

Monopoly vs Perfect Competition

In perfect competition, there are infinitely many buyers and sellers, selling homogeneous products. + Free entries and exits.
↳ earn normal π in LR.

As a result, **perfectly competitive firms are price takers**: they take price as given, and face a perfectly elastic demand curve.

In contrast, a **monopolist is a price maker**. It sets the market price to maximize its profit.

However, we often state the monopolist's profit maximization problem in terms of setting quantity rather than price.

This is because $TR(Q)$ and $TC(Q)$ are functions of Quantity.



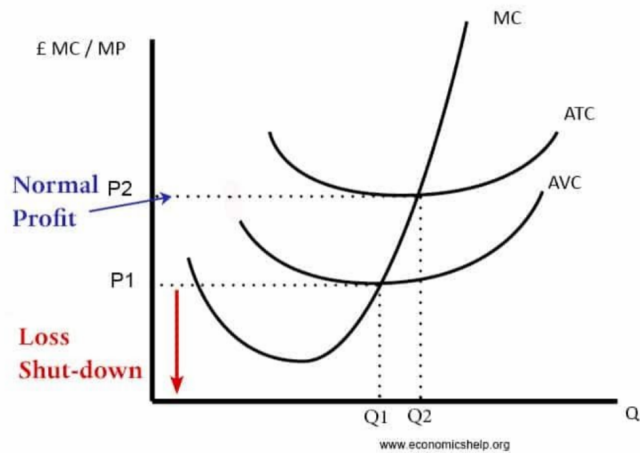
Normal profit

Normal profit is a situation where a firm makes sufficient revenue to cover its the total costs and remain competitive in an industry.

When a firm makes normal profit we say the economic profit is zero.

Formula of normal profits

Normal profit = total revenue – total costs



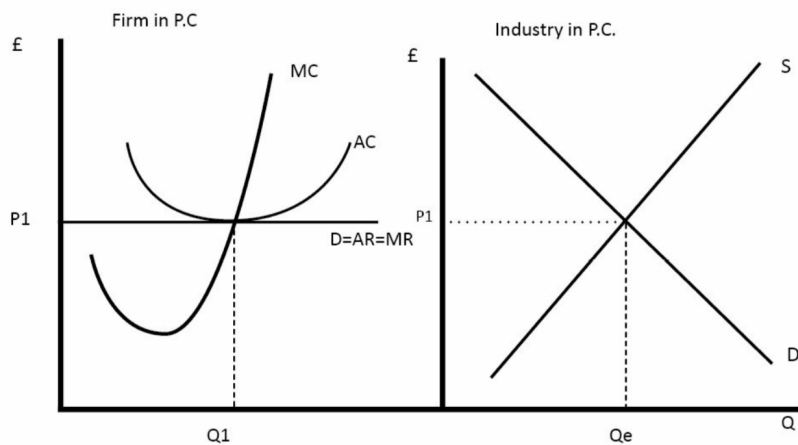
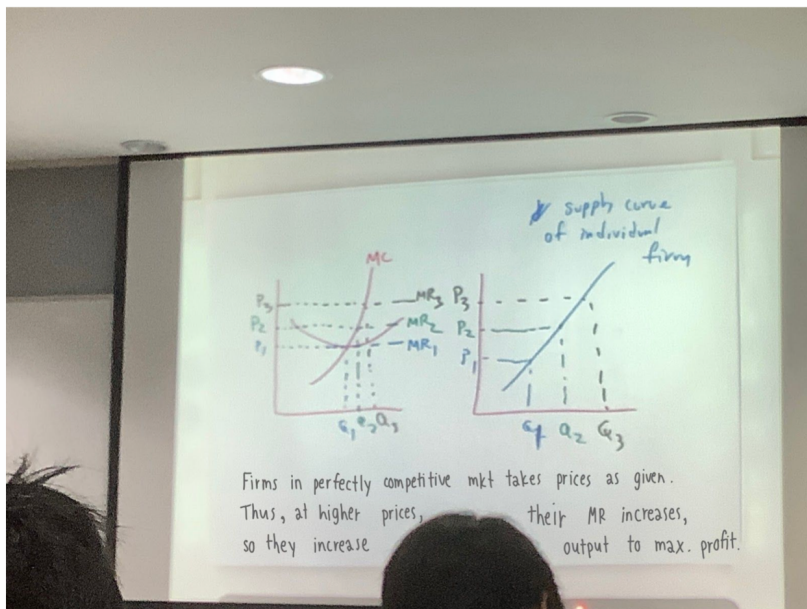
Normal profit occurs at an output where average revenue (AR) = average total costs (ATC)

