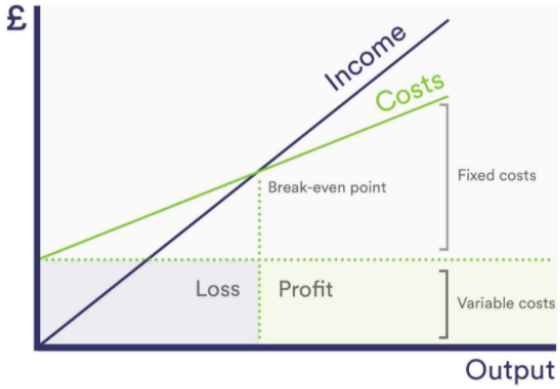
Break Even Point

Break-even point is where revenue is equal to costs. Once your sales revenue equals your fixed and variable costs, you have reached the break-even point. The company will report a net profit or loss of £0, and any sales beyond that point contribute to your net profit.



Key information:

Fixed costs - costs which are the same regardless of how many units are sold. Examples might include rent for buildings, computers and software, advertising.

Variable costs - are those which vary with output, such as wages, energy costs and materials used in production or in providing a service.

Contribution margin. The contribution margin is calculated by subtracting an item's variable costs from the selling price. For example, a product sells at £150 and the costs of labour and material to make it are £50 then the contribution margin is £100. This £100 is then used to cover the fixed costs. Any money left over is net profit.

Contribution margin ratio. This figure is usually expressed as a percentage. It is calculated by subtracting your fixed costs from your contribution margin. From there, you can determine what is required to reach break-even. This might mean raising prices and/or reducing the costs to produce a unit.

There are 2 ways of working out break-even point.

1) Divide fixed costs by the revenue per unit minus the variable cost per unit. The fixed costs are those that do not change regardless of units are sold. The revenue is the price for which you're selling the product minus the variable costs, like labour and materials.

Break-Even (units) = Fixed Costs ÷ (Contribution Cost)
[Contribution Cost =Price of Unit – Variable Costs per unit].

2) Divide fixed costs by the contribution margin. The contribution margin is calculated by subtracting variable costs from the price of a product. This amount is then used to cover the fixed costs.

Break-Even (Sales in £) = Fixed Costs ÷ Contribution Margin
[Contribution Margin = Price of Unit – Variable Costs per unit / Price of unit].

Examples

1) Fixed costs £100 ÷ (£10 revenue per unit - £5 variable cost per unit) = 20 units to break-even
2) Fixed costs £100 ÷ (£10 revenue per unit - £5 variable cost per unit / £10 revenue per unit) = £200 sales break-even

Profit earned following your break even. How to use a break-even analysis

A break-even analysis enables you to determine your break-even point. At the start-up of your business, you can ask yourself:

- Are prices too low or costs too high to reach break-even point in a reasonable amount of time?
- When can we expect to break even?
- Is the business sustainable as a result?

But Break Even is useful in other ways too:

- **Prices.** If the analysis shows that your current unit costs are too low for you to break even you might want to raise them. Check the cost of comparable items before you do so to ensure you don't price yourself out of the market.
- **Materials.** Is the cost of materials and labour unsustainable? Research how you can maintain a high level of quality whilst lowering your costs.
- **New products.** Before you launch a new product, take account of the new variable costs as well as the fixed costs.
- **Planning.** When you know exactly how many units you need to make, it becomes easier to set medium and long term goals.
- **Goals.** If you know how many units you need to sell to break even, it can be motivational.

Other related information

SEDG Resource – Cash Flow
SEDG Resource – Decide On A Bank Account
SEDG Resource – Profit & Loss

Need help?

You can contact at us and arrange a call at: sedg@tsdg.co.uk