money supply by the Central Bank in order to influence the level of economic activity of the country in pursuance of macroeconomic objectives.
- State 4 macro aims:
 - Sustained economic growth
 - Low unemployment rate
 - Low inflation rate
 - o Healthy Balance of Payment

Body

Explain the working of interest rate centred monetary policy

- Monetary Policy is the discretionary control of money supply or interest rates by Central Bank to influence the level of Aggregate Demand (AD) and hence, economic activity.
- Monetary policy can be expansionary or contractionary
 - Expansionary monetary policy refers to deliberate increase of money supply or lowering of interest rates in order to raise Aggregate Demand (AD).
 - Contractionary monetary policy refers to deliberate reduction of money supply and raising of interest rates in order to lower AD.
- With reference to figure 1, when a country adopts expansionary Monetary Policy to boost economic growth, the increase in money supply will lead to a surplus of money (excess liquidity) at r0, causing the interest rate to fall. The fall in interest rate from r0 to r1 leads to a rise in investment from I0 to I1. An increase in investment causes AD to rise. If originally AD is at AD0, increase in investment (I) will shift AD from AD0 to AD1 and this will result in an increase in national income and rise in general price level. This means the expansionary monetary policy has been successful in attaining non-inflationary economic growth. However, if AD is originally at AD2, increase in investment will lead a rightward shift of AD from AD2 to AD3. This will cause a rise in both national income and general price level.

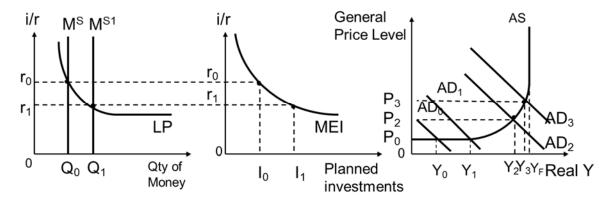


Figure 1: Effect of Expansionary Monetary Policy

• There will be an increase in the demand for labour, leading to a fall in unemployment level, especially cyclical unemployment.

Thesis: the factors limiting the effectiveness of interest rate policy are key in determining the choice of exchange rate centred monetary policy instead of interest rate policy in achieving macroeconomic goals.

Monetary Policy is the demand management policy that mainly aims to achieve price stability as a basis for sustained economic growth. These are the factors that will affect the extent of change in investment and the eventual effect on national income and general price level.

Explain the factors that limit the effectiveness of interest rate policy

- 1. Interest-elasticity of demand of money (Liquidity Preference)
- The more interest-elastic the demand for money, the smaller will be the fall in interest rate given an
 increase in money supply. The smaller the fall in interest rate, the less significant is its impact on
 investment and thus the smaller the change in AD. This means that expansionary monetary policy
 will have a weak effect on the economy.

2. Interest-elasticity of Marginal Efficiency of Investment (MEI)

- The more interest-inelastic the Marginal Efficiency of Investment (MEI) curve, the smaller the change in investment given a fall in interest rate and hence, the less effective is the monetary policy.
- In the context of Singapore, investment is considered to be relatively interest-inelastic, indicating
 that any changes in interest rates will lead to a less than proportionate change in investment, ceteris
 paribus. As such, interest rates centred monetary policy might not be an appropriate choice for
 Singapore.

3. Business expectation

- The economic outlook can affect business expectations which in turn influence firms' decision to invest
- If economic outlook is positive and incomes are expected to increase, expected future returns of investment will increase, there will be rightward shift of MEI curve. Hence, even with the implementation of contractionary monetary policy to restrict AD, investment can still increase.
- On the other hand, if the economic outlook is negative and incomes are expected to fall, firms will
 expect the demand for their products to fall and to receive less profit in the future. Therefore, there
 will be a leftward shift of MEI curve. So, even with the implementation of the expansionary monetary
 policy to increase AD, investment will still fall.

4. Size of multiplier

- The smaller the size of multiplier, the weaker is the effect on national income and economic growth, given a change in investment and AD.
- For instance, Singapore has a small multiplier size due to huge leakages. Therefore, with the implementation of expansionary monetary policy which aims to achieve economic growth, the increase in investment and AD will not cause a significant increase in national income.

Anti-Thesis: Other factors are more important in determining the choice of exchange rate centred monetary policy instead of interest rate policy in achieving macroeconomic goals.

