CHAPTER 01

The Balance Sheet and What it Tells Us



Chapter contents					
1.1	Introduction	2	1.7	Balance Sheets and Profit	10
1.2	An Individual's Balance Sheet	2	1.8	A Company's Published	
1.3	A Company's Balance Sheet	3		Balance Sheet	12
1.4	Short- and Long-term Classification	6	1.9	Role and Limitations of Balance Sheets	14
1.5	Balance Sheets: Financial Strength and Weakness	7	1.10	Financial Accounting and Management Accounting	17
1.6	Depreciation and Balance Sheet 'Values'	9			

LEARNING OBJECTIVES

After studying this chapter you should be able to:

- Explain the structure and terminology of straightforward balance sheets
- Understand how balance sheets can
- indicate financial weaknesses and strengths
- Demonstrate how transactions and profits affect balance sheets
- Discuss the uses and limitations of balance sheets

1.1 Introduction

The term 'balance sheet' is widely used, although most people have never seen one and have little idea of what it shows. This chapter provides a gentle introduction to balance sheets by showing how individuals can prepare their own personal balance sheets, and how similar these are to company balance sheets. It also gives some indication of the usefulness of balance sheets: they can give an indication of what an individual or company is worth (but with severe limitations). They also show what liabilities there are, which can help to predict future bankruptcy.

1.2 An Individual's Balance Sheet

If you want to know how much you are worth as an individual you would probably start by drawing up a list of everything that you own, and then try to put a value on each item. After working for a few years you might own a house, some furniture, a car, some premium bonds and shares that you intend to keep on a long-term basis, and perhaps some short-term investments. You might also have a good stock of food and wine in the kitchen as well as some money in the bank. But you may have debts: a mortgage owed to your bank or building society, an overdraft, money you owe on your credit card, and bills not yet paid for such things as electricity, gas, telephone and council tax.

	£
What I own	
House	300,000
-urniture	4,000
Car	10,000
Premium bonds and shares	6,000
ood and drink	200
Cash and bank	4,800
otal	<u>325,000</u>
What I owe	
Mortgage	222,000
Bills (gas and electricity etc.)	1,000
Credit card	2,000
Total Total	225,000
What I am worth	100,000

It is easy to produce a list of what you own, and a list of what you owe. You can then deduct what you owe from what you own to show your 'net worth'. An example is given in Illustration 1.1.

We can summarize this as:

What I own *minus* what I owe = what I am worth

If you are a full-time student this might be more difficult, or more embarrassing. It may be that the most valuable things that you own are items such as CDs, clothes, books, a stereo and a computer. You may have paid a lot for them, but their value now is questionable — especially if you suddenly needed to sell them. They would cost a lot to replace, and if they were all stolen you would probably claim quite a high value for

them if they were insured. But if you try to sell them, their second-hand value would probably be very disappointing: it is likely to be only a small fraction of what you paid for them. Worse still, you may well have a student loan and an overdraft and owe other amounts of money which means that your net worth is zero, or even negative: you owe more than you own. But it is all worth it, you tell yourself, because all the time you are spending money

on your education; that is an investment; and what you are really worth is your future earning power. If you go to your bank wanting to borrow money, they will be much more interested in your future earning power than they are in a pile of second-hand clothes and some CDs.

Three main problems arise in trying to establish what any individual or business is worth:

- 1 What items are we going to list? Are we going to include our 5-year-old computer, our vinyl records, all the food in the kitchen, our educational qualifications and our children? We might think of these as being some of the best things we have, but we would probably exclude them. We need some basis, or principle, for deciding what to include and what to exclude.
- **2** How do we establish what particular items are worth? We attempt this in several different ways, for example, by looking at what they originally cost, or what the second-hand value is, or what it would cost to replace them.
- 3 What is our future earning power worth? Whether we look at an individual, or a company, in many cases the money that they can earn in the future is worth a lot more than a collection of bits and pieces that they own. If you want to borrow money, you could tell your bank that you expect to earn at least a million pounds during your working life, and ask to borrow the million pounds now. The bank's response is likely to be short and not very sweet.

You can, of course, make up your own rules, and decide that you are worth £100,000. But if you want to compare your own wealth with someone else's, then you need to agree how the calculation is to be made. Are you going to show your house at the amount you paid for it, or at the market value now? Are you going to show your car at the amount you paid for it, or allow for the fact that it has depreciated since you bought it? If you attempt any comparisons like this you will soon find that you need some agreed rules on what to include, and the basis of valuation to be used. You will need accounting principles.

