

1

Introduction to cost and management accounting

1.1 Differences between financial and cost and management accounting

Users of accounting information Cost and management accounting is concerned with the provision of information to *managers* to help them in decision-making, planning and control, whereas financial accounting is concerned with the provision of information to *external users* outside the business.

Segments Financial accounting reports refer to the whole of the organization, whereas cost and management accounting focuses on small parts of the organization, for example individual products or activities.

Emphasis on the future Financial accounting reports what has happened in the past, whereas management accounting is concerned with future information as well as past information.

Legal requirements There is a legal requirement for public limited companies to produce annual financial accounts. Cost and management accounting is entirely optional and information should only be produced if the benefits from using the information exceed the cost of collecting it.

Frequency of reporting Financial accounts are published annually but management requires information quickly if they are to act on it. Therefore management accounting reports may be prepared at daily, weekly or monthly intervals.

Note that less detailed published financial accounts are normally prepared on a semi-annual basis

Approximations Financial accounting information must be accurate, otherwise external users would have little confidence in the content of the published accounts. Management requires information rapidly, and more approximate information which is speedily prepared is normally sufficient for management purposes.

1.2 Objectives of cost and management accounting

Cost and management accounting is concerned with:

- (a) Accumulating costs for *stock valuation* to meet the requirements of external reporting

- (b) Provision of financial information that will assist managers in their *decision-making* and planning activities
- (c) Provision of financial information to help managers *control* the activities for which they are responsible.

1.3 Classification of costs

A cost and management accounting system should be capable of supplying different financial information for different purposes. It is therefore important that costs are classified in various ways according to their nature and the information needs of management.

1.4 Classification of costs for stock valuation and profit measurement

If there are no opening stocks and production is 100 units and 80 units are sold, the matching concept requires that costs for 80 units are matched against sales of 80 units. The closing stock of 20 units must be valued and deducted from the production costs.

The *matching* concept requires that costs are matched with revenue for the purpose of calculating profits. Therefore closing stocks must be deducted from the production costs. In an organization which undertakes a wide range of different jobs, it will be necessary, for stock valuation purposes, to charge the costs to each individual job. The work in progress (WIP) and finished goods stock valuations are ascertained from the total of the individual job costs; the total of the costs attached to the incomplete jobs represents the WIP valuation, and the total of the completed jobs in the finished goods store represents the finished goods stock valuation.

Not all costs are attached to products and included in the stock valuation. Costs which are not included in the product costs, and as a result are treated as an expense in the period in which they are incurred, are classified as *period costs*. Those costs which are allocated to the product and included in the stock valuation are classified as *product costs*. Product costs are therefore matched against sales and classified as an expense in the period when the goods are sold. SSAP9 requires that, for stock valuation, only manufacturing costs should be classified as product costs and non-manufacturing costs should be classified as period costs.

Classification by direct and indirect costs

An example of direct cost is the wood which is used in making a chair. An example of an indirect cost is factory rent and rates

Direct costs are those costs which can be specifically traced to or identified with a particular product. The total of the direct costs is sometimes called *prime cost*. Indirect costs are those costs which cannot be identified with a particular product and which are incurred for the benefit of all products. Indirect expenses are also called *overheads*.

The objective for which the cost is required is called a *cost objective*. A cost objective might be a product, a sales territory, a department or anything for which one wants to measure the resources used. If a cost can be specifically allocated to a cost objective then it is a direct cost of the cost objective

The distinction between direct and indirect costs depends on the purposes for which the information is required. We have assumed in the previous paragraph that the objective is to allocate costs to products. For *decision-making* the focus might be on the profitability of sales territories. Therefore costs are also allocated to sales territories. Sales staff salaries and the rental of sales offices will be classified as direct expenses of the sales territories, whereas the apportionment of general advertising which is

applicable to *all* territories will be regarded as an indirect expense. For *control* purposes costs will be allocated to departments. The salary of a departmental supervisor will be a direct expense of the department, whereas the rent of the factory which is apportioned to departments will be an indirect expense.

1.5 Classification of costs for decision-making

Classification by relevant and irrelevant costs

Relevant costs are those future costs which will be changed by a decision, whereas irrelevant costs are those costs which will not be affected by a decision. Consider a situation where a company is considering the alternatives of either purchasing a component from an outside supplier or producing the component itself. The outside supplier has quoted a cost of £1000 for supplying the component. The estimated costs of producing the component are:

	£
Direct materials	200
Direct labour	300
Variable overhead	400
Fixed overhead	500
	1400

At first glance it appears that it is cheaper to purchase the component. However, it is assumed that the fixed overhead represents a share of factory overhead which would still continue if the component was not produced. In other words the fixed overhead expenditure will not be affected by the decision. It is assumed that the cost of direct labour, direct materials and variable overheads will be zero if the component is not produced. In other words these costs will be changed by the decision and are relevant to the decision. The relevant cost of producing the component is £900. The components should not therefore be purchased from the outside supplier.

Sunk costs

These are costs that have been created by a decision in the past and which cannot be changed by any decision that will be made in the future. Sunk costs are irrelevant for decision-making. For example the purchase price of materials which are already in stock represents a sunk cost. If the materials are used regularly then the decision to use materials on a particular job will necessitate their replacement. Future costs will increase by the cost of replacing the materials. Therefore the relevant cost of the materials is the replacement cost.

Opportunity costs

An opportunity cost is a cost which measures the opportunity which is lost or sacrificed when the choice of one course of action requires that an

The relevant cost for an alternative course of action will include additional labour and overhead costs plus the opportunity cost of the materials. Opportunity costs are therefore part of the relevant cost of choosing an alternative course of action

alternative course of action be given up. Consider the situation where materials are in stock but are not used regularly. The materials can either be sold or used on a particular contract. Hence the decision to allocate the materials to the contract will result in a loss of sale proceeds. The lost sale proceeds represent the opportunity cost of using the materials.

