Edexcel

A Level

Accounts

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Unit 02 - Section 08

Marginal costing and absorption costing

Chapter 10 – Marginal costing and absorption costing

INTRODUCTION

In costing, we measure the cost of all inputs and compare them with the value of the output of the business. There are two methods that are commonly used:

- absorption costing (also known as full costing)
- marginal costing.

The difference between the two is the way in which overheads are treated.

In absorption costing, the overheads (both fixed and variable) are included in the cost of production and the value of inventory. In marginal costing, only the variable overheads are included in inventory.

ABSORPTION COSTING (FULL COSTING)

In determining the unit cost, all direct and indirect production costs, whether variable or fixed, are included. If a business wants to set prices for its output in order to make a profit, the prices charged must cover all costs. Under this method, the full cost of production is absorbed into the unit cost.

Overheads are apportioned to the product cost. In the case of variable overheads, they are directly traceable to the product, while with fixed overheads, they need to be apportioned to the product. This can be expressed as:

Total product cost = direct cost + share of overheads

Advantages of absorption costing

• Aims to ensure that all overheads are covered by revenues received.

• A good base for 'cost plus' pricing (see above worked example).

• Normal method used for inventory valuation for financial accounts.

• Values inventory in accordance with International Accounting Standard (IAS) 2.

• Complies with the accruals concept, with revenues earned matched to costs for a particular period.

Disadvantages of absorption costing

• Overheads may be inaccurately estimated or apportioned.

• Under- or over-absorption of overheads may result from incorrectly apportioning or only partially absorbing the total overheads.

• Difficult and time-consuming to collect data from various cost centres.

MARGINAL COSTING

Before examining marginal costing in detail, we need to understand what is meant by the term 'contribution' (see Chapter 9). Contribution is an important concept in management accounting. It is defined as the difference between the selling price and the variable cost per unit:

Total contribution = sales revenue – total variable costs

The contribution is the amount contributed towards the fixed costs of a business and to its ultimate profit. The profit will be brought about when the fixed costs are covered and there is a surplus. Once we have calculated the amount of the contribution, we then deduct the fixed costs from the total contribution to arrive at a profit or loss. Therefore, the full equations are

Total contribution = sales revenue – total variable costs
Profit or loss = total contribution – fixed costs

Advantages of marginal costing

• No attempt to apportion the fixed costs to production.

• Profits not overstated owing to fixed costs being absorbed in closing inventory - fixed costs all written off in the time period to which they apply rather than being taken forward to the next time period via closing inventory.

• Useful for short-term decision-making-fixed costs have already been incurred and are sunk costs in the short term.

• Complies with the prudence concept.

Disadvantages of marginal costing

• Current year's losses cannot arise if the products are manufactured for later periods.

• Less significant for firms with few variable costs but

• a large proportion of fixed costs; for example, where production is automated.

• Use of marginal costing in processing leads to low prices when demands are low- customers may expect this all the time.

• Profit more consistent under absorption costing Inventory valuation at the marginal cost not allowed under IAS 2.

• Not particularly suited to long-term decision-making on, for example, prices - all costs need to be considered.

THE VALUATION OF INVENTORY USING MARGINAL COSTING AND ABSORPTION COSTING

A significant difference between the two costing methods is how inventory is valued.

• Marginal costing values inventory at the total variable cost of production - direct material, direct labour, direct expenses and variable production overheads. It excludes fixed costs.

• Absorption costing values inventory at the full production cost, it includes both variable and fixed costs.

MARGINAL COSTING IN DECISION MAKING

In order to best use costing information, a business must compare the various proposals made to it by its customers. We will see that the determination of a profit or loss is irrelevant in marginal costing. However, what is relevant is if there is a positive contribution. If there is a negative contribution, the proposal must be rejected.

This section examines a number of different decisions a business might need to take. In all cases, some form of costing is required to help in making the decision.

The acceptance or refusal of new orders

For many businesses, especially in manufacturing, orders for their products are negotiated with the customer, and the selling prices are often different between customers. A business must be able to work out whether it would be profitable to accept an order that has a different (e.g. lower) price from the normal price charged. It is not as simple as just refusing an order if the selling price is below the standard price.

Using the contribution formula (selling price - variable cost), if the order results in a positive contribution, the order should be accepted in the short term. The contribution will increase the profit (or reduce the loss). If the contribution is negative, the order should be rejected as it will decrease profit (or increase the loss).

In general, an order at below the normal selling price should only be accepted in the short term and when:

- there is spare capacity within the business and
- it would not result in the refusal of orders at the normal price
- the customer is made aware that this is a special one-off price and might not be available in the future
- existing customers are not made aware of this, as they might demand a reduction in price, and neither does the customer enjoying the special price sell the goods on to its own customers at a lower price than the standard price.

Make or buy decisions

A business may be able to purchase a component that it normally makes itself. Therefore, the business needs to be able to calculate whether it should make or buy the component. To do this, it should examine the marginal costs and revenues.

The continuation/discontinuation of a service or manufacture of a product

When a business is deciding whether it should stop supplying a product or service, it is effectively deciding whether a department should be closed. Again, it is the marginal costs that are considered when making the decision.

Limiting factors

It is not only demand in the marketplace that limits the amount produced but also the availability, or lack, of resources such as skilled labour, raw materials, time available on certain machinery and working or storage space.

What happens when there is a shortage of such resources? Under these circumstances the answer cannot be based simply on a positive contribution. Rather, a ranking system is required, based on the usage of the scarce factor, so that the contribution is maximised.

The method used is to isolate the scarce resource and recalculate the contribution per unit of the scarce factor.

STATEMENTS OF PROFIT OR LOSS AND OTHER COMPREHENSIVE INCOME USING MARGINAL COSTING AND ABSORPTION COSTING

This chapter has so far discussed two methods of costing, noting that each has its own advantages and disadvantages. The following section examines the differences between the two methods in the pricing of a product and the reported profit or loss for the year.

SUBJECT VOCABULARY

absorption costing a method of absorbing factory overheads into the total production cost of a unit of production
limiting factor a factor that effectively limits the output of a business
marginal costing a costing method based on the variable costs of production
sunk cost a cost that has already been incurred