# 7 BREAK-EVEN ANALYSIS

## Learning Objectives

**After completing this chapter, you should be able to understand**

- the concept of Break-even analysis (BEA)
- determination of Break-even Point (BEP)
- applications of BEA
- significance of BEA
- limitations of BEA

## INTRODUCTION

Profit maximisation is one of the major goals of any business. The other goals include enlarging the customer base, entering new markets, innovation through major investments in research and development, and so on. The volume of profit is determined by a number of internal and external factors. As a part of monitoring the profitability of the operations of the business, it is necessary for the managerial economist to study the impact of changes in the internal factors such as cost, price and volume on profitability. Breakeven analysis comes very handy for this purpose.

## BREAK-EVEN ANALYSIS

Break-even analysis refers to analysis of the break-even point (BEP). The BEP is defined as a no-profit or no-loss point. Why is it necessary to determine the BEP when there is neither profit nor loss? It is important because it denotes the minimum volume of production to be undertaken to avoid losses. In other words, it points out how much minimum is to be produced to see the profits. It is a technique for profit planning and control, and therefore is considered a valuable managerial tool.

Break-even analysis is defined as analysis of costs and their possible impact on revenues and volume of the firm. Hence, it is also called the cost-volume-profit analysis. A firm is said to attain the BEP when its total revenue is equal to total cost (TR = TC).

Total cost comprises fixed cost and variable cost. The significant variables on which the BEP is ba are fixed cost, variable cost and total revenue.

## Key Terms used in Break-even Analysis

(a) **Fixed cost** Fixed costs remain fixed in the short-run. Examples are rent, insurance, depreciati factory supervisor's salaries, directors' salaries, and so on.

(b) **Variable costs** The variable cost per unit vary with the volume of production. The variable co include cost of direct materials, direct labour, direct expenses, operating supplies such as lubri ing oil, and so on.

(c) **Total cost** The total of fixed and variable costs

(d) **Total revenue** The sales proceeds (selling price per unit × number of units sold)

(e) **Contribution margin** The contribution margin is the difference between the selling price p unit and the variable cost per unit. It is also determined as (fixed cost per unit + profit per unit

(f) **Profit** = Contribution – Fixed cost

(g) **Contribution margin ratio** It is the ratio between contribution per unit and the selling price p unit.

(h) **Margin of safety in units** The excess of actual sales (in units) *minus* the break-even point i units)

(i) **Margin of safety in sales volume** The excess of actual sales (in rupees) *minus* the break-ev point (in rupees)

(j) **Angle of incidence** The angle formed where total cost curve cuts the total revenue curve (s the BEP chart in Fig. 5.1).

(k) **P/V ratio** The ratio between the contribution and sales

## Determination of Break-even Point

The following are the key terms used in determination of break-even point:

$$\text{Selling price} = \text{Fixed cost} + \text{Variable cost} + \text{Profit}$$

$$\text{Selling price} - \text{Variable cost} = \text{Fixed cost} + \text{Profit}$$

$$= \text{Contribution}$$

$$\text{Contribution per unit} = \text{Selling price per unit} - \text{Variable cost per unit}$$

Having studied the nature of fixed and variable costs in the earlier, we will now discuss how to det mine break-even point.

(i) Determination of Break-even Point in Units:

$$\text{Break-even point} = \frac{\text{Fixed costs}}{\text{Contribution margin per unit}}$$

Where contribution margin per unit= (Selling price per-unit – Variable cost per unit)

(ii) Determination of BEP in value:

$$\text{BEP} = \frac{\text{Fixed costs}}{\text{Contribution margin ratio}}$$

Where contribution margin ratio is the ratio of contribution margin per unit to selling price per u

**Example 1**

A firm has a fixed cost of Rs 10,000; selling price per unit is Rs 5 and variable cost per unit is Rs 3.

(i) Determine break-even point in terms of volume and also sales value

(ii) Calculate the margin of safety considering that the actual production is 8000 units.

