3 In July 2023, Grab announced it was acquiring Singapore's third-largest taxi operator Trans-cab, which has a fleet of more than 2,500 vehicles. The acquisition would have covered Trans-cab's taxi and car rental business, maintenance workshop and fuel pump operations.

The Straits Times, 25 July 2024

(a) Explain how the market structure in which Grab operates is likely to influence how prices and output are determined. [10]

(b) Discuss whether Grab's acquisition of Trans-cab will benefit or disadvantage the consumers in Singapore. [15]

2021 Q3 – govt intervention onto consumers

a) Explain how the market structure in which Grab operates is likely to influence how prices and output are determined. [10]

Question analysis:

Command Word	"Explain" – requires student to explain the characteristics of the market structure (likely to be oligopoly) and apply it to the context of the ride-hailing market. They should also show the relationship between these characteristics and pricing, output behaviour of the oligopolistic ride-hailing market.
Context	Ride-hailing market
Concept	Characteristics and how that affects price and output determination

Introduction:

Singapore's ride hailing market is considered to be operating in **an oligopolistic market structure**. These are based on the different characteristics such as barriers to entry, size and number of firms. These characteristics in turn, affect how pricing and output decisions are made.

Requirement 1: Explaining the characteristics of the ride-hailing market to conclude the oligopolistic market structure

The barriers to entry of the car-sharing market can be **high**. The **cost barrier to entry** can be high due to **high fixed costs** to set up an app for the private transport services. A ride-sharing app must offer a user-friendly experience to both the driver and the passenger, as well as efficiency usage without lags or errors.

- For instance, the app must enable easy ride booking/ cancellation/ pre-scheduling booking features, real-time tracking, multiple pick-up & drop-off locations, support multiple payment options, in-app chat or call option as part of the customer support services, and even SOS Panic Button to earn users' trust.

Given the high fixed costs, firms in this industry would benefit from **internal economies of scale** which allows the firms to spread their costs over a large output. This means that the existing firms are able to charge their services at a **lower price**, that can **deter the entry of new firms** since they are unlikely able to price their services at a lower price. Moreover, given that the dominant firms have been in the market for some time, **contrived barriers such as brand loyalty** have been established, making it difficult for a new incumbent firm to penetrate.

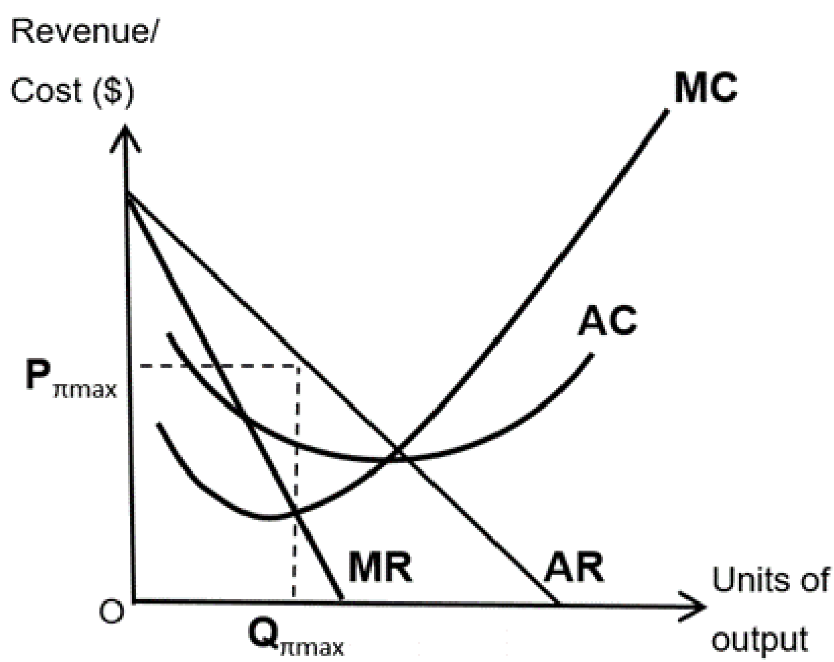
As such, this high barriers to entry has resulted in a **small number of firms** in most countries. For instance, in Singapore the main ride-hailing firms are Grab, GoJek, Ryde, ComfortDelgro etc. This suggest that **each firms can have a substantial market presence with strong market po**wer. With only a few substitutes in the market, **demand for ride-hailing services would likely be price inelastic.**

