

2. According to Euromonitor International, Singapore's grocery retail market was worth S\$4.3 billion in 2016, with the online grocery retail market valued at S\$96 million.
- (a) Distinguish the characteristics of firms operating in oligopolistic and monopolistically-competitive markets. [10]
- (b) Discuss how increased competition in online grocery retailing would affect the survival of traditional supermarket chains like NTUC FairPrice and Cold Storage. [15]

### **Suggested Approach for Q2(a)**

- Identify the characteristics that define a market structure
- For each characteristic, explain how oligopolistic firms differ from monopolistically-competitive firms
- Illustrate with relevant examples how the two market structures differ in the characteristics

### **INTRODUCTION**

The different types of market structure can be distinguished by their characteristics. The basic characteristics that are useful to distinguish the different market structures are number and size of firms, nature of product, and barriers to entry.

### **BODY**

#### **1. Barriers to entry**

- Barriers to entry is a characteristic to distinguish between firms in the oligopolistic and monopolistically-competitive markets. While significant barriers to entry are present in oligopolistic markets, there is relative freedom of entry into and exit out of monopolistically-competitive markets.
- In the supermarket industry, strong barriers to entry exist in the form of substantial investments in basic infrastructure (e.g. stores, distribution centres and logistics networks), access to finance (e.g. to fund advertising and promotions), business management capabilities and retail expertise (e.g. managing a chain of stores, having the expertise to manage a diverse range of employees, being nimble with strategies to compete and to grow). High fixed costs involved in running a chain of stores (rentals, wages, utilities, etc.) are a major consideration for any potential entrant into the market.
- On the contrary, bubble tea stores are almost anywhere and everywhere in Singapore because of the relative ease of entry. Apart from a small store space, the equipment, ingredients and expertise needed to run a bubble tea store are not too difficult to acquire. This is especially so in a franchising model whereby the franchiser licenses its know-how, procedures, intellectual property, use of its business model and brand, and the rights to sell its branded products and services to a franchisee. Many entrants into the bubble tea business are either franchisees or overseas ventures of big bubble tea brands from Taiwan.

#### **2. Number and size of firms**

- Due to relatively strong barriers to entry, an oligopolistic market is dominated by a small number of large firms while a monopolistically-competitive market is characterised by a large number of small firms (but not as large a number as in perfect competition).
- For example, traditional supermarket chains belong to an oligopolistic market structure. In Singapore, most of the supermarket stores belong to 3 major groups namely NTUC FairPrice, Dairy Farm International Holdings (DFI) and Sheng Siong. Leading grocery retailer, NTUC

FairPrice has a market share of 34% with 136 supermarket stores (FairPrice, Finest, Xtra) and 183 convenience stores (Xpress, Cheers) under its name. Meanwhile, competitor DFI has 126 supermarket stores (Cold Storage, Market Place, Jasons, Giant) and around 400 convenience stores under the 7-Eleven brand.

- A good example of a monopolistically-competitive market structure is the bubble tea industry. These stores are easily found at every neighbourhood corner. There are chains like Koi, LiHo, Sharetea, Each A Cup and itea, sharing the market with many other Taiwanese brands like Gong Cha, Playmade, R&B Tea, Yuan Cha, Chatime and Woobbee. As recent as Jun-July 2018, we saw new openings by Taiwanese big names, i.e. Ten Ren at ChinaTown point and TP Tea with its 24-hour bubble tea shop at Changi Airport.