1. Nature of the economy

- Nature and size of the economy is one the determining factors when the government chooses between interest rate and exchange rate centred MP.
- For example, Singapore is a small and open economy and is very dependent on imported raw materials, increase in the price of the imported goods will result in the higher prices of final goods and services produced in Singapore. Therefore, Singapore is very prone to import price-push inflation.
- Therefore, Singapore chooses to adopt exchange rate centred monetary policy to curb the imported inflation. With gradual and modest appreciation of Singapore Dollar, the prices of imported goods and raw materials will be relatively cheaper in domestic currency, ceteris paribus. Therefore resulting in an increase in SRAS, curbing inflation.
- However, it is noted that with appreciation, the price of export will be relatively more expensive in the foreign currency, ceteris paribus. This will result in the decrease of demand for exports.

• With increase in import expenditure and decrease in export revenue, there will be a worsening of Balance of Trade which might also cause the worsening of the Balance of Payment.

2. Openness to capital flow

- An economy's openness to capital flows will affect the ability of the country to control money supply
 or interest rates, affecting the choice of the policy.
- As international financial centre with free movement of capital, Singapore is very open to capital flows, hence it is difficult to control our domestic money supply.
- In addition, Singapore is a price taker in the world market for funds due to its small size.
- Hence, given that Singapore is a price taker in the world market for funds, Singapore is unable to use interest rate centred monetary policy to affect aggregate demand to achieve economic growth.

Other factors that contribute to the choice of policy in Singapore:

- 1. Policy Trilemma
- 2. Openness to capital flow
- 3. Nature of the economy

Marks Scheme

Marks Sche	
Levels	Descriptors
High L3 18 - 20	For an answer that demonstrates knowledge, understanding, application and analysis: > EXCELLENT breadth that considers the following economic concepts in explaining multiple and balanced perspectives, viewpoints, relationships and factors. ALL points chosen should be of relevance and significance in answering the question. > EXCELLENT depth in economic analysis that reflects the following in ALL explanations. - Accurate use of economic concepts, clear elaboration and precise use of economic terminologies, language and phrasing. The answer should also be supported by: > Well-labelled and well-referred to diagram(s) / tool(s) of analysis drawn with precision (where appropriate). > Relevant examples and accurate use of facts. > Logical structure.
Low L3 15 - 17	For an answer that demonstrates knowledge, understanding, application and analysis: At least VERY GOOD breadth that considers the following economic concepts in explaining multiple and balanced perspectives, viewpoints, relationships and factors. MOST points chosen should be of relevance and significance in answering the question. At least VERY GOOD depth in economic analysis that reflects the following in MOST explanations. Accurate use of economic concepts, clear elaboration, and precise use of economic terminologies, language and phrasing. The answer should also be supported by: Well-labelled and well-referred to diagram(s) / tool(s) of analysis drawn with precision (where appropriate). Good use of diagrams that are adequately explained Relevant example(s) and accurate use of facts. Some attempts at contextualisation with some relevant examples. Logical structure.

For an answer that demonstrates knowledge and understanding but lacks application and analysis: At least GOOD breadth that considers the following economic concepts in explaining multiple and balanced perspectives, viewpoints, relationships and factors. MOST points chosen should be of **relevance** and **significance** in answering the question. At least GOOD depth in economic analysis that reflects the following in MOST explanations. Accurate use of economic concepts, clear elaboration, and precise use of High L2 economic terminologies, language and phrasing. 12 - 14 The answer should also be supported by: Diagram(s) / Tool(s) of analysis that may not be well-labelled, may not be wellreferred to and may not be drawn with precision (where appropriate). Relevant diagrams drawn but not well explained or clear explanation in absence of diagrammatical analysis. Example(s). Logical structure. For an answer that demonstrates knowledge and understanding but lacks application and analysis: At least SUFFICIENT breadth that considers the following economic concepts in explaining multiple and balanced perspectives, viewpoints, relationships and factors. SOME points chosen should be of relevance and significance in answering the question. At least SUFFICIENT depth in economic analysis that reflects the following in SOME Low L2 explanations. 9 - 11 Accurate use of economic concepts, clear elaboration, and precise use of economic terminologies, language and phrasing. The answer should also be supported by: Diagram(s) / Tool(s) of analysis that may not be well-labelled, may not be wellreferred to and may not be drawn with precision (where appropriate). Example(s). Logical structure. For an answer that demonstrates knowledge but lacks understanding, application and analysis: INSUFFICIENT breadth that considers the following economic concept(s). Point(s) High L1 chosen may be of relevance but may not be of significance in answering the question. 5 - 8 INSUFFICIENT **depth** in economic analysis that may reflect the following: Lack of accuracy in the use of economic concepts, lack of clarity in elaboration, and lack of precision in the use of economic terminologies, language and phrasing. Demonstrates POOR breadth and POOR economic analysis. Is irrelevant in analysis but may contain an introduction that addresses the question Low L1 or contains no economic analysis but may contain a few statements that are relevant 1 - 4 to the concepts required to answer the question. Contains fundamental conceptual errors in analysis.

