Balance Sheets

The Purpose of a Statement of Financial Position

A company's statement of financial position (balance sheet) is a snapshot of its overall financial position at a particular moment in time. The construction of the statement of financial position is underpinned by the accounting equation assets equals liabilities plus equity and its presentation is split into two halves that must always balance each other exactly. The key information that it provides to shareholders, customers and other interested parties is what the company owns (its assets), what the company owes to others (its liabilities or creditors) and the extent to which shareholders are providing finance to the company (the equity).

Note: the Revised Accounting Standards of the International Accounting Standards Board (IAS 1: The Presentation of Financial Statements) provide new terminology for the term balance sheet which is now the Statement of Financial Position.

The statement of financial position should reflect all of the reporting company's assets and liabilities but, over the years, companies and their advisers often developed creative structures to enable items to remain off-balance sheet rather than on-balance sheet. The International Accounting Standards Board (IASB) and the adoption of its accounting standards should ensure that everything that should appear on the statement of financial position is categorised as such, and those items that are legitimately not assets or liabilities of the company should remain off-balance sheet (off the statement of financial position).

The statement of financial position is shown in a format prescribed by the Companies Acts for the statement of financial positions of plcs.

The Structure of a Statement of Financial Position

Assets

An asset is anything that is owned and controlled by the company and confers the right to future economic benefits. Statement of financial position assets are categorised as either non-current assets or current assets.

Non-current assets are those in long-term, continuing use by the company. They represent the major investments from which the company hopes to make money. Non-current assets are categorised as:

- Tangible, or
- Intangible.

A company's tangible non-current assets are those that have physical substance, such as land and buildings and plant and machinery. Tangible non-current assets are initially recorded in the statement of financial position at their actual cost or book value. However, in order to reflect the fact that the asset will generate benefits for the company over several accounting periods, not just in the accounting period in which it is purchased, all tangible non-current assets with a limited economic life are required to be depreciated.

IAS 16 allows a choice of accounting. Under the cost model, the asset continues to be carried at cost. Under the alternative revaluation model the asset can be carried at a revalued amount, with revaluation required to be carried out at regular intervals.

Intangible non-current assets are those assets that, although without physical substance, can be separately identified and are capable of being sold. Ownership of an intangible non-current asset confers rights known as intellectual property. These rights give a company a competitive advantage over its peers and commonly include brand names, patents, trademarks, capitalised development costs and purchased goodwill.

Purchased goodwill arises when the consideration, or price, paid by an acquiring company for a target company exceeds the fair value of the target company's separable, or individually identifiable, net assets. This is not necessarily the same as the book, or statement of financial position, value of these net assets:

Purchased Goodwill = (Price Paid for Company – Fair Value of Separable Net Tangible and Intangible Assets)

Purchased goodwill is capitalised and included in the statement of financial position. Once capitalised, it cannot be revalued.

Fixed-asset investments are typically long-term investments held in other companies. They are initially recorded in the statement of financial position at cost, and then subsequently revalued (or markedto-market) at their fair value at each period end. Any gains or losses are reflected directly in the equity section of the statement of financial position and disclosed in the statement of changes in equity. However, if they suffer an impairment in value, then such a fall is charged to the statement of profit and loss.

If the shareholding represents at least 20% of the issued share capital of the company in which the investment is held, or if the investing company exercises significant influence over the management policies of the other, then the investing company is subject to additional reporting requirements.

Current assets are those assets purchased with the intention of resale or conversion into cash, usually within a 12-month period. They include stocks (or inventories) of finished goods and work in progress, the debtor balances that arise from the company providing its customers with credit (trade receivables) and any short-term investments held. Current assets also include cash balances held by the company and prepayments. Prepayments are simply when the company has prepaid an expense, as illustrated by the following example:

ABC plc draws up its statement of financial position on 31 December each year. Just prior to the year end ABC pays £25,000 to its landlord for the next three months' rental on its offices (to the end of March in the next calendar year).
This £25,000 is not an expense for the current year – it represents a prepayment towards the following year's expenses and is, therefore, shown as a prepayment within current assets in ABC's statement of financial position.

Current assets are listed in the statement of financial position in ascending order of liquidity, and appear in the statement of financial position at the lower of cost or net realisable value (NRV).

Net Realisable Value (NRV)

NRV is defined as the estimated selling price of each stock item, less any further costs to be incurred in both bringing the stock, work in progress or raw materials into a saleable condition, including any associated selling and marketing costs.

Therefore, if for reasons such as obsolescence the NRV of the stock has fallen below cost, the item must be written down to this NRV for statement of financial position purposes.

Determining what constitutes cost should be relatively straightforward, unless the company purchases vast quantities of stock in different batches throughout its accounting period, making the identification of individual items or lines of stock particularly difficult when attempting to match sales against purchases.

