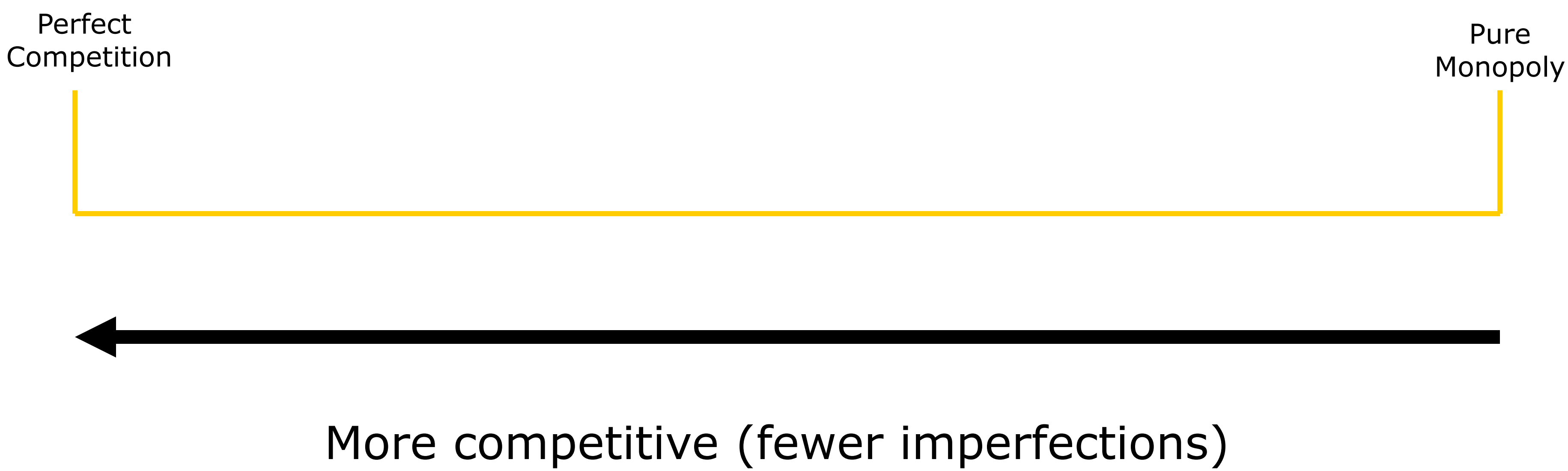
Market Structure

Market Structure

- Market structure – identifies how a market is made up in terms of:
  - The number of firms in the industry
  - The nature of the product produced
  - The degree of monopoly power each firm has
  - The degree to which the firm can influence price
  - Profit levels
  - Firms' behaviour – pricing strategies, non-price competition, output levels
  - The extent of barriers to entry
  - The impact on efficiency

Market Structure



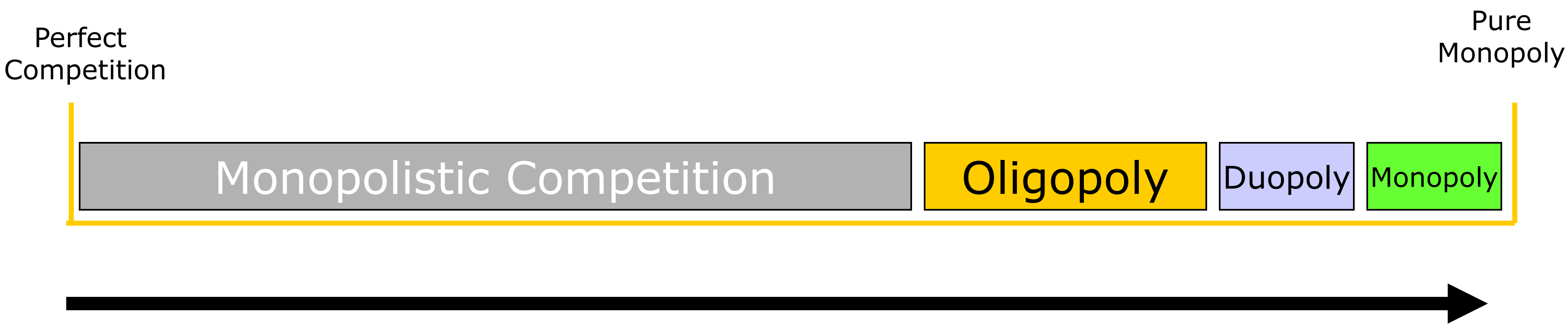
Market Structure

Perfect Competition

Pure Monopoly

Less competitive (greater degree of imperfection)

Market Structure



The further right on the scale, the greater the degree of monopoly power exercised by the firm.

Market Structure

- Importance:
- Degree of competition affects the consumer – will it benefit the consumer or not?
- Impacts on the performance and behaviour of the company/companies involved

Market Structure

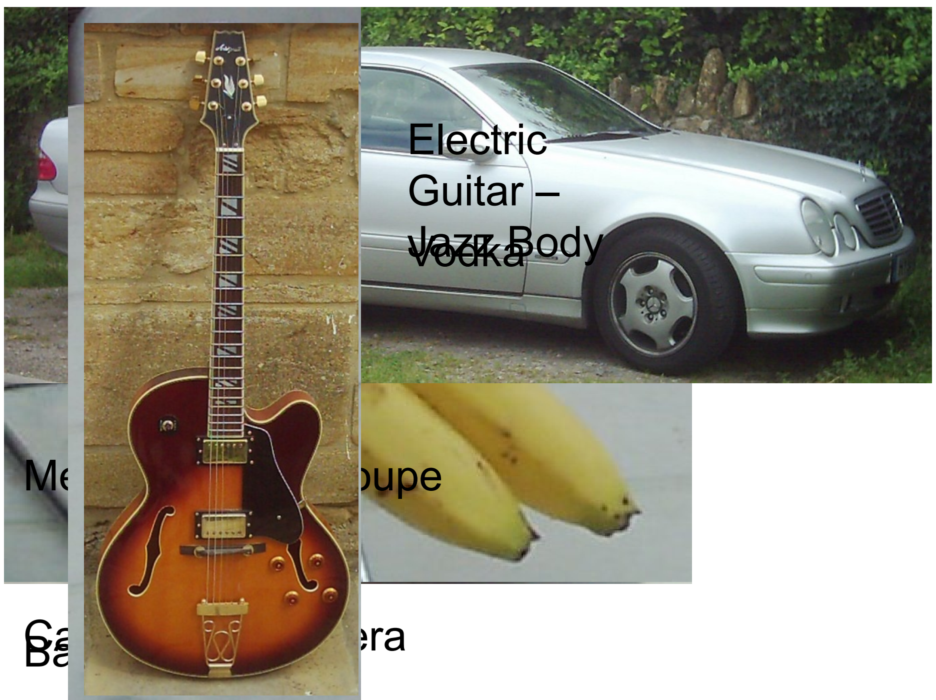
- **Models – a word of warning!**
  - Market structure deals with a number of economic ‘models’
  - These models are a representation of reality to help us to understand what may be happening in real life
  - There are extremes to the model that are unlikely to occur in reality
  - They still have value as they enable us to draw comparisons and contrasts with what is observed in reality
  - Models help therefore in analysing and evaluating – they offer a benchmark

Market Structure

- **Characteristics of each model:**
  - Number and size of firms that make up the industry
  - Control over price or output
  - Freedom of entry and exit from the industry
  - Nature of the product – degree of homogeneity (similarity) of the products in the industry (extent to which products can be regarded as substitutes for each other)
  - Diagrammatic representation – the shape of the demand curve, etc.