### **3. Nature of product**

- We can also distinguish between oligopolistic and monopolistically-competitive firms in terms of their products. While products sold by firms in oligopolistic market structure can be either identical/homogeneous (e.g. steel) or differentiated (e.g. cars), those sold by monopolistically-competitive are generally close substitutes.
- In our example of supermarket chains, the products sold at their stores are similar e.g. rice, sugar, washing detergent, toiletries, dried food, fresh produce. They are usually differentiated by the brand names and even then, certain brands are found in all supermarkets, e.g. Royal Umbrella rice, SPIN detergent, Scotts toilet roll, etc.
- In the monopolistically-competitive bubble tea market, the products are similar but not identical. For instance, the drinks come in various bases such as brewed tea (black tea, red tea, green tea, oolong, etc.), milk tea, cheese tea, fruit tea and juices. There is even one which has differentiated itself with alcohol bubble tea. In terms of toppings, bubble tea competitors have gone beyond the basic bubbles (tapioca pearls – different size, colour and flavour) to a wide range including jelly, fruits, beans, pudding, jam and mochi.
- Product differentiation in monopolistically-competitive firms is usually superficial, i.e. not significant enough to eliminate other brands as substitutes. Because the different bubble tea brands are close substitutes, they have positive and high values of cross elasticities of demand. The goods perform the same basic functions but have differences in qualities (e.g. quality of tea used), style, reputation, appearance and location to distinguish them.
- Supermarket chains differentiate themselves in terms of branding and services rendered. For instance, DFI (so does FairPrice) has different store formats to cater to different income groups – its Giant brand targets the lower income segment or the budget-conscious customers, Cold Storage stores target the middle to upper income group, while Market Place and Jason's cater to the high and upper middle income customers.

### **CONCLUSION**

The characteristics of oligopolistic firms result in them having a relatively more price inelastic demand than firms in monopolistically-competitive markets. Differences in their characteristics in turn determine these firms' behaviour and performance in the markets in which they operate.

## MARK SCHEME FOR Q2 (a)

Level	Descriptors for Q2 (a)	Marks
L3	<ul style="list-style-type: none"><li>• Takes a comparative approach when explaining the differences between oligopolistic and monopolistically-competitive market structures</li><li>• Strong grasp of economic analysis and conceptual understanding (minor inaccuracies may still be present)</li><li>• Well-contextualised and supported with relevant examples</li><li>• Answers are well-organized and coherent</li></ul>	8-10
L2	<ul style="list-style-type: none"><li>• Explanation of characteristics <u>but</u> no clear distinction between both market structures → <b>CAP at 7 marks for answers without a comparative approach</b></li><li>• Uses economic analysis but may contain some conceptual inaccuracies</li><li>• Largely theoretical/rehearsed, lacking in examples</li><li>• Undeveloped explanation of the characteristics e.g. lacking in clarity</li></ul>	5-7
L1	<ul style="list-style-type: none"><li>• Descriptive or a mere listing of points, lacking economic analysis</li><li>• Contains major conceptual errors</li><li>• Largely irrelevant to the context</li></ul>	1-4

### Suggested Approach for Q2(b)

- Unpack key terms, i.e. 'increased competition' and 'survival'
- Establish the relationship between online grocery retailers and traditional supermarket chains
- Explain how increased competition in online grocery retailing would affect traditional supermarket chains – both negative and positive effects
- Use criteria to assess the overall impact of online grocery retailing might have on traditional supermarket chains

### INTRODUCTION

Increased competition in online grocery retailing implies that there are more online sellers of groceries (increase in supply). This in turn implies increased competition for traditional supermarket chains because of the substitutability of grocery items sold by online retailers and traditional supermarkets. How this increased competition affect the survival of traditional supermarkets would depend on how these supermarkets respond to competition in a changing retailing environment.

### BODY

**THESIS ARGUMENT: Increased competition in online grocery retailing would adversely affect the survival of traditional supermarket chains like NTUC FairPrice and Cold Storage**

- With rising popularity in online grocery retailing, traditional supermarkets could see a fall in their revenue and market share. Reasons for rising online grocery sales include the following:
  - Convenience of being able to shop anytime and anywhere
  - Less hassle shopping online, e.g. no need to deal with crowds or standing in line – what is usually purchased online is not something which is immediately needed, hence consumers are willing to wait days for their delivery rather than time queueing at supermarkets
  - Less 'overhead expenses' when shopping online (shopping at physical stores could involve stopping by for a meal, impulse purchases, parking fees, transportation costs, etc.)
  - Ease of online grocery shopping – not only via the computers but also phone apps as well

- With more online grocery retailers competing for the consumer dollar, there are many perks such as free shipping and free returns which further enhance perks of online shopping as mentioned above, especially for working adults who may not have the time to shop at supermarkets during weekdays.
- Due to increased competition from online grocery retailers, the market share of traditional supermarkets is likely to decline. The demand for their groceries could fall and also become more price elastic in light of close substitutes provided by online grocery retailers. Given the high fixed costs of supermarkets, and assuming no fall in average costs, any fall in revenue would therefore result in lower profits.