In such instances, cost can be determined by making an assumption about the way stock flows through the business. Companies can account for their stock on one of three bases:

- **First in first out (FIFO)** – FIFO assumes that the stock first purchased by the business is the first to be sold. Therefore, the value of the closing stock at the end of the accounting period is given by the cost of the most recent stock purchased. This produces a closing stock figure in the statement of financial position that closely resembles the current market value of the stock. It also results in the highest reported profit figure of the three bases in times of rising prices.
- **Last in first out (LIFO)** – LIFO assumes that the most recent stock purchased by the company is the first to be sold. IAS 2 does not permit the use of LIFO since, in times of rising prices, the statement of financial position value of closing stock will be that of the stock first purchased and will therefore not resemble current prices. It also produces the lowest reported profit figure of the three bases.
- **Weighted average cost (AVCO)** – AVCO values closing stock at the weighted average cost of stock purchased throughout the accounting period. This method produces a closing stock figure and a reported profit between that of the FIFO and LIFO methods.

Depreciation and Amortisation

Depreciation is applied to tangible non-current assets, such as plant and machinery. An annual depreciation charge is made in the year's statement of profit and loss. The depreciation charge allocates the fall in the book value of the asset over its useful economic life. This requirement does not, however, apply to freehold land and non-current asset investments which, by not having a limited economic life, are not usually depreciated.

By reducing the book value of tangible non-current assets over their useful economic lives, depreciation matches the cost of the asset against the periods from which the company benefits from its use.

On occasion, tangible assets such as land are not depreciated but periodically revalued. This is done on the basis of providing the user of the accounts with a truer and fairer view of the assets, or capital, employed by the company. To preserve the accounting equation (total assets = equity + liabilities), the increase in the asset's value arising on revaluation is transferred to a revaluation reserve, which forms part of the equity.

Closely linked to the idea of depreciating the value of a tangible asset over its useful economic life is the potential need for intangible assets to be amortised over their useful economic lives. **Amortisation**, like depreciation, is simply a book entry whose impact is felt in the company's reported income and financial position but which does not impact its cash position.

Liabilities

A liability is an obligation to transfer future economic benefits as a result of past transactions or events; more simply, it could be described as money owed to someone else. Liabilities are categorised according to whether they are to be paid within, or after more than, one year.

Non-current liabilities comprises the company's borrowing not repayable within the next 12 months. This could include bond issues as well as longer-term bank borrowing.

In addition, there is a separate sub-heading for those liabilities that have resulted from past events or transactions and for which there is an obligation to make a payment, but the exact amount or timing of the expenditure has yet to be established. These are commonly referred to as provisions. Provisions may arise as a result of the company undergoing a restructuring for example.

Given the uncertainty surrounding the extent of such liabilities, companies are required to create a realistic and prudent estimate of the monetary amount of the obligation, once they are committed to taking a certain course of action.

Current liabilities includes the amount the company owes to its suppliers, or trade payables, as a result of buying goods and/or services on credit, any bank overdraft, and any other payables such as tax, that are due within 12 months of the statement of financial position.

Equity

Equity is referred to in a number of ways, such as shareholders' funds, owners' equity or capital. Equity usually consists of three sub-elements: share capital, capital reserves and revenue reserves. Additionally, when group accounts are presented, there may be minority interests within the group equity figure.

- **Authorised and issued share capital** – as a company is created, the share capital with which the company proposes to be registered, and the division of that share capital into shares of a fixed amount, is decided upon. This capital amount is known as the authorised share capital and acts as a ceiling on the amount of shares that can be issued, although it can subsequently be increased by the passing of an ordinary resolution at a company meeting. The issued share capital is the actual number of shares that are in issue at any point in time.
- **Share capital** – this is the nominal value of equity and preference share capital the company has in issue and has called up. This may differ from the amount of share capital the company is authorised to issue as contained in its constitutional documents. The company may have only called up some of its share capital and may not have issued all of the share capital that is authorised. Under the Companies Act 2006, the requirement to have an authorised share capital has been removed. Instead, directors can be authorised by the Articles or by a resolution to allot shares up to a maximum amount and for a limited period.
- **Capital reserves** – capital reserves include the revaluation reserve, share premium reserve and capital redemption reserve.
    - The **revaluation reserve** arises from the upward revaluation of fixed assets, both tangible and intangible.
    - The **share premium reserve** arises from issuing shares at a price above their nominal value.
    - The **capital redemption reserve** is created when a company redeems, or buys back, its shares and makes a transfer from its revenue reserves to its capital reserves, equal to the nominal value of the shares redeemed.

  Capital reserves are not distributable to the company's shareholders as apart from forming part of the company's capital base, they represent unrealised profits, though they can be converted into a bonus issue of ordinary shares.

- **Retained earnings** – retained earnings is a revenue reserve and represents the accumulation of the company's distributable profits that have not been distributed to the company's shareholders as dividends, or transferred to a capital reserve, but have been retained in the

business. Retained earnings should not be confused with the amount of cash the company holds, which is sometimes simply referred to as the notion that 'profit is not cash'.

- **Minority interests** – these arise when a parent company controls one or more subsidiary companies, but does not own all of the share capital. The equity attributable to the remaining shareholders is the minority interests and this is reflected in the statement of financial position within the equity section.

In total, equity is the sum of the called-up share capital, all of the capital reserves and the revenue reserves:

Equity = Share Capital + Reserves

The Relevance of the Statement of Financial Position to Investors

Prospective investors will make use of all of a company's accounts and financial statements to assess the viability of investing in a business. In addition, financial institutions such as commercial banks, credit ratings agencies and investment banks will also pay particular attention to a company's statement of financial position, in order to decide whether to provide working capital in the form of a revolving credit facility or overdraft, or when evaluating whether to facilitate the issuance of debt instruments such as debentures to finance expansion and other significant expenditures.

