Chapter 4
Analysing financial performance

The financial performance of a business can be measured in a number of different ways.

Financial accounts are required to analyse financial performance and include balance sheets and the trading, profit and loss account (income statement). A business will use ratio analysis to calculate and interpret key performance indicators.

A business will also look at budget variances – the difference between the figure that the business budgeted for and the actual figure – to analyse its performance.

Balance sheets

A balance sheet (statement of financial position) is a statement of a business’s assets (what a business owns) and liabilities (what a business owes) at a specific point in time (usually the last day of a particular trading period, but a ‘snapshot’ can be created at any time).

The components of a balance sheet are as follows:

- **Fixed (or non-current) assets**, which includes land, buildings, machinery and vehicles. Fixed assets are expected to be retained in the business for more than a year, therefore having a long term role in the business and are used to produce the output of the business.

- **Current assets**, which includes stock (sometimes called inventory), debtors (also known as “trade and other receivables”) and bank and cash balances. Current assets are expected to change value often, due to the normal course of business trading. Debtors are customers who haven’t yet paid the business for the goods they have received, but since the business has a claim to the money, then the money owed by customers is still considered an asset.

- **Current liabilities**, which includes the trade creditors of the business (also known as “trade and other payables”) and bank overdrafts. Current liabilities are debts that are normally paid within a year. Current liabilities arise normally as part of normal business practice, for example when a supplier agrees to grant a business trade credit or when a business has an overdraft facility that they are making use of. These examples will remain a currently liability until they have been paid.

- **Long-term (or non-current) liabilities**, which are often bank loans and mortgages, which are repaid over more than a year.

- **Net assets** are calculated by adding both fixed and current assets together and then deducting current liabilities and long term liabilities.

- **Net current assets** might also be shown in a balance sheet, which is the difference between current assets and current liabilities.

- **Shareholders’ funds** (also called shareholders’ capital) is money that has been invested into the business by the owners (through the sale of shares), and also includes retained profit and reserves. Reserves or retained profit is money that has been kept in the business from profits made by the business. The owners (or directors) may decide to reinvest part of profit earned back into the business to help it grow and become more profitable in the future. Reserves are not normally held as cash, but are used for buying assets for the business.
The reason it is called a balance sheet is because the total of the company’s assets will always equal the total of its liabilities. This is shown in the equation:

Fixed Assets + Current Assets = Long-term Liabilities + Current Liabilities + Shareholders’ Funds

This equation can be rewritten as:

Fixed Assets + (Current Assets – Current Liabilities) = Long-term Liabilities + Shareholders’ Funds

The balance sheet below is the conventional method for presenting the components outlined above. Balance sheets normally present two years’ financial data: the current year and the previous year, used for making comparisons and to enable the calculation of ratios.

<table>
<thead>
<tr>
<th></th>
<th>2015 £m</th>
<th>2014 £m</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fixed (non-current) Assets</td>
<td>750</td>
<td>800</td>
</tr>
<tr>
<td>Stock</td>
<td>160</td>
<td>157</td>
</tr>
<tr>
<td>Debtors</td>
<td>130</td>
<td>142</td>
</tr>
<tr>
<td>Cash at bank</td>
<td>75</td>
<td>49</td>
</tr>
<tr>
<td><strong>Total Current Assets</strong></td>
<td><strong>365</strong></td>
<td><strong>348</strong></td>
</tr>
<tr>
<td>Trade creditors</td>
<td>217</td>
<td>228</td>
</tr>
<tr>
<td>Other</td>
<td>16</td>
<td>79</td>
</tr>
<tr>
<td><strong>Total Current Liabilities</strong></td>
<td><strong>233</strong></td>
<td><strong>307</strong></td>
</tr>
<tr>
<td><strong>Long Term (non-current) Liabilities</strong></td>
<td><strong>576</strong></td>
<td><strong>465</strong></td>
</tr>
<tr>
<td><strong>Net Assets</strong></td>
<td><strong>306</strong></td>
<td><strong>376</strong></td>
</tr>
<tr>
<td>Share capital</td>
<td>198</td>
<td>198</td>
</tr>
<tr>
<td>Reserves</td>
<td>108</td>
<td>178</td>
</tr>
<tr>
<td><strong>Total Shareholders’ Capital</strong></td>
<td><strong>306</strong></td>
<td><strong>376</strong></td>
</tr>
</tbody>
</table>
Interpreting and analysing a balance Sheet

**Working capital (net current assets)**

Working capital is the money needed in the business to pay for the day-to-day expenses of a business. Working capital is calculated by taking the value of current liabilities from current assets:

\[
\text{Working capital} = \text{current assets} - \text{current liabilities}
\]

Working capital shows the financial strength of business over the short term, the higher the level of working capital then the more able a business is to meet demands from creditors for payment. Positive working capital also enables a business to pay day-to-day expenses like wages, salaries, overheads and other operating expenses. It is quite possible to have negative working capital, that is current liabilities are greater than current assets (this would be shown as a number in brackets to illustrate that it is negative).

