OCR A2 Economics Module 3 Revision Notes – Theories of Market Structure and Competitive Behaviour in Markets for Leisure

Short-Run Costs of Production

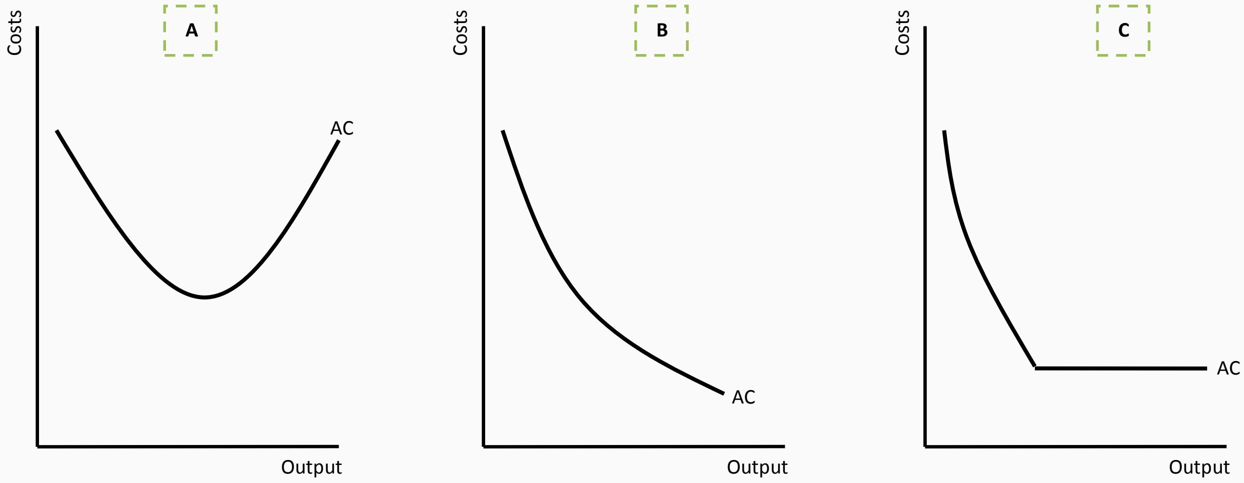
- The 'short-run' is the period of time when at least one factor of production (usually capital) is in fixed supply.
    - E.g. a cinema doesn't have the time to sell its buildings of end a contract in the short-run
- In the short-run, some costs will be fixed or variable
    - Fixed costs are costs that don't change in the short-run with changes in output (e.g. the rent for a building
    - Variable costs are costs that change with changes in output (e.g. the cost of popcorn sold to cinema goers)
- For costs like labour, it can be difficult to decide whether they're fixed or variable
- The deciding factor will be whether the costs change with output in the short run.
    - Overtime and bonus payments will vary with output, but the fixed wage rate paid to permanent staff will not.

Total, Average and Marginal Costs in the Short Run

- Total cost (TC) is the total cost of producing at a given output.
    - It is made up of fixed and variable costs in the short-run
    - As output rises, total cost increases
- Average Cost (AC) (also called unit cost) is total cost divided by output (TC/q)
    - E.g. if a TV company produces 20 hours of TV programs a week, and its total costs are £300,000 a week, AC = £15,000
    - AC can be split into Average Fixed and Average Variable costs (AFC and AVC) in the short-run
        - AFC will decrease with output, as their fixed costs will be spread more thinly.
    - AVC tends to fall at first, and then rises
        - This occurs because initially, whilst firms increase output, resources are employed more efficiently
        - Then, at a certain output level, the fixed supply of at least one factor of production becomes more of a problem, and the combination of resources becomes less efficient.
- Marginal Cost (MC) is the change in total cost resulting from changing output by one unit
    - MC influences AC, as falls in MC reduce AC and rises in MC increase AC.
    - An MC curve will cut both AC and AVC curves at their lowest points.

Long-Run Costs

- The Long-run is the period of time when it is possible to alter all factors of production
    - As the quantity of all resources can be altered, all costs are variable (dependant on output), and hence, will rise with output
- There are a number of possible shapes for a form's long-run AC curve:



- A) shows a firm initially experiencing economies of scale, and then diseconomies of scale
- B) shows a firm experiencing economies of scale for a high range of output
- C) shows a firm reaching the minimum efficient scale of production, and then experiencing constant returns to scale.

