

Chapter 15 Monopolistic competition, oligopoly and contestable markets

Answers to Knowledge checks

- 15.1** Product differentiation is important, as it is a way in which a firm can maintain some customer loyalty, and therefore continue to face a downward-sloping demand curve, with some influence over price.
- 15.2** If a firm under monopolistic competition is making supernormal profits, this will attract new firms into the market, so the firm will find that its demand curve will shift to the left and become more elastic.
- 15.3** Under monopolistic competition, a firm will be charging a price that is above marginal cost, so they could make more profit if they sell more. Under perfect competition, a firm can sell as much as it likes at the going price, so price is equal to marginal cost.
- 15.4** Non-price competition could take a number of forms, for example firms differentiating their products through advertising, packaging or product development. They may also find ways of promoting brand loyalty through loyalty systems.
- 15.5** On the contrary, under the kinked demand curve price will be stable over time, as each firm will be reluctant to change price.
- 15.6** A cartel is seen to be a way in which firms may abuse their market power. Cartels are declared illegal in order to protect consumers from this abuse.
- 15.7** Collusion is likely to be more difficult if individual firms cannot readily monitor the actions of other firms. For example, the more firms there are in the market, the more difficult it will be to monitor behaviour. Also, if firms are producing differentiated products, or have excess capacity to expand output, then collusion becomes more difficult to sustain.
- 15.8** The four-firm concentration ratio is calculated as the share of the largest four firms in the market's total sales.
- 15.9** A firm may benefit in the short run from an aggressive price-cutting strategy, but if rival firms follow suit, the expected increase in the volume of sales may not materialise, so all firms may suffer. In the long run, it is possible (or even likely) that the market will revert to its original state.
- 15.10** Setting a price equal to average cost is the limit pricing strategy. It deters entry from new firms and ensures that the incumbent firm is able to remain in business and continue to make normal profits in the long run.

Answers to Exercises and Case studies

Exercise 15.1

- a** Profits are maximised where $MR = MC$, at output N .
- b** Price A .
- c** At output N and price A supernormal profits are given by the area $ABEC$ (that is, the difference between AR and AC , multiplied by the output level).
- d** As the firm is making supernormal profits and there are no barriers to entry under monopolistic competition, this must be a short-run equilibrium.
- e** The lure of supernormal profits will attract new firms into the market. As more firms enter, the firm shown in the figure will find that its demand curve shifts to the left, as some of its customers shift to buying the new firms' products. Furthermore, as there are now more

substitutes for the firm's product, the demand curve will become more price elastic. This will continue until the typical firm in the market is no longer making supernormal profits — which occurs when the demand curve is just at a tangent to the average cost curve at the output level at which $MR = MC$. Once this point is reached, there is no further incentive for entry.

- f** AC is at a minimum at output level R , and this is the point at which productive efficiency is reached. The market will not reach this position under monopolistic competition.

Exercise 15.2

- a** Where there are a large number of firms in a market selling differentiated products, the most likely model of market structure is monopolistic competition.
- b** A sole supplier of postal services is a monopoly.
- c** A large number of farmers producing cauliflowers at a common price is best described as perfect competition.
- d** Where there is a market with just a few sellers (in this case banks), there is a state of oligopoly.
- e** A sole supplier of rail transport may be a monopoly provider of rail transport, but yet may face competition from suppliers of other forms of transport such as coach or air travel.

Exercise 15.3

There are several issues that you will need to discuss here. In general, consumers tend to benefit in the short run during the period of a price war, as they are able to purchase goods or services at a low price. Even here, whether they benefit or not may depend upon whether firms reduce the quality of their products in order to conduct the price war. However, the crunch comes in the longer term. If the firm that initiated the price war is successful in forcing its rivals out of business, then it is likely to raise prices in the longer term in order to increase its profits. Of course, this would also apply if one of the other firms in the market wins the war. Over the long term, consumers probably do not benefit — and may even be worse off.