It is important to realise that different businesses will have different working capital needs. For example:

- It is likely a larger business will have a need for a larger amount of working capital than a small business.
- A retail business, that needs to hold a high level of stock, may need a high level of working capital.
- The amount of debtors and creditors a business has.

**Liquidity**

Liquidity refers to how quickly an asset can be converted into cash. Money in the bank, or held in cash, is the most liquid asset. Other liquid assets are stock and debtors; of these it is likely that stock is the least liquid.

Liquidity is a measure of the business's ability to pay its short term debts. It is therefore also a measure of the availability of working capital within a business.

It is important that businesses have a good level of liquidity. If businesses are unable to pay their creditors then the owner may find that the supplies of stock or raw materials are stopped, or they may find that the bank stops their cheques. In this sort of situation the business may be forced to stop trading. So the management of liquidity is very important.

Two ratios can be calculated to help a business understand its liquidity position:

**The current ratio and acid test ratio**
Current ratio

The current ratio tells us about the relationship between current assets and current liabilities. The formula is:

\[
\text{Current ratio} = \frac{\text{Current assets}}{\text{Current liabilities}}
\]

Let us consider an example:

The following table gives financial information for a business taken from the balance sheet:

<table>
<thead>
<tr>
<th>Current Assets</th>
<th>Current Liabilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stock</td>
<td>Creditors</td>
</tr>
<tr>
<td>2 700 000</td>
<td>1 500 000</td>
</tr>
<tr>
<td>Debtors</td>
<td>Overdraft</td>
</tr>
<tr>
<td>1 200 000</td>
<td>200 000</td>
</tr>
<tr>
<td>Cash at bank</td>
<td>Total Current Liabilities</td>
</tr>
<tr>
<td>950 000</td>
<td>1 700 000</td>
</tr>
<tr>
<td>Total Current Assets</td>
<td></td>
</tr>
<tr>
<td>4 850 000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total Current Liabilities</td>
</tr>
</tbody>
</table>

Using the formula:

\[
\text{Current ratio} = \frac{\text{Current assets}}{\text{Current liabilities}}
\]

\[
\begin{align*}
\text{Current ratio} &= \frac{4 850 000}{1 700 000} \\
&= 2.85:1
\end{align*}
\]

Notice that the ratio is not given as a percentage but as a ratio to one.

The answer of 2.85:1 means that for every £2.85 a business owns in current assets, it owes £1 of current liabilities.

Suppose that if a business’s creditors demanded immediate payment of the money owed to them by the business then the result of 2.85:1 shows that the business would be able to meet these demands. We can therefore deduce that in this example the liquidity of the business is good and it is managing its working capital effectively.

It is generally thought that the ideal for the current ratio should be somewhere between 1.5:1 and 2:1. A current ratio of below 1.5:1 is considered less than ideal and may be due to over borrowing. A current ratio over 2:1 is also not ideal as it suggests too much money is just sitting around and not being used productively.

It is important to not treat the above figures as a fixed rule. Some businesses happily survive on low current ratios. These are businesses with a high level of stock turnover, who deal in cash. Good examples of this type of business are supermarkets; Tesco survives on a current ratio of about 0.5:1. In some circumstances, the current ratio can be regarded as being too high. For example, a current ratio of 3:1 may indicate that the business is holding a great deal of cash or stock that could be better used by the business if it was turned into some form of fixed asset to facilitate greater production capability.

The current ratio has one main failing as a tool of analysis, which is that it includes stock which may not be a very liquid asset i.e. it may not be turned into cash easily. A fireworks manufacturer may build up its stock over the year
ready for the October sales boom (and therefore show a high level of current assets because of the stock figure). However, if the manufacturer needed to pay off creditors in March, it might struggle to make enough sales at this time of year and may have to decrease prices as a way of raising money quickly. This is where the acid test ratio is useful.

**Acid test ratio**

The acid test ratio excludes stock from current assets as a way of measuring the ability of a business to meet short term demands for cash more reliably than the current ratio. The method of calculation of the acid test ratio is almost the same as the current ratio and the answer is in the same format. The only difference is that we remove stock from the equation.