Economies and Diseconomies of Scale

- Economies of scale are benefit in the form of lower long-run average costs that result from an increase in the scale of production
- Diseconomies of scale are the disadvantages that occur if the scale of production of the firm becomes too large.

Internal Economies of Scale

- Internal economies of scale are economies of scale that occur within the firm as a result of its growth. Examples include:
    - Purchasing economies of scale
        - Buying in bulk will often get you a discount per unit, e.g. buying tons of popcorn would probably be cheaper than buying 2kg at a time.
    - Selling economies of scale
        - A larger firm can make better use of sales and distribution facilities, e.g. hiring a huge HGV that's twice the size of a lorry doesn't cost twice as much.
    - Technical economies of scale
        - A larger firm would be able to buy more high-tech and efficient equipment
    - Managerial economies of scale
        - As a company gets bigger, it can afford to hire specialised staff, like buying accountants etc.
    - Financial economies of scale
        - Larger firms may find it easier to get bank loans, and would probably charge a lower rate of interest
    - Risk-bearing economies

- As a company gets larger, they can produce a greater range of products. This aids them, as if one product suddenly becomes unpopular, and makes a loss, then the others will compensate for it

External Economies of Scale

- External economies of scale are economies of scale that result from the growth of an industry and benefit firms within the industry
    - E.g. if a country or area has a reputation for producing a good quality product, all the firms in the industry can benefit from this.

Internal Diseconomies of Scale

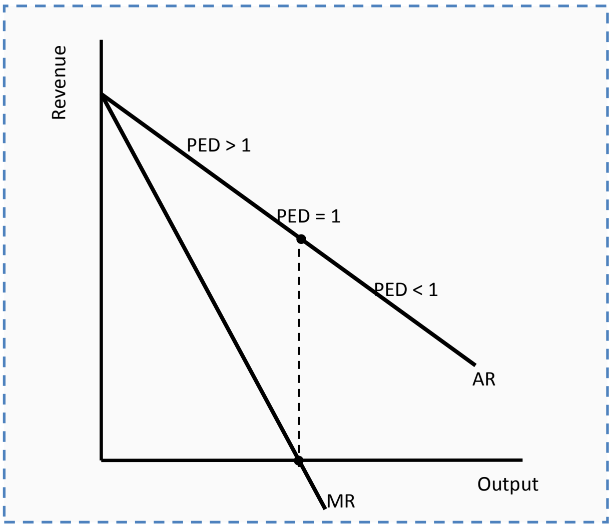
- Internal diseconomies of scale are diseconomies of scale experienced by a firm caused by its growth
    - For example, as a firm gets bigger, it can be hard to manage, as there is more to keep check on, and more levels of decision making, where conflicts may occur, and hence reacting to market situations may take longer.

External Diseconomies of Scale

- External diseconomies of scale are diseconomies of scale resulting from the growth of the industry, affecting firms within the industry.
    - E.g. if the industry for say, transport tourism gets bigger (planes), then there will be more planes flying, and hence negative externalities such as pollution will be more common.
    - External diseconomies of scale would increase the average cost curve (shift upwards)

The Nature of Firms' Revenues

- Whereas TC will rise with output, Total Revenue (TR) may not
- Whether TR rises or falls with output depends on the elasticity of the good
    - E.g. a premiership football club could decreases prices of tickets for a game, and hence sell more tickets, but they wouldn't make as much money if demand is inelastic.
- Marginal Revenue (MR) is the change in TR resulting from the sale of one more unit
- Average Revenue (AR) is the total revenue divided by the output sold.



- When MR is positive, demand is elastic – reductions in price increase TR.
- When TR does not change and MR = 0, there is unit PED
- Demand becomes inelastic when MR is negative
- TR is maximised where MR = 0

Influences on Revenue

- The more market power has, the more any change in its output will influence the price
- Whether this change in price results in a rise in TR depends on the PED.
- AR and TR will increase if demand increases

- A firm that's not perfectly competitive, and hence has some sort of market power (such as a monopoly or oligopoly), could seek to raise its revenue in the long term by driving out a competitor through predatory pricing
  - This would likely cause a decrease in AR in the short-term, but once more market power is gained, they can increase their prices at a greater level than it was previously

- Changes in a consumer's income can affect a leisure firm's revenue
- Things like cinema and theatre were seen as a superior good, with an income elasticity of demand of around 1.75
  - This means that the demand for such products varies greatly with a consumer's income.

