Market Structure and Price determination

Market

- Market is a system where in buyers and sellers bargain for the price of a product, settle the price and transact their business.

- Personal contact between buyer & seller is not necessary.

Market Structure

Market structure – identifies how a market is made up in terms of:

- The number of firms in the industry
- The nature of the product produced
- The degree of monopoly power each firm has
- The degree to which the firm can influence price
- Profit levels
- Firms' behaviour – pricing strategies, non-price competition, output levels
- The extent of barriers to entry
- The impact on efficiency

Types of Market structure

Market structure	Examples	Number of producers	Type of product	Power of firm over price	Barriers to entry	Non-price competition
Perfect competition	Parts of agriculture are reasonably close	Many	Standardized	None	Low	None
Monopolistic competition	Retail trade	Many	Differentiated	Some	Low	Advertising and product differentiation
Oligopoly	Computers, oil, steel	Few	Standardized or differentiated	Some	High	Advertising and product differentiation
Monopoly	Public utilities	One	Unique product	Consider-able	Very high	Advertising

Degree of Competition

Cont...

Less competitive (greater degree of imperfection)

- Under Perfect Competition degree of competition is close to one, as long as firm compete against each other.
- Under Monopolistic Competition, degree of competition is less than 1, as there is product differentiation.
- Under Oligopoly, degree of competition is quite low, as few sellers are there.
- Under Monopoly degree of competition is close to zero.

Perfect Competition

- Perfect Competition is a market structure where there are many firms selling identical products with no firm large enough relative to the entire market to be able to influence market price.

Examples of perfect competition

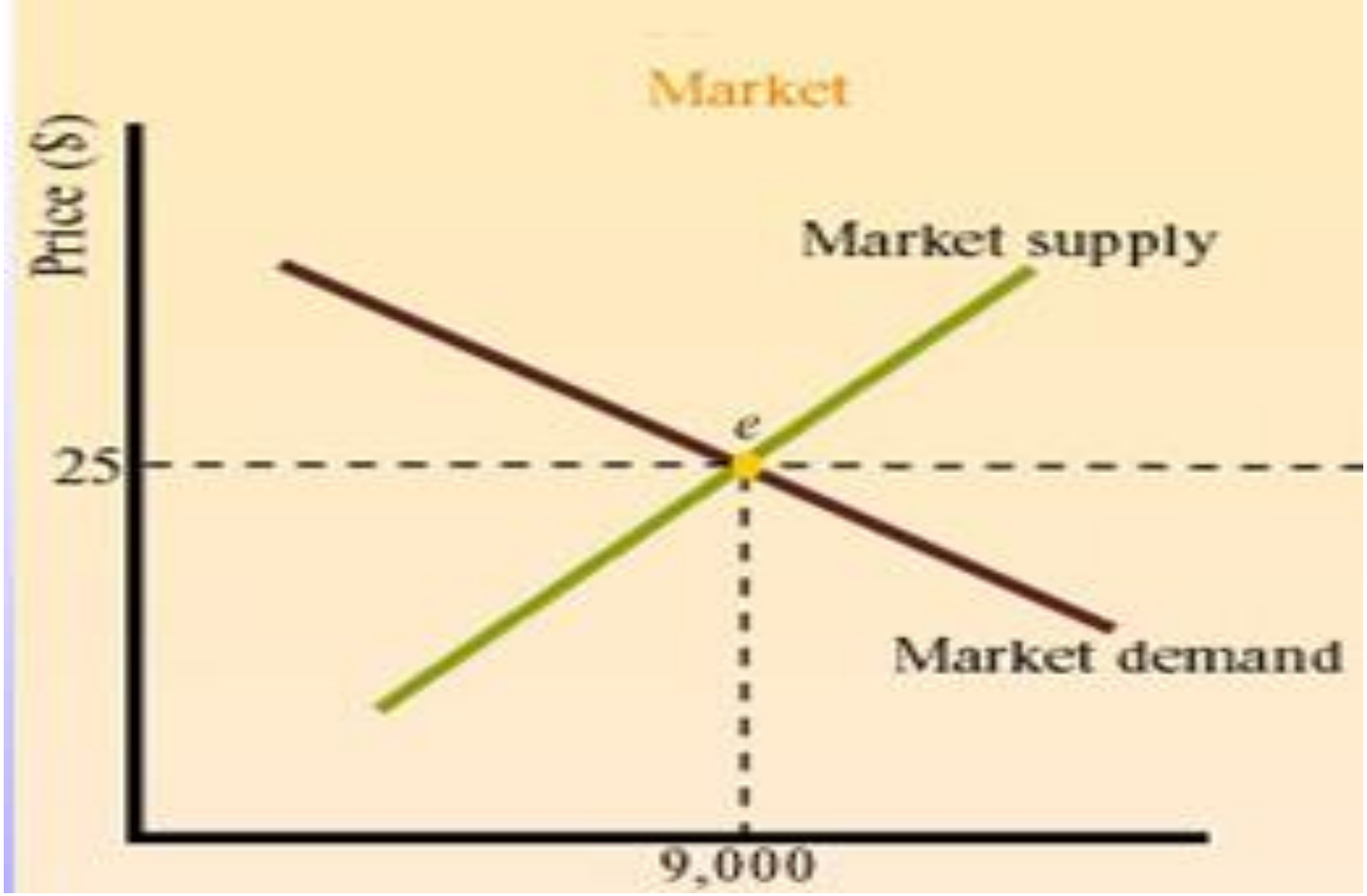
- The expulsive growth of the Internet promises a new age of perfectly competitive markets.
- With perfect information about prices and products at their fingertips, consumers can quickly and easily find the best deals. In this brave new world, retailers' profit margins will be competed away, as they are all forced to price at cost.
- Financial markets – stock exchange, currency markets, bond markets.