Levels	Descriptors
E3 4 - 5	 For an evaluation that contains A synthesis of earlier economic arguments to arrive at relevant judgements/decisions (i.e. answer the question). Well-explained criteria-based evaluative comments supported by accurate and clear analysis to provide fairness in views. A good summative conclusion.
E2 2 - 3	 For an evaluation that contains Relevant judgement(s)/decision(s) (i.e. answer the question) that may not follow from earlier economic arguments. Criteria-based evaluative comment(s) supported by analysis to provide fairness in views but the comment(s) may not be well-explained, may be unclear and/or may be inaccurate at times.
E1 1	For an evaluation that contains Relevant but unexplained evaluative judgement(s)/statement(s) i.e. evaluative judgement(s)/statement(s) not supported by analysis or A relevant conclusion.

- Q5. Brazil's Gross Domestic Product (GDP) contracted by 3.6% in 2016 and this has led to calls from policy makers to use discretionary fiscal policy to stimulate the economy.
- (a) Explain why a government cannot rely solely on automatic stabilisers and instead uses discretionary fiscal policy to address the concerns of an economic recession. [10]
- (b) Discuss whether demand management policies are more important than supply side policies in attaining inclusive economic growth for an economy experiencing recession. [15]

Suggested Answer Outline:

Introduction

 A recession is defined as two consecutive quarters of a fall in real GDP. During a period of economic recession, a country is facing concerns such as falling living standards and rise in cyclical unemployment

Body

Concerns of a recession

- A recession is caused by a fall in AD which can be due to a fall in any autonomous injections such
 as consumption, government expenditure, investment and net exports. This causes a fall in real
 national income. The fall in disposable income and purchasing power of households cause a decline
 in consumption of goods and services, leading to a lower material living standard.
- In addition, the fall in real output reduces the demand for labour, leading to higher cyclical unemployment.
- Moreover, consumers and investors may develop a pessimistic outlook of the economy, hence further reducing C and I respectively which lowers AD and real national output even further.

How automatic stabilisers work in an economy once in place

• Without any deliberate intervention from a government, automatic stabilisers would dampen the fall in AD automatically through tools such as progressive tax system and unemployment benefits.

Progressive tax system

A country with a progressive tax system in place taxes the rich proportionately more than the poor.
When incomes fall due to a recession, more of its citizens would fall into the lower income tax
brackets by design and this implies that the fall in tax payments would be faster than the fall in
income. Hence, this would lower the extent of fall in disposable income, leading to a smaller decline
in consumption levels, AD decreases by a smaller extent and the effects of a recession is
cushioned.

Unemployment benefits

A government can give out unemployment benefits to their citizens when they lose their jobs. Given a recession, more citizens would be unemployed and they would be eligible to receive some form of unemployment benefits. The fall in disposable income is reduced with these transfer payments, leading to a smaller fall in consumption and AD, thus mitigating the recession.

Workings of discretionary Fiscal Policy with brief multiplier process explanation

- Given the inadequacies of the automatic stabilisers, the government is likely to engage in expansionary fiscal policy to stimulate its economy. The government could decide to spend more on building infrastructure projects, leading to increase in government expenditure.
- In addition, the government could reduce its personal income tax for its citizens which would raise the consumption of goods and services. Likewise, a fall in corporate income tax means higher post-tax profits for firms and lead to an increase in investment given more funds now to invest.
 - The combined increase in consumption, investment and government spending would increase AD and increase real national income.