- Changes in the price of complementary goods also affect a firm's revenue
  - E.g. transport is a complement to leisure products, so an increase in public transport may affect the revenue for a cinema
- On the other hand, some products are substitutes, such as a new car being a substitute for a foreign holiday.
  - So if the price decreases for one, demand will increase for that one, and hence demand would decrease for the other.

- Other factors may also influence demand, and hence revenue
  - Bad weather in the UK may increase TV viewing, and increase foreign holidays, but may reduce attendance at some sports events.

Market Structures

- The behaviour and performance of firms will depend upon which market structure they are thought to fit into
- The three main market structure are: monopoly, oligopoly and monopolistic competition
- Care has to be taken in defining the market, either in terms of products or geographically.
  - E.g. there is more competition for the leisure industry on the whole than there is for cinemas.
- Economist look at certain key indicators to ascertain what market structure a firm is operating in, there are:
  - Barriers to entry/exit
  - Market concentration ratio
  - Type of profits earned in the long run
  - Behaviour of firms

    - Performance of firms

Barriers to Entry and Exit

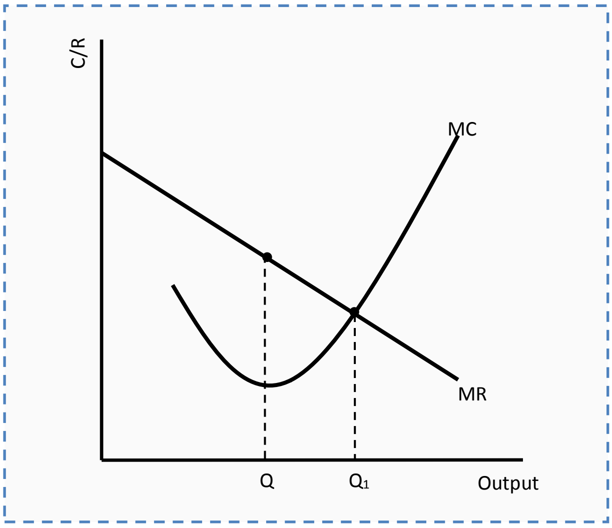
- A barrier to entry is an obstacle to new firms entering a market
    - E.g. in the 1940s the barrier that stopped other firms broadcasting due to the legal monopoly was a legal one – the law stopped them
- Other barriers of entry include:
    - High start-up costs
        - Potential firms may have difficulty raising the finance, and be concerned about the risks involved
    - Brand names
        - Customers may be loyal to a specific brand, and hence reluctant to try new ones
    - Economies of scale
        - Established firms have lower costs of production, and so probably can afford to make a profit at a lower average revenue.
    - Limit pricing
        - Established firms may deliberately set their prices low to discourage new firms from entering the market.
- There are also barriers to exit, the three main ones being:
    - Sunk costs
        - These are costs that cannot be recovered should a firm leave the market
    - Advertising expenditure
        - Should a company have spent a lot on a long-term advertising contract, this money cannot be recovered
    - Contracts
        - A firm may be legally obliged to supply a product for a period of time
- Sometimes, awareness of barriers to exit act as barriers to entry, as a firm will be less likely to enter a market if they're aware of the costs that could be incurred upon leaving it.

Monopoly

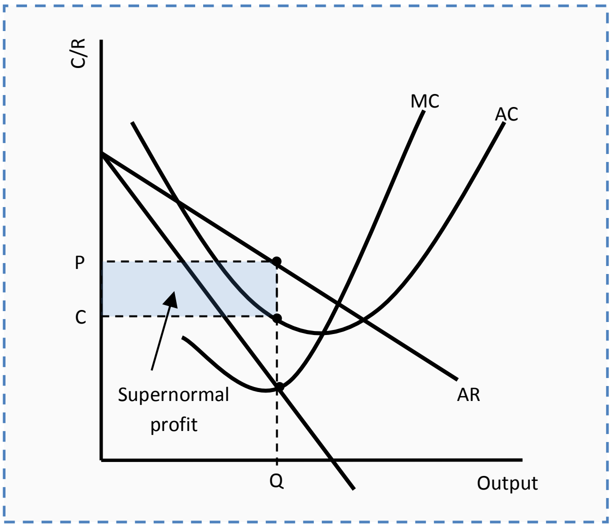
- In a Monopoly market, there are high barriers to entry.
    - In 1932 to 1955, the BBC was a pure monopoly, because the firm *was* the industry.
- In a Monopoly the firm is a price maker