Requirement 2: Explaining how economic theory suggests how price and output will be determined in the ride-hailing market

- *Explain how the profit maximizing price and output is determined*

The objective of the firms in the ride-hailing market would be to **maximise profits**. To do so, the firm would produce an output level of $Q\pi max$ where **MC = MR,** as seen in the diagram below.

MC = MR is the profit maximising condition because when output is smaller than $Q\pi max$, the marginal revenue is larger than the marginal cost, hence it is beneficial for the firm to continue raising its production to gain profits. Conversely, if the firm produces at any output that is higher than that at MC = MR, its marginal cost is greater than the marginal revenue, leading to a net loss. Thus, the firm will stop raising production when marginal cost is equals to the marginal revenue, giving rise to the maximum profit level.



- *Explain how prices are determined using the AR curve – students may also bring in the unique characteristic of oligopolistic “mutual interdependence” characteristic that leads to price rigidity*

The price will be determined by the AR curve at that given output level of Qπmax because AR curve represents all points which consumers are willing and able to pay. Thus, the price is set at Pπmax. As the demand for each firm is price inelastic, this profit-maximum price would be expected to be **relatively higher than the monopolistic competitive firms. (or higher than the marginal cost).**

An important factor that determines prices are mutual interdependence between the firms. As all firms provide similar services and have market power which is quite evenly split, each firm would be very conscious of rival firm’s actions. For example,

- if Grab were to lower prices, the other firms would likely follow suit to prevent consumers from switching over, making demand price inelastic. This would lead to a less than proportionate increase in Qty demanded for Grab’s service.
- If Grab were to increase prices, it is unlikely that firms would follow as consumers would rather stick to other ride-hailing firms, making demand price elastic. This would lead to a more than proportionate decrease in Qdd for Grab’s service.

In either case, revenue would fall. Thus, firms would tend to stick to price leading to rigid and stable prices in the ride-hailing market.

Other acceptable responses include: Explain how market dominance influences pricing strategy such as limit and predatory pricing

Ride-hailing firms could also want to capture a larger market share by setting up contrived barriers such as predatory or limit pricing. Limit pricing is when the dominant firms set a price below profit maximizing price and sometimes below average cost, to prevent new entrants into the market. Predatory pricing is when dominant firms set prices below average cost to drive other firms out. These are pricing strategies that the dominant firms could adopt to secure larger market share and higher profits in the long run.

Knowledge, Understanding, Application and Analysis		
Level	*Descriptors*	*Marks*
L3	• Answer is well developed and explains BOTH the characteristics of the market structure of ride-hailing markets and price and output decisions by firms • Clear and accurate use of economic analysis with diagrams • Relevant examples are provided.	8-10
L2	• Answer is underdeveloped in explaining BOTH the characteristics of the market structure of ride-hailing market and price and output decisions by the oligopolistic firms. OR	5-7

	● Answer is well developed but only explains EITHER the characteristics of the market structure of ride-hailing market OR the price and output decisions of firms. ● Clear use of economic analysis with few inaccuracies ● Some use of examples.	
L1	● Answer is irrelevant in many parts ● Limited use of economic analysis or has major inaccuracies ● Limited use of examples	1-4

(b) Discuss whether Grab's acquisition of Trans-cab will benefit or disadvantage the consumers in Singapore. [15]

b) Discuss whether Grab's acquisition of Trans-cab will benefit or disadvantage the consumers in Singapore. [15]