Perfect Competition

Characteristics/Features:

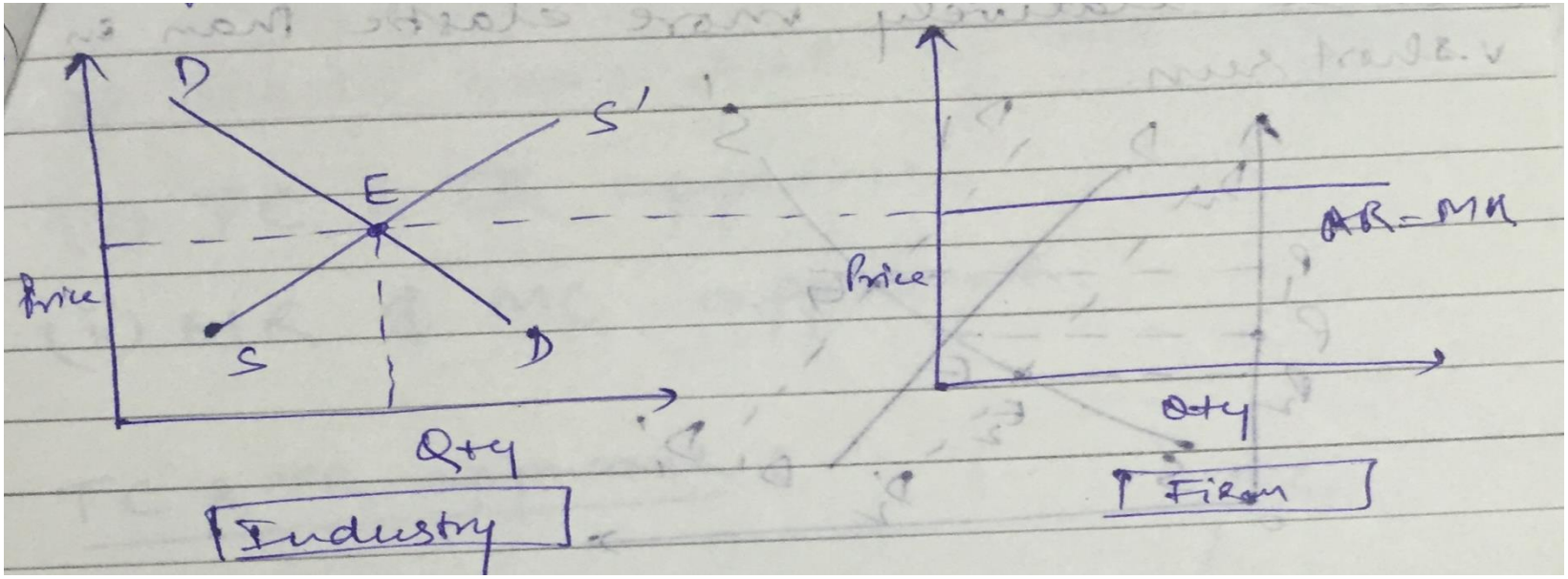
- Large number of firms
- Products are homogenous (identical) – consumer has no reason to express a preference for any firm
- Freedom of entry into and exit from the market
- Firms are price takers not maker
- Each producer supplies a very small proportion of total industry output
- Consumers and producers have perfect knowledge about the market