- A private sector monopolist is likely to want to maximise profit
    - Profits are maximised where MR = MC

- In some markets, it can be more efficient to have just one firm, this is called a natural monopoly
- This is called a natural monopoly
    - This probably occurs due to the existence of economies of scale and the avoidance of wasteful duplication (e.g. water supply)



- A firm's profit will continue to rise when the addition to TR > the addition to TC
- When q > MC=MR, MC > MR, and so with each extra unit produced, the firm would be losing money (as more is added to TC than TR)
- When q < MC=MR, you're getting less per unit sold, and so by increasing q, the addition to TR > the addition to TC.



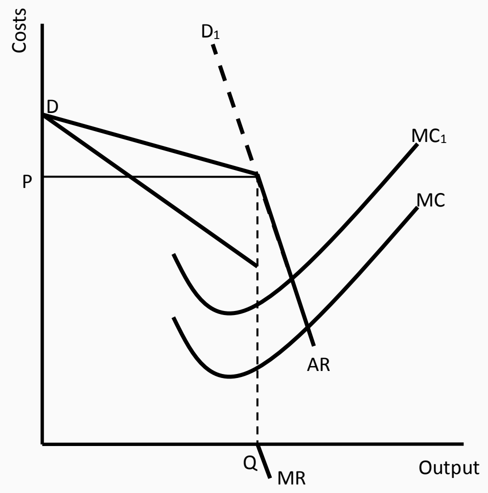
- AR and AC have been added
- Supernormal profit is the profit earned where AR > AC
- Normal profit is the level of profit needed to keep a firm in the market in the long run
  - It is "the price of enterprise"
- The existence of barriers to entry/exit enable a monopolist to protect supernormal profits in the long run

- As well as a pure monopoly, there exists a legal monopoly and a dominant monopoly
  - The former refers to a firm that has a market share of 25% or more
  - The latter refers to a firm with a 40% or more market share.

<u>Oligopoly</u>

- An oligopoly is a market with a high 3-5 firm market concentration ratio
  - Such a market structure is dominated by a few large firms
- There are high barriers to entry and exit, which allow firms to earn supernormal profits in the long run
- The product that is produced is usually differentiated
- Firms are price makers
- There is a high level of non-price competition
  - Firms often seek to attract customers by ways other than charging a lower price
- Firms are interdependent of each other
  - In making decisions on things like advertising campaigns, firms will consider what their rivals will do

- Analysing the behaviour of firms operating under conditions of oligopoly is difficult, as firms may adopt a variety of strategies
- One strategy is to cut the price in order to gain a larger market share
    - This would cause other firms to match the price cut, and so the original firm is likely to cut the prices again, as the original cut would become redundant
    - This constant lowering of prices is called a price war, and is detrimental to all firms
    - As a result, it is not a popular strategy, due to the high risk and its often lack of long-term benefits.



- At the price of P, the firm expects demand to be relatively elastic
    - This is because if a firm were to raise the price, other firms wouldn't follow and hence they'd lose a lot of sales
- Below P, demand is inelastic, as a price war is likely to occur should P fall.

- The kinked demand curve suggests price rigidity is likely to exist, and hence firms are likely to rely on non-price competition
    - This could take the form of large advertising, free gifts, competitions, and brand names.

- The kink in the demand (AR) curve means that the MR curve has a discontinuity at an output of Q
- This is because one demand curve takes over from another, and so MR changes
- As a result, a change in MC doesn't alter the profit maximising output.