<u>Question analysis:</u>

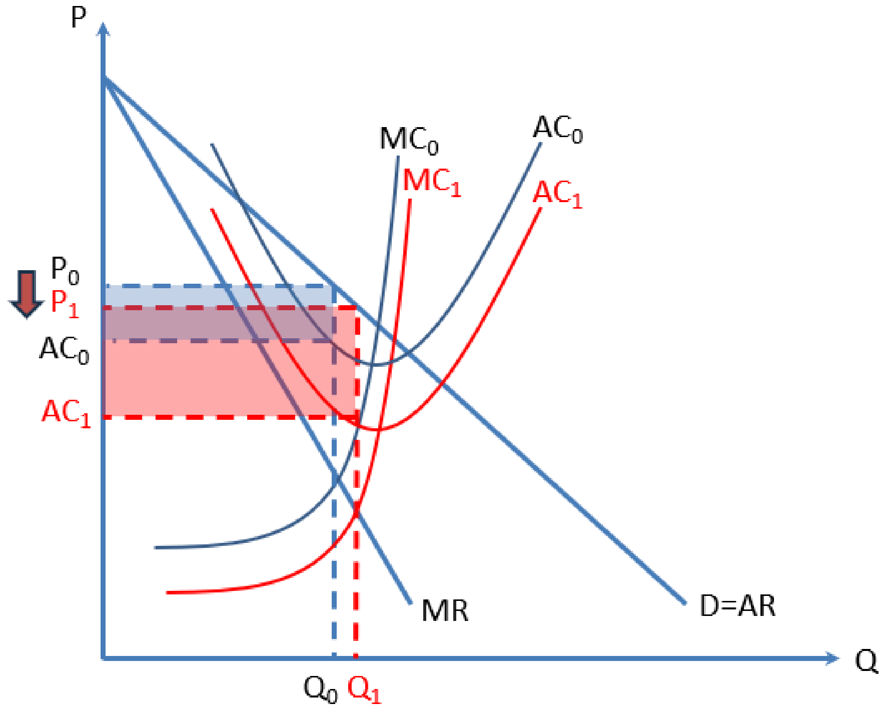
Command Word	"Discuss" – requires student to analyse and evaluate firm's strategy, in this case Grab's acquisition can benefit or disadvantage the consumers in the ride-hailing market.
Context	Singapore's ride-hailing market
Concept	Firm's strategies and market structure

<u>Introduction:</u>

Given that there are a few number of large firms in an oligopolistic market structure where each firm has significant market share and are less likely to compete on price (as explained in part a). Firms are likely to compete through non- price strategies, in this instance, Grab's attempt to use acquisition (of Trans-cab) to expand its market dominance and thus market share in Singapore's ride-hailing market. While the acquisition can lead to greater market share for Grab in Singapore ride-hailing market, its potential benefits and disadvantages for consumers can be debatable.

<u>Requirement 1: Grab's acquisition may benefit the consumers in the ride-hailing market by resulting in lower prices and higher quality of services.</u>

One of the most possible benefits of Grab's acquisition of Trans-cab is the potential for **lower prices/ fares as firm enjoys lower average cost through higher internal economies of scale**. With a larger market share, Grab may enjoy greater internal economies of scale (iEOS), lowering average cost as output expansion occurs (i.e. quantity of ride hailing services increases), lowering MC and AC from MC_0 and AC_0 to MC_1 and AC_1). Assuming firms pass the cost- savings to consumers, at profit- maximizing level, where MC= MR, the **market equilibrium price is lower than before acquisition (Po to P_1), leading to higher consumer surplus**. For instance,



- Grab may be able to enjoy **Risk-bearing economies of scale.** Acquisition of Trans-cab would enable Grab to diversify their products to spread out risks as losses incurred by one product can be offset by profits earned from another product. In the process of diversification, Grab may also enjoy risk-bearing economies of scale such as venturing into car rental business, car workshop maintenance and fuel pump operations services.
- Grab may also be able to enjoy **administrative economies of scale** as output expansion allows Grab to spread its overhead costs involving the employment of management and specialized staff, such as the app- designing team/ talents, customer-supporting team etc. Thus administrative cost per unit of output is lowered as specialization allows staff to raise their productivity where output per worker increase. Hence, the administrative cost is spread over larger output, reducing its average costs.

