



## Case Study 1 – N2007 Qn 2

### Supermarket development and competition

#### Extract 4: China's supermarkets present export opportunity

Rising incomes and an expanding urban middle class are setting the stage for China's development as a family market for imported goods. Until recently, many foreign exporters considering the Chinese market were discouraged after encountering a fragmented market made up of thousands of old-style family owned shops, open-air markets and inefficient systems for the distribution of imports. The good news for food suppliers is that "supermarketisation" is transforming China's food sector into a modern retail system. Modern supermarkets and hypermarkets – retail formats nearly non-existent in China in the early 1990s – have now captured an estimated 30% of the urban food market and are growing at rates of over 30% annually. Chinese supermarkets grew from just one outlet in 1990 to approximately 60 000 stores by 2003.

Supermarkets began developing in China in the early 1990s, encouraged by local governments. Multi-national chains from Europe, Japan, Hong Kong and the United States provided a second major impetus in the development of the sector in the mid 1990s. They have about 40% of the sector's sales but domestic companies such as Lianhua and Hualian have developed quickly. Local governments are actively encouraging the transition to supermarket by shutting down traditional street market and in some cases converting them into supermarkets. In 2004, China's Ministry of commerce announced a five-year plan to develop a rural retail network of supermarkets in small towns.

Imported foods, until recently a rarity in China, are now widely available in Chinese supermarkets. China's growing middle class has the purchasing power to afford imported foods, but this crucial market segment has been kept largely out of reach of the world's food exporters by the combination of China's old-fashioned marketing system and high trade barriers. However, China has cut tariffs, import trading licensing requirements and state trading monopolies as a result of its entry into the World Trade Organization in 2001. Lower trading barriers are the first step to opening the Chinese market, but a competitive, efficient domestic marketing system is necessary to get imported products from entry points to the Chinese consumer. That's where supermarkets come in.

*Source: Fred Gale and Thomas Reardon, Asia Times, 24 June 2005*



**Extract 5: Let China's retail wars begin**

In keeping with the conditions for China's membership of the World Trade Organization, China has lifted most restrictions on foreign retailers. Gone are the limits on the number of stores, rules confining them to large cities and regulations capping the foreigners' stake in local ventures at 65%. China erected those hurdles to give its own companies a chance to copy the West's big store model – and they have done so with great success. The top four retailers in the country are all run by the government or local entrepreneurs. But the foreign companies are not far behind and they have big plans for expansion now that the barriers have come down. Paris-based Carrefour has some 240 stores in China, and plans to open as many as 150 more this year. Its 2003 sales of US \$1.8 billion made it China's fifth biggest retailer.

Consolidation is sweeping the sector, too. Shanghai Ballion, which has nearly 5000 stores, has won permission to take over four rivals. Beijing's ultimate goal is to create a small number of big players that will be strong enough to compete with the multinationals at home and expand overseas.

*Source: Business Week Online, 17 January 2005*

**Extract 6: Supermarkets in the UK: a model for China's retail sector? Tesco may have to sell off stores**

Tesco, the UK's biggest supermarket group, maybe forced to sell off some of its shops in what would be a dramatic intervention aimed at curbing the retail giant's dominance. There is a call for government regulators to intervene to force Tesco into divestment, the process of selling off stores.

The UK's top four supermarkets have a huge market share which is continuing to grow. In the next ten years Tesco could have 1200 smaller convenience stores in addition to its large supermarkets. Asda, one of Tesco's major competitors, is poised to follow suit. Ten years ago supermarkets did not compete in the smaller convenience store market. In the four years to 2004, 7377 independent convenience shops, more than 20% of the total, closed. In addition, the buying power of the supermarkets is so great that their suppliers complain that they are forced to sell to supermarkets at very little profit.

"There is certainly a case for divestment," says the policy director at the New Economics Foundation. "The market place is being strangled by the big four." However, a spokesperson for Tesco said, "I think the public interest would need to be looked at in a proper manner by government regulatory authorities and I would hope that when they talked to us and looked at our operations in detail they would come to the view that divestment was a bad idea".

