

Chapter 3 revision notes

Financial statements of limited companies – profit and loss account

What does the profit and loss account tell us?

Profit and loss account and income statement are two terms usually used to mean the same thing.

The profit and loss account of a private limited company or a public limited company should be able to tell us all about the results of the company's activities over specified accounting periods. The profit and loss account shows us what revenues have been generated and what costs incurred in generating those revenues, and therefore the increase or decrease in wealth of the business during the period.

The same note of caution that should be exercised in the analysis of balance sheet information, applies to profit and loss account information. The profit and loss account is an historical statement and so it does not tell us anything about the ability of the business to sustain or improve upon its performance over subsequent periods.

It is often said of profit and loss statements, as well as balance sheets, that the value of every item included in them is a matter of opinion. This is due not only because of the alternative stock valuation and depreciation methods, but because of the subjective assessment of whether the settlement of a customer account is doubtful or not, and the sometimes imprecise evaluation of accruals and provisions.

What is profit?

The profit (or loss) of an entity may be considered from two perspectives: by considering the change in wealth between the start and end of an accounting period; by deducting total costs from total revenues (sales) generated during the accounting period.

The first perspective, which is not suggested as a method used to calculate profit in practice, compares the balance sheet of an entity at the start of an accounting period with the balance sheet at the end of the accounting period. The values of each of the components of the balance sheet may have changed. For example, levels of stocks, debtors, creditors, cash, fixed assets, and accruals may have changed during an accounting period. The net value of the assets and liabilities in the balance sheet represents the capital, or equity, or the wealth of the business at a point in time. The change in wealth over an accounting period between the beginning and end of the accounting period is the profit or loss for the period reflected in the retained earnings category in the balance sheet.

Profit (or loss) considered in this way can be represented in the equation

$$\text{total assets (TA)} - \text{total liabilities (TL)} = \text{equity (E)} + \text{profit (P)}$$

The second perspective considers the profit and loss account by summarising all the trading and non-trading transactions that have occurred during an accounting period. This is the method used in practice to calculate the profit or loss for an accounting period. This summary, or profit and loss account, gives the same result as that derived by simply looking at the change in wealth between the beginning and end of the accounting period. It is the same because all the transactions relating to items contained in the profit and loss account are also all reflected in some way within one or more balance sheet categories. For example, sales are reflected in debtors, expenses are reflected in creditors, cost of goods that have been sold came out of stocks.

$$\text{profit (P)} = \text{total revenue (TR)} - \text{total costs (TC)}$$

Structure of the profit and loss account

Categories within the profit and loss account are classified into turnover, cost of sales, other operating costs, other operating income, net interest, taxation, and dividends.

The total revenue of a business is generated from the provision of goods or services and may be, for example, in the form of:

- ◆ sales (goods)
- ◆ interest received (on loans)

- ◆ rents (from property)
- ◆ subscriptions (to TV channels)
- ◆ fees (professions)
- ◆ royalties (books, CDs)

The total costs of a business include the expenditure incurred as a result of the generation of revenue. The total costs of a business include, for example:

- ◆ costs of goods purchased for re-sale
- ◆ costs of manufacturing goods for sale
- ◆ transport and distribution costs
- ◆ advertising
- ◆ promotion
- ◆ insurance
- ◆ costs of the 'consumption' of fixed assets over their useful lives (depreciation)
- ◆ wages and salaries
- ◆ interest paid
- ◆ stationery costs
- ◆ photocopy costs
- ◆ communications costs
- ◆ electricit
- ◆ water and effluent costs
- ◆ travel expenses
- ◆ entertaining expenses
- ◆ postage

Each of the above examples of revenues and costs appears itself as a separate heading, or is grouped within one or other of the other main headings within the profit and loss account, which are as follows:

- ◆ turnover
- ◆ cost of sales (COS) includes:
 - costs of raw materials stocks
 - costs of inward-bound freight paid by the compan
 - packaging costs
 - direct production salaries and wage
 - production expenses, including depreciation of trading-related fixed assets
- ◆ gross margin (or gross profit)
- ◆ other operating expenses: distribution costs and administrative expenses

Distribution costs of selling and delivering goods and services include:

- advertising
- market research
- promotion
- costs of the sales department
- outbound freight costs
- delivery fleet costs
- costs of the warehouse and goods outward department

Administrative expenses effectively include all costs not included in cost of sales, distribution costs, and financial costs, and include:

- costs of service departments such as:
 - finance
 - human resources
 - research and development
 - engineering
- telephone costs
- computer costs
- amortised goodwill

- ◆ other operating income
- ◆ operating profit (OP)
 - OP = turnover - COS - other operating expenses + other operating income**
- ◆ income from other fixed asset investments
- ◆ profit before interest and tax (PBIT)
 - PBIT = OP + income from other fixed asset investments**
- ◆ net interest
- ◆ profit before tax (PBT)
 - PBT = PBIT +/- net interest**
- ◆ tax on profit on ordinary activities
- ◆ profit after tax (PAT)
 - PAT = PBT - corporation tax**
- ◆ dividends
- ◆ retained profit for the financial year

Profit and loss account formats

There are four alternative profit and loss account formats permitted by the Companies Acts 1985/1989, and in line with the provisions of FRS 3.

In formats 1 and 3, expenses are classified by function, for example, cost of sales, distribution costs, administrative expenses.

In formats 2 and 4, expenses are classified by type, for example, raw materials and consumables, staff costs, and depreciation. Formats 3 and 4 are rarely used.

Format 1 is seen more frequently than format 2, and is the format most widely used by the majority of UK limited companies.

