Monopolistic Competition & Oligopoly

AQA A-Level Economics

Concentration Ratios · Kinked Demand · Game Theory · Collusion · Contestability

Monopolistic Competition: Characteristics

Definition:

A market structure with many firms selling similar but differentiated products, with low barriers to entry.

A mix of perfect competition (many firms, free entry) and monopoly (some price-making power)

Key characteristics:

Many Firms, Low Barriers

Many small firms compete, each with a small market share. Barriers to entry and exit are low, so new firms can join easily.

e.g. Hairdressers, cafés, takeaways, plumbers and small independent clothes shops.

Product Differentiation

Each firm's product is slightly different — through branding, quality, location or service. Products are close but not perfect substitutes.

e.g. Two nearby coffee shops sell coffee, but one may offer better seating, faster Wi-Fi or a loyalty card.

Some Price-Making Power

Differentiation gives each firm a downward-sloping, fairly price-elastic demand curve. It can raise its price a little without losing all its customers.

e.g. A popular local restaurant can charge slightly more than rivals — but a large price rise sends diners elsewhere.

Monopolistic Competition: Short Run & Long Run

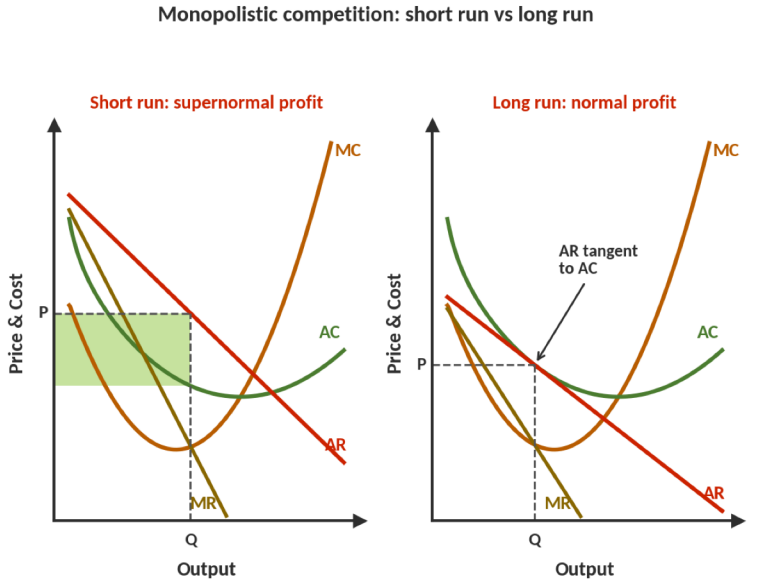
Short run:
Each firm faces a downward-sloping AR curve and maximises profit where MC = MR. Firms can make supernormal profits, just like a monopolist.

Adjustment to the long run:
Low barriers mean supernormal profits attract new firms. Each existing firm loses some customers → its AR curve shifts left and becomes more elastic.

Long-run equilibrium:
Entry continues until AR is tangent to AC. Every firm makes only normal profit (AR = AC).

Efficiency:
P > MC, so it is allocatively inefficient. Firms produce to the left of minimum AC — they have excess capacity, so they are also productively inefficient.

Losses in the short run cause firms to leave → AR shifts right until normal profit is restored.



Real-World Example

UK coffee shops: high profits in the 2010s attracted rapid entry from independents and chains — extra competition squeezed margins towards normal profit.

Evaluating Monopolistic Competition

Compared with perfect competition, monopolistic competition trades some efficiency for greater choice and variety:

Disadvantages

Allocatively inefficient: P > MC in both the short and long run, causing a welfare loss.

Productively inefficient: firms operate with excess capacity, to the left of minimum AC.

Higher prices than perfect competition, as each firm has some price-making power.

Resources used on advertising and branding may be wasteful if they only shift customers between firms.

Small firms rarely benefit from economies of scale.

e.g. A high street with several half-empty takeaways shows excess capacity in action.

Advantages

Consumer choice and variety: differentiation gives consumers products suited to their tastes.

Competitive pressure: free entry means supernormal profits are competed away in the long run.

Innovation: firms keep improving products and service to stand out from rivals.

Low barriers make it easy for entrepreneurs to start new businesses.

Closer to real-world markets than perfect competition, so it is a useful model.

e.g. The huge variety of UK restaurants and cafés reflects consumers valuing choice, not just the lowest price.

Oligopoly: Characteristics & Concentration

Definition:

A market dominated by a few large firms. Each firm's decisions affect its rivals — firms are interdependent.

Key characteristics:

High barriers to entry. Products may be identical or differentiated. Firms are interdependent, so they must predict rivals' reactions. Prices tend to be stable, with non-price competition common.