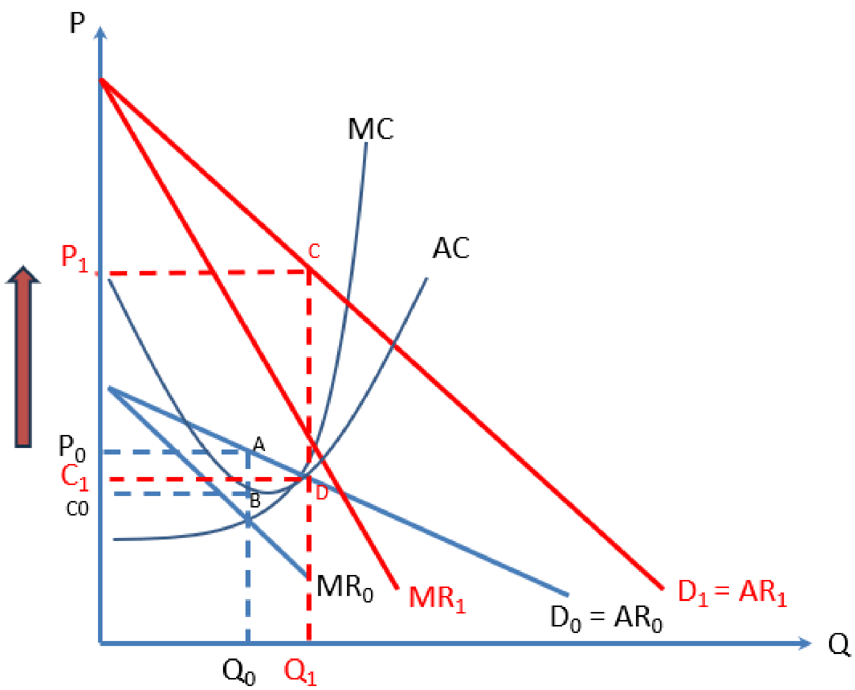
Another potential advantage of the firm merger through acquisition of Trans-Cab by Grab include the **improvement of service quality.** Grab could leverage on Trans-cab's existing infrastructure and customer base to enhance its services. For example, by combining the two companies' networks, Grab might be able to offer shorter wait times and more reliable pickups, through the acquisition, it would enable Grab to have access to a fleet of more than 2,500 vehicles. Ultimately this would **improve consumer welfare.** At the same time, with the acquisition of a larger consumer base, Grab is likely able to enjoy higher DD=AR, hence greater profits. This translates to higher financial ability to innovate their services, which leads to greater consumer's welfare.

Evaluation: Whether Grab can enjoy iEOS also depends on the likelihood of the acquisition leading to **Internal Diseconomies of Scale. Internal Diseconomies of Scale refers to the cost increases, or cost disadvantages, due to expansion of the firm.** Internal

Diseconomies of Scale leads to **rising average cost as the firm continues to expand (rising LRAC)**. The firm is considered to have over-expanded such that greater complexity in management results in rising costs. For instance, acquisition may fail if there is poor communication and integration, as well as unresolved cultural differences between two firms. As the firm grows larger and hire more workers, this could result in workers to feel more isolated and less appreciated. This could lead to lower staff morale, leading to falling productivity and an increase in per unit labour cost hence increasing average cost of production. If these issues are not addressed, Grab may not experience cost efficiency, making a merger or acquisition hard to succeed as Grab may not experience rise in its profit margin.

