**Monopolistic Competition**

**Characteristics**

Monopolistically competitive markets exhibit the following characteristics:

1. Each firm makes independent decisions about price and output, based on its product, its market, and its [costs of production](http://www.economicsonline.co.uk/Business_economics/Costs.html).
2. Knowledge is widely spread between participants, but it is unlikely to be perfect.
3. The [entrepreneur](http://www.economicsonline.co.uk/Competitive_markets/Producer_supply.html) has a more significant role than in firms that are perfectly competitive because of the increased risks associated with decision making.
4. There is freedom to enter or leave the market, as there are no major [barriers to entry](http://www.economicsonline.co.uk/Business_economics/Barriers_to_entry.html) or exit.
5. A central feature of monopolistic competition is that products are differentiated. There are four main types of differentiation:
	1. *Physical product differentiation*, where firms use size, design, colour, shape, performance, and features to make their products different. For example, consumer electronics can easily be physically differentiated.
	2. *Marketing differentiation*, where firms try to differentiate their product by distinctive packaging and other promotional techniques. For example, breakfast cereals can easily be differentiated through packaging.
	3. *Human capital differentiation*, where the firm creates differences through the skill of its employees, the level of training received, distinctive uniforms, and so on.
	4. *Differentiation through distribution*, including distribution via mail order or through internet shopping, such as Amazon.com, which differentiates itself from traditional bookstores by selling online.
6. Firms are *price makers* and are faced with a downward sloping [demand curve](http://www.economicsonline.co.uk/Business_economics/Revenue_theory.html). Because each firm makes a unique product, it can charge a higher or lower price than its rivals. The firm can set its own price and does not have to ‘take' it from the industry as a whole, though the industry price may be a guideline, or becomes a constraint. This also means that the demand curve will slope downwards.
7. Firms operating under monopolistic competition usually have to engage in advertising. Firms are often in fierce competition with other (local) firms offering a similar product or service, and may need to advertise on a local basis, to let customers know their differences. Common methods of advertising for these firms are through local press and radio, local cinema, posters, leaflets and special promotions.
8. Monopolistically competitive firms are assumed to be [profit maximisers](http://www.economicsonline.co.uk/Business_economics/Profits.html) because firms tend to be small with entrepreneurs actively involved in managing the business.
9. There are usually a large numbers of independent firms competing in the market.

**Equilibrium under monopolistic competition**

In the short run [supernormal profits](http://www.economicsonline.co.uk/Business_economics/Profits.html) are possible, but in the long run new firms are attracted into the industry, because of low [barriers to entry](http://www.economicsonline.co.uk/Business_economics/Barriers_to_entry.html), good knowledge and an opportunity to differentiate.

Monopolistic competition in the short run

At [profit maximisation](http://www.economicsonline.co.uk/Business_economics/Profits.html), MC = MR, and output is Q and price P. Given that price (AR) is above ATC at Q, supernormal profits are possible (area PABC).



As new firms enter the market, demand for the existing firm’s products becomes more [elastic](http://www.economicsonline.co.uk/Competitive_markets/Price_elasticity_of_demand.html) and the demand curve shifts to the left, driving down price. Eventually, all super-normal profits are eroded away.

### Examples of monopolistic competition

Monopolistically competitive firms are most common in industries where differentiation is possible, such as:

* The restaurant business
* Hotels
* General specialist retailing
* Consumer services, such as hairdressing

**Price discrimination**

Price discrimination is the practice of charging a different price for the same good or service. There are three types of price discrimination – first-degree, second-degree, and third-degree price discrimination.

### First degree

*First-degree* discrimination, alternatively known as perfect price discrimination, occurs when a firm charges a different price for every unit consumed.

The firm is able to charge the maximum possible price for each unit which enables the firm to capture all available [consumer surplus](http://www.economicsonline.co.uk/Competitive_markets/Consumer_and_producer_surplus.html) for itself. In practice, first-degree discrimination is rare.

### Second degree

Second-degree price discrimination means charging a different price for different quantities, such as quantity discounts for bulk purchases.

### Third degree

Third-degreeprice discrimination means charging a different price to different consumer groups. For example, rail and tube travellers can be subdivided into commuter and casual travellers, and cinema goers can be subdivide into adults and children. Splitting the market into peak and off peak use is very common and occurs with gas, electricity, and telephone supply, as well as gym membership and parking charges. Third-degree discrimination is the commonest type.