Exercise 15.4

In tackling this exercise, it is important to bear in mind the key characteristics of a contestable market, and then judge the extent to which the various markets have exhibited change in those characteristics in recent years. These key characteristics are that there are no barriers to entry or exit, and no sunk costs.

- a** Looking back in time, optometrists had a monopoly in the supply of glasses until the market was deregulated in the 1980s as part of Margaret Thatcher's drive for privatisation and deregulation. This allowed market entry, as dispensing opticians could now sell glasses, not to mention supermarkets and chemists such as Boots. This seemed to improve the intensity of competition within the market, but it cannot be viewed as a contestable market because of the continued existence of economies of scale, and the relatively high fixed costs of setting up in business as an optician. The market has therefore not remained competitive, and today is relatively concentrated, with Specsavers being the largest player in the market.
- b** When it comes to travel agents, superficially, the market looks to be highly competitive, with many high street travel agency offices operating. However, it is not only the number of offices that is important but also the number of firms in the market, and the distribution of the business between them. The Association of British Travel Agents (ABTA) is an organisation that acts as a trade association for tour operators and travel agents in the UK. Some large companies such as Thomson or Thomas Cook have a significant market share.

However, it seems clear that the market is becoming more contestable. The growing ability of consumers to bypass the local travel agent by making their own bookings online suggests that the travel market is highly contestable. It is now possible for a potential holidaymaker to find their flights, hotel accommodation, car rentals or hotel transfers from their PCs or mobile devices. This can be done either by booking direct with airlines and hotels or by using one of the growing number of online firms, such as Expedia, the world's largest online travel agent.

The travel agents have therefore had to respond to these new online entrants to their market. They have done so partly by themselves going online, and developing their own websites and online sales. They have also responded by looking for niche markets, offering specialist advice on long-haul holidays, adventure trips or skiing packages.

The intensity of this competition is likely to be beneficial for consumers in terms of the prices that can be obtained for package holidays. Inevitably, there may also be dangers. For example, it may be that online purchase of the separate components of a holiday is more risky than buying from a travel agent backed by the code of conduct now issued by ABTA. Or it may be that the online companies themselves will go through a process of merger, acquisition and increasing concentration that may lead at some point to market power. In 2014, high street travel agents accounted for only 10% of UK holidays and 20% of holidays abroad according to ABTA.

- c Financial services — such as retail banking — also went through a process of deregulation, allowing entry from new firms. For example, Tesco started to provide financial services such as travel insurance and even mortgages, many former building societies such as Abbey National demutualised and became retail Banks, and a number of online banks have also launched into the market. This seems to suggest that some segments of this market at least are contestable, although the high street remains dominated by a few big players. The credit crunch of 2008 was in part due to excessive lending by the banking sector — so perhaps in this case, the deregulation went too far.
- d The postal service is another market that for some 350 years was a monopoly protected by the state. The Royal Mail was established in 1516 by Henry VIII. However, from January 2006 the market was liberalised, and any licensed operator was able to deliver mail to business and residential customers. The market was not perfectly contestable, as licensees had to pay an application fee of £1,000 and an annual fee of £1,000. There were other legal requirements that had to be fulfilled. New measures introduced in January 2008 reduced the application fee to £50, abolished the annual fee and removed some of the restrictions on licensees, which was intended to encourage more small and medium-sized enterprises into the market. This suggests that this market has become more contestable. However, the extent to which competition will increase may vary in different segments of the market. Delivering mail to an isolated croft in the Scottish Islands is not going to be as attractive as delivering mail to businesses in a metropolitan area such as London. The Royal Mail continues to have an obligation to make deliveries across the entire UK. It was privatised in 2013.
- e Aircraft manufacture is an example of a market that cannot be contestable. The barriers to entry are substantial and the fixed costs of joining the market are enormous. Indeed, the surprise is that there are still two firms (Boeing and Airbus) operating in the market for commercial aircraft. Indeed, it is probable that without some form of state assistance, one or other of these giants would have exited the market.

