Suggested Answer for Q2

2 Strides Taxi and Premier Taxis have merged to form Strides Premier, now Singapore's second-largest taxi operator with 2,500 taxis, behind ComfortDelGro's 8,700 taxis. Unlike the 2018 Grab-Uber merger, which led to a S$13 million fine, the Strides Premier merger raised no concerns from the Competition and Consumer Commission of Singapore (CCCS).

(a) Explain two reasons why Strides Taxi and Premier Taxis decided to merge . [10]

(b) Discuss the factors that governments should consider in its decision to intervene in a merger. [15]

Suggested answer for (a)

1st Requirement: Candidates are to explain how merger between the 2 firms can lead to a rise in TR **2nd Requirement:** Candidates are to explain how merger between the 2 firms can lead to a fall in TC

Introduction

Firms can pursue 2 types of growth- internal expansion and external expansion. An external expansion may occur in the form of a merger which is the result of a mutual agreement of two firms to come together. With a primary objective to raise profits, Strides Taxi and Premier Taxis decided to merge to raise the TR or reduce the TC for both firms to achieve this aim.

R1: Explain how merger between the 2 firms can lead to a rise in TR

A merger between Strides Taxi and premier Taxis can lead to a rise in total revenue. With the merger, the firms now become one firm and faces a larger demand due to an increase in market share. This rise in demand brings about an increase in both the price and quantity for the firm. At the same time, gaining market share also means fewer competitors in the market so the firm will then face a more price inelastic demand. This allows the firm to raise prices or to engage in some form of price discrimination. The quantity demanded will decrease less than proportionate to the price increase and total revenue will increase.

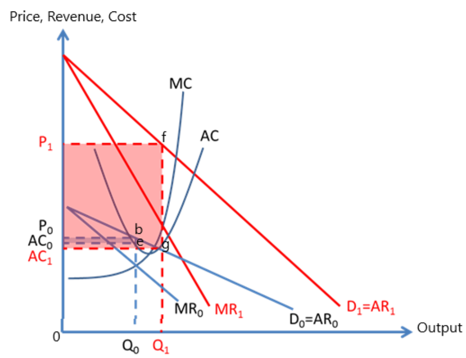


Figure 1

With reference to Figure 1 above, the merger increases the AR from AR0 to AR1 and at the same time making it less price elastic. Assuming MC and AC to be constant, the increase in AR from AR0 to AR1 leads to an increase in total revenue from 0P0bQ0 to 0P1fQ1. As a result, total profits increases from P0AC0cb to P1fgAC1.

R2: Explain how merger between the 2 firms can lead to a fall in TC

A merger between Strides Taxi and premier Taxis can lead to a fall in total cost. This is due to the fact that the firm can increase its scale of production, which could allow it to **reap more internal economies of scale** and lower average cost of production.

In the taxi industry, with an increase in output, the merged firm would be able to enjoy the various economies of scale such as financial economies of scale where the merged firm will be able to get bank loans at lower rate of interest compared to when they were smaller in scale. This is because banks and finance companies generally consider larger firms to be less risky as they can provide more assets as collateral and have higher creditworthiness. Larger firms can hence negotiate loans more easily and at more favourable rates. These leads to lower cost of borrowing. When this happens, the firm's average cost of production falls.

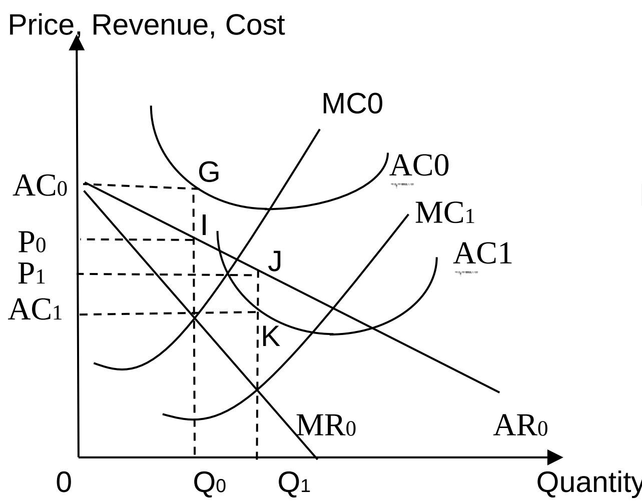


Figure 2

With reference to Figure 2 above, lower average cost of production will lead to a fall in MC and AC from MC0 and AC0 to MC1 and AC1. The firm originally earns a subnormal profit of AC0GIP0 as TR 0P0IQ0 is lesser than AC0GQ0. Assuming constant AR and MR, the fall in TC will lead to a rise in total profits from subnormal profit of AC0GIP0 to supernormal profits of P1JKAC1.