#### Necessary conditions for successful discrimination

Price discrimination can only occur if certain conditions are met.

1. The firm must be able to identify different market segments, such as domestic users and industrial users.
2. Different segments must have different price [elasticities](http://www.economicsonline.co.uk/Competitive_markets/Price_elasticity_of_demand.html) (PEDs).
3. Markets must be kept separate, either by time, physical distance and nature of use.
4. There must be no seepage between the two markets, which means that a consumer cannot purchase at the low price in the elastic sub-market, and then re-sell to other consumers in the inelastic sub-market, at a higher price.
5. The firm must have some degree of [monopoly](http://www.economicsonline.co.uk/Business_economics/Monopoly.php)power.

## Oligopoly

### Defining and measuring oligopoly

An oligopoly is a [market structure](http://www.economicsonline.co.uk/Business_economics/Competition_and_market_structures.html) in which a few firms dominate. When a market is shared between a few firms, it is said to be highly concentrated. Although only a few firms dominate, it is possible that many small firms may also operate in the market. For example, major airlines like [British Airways](http://www.britishairways.com/travel/home/public/en_gb?wtls_class=&wtls_security_level=&wtls_keyrefresh=&wtls_bulkalgorithm=&wtls_macalgorithm=&wtls_keyexchangesuite=&local_port=80) (BA) and [Air France](http://www.airfrance.co.uk/cgi-bin/AF/GB/en/local/home/home/homepage.jsp;jsessionid=0000NOpVY_0OoFzOKyQKO5LhCoD:140ufn0s8) operate their routes with only a few close competitors, but there are also many small airlines catering for the holidaymaker or offering specialist services.

### Concentration ratios

Oligopolies may be identified using concentration ratios, which measure the proportion of total market share controlled by a given number of firms. When there is a high concentration ratio in an industry, economists tend to identify the industry as an oligopoly.

#### Example of a hypothetical concentration ratio

The following are the annual sales, in £m, of the six firms in a hypothetical market:

A = 56 88

B = 43 45

C = 22 40

D = 12 12

E = 3 5

F = 1 2

In this hypothetical case, the 3-firm concentration ratio is 88.3%, that is 121/137 x 100.

#### Example - Telephone services

While there are around 170 telephone service suppliers in the UK  the fixed-line market is dominated by two main suppliers, BT and Virgin Media, with a 3-firm concentration ratio for fixed-line telephone supply of 89% in 2006.

### Key characteristics

The main characteristics of firms operating in a market with few close rivals include:

### Interdependence

Firms that are interdependent cannot act independently of each other. A firm operating in a market with just a few competitors must take the potential reaction of its closest rivals into account when making its own decisions. For example, if a petrol retailer like Texaco wishes to increase its market share by reducing price, it must take into account the possibility that close rivals, such as Shell and BP, may reduce their price in retaliation. An understanding of [game theory](http://www.economicsonline.co.uk/Business_economics/Prisoner%27s_dilemma.html) and the [Prisoner’s Dilemma](http://www.economicsonline.co.uk/Business_economics/Prisoner%27s_dilemma.html) helps appreciate the concept of interdependence.

### Strategy

Strategy is extremely important to firms that are interdependent. Because firms cannot act independently, they must anticipate the likely response of a rival to any given change in their price, or their non-price activity. In other words, they need to plan, and work out a range of possible options based on how they think rivals might react.

Oligopolists have to make critical strategic decisions, such as:

* Whether to compete with rivals, or collude with them.
* Whether to raise or lower price, or keep price constant.
* Whether to be the first firm to implement a new strategy, or whether to wait and see what rivals do. The advantages of ‘going first’ or ‘going second’ are respectively called 1st and 2nd-mover advantage. Sometimes it pays to go first because a firm can generate head-start profits. 2nd mover advantage occurs when it pays to wait and see what new strategies are launched by rivals, and then try to improve on them or find ways to undermine them.

### Barriers to entry

Oligopolies and monopolies frequently maintain their position of dominance in a market might because it is too costly or difficult for potential rivals to enter the market. These hurdles are called barriers to entry and the incumbent can erect them deliberately, or they can exploit natural barriers that exist.

### Natural entry barriers include:

#### Economies of large scale production.

If a market has significant [economies of scale](http://www.economicsonline.co.uk/Business_economics/Economies_of_scale.html)that have already been exploited by the incumbents, new entrants are deterred.