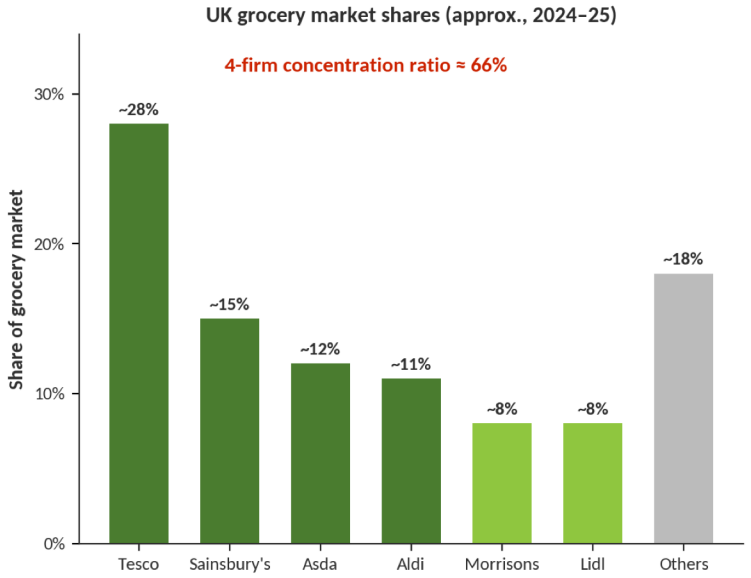
Concentration ratios:

An n-firm concentration ratio is the combined market share of the n largest firms. A market is usually called an oligopoly if the 4-firm ratio is above ~60%.

Worked example:

If the four largest firms have shares of 28%, 15%, 12% and 11%, the 4-firm concentration ratio = 28 + 15 + 12 + 11 = 66%.

Oligopoly is defined by market conduct (interdependence) as well as structure (a few firms).



Real-World Example

UK groceries are a classic oligopoly: Tesco, Sainsbury's, Asda and Aldi hold around two-thirds of the market, and closely match each other's prices.

The Kinked Demand Curve

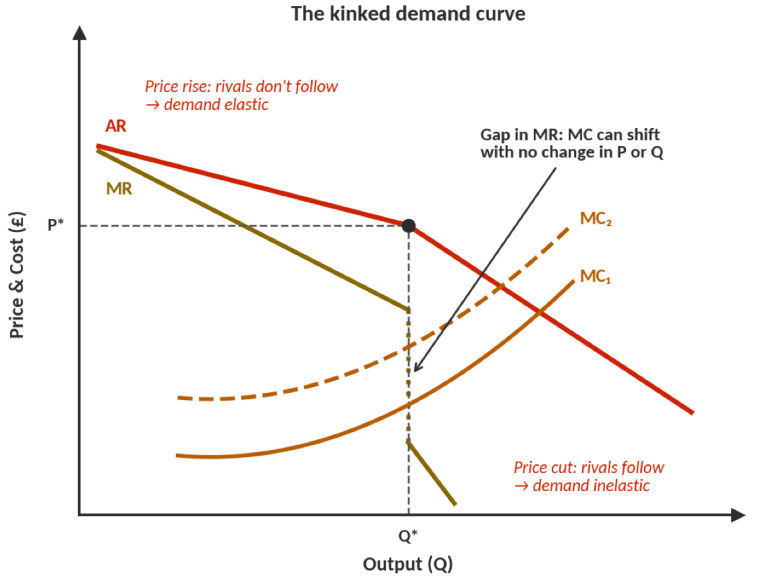
Purpose:
The kinked demand curve model explains why prices in oligopoly tend to be stable (sticky), even when costs change.

The key assumption:
Rivals will match a price cut (to avoid losing customers) but will NOT follow a price rise (to gain customers).

Consequences:
Above the current price, demand is elastic — a price rise loses many customers. Below it, demand is inelastic — a price cut gains few. So the firm has no incentive to change price.

The MR gap:
The kink creates a vertical gap in MR. MC can rise or fall within this gap without changing the profit-maximising price or output.

Eval: it does not explain how the original price was set, and price wars do happen in reality.



Real-World Example

UK road fuel: pump prices tend to move together, and the CMA's 2023 review found weakening competition — supermarket fuel margins rose while prices stayed sticky.

Game Theory & the Prisoners' Dilemma

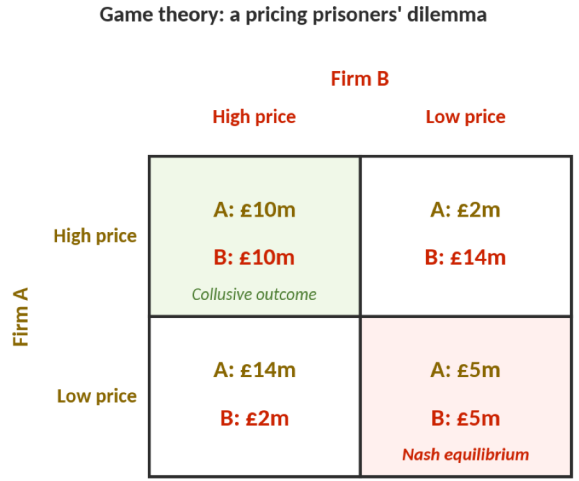
Game theory:
A way of analysing decisions where the outcome for each firm depends on the choices of its rivals — ideal for studying interdependence in oligopoly.

The prisoners' dilemma:
Both firms would earn most by keeping prices high (£10m each). But each has an incentive to cut its price to win customers (£14m) — so both cut and earn only £5m.