Conclusion

 Automatic stabilisers can only smoothen the fluctuations in the economy and when these are too large, in the case of a recession, expansionary fiscal policy is more effective to bring the economy out of a recession due to the multiplier effect.

Marks Scheme:

Levels	Descriptors
	For an answer that demonstrates knowledge, understanding, application and analysis:
L3 8 - 10	✓ EXCELLENT breadth that considers the following economic concepts in explaining multiple and balanced perspectives, viewpoints, relationships and factors. ALL points chosen should be of relevance and significance in answering the question.
	 ✓ EXCELLENT depth in economic analysis that reflects the following in ALL explanations. ✓ Accurate use of economic concepts, clear elaboration, and precise use of economic terminologies, language and phrasing.
	The answer should also be supported by: ✓ Well-labelled and well-referred to diagram(s) / tool(s) of analysis drawn with precision (where appropriate).
	✓ Relevant examples and accurate use of facts. Logical structure.
L2 5 - 7	For an answer that demonstrates knowledge and understanding but lacks application and analysis: At least GOOD breadth that considers the following economic concepts in explaining multiple and balanced perspectives, viewpoints, relationships and factors. MOST points chosen should be of relevance and significance in answering the question.
	 At least GOOD depth in economic analysis that reflects the following in MOST explanations. Accurate use of economic concepts, clear elaboration, and precise use of economic terminologies, language and phrasing.
	 The answer should also be supported by: Diagram(s) / Tool(s) of analysis that may not be well-labelled, may not be well-referred to and may not be drawn with precision (where appropriate). Example(s). Logical structure.
	For an answer that demonstrates knowledge but lacks understanding, application and
High L1 3 - 4	analysis: ✓ INSUFFICIENT breadth that considers the following economic concept(s). Point(s) chosen may be of relevance but may not be of significance in answering the question.
	 ✓ INSUFFICIENT depth in economic analysis that may reflect the following: ✓ Lack of accuracy in the use of economic concepts, lack of clarity in elaboration, and lack of precision in the use of economic terminologies, language and phrasing.
Low L1 1 - 2	For an answer that:
	 Is irrelevant in analysis but may contain an introduction that addresses the question or contains no economic analysis but may contain a few statements that are relevant to the concepts required to answer the question. Contains fundamental conceptual errors in analysis
	contains no economic analysis but may contain a few statements that are relevan

Part (b)

Introduction

A recession means there is a consecutive fall in real GDP for 2 quarters or more. The recession
can be caused by either a fall in AD or a fall in SRAS. Inclusive economic growth is not attained
and with a fall in living standards of a country's citizens, it is important for a government to intervene
using relevant policies.

Body

Thesis: Demand management policies more important than supply side policies if recession is due to a fall in AD

Explanation of expansionary MP (Note: any alternative demand management policy like exchange rate and fiscal policy can be accepted)

- Demand management policies are more effective for a country facing a recession due to a fall in its AD. For example, a country like the USA can use expansionary monetary policy (MP). The central bank of USA can increase the money supply in its economy, hence decreasing interest rates.
- This reduces the cost of borrowing for firms and individuals, leading to an increase in I and C respectively. Since I and C are part of AD, this increases AD from, leading to an increase in real NY.

Limitations

- However, the effectiveness may be limited due to the MEI being interest inelastic.
- Expansionary monetary policy is unable to attain inclusive economic growth because although it increases real national income, it does not determine the distribution of this.
- Generally, demand management policies are more important than supply side policies as they target the lack of AD in an economy which supply side policies cannot do.

Alternative policy for thesis: Demand management policies more important than supply side policies if recession is caused by a fall in AD

Explanation of expansionary fiscal policy

- Another way of increasing AD during a recession is to use expansionary fiscal policy. A government
 can increase its development expenditure on public infrastructure projects and the construction of
 more hospitals and schools.
- The increase in government spending and consumption leads to increase in AD and a multiple increase in real national income via the multiplier effect which is based on the principle that expenditure creates income and income creates expenditure.

Limitations

- If the government is having a budget deficit and needs to finance its expenditure through borrowing, crowding out effect may occur.
- For any demand management policy, the effectiveness also depends on the multiplier size. A small
 multiplier limits the extent of increase in real NY when AD increases.