Level of Response Mark Scheme (LORMS)

Level	Descriptor	Mark
L3	**Analysis & Application** For an **analytical** answer that addresses the question thoroughly with clear explanation well supported by **tools of analysis using the firm's diagram**. There's clear and thorough explanation of how merger leads to a rise in total revenue and fall in total cost, leading to a rise in total profits.	[8 – 10] **[A+A: 10]** **[A+C: 8-9]**

	There is good ability to **organise** ideas or discriminate between **relevant** and irrelevant factors. Answer is **well-focused on question**, (e.g., the taxi industry) with the good use of economic concepts, theories or principles. **Knowledge & Understanding** For an answer that demonstrates an **accurate knowledge and understanding** of economic concepts, theories related to question, e.g., firms and decision concepts	
L2	**Analysis & Application** For an **under-developed** answer that attempts to address the question and explain how the merger will lead to a rise in total revenue and fall in total cost resulting in a rise in profits. Answers may be **descriptive**, **lack an analytical approach** (e.g., not supported with tools of analysis, incomplete use of graph) or is **incompletely explained** with gaps in analysis. [Or For a **one-sided analytical answer** that address only one of the two question requirements, i.e., explanation of either a rise in TR or fall in TC only] For an answer that is **supported with some application to the context of the question** (e.g., the taxi industry)**.** There is limited ability to organise ideas or discriminate between relevant and irrelevant materials. Answer has some relevance to the question context but is generic (e.g., pre-learnt answer that is not focused on addressing the question specifically). **Knowledge & Understanding** For an answer that demonstrates **largely accurate knowledge and understanding** of economic concepts, theories related to question, e.g., market failure analysis (i.e., no major conceptual errors).	[5 – 7] **[A+K: 7]** **[C+C: 6-7]** **[A+0: 6]** **[K+C: 5-6]**
L1	**Knowledge & Understanding** For an answer that shows **limited knowledge and understanding** of relevant economic concepts and theories (e.g., basic description or definitions). Few valid points made which are scant and inadequately explained. Answers are **mostly irrelevant and inaccurate.** Answer demonstrates that the meaning of question is not properly grasped or may contain basic errors of theory.	[1 – 4] **[C+0: 4]** **[K+K: 2-4]** **[K+0: 1-2]**

Marker's Comments

This question is reasonably performed by the students who attempted the question. Most students understood the concepts the requirements of the question and are able to link the impact of merger on TR and TC of the merged firm. However, most analysis presented are cursory and did not present clear explanation that is well supported by tools of analysis using a firm's diagram

Suggested answer for (b)

1st Requirement: Candidates are to explain one factor e.g. benefit that the government consider in its decision to intervene in a merger.

2nd Requirement: Candidates are to explain one factor e.g. cost that the government consider in its decision to intervene in a merger.

To enter L3, candidates should discuss at least 2 factors of consideration.

Evaluation marks: Well-argued judgements about the two factors and a summative conclusion about which is the more important factor.

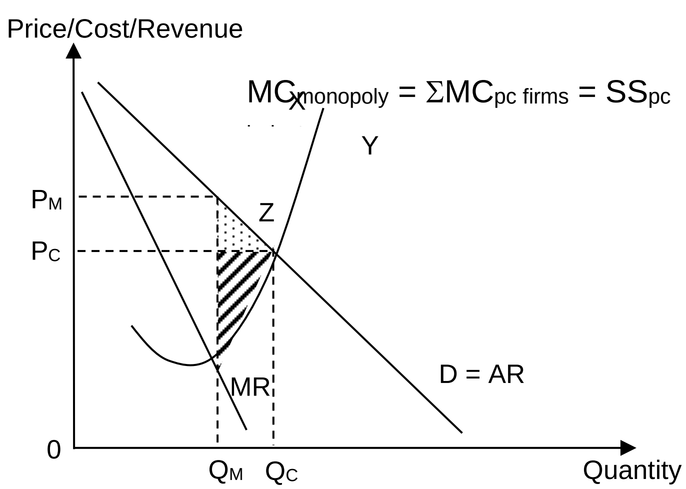
Introduction

The reasons why government intervene in markets is to achieve higher social welfare. It is necessary to intervene in mergers as mergers can lead to monopolies with huge market power which will reduce the allocative, productive and dynamic efficiency in the market, as well as consumers' welfare.

R1: Explain how the government considers the benefit to the society on the intervention in a merger.

Governments may choose to intervene in a merger for several reasons, primarily to ensure that the merger aligns with public interest and economic policy objectives. Here are some of the key benefits to government intervention in a merger. Some examples include promotion of fair competition and protecting consumers.