As part of the exercise of due diligence by any potential investor in a solicitation for loan stock or bonds by a company, the statement of financial position will be one of the key documents to assess the overall financial soundness of a potential purchase of such securities.

In addition to the specific information made available by a company's statement of financial position, IAS 1 requires companies to present a separate Statement of Changes in Equity (SOCE) as one of the components of financial statements. Companies are obliged to provide details of transactions with owners, showing separately contributions by and distributions to owners and changes in ownership interests in subsidiaries that do not result in a loss of control. For small- and medium-size enterprises (SMEs), the SOCE should show all changes in equity including:

- Total comprehensive income
- Owners' investments
- Dividends
- Owners' withdrawals of capital
- Treasury share transactions.

A vital consideration for any investor or lender is the relative size of shareholders' equity compared to debt, as this provides insight about how a company is financing its operations. Large short-term liabilities, for example, increase a company's sensitivity to interest rate changes and also influence the credit rating which is granted to a company by a credit rating agency. Credit rating agencies will in fact be one of the principal users of corporate statement of financial position information, and the ratings which are provided to the investment community will have a major impact on to what extent the company is perceived as a credit risk and consequently the terms that need to be provided by the company (ie, the amount of the coupon payment) in a bond offering.

The assets portion of the statement of financial position can contain large amounts of intangible assets. Assets such as goodwill are also worth close examination by investors since, if they become

disproportionate when compared to other current and long-term assets, this could be a warning that there are other issues which require closer attention.

The notes (or footnotes) to the statement of financial position and to the other financial statements are part of the financial statements. The notes inform the readers about such things as significant accounting policies, commitments made by the company, and potential liabilities and potential losses. The notes contain information that is critical to properly understanding and analysing a company's financial statements.

Some of the more pertinent details that an investor would want to examine in the notes to the financial statements are the following:

- Companies are required to disclose the accounting policies that have been used to present the company's financial condition and results. Disclosure of any items which are extraordinary will take on special significance. The comments will also provide insight into the quality of judgements of the key management team, including any specific comments from the managing director/chief executive officer as well as the chairman of the board.
- Footnotes will provide detailed information about the company's current and deferred income taxes.
- Footnotes need to disclose the company's pension plans and other retirement or post-employment benefit programmes. The notes contain specific information about the assets and costs of these programmes, and indicate whether the plans are adequately funded.
- The notes also contain information about stock options granted to officers and employees, including the method of accounting for stock-based compensation and the effect of the method on reported results.

All of these items, as well as the statement from the chairman of the board will be scrutinised carefully by the investment community to determine how willing they are to purchase securities from the issuer, and on what terms such securities should be offered.

Additionally, investors will want to examine the external auditor's report and any comments or qualifications to the financial statements, as these could, if they are not routine, be a warning that there may be deeper issues that require further investigation.

Trend Analysis

Ratios which measure liquidity, asset turnover and dividend cover are based upon quantitative information about a company which is found in its financial statements, including the statement of financial position.

Over and beyond ratio analysis, there is considerable benefit to be gained from what can be called trend analysis. In this case the current statement of financial position, for example, is compared to those for the preceding years, often five, with a view to establishing the trends of the data and to provide early indicators for investors to changes which might be a cause for concern.

One technique for examining trends is known as common-size analysis. Common-size analysis (also called vertical analysis) expresses each line item on a single year's statement of financial position as a percentage of one line item, which is referred to as a base amount. The base amount for the statement of financial position is usually total assets (which is the same number as total liabilities plus stockholders' equity) and for the statement of profit and loss it is usually net sales or revenues.

By comparing two or more years of common-size statements, changes in the mixture of assets, liabilities and equity become evident.

The common-size statement is a valuable tool for identifying changes in the way in which assets employed are financed and the breakdown of the assets employed.

Statement of Financial Position Summary for XYZ plc					
	2012	2013	2014	2015	2016
	£000s	£000s	£000s	£000s	£000s
Assets					
Non-current assets	400	500	520	600	550
Current assets	420	460	530	660	650
Total	820	960	1050	1260	1200
Financing					
Share capital	200	200	210	300	400
Capital reserves	120	130	160	200	220
Retained earnings	216	340	300	310	330
Loans	50	150	150	150	50
Current liabilities	234	140	230	300	200
Total	820	960	1050	1260	1200

The table above shows a summary statement of financial position for XYZ plc as of five year-ends. It provides a high-level overview of the financial state of the company but the interpretation of the numbers in each column is facilitated by a comparison of each row of the table to the two base amounts of the total for each year of the assets and the total for each year of the liabilities. In this manner the breakdown or composition of the assets and liabilities and financing becomes more readily apparent.

For example, we can see that in 2013 XYZ plc took an additional £100,000 loan and that in 2016 the loan was paid back, essentially through the issue of new share capital. It can also be more clearly seen, in the common-size statement which is calculated from the previous table, and which follows, that the company is experiencing a steady decline in the ratio of non-current assets to the total assets throughout the period.