Equilibrium point of Market

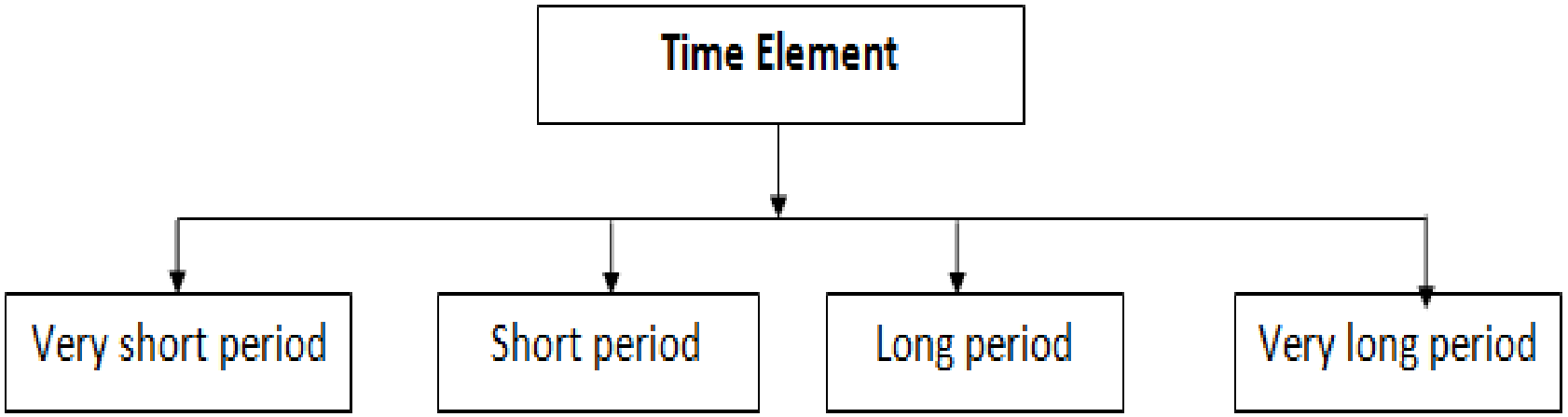


Equilibrium point of Industry

Price of the good is determined by the industry and each firm has to sell the products at this very price (Firm is a price taker not maker).