In the case of taxi industry, a monopoly firm can result in very high taxi price and low quantity as well as incur allocative inefficiency. This is because a profit maximising monopolist will restrict output to raise price, producing at MR = Rising MC. By doing so, allocative inefficiency results as price rises above marginal cost of production (i.e. P > MC). There is an under-allocation of resources in producing a product which society values. Consumers are clearly prepared to pay for additional units at an amount that is more than the opportunity cost incurred in producing these units. Society would be much better off if more resources are channelled into the production of this good.



Welfare loss/ Deadweight loss

= loss of potential consumer surplus (A)

= loss of potential producer surplus (B)

Deadweight loss = A + B

With reference to the Figure above, the monopolist produces at 0Qm (where MR = rising MC). At this output 0QM, the price charged by it is higher than its marginal cost of production (PM> MC). The pricing means that consumers are charged a price higher than the cost of the last unit of good produced. This represents a misallocation of resources or allocative inefficiency as societal welfare is not maximised. For the amount of goods QMQC, the incremental welfare gain is represented by the area QMQCYX while the incremental cost is QMQCYZ. Since benefits foregone outweigh costs not incurred, the society suffers from a welfare loss of XYZ for QMQC of goods not produced. Hence, the government intervenes in the market to promote fair competition and to maintain a competitive environment that encourages innovation, efficiency, and fair pricing for consumers. Having a competitive market environment encourages healthy competition among the producers and promotes innovation and efficiency by ensuring a level playing field.

Also, intervention can promote dynamic efficiency where there is higher incentive to engage in dynamic efficiency e.g. the use of EV taxi car fleet or development of booking applications that eases the booking process. At the same time, it prevents the merged firm from exploiting the consumers by charging a higher price knowing that the consumers will have little alternatives to turn to and with the aim to raise profits. Overall, these improvements will lead can preent companies from gaining excessive market power, which might lead to higher prices, lower quality, or reduced choices for consumers. By scrutinizing mergers, governments can ensure that consumer welfare is not negatively impacted.

With competition, firms are more likely to be productive efficient. A firm is productive efficient when it is producing on AC curve. Strong competition can reduce X inefficiency such as reduce slack management and unnecessary spending on cost where the firm can prevent ending up incurring a level of cost that is higher than the lowest possible cost of producing any given output.

R2: Explain how the government considers the cost to the society on the intervention in a merger.

The cost to the society on intervention in a merger is the benefits of mergers to society. An example of the benefits of a merger is that the merged firm will increase in size and have receive benefits such as the reaping of internal economies of scale which can be passed down to the consumers and translate to cheaper prices and higher output.

As explained in part a) of the essay above, in the taxi industry, with an increase in output, the merged firm would be able to enjoy the various economies of scale such as financial economies of scale where the merged firm will be able to get bank loans at lower rate of interest compared to when they were smaller in scale. This is because banks and finance companies generally consider larger firms to be less risky as they can provide more assets as collateral and have higher creditworthiness. Larger firms can hence negotiate loans more easily and at more favourable rates. These leads to lower cost of borrowing. When this happens, the firm's average cost of production falls.

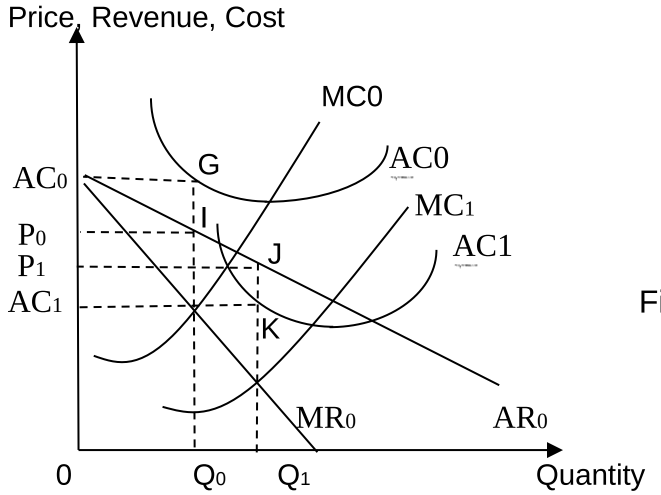


Figure 2

With reference to Figure 2 above, lower average cost of production will lead to a fall in MC and AC from MC0 and AC0 to MC1 and AC1. Before the merger, consumers will pay price of P0 and equilibrium output will be at Q0. Assuming that producers pass on the cost savings of the IEOS to the consumers, the price falls to P1 and output increases to Q1 upon the merger. This essentially translates to lower price and higher output for the consumers. Should the government intervene in a merger, it wull not allow the firm to grow in size and reap internal economies of scale which then will not translate to cheaper prices and higher output.