**COUNTER ARGUMENT: Traditional supermarket chains may continue to survive and even thrive despite competition from online grocery retailers**

- All is not doom and gloom for traditional supermarkets despite increased competition in the grocery retailing market. Despite growing online grocery sales in recent years, traditional supermarkets still take up more than 90% of the market. There is still optimism that supermarkets will remain strong in the next few years. As consumers continue to make use of all grocery retail channels (modern or traditional), any grocery retailer that is able to identify areas of consumer demand will be the biggest beneficiaries – be it online or traditional stores.
- Traditional supermarkets can continue to survive amidst rising competition from online grocery retailers if they successfully carry out targeted strategies to improve their profits. These strategies can be directed at managing costs, or to sustain a strong growth in revenue.

**STRATEGIES TO REDUCE COSTS**

- Supermarkets still have the [benefits of scale](#) which online grocers may not enjoy. Because of the many stores in their chains, traditional supermarkets have a greater scope to enjoy economies of scale from bulk purchases, marketing and advertising, etc. They have also made efforts to reduce fixed costs, for instance having self-checkout lanes to reduce queuing time at the cashiers. Such measures save on manpower costs, which is a major fixed cost item and an item which can only see rising cost given our tight labour market. The benefits of internal economies of scale can be passed on to consumers in terms of competitive prices.
- Supermarkets have also expanded their range of [house-brand and private-label items](#). House-brand items are cheaper than other labels as supermarket chains cut down on intermediary costs and advertising. Surveys by marketing research agency, Nielsen, have shown that consumers are increasingly more receptive to house brands as supermarkets shed their image of house brands being low quality and inferior to other name labels. FairPrice and Cold Storage each has more than 2,000 house-brand items and Giant has more than 1,500. According to FairPrice, their house-brand items are priced 10-15% lower than comparable products; the sub-brands under the HouseBrand umbrella include FairPrice Housebrand, FairPrice Gold, Pasar, Home Proud and Budget. In 2017, amidst concerns that prices of infant milk formula have increased at twice the pace of median income, FairPrice launched its FairPrice Gold house-brand formula milk for children up to the age of three. Sourced from Australia, the formula milk costs only about half the price of some premium brands.

## **STRATEGIES TO BOOST REVENUE**

- **Partnerships with firms in complementary business:** Traditional supermarkets like FairPrice, Cold Storage, Giant and Sheng Siong already offer online shopping for their groceries. If they can enhance this [online channel](#) to increase overall sales, they can compete better with online-only grocery retailers such as Redmart, Fresh by honestbee, Gofresh and EAMART. FairPrice has also partnered honestbee, a concierge/delivery services company for an added platform to market their products. This means that consumers can also shop for FairPrice groceries on the honestbee website. In light of growing interest in online shopping, traditional supermarkets can also strengthen their foothold in grocery retailing by [teaming up with tech giants or e-commerce firms](#) to explore new platforms for them to widen their consumer base.
- **Strengthening their foothold on food groceries:** While online grocery shopping has gained popularity, and there are specialised online stores for meats, fishes, fruits and vegetables, consumers generally still [prefer to purchase food groceries at physical stores](#). Supermarkets remain the popular choice for food groceries, especially for working adults who find it more convenient than going to the wet market during the weekend. Therefore, supermarkets should continually raise standards on freshness to ensure that consumers continue to make in-store purchases.
- **Improving the overall shopping experience and service quality:**
  - To entice a bigger crowd and to secure a loyal customer base, supermarkets can also improve the overall [shopping experience](#). For example, they can hold events like product launches, food fairs, chef demonstrations, in-store competitions, etc.
  - Supermarkets have also introduced [other shopping perks](#) such as the 'click-and-collect' mode of shopping for consumers who prefer to save time by ordering online but still prefer to collect the purchases themselves.
  - The impact of online grocery retailing is probably felt the most in bulk purchases (e.g. packaged drinks, personal-care and home-care products) which can be heavy to lug home. Supermarkets have tried to work around this by offering free [delivery services](#), or at minimal charges, for purchases above a certain amount. This helps to retain customers who prefer to shop at the physical stores.
  - Other attractions could be bundling of online-offline promotions whereby purchases made online would entitle the consumers to enjoy certain promotional offers when they make in-store purchases.