The formula is:

\[
\text{Acid test ratio} = \frac{\text{Current assets} - \text{stock}}{\text{Current liabilities}}
\]

Using the same financial data we used to calculate the current ratio we will now calculate the acid test ratio:

<table>
<thead>
<tr>
<th>Current Assets</th>
<th>Current Liabilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stock</td>
<td>Creditors</td>
</tr>
<tr>
<td></td>
<td>2 700 000</td>
</tr>
<tr>
<td>Debtors</td>
<td>Overdraft</td>
</tr>
<tr>
<td></td>
<td>1 200 000</td>
</tr>
<tr>
<td>Cash at bank</td>
<td>Overdraft</td>
</tr>
<tr>
<td></td>
<td>950 000</td>
</tr>
<tr>
<td>Total Current Assets</td>
<td>Total Current Liabilities</td>
</tr>
<tr>
<td></td>
<td>4 850 000</td>
</tr>
<tr>
<td></td>
<td>1 700 000</td>
</tr>
</tbody>
</table>

Using the formula:

\[
\text{Acid test ratio} = \frac{4 850 000 - 2 700 000}{1 700 000} = 1.26:1
\]

The acid test ratio is 1.26:1. This means that for every £1.26 of current assets (excluding stock) the business owns it owes £1.00 of current liabilities. Therefore, in this example, if all creditors demanded the money the business owes them, and the business had a problem selling its stock quickly, the business would still have enough liquid assets to meet these demands. Therefore we can deduce that the management of its liquidity is good and it is managing its working capital effectively.

The ideal for this ratio is generally given as 1:1.
If the acid test ratio is less than 1:1 then a business hasn’t got enough current assets (minus stock) to cover its liabilities and it may be in difficulty.

As with the current ratio, these figures are for guidance and are not to be used as a fixed rule. Some businesses comfortably survive on low acid test ratios, such as businesses with a high level of stock turnover who deal in cash and those with good financial management of the other current assets and current liabilities. As with the current ratio, the acid test ratio can also be regarded as being too high. For example, an acid test ratio of 2:1 may indicate that the business is holding a great deal of cash that could be better used by the business in investing in growth.

When analysing a business’s liquidity it is best to use the current ratio and acid test ratio together. As part of the analysis, it is also wise to refer to the generic benchmarks considered above and refer to industry-specific differences.

### The gearing ratio

The gearing ratio compares the amount of capital employed that is financed by borrowing with the total capital employed.

Capital employed is the sum of a company’s share capital, reserves and long term liabilities. The gearing ratio calculates the proportion (%) of capital employed that is financed by long-term liabilities.

There is nothing wrong with a business taking out loans in order to expand. This is often an excellent way to finance expansion, but there are dangers if a business tries to expand too fast and borrows too much. Many large businesses found themselves in serious trouble in 2008 when the economy went into recession and their expansion plans failed as consumers stopped buying their goods and services.

The formula for calculating gearing is:

\[
\text{Gearing ratio} = \frac{\text{Long term liabilities (non-current liabilities)}}{\text{Capital employed}} \times 100
\]

\[
\text{Capital employed} = \text{long term liabilities} + \text{shareholders’ fund (also called equity)}
\]

Consider the following example using figures extracted from the accounts of a PLC:

<table>
<thead>
<tr>
<th></th>
<th>2014 (£m)</th>
<th>2015 (£m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Long term liabilities</td>
<td>£1 089.2</td>
<td>£1 171.8</td>
</tr>
<tr>
<td>Shareholders’ funds (equity)</td>
<td>£1 783</td>
<td>£1 977.9</td>
</tr>
</tbody>
</table>

Using these figures, the gearing ratio for each of the two years is calculated as follows:

\[
\text{Gearing ratio 2015} = \frac{1171.8}{1171.8 + 1977.9} \times 100 = 37.2\%
\]

\[
\text{Gearing ratio 2014} = \frac{1089.2}{1089.2 + 1783} \times 100 = 37.9\%
\]
If the gearing ratio exceeds 50% then the company is said to be highly geared as in the case of the above example gearing is well below this figure and at just under 40% is good. The company is borrowing money to expand but it has not borrowed too much and it will be in a good position to repay its loans out of its profits.

A business with low gearing is one that is funded (financed) in the main by share capital (equity) and reserves, whilst one with high gearing (considered generally to be over 50%) is funded in the main by loan capital.

But it is important not to be fixated with these percentages in making a snap judgement, since there might be other information to be considered in putting the gearing ratio into context, such as industry averages and business aims.

A highly geared business is one where the largest proportion of the funding of the business has come from borrowing. When high gearing exists then interest paid on debts reduces profits available to shareholders and if interest rates increase then the costs of the business can rapidly increase. But high gearing is not necessarily a bad thing. It may indicate that a company is adventurous in its expansion plans and may have taken the opportunity to invest by borrowing at low rates. If we find a highly geared company then we must look at the type of business involved. Are its profits or sales growing fast? Is the level of gearing falling? If both these factors are found, then we may be able to comment favourably on the gearing ratio. But on the other hand high gearing will mean that a larger proportion of profits are used to pay interest on loans instead of being reinvested or paid to shareholders.