Market Structure

Characteristics: Look at these everyday products – what type of market structure are the producers of these products operating in?



Remember to think about the nature of the product, entry and exit, behaviour of the firms, number and size of the firms in the industry.

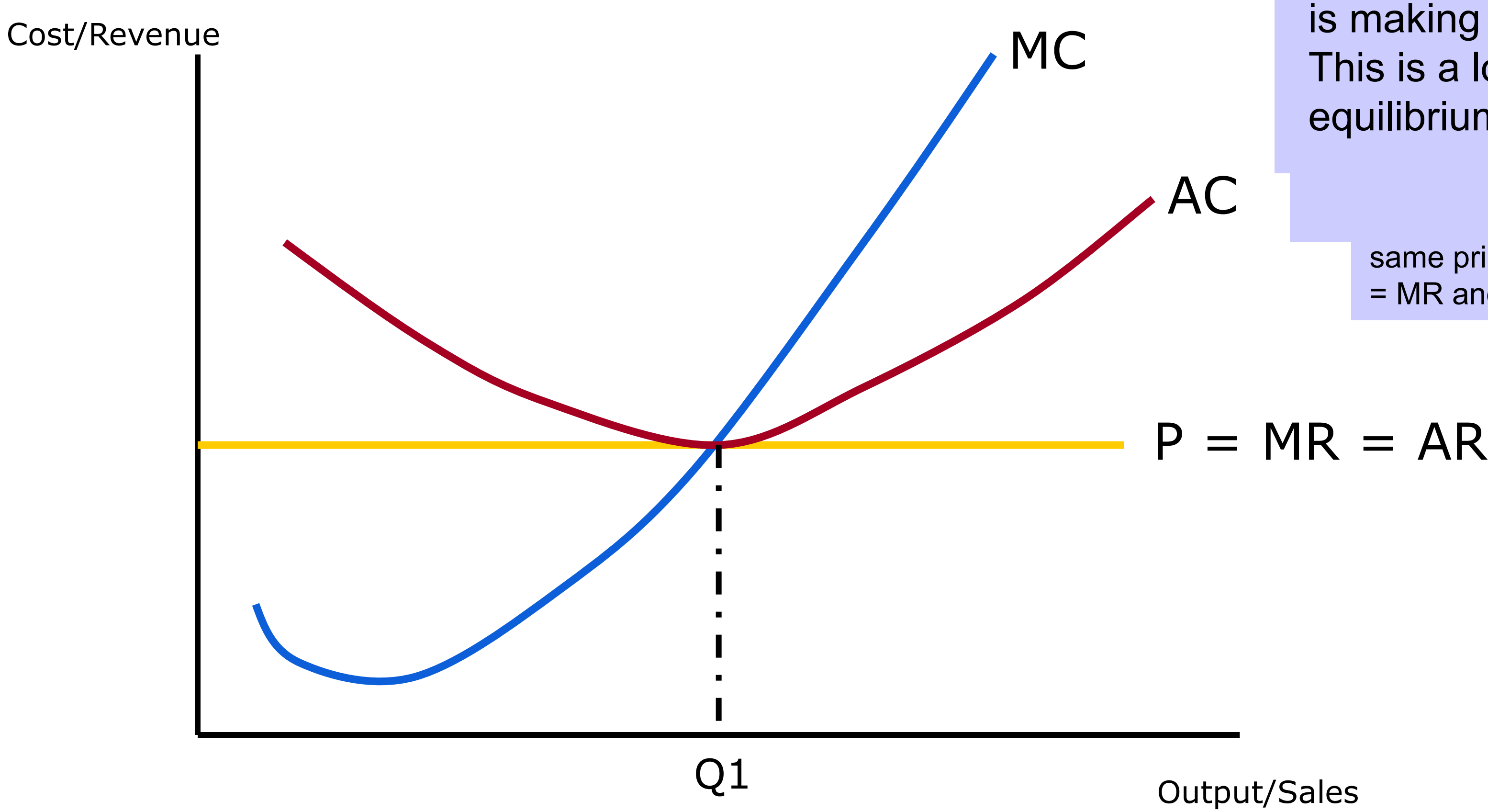
You might even have to ask what the industry is??

Perfect Competition

- One extreme of the market structure spectrum
- **Characteristics:**
  - Large number of firms
  - Products are homogenous (identical) – consumer has no reason to express a preference for any firm
  - Freedom of entry and exit into and out of the industry
  - Firms are price takers – have no control over the price they charge for their product
  - Each producer supplies a very small proportion of total industry output
  - Consumers and producers have perfect knowledge about the market

Perfect Competition

Diagrammatic representation

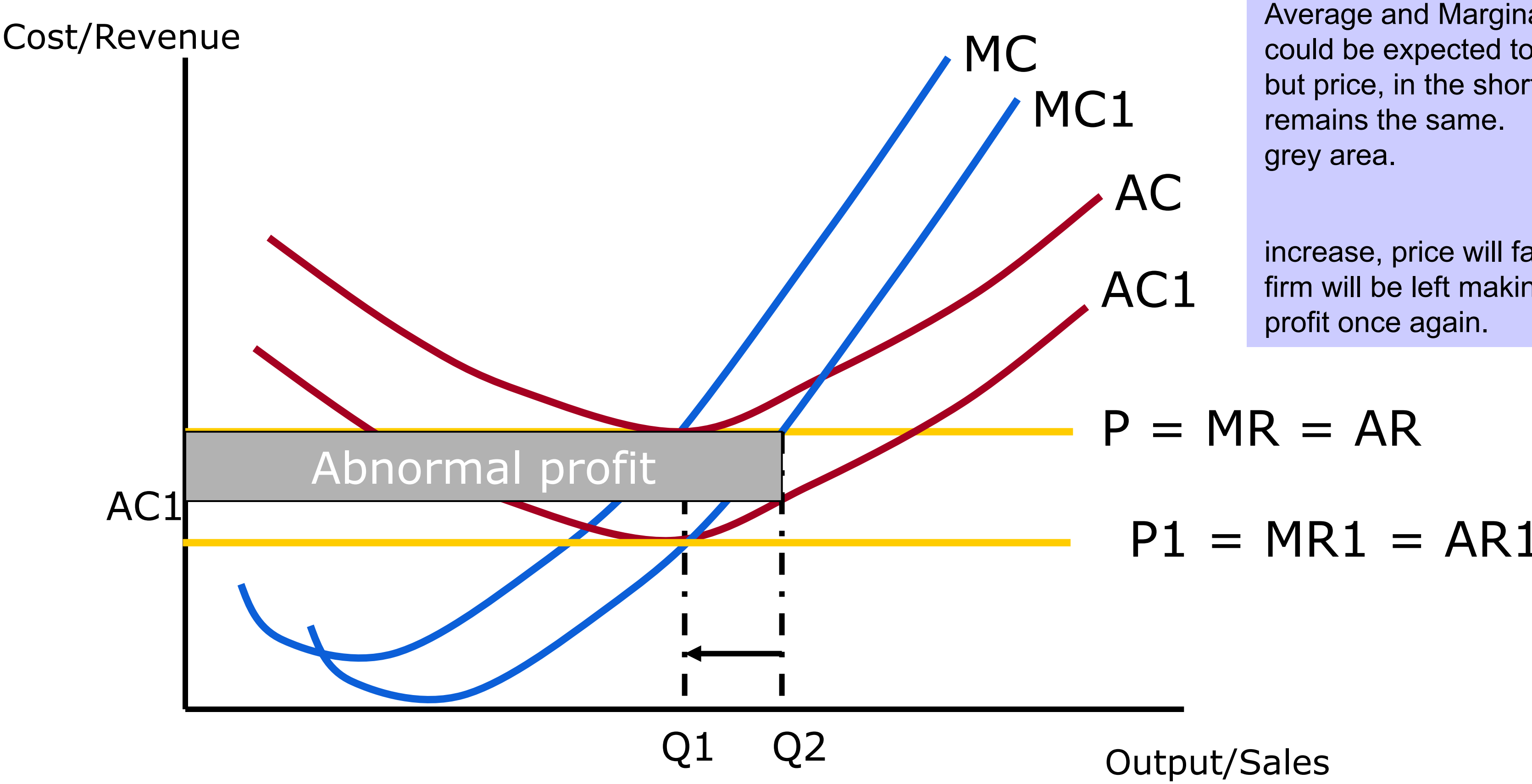


At this output the firm is making normal profit. This is a long run equilibrium position.

same price. Price therefore = MR and AR

Perfect Competition

Diagrammatic representation



Because the model assumes Average and Marginal costs could be expected to be lower but price, in the short run, remains the same. grey area.

increase, price will fall and the firm will be left making normal profit once again.