Anti-thesis: Supply side policies more important than demand management policies if recession is caused by fall in SRAS

Explanation of subsidies to mitigate recession caused by fall in SRAS

- If an economy is facing recession from a fall in SRAS, it is more pertinent to use SS policies. A fall
 in SRAS is caused by an increase in cost of production in an economy. This can lead to stagflation
 with rising prices and falling real output. If this is because of high oil prices in the global market, the
 government can consider giving subsidies to producers in the form of lower petrol prices at pump
 stations.
- In addition, this policy of giving fuel subsidies help to improve equity as a petrol cost takes up a larger proportion of income for lower income citizens as compared to higher income ones.

Limitations

• While giving fuel subsidies can help to reduce cost of production, this imposes a strain on the government budget. The increased subsidies incur an opportunity cost to the economy as it could have been spent on another area such as education.

Anti-thesis: Supply side policies more important than demand management policies if recession is caused by loss of comparative advantage

Explain incentives to restructure economy when the recession is caused by loss of comparative advantage for a trade reliant country

- If a trade reliant country experiences a fall in external demand due to a loss in its comparative advantage, supply side policies are more effective in addressing this than demand management policies.
- Supply side policies can be used to develop a new area of comparative advantage such as
 pharmaceutical industry. For example, the US government could give research and development
 grants to companies to encourage them to invest in this sector. This will lead to a fall in opportunity
 cost and this may be lower than its rival countries, hence developing a new comparative advantage.

Limitations

• Such projects usually take a long time to bear fruit, if any, due to the numerous iterations and tweaking that needs to be done after each experiment.

Evaluative conclusion

- In conclusion, demand management policies are generally more important than supply side policies if the root cause is a fall in AD while the reverse holds true if the root cause is a fall in SRAS.
- In reality, both demand management and supply side policies are used in combination to effectively address an economic recession in the short and long term due to the various strengths and limitations of each type of policy.

Marks Scheme

	The answer should also be supported by: Diagram(s) /tool(s) of analysis that may not be well-labelled, may not be well-referred to and may not be drawn with precision (where appropriate). Example(s). Logical structure.
High L1 3 - 4	For an answer that demonstrates knowledge but lacks understanding, application and analysis: ➤ INSUFFICIENT breadth that considers the following economic concept(s). Point(s) chosen may be of relevance but may not be of significance in answering the question. ➤ INSUFFICIENT depth in economic analysis that may reflect the following: ✓ Lack of accuracy in the use of economic concepts, lack of clarity in elaboration, and lack of precision in the use of economic terminologies, language and phrasing.
Low L1 1 - 2	For an answer that: Demonstrates POOR breadth and POOR depth in economic analysis. Is irrelevant in analysis but may contain an introduction that addresses the question or contains no economic analysis but may contain a few statements that are relevant to the concepts required to answer the question. Contains fundamental conceptual errors in analysis.

Levels	Descriptors
E3 4 - 5	For an evaluation that contains A synthesis of earlier economic arguments to arrive at relevant judgements/decisions (i.e. answer the question). Well-explained criteria-based evaluative comments supported by accurate and clear analysis to provide fairness in views. A good summative conclusion.
E2 2 - 3	 For an evaluation that contains Relevant judgement(s)/decision(s) (i.e. answer the question) that may not follow from earlier economic arguments. Criteria-based evaluative comment(s) supported by analysis to provide fairness in views but the comment(s) may not be well-explained, may be unclear and/or may be inaccurate at times.
E1 1	For an evaluation that contains Relevant but unexplained evaluative judgement(s)/statement(s) i.e. evaluative judgement(s)/statement(s) not supported by analysis or A relevant conclusion.

Q6. Evaluate the policies the Singapore government should adopt to improve global competitiveness in light of the potential conflicts with the achievement of macroeconomic goals. [25]

Suggested Answer Outline:

Introduction

- Singapore is a small and open economy that is heavily dependent on trade, due to our small domestic market and lack of resources for production.
- Therefore, the Singapore government needs to focus on appropriate policies to continuously improve our global competitiveness to boost our economy through our export demand. This includes reducing the price and improving the quality of our exports.