*Source: Observer, 6 November 2005*



**Table 4: Top four UK supermarkets: share of grocery sector**

Share of Grocery Sector (by value of total sales)	2004 (%)	2005 (%)
Tesco	28.1	30.5
Asda	16.6	16.7
Sainsbury	15.4	15.7
Morrisons	13.9	11.3

**Extract 7: Supermarkets in Singapore: the food retail sector**

For many years the food retail sector has been dominated by “wet markets” and general grocery shops, but this pattern is changing with the rapid expansion of modern supermarkets. NTUC Fairprice and the Dairy Farm Group are the two largest supermarkets for retail food. Cold Storage and Shop n’Save supermarket chains are subsidiaries of the Dairy Farm Group.

Wet markets still represent the bulk of sales of products such as vegetables, seafood, rice, eggs and chicken, while dedicated fruit shops still sell most of the fresh fruits. However, supermarkets are gaining market share in all retail food products.

Singapore has a significant domestic industry manufacturing a range of food and beverages, but virtually all raw materials are imported, as there is almost no local agricultural production. Singapore’s multi-racial society and the presence of a large expatriate population have led to a diverse and rich variety of food types being available to customers.

*Source: Australian Government: Austrade, Guide to Australian Exporters Webpage 2005*

**Table 5: Singapore retail sector: retail sales index for selected types of outlet**

Type of outlet	Index at Current Prices (1997=100)				
	2000	2001	2002	2003	2004
Department stores	104.3	99.9	100.4	99.6	108.4
Supermarkets	123.0	138.3	147.1	158.5	151.1
Provision and sundry shops	100.6	104.6	109.6	113.8	123.2
Total retail sales	128.4	133.1	129.8	140.9	158.6

*Source: [www.singstat.gov.sg](http://www.singstat.gov.sg)*



**Questions**

- (a) Compare the change in retail sales in Singapore by type of outlet between 2000 and 2004. [2]
- (b) Explain two reasons why supermarkets are growing so quickly in China. [4]
- (c) (i) Describe the type of market structure operating in the UK grocery sector in 2004. [2]
- (ii) Explain how the firms in this market might compete against each other. [4]
- (d) Discuss the policy of divestment in the case of Tesco explaining clearly how this might affect consumer welfare. [8]
- (e) In the light of the data provided, if you were an economic advisor to the Singapore government, would you recommend that it should follow the example of the Chinese authorities and encourage supermarket development? Justify your answer. [10]



### Suggested Answers

- (a) Compare the change in retail sales in Singapore by type of outlet between 2000 and 2004. [2]

**Suggested answer:**

Similarity: Retail sales in Singapore increased for all 3 categories between 2000 and 2004. [1m]

Difference [1m]:

Retail sales for Supermarkets increased at the fastest rate by about 23% while that of Department Stores at about 4%.

OR

Retail sales increased the most for Supermarkets and the least for Department stores.

**Note: Though supermarket experienced the highest increase, it does not mean the sales is the highest. We need absolute figures to be sure.**

Teaching point: Use of index nos. For weaker classes, teachers might want to provide additional exercise for students to try on the spot. One good exercise would be Nov 2008 qn ai & aii)

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**Calculations:**

Department stores	$108.4 - 104.3 / 104.3 * 100 = 3.93 \approx 4$
Supermarkets	$151.1 - 123.0 / 123 * 100 = 22.85 \approx 23$
Provision and sundry shops	$123.2 - 100.6 / 100.6 * 100 = 22.47 \approx 22$

**Note: The base year is 1997 and not 2000. We need to perform the above calculations to see the % change from 2000 to 2004.**

*Examiner's report:*

*In response to this question candidates simply needed to make comparative statements on the changes in retail sales by type of outlet. Acceptable comments included the facts that sales had risen in all types of outlet over the period, sales had increased most in supermarkets and sales had increased least in departmental stores. Candidates did not do well if they simply observed the changes rather than making comparative comments. A surprising number of candidates misinterpreted the data here. Many thought that sales were highest in supermarkets, others that the data showed price changes in some way. Careful and thoughtful interpretation of the data was required to score both marks available.*



- (b) Explain 2 reasons why supermarkets are growing so quickly in China. [4]

Suggested answers:

**Increase in Demand**

**1. Rising incomes**

The increase in incomes of the middle class in urban areas, allowing them to purchase more imported goods which are available usually in big supermarkets. These goods are likely to be **positive and income elastic and demand will rise more than proportionate with income.**

**2. Government intervention**

The Chinese government encourages supermarkets by shutting down street markets, and thus inevitably forcing consumers to shop at supermarkets and thus increasing the demand for supermarkets.