Even if we take a positive view of high gearing it is worth noting that many company failures over recent years have been accompanied by spectacularly high gearing ratios. High gearing leads to high interest repayments and as soon as profits start to fall, the banks get nervous, and can withdraw their support.

A company with low gearing is one where the largest proportion of the funding of the business has come from investment by shareholders. As low gearing will be a result of a low level of borrowing this can indicate that the business is growing through reinvestment of profits and is minimising risk. But low gearing may indicate that a business is not aggressive enough to survive and may not be seeking opportunities for growth. Low geared companies tend to have less interest to pay on their borrowing which means higher profit levels and therefore more money to distribute as dividends.

Low geared business might be concentrating on investing from cash flow and not overextending itself. But on the other hand the business could be too conservative in its outlook and is missing out on investment opportunities and new markets. The management of the business might realise too late that in the long run, borrowing to invest and to grow should have been the option chosen.
Using the trading, profit and loss account (the income statement) to assess the financial performance of a business

The trading, profit and loss account, the gross profit margin and net profit margin were introduced in the AS textbook content (Chapters 21 and 22).

The trading, profit and loss account, along with the gross and net profit margin are used to analyse the profitability of a business. A third profitability ratio used to analyse performance is the return on capital employed (ROCE).

Return on Capital Employed (ROCE)

The ROCE figure measures how effectively the capital invested in the business is being used to create profits i.e. how effective a business is creating a return based on the money invested within a business.

Below is an extract of financial information (from the profit and loss account and the balance sheet) needed to calculate ROCE:

<table>
<thead>
<tr>
<th>Profit and Loss Account</th>
<th>£</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net Profit before Tax</td>
<td>950 000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Balance Sheet</th>
<th>£</th>
</tr>
</thead>
<tbody>
<tr>
<td>Long Term Liabilities</td>
<td>3 900 000</td>
</tr>
<tr>
<td>Share Capital</td>
<td>3 000 000</td>
</tr>
<tr>
<td>Reserves</td>
<td>1 200 000</td>
</tr>
<tr>
<td>Shareholder Funds</td>
<td>4 200 000</td>
</tr>
</tbody>
</table>

Note that the best figure to use in your calculations for this is ‘Profit before Interest and Taxation’. If this figure is not available then look for a profit figure that is close in identity to Net Profit (Net Profit before Tax or Net Profit). Shareholder funds are share capital + reserves.

The formula for calculating ROCE is:

\[
\text{Return on capital employed} = \frac{\text{Net profit before tax}}{\text{Shareholders’ funds + long term liabilities}} \times 100
\]

Using the formula:

\[
\frac{950 000}{4 200 000 + 3 900 000} \times 100 = 11.72\%
\]

In this case we have a ROCE of 11.72%. This figure may be quite acceptable, but will depend upon the industry involved. Generally speaking, the higher this ratio the better. ROCE is often compared to the interest rate, the rate that investors might receive if they were to put their money in a bank account. Currently, interest rates are extremely low and investors would undoubtedly hope for a better return than that.

Some analysts state that 15% is a desirable figure for ROCE but in reality, like most other ratios, it will depend on the type of business as to what rate of return is generally acceptable to investors. These investors may, for example, be more concerned with the share price than the dividend yield.
Many businesses have internal targets for their own ROCE figure and do not invest in projects that are predicted to give a return of below this figure. Typically, international airlines such as British Airways have a low ROCE ratio (perhaps 6% or 7%) whilst some large software companies have ROCE ratios of 20%. Of course as profits fluctuate then ROCE will alter in line with these changes.

### Evaluating financial performance using ratios

In order to evaluate the financial performance of a business it is necessary to take into account all of the six ratios as well as any non-financial information that may be available (such as customer satisfaction, quality, employee motivation etc.).

If the gross or net profit ratio is low or has fallen then reasons should be looked for to explain this. Perhaps sales have fallen or the cost of sales (or expenses) has risen. The business will need to address these issues. If ROCE is low then the company may be in danger of being taken over by another business which can offer shareholders a better rate of return. If the liquidity ratios are low, the business may be running into short-term cash-flow problems which they will need to address. If gearing is low, it might be a good idea to borrow more money in order to take advantage of opportunities to expand the business. On the other hand if it is too high it might be better to delay expansion plans until some of the debt has been repaid. A company’s performance should also be compared to generic benchmarks but with the caution as highlighted in the discussion in this chapter.