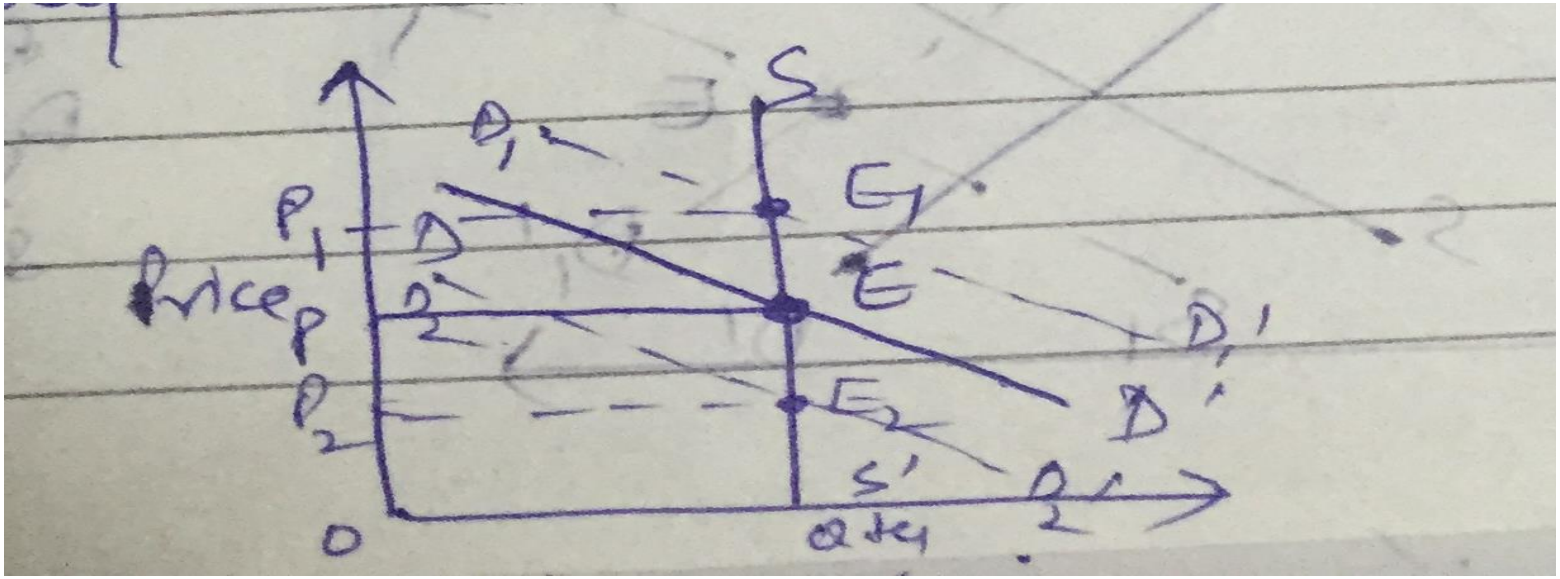


Importance of Time element in Price Determination



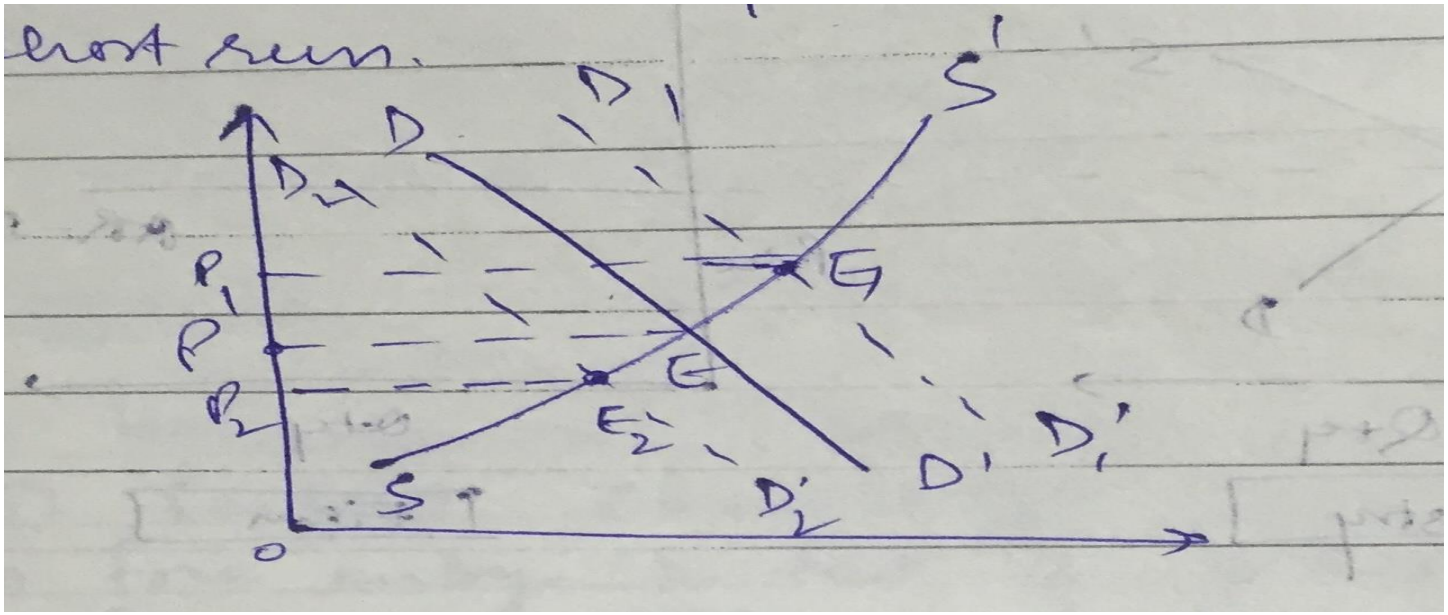
Very Short Period (Market Price)

For very short time period supply remain constant.



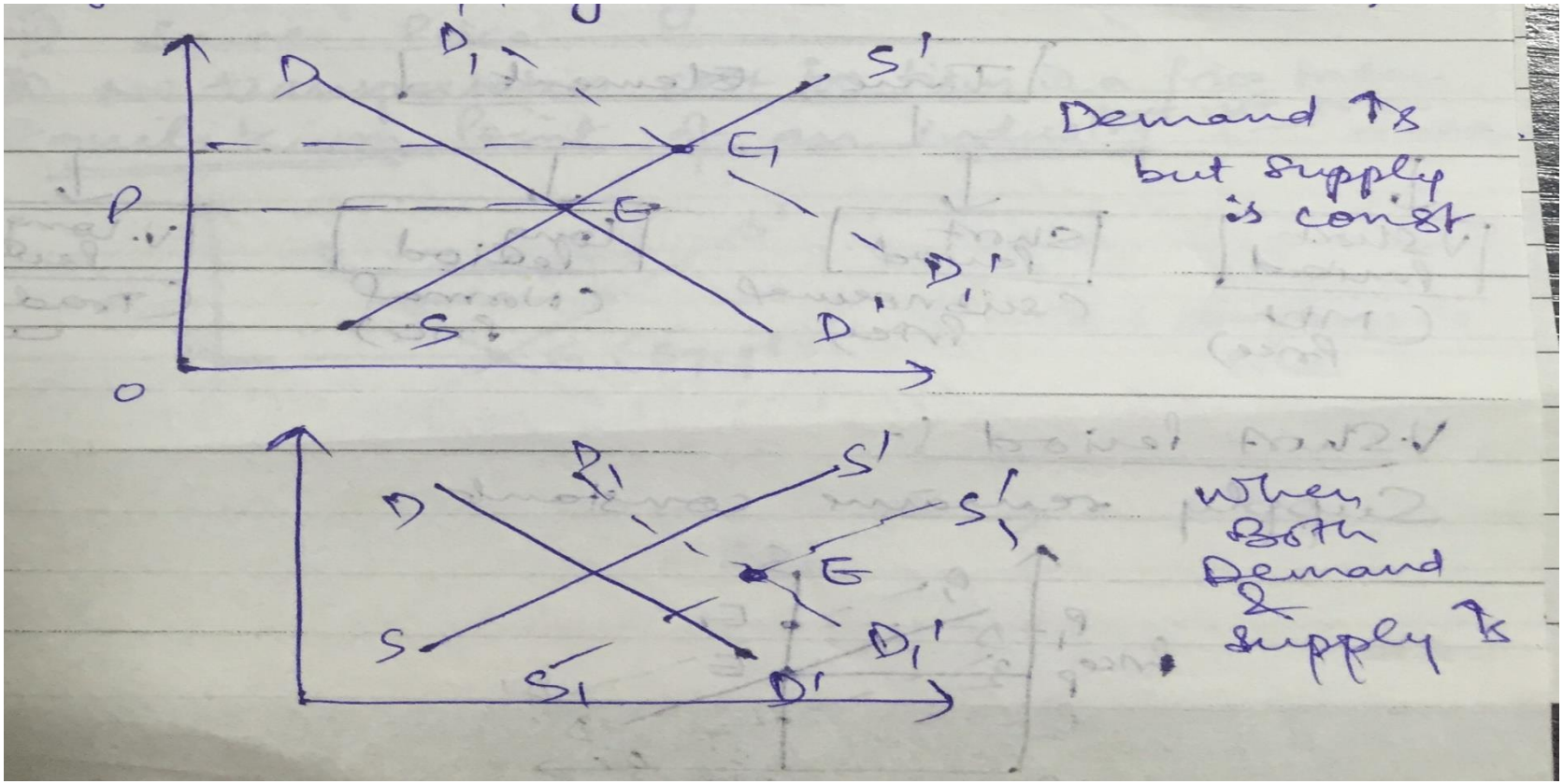
Short Run (Sub normal price)

Supply will change but non-linearly. Supply for short will be more elastic than for very short run.