FRS 3, Reporting Financial Performance, contains supplementary provisions relating to the format of the profit and loss account, in addition to the four alternative formats allowed in the Companies Act. One of the main provisions of FRS 3 relates to the separate identification within the profit and loss account of turnover and operating profit relating to continuing operations and discontinued operations.

The other important provisions of FRS 3 relate to the treatment of:

- ◆ extraordinary items
- ◆ exceptional items
- ◆ earnings per share
- ◆ reconciliation of the movement in shareholders' funds

Profit and loss and the balance sheet

The profit and loss account and the balance sheet are linked in two ways:

- ◆ the cumulative balance on the profit and loss account is reflected within the equity, or the shareholders' funds category of the balance sheet representing the increase in the wealth of the business
- ◆ some of the items contained in the profit and loss account are also all reflected in some way within one or more balance sheet categories

The balance sheet at the end of a period may be derived from considering each element in the profit and loss account for the period, and movements between accounts within the balance sheet:

- ◆ sales to customers on credit are the starting point for the profit and loss account, which also increase debtors
- ◆ cash received from customers increases cash and reduces debtors
- ◆ purchases of goods on credit for resale increase stock and increase creditors
- ◆ cash paid to creditors reduces cash and reduces creditors
- ◆ stock sold reduces stock and is a cost to the profit and loss account
- ◆ depreciation of fixed assets increases the depreciation provision and is a cost to the profit and loss account
- ◆ payments for expenses reduce cash and are a cost to the profit and loss account
- ◆ payments for additions to fixed assets increase fixed assets and reduce cash

- ◆ issues of ordinary shares increase equity capital and increase cash

Adjusting entries, used to prepare the profit and loss account, are also reflected in the balance sheet:

- ◆ accruals
- ◆ prepayments
- ◆ depreciation, the depreciation provision, and fixed assets
- ◆ valuation of stocks, and the cost of sales
- ◆ bad and doubtful debts, and trade debtors

Valuation of the various items within the balance sheet in accordance with the Companies Acts 1985/1989, accounting concepts and standards, has a significant impact on the level of profit (or loss) earned by a business during an accounting period.

Depreciation

Depreciation, the total cost of using a fixed asset over its life, may be defined as the original investment less a portion of its cost recovered (its residual value) at the end of the asset's useful life.

There are five main depreciation methods:

- ◆ straight line
- ◆ reducing balance
- ◆ sum of the digits
- ◆ activity rate
- ◆ double declining

The amount of depreciation calculated for an accounting period is charged as a cost in the profit and loss account, the depreciation charge, for that period. A corresponding amount is also reflected in an account in the balance sheet, the cumulative depreciation provision account, the effect of which is to reduce the original cost of the fixed assets at the end of each accounting period.

Cost of sales

A number of alternative methods may be used to determine the cost of stock, and therefore the cost of sales:

- ◆ first in first out (FIFO)
- ◆ last in first out (LIFO)
- ◆ average cost
- ◆ market value
- ◆ retail method
- ◆ specific identification
- ◆ next in first out (NIFO)
- ◆ base cost

The first four methods of valuation are among the most commonly known, with FIFO being by far the most popular. FIFO (first in first out, where the oldest items of stock, or their costs, are assumed to be the first to be used) assumes that costs are matched with the physical flow of stock.

Bad and doubtful debts

When goods or services are sold to a customer on credit, most customers pay in accordance with their agreed terms, whether it is for example within ten days, one month, or two months of invoice date. Unfortunately, there may sometimes be slow payers; there may be customers, for a variety of reasons, from whom payment will never be received. In the event of an invoice not being settled at all, as soon as this is known with certainty, the debt is deemed to be a 'bad debt' and must be written off. The effect of this on the profit and loss account is not to reduce sales. It is a cost charged to the bad debt account. The double entry is to the debtor account to cancel the appropriate account receivable.

At the end of each accounting period debtors that still remain unpaid, falling outside their normal credit terms, must be reviewed as to the likelihood of their not being paid either in full or not at all. If non-payment is certain then the debt must be written off. If there is uncertainty as to whether or not a debt will be settled then a provision for doubtful debts may be made on a specific basis, based on knowledge of

particular customers, or on a general basis, say as a percentage total debtors, based on past trading experience.

An amount in respect of estimated doubtful debts that is charged to an account in the profit and loss account, the bad and doubtful debt account, is also reflected as a credit to an account in the balance sheet, the doubtful debt provision. The effect of the provision for doubtful debts is to reduce the value of the debtors in the balance sheet but without permanently eliminating any accounts receivable. Debtors that are deemed to be bad debts are actually written off (charged as a cost to the profit and loss account) and the debts are permanently eliminated from accounts receivable.

Profit and loss and cash flow

The profit (or loss) earned during an accounting period is not the same as the cash flow generated during the period, but the links between the two measures may be quantified and reconciled.

The profit or loss made by a business during an accounting period differs from the net cash inflows and outflows during the period because of:

- ◆ cash expected to be paid or received relating to transactions during a period may in fact not be paid or received until the following or subsequent periods
- ◆ cash may have been paid or received in advance of goods or services being received or provided and invoices being received or issued
- ◆ cash may have been paid or received that related to non-manufacturing, non-trading, or non-profit items – for example, cash received for shares in the business, and cash paid out on capital expenditure
- ◆ profit will have been calculated to include the impact of non-cash items such as depreciation

Profit and loss account limitations

There are limitations to the profit and loss account, which like the balance sheet is an historical document, primarily due to the impact on costs of the employment of alternative methods of valuation of assets and liabilities.