Monopolistic or Imperfect Competition

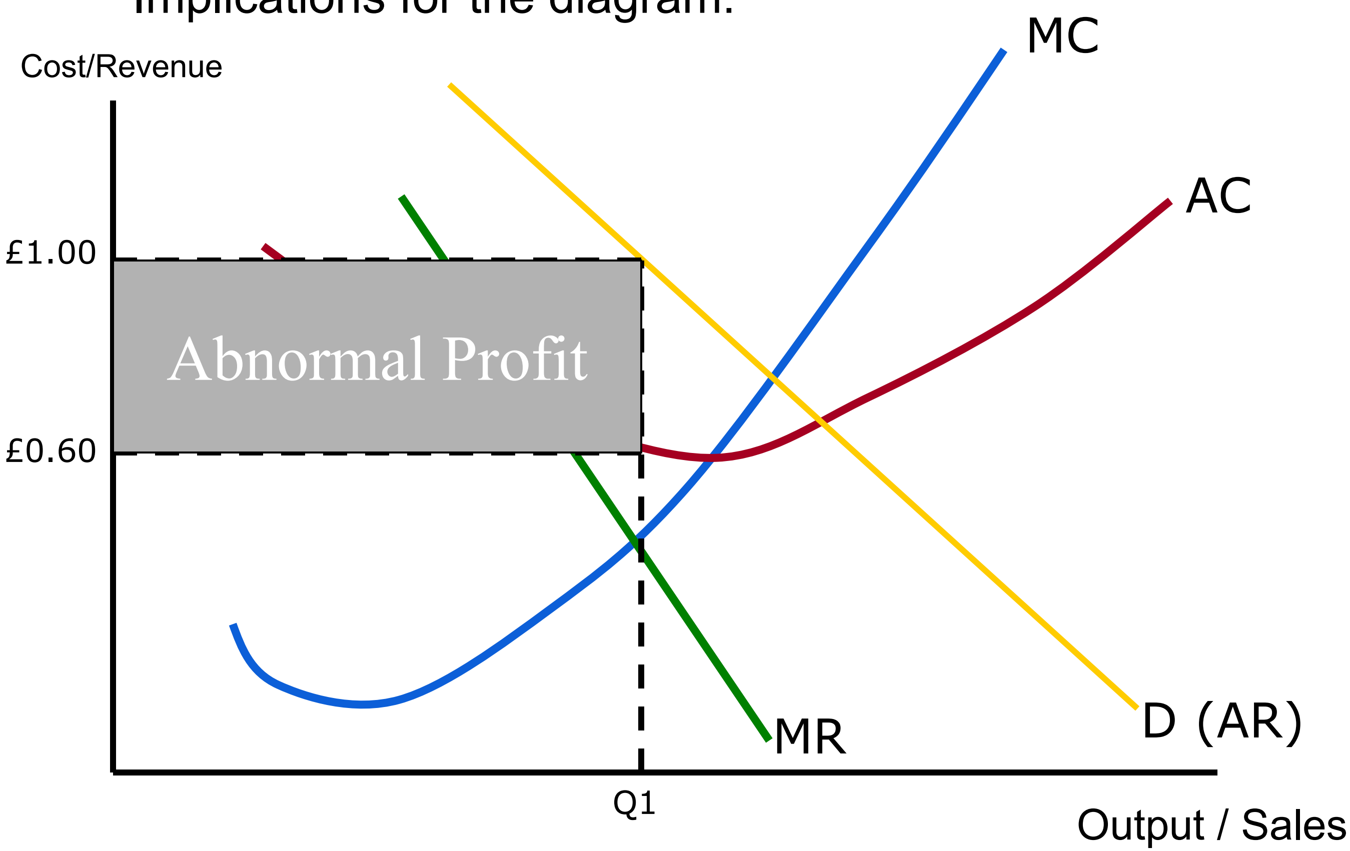
- Where the conditions of perfect competition do not hold, ‘imperfect competition’ will exist
- Varying degrees of imperfection give rise to varying market structures
- Monopolistic competition is one of these – **not** to be confused with monopoly!

Monopolistic or Imperfect Competition

- **Characteristics:**
  - Large number of firms in the industry
  - May have some element of control over price due to the fact that they are able to differentiate their product in some way from their rivals – products are therefore close, but not perfect, substitutes
  - Entry and exit from the industry is relatively easy – few barriers to entry and exit
  - Consumer and producer knowledge imperfect

Monopolistic or Imperfect Competition

Implications for the diagram:



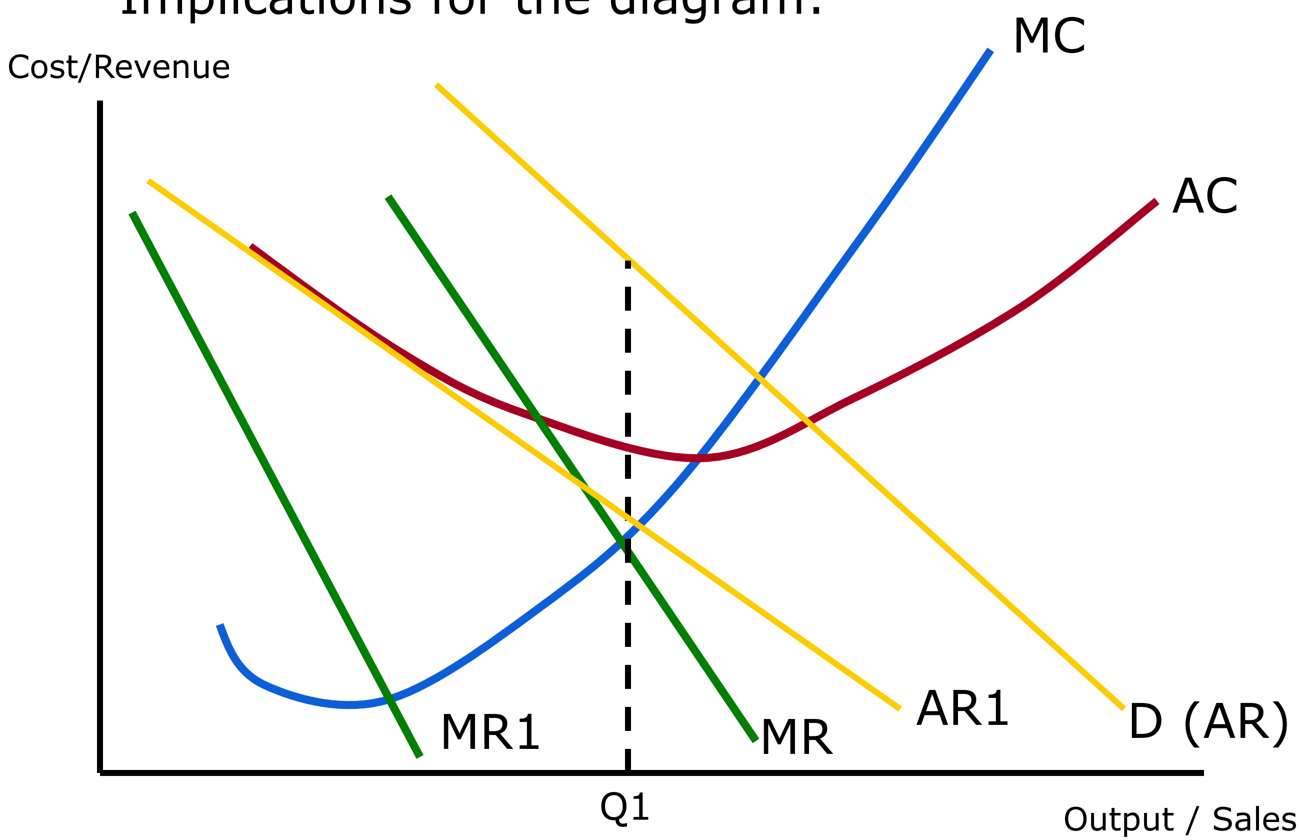
This is a short run equilibrium position for a firm in a monopolistic market structure.