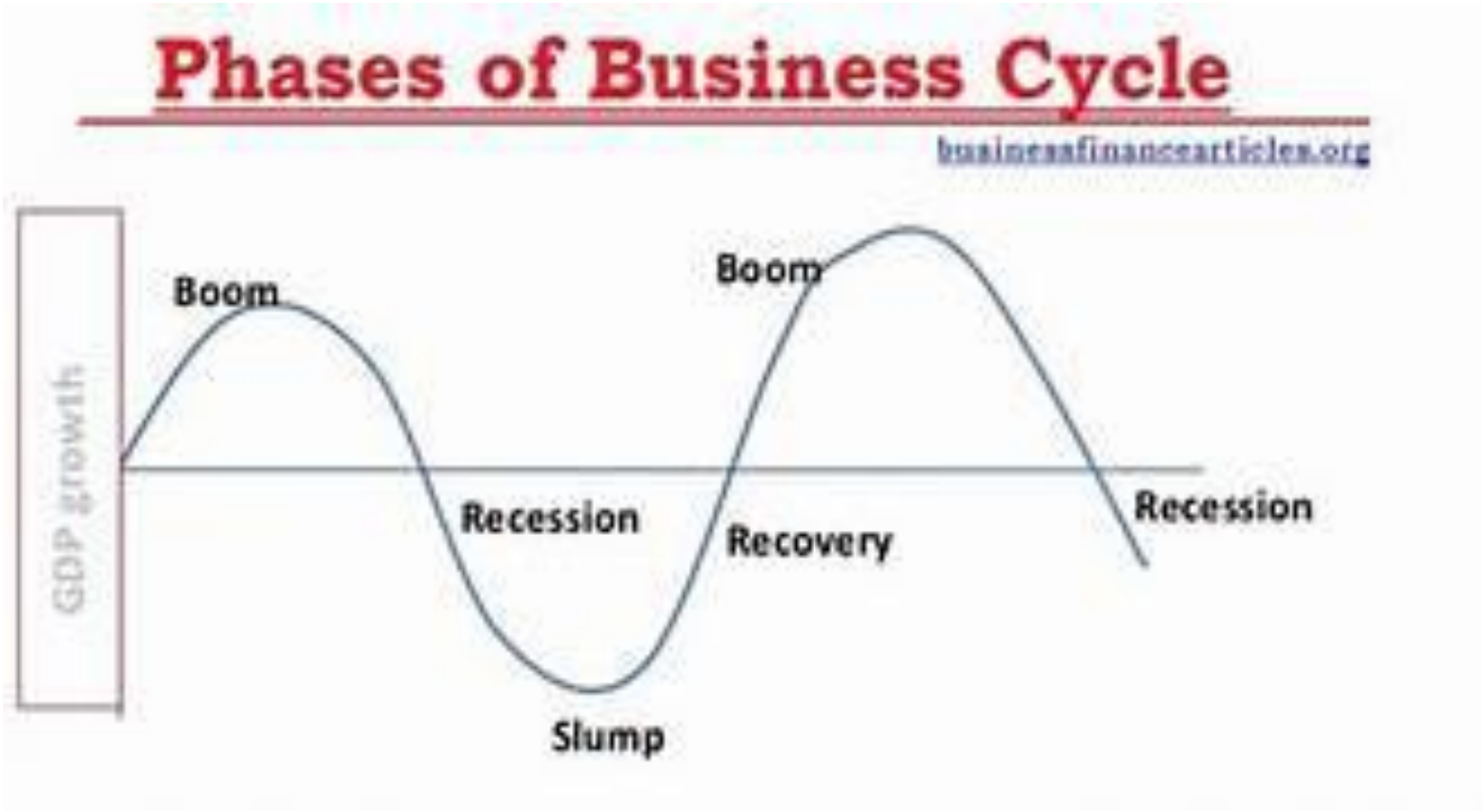
Long Run (Normal price)

Supply will increase linearly. There is a probability that supply may shift.



Very long period

- Price of the product will depend on the phase of Business cycle.