*Solution*

(i) Determination of BEP:

$$\text{Break-even point in units} = \frac{\text{Fixed costs}}{\text{Contribution margin per unit}}$$

Where contribution margin per unit = Selling price per unit – Variable cost per unit

$= 5 - 3$

$= 2$

So, $$\text{BEP in units} = \frac{10{,}000}{2}$$

$= 5000$ units.

BEP can also be determined in terms of value (in rupees).

The formula is

$$\text{BEP in sales value} = \frac{\text{Fixed costs}}{\text{Contribution margin ratio}}$$

$$\text{where contribution margin ratio} = \frac{\text{Selling price} - \text{Variable cost}}{\text{Selling price}}$$

In the above example, the contribution margin ratio is $(5 - 3)/5 = (2/5)$

BEP in terms of sales value is calculated as below:

$$= \frac{10{,}000}{2/5}$$

$= \text{Rs } 25{,}000$

This can be verified by the formula:

Total revenue = Total cost

= (No. of units at BEP) × (Selling price per unit)

= 5000 units × Rs 5 per unit

Rs 25,000

In other words, at BEP Total revenue = Total cost. This implies that the profit or loss is zero. This is the reason why BEP is called no profit or no loss point.

BEP can be determined graphically as shown in Fig. 5.1.

(ii) Determination of margin of safety

Margin of safety (units) = Number of units sold – Break-even point in units

Margin of safety = 8000 – 5000

= 3000 units.

The margin of safety is 3000 units. If there is any unfavourable business conditions such as labour problem, the company can stand firm and continue discussions as long as volume of production does not fall below 5000 units. Once it reaches the BEP, it is advisable for the firm to reach an understanding as it cannot afford any more delay. If production falls below BEP, the firm suffers loss.

**Example 2**

A high-tech rail can carry a maximum of 36,000 passengers per annum at a fare of Rs 400. The variable cost per passenger is Rs 150 while the fixed costs are 25,00,000 per year. Find the break-even point in terms of number of passengers and also in terms of fare collections.

*Solution*

(a) Determination of BEP:

$$\text{Break-even point in units} = \frac{\text{Fixed costs}}{\text{Contribution margin per unit}}$$

Where contribution margin per passenger = Fare per passenger – Variable cost per passenger

$$= 400 - 150$$
$$= 250$$

So, BEP in number of passengers $\frac{25,00,000}{250}$

$$= 10,000 \text{ passengers}$$

BEP in terms of collections (in rupees).

The formula is

$$\text{BEP in sales value} = \frac{\text{Fixed costs}}{\text{Contribution margin ratio}}$$

$$\text{where contribution margin ratio} = \frac{\text{Selling price} - \text{Variable cost}}{\text{Selling price}}$$

the contribution margin ratio is (400 – 150)/400 = (250)/(400)

BEP in terms of sales value is calculated as below:

$$= \frac{25,00,000}{(250/400)}$$
$$= \text{Rs } 40,00,000$$

**Example 3**

Srikanth Enterprises deals in the supply of hardware parts of computer. The following cost data is available for two successive periods:

| | *Year I (Rs)* | *Year II (Rs)* |
|---|---|---|
| Sales | 50,000 | 1,20,000 |
| Fixed costs | 10,000 | 20,000 |
| Variable cost | 30,000 | 60,000 |

Determine (a) Break-even point (b) Margin of safety.

*Solution*

Here the per unit data is not available. Hence use the formula of P/V ratio to find out BEP.

Profit-volume (P/V) ratio = (Contribution/Sales) × 100

Contribution and profit during the year II and I are calculated as below:

| | *Year I (Rs)* | *Year II (Rs)* |
|---|---|---|
| Sales | 50,000 | 1,20,000 |
| Less Variable cost | 30,000 | 60,000 |
| Contribution | 20,000 | 60,000 |
| Less: Fixed costs | 10,000 | 20,000 |
| Net profit | 10,000 | 40,000 |