60p, the firm will make 40p x Q1 in abnormal profit.

output by lowering price.

Monopolistic or Imperfect Competition

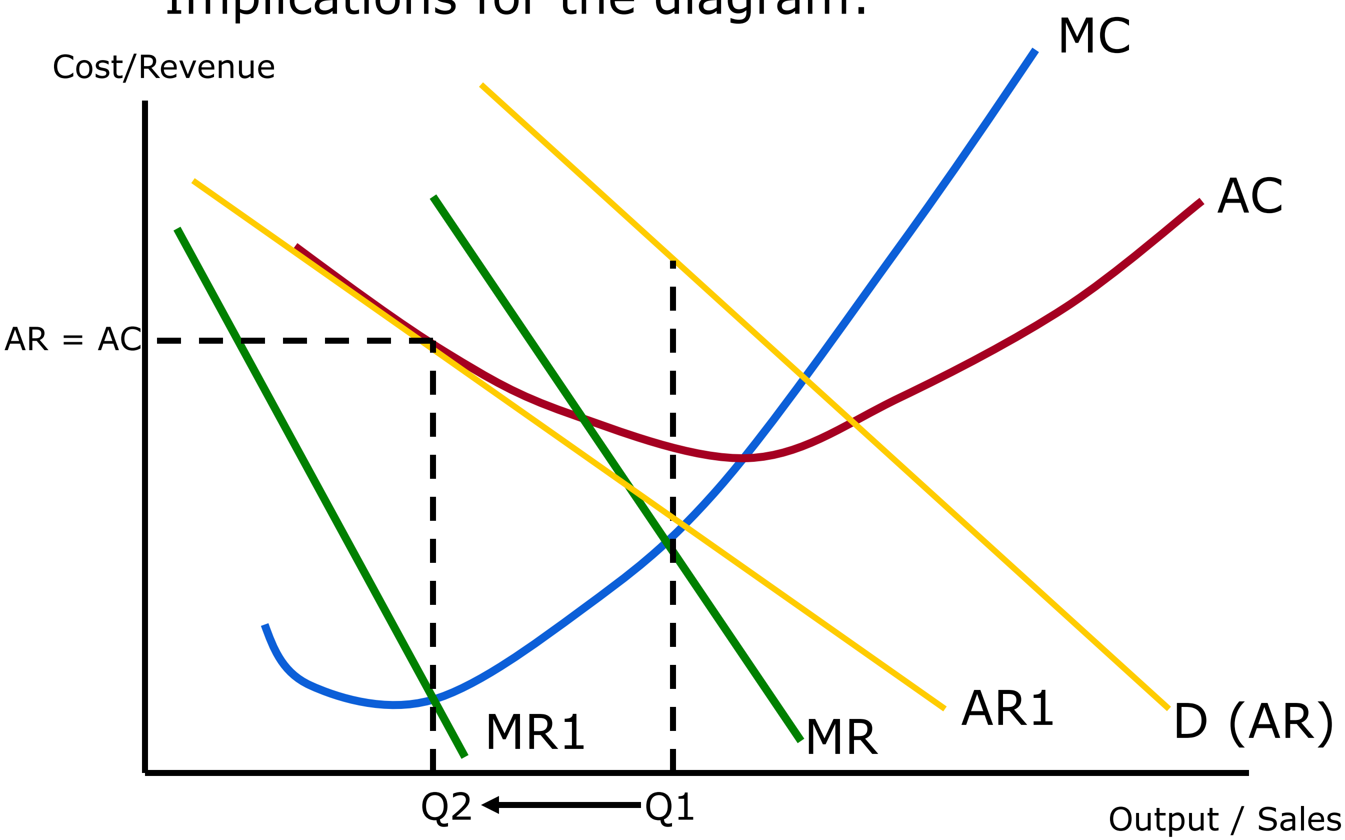
Implications for the diagram:



Because there is relative freedom of entry and exit into the market, new firms will enter encouraged by the existence of abnormal profits. New entrants will increase supply causing price to fall. As price falls, the AR and MR curves shift inwards as revenue from each sale is now less.

Monopolistic or Imperfect Competition

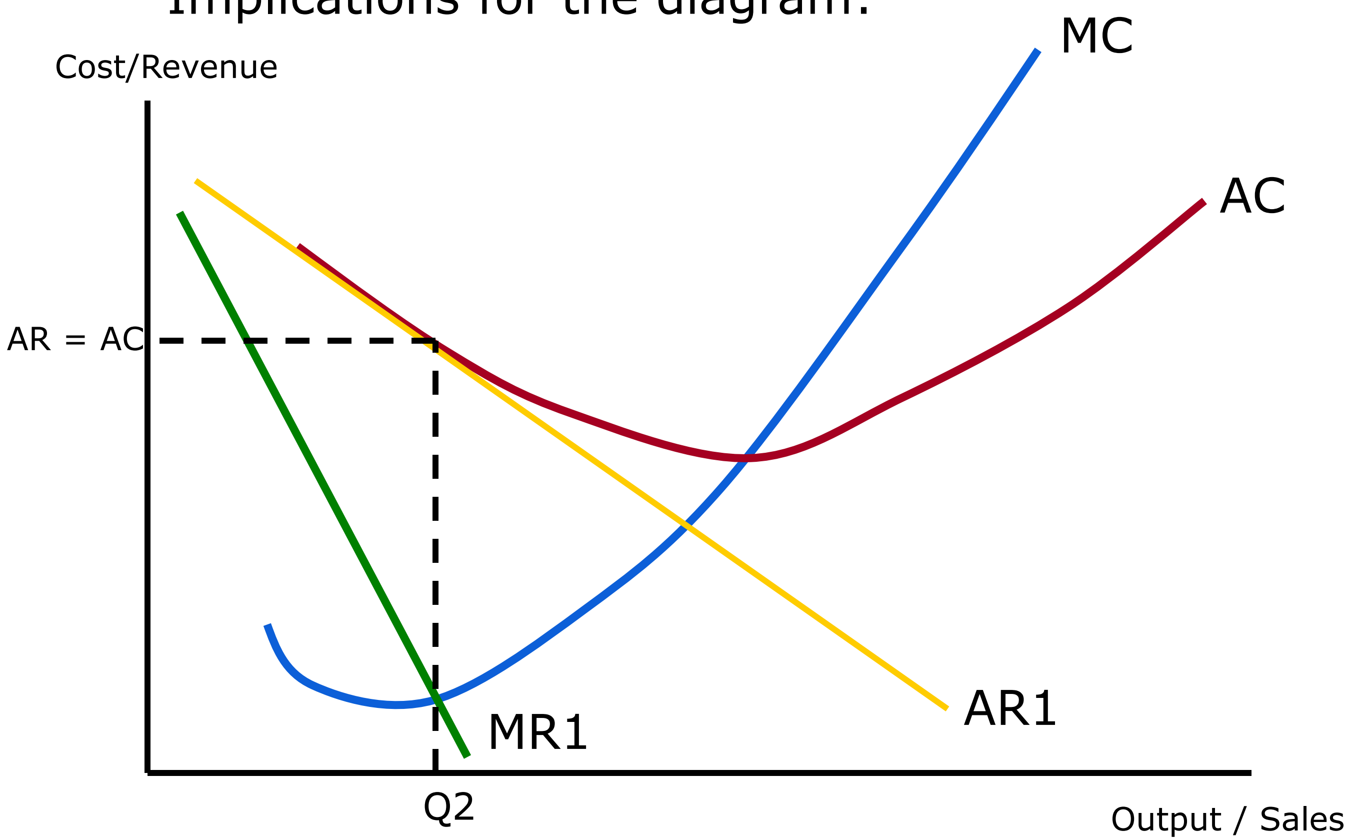
Implications for the diagram:



Notice that the existence of more substitutes makes the new AR (D) curve more price elastic. The firm reduces output to a point where MC = MR (Q2). At this output AR = AC and the firm will make normal profit.

Monopolistic or Imperfect Competition

Implications for the diagram:



This is the long run equilibrium position of a firm in monopolistic competition.

Monopolistic or Imperfect Competition

- Some important points about monopolistic competition:
  - May reflect a wide range of markets
  - Not just one point on a scale – reflects many degrees of ‘imperfection’
  - Examples?

Monopolistic or Imperfect Competition

- Restaurants
- Plumbers/electricians/local builders
- Solicitors
- Private schools
- Plant hire firms
- Insurance brokers
- Health clubs
- Hairdressers
- Funeral directors
- Estate agents
- Damp proofing control firms

Monopolistic or Imperfect Competition

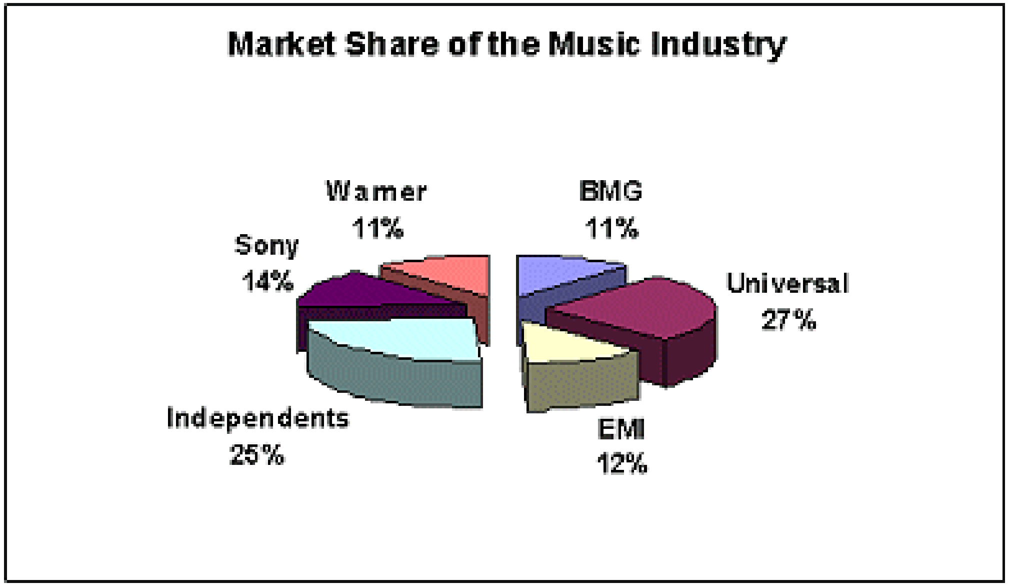
- In each case there are many firms in the industry
- Each can try to differentiate its product in some way
- Entry and exit to the industry is relatively free
- Consumers and producers do not have perfect knowledge of the market – the market may indeed be relatively localised. Can you imagine trying to search out the details, prices, reliability, quality of service, etc for every plumber in the UK in the event of an emergency??

Oligopoly

- Competition between the few
  - May be a large number of firms in the industry but the industry is dominated by a small number of very large producers
- **Concentration Ratio** – the proportion of total market sales (share) held by the top 3,4,5, etc firms:
  - A 4 firm concentration ratio of 75% means the top 4 firms account for 75% of all the sales in the industry

Oligopoly

- Example:
- Music sales –



Market Share of the Music Industry 2002. Source IFPI: http://www.ifpi.org/site-content/press/20030909.html

The music industry has a 5-firm concentration ratio of 75%. Independents make up 25% of the market but there could be many thousands of firms that make up this 'independents' group. An oligopolistic market structure therefore may have many firms in the industry but it is dominated by a few large sellers.

