

SYLLABUS REFERENCE 2.2 ¹: Theory of the firm - **Monopoly**²

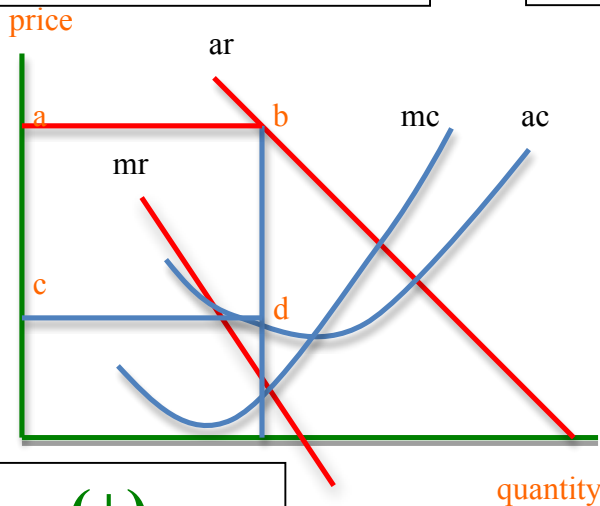
1. Assumptions of the Model:

- 1 Firm
- No product differentiation necessary
- Barriers to entry to the industry
 1. Legal – G (see ‘natural monopoly’.
 2. Cost – setup costs high (airline)
 3. Resource – de Beer controls diamond market

The model suggests that:

2. Inefficient – not at lowest point of AC
3. Higher prices – controls P or Q (usually Q)
4. Lower output for the Industry than in PC
5. Resource Allocation is worse than PC
6. Regulator must always monitor markets

Long Run and Short run Equilibrium price and quantity. Note Abnormal profits exist as shown by abcd.



Note:

Look for the following points:

- S/N where $AR > AC$
- Max profit or profit maximising output level occurs at

MC = MR

but the monopolist receives a price of P_m where s/n profits exist (abcd).

- Efficiency not at lowest point of AC but often the monopolist will not produce at the lowest point of the AC curve. Diagram A shows an inefficient monopolist.
- Note however the M can be efficient at lowest point of AC if economies of scale dominate. See Y

Monopoly : (+)

1. Economies of scale more likely than PC
2. S/N profits may be reinvested in R+D
3. No overproduction likely as in PC and less possibility of overproduction – negative externalities
4. Government regulation can improve consumer surplus as in legal monopoly government often controls price increases. See OFGEM in UK <https://www.ofgem.gov.uk/energy-price-caps/consumers>
5. Monopolist can afford R + D to improve quality of products + innovation etc

~~$mc = ac$~~
 ~~$mc = ar$~~
 $mc = mr$
 $ar > ac$

Monopoly: (-)

1. S/N profits in the long run
2. Poor allocation. Advertising wasteful.
3. Productively inefficient – not likely to be at lowest point of AC
4. Compared to PC price is higher and output lower
5. 2 opposite (s/n profit) may well be inaccurate
6. Price discrimination possible – see webnote 215 on [price discrimination](#). Monopolist will try to erode consumer surplus

3 KEY Points:

1. S/N exists where $AR > AC$
2. Max profit at $MC = MR$
3. Efficiency NOT at lowest point of AC (only if economies of scale dominate)
Note that if economies of scale dominate then monopoly can be ‘good’

**Monopoly:
analysis +
evaluation**

¹ TKB/SL/HL

² DIAGRAMS NOT REQUIRED FOR SL / SEE ALSO CONSUMER SURPLUS IN SECTION 2.3