Requirement 2: Grab's acquisition may disadvantage the consumers in the ride-hailing by

While the acquisition of Trans-cab could bring about benefits to consumers, there are also potential drawbacks that can disadvantage the consumers. One major concern is the **reduction in competition**. With fewer independent ride-hailing companies operating in Singapore, consumers may have limited options as Grab would enjoy **larger market power and hence dominance the market of ride-hailing**, leading to price elastic of demand to be more inelastic (i.e AR and MR is relative more gentler). In addition, as Grab's market share is likely to increase due to larger consumer base, it can also lead to higher AR and MR (i.e rightward shift in MR_0 and AR_0 to MR_1 and AR_1). With **higher price- controlling ability** by Grab, at the profit-maximizing output level where MC= MR_1, consumers would have to pay **higher fares (Po to P_1)** for ride-hailing services. This suggest that acquisition can lead to a situation where Grab has more control over pricing, potentially resulting in higher fares as level of market competition decreases. Consumers might pay high prices, leading to inequitable outcome as the poor / lower-income consumers are likely to be more affected by the higher transport prices since they tend to spend a larger proportion of their income on it.



Another potential disadvantage could be the lack of competition that might arises as firm dominate the market. In the case if the acquisition of Trans-Cab by Grab takes place, it would result in the already dominating firm; Grab further solidifying it position as the firm with the higher market share. Thus, Grab may become dynamic inefficiency due to the lack of incentive to engage in process or product innovation.

<u>Evaluation</u>:

The acquisition could like to **unintended negative consequence on the economy**, in this case the risk of higher unemployment should **firm restructure, leading to potential job losses**. While the merger may lead to operational efficiencies, it could also result in job redundancies. If Grab decides to consolidate operations or streamline its workforce, there is a risk that some staff may lose their jobs. This could have a negative impact on the livelihoods of individuals and families in the transportation sector.

<u>Summative conclusion:</u>

The acquisition of Trans-cab by Grab presents a complex picture with both potential benefits and disadvantage for Singaporean consumers. While the merger could lead to lower fares and improved service quality, there is also a risk of reduced competition and potential job losses.

Ultimately, the impact of this acquisition on consumers will **depend on how Grab manages its market power and prioritizes the needs of its customers**. It is also essential for **regulators or watchdogs** such as Competition and Consumer Commission of Singapore (CCCS) **to monitor the situation closely** and ensure that the acquisition does not result in unfair practices that may eventually harm consumers.

Nonetheless, given the nature of **Singapore's small domestic market, the likelihood of a large firm facing internal disEOS due to firm's over-expansion as well as the risk of a large firm; such as Grab gaining substantial market power and thus monopolizing the ride-hailing market can be high,** and hence the acquisition of Trans-Cab by Grab may **potentially disadvantage rather than benefit consumers**.

Knowledge, Understanding, Application and Analysis		
Level	*Descriptors*	*Marks*
L3	• Answer is well developed and balanced, clearly explaining how consumers are impacted in both positive and negative ways. • Clear and accurate use of economic analysis (e.g. price, consumer surplus, quality) • Relevant examples are used to substantiate arguments.	8-10
L2	• Answer is well developed but only explains one sided (either positive or negative way) OR • Answer is underdeveloped but explain the two sided impact on consumers • Use of economic analysis with several inaccuracies • Some use of examples to substantiate arguments.	5-7

L1	• Answer is irrelevant in many parts • Limited use of economic analysis or has major inaccuracies • Limited use of examples to substantiate arguments	1-4
Evaluation		
Level	*Descriptors*	*Marks*
E3	An evaluative discussion with sound conceptual substantiation, ending with a reasoned judgment on the overall impact on the consumers – whether positive or negative to what extent	4-5
E2	Some attempts of judgement, but some lack of substantiation (e.g. the extent of impact)	2-3
E1	Incidental evaluative comments with a lack of overall judgement	1