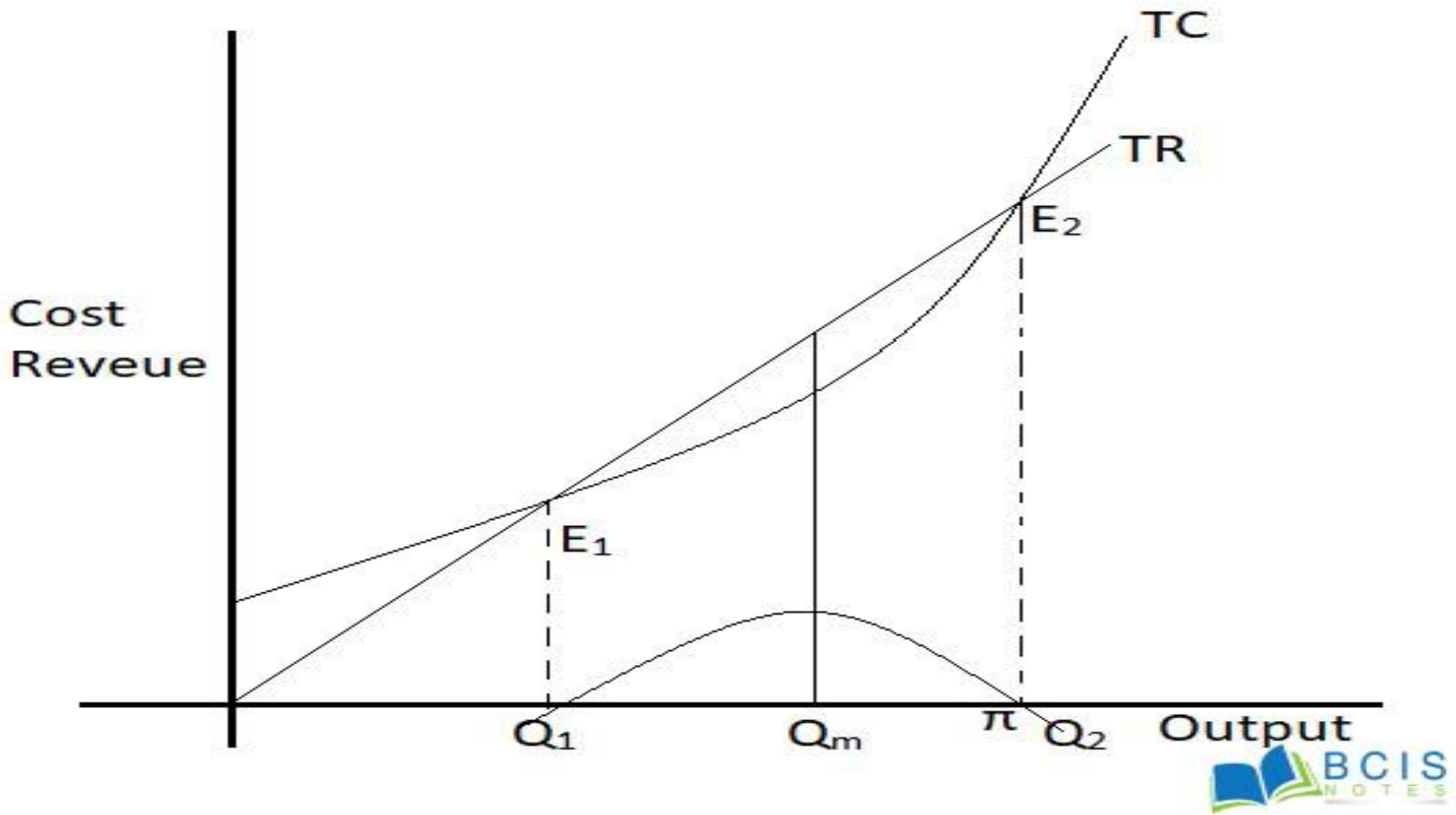


Price- Output determination or Equilibrium of the firm

- Price can be determined with 2 approaches:

1. TR and TC approach
2. MR and MC approach

TR and TC approach



MR and MC Approach

- It can be measured by MC and MR approach:

  Two conditions for equilibrium

  1. MC=MR
  2. MC cuts MR from below.

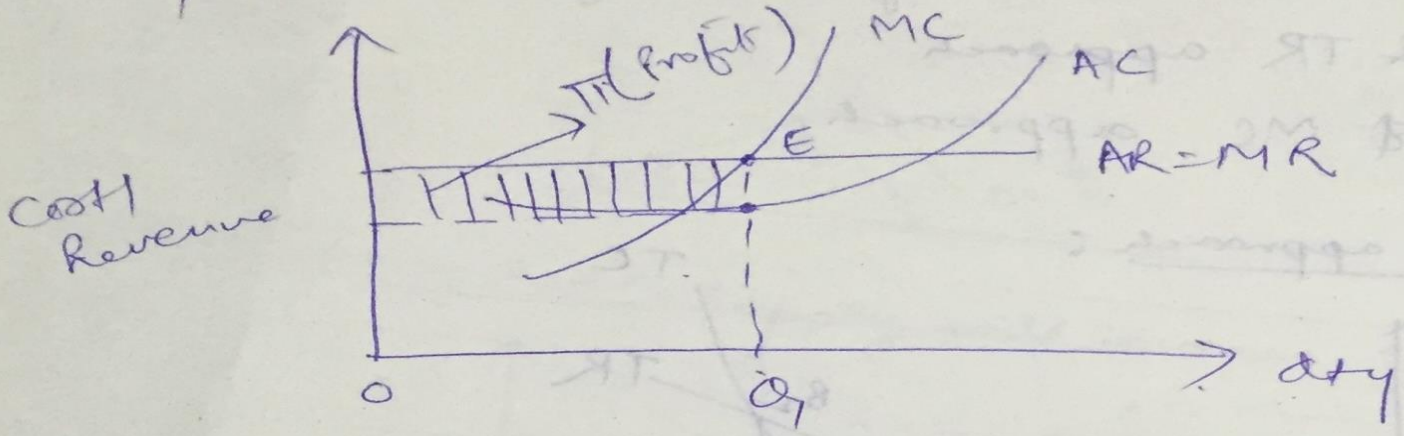
  – In the short run, firm can incur:

    - Super normal profit (Average Revenue > Average Cost)
    - Normal profit (AR=AC)
    - Minimum losses (AR< AC)

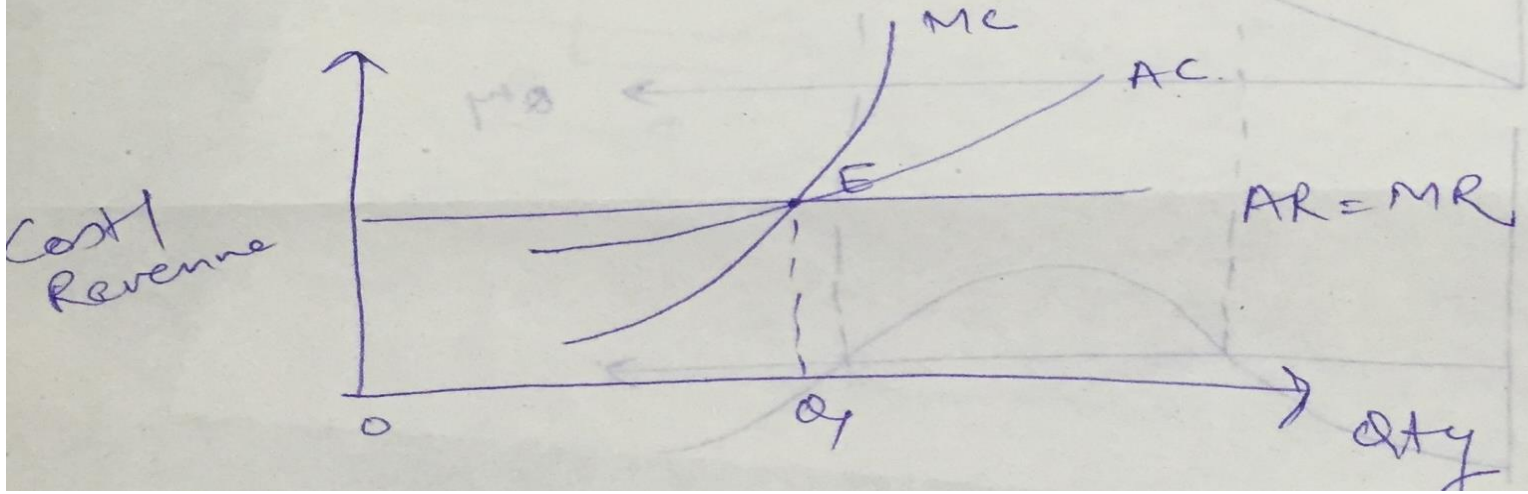
    In long run, the firm will incur Normal profits.

Short Run

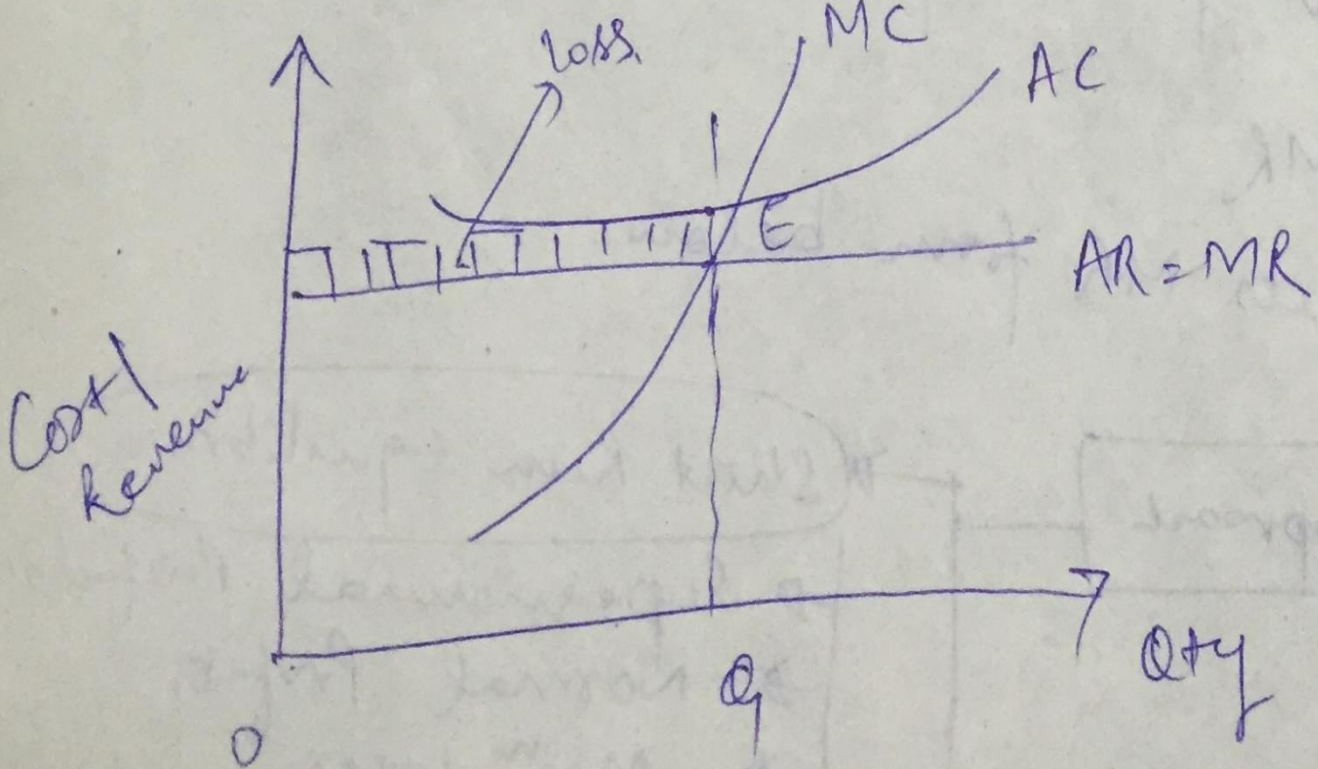
(a) Super-normal Profits (AR > AC)