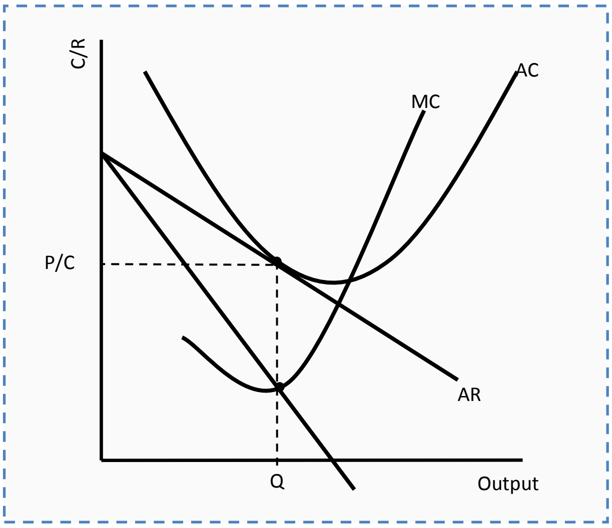
- Firms may seek to reduce the risk of a price war by colluding with rivals, forming a cartel
    - In such situations, the firms produce separately but sell at one agreed price.
        - They are, in effect, acting as a monopoly
    - Cartels are illegal in most countries, including the UK, but this doesn't stop all firms acting in this way.
- In practise, as members of a cartel have an incentive to cheat, formal collusion tends to break down over time.
- Tacit collusion may occur, where firms follow the price strategy of a leading firm

- Game Theory plays an important part in oligopolists's
    - This is where a firm will strongly consider the reactions of other firms when making a decision, and base their decisions off of this hypothetical action

Monopolistic Competition

- This market structure has a high degree of competition between firms
  - This produces a product that is similar but slightly different from that of its rivals (homogeneous product)
- It is characterised by a large number of small firms
- Low barriers to entry and exit
- Non-price competition
- Each firm faces a downward sloping demand curve, and is a price taker.

- The lack of barriers to entry and exit means that normal profit is earned in the long run
- In the short run, if market demand increases, incumbent firms will earn supernormal profit
  - As a result, firms outside the market will be attracted by these high profits, and enter the market
  - Subsequently, their entry will cause market the supply curve to shift to the right, driving down price until normal profit is earned again
- A monopolistically competitive firm will seek to increase demand by increasing customer loyalty, usually in the firm of making their products as distinctive as possible
  - This could be through things like advertising, after-sales service, better location of outlets or improved quality.



Resource Allocation and Efficiency in Different Market Structures

- There is some question as to the relationship between the level of competition and the efficient allocation of resources
- Usually, a monopoly has been seen as inefficient
  - This is because output is below, and price is above the allocatively efficient levels (MC=AR)
  - The firm is also not productively efficient, as AC is not minimised.
  - A monopolist may also not provide a product of the quality that a consumer desires

    - Also, dynamic efficiency may not be reached, as lack of competition would mean that the firm doesn't need to spend much on research and development, and innovate.
- Where economies of scale are significant, prices may be lower in oligopolies and monopolies
    - Firms may also likely to innovate, as due to the earning of supernormal profit in the long-run, they will have the funds to invest in development.
        - This strategy could also help 'raise' barriers to entry and exit, this protecting the supernormal profit they're earning.
    - The existence of high barrier to entry, alongside the theory of creative destruction, suggests that firms outside the market will develop superior products and methods, and hence, overcoming the barriers.
- A lack of competition could be outweighed by X-inefficiency
    - This is the difference between actual costs and attainable costs
    - It is represented by the 'optimum' AC curve being lower than the actual AC curve.
    - This could be due to the firm over-employing, or managers taking large bonuses

- A firm producing under monopolistic competition also fails to achieve allocative efficiency.
    - Output is restricted in order to maximise profit, and so the product is under-produced
    - It is also productively inefficient, and is operating with excess capacity.
- Monopolistic competition is criticised on the grounds that there are too many firms producing at too low of an output at relatively high prices, and hence wasting resources.
    - A greater output could be produced at a lower cost by fewer firms.
- However, it is argued that consumers gain, as there is greater choice and product differentiation
- Also, in a bid to differentiate their products and gain a competitive edge, firms may innovate, which could mean a reduction in costs, or an increase in the quality of their products.