Body

Policy 1a: Exchange Rate policy (Depreciation of Singapore dollar)

- In a severe recession, to improve our global competitiveness by keeping the prices of our exports low, Singapore should directly reduce the price of our exports in terms of foreign currency through a depreciation of the Singapore dollar.
- Hence a depreciation of the Singapore dollar during times of recession, will help boost our global competitiveness and increase our export demand which will boost our aggregate demand and actual economic growth.

Limitations of policy 1a: Conflict with macro goal of Price stability

 A depreciation of the Singapore dollar would lead to higher import prices in terms of Singapore dollars. This would hence increase the cost of production of many of our industries. This would lead to a fall in Short Run Aggregate Supply (SRAS) and a rise in General Price level and cost push inflation in the economy.

Choice of Policy 1b due to Conflict: Gradual and modest appreciation of Singapore dollar

- Therefore during times of economic growth, where price stability is likely to be one of the main priorities of the government, Singapore generally maintains a policy of a gradual and modest appreciation of the Singapore dollar.
- Hence this helps mitigate any imported price push inflation due to inflation in our trading partners and has kept the inflation rate in Singapore generally low.

Limitations of Policy 1b

However, an appreciation of our currency leads to an increase in the price of our exports in terms
of foreign currency. If Marshall-Lerner condition holds in the long run, IE. The sum of the absolute
value of the price elasticity of demand of our exports and imports is greater than 1, (X-M) and
aggregate demand will fall in the long run, reducing actual growth.

Policy 2a: Supply side policies to overcome potential conflict of inflation in LR and problems with overdependence on external demand and FDI through improving our domestic industries

- The only way to maintain our global competitiveness in the long run is through our supply side
 policies. This is largely done by the Singapore government through efforts to increase R and D as
 well as retraining of workers.
- Focusing on developing the capabilities and competitiveness of its own local producers in face of foreign competition helps local enterprises grow and develop their capabilities to compete in the world market.

Limitations of Policy 2a: - Conflict with Structural unemployment

• Efforts to develop our domestic industries and help them move up the value-added production chain, often leads to an increase in structural unemployment.

Policy 2b: Supply side-Retraining/ Skills development our workforce

• In order to prevent the conflict with structural unemployment and improve our labour productivity, the government also rolled out skills future, which enables all eligible Singaporeans to upgrade their

skills by giving them a \$500 grant to attend accredited skills related courses. This is especially important for Singapore, given that labour is practically our only natural resource available.

Policy 2a and 2b: Effectiveness

- These schemes help increase the productivity of the firms and help lower their per unit cost of production. This will then increase the production capacity of Singapore in the long run, as well as lower general price level of the economy as LRAS increases.
- These will then help us improve our global, as well as making our economy more attractive to FDIs.
- Therefore, supply side policies are key to Singapore's global competitiveness and attainment of its macroeconomic goals. In particular, in the long run, to ensure we can continue to sustain our competitiveness through the encouragement of investments.

Limitations of Policy 2a and 2b: Supply side policies

- The impact of most Supply side policies are only seen the long run. Hence, they will not be able to improve Singapore's global competitiveness in the short run.
- Also opportunity cost is incurred.

Due to limitations of Policy 1 and 2, also need FTAs to help boost export competitiveness

- The Singapore government has in recent times embarked on a policy of forging FTAs with many countries.
- The lack of trade barriers has hence helped boost our export competitiveness due to less taxes on our exports leading to relatively lower prices.
- Adopting a free trade policy without any import restrictions also enables us to avoid retaliation from other countries which will hurt Singapore's exports.

Use of FTAs to boost FDIs

• In addition, FTAs go beyond trade. They also help boost FDIs as there is more interconnected investments between countries. They are designed to support SG's business community in moving up the value-added ladder and knowledge chain and to achieve global competitiveness.

Anti-Thesis 2- Limitations of FTAs

With Free Trade policy, Singapore firms will face increased competition; Singapore's FTA partners
will also enter Singapore more easily than before. Service suppliers are more likely to feel the impact
of foreign competition.