| | *Year I (Rs)* | *Year II (Rs)* |
|---|---|---|
| P/V ratio $= \frac{\text{Contribution}}{\text{Sales}} \times 100$ | $= \frac{20,000}{50,000} \times 100$ | $= \frac{60,000}{1,20,000} \times 100$ |
| | = 40% | = 50% |
| BEP $= \frac{\text{Fixed costs}}{\text{P/V ratio}}$ | $= \frac{10,000}{40\%}$ | $= \frac{20,000}{50\%}$ |
| | = Rs. 25,000 | = Rs. 40,000 |
| Margin of safety $= \frac{\text{Net Profit}}{\text{P/V ratio}}$ | $= \frac{10,000}{40\%}$ | $= \frac{40,000}{50\%}$ |
| | = 25,000 | = 80,000 |

The answers can be verified by using the following formula:

Sales = BEP sales + Margin of safety

Graphical representation of Break-even Point (BEP):

From the Fig. 7.1, we understand:

(i) TC = Total Variable Cost (TVC) + Total Fixed Cost + (TFC)
(ii) The variable cost line is drawn first. It varies proportionately with volume of production and sales.
(iii) The total cost line is derived by adding total fixed costs line to the total variable cost line. The total cost line is parallel to variable cost line.
(iv) The total revenue line starts from 0 point and increases along with volume of sales intersecting total cost line at point BEP.
(v) The zone below BEP is loss zone and the zone above BEP is profit zone.
(vi) OP is the quantity produced/sold at OC the cost/price at BEP.
(vii) The angle formed at BEP, that is, the point of intersection of total Revenue and total cost is called *angle of incidence*.

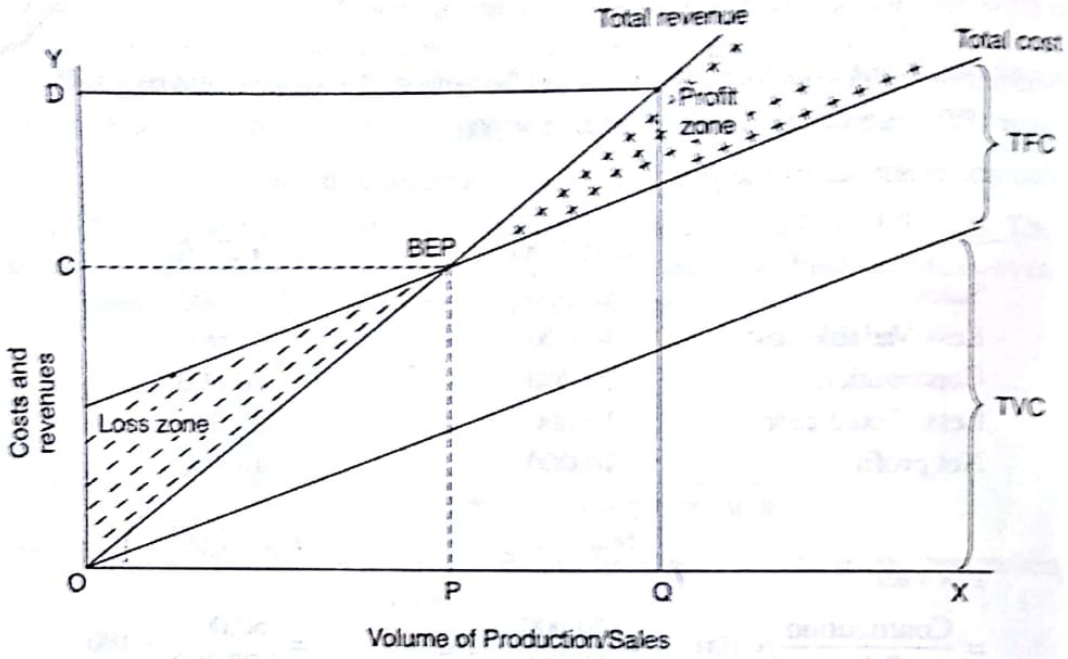


*Fig. 7.1 Graphical Representation of Break-even Point*

(viii) The larger the angle of incidence, the higher is the quantum of profit once the fixed costs are absorbed.

