Perfect Competition

Perfect competition is a market structure characterised by a complete absence of rivalry among the individual firms.

Assumptions

- 1) Large number of sellers and buyers: Perfect competition is characterised by the presence of large number of buyers and sellers. There is no shortage of either buyer or seller as such none is in a position to influence the price of the product.
- 2) Product homogeneity: There is only kind of product that is available in the market. There is no product differentiation. Doesn't matter from which buyer we buy the product we will get the same type of product.
- 3) Free entry and exit of firms: Firms are allowed to enter and exit the markets all the time. If there is high amount of profit available then new firms can enter the market and if the firms are incurring losses they can exit at any time.
- 4) Profit maximisation: The goal of the firms is profit maximisation: They will try to sell as much of their product as there is not much they can do about the price.
- 5) No government regulation: The government does not regulate the working of perfect competition. The firms are free to take their own decision regarding production and distribution. There is a kind of free demand and supply forces working in the economy.
- 6) Perfect mobility of factors of production: Factors of production are perfectly mobile. They are free to move from one place to another and from one job to another. This leads to sound production facility all the time.
- 7) Perfect knowledge: Both buyers and sellers have perfect knowledge of the prevailing market conditions. They know the prices prevailing and the kinds of goods available so there can be no cheating from either side.

Conditions for the equilibrium of the firm

There are 2 conditions which need to be satisfied for the firm to be in equilibrium

- 1) MC = MR
- 2) MC cuts MR from below

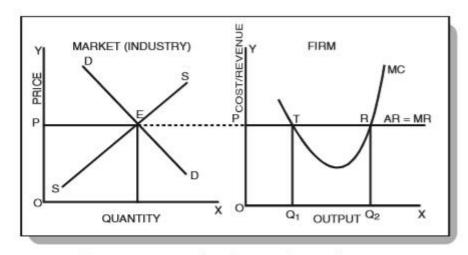


Fig. 3: Equilibrium position for a firm under perfect competition

In this figure we can see MC=MR at T but MC cuts MR from above. This means that it is profitable for the firm to continue with the production. Its only at R that MC= MR and MC cuts MR from below. This means that both the conditions are fulfilled and it will be profitable for the firm to produce OQ_2 output.

Short run equilibrium of the firm

1) Equilibrium under profits

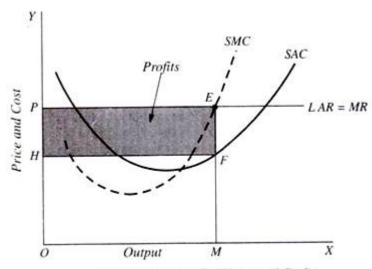


Fig. 23.3. Short-Run Equilibrium with Profits

In this figure we find that SAC curve lies below the AR= MR curve. This means that cost of the firm is below revenue. Point of equilibrium is at the point E where SMC cuts MR from below. OHFM is the area of cost. OPEM is the area of revenue. PHEF is the amount of excess revenue over cost. So the firm is having profits in this situation.

2) Firm having losses

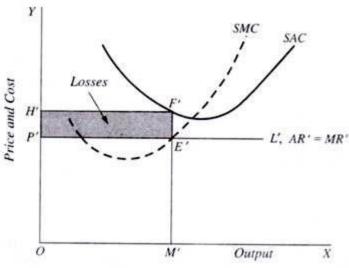


Fig. 23.4. Short-Run Equilibrium with Losses

In this figure we find that the SAC curve lies above the AR=MR curve. As the cost exceeds the revenue the firm is incurring losses. The revenue area is OP'E'M' while the cost area is OH'F'M'. The cost incurs loss of the area H'P'F'E'.

3) Shut-down Point

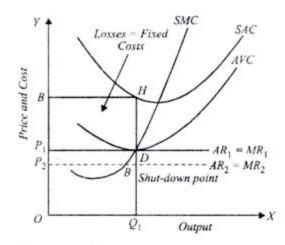


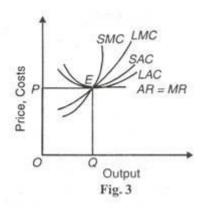
Fig. 23.5(b). When Price (P) = minimum AVC, losses are equal to total fixed costs. If price falls below it, the firm will shut down.

In this figure we find that SAC is way above AR=MR curve. AVC is just tangent to AR=MR. This means that variable cost is just being recovered while fixed cost was already not being recovered. If price falls below this level then the firm will shut-down.

Long Run Equilibrium of the firm

There are 2 conditions for the long run equilibrium of the firm.

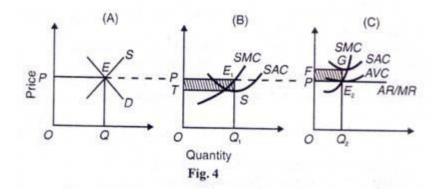
- 1) SMC = LMC = MR = AR = P = SAC = LAC at its minimum point
- 2) LMC curve must cut MR curve from below.



Both the above mentioned conditions are fulfilled at point E. All the curves are meeting at point E at the minimum point and LMC cuts MR from below. The firm is earning normal profit as the cost and revenue are both equalised.

Short- run Equilibrium of the industry

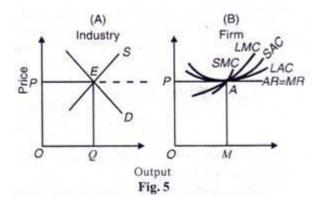
An industry is in equilibrium when it is neither in a position to expand or contract. This can happen when all the firms are earning supernormal profit. But this is rarely the scenario because firms can be earning supernormal profit and incurring losses.



We can see in the figure that the industry is in equilibrium with the interaction of demand and supply. In panel (B) the firm is earning supernormal profit while in panel (C) the firm is earning losses.

Long-run equilibrium of the industry

An industry is in equilibrium in the long run when all the firms are earning normal profits. There is no tendency of any firm to enter or leave the industry. The industry is in full equilibrium where LMC = MR = AR(=p) = LAC at its minimum.



Industry is in equilibrium with the interaction of demand and supply and the firm is earning normal profit. This is the complete equilibrium situation when there is no tendency of any entry or exit of the firms.