It is important to provide as much context as possible in the evaluation and realise that it is important that when making a judgement on a business’s financial performance that comparison to previous years’ performance and the performance of competitors or other businesses is necessary. It is also important to consider the wider business or economic environment. In times of recession most businesses will be negatively affected and in these conditions the objectives of the business may change to adapt to a challenging business environment.

Any evaluation should take into account the nature of the business and bear in mind that the accounts may have been window-dressed in order to create a more favourable impression than is actually the case (see next section on window dressing). Tesco’s financial results had to be restated in 2014 because they had treated future anticipated discounts from suppliers as current income. As a result the revised accounts painted a far more disappointing picture than those originally published.
Window-dressing is the manipulation of financial accounts by a business to improve the appearance of its performance.

The presentation of the accounts of Limited Companies (both LTDs and PLCs) is supposed to be a science. Rules laid down by statute and the professional accountancy bodies govern the form and content of accounts, the dates by which accounts must be published and how figures are to be presented within the accounts. However, because of the complex nature of business activity and the need for managers and directors to be seen to achieve then the opportunity arises and motivation exists for rules to be bent, reinterpreted or in the worst of cases to be ignored.

**Examples of methods of window-dressing**

**Presentation of financial data**
A relatively easy way businesses can window-dress their accounts is by manipulating the presentation of the information in the accounts. An example of how businesses can achieve this is by using graphs with distorted scales to give the appearance of bigger or smaller changes in sales. Businesses might also highlight only certain data or use certain examples in their reporting documents, for instance highlighting product lines that have done particularly well in an attempt to disguise other areas of the business that have not performed very well. A similar strategy would be to not include any comparative data to be used for analysis of performance e.g. with previous years’ performance or that of competitors or industry norms.

The balance sheet and profit and loss account need to be examined in detail and comparisons made against major competitors in order to get an overall impression of a businesses’ financial performance.

**Overstating brand valuations**
Brands have become a great deal more valuable in recent times and awareness of this has meant that many businesses can adjust the strength of their balance sheets by revaluing their brands (brand value is an intangible fixed asset and therefore increases in brand value increases the assets of a company and gives the impression that the company is more valuable). An increase in the value of the brands will increase the paper worth of a company. This revaluation is often carried out to increase the asset value of a company and to defend against take-overs.

If a company was to increase the valuation of its brands from £200 million to £400 million then of course it will be much more difficult to take over the company, not least because it will cost more money. That said, the true value of the brands is perhaps in the eye of the beholder which is why valuing brands is subjective and therefore an opportunity for businesses to use brand value as a way of window-dressing their accounts.
Hiding the cost of poor investments and hiding costs

Banks have been found to have written down the value of so-called ‘toxic assets’, as a result of failed investment decisions. The result is that huge losses are made on these investments, which businesses might understate, and by doing so gives the appearance of minimising losses and therefore inflating profit levels.

Worldcom, a huge telecoms and communications company inflated its profits by disguising expenses as investment in assets – what seemed like a hugely successful and profitable company, had it seems never actually made a profit!

Sale and leaseback to improve liquidity

Cash flow problems can be improved by the use of sale and leaseback. This involves the sale of fixed assets (such as buildings or capital equipment) and then leasing back the same assets so that they are available for use by the company. It is normal practice for department stores, for example, to build a new retail outlet and then sell the outlet to a property company or investment fund and then leaseback the use of the store. We can see then that sale and leaseback is a normal business practice but it can be used to improve short-term cash situations and therefore improve current asset ratios and liquidity. If sale and leaseback is carried out for short-term liquidity reasons, questions should arise over long term business performance. In terms of window-dressing, because large capital outlays are recovered once the asset is sold, this injects money back into the business. This shows a higher cash balance, with relatively smaller lease payments being made to improve cash flow in the short term.

The use of exceptional and extraordinary items

Exceptional items are costs and revenues to the business that arise from normal business activity but are unusual in some way. For example, redundancy costs are normally an exceptional item. We can see that these can arise from time to time in any business. Exceptional revenues can be used as a method of window-dressing because businesses might try to pass these off as normal business revenues (i.e. sales of the products and services that a business normally sells). Of course, if businesses specifically and clearly highlight these revenues as exceptional revenues in their accounts then those looking at the accounts will be able to see why profits might have increased in a particular year.