**Increase in supply**

**Lower trade barriers with entry into WTO**

Easing on rules to set up firms in China and imports like grocery products, attract more international firms to set up supermarkets in China and thus increase the supply of supermarkets in China.

**\*1m for the identification of a factor and a further mark for an explanation**

*Examiner's report:*

*This question was well answered by most candidates. Few were unable to identify and then explain the reasons for the development of supermarkets in China since the reasons were so clearly signposted in the text. Most candidates scored well, although the Examiners are less impressed by those who paraphrased the text extensively. They preferred answers that were succinct and to the point, whilst at the same time answering the question in sufficient depth.*

- (ci) Describe the type of market structure operating in the UK grocery sector in 2004. [2]

Suggested answers:

The market structure in the UK grocery sector would be an oligopoly [1m] because four supermarkets dominated the market with  $MCR_4 = 74\%$ . [1m]

***Note: To justify whether the market structure is indeed oligopoly and once a table of market shares by different firms is given, it is a MUST to calculate MCR. MUST link MCR to a few dominant firms which is a unique characteristic of oligopoly beside mutual interdependence.***

*Examiner's report:*

*This question was also answered very well. Most candidates identified the market structure as oligopolistic and justified this in terms of the small number of firms controlling the large share of the market as shown in the data.*

- cii) Explain how the firms in this market might compete against each other. [4]

Suggested answers:



- 1m for explaining why firms will use non-price competition rather than price due to mutual interdependence (Cambridge highlighted many candidates left out this point)
- 3m for elaborating on non-price competition – product development and promotion with exemplification (link it to increasing in demand and reduce PED)
- There are only a few firms under oligopolistic market structure and they are **mutually interdependent** thus each firm has to **take into account the actions/reactions** of other firms and as a result, there is **price rigidity**. (1m)
- *(Revision and not required in the answers: If an oligopolistic firm increases price, other firms will not follow and it will lose its consumers to the competitors, and quantity demanded will fall more than proportionate leading to a loss in revenue. If it reduces price, other firms will respond by reducing their prices as well and the quantity demanded will increase less than proportionate and result in lower revenue for all.)*
- Hence, oligopolies will more likely engage in non-price competition.
- They would compete through **product promotion** such as advertising in the media to create increased brand recognition for their supermarket. They would also attract new clients and retain existing clients through special promotions and marketing strategies by having lucky draws or having a system that recognize customer loyalty. (1m)
- Furthermore, they also engage in **product and service development** such as offering services that are unique to their consumer base such as free home deliveries for senior citizens and phone-in or online orders. (1m)
- All these would **increase the demand and ensure that demand for their products is more price inelastic**. (1m)

*Examiner's report:*

*In response to this question candidates showed knowledge of the ways in which firms compete in oligopoly, but these were often described rather than explained. The kinked demand curve was often introduced together with the statement that it deterred firms from competing on price. This usually led on to a description of types of non-price competition such as advertising or special promotions or types of collusive behaviour. What was often lacking here was the underlying explanation of why these types of competition arose in this type of market. The reason is the mutual interdependence or rival consciousness caused by the fewness of the firms in the market. Although this could be inferred from the kinked demand curve diagrams that were usually provided, it was very often only implied rather than explained.*

(d)





Discuss the policy of divestment in the case of Tesco explaining clearly how this might affect consumer welfare.