Common-Size Statement of Financial Position Summary for XYZ plc					
	2012	2013	2014	2015	2016
	Percentages				
Assets					
Non-current assets	49%	52%	50%	48%	46%
Current assets	51%	48%	50%	52%	54%
Total	100%	100%	100%	100%	100%
Financing					
Share capital	24%	21%	20%	24%	33%
Capital reserves	15%	14%	15%	16%	18%
Retained earnings	26%	35%	29%	25%	28%
Loans	6%	16%	14%	12%	4%
Current liabilities	29%	15%	22%	24%	17%
Total	100%	100%	100%	100%	100%

In 2012, the company's loan amount of £50,000 represented just 6% of its liabilities/financing, whereas after taking the loan of £100,000 in 2013, this ratio jumped to 16% of the company's liabilities. When the £100,000 of new shares were issued, and added to the share capital of the company in 2016, the proceeds were used to pay back the loan and it can be seen that the ratio of loans to total financings has dropped back to 4%, indicating that the coverage has less leverage or gearing on its statement of financial position.

In summary, the trends that are discernible using the above approach will reveal what is happening beneath the surface of the day-to-day operations of a company. By performing such an analysis it is possible to have much greater insight into a company's financial position than is accessible from consideration of just one year's statement of profit and loss, useful as that is.

Statements of Profit and Loss

The Purpose of a Statement of Profit and Loss

The statement of profit and loss (income statement) summarises the amount of income earned by a company, and the expenditure incurred by that company, over the accounting period. The purpose of the statement of profit and loss is to detail how much profit (or loss) has been earned as a result of the company's ongoing operations. As a result, the statement of profit and loss is often referred to as the profit and loss account. However, since the statement of profit and loss is constructed on an accruals basis, rather than a cash basis, profit must not be confused with the company's cash position.

In accordance with the statement of financial position, the format of the statement of profit and loss is governed by the Companies Acts and its construction is underpinned by accounting standards and industry best practice.

Additionally, IAS 1 has brought about changes to the statement of profit and loss. The amendment requires companies to present other comprehensive income items such as revaluation gains and losses,

and actuarial gains and losses, as well as the usual statement of profit and loss items, on the face of the primary financial statements. IAS 1 allows this information to be presented either in one statement of comprehensive income or in two separate statements: a statement of profit and loss and a statement of comprehensive income.

The amount of profit earned over an accounting period has an impact on the company's ability to pay dividends and how much can be retained to finance the growth of the business from internal resources.

There are different ways of presenting a statement of profit and loss and there is no uniform agreement as to which is the preferred method. In essence the two-column approach, which is shown in the example statement of profit and loss for XYZ plc on the next page, is the most common format, although there are variations as to exactly the format followed.

In the following example, the statement shows the most recent set of results for fiscal year 2016, and alongside, for comparative purposes and to make the data more useful for investors who are looking at the underlying trends of the business (as discussed later in this section), the comparable figures for the year ending 2015 are shown. Also presented in this format are, for each line item, the percentage of the amount shown in relation to the total revenue or turnover of the business, which enables the reader to discern any notable shifts or changes in the broad categories of expenditures and other variables displayed.

Statement of Profit and Loss for XYZ plc as at 31 December 2016				
All figures are in £000s except per share earnings				
	2015	% of revenue	2016	% of revenue
Revenue	65,690		66,478	
Cost of sales	(46,310)		(47,375)	
Gross profit	19,380	30%	19,103	29%
Distribution costs	(8,090)	12%		13%
Administration	(7,800)	12%	(8,333)	12%
Loss on disposal of plant	(1,309)	2%	(7,956)	0%
Operating costs	(17,199)	26%	(16,289)	25%
Operating profit	2,181	3%	2,814	4%
Financial Income				
Income from affiliate	206		200	
Interest receivable	350		123	
Interest payable	(1,530)		(1,561)	
Profit before taxation	1,207	2%	1,577	2%
Taxation	(422)	35%	(522)	35%
Profit after taxation	785	1%	1,025	2%
Preference share dividends	(124)		(126)	
Profit attributable to the group	661		898	
Dividends				
Ordinary	349		356	
Earnings per share	13.21		17.97	
Dividend per share	6.98		7.12	

The Structure of a Statement of Profit and Loss

Revenue

The statement of profit and loss starts with one of the most important things in any company's accounts: its sales revenues. In accounts, sales revenues are generally referred to as revenue, or sometimes turnover. It is simply everything that the company has sold during the year, regardless of whether it has received the cash or not. For a manufacturer, revenue is the sales of the products that it has made. For a company in the service industry, it is the consulting fees earned or perhaps commissions earned on financial transactions.

Revenue is calculated on an accruals basis and represents sales generated over the accounting period regardless of whether cash has been received. However, since there are no prescriptive rules as to when revenue should be recognised in the profit and loss account, this leaves scope for subjective judgement.

IAS 18 prescribes the accounting treatment for revenue arising from certain types of transactions and events, essentially only allowing recognition of revenues when appropriate. Revenue is recognised in the statement of profit and loss when it meets the following criteria:

- It is probable that any future economic benefit associated with the item of revenue will flow to the company.
- The amount of revenue can be measured with reliability.

The IASB has published guidance on when revenue from the sale of goods, rendering of services and interest, royalties and dividends should be recognised.