It is difficult to know what something is really worth until you sell it. I might boast that my house is worth £500,000, but we might agree that it is more objective to show it at cost; and it cost £300,000 a few years ago. The accounting principle would be to list everything that we own, and show everything at the original cost price.

Deciding what principle to adopt for furniture and for a car is more difficult. They have only a limited life, and are likely to depreciate over time as we 'use them up'. We could decide that a car has a 5-year life and write it down by one-fifth each year.

1.3 A Company's Balance Sheet

A company's balance sheet is very much like an individual's balance sheet, except that a standard layout is used, and more impressive terminology is used.

The layout and terminology probably look quite confusing at first and it may be hard to believe that Illustration 1.2 really is the same balance sheet as Illustration 1.1. By using standardized terminology and presentation, accountants say that they are making it easier to compare one company with another. You might think that they are just making it more com-

plicated so that it is 'impenetrable' to non-accountants. But professionals can no longer hide behind their terminology, conventions and so-called 'expertise'. These days many patients question their doctor's recommendations (perhaps by looking things up on the Internet and being instantly more 'expert' than the doctor). Similarly, you are learning to question accountants (and other management 'experts'), and now is the time to make sure that you understand the basic terminology of financial statements.

The terminology used on balance sheets has become more standardized since the wide-spread application of international accounting standards in 2006. Illustrations 1.2 and 1.3 are both consistent with international standards; the first is in the format illustrated in International Accounting Standard 1 (IAS 1). The second one also complies with the standard, and is also fairly conventional. Unfortunately we have to be able to cope with balance sheets presented in different ways.¹

In accountant's jargon, what a company owns and what they owe are called *assets* and *liabilities*, and the statement showing assets and liabilities (and *net assets*, or *net worth*, or *equity*, or *capital*) is called a *balance sheet*. The idea is that it 'balances': the total of assets used to be shown on the one side, and the total of liabilities and equity on the other side: the two sides balance. But nowadays it is usual to show the one 'side' at the top, and the other 'side' underneath.

	£
ASSETS	_
Non-current assets	
Freehold land and buildings (at cost)	300,000
Furniture (at cost)	4,000
Vehicles (at cost)	10,000
Investments	6,000
	<u>320,000</u>
Current assets	
Inventories	200
Cash and bank	<u>4,800</u>
	<u>5,000</u>
Total assets	<u>325,000</u>
EQUITY AND LIABILITIES	
Share capital and reserves	<u>100,000</u>
Non-current liabilities	
Mortgage	<u>222,000</u>
Current liabilities	
Trade payables	1,000
Short-term borrowings	<u>2,000</u>
	<u>3,000</u>
Total equity and liabilities	<u>325,000</u>

¹ That is the price of international 'standardization', prior to which there was a standardized UK form of balance sheet which, unfortunately, differed from that of other countries.

	£	£
Assets		
Non-current assets		
Freehold land and buildings (at cost)	300,000	
Furniture (at cost)	4,000	
Vehicles (at cost)	<u>10,000</u>	
Total of tangible assets	314,000	
Financial assets (investments)	<u>6,000</u>	320,000
Current assets		
Investories	200	
Cash and bank	<u>4,800</u>	<u>5,000</u>
Total assets		<u>325,000</u>
Current liabilities		
Trade payables	1,000	
Credit card	<u>2,000</u>	3,000
Non-current liabilities		
Mortgage		222,000
Equity		
Share capital and reserves		<u>100,000</u>
Total liabilities and equity		<u>325,000</u>

In everyday English we have seen that what I am worth is the total of what I own, minus the total of what I owe. In accountancy terms we would say that the balance sheet value of a company is the total of assets minus liabilities. We could call this 'equity', or net assets, or capital, or net worth. Accountants sometimes talk about 'the balance sheet equation' that has three items (assets, liabilities and equity), which can be arranged in different ways as follows:

(a) assets = liabilities *plus* equity

This shows a total of assets, and then how they were financed: partly with other people's money, and partly by the owners' equity

Or

(b) assets *minus* liabilities = equity This emphasizes the amount of equity

It is easy enough to establish the 'balance sheet value' of a company, or its 'net asset value', or 'equity', or 'net worth'. In Illustration 1.2 it would be £100,000. It is much more difficult to establish what a company is really worth — because of the same three problems already identified:

- 1 What items are we going to include on the list?
- 2 How do we establish what particular items are worth?
- **3** What is the future earning power of the company as a whole worth?

These problems are addressed more fully later in the book.

6

1.4 Short- and Long-term Classification

The usual formats for balance sheets make it relatively straightforward to compare one company with another. Both assets and liabilities are classified as being long or short term. Anything that is intended to be around for more than a year is long term. Anything that changes within a year is short term.