*Note: This is a typical ‘Higher Order Skills’ question. The style and approach would be similar to writing an AWESome essay using thesis, anti-thesis and synthesis for structure.*

**General Mark Scheme for 8m HOS Questions:**

<b>L3</b>	<b>Elaborate (Extend to include analysis)</b> Analyse – use relevant theory to aid explanation Apply – place explanation in context of evidence from the data Balanced view Justified conclusion	<b>7 – 8</b>
<b>L2</b>	<b>Consolidate (Add some details – application)</b> Explain the economic concepts more in depth. Clarify – give examples from data with more elaboration Consider both sides but lopsided No justified conclusion.	<b>4 – 6</b>
<b>L1</b>	<b>Knowledge/Recognise (Description)</b> Identify – the key theory without explanation or/and key evidence without explanation Outline: give a list of relevant factors Consider 1 side – no evidence of discussion.	<b>1 – 3</b>

**Tips: Use ‘SE<sup>3</sup>DS’**

State
Elaborate with economic analysis
Evaluate
Exemplify with evidences from
Data
Stand

*Examiner’s report:*

*This question was generally done well, particularly by those who had a good grasp of the underlying conceptual framework. Divestment is a policy proposed in the UK to introduce more competition into the retailing sector. **With more competition it would be expected that prices would fall and output would rise and that this would improve consumer welfare. An alternative argument is that divestment would reduce the size of Tesco leading to the loss of economies of scale and higher prices. This would result in an overall loss of consumer welfare. Similarly, with lower profits, Tesco would be less able to engage in research and development and again consumers would be disadvantaged.** To score in Level 2 on this question it was necessary to show an appreciation of both possible outcomes in terms of the impact of divestment upon consumer welfare. The mark awarded within the band was dependent upon the quality of the answer in terms of technical grasp and the range of issues considered.*



**Thesis – Divestment in the case of Tesco will have a positive impact on consumer welfare**

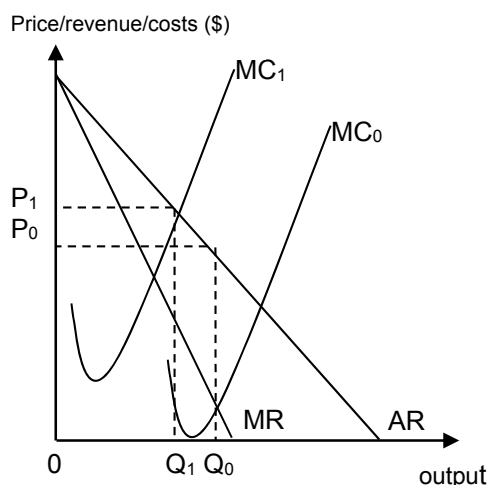
Explain how divestment reduces the market dominance or monopoly power of the firm and leads them closer to allocative efficiency

According to extract 3, there have been calls for the government to compel Tesco to divest, i.e. selling off some of its stores. This is an attempt at “curbing the retail giant’s dominance”, especially in the smaller convenience store market. Forcing Tesco to sell off stores would inject more competition into the convenience store market. With more competition it would be expected that prices would fall and output would rise as each new retailer would provide and that this would improve consumer welfare. The increase in number of retailers could also lead to an increase in the variety of goods the consumers can enjoy as each retailer could resort to product differentiation to attract customers.

**Anti-thesis – Divestment in the case of Tesco will have a negative impact on consumer welfare**

However, in this scenario, injecting more competition may not be a good thing. Given their large size, supermarkets, including Tesco, enjoy significant internal economies of scale. One of the non-technical internal economies of scale alluded to in *extract 3* is that of “bulk purchase economies”. Tesco’s large firm size allows it to enjoy preferential treatment and bargaining power to purchase supermarket supplies at a very low rate. This can be seen by the “suppliers complaining that they are forced to sell to supermarkets at very little profit”. As such, if Tesco is forced to divest, they will have less bargaining power and the unit cost of their supplies may actually go up.

As the unit cost of their supplies increase, the marginal cost will increase from  $MC_0$  to  $MC_1$ . This will lead to an increase in price and reduction in quantity from  $P_0$  and  $Q_0$  to  $P_1$  and  $Q_1$  respectively and thus lead to a reduction in consumer welfare.