(ix) Margin of safety refers to the excess of production or sales over and above the BEP of production/sales. The margin of safety is OQ minus OP. The sales value at OQ is OD. It can be observed that the firm reaches break even point at point BEP. At BEP, the total cost is equal to total revenue. OP is the volume of production/sales at the cost/revenue of OC. The zone below BEP is called loss zone and zone above BEP is called profit zone. Total cost curve is based on the total of fixed cost and variable cost.

## Assumptions Underlying Break-even Analysis

The following are the assumptions underlying break-even analysis:

(a) Costs can perfectly be classified into fixed and variable costs.

(b) Selling price does not change with volume changes. It remains fixed. It does not consider the price discounts or cash discounts.

(c) All the goods produced are sold. There is no closing stock.

(d) There is only one product available for sale. In case of multi-product firms, the product mix does not change.

## Different Formulae Used in Break-even Analysis and their Applications

The following are the variations of the formula of break-even analysis:

1. Profit-volume (P/V) ratio = (Contribution/Sales). If multiplied by 100, it can be expressed in terms of percentage.

This has been derived from the following basic formula:

$$\frac{\text{Fixed cost} \times \text{Sales}}{\text{Sales} - \text{Variable cost}}$$

or

$$\frac{\text{Fixed cost}}{P/V \text{ ratio}}$$

2. Margin of safety can be determined by the following formula:

$$\text{Margin of safety} = \frac{\text{Profit}}{P/V \text{ ratio}}$$

3. To ascertain the volume of sales required to achieve a targeted amount of profit:

$$\text{Volume of sales to attain a targeted profit} = \frac{\text{Fixed costs} + \text{Targeted profit}}{\text{Contribution margin}}$$

## Application of Break-even Analysis

The following are some of the significant areas of applications of break-even analysis.

**1. Make or Buy Decision** Often, the manager is confronted with 'make or buy' decisions the necessary components or spare parts. Where the consumption is large, making may be economical. To illustrate,

**Example 4**

A lathe workshop owner uses 150 units of a certain spare part. He buys this from the market for Rs 250. The same can be manufactured in his workshop with a fixed cost of Rs 40,000 and a variable cost of Rs 50. Do you suggest him to make or buy from the market? It is possible that he can sell 500 units of the same spare part to other lathe shops in the town.

$$\text{BEP} = \frac{\text{Fixed costs}}{\text{Purchase price per unit} - \text{Variable cost per unit}}$$

$$= \frac{40{,}000}{250 - 50}$$

$$= \frac{40{,}000}{200}$$

$$= 200 \text{ units.}$$

The BEP is 200 units. This means that producing less than this is not economical. The total demand for the spare part is 650 units (150 + 500). It is recommended that this can be manufactured.

**2. Choosing a Product Mix when there is a Limiting Factor** It is very likely that the company may be dealing in more than one product and company wants to know, in view of the limited plant capacity,

What combination would yield maximum profits? To illustrate

**Box 7.1 Make or Buy?**

It is a complex decision, more so in a competitive economy which compels the companies to contain costs and maximise the returns on their investments. 'Making' involves assured supply lines. 'Buying' facilitates lowering the costs. Buying is also called 'outsourcing'.

Look at the following examples:

- Videocon manufactures all its components including the glass-shells used for the picture tube. On the other hand, National Panasonic outsources its colour television assembling processes.
- TELCO takes care of all its operations such as forging, foundry, small part machining, research, design, manufacturing of body panels, engines and transmission systems. Whereas Mahindra Ford prefers to concentrate on the core function of assembly so that it can keep its initial costs as low as possible. It has been outsourcing 40 percent of its components, warehousing and distribution services.
- Sometimes the outsourcing may be 'expensive'. Steel Authority of India (SAIL), Tata Iron and Steel Company (TISCO) and Essar Steel are vertically integrated to take care of successive stages of steel making in close proximity to each other. This not only ensures avoiding duplication of processes. The steel ingots that emerge from TISCO's blast furnace are immediately hot-rolled into coils at a factory 500 yards away from the furnace. Outsourcing such operations would mean that the company would have to heat them all over again which can be avoided while reducing the costs.
- In some cases, there is no option other than making everything on one's own. Indian Oil Corporation takes care of all its operations from refining, packaging, bottling to marketing and distribution all by itself. None of these services are available outside.
- Companies prefer to focus more on their respective strengths. Ciba-Geigy focuses its efforts on marketing. It buys all its bottling, packaging, and stamping requirements. On the other hand, Core Healthcare, the manufacturer of pharmaceutical formulations, solutions, and parenterals, has integrated bottling, packing, warehousing and distribution. As a result, it could successfully cut cycle-times and respond faster to market demand.