#### Ownership or control of a key scarce resource.

Owning scarce resources that other firms would like to use creates a considerable barrier to entry, such as an airline controlling access to an airport.

#### High set-up costs.

High set-up costs deter initial market entry, because they increase break-even output, and delay the possibility of making profits.  Many of these costs are [sunk costs](http://www.economicsonline.co.uk/Business_economics/Costs.html), which are costs that cannot be recovered when a firm leaves a market, and include marketing and advertising costs and other fixed costs.

#### High R&D costs

Spending money on Research and Development (R & D) is often a signal to potential entrants that the firm has large financial reserves. In order to compete, new entrants will have to match, or exceed, this level of spending in order to compete in the future. This deters entry, and is widely found in oligopolistic markets such as pharmaceuticals and the chemical industry.

### Artificial barriers include:

#### Predatory pricing.

Predatory pricing occurs when a firm deliberately tries to push prices low enough to force rivals out of the market.

#### Limit pricing.

Limit pricing means the incumbent firm sets a low price, and a high output, so that entrants cannot make a profit at that price.  This is best achieved by selling at a price just below the [average total costs](http://www.economicsonline.co.uk/Business_economics/Costs.html) (ATC) of potential entrants. This signals to potential entrants that profits are impossible to make.

#### Superior knowledge

An incumbent may, over time, have built up a superior level of knowledge of the market, its customers, and its production costs. This superior knowledge can deter entrants into the market.

#### Predatory acquisition

Predatory acquisition involves taking-over a potential rival by purchasing sufficient shares to gain a controlling interest, or by a complete buy-out. As with other deliberate barriers, regulators, like the [Competition Commission](http://www.competition-commission.org.uk/), may prevent this because it is likely to reduce competition.

#### Advertising

Advertising is another [sunk cost](http://www.economicsonline.co.uk/Business_economics/Costs.html) - the more that is spent by incumbent firms the greater the deterrent to new entrants.

#### A strong brand

A strong brand creates loyalty, ‘locks in’ existing customers, and deters entry.

#### Loyalty schemes

Schemes such as Tesco’s Club Card, help Oligopolists retain customer loyalty and deter entrants who need to gain market share.

#### Exclusive contracts, patents and licenses

These make entry difficult as they favor existing firms who have won the contracts or own the licenses. For example, contracts between suppliers and retailers can exclude other retailers from entering the market.

#### Vertical integration

Vertical integration can ‘tie up’ the supply chain and make life tough for potential entrants, such as an electronics manufacturer like [Sony](http://www.sony.co.uk/section/home) having its own retail outlets (Sony Centres), and a brewer like [Heineken](http://www.heineken.com/AgeGateway.aspx) owning its own chain of UK pubs, which it acquired from the brewers Scottish and Newcastle in 2008.

### Collusive oligopolies

Another key feature of oligopolistic markets is that firms may attempt to collude, rather than compete. If colluding, participants act like a [monopoly](http://www.economicsonline.co.uk/Business_economics/Monopoly.php) and can enjoy the benefits of higher profits over the long term.

### Types of collusion

#### Overt

Overt collusion occurs when there is no attempt to hide agreements, such as the when firms form trade associations like the Association of Petrol Retailers.

#### Covert

Covert collusion occurs when firms try to hide the results of their collusion, usually to avoid detection by regulators, such as when fixing prices.

#### Tacit

Tacit collusion arises when firms act together, called acting in concert, but where there is no formal or even informal agreement. For example, it may be accepted that a particular firm is the price leader in an industry, and other firms simply follow the lead of this firm. All firms may ‘understand’ this, but no agreement or record exists to prove it. If firms do collude, and their behaviour can be proven to result in reduced competition, they are likely to be subject to regulation. In many cases, tacit collusion is difficult or impossible to prove, though regulators are becoming increasingly sophisticated in developing new methods of detection.

### Competitive oligopolies

When competing, oligopolists prefer non-price competition in order to avoid price wars. A price reduction may achieve strategic benefits, such as gaining market share, or deterring entry, but the danger is that rivals will simply reduce their prices in response.

This leads to little or no gain, but can lead to falling revenues and profits. Hence, a far more beneficial strategy may be to undertake non-price competition.

