

## Monopolistic Competition

Monopolistic comp. refers to a market structure in which a large number of sellers sell differentiated products, which are close substitutes for one another.

The main features of monopolistic comp. are

- (1) Large number of sellers: The number of sellers is large. It is so large that a firm retains to be a price maker.
- (2) Product differentiation: The firms differentiate their products from one another in respect of their shape, size, colour etc.
- (3) Free entry and free exit: There is no barrier on the entry of new firms and exit of old ones from the industry.
- (4) Selling cost: The firms undertake heavy expenditure on advertisement and other sales promotion schemes for their product.
- (5) Downward sloping Demand curve: A firm faces a downward sloping curve.

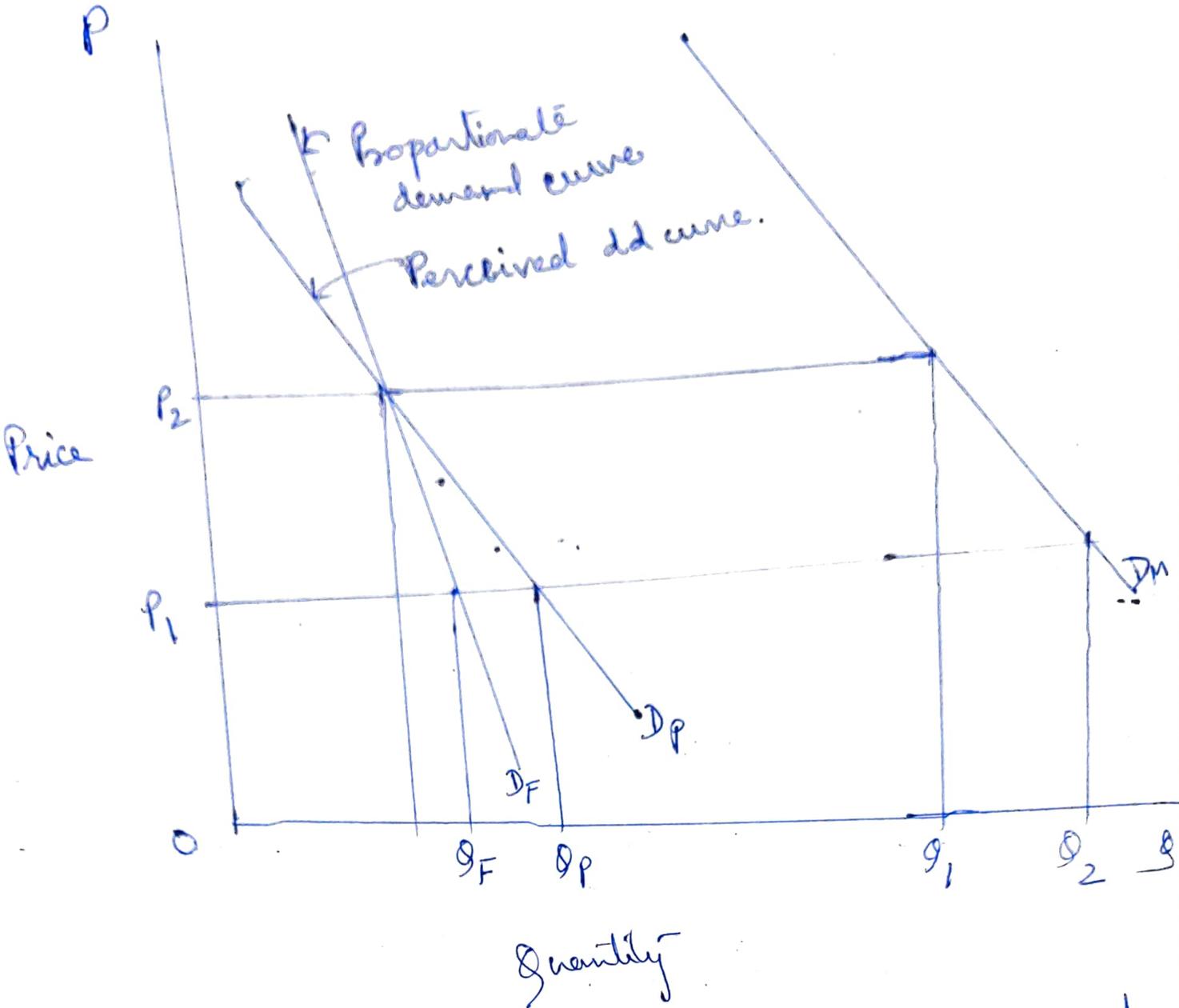
## Price output determination under monopolistic competition :