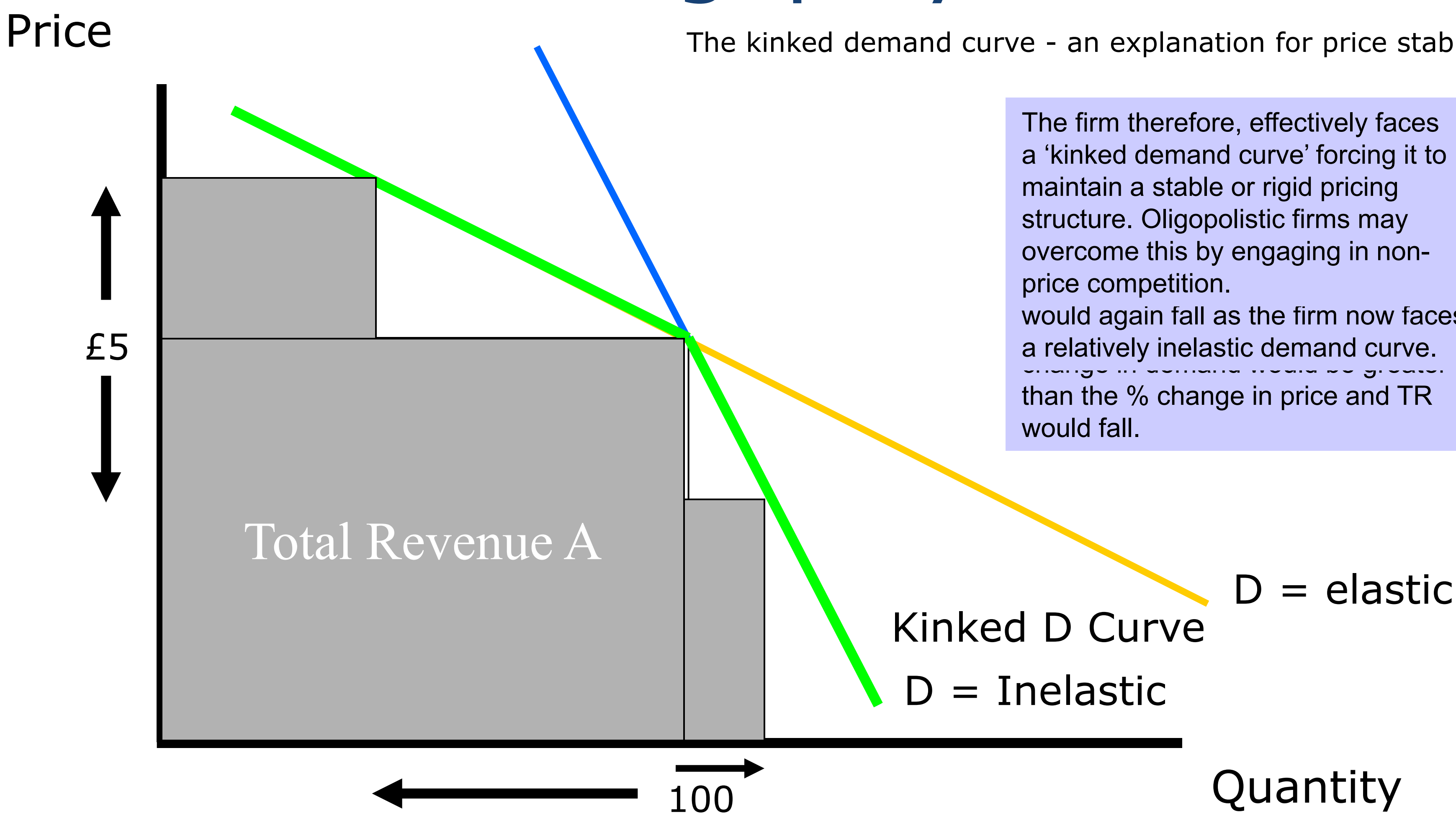
Oligopoly

- Features of an oligopolistic market structure:
  - Price may be relatively stable across the industry – kinked demand curve?
  - Potential for collusion
  - Behaviour of firms affected by what they believe their rivals might do – interdependence of firms
  - Goods could be homogenous or highly differentiated
  - Branding and brand loyalty may be a potent source of competitive advantage
  - Non-price competition may be prevalent
  - Game theory can be used to explain some behaviour
  - AC curve may be saucer shaped – minimum efficient scale could occur over large range of output
  - High barriers to entry

Oligopoly

The kinked demand curve - an explanation for price stability?

The firm therefore, effectively faces a ‘kinked demand curve’ forcing it to maintain a stable or rigid pricing structure. Oligopolistic firms may overcome this by engaging in non-price competition.
would again fall as the firm now faces a relatively inelastic demand curve.
than the % change in price and TR would fall.



Duopoly

- Market structure where the industry is dominated by two large producers
  - Collusion may be a possible feature
  - Price leadership by the larger of the two firms may exist – the smaller firm follows the price lead of the larger one
  - Highly interdependent
  - High barriers to entry
  - Cournot Model – French economist – analysed duopoly – suggested long run equilibrium would see equal market share and normal profit made
  - In reality, local duopolies may exist

Monopoly

- Pure monopoly – where only one producer exists in the industry
- In reality, rarely exists – always some form of substitute available!
- Monopoly exists, therefore, where one firm dominates the market
- Firms may be investigated for examples of monopoly power when market share exceeds 25%
- Use term 'monopoly power' with care!

Monopoly

- Monopoly power – refers to cases where firms influence the market in some way through their behaviour – determined by the degree of concentration in the industry
  - Influencing prices
  - Influencing output
  - Erecting barriers to entry
  - Pricing strategies to prevent or stifle competition
  - May not pursue profit maximisation – encourages unwanted entrants to the market
  - Sometimes seen as a case of market failure

Monopoly

- **Origins of monopoly:**
  - Through growth of the firm
  - Through amalgamation, merger or takeover
  - Through acquiring patent or license
  - Through legal means – Royal charter, nationalisation, wholly owned plc

Monopoly

- Summary of characteristics of firms exercising monopoly power:
  - **Price** – could be deemed too high, may be set to destroy competition (destroyer or predatory pricing), price discrimination possible.
  - **Efficiency** – could be inefficient due to lack of competition (X- inefficiency) or…
    - could be higher due to availability of high profits

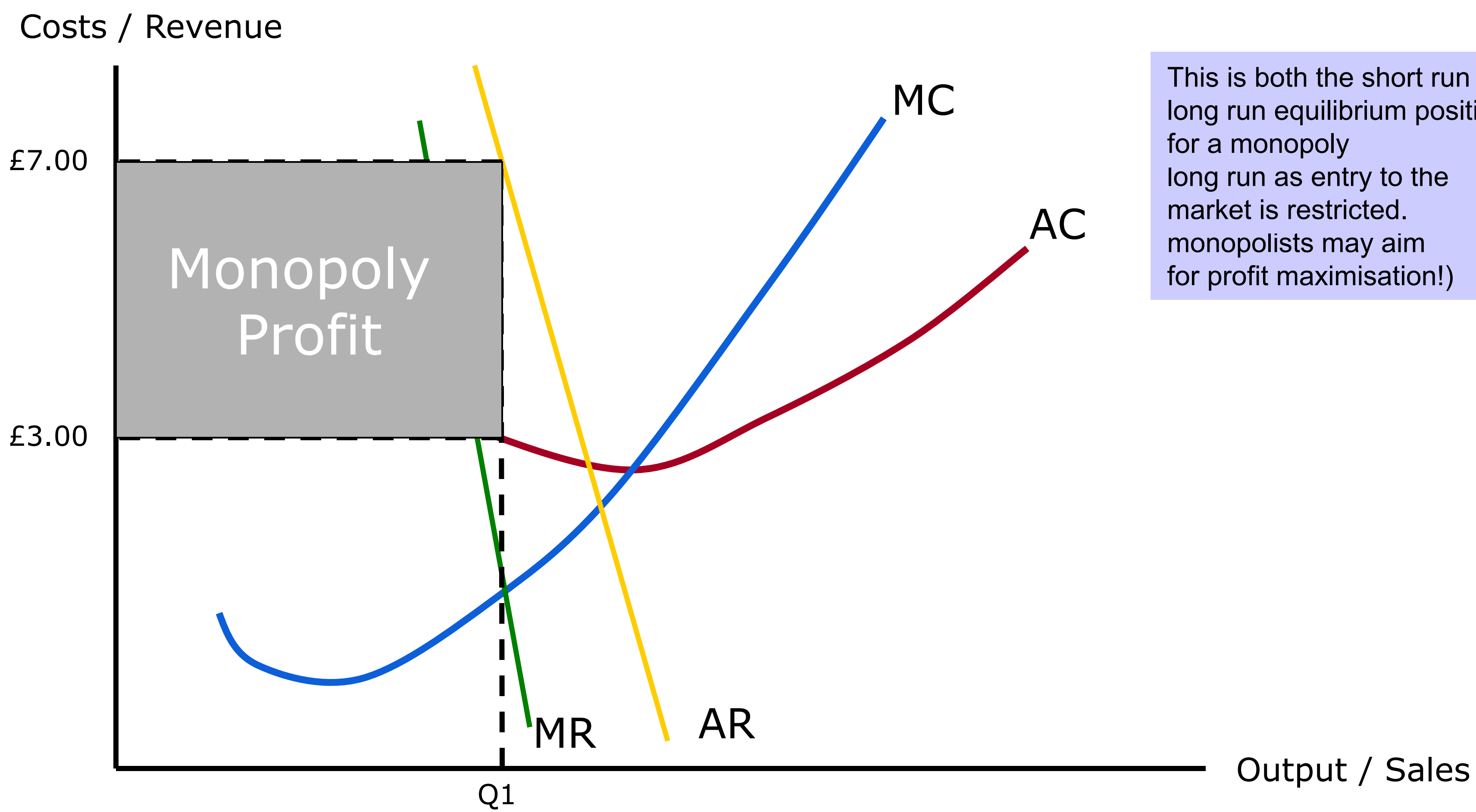
Monopoly

- **Innovation** - could be high because of the promise of high profits, Possibly encourages high investment in research and development (R&D)
- **Collusion** – possible to maintain monopoly power of key firms in industry
- High levels of branding, advertising and non-price competition