Extraordinary items are revenues or costs that occur, but not as a result of normal business activity. They should be highlighted in the accounts, and inserted after the calculation of profit before interest and taxation. To include extraordinary items then normal revenues will, as with exceptional revenue, exaggerate business profits. An example of an extraordinary item could be British Glue selling its London Headquarters at a price greatly above the balance sheet valuation. The income generated could distort published accounts if not presented in the appropriate manner. It is obvious that the correct positioning and titling of this type of revenue is important if accounts are not to be distorted or misinterpreted.
Reasons why businesses window-dress their accounts

- **Improve share price** – if the profits of a business are recorded to be higher because of window-dressing, this could improve the share price as investors might be attracted to the business.

- **Take-overs** – a more valuable business could attract a take-over as the company is seemingly more successful and this could increase the price they get. On the other hand, if they don’t want to be taken over if the value of the business is higher through brand valuations for example, then this makes the business more expensive and might deter take-over bids.

- **Reduce tax bill** – by making the profits look smaller then a business can reduce the amount it has to pay in taxes.

- **Improve credit rating** – businesses with high profits and higher asset values can gain finance more easily from banks as they seem to pose less of a risk.

- **Praise and rewards** – having a set of good financial accounts could result in praise and financial rewards for managers.
Depreciation

Most fixed assets used by businesses will decrease in value over time. This decrease in value is known as depreciation. Assets depreciate with use, with age or as a result of the development of new technology (in which case assets become obsolete). If fixed assets were not depreciated they would be shown on the business’s balance sheet at ‘historic cost’ (the purchase price) when what is required to be recorded is the ‘true value’ of the fixed assets, known as the ‘net book value’.

historic cost – depreciation = net book value

Depreciation needs to be carried out for 3 reasons:

- So that profits are not overestimated
- So that the value of fixed assets is not overestimated
- To make accounting provision for replacement purchase of new fixed assets in the future.

Example of depreciation

A business buys a computer for £1,000 (historic cost) to be used for designing brochures, direct mail and generating price lists. Upon purchase of the computer it was estimated that the machine would have a useful working life of 4 years and at the end of this period it would probably have a scrap value of £100 (resale value or residual value). Over the 4-year period the total depreciation of the computer is therefore £900 (historic cost – resale value = £1,000 - £100). Each year the computer will be shown on the business’s balance sheet as having a lower net book value (reducing by £225 per year, since total depreciation is £900 and the useful life is 4 years - £900÷4 = annual depreciation of £225) until at the end of 4 years the net book value of the computer will be £100. If the computer is then sold, the asset will disappear for the balance sheet, and the money gained from the sale (in this case expected to be £100), will become income for the business and appear as cash in current assets. Using the above example of the computer, total depreciation has been £900 over the four years.

Calculating depreciation - The straight line method

The method used in the example above to depreciate the computer is called the ‘straight line method’, whereby an equal amount of depreciation is applied to the asset each year (in the example above, this was £225 each year for 4 years). This method of depreciation is simple to use, often approved of by the Inland Revenue, and makes the process of calculating the net book value of assets a more straightforward process.

In the following diagram an asset has been purchased for £10,000 and will depreciate in value over a five-year period by £2,000 a year. At the end of year 5 the net book value of the asset is nil.

![Straight Line Depreciation](image-url)
**Accounting for depreciation**

Depreciation is shown as a business expense on the profit and loss account. Depreciation also affects fixed assets on the balance sheet by reducing their value by the amount of depreciation applied each year.

Depreciation can also be used as a method of window-dressing since if a business depreciates its assets at a low percentage; the value of the asset decreases slowly, therefore giving a higher net book value for a longer period of time (and therefore retains a relatively higher value for fixed assets). This compares to a business that is using a higher percentage to depreciate its assets, that lose value more quickly, and therefore reduces the value of fixed assets in the balance sheet.

**Budgets and budget variance**

Budgets and budget variances were introduced and explained in the AS textbook content (Chapter 18).

**The impact of the use budgets and budget variances**

A budget is a financial plan for the future and without such a plan businesses, and individuals, often get into trouble.

The managers of a business need to know when money is coming into the business and when it is going out. Failure to do this can result in cash flow difficulties and, in the worst case scenario, it can lead to insolvency i.e. the inability to pay its creditors. This is the major cause of business failure in Britain and particularly effects small and medium sized businesses, especially in times of recession.

The main causes of cash-flow problems for small businesses are late or failed payments from customers, weak sales and unexpected increases in costs.

All of this underlines the importance of setting and monitoring budgets.

Businesses will normally have a master budget for the whole business which can then be broken down into smaller sections e.g. departmental budgets. This breaking down process involves the identification of cost and profit centres within a business.

One of the most important aspects of budgeting is to check actual outcomes against predicted outcomes. Outcomes can be either favourable (F) or adverse (A).

For example if a business predicts monthly sales to total £8 000 and they turn out to be £10 000 then they will have achieved a favourable balance of £2 000. On the other hand, if they predict costs of £3 000 but they actually amounted to £4 000 there would be an adverse balance of £1 000.