(b) Normal Profits (AR = AC)



(C) Min^m losses (AR < AC)



Price determination of a firm in long run

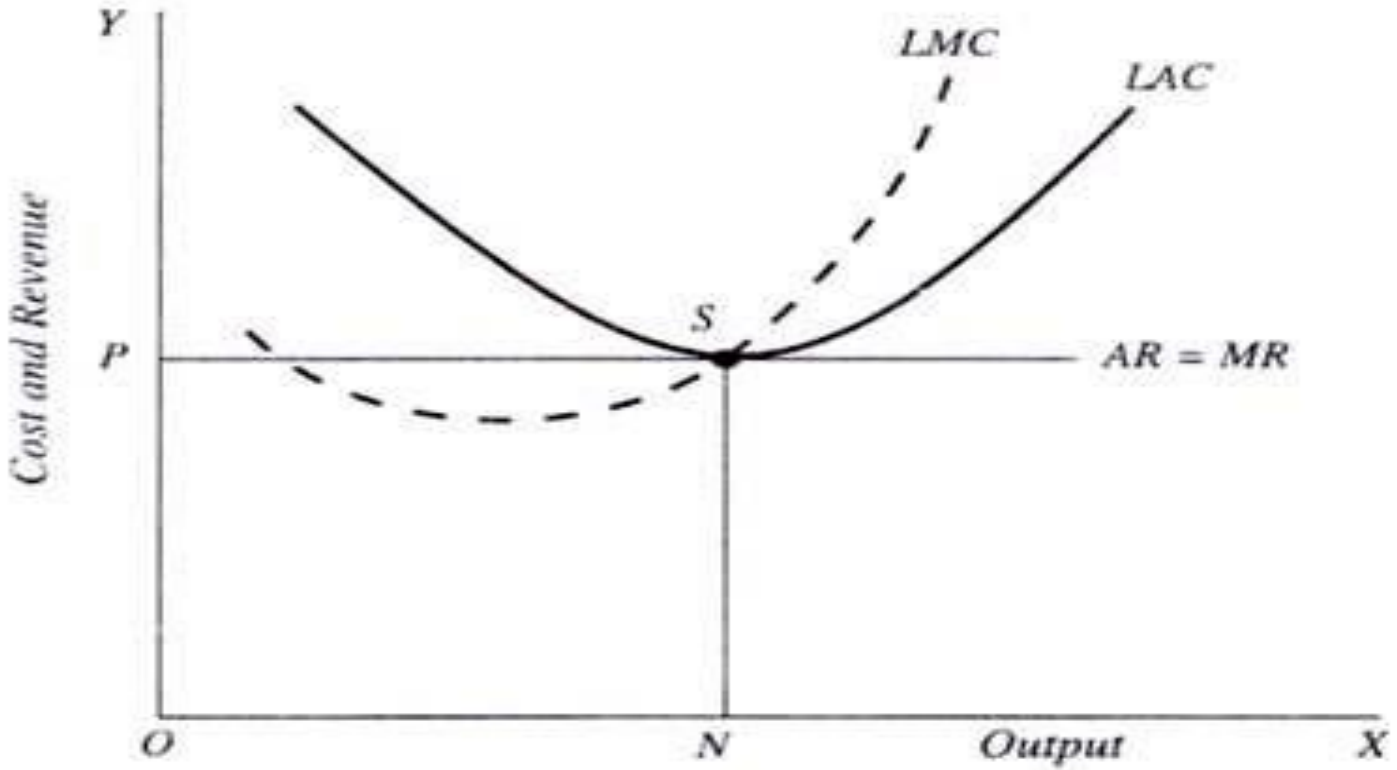


Fig. 23.6. *Long-Run-Equilibrium of the Firm*

Practice

Suppose the demand and supply equations for a perfectly competitive market are:

$Q_d = 1625 - P$ and $Q_s = 25 + 30P$.

1. Calculate the market equilibrium point.
2. If there are 25 firms in the industry. How much each firm has to produce?

Solution

At Equilibrium point, Demand = Supply

$1625 - 50P = 25 + 30P$

Or $1600 = 80P$

Or $P = 20$

Equilibrium price = Rs 20

Equilibrium output = $1625 - 50\ (20)$

$= 625$ units

- If there are 25 firms in the market/industry

Then the supply by each firm = total output/no. of firms

= 625/25 = 25 units