## **CONCLUSION/SYNTHESIS**

- The extent of supermarkets' ability to survive depend on the success of the strategies explained above. Market research by Euromonitor International and securities firms have shown that online grocery retailers have not been able to break into the dominance of traditional supermarket chains in Singapore. While online grocery retailing has caused an impact, they are not seen to be a significant threat for the supermarkets in the next few years.

**Just for info:** Research by securities firm Maybank Kim Eng showed that growth of online grocery sales has dropped from 56% in 2016 to 35% in 2017. This was largely attributed to the slower growth in sales of RedMart, Singapore's leading online grocery retailer. While revenues grew, RedMart also experienced rising costs (online space and tech maintenance, warehouse space, labour for logistics and delivery, advertising on multiple social media channels) and made losses in 2015 and 2017. [Statistics: warehouse space rose from 3,000 sq ft in 2011 to 150,000 sq ft in 2017; office space from 200 sq ft to 18,000 sq ft; staff strength from 3 to 1,200.]

- While online grocery retailing appears to be still at an infancy stage and has several obstacles to overcome, it certainly has the potential to be a more popular channel in the future. Therefore, traditional supermarket chains should not be complacent but take this transition period as an opportunity to adapt to evolving consumer behaviour.
- Shopping remains very convenient in Singapore, with the proliferation of HDB and mall supermarkets. Although housing estates are densely packed, last-mile logistics is expensive and reducing delivery cost is key to profitable last-mile fulfilment (*note: last mile is the last leg of the delivery process from the distribution centre to the end user*). Traditional supermarkets can take advantage of this (which is a big cost concern to online grocery retailers) to grow their scale further in order to improve efficiency in their operations, and hence improving profit margins.
- The modern grocery retail market is dynamic. Consumers' needs are frequently changing, especially in light of a globalised world where increased physical and virtual connectivity allow firms the opportunities to meet consumers' expectations and stay ahead of the competition. Against this backdrop, traditional supermarkets must continue to look for innovative ways to thrive. One possible path is for the traditional and online channels to converge, i.e. going the omni-channel route, a type of retailing which integrated the different methods of shopping available to consumers.

#### MARK SCHEME FOR Q2 (b)

Level	Descriptors for Q2 (b)	Marks
L3	<ul style="list-style-type: none"> <li>• Developed and balanced analysis of the supermarkets' strengths and challenges, in view of increased competition from online grocery retailing.</li> <li>• Strong economic analysis (with perhaps some minor conceptual inaccuracies)</li> <li>• Well-contextualised and supported with relevant examples</li> <li>• Answers are well-organized and coherent</li> </ul>	8-10
L2	<ul style="list-style-type: none"> <li>• Balanced but under-developed answer, e.g. considers both strengths and challenges but explanations lack the depth</li> <li>• Developed but one-sided answer, e.g. why supermarkets can <u>or</u> cannot survive</li> <li>• Uses economic analysis but may contain some conceptual inaccuracies</li> <li>• Limited use of examples, or examples are not very contextualised</li> <li>• Undeveloped explanation of the characteristics e.g. lacking in clarity</li> <li>• <b>CAP at 6 marks if answers focus on strategies, but without effects on survival</b></li> </ul>	5-7
L1	<ul style="list-style-type: none"> <li>• Descriptive or a mere listing of points, lacking economic analysis</li> <li>• Contains major conceptual errors</li> <li>• Largely irrelevant to the context</li> </ul>	1-4
E3	<ul style="list-style-type: none"> <li>• Well-reasoned judgement, with strong conceptual substantiation and relevant criteria</li> </ul>	4-5
E2	<ul style="list-style-type: none"> <li>• Attempts to support judgement with concepts and criteria, but may lack clarity in wrapping up the arguments or pulling together a cohesive synthesis</li> </ul>	2-3
E1	<ul style="list-style-type: none"> <li>• Superficial judgement, largely unsubstantiated</li> </ul>	1