Furthermore, the decrease in supernormal profits for Tesco after divestment could also lead to a fall in R&D expenditure, leading to a loss in consumer welfare.



Evaluation: There seems to be huge scope for Tesco to reap internal economies of scale and the cost savings can be passed on even to smaller convenience stores run by Tesco. As such divestment is likely to end up with higher prices for consumers as smaller retailers will have less bargaining power and thus not have the same cost advantage.

OR

The direction of change in consumer welfare depends on the no. of stores that are sold and hence how it affects its market dominance. As Tesco is a dominant firm with market share of about 30.5% in 2005. Even with divestment, Tesco is likely to be able to have substantial buying power and ability to reap marketing economies of scale. Hence the overall price is likely to fall and output is likely to increase. With increased competition, Tesco has greater incentive to innovate and it will still retain enough supernormal profits to still be able to innovate.

L3 (6-8)	Excellent explanation with economic analysis using diagrams where appropriate. Balance view and synthesis.
L2 (4-5)	show understanding of divestment and will explain why it could either raise or lower consumer welfare
L1 (1-3)	show understanding of divestment but will only explain one possible outcome in terms of consumer welfare

- (e) In the light of the data provided, if you were an economic advisor to the Singapore government, would you recommend that it should follow the example of the Chinese authorities and encourage supermarket development? Justify your answer. [10]

**Note: There is not much evidence in the case material. This question requires certain own knowledge to do well.**

<b>State</b>	<b>Introduction (clarify what the China government is doing &amp; the criteria for assessing whether Singapore should follow suit)</b> The China government is encouraging supermarketisation and closing down traditional street markets. Whether the Singapore government should follow suit would depend on the economic situation in Singapore.	
	<b>Advantages of developing supermarkets &amp; China's rationale</b>	<b>Compare it with the S'pore situation</b>
<b>Explain Exemplify With Data</b>	<ul style="list-style-type: none"> <li>- The Chinese authorities encouraged supermarketisation because the <i>existing retail system was inefficient and inadequate</i> for the development of the economy.</li> <li>- Growth and modernization of the retail market also lacked direction as the ownership of these small</li> </ul>	<ul style="list-style-type: none"> <li>- The existing situation for Singapore is quite different from that of China's.</li> <li>- Singapore is made up of a very small area with a good network of road for distribution of goods required in the retail market.</li> <li>- Currently, Singapore already has 3 dominant local supermarket</li> </ul>



	shops was largely in the hands of individual families.	chains, namely NTUC, Cold Storage and <del>Shop N Save</del> <b>Giant</b> co-existing with wet markets stores (which complement the supermarkets) and a dwindling number of neighbourhood provision shops.
<p><b>Elaborate with ECONOMICS analysis</b></p> <p><b>COST &amp; REVENUE advantages</b></p>	<p>One solution to these problems is to replace them with a few large supermarkets.</p> <p><b>COST advantage</b> Such supermarkets would also be in a better position to handle the paperwork and the distribution network for imports =&gt; can reap <b>internal EOS</b></p> <p>Elaborate on 2 internal EOS reaped by supermarkets</p> <p><b>REVENUE advantage</b> Large supermarkets will more likely to have higher revenue and resources to engage in activities that further increase its demand.</p> <p>They can engage in advertisement to establish their brands and create better awareness amongst consumers, introduce new, more and better products, install self-payment machines to speed up payment. All these aim to make shopping at supermarket a better, faster and more convenient experience as compared to traditional shops. And when consumers deem it as a better substitute, the <b>demand will increase</b> leading to more revenue.</p> <p>At the same time, the demand will also be more price inelastic and so even if the supermarkets charge a higher price, quantity demanded will fall less than proportionate and revenue will increase.</p>	<ul style="list-style-type: none"> <li>- As the industry is dominated by 3 large supermarkets, they are reaping EOS and revenue advantages.</li> <li>- The number of independently-owned neighbourhood provision shops has been declining over the years. In fact, many shop-keepers have opted to be a part of a franchise such as Econ Minimart to enjoy more EOS since promotions of sales and advertising is done by the franchiser.</li> </ul> <p>As a result, there is no urgent need for the government to intervene.</p> <p>In fact, for Singaporeans, the decline of neighbourhood shops would mean <u>fewer choices</u> for consumers.</p> <p>The supermarket way of running a convenience store would rule out possibility of <u>special request</u> that could be accommodated by an owner who knows the client and is in a position to act on his request e.g. to bring in a brand of a commodity (e.g. a special brand of dog food) in small quantity.</p>
<p><b>Explain Exemplify With Data</b></p>	<p>One other reason why China has consolidated the supermarket industry is to gain comparative advantage in that industry to allow</p>	<p>May not be the case in Singapore as supermarkets are more to serve the domestic market.</p>



