



Higher margin of safety shows that the business is sound and when sales substantially come down, (but not below break even sales) profit might be earned by the business. Lower margin of safety, as pointed out earlier, means that when sales come down slightly profit position might be affected adversely. Thus, margin of safety can be used to test the soundness of a business. In order to improve the margin of safety a business can increase selling prices (without affecting demand, of course) reducing fixed or variable costs and replacing unprofitable products with profitable one.

# Question

beta manufacturers ltd. Has supplied you the following information in respect of one of its products:

- Total Fixed Costs 18,000
- Total Variable Costs 30,000
- Total Sales 60,000
- Units Sold 20,000

Find out (a) contribution per unit, (b) break-even point, (c) margin of safety, (d) profit.

# Solution

$$\text{Selling Price Per Unit} = \frac{60,000}{20,000} = \text{Rs.}3$$

$$\text{Variable Cost Per Unit} = \frac{30,000}{20,000} = \text{Rs.}1.50$$

$$\begin{aligned} \text{(A) Contribution Per Unit} &= \text{Selling Price Per Unit} - \text{Variable Cost Per Unit} \\ &= \text{Rs.}3 - \text{Rs.}1.50 \\ &= \text{Rs.}1.50 \end{aligned}$$

Cont...

Total Fixed Cost

(B) Break-Even Point = -----

Contribution Per Unit

Rs.18,000

= ----- = 12,000 Units

Rs.1.50

(C) Margin Of Safety = Units Sold – Break-Even Point

= 20,000 – 12,000

= 8,000 Units (Or) Rs.24,000

$$\begin{aligned} \text{(D) Profit} &= (\text{Units Sold} \times \text{Contribution Per Unit}) - \text{Fixed Cost} \\ &= (20,000 \times \text{Rs.}1.50) - \text{Rs.}18,000 \\ &= \text{Rs.}12,000 \end{aligned}$$

Thank You