

# BUDGETING

## Cost Classification

### 1. Budget

#### 1.1. Definition

- A budget is a numerical plan for an entity.

This unit looks at the ways in which management accountants can help management to **plan and control** costs and income.

#### 1.2. Structure

Budgets can be structured differently depending on the type of entity/organisation. The budget often mirrors the organisational structure of a business. For example if there is a marketing department there is often a marketing budget, if the sales department is split into East and West then there are often two sales budgets, East and West.

We can classify departments into:

- Cost centres

Areas of a business for which costs are incurred

- Production c.c – produce cost units
- Service c.c – e.g. canteen

- Profit centres

Area which earns revenue as well as incurs costs

- Ladies wear; M&S Kettering
- Food Hall; M&S Kettering

- Investment centres

Area with costs and revenues which also accounts for capital employed

- M&S Kettering

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➤ Responsibility centres

In the exam you will be asked to match a costs to a budget.

## **2. Cost classification**

There are various ways to consider costs

- 1) By function: manufacturing, distribution, admin
- 2) Whether direct or indirect: a direct cost relates directly to a specific product or service -> prime cost
- 3) Capital or Revenue
- 4) By behaviour: fixed, variable, semi variable and stepped

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## 3. Cost behaviour

Costs can be divided into four types according to how they behave as the level of activity increases.

- Variable: The cost increases. The cost per unit remains constant.
- Fixed: The cost does not change. The cost per unit falls.
- Semi variable: Composed of a fixed element and a variable element. Can be split into its component parts by the High Low method.
- Stepped: Fixed for a range of activity, then increases eg machinery rental.

### 3.1. High – Low Method

Revise the **high – low method** used in semi variable costs.

$$\text{Total cost} = \text{Total variable cost} + \text{Fixed cost}$$

Fixed costs are just that, fixed. Therefore any change in total cost with change in production output is a variable cost.

$$\text{Variable cost per unit} = \frac{\text{Change in total cost}}{\text{Change in level of activity}}$$

In order to use the high – low method you should always look at the highest and lowest levels of activity.

Once the variable cost per unit is known it can be substituted into the above equation to find fixed costs.

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## Example

Production units	Total cost £
10,000	75,000
12,000	90,000
14,000	98,000
15,000	100,000

Use the high – low method to calculate the variable cost per unit and the fixed cost.

## Solution

Highest level of activity	= 15,000 units	cost £100,000
Lowest level of activity	= 10,000 units	cost £75,000

$$\begin{aligned}\text{Variable cost per unit} &= \frac{\text{Change in total cost}}{\text{Change in level of activity}} \\ &= \frac{\underline{\pounds 100,000} - \underline{\pounds 75,000}}{15,000 - 10,000} \\ &= \frac{\underline{\pounds 25,000}}{5,000} = \pounds 5 \text{ per unit}\end{aligned}$$

$$\text{Total cost} = \text{Total variable cost} + \text{Fixed cost}$$

$$\pounds 100,000 = (\pounds 5 * 15,000) + \text{Fixed cost}$$

$$\pounds 100,000 = \pounds 75,000 + \text{Fixed cost}$$

$$\text{Fixed cost} = \pounds 25,000$$