G. 2 Firms: Comparison of Perfect and Monopoly
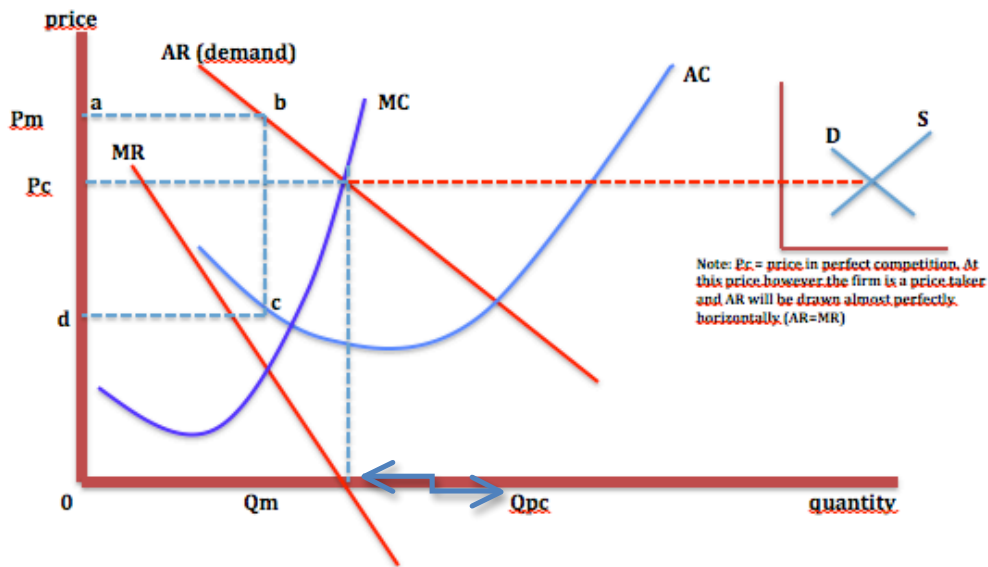
Remember the maximum profit finder is where:
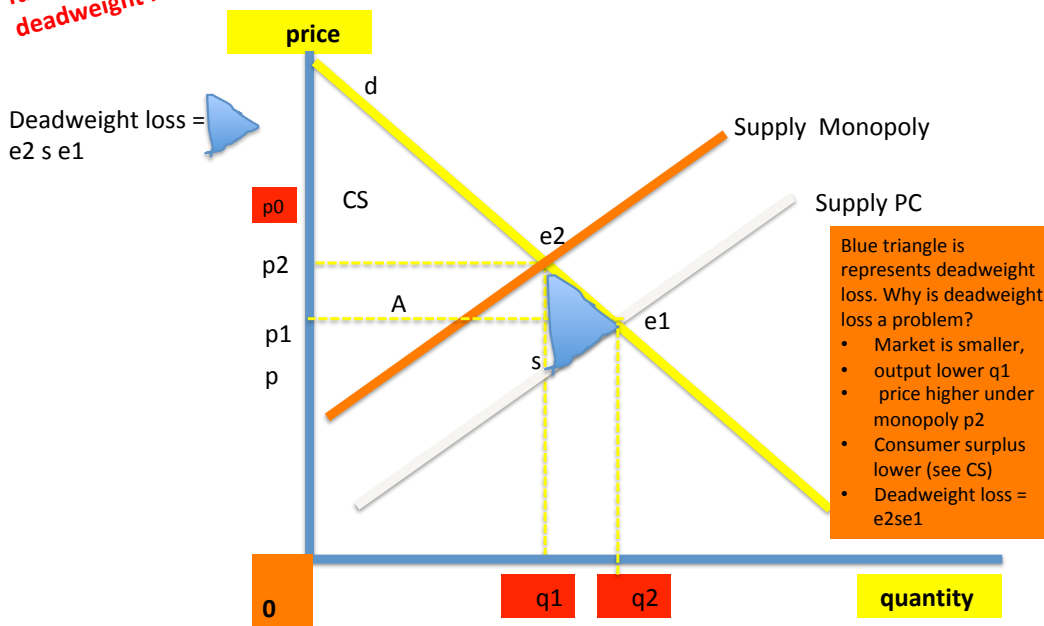
MR=MC

price

AR (demand)

Pm   a   b   MC

MR

Pc

d   c

0   Qm   Qpc   quantity

AC

D   S

Note: Pc = price in perfect competition. At this price however the firm is a price taker and AR will be drawn almost perfectly horizontally (AR=MR)

1. Consider using a Deadweight Loss Analysis when comparing monopoly with perfect competition
2. PC produces at Qpc but monopolist produces at Qm
3. Deadweight loss occurs here as the market is smaller with less choice, less ouput and higher prices under monopoly

Review 'Deadweight loss' in webnote **130**

See Webnote 130 for further details on deadweight loss

Monopoly, Perfect Competition (PC) and Deadweight loss

price

Deadweight loss = e2 s e1

d

Supply Monopoly

p0   CS   Supply PC

e2

p2

A

p1   e1

p   s

Blue triangle is represents deadweight loss. Why is deadweight loss a problem?
• Market is smaller,
• output lower q1
• price higher under monopoly p2
• Consumer surplus lower (see CS)
• Deadweight loss = e2se1

0   q1   q2   quantity

1.3 Big Ideas   webnote 130   1

Evaluation:

Perfect Competition (Firm)

1. **D = P = AR=MR=MC and AR = AC** (at lowest point)
2. perfect productive / technical efficiency
3. PC approaches the concept of Pareto optimality which identifies a level of production in an economy whereby no person can be made better off without another person being worse off. Pareto efficiency must include:
   - ⊙ Productive efficiency -AC
   - ⊙ Allocative efficiency- PPF
   - ⊙ Distributional efficiency, whereby consumers do not wish to spend disposable income in any other way

Monopoly

1. **AR >AC, MR=MC, AC** not likely to be at lowest point of AC so it is "productively inefficient" **MC = AC**
2. poor productive /technical efficiency
3. if the monopoly firm enjoys economies of scale then the AC operating point (according to MC=MR) could be lower than for the industry in PC and monopoly could be lower. However price is still likely to be greater than MC and **AR >AC = S/N** profits

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Resource Allocation: Economic efficiency and productive (technical) efficiency.

1. What is the optimal level of resource allocation? Pareto Efficiency suggests Firms in PC are productively efficient.
2. Under PC the consumer is sovereign and influences WHAT ? is produced.
3. The monopoly firm has on the other hand producer sovereignty with a large degree of price power.
4. Resources (FoP) follow profits and therefore if resources can be allocated efficiently then competition will enter the industry and competition follows. This is assuming of course that the factors of production can be allocated from one industry to another. In reality factor immobility may play a significant factor in reducing the level of competition for firms at least in the short run but also in some cases in the long run e.g. restaurants and small monopolistic firms that enjoy a special location and competing firms cannot affect their price power in the long run by offering a competitive alternative nearby.
   - ⊙ See webnote 115
   - ⊙ See syllabus section 2.3 'productive and economic efficiency'
5. To show allocative efficiency use the PPF or MSB = MSC (see syllabus section 1.3 and 'overproduction'.
6. To show productive efficiency use the ATC