Monopoly

- Problems with models – a reminder:
  - Often difficult to distinguish between a monopoly and an oligopoly – both may exhibit behaviour that reflects monopoly power
  - Monopolies and oligopolies do not necessarily aim for traditional assumption of profit maximisation
  - Degree of contestability of the market may influence behaviour
  - Monopolies not always 'bad' – may be desirable in some cases but may need strong regulation
  - Monopolies do not have to be big – could exist locally

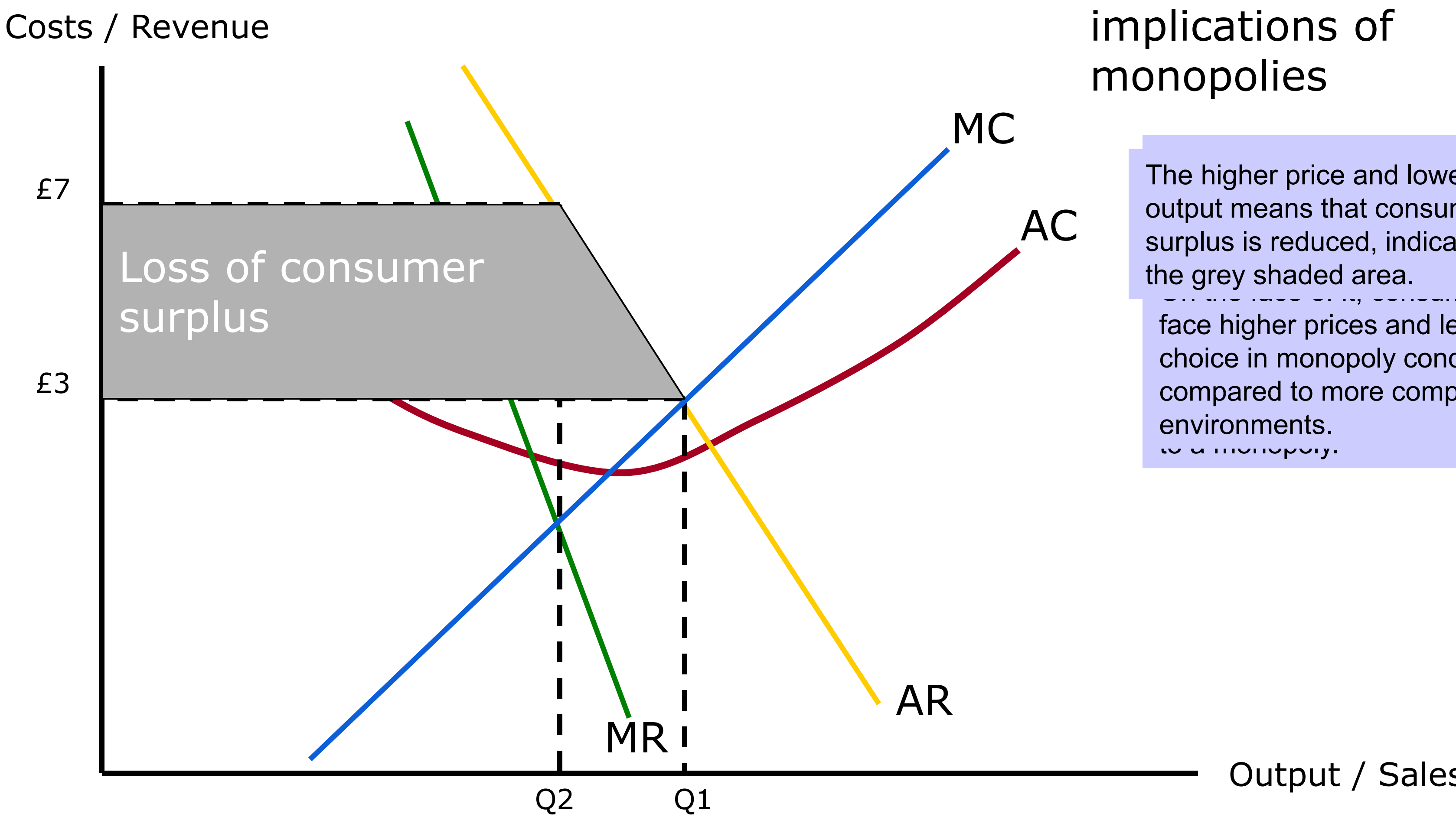
Monopoly



This is both the short run and long run equilibrium position for a monopoly
long run as entry to the market is restricted.
monopolists may aim
for profit maximisation!)