Assets

Long-term assets are called 'non-current assets'. They are still often referred to as 'fixed assets' although there is nothing fixed about them: they include cars and aeroplanes just as much as they include land and buildings.

The main categories within the non-current assets section of a balance sheet are:

- 1 Intangible assets: for example, goodwill, patents, trade marks, licences
- **2** Property, plant and equipment (tangible fixed assets): for example, land and buildings; plant, machinery and equipment; vehicles; furniture, fixtures and fittings
- **3** Financial assets or investments: items such as shares in other companies or loans that have been made

We can say that things like vehicles or furniture are *usually* classed as non-current assets, but that is not always the case. If a business intends to use them for a period of years, then they are non-current. But if someone is in business to buy and sell vehicles, or furniture, then any items held short term, awaiting sale, are not fixed assets. Stocks of goods held for sale are labelled as 'inventories' and shown as current assets.

The same arguments apply with investments. Any surplus funds invested in shares, or loaned to someone or another business, might be intended to be long term, and so are 'non-current'. Or they might be intended to be short term, and so are shown as current assets.

Current assets are short term. They include cash and any assets intended to become cash within a year. They include:

- 1 Inventories (or stocks) of merchandise, production supplies, materials, work in progress and finished goods
- 2 Trade receivables (or debtors) money owed to the business by customers and others²
- **3** Investments (those which are not fixed assets)
- 4 Cash³

Current assets are short term, and constantly circulating. They are all cash, or cash equivalents, or things that are intended to become cash within a matter of months. We intend that all our inventories will be sold; even raw materials and components will be incorporated into finished goods that are sold. Investments that are shown as current assets are assumed

² And even prepayments, and accrued income if you want to be technical!

³ Cash includes money in the bank, and petty cash in hand. Obviously the two are quite distinct and a bookkeeper needs to account for them separately. But for the sake of simplicity, in interpreting balance sheets, the two can be lumped together.

to be temporary, and so will be sold and converted into cash. The amounts shown for receivables should be received from debtors within a few months.

Liabilities

Liabilities are also categorized as current and non-current (short term and long term).

1 Current liabilities are creditors where the amount is due to be paid within a year. This includes most ordinary trade receivables (creditors for goods and services who have not yet been paid); current taxation payable; and other short-term financial liabilities such as bank overdrafts. Where a company has formally 'proposed' to pay a dividend, but has not yet done so, the 'proposed' dividend is also included in current liabilities.⁴

The balance sheets shown in Illustrations 1.2 and 1.3 clearly show current and non-current asset and liabilities separately from each other.

2 Non-current liabilities include long-term borrowings such as mortgages and debentures.

The distinction between what is short term and what is long term is important in assessing the financial strength or solvency of a business – in assessing whether or not it is likely to go bust!

1.5 Balance Sheets: Financial Strength and Weakness

Abalance sheet may suggest that a business is financially strong, although it does not prove it. It can also show signs of weakness – and we ignore these at our peril. Accountants are often criticized when a company gets into financial difficulty because they did not warn in big red letters, 'This company is dodgy. Avoid it like the plague'. But, in most cases, the signs of financial difficulty are there for all to see, long before a much publicized collapse, if only they take the trouble to try to understand the balance sheet.

Companies collapse in one way or another when they cannot pay what they are required to pay: when they are unable to meet their financial liabilities. Many factors may contribute to this situation: poor management, poor marketing, poor planning, trying to do too much with too little money, bad luck, dodgy customers, changes in the world economy and so on. There is usually someone, or something, to blame. But, in the end, either a company can pay its bills, or it cannot. The balance sheet gives a pretty good guide to what bills are due to be paid – and the resources available for paying them.

Although there may be question marks about the reliability of some figures in published accounts, the liabilities⁵ figures are among the most reliable. A company needs to have sufficient funds readily available to meet its liabilities when they fall due. A company's 'current liabilities' are shown clearly on the balance sheet. The important question is: does the

⁴ Although it might be necessary to hunt around in the notes to the accounts to find it.

⁵ There are occasions when crooked accountants and directors omit liabilities completely, or hide them as some form of 'off balance sheet finance'. These 'creative accounting' issues are addressed in Chapter 8.

company have enough short-term assets to be able to pay its short-term liabilities as they fall due?

A company's current assets include money in the bank, receivables⁶ that are due to become money in the bank within a few months, and inventories, or stocks of goods that the company plans to sell and convert into money in the bank within a matter of months. If a company has a lot more current assets than current liabilities, it should be able to pay its current liabilities when they fall due. If their current assets are two or three times as much as their current liabilities, then they appear to be fairly strong; or in the terminology of accounting, they have a high current ratio.