	those firms to compete in world market.	
<b>Evaluation</b>	<p>The cost savings between supermarkets and neighbourhood shops are still not substantial since there is more marketing EOS rather than technical EOS. Consumers are willing to pay slightly more in neighbourhood shops for the convenience they offer. So, supermarketism actually reduces consumers' welfare.</p> <p><b>Note: Saucer shaped LRAC for co-existence of big and small firms.</b></p>	
<b>Synthesis/Stand</b>	<ul style="list-style-type: none"> <li>- From Table 5, we can see both supermarkets and provision and sundry shops increased healthily by 22-23% even when there is no government intervention.</li> <li>- As the economic advisor for Singapore, I would say that Singapore has different needs from those of China in terms of supermarket development and should not follow suit.</li> <li>- I would recommend a non-intervention approach, allowing both the large firms and the small firms to operate simultaneously.</li> <li>- Ultimately, in the long run, market forces would allow only the fittest firm that is most cost efficient to survive.</li> </ul> <ul style="list-style-type: none"> <li>- The neighbourhood provision shops that survived would be those that have a niche market where the demand curve is more price inelastic while the supermarkets will continue to compete among themselves to be more cost efficient.</li> <li>- Nonetheless, if the supermarkets indeed become too monopolistic and there are evidences of consumer exploitation, there may be a need to follow the UK model of divestment instead.</li> </ul>	

L3 (6-8)	Provide a balanced view and include both the advantages and disadvantages of further supermarket development with economic analysis. These will be considered in the context of the Singapore economy.
L2 (4-5)	Provide both advantages and disadvantages but then to be lopsided. Explanation still lacks economic analysis.
L1 (1-3)	One-sided and discuss only the advantages or disadvantages of supermarket development and/or there will be limited reference to the Singapore economy. This level may be characterized by a no of descriptive points drawn from the data.
E2 (2)	make a recommendation based upon a sound examination of the costs and benefits for the Singapore economy of further supermarket development. Expect comparisons between Singapore and China and UK.
E1 (1)	make a recommendation but only the costs and benefits are considered. There may be points made that are not based upon evidence. There will be only limited comparison with China.

**Examiner's report:**

*This question gave candidates the opportunity to consider the arguments for and against supermarkets in the Singaporean context. The data provided two examples of different government policies towards supermarket development. In China, government policy has been to encourage*



*supermarket development in a variety of ways. In the UK, the government is considering a policy to reduce the market power of supermarkets. Candidates were questioned on these opposing approaches in the earlier questions. The reasons for the differing approaches to policy are clearly related to the differing conditions in China and the UK. Clearly whether further supermarket development was appropriate for Singapore depended on the circumstances in Singapore. An appreciation of this was essential for a successful answer here. Some candidates did very well. They considered the data provided as a whole and recognised the underlying themes and issues. For example, it was clear from the data that the reason that the Chinese government encouraged supermarket development was that the distribution of goods in China is inefficient. This was because of the fragmented market. This could hardly be applied to Singapore, where the wet markets appear to complement other retail outlets. Successful answers considered such issues in an analytical framework. Good candidates provided a thoughtful conclusion after summarising the issues from a Singaporean context. The less successful approaches simply provided a few arguments for and against supermarkets with little reference to Singapore. These approaches were usually descriptive and failed to grasp the relevant themes inherent in the data. They tended to focus upon a limited section of the data and failed to consider the data as a whole. These tended to be awarded a mark in the lower level and often they scored few marks for evaluation*