### Pricing strategies of oligopolies

Oligopolies may pursue the following pricing strategies:

1. Oligopolists may use predatory pricing to force rivals out of the market. This means keeping price artificially low, and often below the full cost of production.
2. They may also operate a limit-pricing strategy to deter entrants, which is also called entry forestalling price.
3. Oligopolists may collude with rivals and raise price together, but this may attract new entrants.
4. Cost-plus pricingis a straightforward pricing method, where a firm sets a price by calculating average production costs and then adding a fixed mark-up to achieve a desired profit level. Cost-plus pricing is also called rule of thumb pricing.

However, there is a risk with such a pricing strategy as rivals could adopt a more flexible discounting strategy to gain market share.

### Non-price strategies

Non-price competition is the favoured strategy for oligopolists because price competition can lead to destructive price wars – examples include:

1. Trying to improve quality and after sales servicing, such as offering extended guarantees.
2. Spending on advertising, sponsorship and product placement - also called hidden advertising – is very significant to many oligopolists. The UK's football [Premiership](http://www.premierleague.com/page/Home/0%2C%2C12306%2C00.html) has long been sponsored by firms in oligopolies, including [Barclays Bank](http://www.barclays.co.uk/)and [Carling.](http://www.carling.com/music/venue/glasgow-academy.html)
3. Sales promotion, such as buy-one-get-one-free (BOGOF), is associated with the large supermarkets, which is a highly oligopolistic market, dominated by three or four large chains.
4. Loyalty schemes, which are common in the supermarket sector, such as [Sainsbury’s](http://www.economicsonline.co.uk/Business_economics/Supermarkets.html) Nectar Card and [Tesco’s](http://www.economicsonline.co.uk/Business_economics/Supermarkets.html) Club Card.

**Each strategy can be evaluated in terms of:**

1. How successful is it likely to be?
2. Will rivals be able to copy the strategy?
3. Will the firms get a 1st - mover advantage?
4. How expensive is it to introduce the strategy? If the cost of implementation is greater than the pay-off, clearly it will be rejected.
5. How long will it take to work? A strategy that takes five years to generate a pay-off may be rejected in favour of a strategy with a quicker pay-off.

#### Examples of Oligopoly

Oligopolies are common in the airline industry, [banking](http://www.economicsonline.co.uk/Business_economics/Banks.html), soft-drinks, [supermarkets](http://www.economicsonline.co.uk/Business_economics/Supermarkets.html) and [music](http://www.economicsonline.co.uk/Business_economics/Music_industry.html).  For example, the manufacture, distribution and publication of music products in the UK, as in the EU and USA, is highly concentrated, with a 4-firm concentration ratio of around 75%, and is usually identified as an oligopoly.

#### The disadvantages of oligopolies

Oligopolies can be criticised on a number of obvious grounds, including:

1. High concentration reduces consumer choice.
2. Cartel-like behaviour reduces competition and can lead to higher prices and reduced output.
3. Given the lack of competition, oligopolists may be free to engage in the manipulation of consumer decision making. By making decisions more complex - such as [financial decisions](http://www.economicsonline.co.uk/Competitive_markets/Financial_markets.html) about mortgages - individual consumers fall back on [heuristics](http://www.economicsonline.co.uk/Behavioural_economics/Decision_making_bias.html) and rule of thumb processes, which can lead to [decision making bias](http://www.economicsonline.co.uk/Behavioural_economics/Decision_making_bias.html) and irrational behaviour, including making purchases which add no utility or even harm the individual consumer.
4. Firms can be prevented from entering a market because of deliberate [barriers to entry](http://www.economicsonline.co.uk/Business_economics/Barriers_to_entry.html).

#### The advantages of oligopolies

However, oligopolies may provide the following benefits:

1. Oligopolies may adopt a highly competitive strategy, in which case they can generate similar benefits to more competitive [market structures](http://www.economicsonline.co.uk/Business_economics/Competition_and_market_structures.html), such as lower prices. Even though there are a few firms, making the market uncompetitive, their behaviour may be highly competitive.
2. Oligopolists may be dynamically efficient in terms of innovation and new product and process development. The super-normal profits they generate may be used to innovate, in which case the consumer may gain.
3. [Price stability](http://www.economicsonline.co.uk/Business_economics/Oligopoly.html#stick) may bring advantages to consumers and the macro-economy because it helps consumers plan ahead and stabilises their expenditure, which may help stabilize the trade cycle.