Revenue arising from the sale of goods should be recognised when all of the following criteria have been satisfied:

- The seller has transferred to the buyer the significant risks and rewards of ownership.
- The seller retains neither continuing managerial involvement to the degree usually associated with ownership nor effective control over the goods sold.
- The amount of revenue can be measured reliably.
- It is probable that the economic benefits associated with the transaction will flow to the seller.
- The costs incurred or to be incurred in respect of the transaction can be measured reliably.

For revenue arising from the rendering of services, revenue should be recognised based on the stage of completion of the transaction, providing that all of the following criteria are met:

- The amount of revenue can be measured reliably.
- It is probable that the economic benefits will flow to the seller.
- The stage of completion at the statement of financial position date can be measured reliably.
- The costs incurred, or to be incurred, in respect of the transaction can be measured reliably.

When the criteria are not met, revenue should be recognised only to the extent of the expenses that are recoverable

For interest, royalties and dividends, revenue should be recognised as follows:

- **Interest** – on a time proportion basis that takes into account the effective yield.
- **Royalties** – on an accruals basis.
- **Dividends** – when the shareholder's right to receive payment is established.

Cost of Sales

Cost of sales = [Opening stock (if any) + Purchases – Closing stock]

The cost of sales is arrived at by adding purchases of stock made during the accounting period, again by applying accruals rather than cash accounting, to the opening stock for the period, and deducting from this the value of the stock that remains in the business at the end of the accounting period.

The opening stock figure used in this calculation will necessarily be the same as the closing stock figure that appears in the current assets section of the statement of financial position from the previous accounting period.

Gross Profit

The gross profit figure is simply the revenue less the cost of sales.

Operating Profit

Operating profit is also referred to as profit on operating activities. It is the gross profit, less other operating expenses, that the company has incurred. These other operating expenses might include costs incurred distributing products (distribution costs) and administrative expenses such as management salaries, auditors' fees and legal fees. Administrative expenses also include depreciation and amortisation charges. Additional items may be separately disclosed before arriving at operating profit, such as the profit or loss made on selling a non-current asset. When a non-current asset, such as an item of machinery, is disposed of at a price significantly different from its statement of financial position value, the profit or loss when compared to this net book value (NBV) should be separately disclosed if material to the information conveyed by the accounts.

Operating profit is the profit before considering finance costs (interest) and any tax payable. It can be described as profit before interest and tax (PBIT).

Finance Costs/Finance Income

Finance costs are generally the interest that the company has incurred on its borrowings. That may be in the form of bonds or may be bank loans and overdrafts. Finance income is typically the interest earned on surplus funds, such as from deposit accounts.

Profit Before Tax

This is the profit made by the company in the period, before considering any tax that may be payable on that profit.

Corporation Tax Payable

This is simply the corporation tax charge that the company has incurred for the period.

Net Income

Net income is the company's total earnings or profit. In the UK it is also referred to as profit after tax.

It is calculated by taking the total revenues adjusted for the cost of business, interest, taxes, depreciation and other expenses. The net income is the profit that is attributable to the shareholders of the company and is stated before the deduction of any dividends because dividends are an appropriation of profit and are at the discretion of the company directors.

The net income is added to the retained earnings in the statement of financial position and disclosed within the statement of changes in equity. It is also within this statement that the dividends paid during the year are deducted from the retained earnings. As will be seen in section 1.3, dividends paid are also disclosed in the statement of cash flows.

Earnings Per Share (EPS)

EPS is one of the most important figures for investors and financial analysts and is reflected at the bottom of the statement of profit and loss, in pence. EPS is the amount of profit after tax that has been earned per ordinary share. EPS is calculated as follows:

$$\text{EPS} = \frac{\text{Net Income for the Financial Year}}{\text{Number of Ordinary Shares in Issue}}$$

Dividends

Some, or all, of the profit for the financial year can be distributed as dividends. Dividends to any preference shareholders are paid out first, followed by dividends to ordinary shareholders at an amount set by the board and expressed as a number of pence per share. The dividends for most listed companies are paid in two instalments: an interim dividend paid after the half-year stage and a final proposed dividend paid after the accounts have been approved. The dividends are shown in the accounts in a note that reconciles the movement in equity from one statement of financial position to another.

Capital Versus Revenue Expenditure

Money spent by a company will usually fall into one of two possible forms: capital expenditure or revenue expenditure.

Capital expenditure is money spent to buy non-current assets, such as plant, property and equipment. It is reflected on the statement of financial position.

Revenue expenditure is money spent that immediately impacts the statement of profit and loss. Examples of revenue expenditure include wages paid to staff, rent paid on property, and professional fees, such as audit fees.

The Relevance of the Statement of Profit and Loss to Investors

For obvious reasons, a company's statement of profit and loss will be a main focus of attention to the investment community, as it directly reflects the performance level of the company from current operations. Moreover, analysis of the items in the statement of profit and loss reveals not only the size of a company's profit or losses, but also considerable details on the quality of its income and expenditures.

Investors will want to look closely at the breakdown of expenditures to see if there are signs that the company's management is over-spending, especially in relation to previously released targets or forecasts from previous financial statements.