**Example 5**

A machine tools factory has a plant capacity of enough hours 9000. Annual fixed charges are of Rs.50,000 per year. It can produce two products of X and Y. It has three options: make X, or make Y, or make some units of X and some units of Y. Look at the following data:

| | *X* | *Y* |
|---|---|---|
| Selling price (Rs) | 250 | 400 |
| Variable cost (Rs) | 100 | 200 |
| Demand | 2500 units | 5000 units |
| Time taken for production | 3 hours | 5 hours |

What product mix will maximise the net profits of the factory? Calculate the maximum net profit.

*Solution*

Find out the contribution on each product. Since there is a limitation on the plant capacity in terms of hours of utilisation, find out the contribution per hour. See this table:

**Table 7.1 Contribution Particulars**

| | *Product X* | *Product Y* |
|---|---|---|
| Selling price Rs | 250 | 400 |
| Less: Variable cost Rs | 100 | 200 |
| Contribution (a) Rs | 150 | 200 |
| No. of hours needed to manufacture (b) | 3 | 5 |
| Contribution per hour | 50 | 40 |

From the Table 7.1, it is clear that the Product X has higher contribution per hour and hence, it is profitable to utilise the given hours to manufacture Product X. But there is a limitation. We cannot sell more than 2500 units. To manufacture, we need 7500 hours (2500 units × 3 hours).

Now, we are left with 1500 hours, (9000 – 7500) which can be spent, on Product Y. the factory can manufacture 300 units of Product Y (1500 hours/5 hours per unit of Product Y).

The product mix X and Y is 2500 : 300 units.

The net profits at this product mix:

| | *Units* | *Contribution per unit* Rs. | *Total contribution* Rs. |
|---|---|---|---|
| Product X | 2500 | 150 | 3,75,000 |
| Product Y | 300 | 200 | 60,000 |
| Total | | | 4,35,000 |
| Less fixed cost | | | 50,000 |
| Net profit | | | 3,85,000 |

The maximum net profit resulting from a product mix of 2500 units of X and 300 units of Y is Rs 3,85,000.

**3. Drop or Add Decisions** It is common that the firms keep on adding new products to their product range while dropping the old ones to keep pace with the changing demand. In this process, how do we know whether the new product really adds to profit and the old one proposed to be dropped saves the firm from the losses? Break-even analysis helps in such decisions.

**Example 6**

A firm has two products B and C. The particulars of the price per unit, variable cost per unit and percentage of share in the total sales volume are given in the following table.

**Table 7.2 Product Mix — I**

| *Products* | *Selling Price* | *Variable Cost* | *% of Share* |
|---|---|---|---|
| B | Rs. 40 | Rs. 16 | 40 % |
| C | Rs. 50 | Rs. 20 | 60 % |

The total fixed costs during the year amount Rs 100,000. The total volume of sales is Rs 8,00,000.

The company wants to drop product B as it is yielding less contribution per unit. In stead it wants to add Product D. If D is added, the new fixed cost is likely to be Rs 125,000 and the sales volume is likely to increase to Rs 9,00,000. The new scenario will be as given below:

**Table 7.3 Product Mix—II**

| *Products* | *Selling Price* | *Variable Cost* | *% of share* |
|---|---|---|---|
| C | Rs 50 | Rs 20 | 70% |
| D | Rs 60 | Rs 24 | 30% |

Do you recommend the change?

