

If the price regulatory authority fixes the monopoly price  $WS$  equal to the average cost where the  $AC$  curve cuts the  $D/AR$  curve at point  $S$ , the monopolist would be able to place a greater quantity of output  $OW$  in the market. At this level, the monopolist would earn only normal profits. In such a situation, the monopolist would continue to produce so long as he is getting a fair return on his capital investment. But the regulatory authority cannot force him to increase output beyond  $OW$  because the monopolist would not be operating at a loss.)

## 2. CONTROL OF MONOPOLY THROUGH TAXATION

Taxation is another way of controlling monopoly power. The tax may be levied lumpsum without any regard to the output of the monopolist. Or, it may be proportional to the output, the amount of tax rising with the increase in output.

**Lumpsum Tax.** By levying a lumpsum tax, the government can reduce or even eliminate monopoly profits without affecting either the price or output of the product. A lumpsum tax imposed on the monopoly firm is shown in Figure 38.12 where  $AC$  and  $MC$  are the average cost and marginal cost curves before the tax is levied. The monopolist earns  $APRT$  super-normal profits by selling  $OM$  product at  $MP$  price. The imposition of the lumpsum tax is, in fact, a fixed cost to the monopoly firm because it is independent of output. It, therefore, raises the average cost by the amount of the tax  $TC$  so that the  $AC$  curve shifts upward as  $AC_1$ , but the marginal cost remains unaffected. So the imposition of a lumpsum tax has the effect of reducing monopoly profit from  $APRT$  to  $APBC$ . The entire burden of the tax will be borne by the monopolist himself. He cannot shift any part of it to his customers at any stage by raising the price and reducing output. Since the monopolist's marginal cost curve and the marginal revenue curve remain unaffected by the tax imposition, any change in the existing price-output combination would only lead to losses.)

**Specific Tax.** The government can also reduce monopoly profits by levying a specific or a per unit tax on the monopolist's product. A per unit tax on monopoly output has the effect of shifting both the average and marginal cost curves upward by the amount of the tax. Figure 38.13 illustrates this case.  $AC$  and  $MC$  are the monopoly firm's average cost and marginal cost curves before the tax imposition. It earns  $BPGK$  monopoly profits by selling  $OM$  quantity of the product at  $MP$  price. Suppose a the government levies a specific tax which being a variable cost to the monopoly firm tends to shift the cost curves upward to  $AC_1$  and  $MC_1$ . The monopolist's new equilibrium point is  $E_1$  where the  $MC_1$  curve cuts the  $MR$  curve. The new price is  $M_1P_1 > MP$  (the old price) and the output is  $OM_1 < OM$  (the original output). In this case, the monopolist is able to shift a part of the tax burden to con-

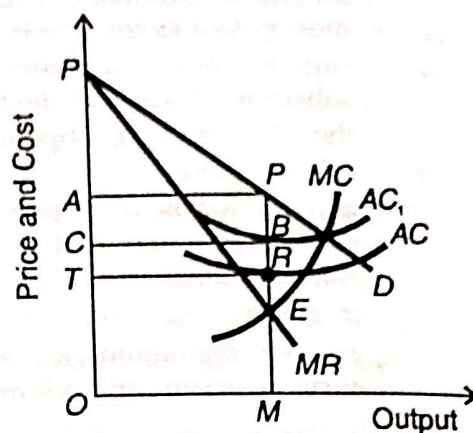


Fig. 38.12

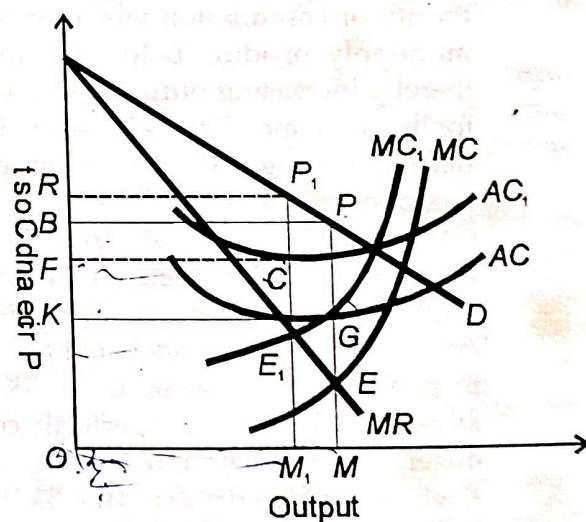


Fig. 38.13

sumers in the form of higher price and a smaller output of the product. Since the monopolist has to bear a portion of the tax burden himself, his profits are also reduced from  $BPGK$  to  $RP,CF$ . Such a tax does not help in regulating monopoly price and output. For, the higher the demand elasticity of tax, the higher the price for the product and the lower the output. The ultimate loss will be borne by the public rather than by the monopolist.