The gross profit margin, ie, the percentage of gross profit to turnover or total revenues, may provide further insights. A change that sees gross profit margin increase might be due to the company becoming dominant, enabling it to increase the sales price and/or decrease the prices it is paying its suppliers. A decrease in gross profit margin might arise because the company is facing increased competition and has been forced to lower its sales prices and/or pay more to its suppliers. Alternatively, it may be a strategic decision by the company to pursue market share.

The key figure which will be examined by investors and analysts is the earnings per share (EPS) figure, as this will provide guidance to the marketplace as to the company's valuation. Analysts will want to see whether the company's EPS shows it to be performing in line with the applicable price/earnings (P/E) multiples for the sector in which the company operates, and, if not, one would want to understand the reasons for outperformance or underperformance. Detailed examination and analysis of the statement of profit and loss may reveal whether there are unusual or exceptional circumstances that would explain a higher or lower multiple than that which was expected from the company.

There are no absolute rules of reference for deciding how to evaluate a company's EPS. Rather the figure should be seen in the context of previous performance by the company. Companies have very different business models. Some companies are suppliers of merchandise to mass markets, while others occupy

more specialised niches. Some companies are keen to have a very large share of the available market in the product/service which they supply, and work on the principle of low margins and high volume. Other companies may prefer the converse model of having a high margin and relatively low volume. All of this needs to be taken into consideration when assessing a company's performance as revealed in its statement of profit and loss.

Different sectors of the marketplace will have different P/E multiples and it is not easy to compare company performances across different sectors. Also to be factored into the assessment is the fact that to a large extent all companies will have earnings and costs which will fluctuate depending on economic factors such as whether GDP is growing or contracting, on exchange rates, and in most general terms on the state of the economy.

Statement of Profit and Loss – Trend Analysis

In similar fashion to the approach used in consideration of the common-size technique for trend analysis of a company's statement of financial position, a similar approach can be taken with respect to the statement of profit and loss. Key performance metrics are not considered in annual isolation but within the context of a broader time frame – perhaps five years, which is a widely used frame of reference in the investment world.

The table below provides some highlights from the statement of profit and loss of a company over a five-year period. The top line of the table reflects the gross revenues from 2014 to 2016 and shows that, in the period under consideration, the revenues doubled to the point where, for year-end 2016, the company had annual revenues of £1.6 million.

	2012	2013	2014	2015	2016
	£000s	£000s	£000s	£000s	£000s
Gross revenue	800	880	1040	1280	1600
Gross profit	140	170	200	210	240
Gross margin	18%	19%	19%	16%	15%
Profit before tax	130	160	180	200	220
Profit margin	16%	18%	17%	16%	14%
Dividends	4	5	6	7	10

The second line of the table indicates the monetary amount of gross profit being made in each year. Below that there is a percentage figure showing the gross margin achieved in each of the five years and, as can be seen, the company is in the somewhat concerning condition where despite the impressive growth in top-line revenue, the amount of gross profit as a percentage of revenue is declining. From 2014 to 2016, the gross margin has dropped from 19% to 15%.

A somewhat similar decline in an important ratio is seen in the line for the profit margin for the company (ie, profit before tax divided by revenues). The final line shows that the company has decided, not through any logic of necessity but circumstance, to boost its annual dividend to shareholders by 150% during the same period that its sales have doubled.

	2012	2013	2014	2015	2016
	£000s	£000s	£000s	£000s	£000s
Gross revenue	100	110	130	160	200
Gross profit	100	121	143	150	171
Gross margin	100	110	110	94	86
Profit before tax	100	123	138	154	169
Profit margin	100	112	107	96	85
Dividends	100	125	150	175	250

The table above provides a trend analysis for the previous set of data and makes it even easier to conduct a proper comparison of key parameters and track down areas of concern or merit.

The 2012 levels for each of the six variables are used as the base amounts and an index value has been created for each of the subsequent years, with 2012 values set at an index value of 100.

It can be seen that the revenues have doubled and that the profit before tax has expanded by 69% (ie, from 100 to 169). It is also clear that the increase in the index level of gross profit has failed to match that seen on the top-line revenue.

One useful feature of the above way of presenting the data is that ratio values or percentages can themselves be expressed in terms of index values. The gross margin has in fact declined from 110 in 2013 to 86 in 2016 and the net profit margin has declined to 85% of what it was in 2012. Clearly the company is in a position where its expanding share of a market is leading to higher turnover but the underlying profitability is deteriorating, which would call for a detailed analysis of its cost structure and, in particular, its marginal costs.

One final point is well demonstrated by the fact that the dividends have increased by 150%, which is above the rate of growth of turnover and considerably beyond the rate of growth in profitability.

Gross Revenue Growth	2012	2013	2014	2015	2016
A	100	110	130	160	200
B	100	140	200	220	250
Company		**2013**	**2014**	**2015**	**2016**
A		10.0%	18.2%	23.1%	25.0%
B		40.0%	42.9%	10.0%	13.6%

The table above focuses just on the revenue growth of two companies and uses a combination of the index-based approach discussed previously with a simple expression of the percentage change for each company.

Company A is the same company which was examined in more detail previously and the gross revenue index levels have been included from 2012 to 2016.

Company B is another company where similar index values are available but we are not given access to the underlying data, so it may well be that the two firms are of quite different orders of magnitude. But for the purposes of trend analysis this can be overlooked by simply tracking the year-over-year percentage changes of each company.