In Illustrations 1.1 to 1.3, current assets are £5,000, and short-term liabilities are £3,000. The current ratio is $1.67:1.^7$ This is not particularly high, but it looks as if there is enough cash and near cash available in the short term to be able to pay the short-term liabilities as they fall due.

Although all current assets should become cash within a matter of months, this is more difficult with some items than others. Not all inventories (or stocks of goods) are easily and quickly turned into cash. A half-baked loaf will probably be finished and sold for cash within a matter of hours. A half-built house, in an area where no-one wants to live, could remain unsold for a long time. If most of a company's 'current assets' are actually inventories, their ability to pay creditors quickly may be less than their current ratio suggests. A useful approach to assessing a company's ability to pay their short-term liabilities is to exclude inventories from current assets, and to assess the company's 'liquidity', by comparing their 'liquid assets' with their current liabilities. This is known as the liquidity ratio, or acid test, or quick assets ratio.

Long-term liabilities are also important – a company or individual can go bankrupt because of the weight of long-term creditors. It is difficult to say how much debt is too much – some people, and some companies, seem to manage with huge amounts of debt, whereas others (like Marconi, and a number of airlines recently) collapse. An individual who has lots of money can afford to borrow lots of money. Similarly, a company with a large amount of equity, or shareholders' funds (the company's 'own' money) can afford to borrow more money than a company with very little equity. In Illustrations 1.1–1.3 the amount of equity is £100,000, so it would seem reasonable to borrow another £100,000. If a business is financed half by borrowing, and half from its own shareholders' funds, then the borrowing is high, but probably not excessive. But in these illustrations, the borrowing is much more than the equity. If we add together all the long-term funds (shareholders' funds, plus long-term creditors = £322,000), then we can see that the assets of the business are mainly financed by borrowing. In accounting terminology such a company is 'high geared', which usually means high risk.

⁶ Receivables are debtors; these are customers who have not yet paid for the goods and services with which they have been supplied.

 $^{^{7}}$ £5,000 ÷ £3,000 = 1.67.

⁸ At the end of 2005 ICI had long-term liabilities totalling £5,600 million; total equity amounted to only £486 million. This is most unusual!

⁹ £222,000 of £322,000 is almost 69 per cent.

But high gearing, or high amounts of long-term debt, does not particularly matter if the individual or company has a substantial amount of income with which to pay the interest, and to repay the creditors (or borrow more!) when repayment is due. Individuals who have to pay mortgage interest of £20,000 a year should have no problems if their annual income is £100,000 a year or more. Someone who has to pay £20,000 a year mortgage interest from an annual income of £25,000 is likely to have real problems! It is worth comparing the amount of interest that has to be paid each year, with the income available to pay that interest. If the interest is covered, say, 5 times by the income, then it is probably all right. But if the interest is covered only 1.25 times by the available income, then there are likely to be problems.

In assessing the financial strength of a company, or how likely it is to go bankrupt, it is worth calculating the current ratio, the liquidity ratio, the capital gearing ratio and the interest times cover.

1.6 Depreciation and Balance Sheet 'Values'

Before looking at the published balance sheet of a real company, it is useful to know that all assets are not simply shown at cost. Some non-current assets, particularly land and buildings, are revalued from time to time. Most property, 10 plant and equipment ('tangible non-current assets') are depreciated each year.

If you buy a car for £10,000, you might decide that you will keep it for 4 years, and expect that at the end of the 4 years you will be able to sell it for £2,000. This is a plan, or an accounting policy. After one year you can show the car as being £8,000; after 2 years it would be £6,000 and so on. This does not mean that the car is 'worth' £8,000 after one year. What we need to do is to show three things:

- 1 The car cost £10,000
- **2** After 1 year the cumulative depreciation is £2,000 (after 2 years it would be £4,000; after 3 years it would be £6,000)
- **3** After 1 year the net book¹¹ value of the car would be £8,000 (after 2 years it would be £6,000; after 3 years it would be £4,000).

It is important that *all three* of these can be found on the balance sheet, or in notes to the balance sheet: the cost of an asset, the cumulative depreciation and the net book value. As the above example shows, the net book value is not an attempt to show what the asset is really worth now. We decided to write off the initial cost of the car, down to an estimated trade in value when we have finished with it, and to charge the same amount of depreciation each year¹² for 4 years. A published balance sheet does not, of course, show individual assets; totals for groups of similar assets are shown.