Evaluative Conclusion

- Being a small and open economy with a small domestic market and a lack of resources, Singapore
 is highly dependent on both exports and imports to drive its economic growth. With a small domestic
 market and our dependence on external demand and FDIs, it is crucial for the government to have
 sound policies to maintain our global competitiveness.
- In face of limitations from the policies adopted, it is thus crucial for Singapore government to use a mixture of long and short term policies, that target both increasing AD and AS to complement one another and help us overcome the potential conflicts and sustain the growth of our economy into the long term.

Marks Scheme

Levels	Descriptors
High L3 18 - 20	For an answer that demonstrates knowledge, understanding, application and analysis: ➤ EXCELLENT breadth that considers the following economic concepts in explaining multiple and balanced perspectives, viewpoints, relationships and factors. ALL points chosen should be of relevance and significance in answering the question. ➤ EXCELLENT depth in economic analysis that reflects the following in ALL explanations. ✓ Accurate use of economic concepts, clear elaboration and precise use
	of economic terminologies, language and phrasing.

The answer should also be supported by: Well-labelled and well-referred to diagram(s) / tool(s) of analysis drawn with precision (where appropriate). Relevant examples and accurate use of facts. Logical structure For an answer that demonstrates knowledge, understanding, application and analysis: At least VERY GOOD breadth that considers the following economic concepts in explaining multiple and balanced perspectives, viewpoints, relationships and factors. MOST points chosen should be of relevance and significance in answering the question. At least VERY GOOD depth in economic analysis that reflects the following Low L3 in MOST explanations. ✓ Accurate use of economic concepts, clear elaboration, and precise use 15 - 17 of economic terminologies, language and phrasing. The answer should also be supported by: Well-labelled and well-referred to diagram(s) / tool(s) of analysis drawn with precision (where appropriate). Relevant example(s) and accurate use of facts. Logical structure. For an answer that demonstrates knowledge and understanding but lacks application and analysis: At least GOOD **breadth** that considers the following economic concepts in explaining multiple and balanced perspectives, viewpoints, relationships and factors. MOST points chosen should be of relevance and **significance** in answering the question. High L2 At least GOOD **depth** in economic analysis that reflects the following in MOST explanations. 12 - 14 ✓ Accurate use of economic concepts, clear elaboration, and precise use of economic terminologies, language and phrasing. The answer should also be supported by: > Diagram(s) / Tool(s) of analysis that may not be well-labelled, may not be well-referred to and may not be drawn with precision (where appropriate). Example(s). Logical structure For an answer that demonstrates knowledge and understanding but lacks application and analysis: At least SUFFICIENT breadth that considers the following economic concepts in explaining multiple and balanced perspectives, viewpoints, relationships and factors. SOME points chosen should be of relevance and significance in answering the question. Low L2 At least SUFFICIENT depth in economic analysis that reflects the following 9 - 11 in SOME explanations. Accurate use of economic concepts, clear elaboration, and precise use of economic terminologies, language and phrasing. The answer should also be supported by: Diagram(s) / Tool(s) of analysis that may not be well-labelled, may not be well-referred to and may not be drawn with precision (where appropriate).

	✓ Example(s).
	✓ Logical structure.
Low L2 5 - 8	For an answer that demonstrates knowledge but lacks understanding, application and analysis: ➤ INSUFFICIENT breadth that considers the following economic concept(s). Point(s) chosen may be of relevance but may not be of significance in answering the question. ➤ INSUFFICIENT depth in economic analysis that may reflect the following: ✓ Lack of accuracy in the use of economic concepts, lack of clarity in elaboration, and lack of precision in the use of economic terminologies, language and phrasing.
Low L1 1 - 4	 Demonstrates POOR breadth and POOR economic analysis. Is irrelevant in analysis but may contain an introduction that addresses the question or contains no economic analysis but may contain a few statements that are relevant to the concepts required to answer the question. Contains fundamental conceptual errors in analysis.
Levels	Descriptors
Levels E3 4 - 5	Descriptors For an evaluation that contains ➤ A synthesis of earlier economic arguments to arrive at relevant judgements/decisions (i.e. answer the question). ➤ Well-explained criteria-based evaluative comments supported by accurate and clear analysis to provide fairness in views. ➤ A good summative conclusion.
E3	For an evaluation that contains A synthesis of earlier economic arguments to arrive at relevant judgements/decisions (i.e. answer the question). Well-explained criteria-based evaluative comments supported by accurate and clear analysis to provide fairness in views.