

# Cost-Volume-Profit Analysis

# Introduction

Earning of maximum profit is the ultimate goal of almost all business enterprises. The amount of profit on the sales of a product depends upon volume of production and its cost.

Cost Volume Profit analysis is a logical extension of the concept of marginal costing in, which cost of production is divided into two parts i.e fixed cost and variable cost. Total amount of fixed cost remains constant upto a certain level of activity and change in production volume is associated with the change in variable (marginal) cost only.

It leads to decrease in cost per unit and increase in profit per unit with the increase in volume of production. The study of relationship among these three important factors, viz., cost, volume and profit is known as Cost - Volume - Profit Analysis.

The Cost - Volume - Profit Analysis can be presented in the form of equation also given as below:

$$P = (S - V) Q - F$$

Where

P= Profit

Q= Sales Volume

S= Selling Price per unit

V= Variable Cost per unit

F= Total Fixed Cost

# Various Aspects of Cost - Volume - Profit Analysis

- What will be the cost of production at different level of production?
- What will be the amount of profit at different level of production?
- What should be the volume of production to earn a desired amount of profit?
- What will be the impact of different levels of production on cost of production and amount of profit? etc....

# Importance /Objective of Cost - Volume - Profit Analysis

- Setting up Flexible Budget
- Determining of Break Even Point
- Profit Planning
- Decision relating to Selection of Alternatives
- Performance Evaluation for Control
- Helpful in Price Fixation
- Allocation of Overheads Costs
- Analysis of Effect of changes in Cost.

# Limitation of Cost - Volume - Profit Relationship

The linear relationship between cost-volume –profit is based on the assumption that selling per unit, variable cost per unit and total fixed cost are constant. However in practical life the following factors may effect such relationship:

- Variable cost per unit may not be constant.
- Selling prices may be lower at high volumes because sales discounts may not be given in order to sale the high volume of production.
- Fixed cost may not remain static at higher levels of production.

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For example depreciation on machinery is a fixed cost. However, with increase in production the machinery ,may be operated for an extra shift so that it may be necessary to provide extra shift allowance of depreciation.

- Change in working efficiency may also affect the cost-volume-profit relationship. It may ne both ways. An increase in efficiency may increase the volume with less than the expected increase in cost, while decrease in efficiency will increase the volume with more than the expected increase in cost.



# Thank You

In case of any query, you are free to ask...