In Illustrations 1.1-1.3 depreciation has been ignored to simplify it. The car is shown at

¹⁰ Yes, even property.

¹¹ The amount shown in the 'books' of the company, or its balance sheet value.

¹² Depreciation does not have to be on a 'straight line' or 'equal annual instalments' basis. Businesses can choose to charge more depreciation in the early years by using a 'diminishing balance' basis.

£10,000. If we decided that a depreciation charge, or expense, of £2,000 is appropriate, there would be *two effects* on the balance sheet: (i) the car (assets) would be reduced by £2,000; and (ii) the equity would be reduced by £2,000. The basic balance sheet equation, shown below, would still balance.

Assets
$$-$$
 liabilities $=$ equity

Illustration 1.4 shows how the balance sheet changes as a result of charging expenses, earning income and making a profit.

1.7 Balance Sheets and Profit

A successful individual or business is likely to show an increase in capital or equity or net worth each year.

Expenses, such as depreciation, decrease assets and decrease equity. Most expenses reduce the asset of cash when they are paid.¹³ If they have not yet been paid, then there is an increase in liabilities – shown as payables (which has the same effect as a reduction in assets). Whether they are paid out in cash or not, the effect of all expenses is to reduce equity.

Revenues, mainly from sales, increase assets and increase equity. If they come in the form of cash, then the asset of cash is increased. If the customers have not yet paid, then the increase in assets shows up as an increase in receivables.¹⁴ Whether they are received in the form of cash or not, the effect of all revenues is to increase equity.

In a successful business revenues should be greater than expenses. This means that profit is earned; the net effect is to increase equity. Profit is added to equity.

If we take the balance sheet at the end of one year, and compare it with the balance sheet at the end of the next year, we can get a fairly good idea of the amount of profit that was made in the period between the two dates. All we do is compare the figure for equity (or net assets, or shareholders' funds) on the most recent balance sheet with the equivalent figure a year ago. This is shown in Illustration 1.4. The profit has shown up in additional stocks, debtors and cash: they have increased by £29,000. But fixed assets have gone down by £2,800 (depreciation), and there are additional liabilities of £1,200; the total effect of these is an increase in net assets of £25,000. That £25,000 should be added to equity: until the question mark has been replaced by £25,000 of 'retained earnings', the balance sheet will not balance.

Without more evidence we cannot always be sure that the increase in net assets is the profit for the year, for three main reasons:

1 It could be that the amount of equity has increased because shareholders have put more money into the business; there has been a new issue of shares. Any extra coming in from the issue of shares does not count as profit, and so should be deducted from

¹³ Depreciation is an expense that reduces the fixed asset; it does not reduce the cash – it is not paid.

¹⁴ Or debtors.

	Year 1		Year 2	
	£	£	£	£
Non-current assets				
Tangible assets				
Freehold land and buildings (at cost)	300,000		300,000	
Furniture (at cost less depreciation)	4,000		3,200	
Vehicles (at cost less depreciation)	10,000		8,000	
	314,000		311,200	
Investments	6,000	320,000	<u>6,000</u>	317,20
Current assets				
Inventories	200		9,000	
Trade receivables	_		20,000	
Cash and bank	4,800		<u>5,000</u>	
		<u>5,000</u>		34,00
Total assets		<u>325,000</u>		351,20
Current liabilities				
Trade payables		3,000		4,20
Non-current liabilities				
Mortgage		222,000		222,00
Total liabilities		225,000		226,20
Equity				
Capital and reserves		100,000		100,00
Retained earnings for year 2				
		325,000		351,20

the increase in equity shown on the balance sheet to arrive at the profit figure for the year.

- **2** All the profits that have been made do not necessarily stay within the business. Most companies pay out dividends. They can make a substantial profit, and pay most of it out as dividends. Dividends do not reduce profits, but they do mean that the whole of the profit for the year does not increase equity. If we are to calculate the amount of profit for the year using the balance sheet, dividends must be added to the amount of retained profit for the year to arrive at the total profit for the year.
- 3 Sometimes the amount shown for equity has increased because the company has revalued its assets. An increase in the value of assets does not count as profit. In Illustration 1.4 if the company had wanted to revalue their land and buildings from £300,000 to £350,000 there would be two effects: the amount for the asset would increase by £50,000; and the amount of equity would have increased by £50,000. This has not happened in Illustration 1.4.

If there has been an increase in the amount shown for equity from one year to the next, this is an indication of profit; but adjustments may need to be made for the three items listed above to arrive at the correct profit figure for the year.

