

CVP Analysis

CVP Analysis Assumptions

- 1 All costs are either purely flexible or capacity related costs (variable or fixed costs)
- 2 Fixed Selling price per unit
- 3 Number of unites produced = Number of unites sold (No inventory)

Break-even Point
Is the numbers of sales at which
Total revenues = Total costs

In Units

$$\frac{\text{Fixed costs}}{\text{Contribution margin per unit}}$$

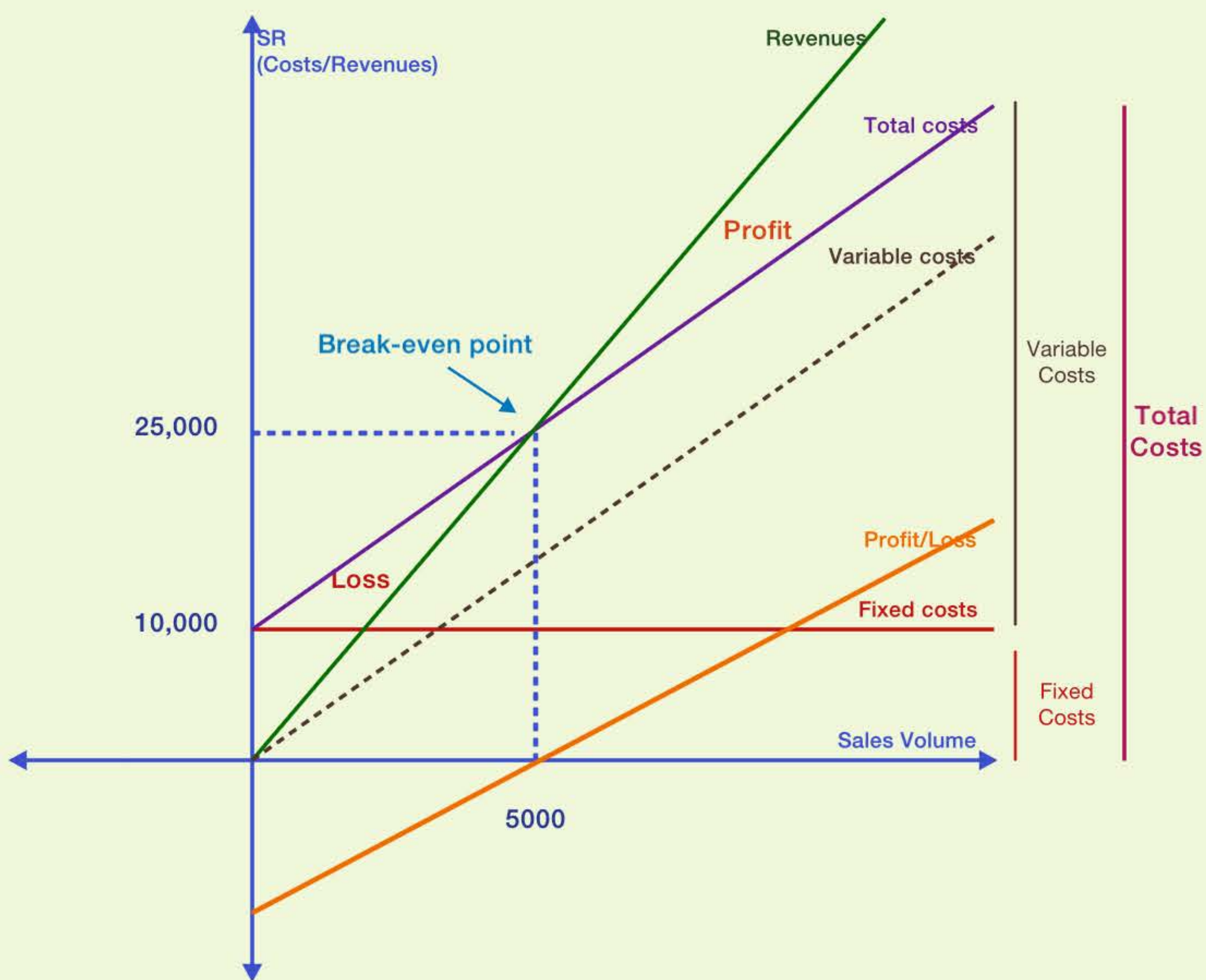
(Selling price per unit - V. Costs per unit)

In Dollars

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

Contribution margin per unit
Selling price per unit

CVP Chart



Profits Planning

Number of units sold
required to earn
a target profit

$$\frac{\text{Target profit} + \text{Fixed costs}}{\text{Contribution margin per unit}}$$

Sales revenue
required to earn
a target profit

$$\frac{\text{Target profit} + \text{Fixed costs}}{\text{Contribution margin ratio}}$$

Sales revenue
required to earn
a target percentage of profit

$$\frac{\text{Fixed costs}}{\text{Contribution margin} - \text{target profit percentage}}$$

**Effects of changes in costs and selling price
on
the break even point
(Sensitivity Analysis)**

Break even point can be
decreased
by

Decreasing

Total fixed
costs

V. costs
per unit

Increasing

Selling price
per unit