*Solution*

There are two situations here. Situation I with products B and C. Situation II with product C and D. Compare the net profit earned in both the situations. Then we can decide which situation is better.

**Situation I** (with products B and C):

Let us find out the contribution ratio of each product:

$$\text{Contribution ratio} = \frac{\text{Selling price} - \text{Variable cost}}{\text{Selling price}} \times \text{percentage share in the total sales}$$

$$\text{Contribution ratio for product B} = \frac{40-16}{40} \times 0.4$$
$$= 0.6 \times 0.4$$
$$= 0.24$$

$$\text{Contribution ratio for product C} = \frac{50-20}{50} \times 0.6$$
$$= 0.4 \times 0.6$$
$$= 0.36$$

Total of the Contribution ratios for products B and C $= 0.24 + 0.36$
$= 0.6$

Total contribution = Sales × Contribution ratio
= 8,00,000 × 0.6
= Rs 4,80,000.

Profit = Contribution – Fixed cost
= 480,000 – 100,000
= Rs 3,80,000

**Situation II** (with products C and D)

$$\text{Contribution ratio for product C} = \frac{50 - 20}{50} \times 0.7$$
$$= 0.6 \times 0.7$$
$$= 0.42$$

$$\text{Contribution ratio for product D} = \frac{60 - 28}{60} \times 0.3$$
$$= 0.53 \times 0.3$$
$$= 0.16$$

Total of the Contribution ratios for

products C and D = 0.42 + 0.16
= 0.58

Total contribution = Sales × Contribution ratio
= 900,000 × 0.58
= Rs 5,22,000

Profit = Contribution – Fixed cost
= 5,22,000 – 1,25,000
= Rs 3,97,000

The profit in the second situation is higher, and hence the change is recommended.

**Impact of changes in cost or selling price on BEP:**

BEP is a short-run phenomenon. Given an amount of total fixed cost and variable cost and selling price, the BEP is determined. If there is any change in one of these variables, BEP also is likely to change. The following are the likely conclusions:

(a) If the fixed cost increases, the profits will come down. To maintain the same level of profit, the firm has to produce more volume.
(b) If the fixed cost decreases, the firm attains BEP at lower level of production itself.
(c) If variable cost increases, the contribution margin gets reduced. Hence, to maintain the same profitability, the firm has to produce more to reach BEP.
(d) If variable cost decreases, the contribution margin increases. The firm can attain BEP at lower level of production.
(e) If selling price increases, the contribution margin increases. The firm can attain BEP at lower level of production.
(f) If selling price decreases, the contribution margin gets reduced. Hence, to maintain the same profitability, the firm has to produce more to reach BEP.

Let us illustrate one of these scenarios.

**Determining BEP when there is an increase in fixed cost**

**Example 7**

A firm has a fixed cost of Rs 50,000; selling price per unit is Rs 50 and variable cost per unit is Rs 25. Present level of production is 3500 units.

(i) Determine break-even point in terms of volume and also sales value.
(ii) Calculate the margin of safety.
(iii) What is the change in BEP and margin of safety if fixed costs increase from Rs 50,000 to 60,000?

*Solution*

(i) Determination of BEP

$$\text{Break-even point in units} = \frac{\text{Fixed costs}}{\text{Contribution margin per unit}}$$

Where contribution margin per unit = Selling price per unit – variable cost per unit
= 50 – 25
= Rs 25

So, $$\text{BEP in units} = \frac{50{,}000}{25}$$
= 2000 units.

BEP in terms of value (in rupees):

The formula is

$$\text{BEP in Sales Value} = \frac{\text{Fixed costs}}{\text{Contribution margin ratio}}$$

$$\text{Where contribution margin ratio} = \frac{\text{Selling price} - \text{Variable cost}}{\text{Selling price}}$$

In the above example, the contribution margin ratio is (50 – 25)/50 = (25/50)

BEP in term's sales value is calculated as below:

$$= \frac{50{,}000}{(25/50)}$$
= Rs 1,00,000

(ii) Determination of margin of safety:

Margin of safety = Number of units sold – break-even point in units
Margin of safety = 3500 – 2000
= 1500 units.