A Contestable Market

- Instead of classifying markets according to the level of actual competition, they can also be classified according to the level of potential competition
    - A contestable market is a market in which there are no barriers to entry and exit and the costs facing incumbent and new firms are equal
- The theory of contestable market says that what determines how firms have and how efficient they are is based on the potential amount of competition
    - A market may have a high concentration, but may still face competitive pressure
        - This could result in things like decreasing supernormal profit in the long-run.
- Hit-and-run competition may occur in a contestable market
    - If a firm sees that supernormal profits are being made by a firm, then they will easily enter the market (due to no barriers of entry), reap the benefits of the supernormal profits, and then leave easily (due to no barriers of exit)
    - This means that markets are very responsive to changes in consumer demand.

- A contestable market should therefore benefit consumers by being both productively and allocatively efficient
    - A firm will seek to keep costs low, and not raise prices above MC, because they're worried about attracting new firms to the industry.
- Obviously, in practise, a market is unlikely to be perfectly contestable, and the degree of contestability can vary over time, with a market becoming more or less contestable.

The Importance of Barriers to Entry and Exit

- Barriers to entry and exit determine the level of competition and contestability in a market
    - The lower the barriers, the higher the contestability and level of competition.
    - If it is easy for a firm to enter the market, supply will adjust quickly in line with changes in consumer demand (elasticity)
    - There will therefore be pressure on incumbent firms to keep their costs low and make normal profit in the long run.

Behaviour of Firms in Leisure Markets

- The behaviour of firms in leisure markets is influenced by both their structure and contestability
- For cinema firms:
    - Relatively oligopolistic
    - There are barriers to entry in the form of the relationship that a cinema has with the distributors, making it difficult for entrants to get 'first run' films. There may also be brand loyalty.
    - There is non-price competition, in the form of cinemas competing for the best sites, offering facilities such as car-parking, etc.
    - High profits in the long-run
- For tour operators:
    - Relatively oligopolistic – merges have increased the concentration ration, and hence the power of the largest companies
    - However, the market may still show some aspects of monopolistic competition
        - It is not hard to set up a travel agency
        - This is evident by a number of high street travel agents which work below full capacity, offer slightly differentiated products, and engage in small-scale advertising
- For TV broadcasting:
    - Started off as a monopoly, and then moved to oligopoly, due to the other firms partaking in non-price competition
    - Due to the increase of technology, the barriers to entry are lower, and hence the number of channels has increased, moving the market towards monopolistic competition
        - As a result of the increased competition, companies are bidding fiercely for the rights to broadcast major events.
- For TV production:

  - Is become more and more competitive, due to legislation requiring broadcasters to have more of their programmes produced by outside production companies, making the market also more contestable.
  - However, in recent years, larger production companies have been buying up smaller ones, making the market less competitive
  - Legislation such as the 2003 Communications Act has also helped, as this gives the producers, and not the broadcasters, the rights to what they make.
- For spectator sports:
  - It can be hard to assess, as it depends how you define your market
    - E.g. Manchester United can be regarded as a monopoly, as its product may be regarded as unique, but it could be an oligopolist, as it's one of the 'big four' that dominate the premier league.
  - There are very high barriers to entry for the premiership
    - A manager would need a big stadium, top-class players, good manager and strong training staff – all of which are expensive
    - There would also be a time delay, as it would take several seasons to get up to the premier league.
  - Other barriers to entry include brand loyalty, and planning permission to build a stadium.

Regulation

- Regulation involves rules administered by a government agency or another body.
- These rules are designed to influence barriers to entry and exit, prices charged, product standards and how the product is sold.
  - These regulations, especially in the case where they're administered by the government, are backed up by law
  - They are designed to correct market failure from the abuse of market failure, imperfect information, under-consumption of merit goods, and other causes.
- For Cinema:
  - The British board of film classification is seeking to overcome information failure by classifying movies with age ratings (18, 15, PG, U, etc.)
  - In the past, however, it used to censor films, treating the censored parts as demerit goods.
- For TV Broadcasting:
  - Ofcom furthers the interests of consumers by promoting competition and protecting them from harmful or offensive material (demerit goods)
- For Tourism:
  - The trade organisation ABTA (Association of British Travel Agents) aims to maximise the consumer's satisfaction by issuing a range of guidelines covering advertising and the sale of services
  - If a firm doesn't adhere to these guidelines, then they can be fined or expelled from ABTA
  - A consumer can therefore be confident in a firm that is a member of ABTA
- For spectator sports:

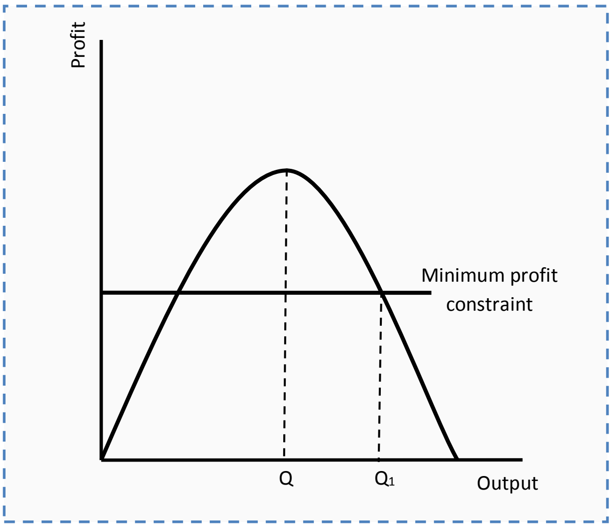
  - UK athletics oversees drugs-testing of athletes, to ensure fair competition, and implementing the rules of the sport
  - Cricked is governed by The England and Wales Cricket Board (ECB), which is responsible for the direction of cricket in the country
  - The FA is responsible for upholding and administering the rules of football, and has the power to change the rules.
- Some sports are governed by international bodies, such as FIFA being responsible for the organisation of international football tournaments
- The Royal and Ancient Gold Club of Saint Andrews is also tasked with developing and promoting the game of golf to other nations
- The Office of Fair Trading, which has a jurisdiction over the leisure industry, enforces consumer protection and competition law, and seeks to maximise competition
  - If the OFT is concerned by any behaviour, or anti-competitive practise, it can ask the competition commission to carry out an investigation, which could result in large fines.

The Objectives of Firms

- The objectives of a firm will be influenced by a number of factors, including the type of organisation it is, and the priorities of the managers/owners
  - E.g. the BBC, being in the public sector, wants to provide the best service to the public
- To contrast it is often assumed that the main objective of private-sector firms are to profit maximise.
- This, however, is not always the case
  - In practise, it can be difficult to calculate MC and MR, and so firms use a more straightforward approach to pricing (such as just adding 10% on to costs)
  - The other main criticism is that for PLCs, the managers and the shareholders will want different things.

- One objective is therefore sales revenue maximisation, which is the objective of achieving as high a TR as possible
  - This is because managers' salaries are linked to the growth of sales, instead of profit performance.
  - Also, high sales can attract external finance, and may result in greater economies of scale
- To maximise sales revenue, a firm would continue to produce more as long as extra output would increase revenue (up to the point where MR = 0)
  - In practise, this objective is subject to a minimum profit constraint, based on the level needed to keep shareholders happy
- Growth is another objective that's linked to sales revenue maximisation
  - This is because as a company gets bigger (due to producing more, and having more resources to deal with), a manager is likely to earn more, have higher status and increase career prospects

- A manager may also feel more secure in his job if the company is growing, as it's less prone to buyouts
- Growth objective is also subject to a minimum profit constraint



- The profit maximising output is Q, but the growth maximisation output would be Q_1

- With imperfect information and conflicting objectives, it would be more realistic to aim for satisfactory profit instead of maximum profit.
    - This is called profit satisficing, and can allow a firm to pursue other objectives.
- Different members of firms will each want different things; accountants will want to reduce costs, marketers may want to run advertising campaigns, workers may want better machinery, etc.
    - Such objectives may conflict with profit maximisation in the short term, but sacrificing this may lead to a satisfactory performance in other areas.
- When a firm is new to a market, such as a football club joining a higher league, its main objective could be survival
    - Such a firm may face difficulties due to rising costs, or a decrease in demand
- While some objectives may conflict with profit maximisation in the short-run, in the long-run it is likely that profit maximisation will be the main objectives, and short-term goals like growth aid this long-term goal.
- Another objective for a firm is utility maximisation
    - This is most commonly associated with public sector firms, but even private sector firms, such as owners of football club, are just in it for the pleasure.
    - This applies to a lot of football clubs, especially ones in lower divisions, where high profits are unlikely
    - With things like golf clubs, however, they're more profit-orientated, but there is still some evidence of utility maximisation, such as member-waiting-lists
        - A higher price would increase profit for a golf club, but they don't do this.