Additionally, firms without the merger will not be able to earn higher profits. This reduces its ability to engage in dynamic efficiency such as investing in better vehicles and development of booking applications for better services rendered.

Other cost that the government should consider is the intervention cost. To intervene in a merger, the government need to review and decide on the approval. This requires them to analyse the competitive effects of the merger for a prolonged period of time to ensure it does not lead to a concentration of market power that could result in market abuse.

Additionally, it may impose conditions requiring the merging companies to sell off certain assets, license technology, or meet other conditions to prevent anti-competitive outcomes and prohibiting mergers that are likely to create or strengthen a dominant position in a way that would enable market abuse. All these require costs on the government for the study and the money could be used in other areas such as healthcare of housing development.

In deciding to intervene in a merger, the government should first consider the importance of the good or market to the society. It can be worth to intervene in a merger if the good in consideration is a basic necessity or one that impacts the lives of the people. The higher impact of the good, the more reasons for intervention. Other criteria to determine which factor is more important in the decision to intervene includes contestability of the market. If the market is contestable, a merged firm though large in size, may deviate from the theoretical prediction of their behaviour. In fact, just the threat of entry by potential competitors is enough to keep the merged firm on its toes to the extent that it behaves as if it is operating in a highly competitive market. In this case, there is motivation for the merged firm to produce at the lowest possible cost and might even charge a lower price to deter potential entrants. In this case, intervention will not be required.

Level of Response Mark Scheme (LORMS)

Level	Descriptor	Mark
L3	**Analysis & Application** For an **analytical** answer that addresses the question thoroughly with clear explanation well supported by **tools of analysis**, such as market failure analysis and diagram. There's thorough explanation of how at least 2 factors in the DM framework are considered in the decision for the government to intervene in a merger. There is good ability to **organise** ideas or discriminate between **relevant** and irrelevant factors. Answer is **well-focused on question**, with the good use of relevant economic concepts, theories or principles. **Knowledge & Understanding** For an answer that demonstrates an **accurate knowledge and understanding** of economic concepts, theories related to question and well supported with examples	[8 – 10] **[A+A: 10]** **[A+C: 8-9]**
L2	**Analysis & Application** For an **under-developed** answer that attempts to address the question and explain how at 2 factors in the DM framework are considered in the decision for the government to intervene in a merger. Answers may be **descriptive**, **lack an analytical approach** (e.g., not supported with tools of analysis, incomplete use of graph) or is **incompletely explained** with gaps in analysis. [Or For a **one-sided analytical answer** that address only one of the two question requirements, i.e., explanation of one factor only] For an answer that is **supported with some relevant examples** (e.g., the taxi industry)**.** There is limited ability to organise ideas or discriminate between	[5 – 7] **[A+K: 7]** **[C+C: 6-7]** **[A+0: 6]** **[K+C: 5-6]**

	relevant and irrelevant materials. Answer has some relevance to the question context but is generic (e.g., pre-learnt answer that is not focused on addressing the question specifically). **Knowledge & Understanding** For an answer that demonstrates **largely accurate knowledge and understanding** of economic concepts, theories related to question, e.g., market failure analysis (i.e., no major conceptual errors).	
L1	**Knowledge & Understanding** For an answer that shows **limited knowledge and understanding** of relevant economic concepts and theories (e.g., basic description or definitions). Few valid points made which are scant and inadequately explained. Answers are **mostly irrelevant and inaccurate.** Answer demonstrates that the meaning of question is not properly grasped or may contain basic errors of theory.	[1 – 4] **[C+0: 4]** **[K+K: 2-4]** **[K+0: 1-2]**
	Evaluation	
E3	Well-explained evaluative judgements about 2 requirements + a summative conclusion.	**5**
E2	Well-explained evaluative judgements about 2 requirements. OR A well-explained evaluative judgement about 1 requirement + an evaluative statement for the second + a summative conclusion.	**4**
	A well-explained evaluative judgement about 1 requirement + an evaluative statement for the second.	**3**
E1	A well-explained evaluative judgement about 1 requirement. OR evaluative statements for 2 requirements.	**2**
	An evaluative statement for 1 requirement.	**1**
E0	No attempt at evaluation.	**0**

Marker's Comments

This question tests on the performance of firms where students are to weigh the benefits and costs of intervention by the government by comparing the impact of the decision on social welfare and efficiencies. Essentially, students are required to write on the costs and benefits of large firms. While most students have some idea on the concepts, the explanations are not fully developed, often without the use of diagrams and clear tools of analysis. The explanations are also brief, descriptive and not supported by examples to illustrate the impact. Almost no students demonstrated evaluation by bringing in criteria to decide which is the more important factor. This resulted in most students to not achieve any evaluation marks.