(iii) Determination of BEP with fixed costs of Rs.60,000

Where contribution margin per unit = Selling price per unit – variable cost per unit
= 50 – 25
= 25

So, $$\text{BEP in units} = \frac{60{,}000}{25}$$
= 2400 units.

BEP in terms of value (in rupees).

The formula is

$$\text{BEP in sales value} = \frac{\text{Fixed costs}}{\text{Contribution margin ratio}}$$

$$\text{Where contribution margin ratio} = \frac{\text{Selling price} - \text{Variable cost}}{\text{Selling price}}$$

In the above example, the contribution margin ratio is (50 – 25)/50 = (25/50)

BEP in terms sales value is calculated as below:

$$= \frac{60{,}000}{(25/50)}$$

$$= \text{Rs } 1{,}20{,}000$$

Determination of margin of safety:

$$\text{Margin of safety} = \text{Number of units sold} - \text{break-even point in units}$$

$$\text{Margin of safety} = 3500 - 2400$$

$$= 1100 \text{ units.}$$

The above calculations show that the firm has to produce 400 more units (2400 – 2000) in the event of increase in fixed costs by Rs 10,000. This reduces margin of safety also by 400 units (1500 – 1100).

## SIGNIFICANCE OF BEA

Break-even analysis is a valuable tool

- to ascertain the profit on a particular level of sales volume or a given capacity of production
- to calculate sales required to earn a particular desired level of profit
- to compare the product lines, sales area, methods of sale for individual company
- to compare the efficiency of the different firms
- to decide whether to add a particular product to the existing product line or drop one from it
- to decide to 'make or buy' a given component or spare part
- to decide what promotion mix will yield optimum sales
- to assess the impact of changes in fixed cost, variable cost or selling price on BEP and profits during a given period

## LIMITATIONS OF BEA

Break-even analysis has certain underlying assumptions which form its limitations.

1. Break-even point is based on fixed cost, variable cost and total revenue. A change in one variable is going to affect the BEP.
2. All costs cannot be classified into fixed and variable costs. We have semi-variable costs also.
3. In case of multi-product firm, a single chart cannot be of any use. Series of charts have to be made use of.
4. It is based on fixed cost concept and hence holds good only in the short-run.

5. Total cost and total revenue lines are not always straight as shown in the figure. The quantity ... price discounts are the usual phenomena affecting the total revenue line.
6. Where the business conditions are volatile, BEP cannot give stable results.

The above limitations do not deter the utility of break-even analysis. Even today, the business proposa... are evaluated on the concept of BEP. The project is chosen if the BEP is lower. Similarly, the bankers a... other financial agencies excessively rely up on the BEP of the borrower. If the BEP is lower, only the ... borrower is favoured. In other words, the break-even analysis continues to be practical tool for ... business community.

## *Self-assessment Questions*

### I. Fill in the Blanks

1. The fixed costs in the short-run are .....
2. There is .....relationship between the fixed costs per unit and volume of produ... tion.
3. The excess of actual production over and above the break-even point of production is call... .....
4. The more the ....., the more is the profitability.
5. Selling price *minus* variable cost is called .....
6. Contribution *minus* fixed cost is called .....
7. Direct material cost is an example for .....cost.
8. In break-even analysis, one of the assumptions is that costs can be classified into ... ..... and b) .....
9. When variable cost decreases, the BEP .....
10. When selling price per unit decreases, the BEP .....
11. Break-even point is also called .....
12. Break-even analysis is also called .....

### II. Short-answer Questions

*Write short notes on the following:*

(a) Margin of safety
(b) Angle of incidence
(c) Assumptions of BEA
(d) CVP analysis
(e) Contribution

### III. Essay Type Questions

1. Define BEP. How do you determine it. Show graphical presentation of BEA.
2. State the assumptions in Break-even analysis. Explain how break-even analysis is used by ... managers in their day-to-day operations?