The bottom two rows of the table above indicate the rates of growth of Companies A and B from 2013 onwards. The 2012 figures are set aside since we are considering a progression from a starting year. What can be clearly seen from the percentage changes is that the rates of growth are very different. Company A is growing at an expanding rate, whereas company B is more erratic, and after two years of strong growth its rate of growth in the most recent two-year period is substantially slower.

The Statement of Cash Flows

The Purpose of the Statement of Cash Flows

A statement of cash flows (as it is now known in accordance with the IAS 1 Revised) is required by accounting standard IAS 7.

The statement of cash flows is basically a summary of all the payments and receipts that have occurred over the course of the year, the total reflecting the inflow (or outflow) of cash over the year.

The principal features of a statement of cash flows, and the purposes behind it, are as follows:

- Removal of accruals, or amounts payable and receivable, from the income statement so that these amounts may be accounted for on a cash paid and received basis. The removal of accruals allows the actual cash available to a company at any point in time to be more precisely determined.
- Adjustment for statement of financial position items such as an increase in the value of a company's stock or accounts receivable (also often referred to as debtors) or a decrease in accounts payable (also often referred to a creditors), all of which increase reported profit but do not impact cash.
- Adding back non-cash items, such as depreciation charges, amortisation and book losses from the sale of fixed assets, while deducting book profits from fixed-asset disposals recorded in the statement of profit and loss, which impact recorded profit but not the company's cash position.
- Bringing in changes in statement of financial position items that impact the company's cash position, such as finance raised and repaid over the accounting period and fixed assets bought and sold. While these items are not readily accessible from an examination of a company's profit and loss accounts, the financial statement of cash flows may also contribute significantly to the company's current cash holdings.

Analysis of the statement of cash flows shows that it is important that a company generate positive cash flow at the operating level, otherwise it will become reliant upon fixed-asset sales and borrowing facilities to finance its day-to-day operations.

A company's survival and future prosperity is also dependent upon it replacing its fixed assets to remain competitive. However, these assets must be financed with capital of a similar duration to the economic life and payback pattern of the asset; otherwise the company will have insufficient funds to finance its operating activities. The statement of cash flows will also identify this.

The Structure of Statements of Cash Flows

IAS 7 regarding statement of cash flows requires a company's cash flows to be broken down into three particular headings:

1. **Operating cash flow** – operating activities is the cash that has been generated from the trading activities of the company, excluding financing cost (interest).
2. **Investment or enterprise cash flow** – investing activities details the investment income (dividends and interest) that has been received in the form of cash during the year and the cash paid to purchase new non-current assets less the cash received from the sale of non-current assets during the year.
3. **Financing cash flow** – financing activities includes the cash spent during the year on paying dividends to shareholders and the cash raised from issuing shares or borrowing on a long-term basis, less the cash spent repaying debt or buying back shares.

When all three sections of the statement of cash flows are consolidated, the resultant total should explain the changes in cash (and cash equivalents) between the statement of financial position.

In order to establish the cash generated from the operating activities figure in the statement of cash flows – essentially the company's operating cash flow – IAS 7 allows one of two alternative presentations on the face of the cash flow statement.

Of the two methods, the first is the direct method, where the cash received from customers and paid to suppliers and employees is shown. Alternatively, the indirect method is where reconciliation is shown between the company's other financial disclosures, primarily those found in the statement of financial position and the cash generated from operations in the statement of cash flows. This reconciliation requires the following adjustments to be made to the operating profit figure:

- Non-cash charges such as the depreciation of tangible fixed assets and the amortisation of intangible assets must be added back, as these do not represent an outflow of cash.
- Any increase in debtors or stock or decrease in short-term creditors over the accounting period must be subtracted, as these all increase reported profit but do not increase cash.
- Any decrease in debtors or stock or increase in short-term creditors over the accounting period must be added, as these all decrease reported profit but do not decrease cash.

Operating Statement of Cash Flows for XYZ plc for Year Ending 31 December 2016		
All figures are in £ sterling		
Net income after tax		240,000.00
Other additions to cash		
Depreciation and amortisation	35,000.00	
Decrease in accounts receivable	17,000.00	
Decrease in inventory		
Decrease in other current assets	19,000.00	
Increase in accounts payable	26,000.00	
Increase in accrued expenses		
Increase in other current liabilities		
Total additions to cash from operations		97,000.00
Subtractions from cash		
Increase in accounts receivable		
Increase in inventory	(33,000.00)	
Increase in other current assets		
Decrease in accounts payable		
Decrease in accrued expenses	(19,000.00)	
Decrease in other current liabilities	(23,000.00)	
Total subtractions from cash from operations	(75,000.00)	(75,000.00)
Total operating cash flow		262,000.00

Additions to Cash

- **Depreciation and amortisation** – depreciation is not a cash expense; it is added back into net income for calculating cash flow.
- **Decrease in accounts receivable** – if accounts receivable decrease, more cash has entered the company from customers paying off their accounts – the amount by which accounts receivable has decreased is an addition to cash.
- **Decrease in inventory** – a decrease in inventory signals that a company has spent less money to purchase more raw materials. The decrease in the value of inventory is an addition to cash.
- **Decrease in other current assets** – similar reasoning to above for other current assets.
- **Increase in accounts payable** – if accounts payable increases it suggests more cash has been retained by the company through not paying some bills. The amount by which accounts payable has increased is an addition to cash.
- **Increase in accrued expenses** – for example deferring payment of some salaries will add to cash.
- **Increase in other current liabilities** – similar reasoning to above for increase in taxes payable.