As far as a business is concerned probably the most important variance is the profit variance.

In the above example the profit variance is the difference between the favourable sales variance and the adverse cost variance i.e. + £2 000 - £1 000 = + £1 000.

A business will need to monitor variance in order to understand why they have occurred:

**Favourable sales variances** might be caused by a number of factors including: an effective bonus scheme for salesmen; a successful advertising campaign; favourable weather; the demise of a competitor etc.

**Adverse sales variances** might be caused by several factors including: the successful activities of competitors; ineffective advertising; logistical problems that meant that stock did not arrive with the customer on time; bad weather etc.
Favourable cost variances may be caused by such factors as: improved labour productivity; reduced costs of imported components due to a strengthening of Sterling; finding a cheaper supplier etc.

Adverse cost variances might have been caused by several factors including: a strike by dockers; bad weather in the growing region for crops such as sugar or coffee; a devaluation of Sterling; unexpected price rises from suppliers etc.

It should be clear that some of these factors are in the control of the business and they will want to learn the lessons of why the variances arose in order to maximise the causes of the favourable variances in the future and to minimise the causes of the adverse variances. Some factors will be beyond their control but it may be possible to plan for such eventualities through such devices as buying in advance (stock or currencies) or holding buffer stocks of essential supplies.
Analysing the non-financial performance of businesses

Business performance can also be measured against other parameters such as the non-financial performance measures below. These measures can be used to make judgements on how the business has performed and are often linked to their aims and objectives or its strategy.

Elements of non-financial performance (more accurately, those not related to ratio analysis or the financial accounts of a business):

- **Market share**
  - Market share is the proportion of total sales a business has in the market. For example, if a business’s sales are £150m in a market that has total sales of £700m, then market share is 21.4%. Increasing market share is a common, long term aim of businesses. Businesses might invest money in advertising and new product development in an attempt to increase market share, which might reduce profit levels in the short term but will help them achieve a long term aim.

- **Sales targets**
  - Sales are important to all businesses; after all it is sales that generate profits. Setting sales targets for the future (based on sales forecasting techniques considered in an earlier chapter) might also involve spending money in the short term in order to generate sales revenue, thus reducing profitability. This may involve the use of loss leader products, which result in increased sales in the future. Targeting increased use of products by existing customers is also an example of sales targeting. The idea of increased use of products is important to subscription TV companies such as SKY and Virgin. Here the objective is often not to gain new customers but to increase sales to existing customers by selling them more expensive packages. Businesses might be able to save money by targeting existing customers rather than just concentrating on trying to win new business all of the time.

- **Productivity**
  - Productivity is a measure of output against a fixed input (AS textbook Chapter 35). An example is labour productivity: if 10 employees in a business producing hand-made ceramic mugs are able to produce 30 mugs per hour, then the labour productivity is 3 mugs per employee per hour. If this is compared to a competitor, who has 12 employees but is only able to produce 24 mugs per hour, then the labour productivity is only 2 mugs per employee per hour.
All other things being equal, we deduce that the business producing 3 cups per hour per employee has higher productivity and is therefore more efficient. Higher productive efficiency can reduce average unit costs and make a business more competitive.

A simple but effective example of how productivity in an industry can differ is the levels of productivity achieved by MG Rover and Nissan in their British factories. Productivity as measured by cars produced each year/ per workers employed, was 17 cars per year for a MG Rover worker (before closure). In the same year productivity at Nissan’s Sunderland plant was 103 cars per worker. Productivity was therefore 6 times as high in the Nissan plant.

In the situations above it can be seen why some businesses might ignore short term profits in order to improve their productivity, this may mean spending money on training or investing in new machinery.

Environmental impact

Increasingly, businesses are becoming more aware of the impact on the environment and try to minimise this impact. Such measures might include recycling or using recycled materials, they may try to ensure suppliers in developing counties get a good deal; they may pay their workers above the market wage. Environmental issues might be considered a long term commitment to a business and an environment audit can assist businesses with assessing their impact on their external environment to highlight where improvement can be made. For some businesses their environmental vision and aims and objectives will be far more important than increasing market share or maximising profits.

Customer satisfaction / Customer attitude surveys

Customer satisfaction measures the degree to which customer expectations are met or exceeded e.g. in terms of price and product/service quality. Methods of measuring customer satisfaction or customer attitude is to consider the level of repeat purchases, amount of customer complaints, percentage of products returned and by gathering feedback by questionnaires and focus groups. Once again the focus may be long term by improving customer satisfaction and customer loyalty may follow and then in the long term this will result in increased sales and profit.