A balance sheet is not the most convenient way of calculating profit, but it can be done! Profit for the year is the increase in equity during the year, minus any additional shares that have been issued, plus any dividends that have been declared, minus any amounts resulting from the revaluation of assets.

Some may argue that even an increase in asset values should count as profit. But the traditional accountant would not be impressed with such an 'all inclusive' view of profit.

1.8 A Company's Published Balance Sheet

A recent published balance sheet of Ted Baker plc for the year ended 28 January 2006 (slightly simplified) is shown in Illustration 1.5. It is presented in a form that became normal practice in 2006, following IAS 1. It provides useful indications in relation to several aspects of a company, especially when comparing one year with another.

- **1** Size and growth¹⁵ The book value of Ted Baker increased from £36.8m in January 2005 to £42.2m in January 2006, an increase of 11.5 per cent. There has been an increase both in current assets and in non-current assets.
- 2 How the business is financed The balance sheet equation, assets equals liabilities plus equity, shows that a business finances its assets partly with other people's money (liabilities), and partly with the owners' money (equity). Ted Baker's increase in assets has been financed mainly by an increase in equity. The increase in equity was as a result of generating profits; no additional shares were issued.

The increase in current assets (£5.7m) was financed partly by an increase in current liabilities (£2.8m).

- **3** *Profits* Comparing balance sheets of two different dates does not show the amount of profit made in the intervening period, unless a few adjustments are made, as explained above. It does not show what dividends were paid; but even after deducting the dividends we can see a substantial increase in Ted Baker's retained profits (£5.2m).
- **4** *Solvency* Balance sheets show the amount of liabilities, and give some indication whether or not these are excessive. This can be done in two stages as follows.

Current Liabilities

Are these excessive in relation to current assets? The amounts are as follows:

	2006	2005
	£000	£000
Current assets	46,775	41,090
Current liabilities	24,740	21,929

Current liabilities are amounts that have to be paid out in the short term. Current assets include cash and items that should become cash within a year. As Ted Baker has a lot more

¹⁵ In assessing size and growth it is useful also to look at sales revenue, profits and market capitalization. On Monday 19 June 2006 the market capitalization of Ted Baker was shown in the *Financial Times* as £209m.

	28 January 2006	29 January 2005
	£′000	£'000
Non-current assets		
Intangible assets	501	506
Property, plant and equipment	18,667	17,346
Other assets	<u>1,719</u>	<u>567</u>
	20,887	18,419
Current assets		
Inventories	23,475	22,725
Trade and other receivables	11,764	8,762
Cash and similar assets	<u>11,536</u>	<u>9,603</u>
	46,775	41,090
Current liabilities		
Trade and other payables	17,507	15,806
Borrowings and similar items	689	-
Current tax payable	<u>_6,544</u>	<u>6,123</u>
	24,740	21,929
Non-current liabilities		
Borrowings	750	750
Total liabilities	<u>25,490</u>	<u>22,679</u>
Net assets	<u>42,172</u>	<u>36,830</u>
Equity		
Share capital	2,149	2,149
Share premium	6,983	6,983
Retained earnings	33,040	27,698
	 42,172	 <u>36,830</u>

current assets than current liabilities, there should be no problem in paying those liabilities as they fall due. This is often expressed as the *current ratio*, which is the ratio of current assets to current liabilities, which is:

1.9:1

The ratio is lower than the 2 : 1 that some textbooks recommend, but it is in line with most retailers where current ratios tend to be lower than average.

With some current assets such as inventories, it could take many months before they are turned into cash. Liquidity can be assessed by taking only 'quick assets' and comparing them with current liabilities. This is the 'acid test'. If stocks are excluded from current assets, the *liquidity ratio* is calculated as follows:

	2006	2005
	£000	£000
Current assets excluding		
inventories	23,300	18,365
Current liabilities	24,740	21,929
Liquidity ratio	0.9 : 1	0.8 : 1

The liquidity ratio is less than 1 : 1 which, at first sight, looks rather weak: there are not enough liquid assets to pay current liabilities at the moment. But this is the normal position with retailers, and is not likely to be a problem in this case.

Non-current Liabilities

Ted Baker's balance sheet shows that borrowings (or 'debt') are the only long-term liability, and the amount is fairly low. The total equity ('E' or shareholders' funds) amounted to over £42 million in 2006, but there was only £0.75 million of long-term borrowings ('D' or debt). This can be expressed as a *gearing ratio* for each year by asking the question: what proportion of long-term finance was borrowed (as opposed to being part of shareholders' funds)? This can be expressed as: what D as a proportion of D + E?