Monopoly

Welfare implications of monopolies

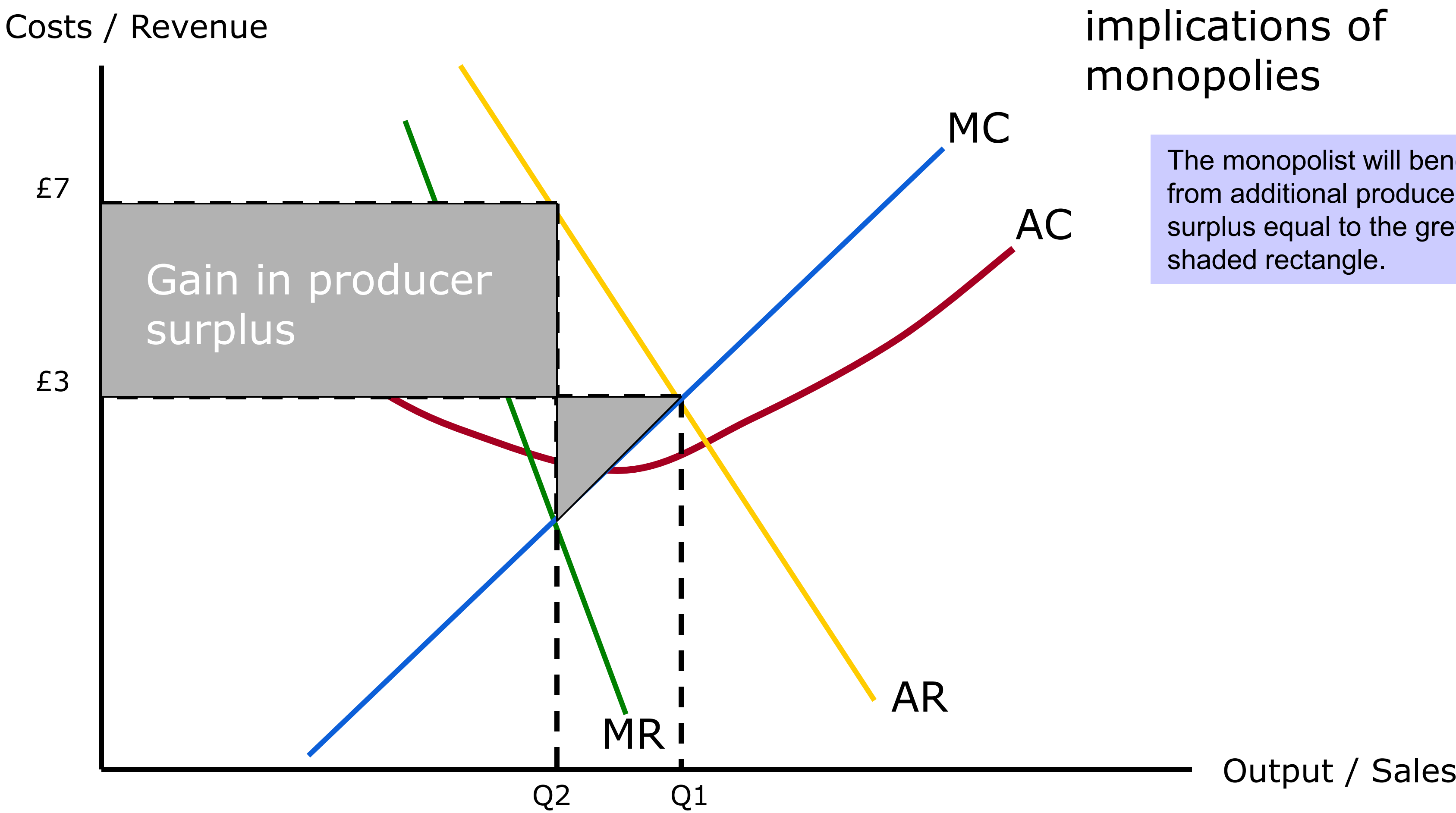


The higher price and lower output means that consumer surplus is reduced, indicated by the grey shaded area.

face higher prices and less choice in monopoly conditions compared to more competitive environments.

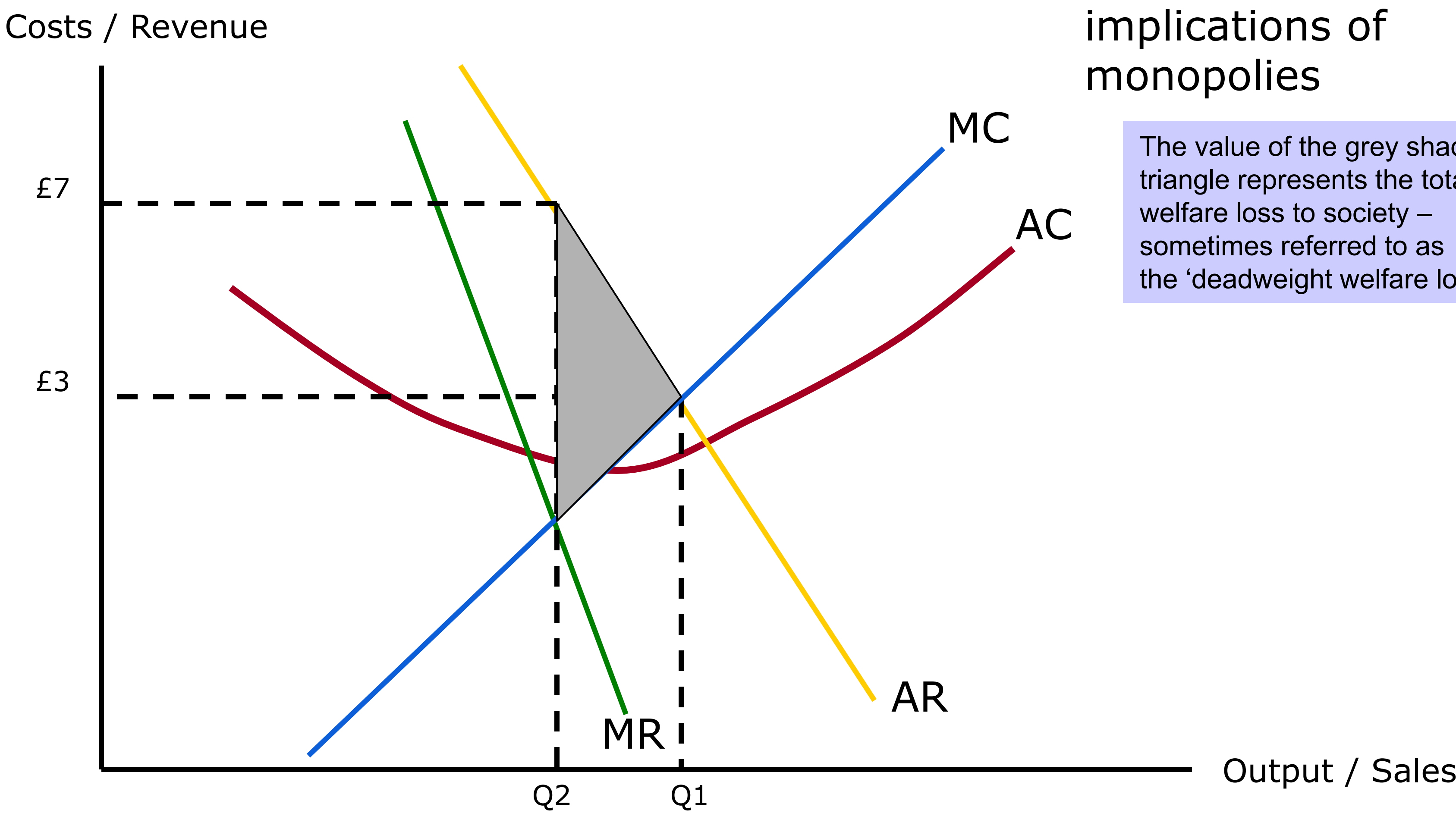
Monopoly

Welfare implications of monopolies



The monopolist will benefit from additional producer surplus equal to the grey shaded rectangle.

Monopoly



Welfare implications of monopolies

The value of the grey shaded triangle represents the total welfare loss to society – sometimes referred to as the ‘deadweight welfare loss’.

Contestable Markets

- Theory developed by William J. Baumol, John Panzar and Robert Willig (1982)
- Helped to fill important gaps in market structure theory
- **Perfectly contestable market** – the pure form – not common in reality but a benchmark to explain firms' behaviours

Contestable Markets

- **Key characteristics:**
  - Firms' behaviour influenced by the threat of new entrants to the industry
  - No barriers to entry or exit
  - No sunk costs
  - Firms may deliberately limit profits made to discourage new entrants – entry limit pricing
  - Firms may attempt to erect artificial barriers to entry – e.g…

Contestable Markets

- Over capacity – provides the opportunity to flood the market and drive down price in the event of a threat of entry
- Aggressive marketing and branding strategies to 'tighten' up the market
- Potential for predatory or destroyer pricing
- Find ways of reducing costs and increasing efficiency to gain competitive advantage

Contestable Markets

- **‘Hit and Run’ tactics** – enter the industry, take the profit and get out quickly (possible because of the freedom of entry and exit)
- **Cream-skimming** – identifying parts of the market that are high in value added and exploiting those markets

Contestable Markets

- Examples of markets exhibiting contestability characteristics:
  - Financial services
  - Airlines – especially flights on domestic routes
  - Computer industry – ISPs, software, web development
  - Energy supplies
  - The postal service?

Market Structures

- Final reminders:
- Models can be used as a comparison – they are not necessarily meant to BE reality!
- When looking at real world examples, focus on the behaviour of the firm in relation to what the model predicts would happen – that gives the basis for analysis and evaluation of the real world situation.
- Regulation – or the threat of regulation may well affect the way a firm behaves.
- Remember that these models are based on certain assumptions – in the real world some of these assumptions may not be valid, this allows us to draw comparisons and contrasts.
- The way that governments deal with firms may be based on a general assumption that more competition is better than less!