Here we explain Chamberlin's theory of monopolistic competition. First we explain perceived and proportionate demand curve.

Under monopolistic competition, product differentiation is the basis of competition among the firms. With product differentiation, each firm perceives that the demand curve for its own product is more elastic than that of the rival firms. That is why we get a perceived demand curve ~~as well~~ over and above a proportionate demand curve.

Suppose, industry's demand curve (ie market demand curve) is given by the curve  $D_M$ . If industry's demand is proportionately divided between the firms, each firm is supposed to have a demand curve shown by  $D_F$ . It is called proportionate demand curve.

However, firms under monopolistic



competition do not take  $D_F$  to be the demand curve for their individual product. Each firm perceives that the demand curve for its own product is more elastic than that of the others firms. It gives rise to perceived demand curve which is shown by  $D_P$  in the figure. It is evident that the perceived demand curve  $D_P$  is more elastic than the proportional demand

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curve  $D_F$ . The basis of the perceived demand curve is the firm's belief that if it changes the price of its own product, it will go unnoticed by the other firms and they will not react to change the price of their products <sup>(as the no. of firms is very large).</sup>

The assumption lying behind is the belief that the number of firms is so large that price changes made by a single firm is very much likely to go unnoticed by the rival firms.

The perceived demand curve plays an important role in price and output determination in Chamberlin's theory of monopolistic competition.

Assumptions :



## Assumptions

Chamberlin has made the following *explicit* and *implicit* assumptions to develop his theory of monopolistic competition.

1. There are a large number of firms selling slightly differentiated products, which are close substitutes for one another.
2. The number of firms in a product group is so large that their activities, especially, manoeuvring of price and output, go unnoticed by the rival firms.
3. Demand and cost curves for all the products and for all the firms of the group are uniform, i.e., firms face identical demand (including *perceived* one) and cost curves.
4. Consumer's preferences are evenly distributed among the different products and product differentiations are not such that they make a difference in cost.<sup>14</sup>