	2006	2005
	£000	£000
D Long-term borrowings	750	750
E Equity	<u>42,172</u>	<u>36,830</u>
D + E Total long-term finance	42,922	37,580
D as a percentage of D $+$ E	1.7%	2.0%

The gearing is less than 2 per cent which is low; this means that the company has little dependence on long-term borrowings, and so the company is financially strong. Many companies have gearing ratios of 20 per cent or 30 per cent without problems. A company might be regarded as being highly geared, and so more risky, if the ratio is around 50 per cent.

In assessing if there is too much borrowing it is important to see how much interest the company has to pay, and if their operating profits are high enough that the interest is amply covered by the earnings available to pay it.

The published annual reports of companies show a lot more detail than the simplified balance sheets included in this chapter, and it can look frighteningly complex. A great deal of additional information is shown in notes to the accounts. In studying balance sheets it is important to have a few clear questions in mind; to concentrate on the larger figures; and not to become lost in detail that is hard to understand.

1.9 Role and Limitations of Balance Sheets

Palance sheets can be useful in a number of ways.

1 We saw that the balance sheet, or a statement of assets and liabilities, can be useful in showing what a person or business is worth. But there are problems in establishing agreed rules as to exactly which assets (and perhaps even which liabilities) should be

included, and in determining the basis upon which they should be valued. There is also the problem that the value of a business as a whole is likely to be different from the value of all of its assets (less liabilities) added together. The real value of a business (or an individual) might depend more on the income that it can generate (as a whole entity) in the future than upon whatever amounts might be shown for individual assets and liabilities.

- 2 We also saw that, in listing the various liabilities that have to be paid, short and long term, we can get an idea of the financial strength of a business. If its liabilities are too high, and it cannot pay them, it is likely to get into serious financial difficulties, and perhaps go out of business. Balance sheets can give a good indication of whether liabilities are too high, or whether the business is reasonably strong. The balance sheet is the basis for assessing the financial position of a company.
- **3** We can also measure profit using the balance sheet. There are easier ways of measuring profit, but it is useful to calculate it in two different ways so that one checks the other. The balance sheet approach to measuring profit is one of the two main approaches, and one that may increase in importance.
- 4 Balance sheets play an important role in 'stewardship'. Shareholders put their money into a company; directors and managers are the 'stewards' of that money; and shareholders want to know what has happened to their money. The balance sheet shows what money has been put in by the shareholders, and what retained profits have been added to it; this amount is shown as equity (or shareholders' funds). Examination of the balance sheet, the assets and liabilities, shows what that money is now financing or, if you like, what has happened to it.
- 5 In order to produce a balance sheet it is necessary to produce a listing of all the company's assets and liabilities. This can be useful in keeping track of various assets, and ensuring that all are being put to good use and are earning their keep. When a company gets into financial difficulties it sometimes seems that they manage to find assets that they had previously forgotten about, or done nothing with. There may be investments that are not much use; sports and social facilities that are hardly used; debtors who have been neglected and have got away with not paying for too long (perhaps because of a half-forgotten dispute); a workshop developing a new product that made little progress; machinery, or components and raw materials that were specially bought for a new product that was quietly abandoned; too many premises or branches; an expensive head office in the centre of London; a training centre, kitchens, computer workshops and maintenance facilities that should have been sold or redeployed when these activities were outsourced.

Many companies do not even know what assets they own, or how many laptop computers have 'walked' out of the door, and they do not even have an up-to-date fixed assets register. The process of producing listings of assets in order to compile a balance sheet can be a useful housekeeping exercise.

6 In addition to providing a basis for assessing the financial *position* of a company, the balance sheet also provides a basis for assessing the financial *performance* of a company. The shareholders of a company are likely to be concerned about perform-

ance in terms of profitability. They are not concerned merely with the amount of profit the company makes; they are concerned with how much profit the company makes in relation to the amount of capital employed. A profit of £1 million may look good for a company with capital employed of £5 million; it would look pathetic in relation to capital employed of £100 million. It is the balance sheet that shows the amount of capital employed. The ratio of profit to capital employed is a key ratio in assessing and improving a company's financial performance.