Subtractions from Cash

- **Increase in accounts receivable** – if accounts receivable increases less cash has entered the company from customers paying their accounts. The amount by which accounts receivable has increased is a subtraction of cash.
- **Increase in inventory** – an increase in inventory signals that a company has spent more money to purchase more raw materials. If the inventory was paid with cash, the increase in the value of inventory is a subtraction of cash.
- **Increase in other current assets** – similar reasoning to above for other current assets.
- **Decrease in accounts payable** – if accounts payable decreases it suggests more cash has been used by the company to pay its bills. The amount by which accounts payable decreased is a subtraction from cash.
- **Decrease in accrued expense** – for example an increase in prepaid expenses results in a subtraction of cash.
- **Decrease in other current liabilities** – similar reasoning to above for decrease in taxes payable.

The simple formula to arrive at the total operating cash flow is:

Net income after tax

+ Total additions to cash from operations

– Total subtractions from cash from operations

The Structure of the Investment or Enterprise Statement of Cash Flows

Here is a brief description of the net result to the cash position of a company from its investment and capital expenditures, or, as is it is sometimes referred to, especially in the US, the enterprise cash flow statement. The statement can be compiled by reference to the changes from year to year in the company's statement of financial position.

Additions to Cash from Investments

- **Decrease in fixed assets** – sale of a building will lead to an addition to cash.
- **Decrease in notes receivable** – a reduction in notes receivable indicates that cash will have been received.
- **Decrease in securities, investments** – securities will have been sold thereby raising cash.
- **Decrease in intangible, non-current assets** – sale of a patent or copyright will lead to an addition of cash.

Subtractions from Cash from Investments

- **Increase in fixed assets** – purchase of a building will lead to a subtraction from cash.
- **Increase in notes receivable** – an increase in notes receivable indicates that cash has not been received.
- **Increase in securities investments** – securities will have been purchased thereby reducing cash.
- **Increase in intangible non-current assets** – purchase of a copyright will lead to a reduction of cash.

The Structure of the Financing Activities Statement of Cash Flows

Additions to Cash from Financing

- **Increase in borrowings** – additional net borrowing will lead to an addition of cash.
- **Increase capital stock** – additional net equity capital paid in will lead to an addition of cash.

Subtractions from Cash for Financing

- **Decrease in borrowings** – net reduction in borrowing will lead to a subtraction of cash.
- **Decrease capital stock** – retirement of net equity capital paid in will lead to a subtraction of cash.
- **Subtractions from cash for dividends** – dividends paid out will lead to a subtraction of cash.

The final line of the table shows the total free cash flow for the company:

Total Free Cash Flow = Total Equity Cash Flow – Dividends Paid Out

The Relevance of the Statement of Cash Flows to Investors

As listed companies typically use accrual accounting, the statements of profit and loss released each quarter by a company will not necessarily reflect changes in their cash positions. If one has invested in a company, or is contemplating an investment, one of the crucial considerations will be whether the company has sufficient cash on hand to meet its obligations or whether it is likely to face a cash crunch in which it could be forced to sell assets under duress or have to seek emergency funding under disadvantageous conditions.

While a company may be earning a profit from an accounting perspective, it may, during the quarter, actually end up with less cash than when it started the quarter. Even profitable companies can fail to adequately manage their cash flow, which is why the statement of cash flows is vitally important; it helps investors see if a company is having trouble with its cash position.

Investors will use the statement of cash flows in a variety of ways:

- Cash from operating activities is compared to the company's net income. If the cash from operating activities is consistently greater than the net income, the company's net income or earnings are said to be of a high quality. If the cash from operating activities is less than net income, a warning to investors should be raised as to why the reported net income is not turning into cash.
- Many investors have the view that cash is king. If a company is consistently generating more cash than it is using, the company could increase its dividend, buy back some of its stock, reduce its debt or acquire another company. All of these are perceived to be good for shareholder value. On the contrary, if a company is lacking cash and faces momentary bouts of illiquidity, then there may eventually be questions raised as to its ability to survive and its solvency.
- The methods of common sizing discussed in the previous two sections can also be applied to a company's statement of cash flows. For example, the financing activities revealed in the financing statement of cash flows can throw further light on the gearing position of the company, as all of the financing debits and credits to the cash account will be viewable in one place.

In summary, the casualties of a recession, such as that seen during 2008–2009, are not always easy to identify ahead of time and may not be readily discernible from financial statements. Many economists and analysts have suggested that in the last quarter of 2008 it was as if the world economy fell off a cliff. The track record for investment analysts in anticipating the demise of institutions such as major banks, insurance companies and large manufacturers, even from a detailed perusal of financial statements has historically not been very good.

The most common malaise for business failures, both during a recession and in more normal economic circumstances, is the inability of firms to realise cash from operations to meet their unavoidable obligations.

Liquidity in the capital markets, in the most general and systemic sense of the term and not just in the more literal sense of immediate access to raise cash, is at its lowest when it is most needed.