Classification by cost behaviour

This enables costs to be estimated at different output levels. Such information is important for decision-making - for example, expansion and contraction decisions.

Variable costs vary in direct proportion with the level of activity, so that doubling the level of activity will double the total variable cost. Hence, *total* variable costs are linear and *unit* variable cost is constant (see Figure 1.1). Examples of variable manufacturing costs include direct materials and power. These costs fluctuate with operating activity.

Fixed costs such as depreciation and rent remain constant over a wide range of activity for a specified period. Note that *total* fixed costs are constant at all levels of activity whereas *unit* fixed costs decrease proportionally with the level of activity (see Figure 1.1).

Linearity does not normally apply throughout the whole output range. For a discussion of non-linearity see Chapter 8.

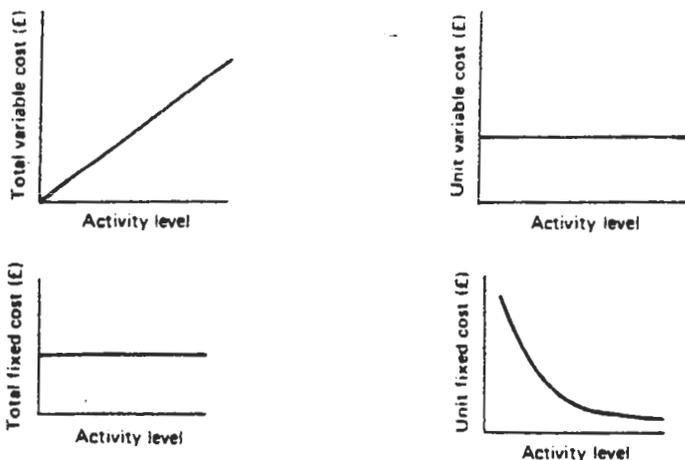


Figure 1.1 Variable costs and fixed costs

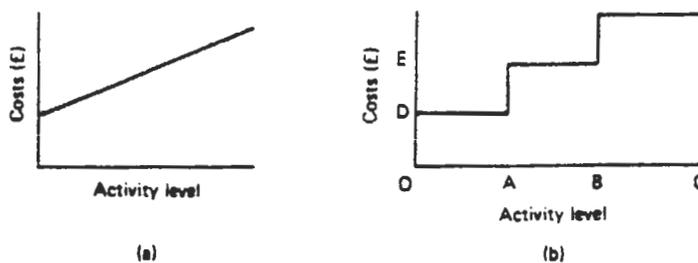


Figure 1.2 (a) Semi-variable and (b) semi-fixed costs

Semi-variable costs include both a fixed and a variable component (see Figure 1.2a). An example of a semi-variable cost is the maintenance of machinery which consists of planned fixed maintenance that is undertaken whatever the level of activity, and a variable element that is directly related to the level of activity.

Semi-fixed or step costs are fixed for a given level of activity but eventually increase by a constant amount at some critical point. Examples of semi-fixed costs include supervisory salaries and the hire of machinery. You can see from Figure 1.2b that costs of OD are incurred for output levels between O and A, OE between output levels A and B, and so on.

For a further discussion of semi-fixed costs see Chapter 8

1.6 Classification of costs for control

For control purposes costs should be allocated to the individual who is responsible for incurring them. This system of cost accumulation is known as *responsibility accounting* and is based on the recognition of individual areas of responsibility. These areas of responsibility are known as *responsibility centres*.

Controllable and non-controllable costs

Costs which are allocated to responsibility centres should be classified according to whether they are controllable or non-controllable by the manager of the responsibility centre. A controllable cost is defined as a cost which is reasonably subject to regulation by the manager of the responsibility centre. If this condition does not hold then the cost should be regarded as non-controllable. Labour and materials are normally controllable costs whereas apportioned costs such as factory rent and depreciation are non-controllable.

Typical examination questions

The following are some recent examination questions on cost classification:

- 1 'Costs may be classified in a variety of ways according to their nature and the information needs of management.' Explain and discuss this statement illustrating with examples of the classifications required for different purposes. (ICSA Part 4 Management Accounting) (22 marks)
- 2 Explain and show by drawing two separate diagrams what is meant by:
 - (a) A semi-variable cost
 - (b) A stepped fixed costand give one example of each. (CIMA Cost Accounting 1)
- 3 Cost must be classified to facilitate its arrangement in as flexible a manner as possible. Explain the meaning of the 'classification of cost' and give some practical examples of the ways in which cost is classified. (AAT) (7 marks)

APPENDIX

1 Direct materials cost

The cost of materials entering into and becoming constituent elements of a product or saleable service and which can be identified separately in product cost.

2 Direct labour cost

The cost of remuneration for employees' efforts and skills applied directly to a product or saleable service and which can be identified separately in product costs.

3 Direct expenses

Costs other than materials or labour, which can be identified in a specific product or saleable service.

4 Prime cost

Prime cost is the total of all direct cost which is defined as 'Expenditure which can be economically identified with a specific saleable cost unit'.

5 Indirect materials cost

Materials costs which are not charged directly to a product, e.g. coolants, cleaning materials.

6 Indirect labour cost

Labour costs which are not charged directly to a product, e.g. supervision.

7 Indirect expenses

Expenses which are not charged directly to a product, e.g. buildings insurance, water rates.

8 Overhead cost

Overhead is the total of all indirect cost defined as 'Expenditure on labour, materials or services which cannot be economically identified with a specific saleable cost unit. The synonymous term burden is in common use in the USA and in subsidiaries of American companies in the UK.'

Source: CIMA *Official Terminology* (inc. rev.): Cost defined/classified by element and by nature