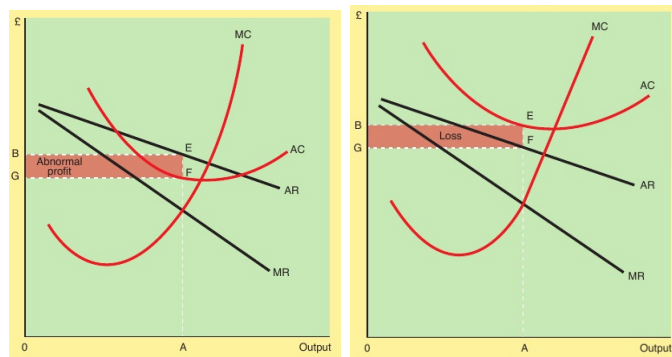


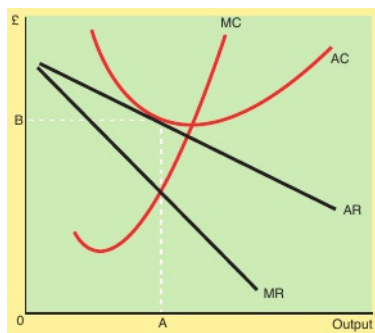
# ECONOMICS

## 1. MONOPOLISTIC COMPETITION

- **Assumptions** for the monopolistic competition Similar assumptions to *perfect competition*
  - *large number* of buyers and sellers (each one is relatively small and acts independently)
  - *no barriers* to entry or exit
  - firms are short run *profit maximisers*
  - firms produce *differentiated goods* (or *non-homogeneous goods*)
- Examples: hotel trade, coach travel, or furniture making
- *Product differentiation* implies that firms have a certain degree of *market power*
  - (unlike in perfect competition) firms can raise prices without losing all its customers to firms which have kept prices constant
  - firms are not *price takers*
  - there will be firms in the market that produce relatively close *substitutes*  $\Rightarrow$  market power will be relatively weak
- Demand will be relatively *elastic*: small changes in price will result in large changes in quantity
- Demand curve facing the firm is *downward sloping* but *elastic*
- *Shapes* of the different curves will be explained in Chapter 50!
- Figures: *Short-run equilibrium* for a monopolistically competitive firm earning *abnormal profit* (left) and *making a loss* (right)



- Figure: *Long-run equilibrium* for a monopolistically competitive firm



## 2. OLIGOPOLY

- Most markets are *imperfectly competitive*:
  - few are *monopolistically competitive*
  - majority *oligopolies*
- There are several *theories of oligopoly*
- *Market structure* of an oligopoly
  - *Few* firms that control the majority of the supplied goods
  - Firms will be *interdependent*: actions of one firm affects behaviour of another one
  - High *barriers of entry*
  - Products may or may not be *differentiated*
- *Collusion*: agreements between oligopolists
  - firms do agreements to *restrict competition* and *maximize their profit*
  - see *Table 1*: Collusion, by restricting output, leads to *higher prices* and *higher profits*
  - *Cartel*: wide-ranging agreement amongst several firms in a market
    - \* firms *limit their output* in order to raise prices
    - \* *regular meetings* to discuss conditions and negotiate quotas
    - \* Example: OPEC (Organization of the Petroleum Exporting Countries) attempts to *manipulate* the world price of oil by *restricting supply*
    - \* *Conditions* for a cartel to function:
      - *agreement* has to be reached (difficult when there are a large number of firms involved)
      - *cheating* has to be prevented (each member has incentive to lower price wrt to the agreed one)
      - *potential competition* must be restricted (cartel firms could increase barriers to entry)
  - collusion is *illegal* in most countries (*covert collusion* vs. *overt collusion*)
  - *tacit* or *informed collusion*: no formal agreement, firms monitor each other's behaviour closely (*unwritten rules*)
    - \* *price leadership* (= form of tacit collusion): market composed of a *price leader* (dominant firm) and *price followers* (small firms)
    - \* Examples: unwritten rule that says firms do not try to *take away existing customers* from other firms; or that advertising expenditure should be kept low

- *Game theory* allows to understand why collusion benefits firms in the market
  - Game theory considers what would be the outcomes if two or more players were interdependent and made certain choices
  - *Prisoners dilemma*: famous example in Game theory

		PRISONER 2	
		Confess	Lie
PRISONER 1	Confess	-8, -8	0, -10
	Lie	-10, 0	-1, -1

- In oligopolistic market there are a *few interdependent dominant firms*

**Table 2 A payoff matrix which shows that two firms have an incentive to collude**

		Firm B	
		Raise price	Leave price unchanged
Firm A	Raise price	£100m/£70m	£30m/£40m
	Leave price unchanged	£40m/£20m	£50m/£30m

- Equilibrium in Table 2 would be for both to *leave price unchanged* (stable equilibrium)
- However, both firms would be better off by *raising prices* ⇒ firms have *incentive to collude*
- Table 3 shows a case with *instability*: there is no strategy that would make both firms better off

**Table 3 A payoff matrix which shows an unstable market**

		Firm B	
		Raise price	Leave price unchanged
Firm A	Raise price	£40m/£15m	£30m/£25m
	Leave price unchanged	£10m/£35m	£50m/£10m

- Firms can engage in *price competition*:
  - *price wars*:
    - \* markets where *non-price competition* is weak (e.g., goods that are weakly branded)
    - \* advertising may be insufficient to persuade consumers
    - \* markets where collusion is difficult
    - \* price wars often force firms to make losses and finally leave the market
  - *predatory pricing*:
    - \* established firm is threatened by a new entrant
    - \* established firm *sets the price at lower level* in order to put pressure on the new entrant and drive him out of the market
  - *limit pricing*:
    - \* firms set low prices in order to deter new entrants from coming into the market
- Non-price competition: in imperfect equilibrium *price* is the the most important factor in the competitive process (*marketing mix* with the '4 Ps' and *brands*)