Normal profit in perfect competition in the long-run

For supply curve



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$$TR = TC \rightarrow \pi = 0$$

$$MR = MC \rightarrow \pi \text{ max}$$

$$MR > MC$$

$$5 > 3 \rightarrow \text{additional profit} = 2$$

$$MR = MC \rightarrow \text{additional profit} = 0$$

* profit is already max * You cannot make any more extra profit

In perfect competition, there is freedom of entry and exit. If the industry was making supernormal profit, which is Economic profit is any profit above the level of normal profit. It is also referred to as supernormal profit.

then new firms would enter the market until normal profits were made.
This is why normal profits will be made in the long run. At Q_1 which $AR=ATC$.

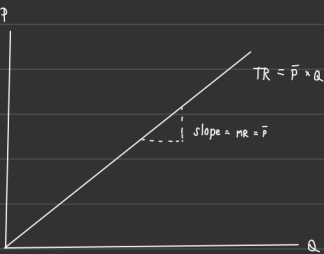
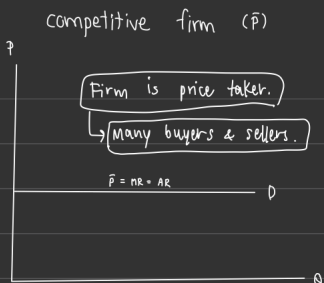
Moreover, the firms can leave the industry in the long run. The long-run equilibrium then refers to the situation when free and full adjustment in the capital equipment as well as in the number of firms has been allowed to take place.

If the price is greater than the average cost, the firms will earn more than normal profits. These supernormal profits will attract other firms into the industry.

the following two conditions must be fulfilled.

1. Price – Marginal Cost

2. Price = Average Cost



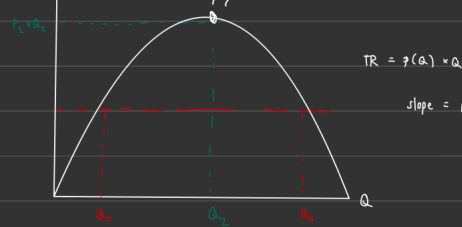
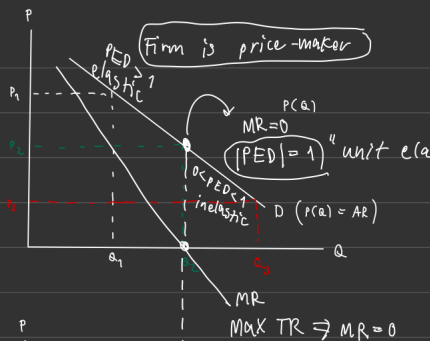
- Competitive requires
- identical product *
 - Many Buyer & Seller *
 - Perfect Knowledge
 - No barriers to entry

$$TR = \bar{P} \times Q$$

$$AR = \bar{P}$$

$$MR = \frac{dTR}{dQ} = \bar{P}$$

Non-competitive firm



$TR \uparrow$ as $P \downarrow$: elastic
 $TR \downarrow$ as $P \downarrow$: inelastic

price takers

the price is determined by the equilibrium in the market!

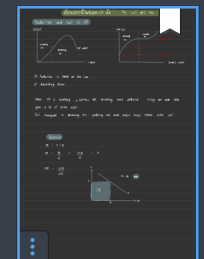
downward-sloping DC shows trade-off between P & Q : to sell more, firm has to lower P .

$$TR = P(Q) \times Q$$

$$MR = \frac{dTR}{dQ} = P + Q \frac{dP(Q)}{dQ}$$

Topic 8 Part 1

Monopoly (Chapter 11)



Monopoly

A Monopoly Market consists of a single firm that has many buyers.

The monopolist's profit maximization problem:

$$\text{Max } \pi(Q) = TR(Q) - TC(Q)$$

where: $TR(Q)$ = total revenue
 $TC(Q)$ = total cost

The monopolist's profit maximization condition:

$$MR(Q) = MC(Q) \quad \text{OR} \quad MR(Q) = MC(Q)$$

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However, we often state the monopolist's profit maximization condition in terms of quantity: $MR(Q) = MC(Q)$ are functions of Quantity.