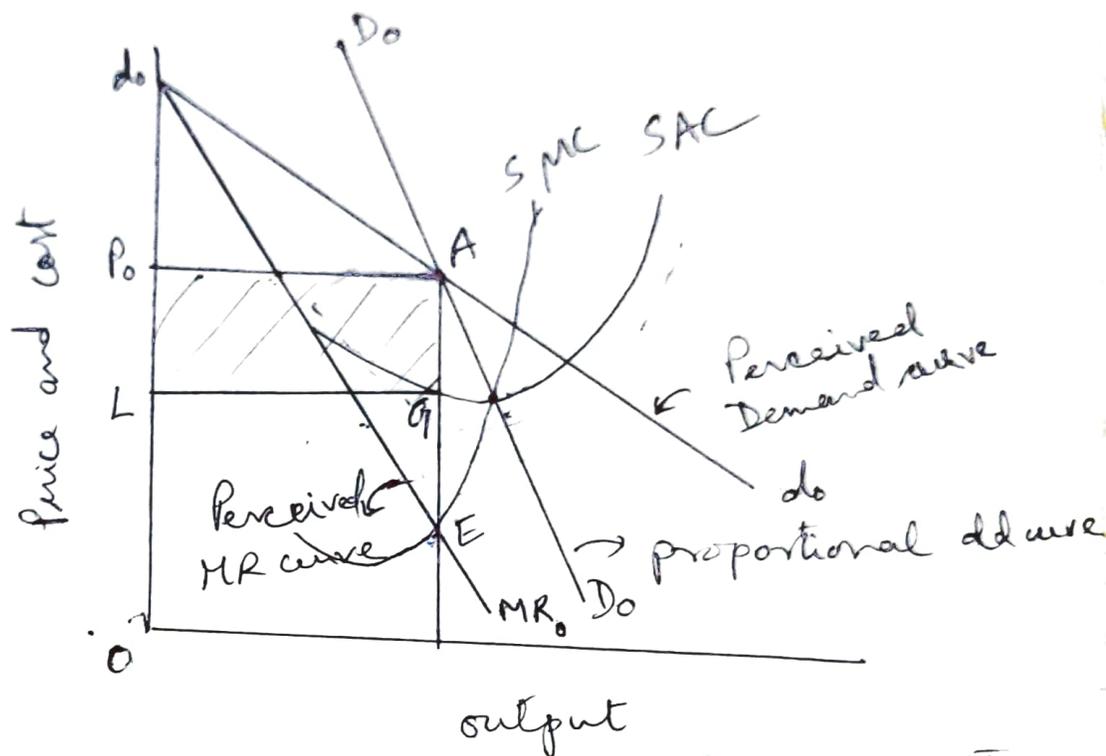
The last two assumptions are called rather 'heroic' in the sense that these are unrealistic. However, it can be assumed, for theoretical convenience, that the differences, wherever they are, are not significant enough to influence the price and output decisions of the rival firms. Given the assumptions, let us discuss first the *short-run equilibrium of the firm*. Firm's *long-run equilibrium* will be discussed in the next section.

### Short-run Equilibrium of the Firm

14. The short-run equilibrium of a firm under monopolistic competition is illustrated in Figures 18.4

## Short run Equilibrium

The price-output equilibrium of a firm in the short run is shown in fig (1) below.



The proportional demand curve  $D_0D_0$  shows the quantity demanded at various prices when all firms charge uniform price and each firm gets a proportional share of the total market demand for the product. Suppose the firm is initially at point A on the proportional demand curve  $D_0D_0$ . Firm's perceived demand curve  $d_0d_0$  which is more elastic than the proportional

demand curve  $DD_0$  has been drawn through point A. The perceived demand curve shows the demand for the product of the firm on the assumption that all other firms in the industry keep the prices of their products constant.

Each firm's share of demand for its product is equal to  $OD_0$  and all of <sup>them are</sup> charging uniform price  $OP_0$ .

SAC and SMC are short-run average cost curve and short run marginal cost curve respectively.  $MR_0$  is the marginal revenue <sup>curve</sup> corresponding to the perceived demand curve  $DD_0$ . SMC and  $MR_0$  curves intersect at point E and accordingly  $OQ_0$  is the equilibrium output of the firm and  $OP_0$  is the equilibrium price charged with proportional and perceived demand curves cutting each other at point A in the present price-quantity equilibrium. Here price  $OP_0$  exceeds average cost production at  $OQ_0$  output level. and therefore the firm is making supernormal

profit equal to the area  $P_0AGL$ . Thus according to Chamberlain's alternative approach, short run equilibrium in monopolistic competition is reached when following two conditions are satisfied —

- (i) The price-output combination is such that at which perceived marginal revenue curve intersects the marginal cost curve so that  $MR = MC$ .
  - (ii) The price-output combination where  $MR = MC$  is such that it corresponds to the point at which perceived demand curve ~~and~~ intersects the proportional demand curve  $D_0D_0'$ .
- Only when the above two conditions are fully the firm will be maximising its profit and will have no incentive to change its price.