Key terms:
Dominant strategy: the best choice whatever the rival does (here, a low price). Nash equilibrium: no firm can gain by changing its choice alone (both low).

Why it matters:
Shows why firms have an incentive to collude — and why collusive agreements are unstable, as each firm has an incentive to cheat.

In repeated games, firms may learn to trust each other, making tacit collusion more likely.



Real-World Example

Supermarket price wars: when one grocer cuts prices, rivals quickly respond — all end up with lower margins, as the prisoners' dilemma predicts.

Collusion & Cartels

Collusion is when firms cooperate rather than compete, to act like a joint monopoly and raise profits:

Overt Collusion (Cartels)

A formal agreement between firms to fix prices, limit output or share out markets. The cartel acts as a monopoly, raising prices and profits. e.g. OPEC sets oil production quotas.

Tacit Collusion

Firms cooperate without any formal agreement — e.g. price leadership, where firms follow the price set by a dominant firm. Harder to detect and prove than a cartel.

When Is Collusion Likely?

Few firms; similar costs and products; high barriers to entry; stable demand; prices are easy to observe; weak penalties or low chance of being caught.

Why Collusion Breaks Down

Each member has an incentive to cheat by cutting price or raising output. New entrants, falling demand, cost differences and leniency schemes for whistleblowers all weaken cartels.

Illegal in the UK: cartels are banned under the Competition Act 1998 — the CMA can fine firms up to 10% of global turnover. e.g. BA was fined £121.5m in 2007 for fixing fuel surcharges.

Pricing & Non-Price Competition in Oligopoly

Because price competition can trigger damaging price wars, oligopolists often compete in other ways:

Price Wars

Firms repeatedly cut prices to win market share. Consumers gain in the short run, but profits fall for all firms.

e.g. UK supermarket price-matching campaigns against Aldi and Lidl.

Predatory & Limit Pricing

Predatory pricing: pricing below cost to drive rivals out. Limit pricing: pricing low to deter new entrants.

e.g. Predatory pricing is illegal, but hard to prove — low prices may just reflect efficiency.

Advertising & Branding

Heavy advertising builds brand loyalty, making demand more price inelastic and raising barriers to entry.

e.g. Unilever and Procter & Gamble spend billions a year promoting their brands.

Loyalty Schemes

Reward schemes lock in customers and give firms valuable data on consumer spending.

e.g. Tesco Clubcard Prices and Sainsbury's Nectar Prices offer lower prices only to members.

Product Development & Innovation

New and improved products differentiate a firm from rivals and can create temporary monopoly power.

e.g. Apple and Samsung release new smartphone models every year.

Quality & Customer Service

Better service, delivery and after-sales care attract customers without cutting prices.

e.g. Next-day delivery and free returns in online retail.

★ Bonus: Contestable Markets

Definition:
A contestable market is one where there is a genuine threat of new firms entering. Firms behave competitively because of potential competition, not just actual competition.

Conditions for contestability:
Low barriers to entry and exit. Low or zero sunk costs. New entrants have access to the same technology. Perfect information.

Consequences:
Even a monopoly or oligopoly may earn only normal profit and be efficient — if it raises prices, 'hit-and-run' entrants will take its profits.

Evaluation:
Shifts focus from the number of firms to barriers to entry. ✗ Few markets have zero sunk costs. ✗ Incumbents may respond aggressively to deter entry.

Hit-and-Run Competition

Firms enter a market to take supernormal profits, then leave quickly when profits fall — possible only if sunk costs are low.

Sunk Costs

Costs that cannot be recovered on exit (e.g. advertising, specialist equipment). The higher the sunk costs, the less contestable the market.

Real-World Example

Airline routes are fairly contestable: aircraft can be leased and moved between routes. If an airline charges high fares on a route, rivals such as easyJet or Ryanair can quickly add flights.

Summary: Key Terms & Relationships

Key Term	Meaning
Monopolistic competition	Many firms, differentiated products, low barriers. Normal profit in the long run.
Product differentiation	Making a product different from rivals' through branding, quality, location or service.
Excess capacity	Producing below the output at minimum AC — a feature of monopolistic competition.
Oligopoly	A market dominated by a few large, interdependent firms with high barriers to entry.
Interdependence	Each firm's decisions affect its rivals, so it must predict their reactions.
Concentration ratio	The combined market share of the n largest firms. 4-firm ratio above ~60% = oligopoly.
Kinked demand curve	Rivals match price cuts but not rises → prices are sticky. MR has a vertical gap.
Game theory	Analysis of strategic decisions where outcomes depend on rivals' choices.
Nash equilibrium	No player can gain by changing strategy alone. Often both firms choose low prices.
Overt collusion (cartel)	A formal agreement to fix prices or output. Illegal under the Competition Act 1998.
Tacit collusion	Cooperation without a formal agreement — e.g. price leadership.
Non-price competition	Competing through advertising, branding, loyalty schemes, innovation or service.
Contestable market	A market with low entry/exit barriers and sunk costs — the threat of entry keeps prices down.