Case study 15.1

Competition in oligopolistic markets

- a Joint profits would be highest if the firms both set a high price, acting as if they were a joint monopoly. This could be achieved if each firm had trust in its rival to believe that it would not try to set a lower price and therefore come to dominate the market.

- b** It does not seem very likely that this outcome will be reached. The temptation to set a lower price and sweep up the market is great, given the profits that would result. Each firm will see that the other firm faces this temptation, and will therefore want to guard against it happening. The likelihood is therefore that both firms will go for a low price, accepting that they will make lower profits in this situation.
- c** The issue is whether all of the restaurants would be able to agree to work together in setting their prices. It would only need one of them to depart from the agreement to trigger a price war. It could also depend upon whether the restaurants are producing similar types of food, or whether they are able to differentiate themselves. In practice the competition seems to be quite fierce.

Answers to end-of-chapter questions

A Multiple-choice questions

- 1** b. Lidl developing a fish counter because Tesco stores already have them
- 2** c. Homogeneous products
- 3** b. 64%
- 4** c. Barometric price leadership

B Knowledge and understanding questions

- 5** Short-run equilibrium under monopolistic competition has a downward-sloping demand curve and a corresponding marginal revenue curve. If the firm is aiming to maximise profits, it will choose the level of output such that $MR = MC$.

An explanation of short-run monopolistic competition	up to 2 marks
A diagram showing short-run monopolistic competition	up to 2 marks

- 6** The model relates to an oligopoly in which firms try to anticipate the reactions of rivals to their actions. Suppose the price is currently set at P — the firm is selling Q and is trying to decide whether to alter price. Below this price, demand is likely to be price inelastic. However, above this point demand is likely to be price elastic.

An explanation of the kinked demand curve	up to 2 marks
A diagram showing the kinked demand curve	up to 2 marks

C Stimulus response question

- 7 a** A three-firm concentration ratio is a measure of the market share of the largest three firms in an industry.

A full explanation of a three-firm concentration ratio	2 marks
A vague or partial explanation of a three-firm concentration ratio	1 mark

b Characteristics may include:

- Many barriers to entry (or perceived barriers)
- Sunk costs — buildings/screens etc.
- Little brand differentiation — same films
- Many barriers to exit (or perceived barriers)
- Asymmetric access to technology
- Slow entry into and exit from the market (limited scope for hit and run entry to market)

Two characteristics explained	4 marks
One characteristic explained AND one characteristic identified	3 marks
One characteristic explained OR two characteristics identified	2 marks
One characteristic identified	1 mark

D Essay question

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AO1 Knowledge	6 marks
AO2 Application	6 marks
AO3 Analysis	6 marks
AO4 Evaluation	7 marks

Knowledge (1 mark) is likely to include:

- Oligopoly

Application (1 mark) is likely to include:

- Application to the UK cinema industry, for example:
 - Dominated by three brands: Cineworld, Odeon and Vue
 - Almost 70% three-firm concentration ratio

Analysis (5 marks) is likely to include:

- Analysis of characteristics of oligopoly that the UK cinema industry displays, for example:
 - Non-price competition, e.g. snack promotions, branding
 - Barriers to entry — sunk costs, film distribution costs, etc.
 - Inter-dependant decision making, e.g. over showing times
 - Sticky prices

Evaluation (5 marks) is likely to include:

Evaluation that the UK cinema industry is not an oligopoly, for example:

- Depends upon the competition in the area (geographic)
- Price competition — prices varied to attract customers

Evaluation that the UK cinema industry may be another market structure, for example:

- A monopoly in certain geographic areas
- Monopolistic competition — many independent cinemas in market
- Perfect competition — if compared to other ways of watching new films, such as online streaming

A judgement of the extent to which the UK cinema industry may be considered to be an oligopoly