Employee attitude surveys

Employee attitude surveys are used to find out about the views of workers in regard to their roles in the business and overall business performance. The overall objective of the survey is to discover the needs of the business from the point of view of employees. The survey will allow a business to:

- Identify issues and problems that exist e.g. low employee satisfaction
- Indicate how motivation can be improved
- Judge reaction to proposed change
- Assess effectiveness of policies.

Businesses can use this information, in addition to data on labour turnover and early leavers, in order to make improvements with recruitment and selection processes, employee retention schemes, communication systems, and employee reward and recognition policies. Improving employee satisfaction and retention may be an important aim for some businesses that have experienced labour problems in the past resulting in loss of sales and increased costs.
Discussion themes

What is the difference between a current and fixed asset?

What is the difference between current and long term liabilities?

What is working capital? Why is this an important concept for a business?

Use the financial data below to answer the questions that follow:

GlaxoSmithKline plc’s finances 2011 and 2012

GlaxoSmithKline plc’s profit and loss account (income statement) for year ending 31 December:

<table>
<thead>
<tr>
<th></th>
<th>2012</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales Revenue (turnover)</td>
<td>26 431</td>
<td>27 387</td>
</tr>
<tr>
<td>Less Cost of Sales</td>
<td>7 894</td>
<td>7 648</td>
</tr>
<tr>
<td>Gross Profit</td>
<td>18 537</td>
<td>19 739</td>
</tr>
<tr>
<td>Less Expenses</td>
<td>11 145</td>
<td>11 932</td>
</tr>
<tr>
<td>Net Profit</td>
<td>7 392</td>
<td>7 807</td>
</tr>
</tbody>
</table>

GlaxoSmithKline plc’s balance sheet on 31 December

<table>
<thead>
<tr>
<th></th>
<th>2012</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fixed (non-current) Assets</td>
<td>27 783</td>
<td>24 913</td>
</tr>
<tr>
<td>Current Assets</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stock</td>
<td>3 969</td>
<td>3 873</td>
</tr>
<tr>
<td>Debtors</td>
<td>5 242</td>
<td>5 576</td>
</tr>
<tr>
<td>Cash</td>
<td>4 184</td>
<td>5 714</td>
</tr>
<tr>
<td>Other</td>
<td>297</td>
<td>1 004</td>
</tr>
<tr>
<td>Total Current Assets</td>
<td>13 692</td>
<td>16 167</td>
</tr>
<tr>
<td>Total Assets</td>
<td>41 475</td>
<td>41 080</td>
</tr>
<tr>
<td>Current Liabilities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trade Creditors</td>
<td>8 054</td>
<td>7 359</td>
</tr>
<tr>
<td>Other</td>
<td>5 761</td>
<td>8 808</td>
</tr>
<tr>
<td>Total Current Liabilities</td>
<td>13 815</td>
<td>16 167</td>
</tr>
<tr>
<td>Long-term (non-current) Liabilities</td>
<td>20 913</td>
<td>17 243</td>
</tr>
<tr>
<td>Total Liabilities</td>
<td>34 728</td>
<td>33 410</td>
</tr>
<tr>
<td>Net Assets</td>
<td>6 747</td>
<td>7 670</td>
</tr>
<tr>
<td>Total Shareholders’ Funds</td>
<td>6 747</td>
<td>7 670</td>
</tr>
</tbody>
</table>

Calculate the following for 2011 and 2012:

- Gross and net profit margin
- Return on capital employed
- Current and acid test ratio
- Gearing ratio

Using your results comment on the financial performance of GlaxoSmithKline plc.

Explain why care has to be taken when using these calculations to comment on the financial performance of GlaxoSmithKline plc.
<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>What is a Balance Sheet? Money Week Video</td>
<td><img src="https://www.youtube.com/watch?v=DuKEcxVplnY" alt="YouTube Video Link" /></td>
</tr>
<tr>
<td>Money Week YouTube Current ratio</td>
<td><img src="https://www.youtube.com/watch?v=YBHqqT2xzpA" alt="YouTube Video Link" /></td>
</tr>
<tr>
<td>What is window-dressing? Explain 2 ways in which businesses can window-dress.</td>
<td></td>
</tr>
<tr>
<td>Explain why a business needs to depreciate its assets.</td>
<td></td>
</tr>
<tr>
<td>With the use of an example, explain the straight line method of depreciation.</td>
<td></td>
</tr>
<tr>
<td>Explain why accounts alone are not enough to judge a business’s success.</td>
<td></td>
</tr>
<tr>
<td>Identify 3 non-financial measures a business could use to evaluate its performance.</td>
<td></td>
</tr>
</tbody>
</table>