7 Financial accounting is a whole system, and the balance sheet is an essential part of it in checking, balancing and controlling other parts of the system. If a company's balance sheet does not balance, there is definitely something wrong! Accountants are only (or nearly!) human, and inevitably some mistakes are made with figures. The financial accounting system is designed to show up errors, and to find where they occurred. An accounting system can also show up fraud and theft. When a balance sheet does balance, we cannot be sure that there is no fraud or error. If it does not balance, we can be sure that something is wrong; and if we do make a mistake, it will probably show up during the accounting processes before producing a balance sheet.¹⁶

But we should not expect too much from balance sheets. They were never properly designed to achieve anything very useful. When double-entry bookkeeping first became widely used, the balance sheet was just a matter of bookkeeping convenience. It was not even necessary to produce one every year. Until the eighteenth century a balance sheet was often not produced until the ledger was full; then a balance sheet was a summary of the assets and liabilities that were transferred to the new ledger. Any remaining old balances, mostly revenues and expenses, were written off. The balances shown on the balance sheet are items that are continuing, but they tend to be shown at the cost price when they are first entered in the business's books.

By the end of the eighteenth century the production of balance sheets on an annual basis became normal. During the nineteenth century it became a requirement for companies to publish annual balance sheets; and during the twentieth century legislation became increasingly specific about what should be shown on a balance sheet. Towards the end of the twentieth century accounting standards laid down more detailed requirements, and since 2006 companies have been following International Accounting Standards in the same way as many other countries.

The main limitations of balance sheets have already been referred to:

- 1 What items are we going to include?
- **2** How do we establish the value of particular items?
- **3** The value of a company as a whole is likely to be very different from the total net value of the individual assets and liabilities.

Sometimes it is very difficult to decide whether or not an item should appear on the balance sheet. If a company running a number of hotels buys an additional hotel, that is clearly an extra fixed asset that would be shown on the balance sheet, and the

¹⁶ Mistakes usually show up in the trial balance – if it does not balance!

amount shown would be the amount paid for it. If such a company pays for routine cleaning of a hotel, there is no additional asset, and the amount paid should not appear on the balance sheet as an additional asset. A payment for cleaning will reduce assets (cash) and also reduce equity. Routine redecoration, like cleaning, is an expense that does not appear on the balance sheet. Improvements, such as installing double glazing, an extension, or additional bathrooms, are 'capital expenditure': the amounts are added to fixed assets on the balance sheet. Sometimes the boundary between 'capital expenditure' (which appears on the balance sheet, and does not reduce equity) and 'revenue expenditure' (which does not appear on the balance sheet, and does reduce equity) is not clear and there may be scope for creative accounting.

Where there is a lack of clear principles to determine what should be included on a balance sheet, and the basis or valuation that is to be used for the various items, the value of balance sheets is restricted. A series of official 'Financial Reporting Standards', now on an international basis, has been produced to deal with this problem, and the development of financial accounting has steadily encouraged users to expect more from balance sheets. It would be difficult for them to satisfy all the different expectations that interested parties might have. But we cannot even begin to assess a company's financial position and performance without a good understanding of balance sheets.

1.10 Financial Accounting and Management Accounting

Financial accounting is mainly concerned with producing financial statements for share-holders, creditors and others who are outside the organization concerned. The main financial statements are the balance sheet, the income statement and the cash flow statement. In published accounts these are supported by substantial additional information, notes and explanations. The Companies Acts, and official accounting standards, regulate the information that is published. Within the company a sophisticated book-keeping system is required to record all the transactions that form the basis of these financial statements. Bookkeeping systems are explained in Chapter 14. In large-scale businesses managers do not rely very much on published financial accounting information; they have access to much more detailed and relevant management accounting information.

Management accounting is concerned with producing information for managers who are concerned with planning, decision-making and control. Management accounting information is not usually published, and it is designed to meet the needs of the managers of the organization concerned; it does not have to comply with official regulations. The subject of management accounting is introduced in Chapter 13 where it is clearly distinguished from financial accounting.

Summary

A balance sheet shows the liabilities of a company, and can provide useful information about a company's financial position. Solvency ratios can give an indication of whether a company is likely to become insolvent. Assets are not usually shown at their current value, and care is needed in using balance sheets as an indication of the value of a company. A business as a whole, as a going concern, is usually worth much more than the total of its net assets.

Review of key points

- A balance sheet shows what a company owns (assets) and what it owes (liabilities).
- By deducting liabilities from assets we arrive at the figure for 'equity', or 'capital', or 'net assets'.
- Assets and liabilities are classified as being long or short term. UK balance sheets usually begin with non-current assets, followed by current assets. The second part of the balance sheet shows how the assets were financed: by liabilities (current and non-current) and by equity.
- A successful business is usually worth more than the balance sheet figure for its net assets.
- Balance sheets show how a company is financed and may indicate if a company has excessive liabilities.
- Comparing this year's balance sheet with last year's can provide a basis for calculating profit
- The main financial accounting statements are published; management accounting information is different, and is internal to the organization.

Self-testing questions

- 1 Which of the following are shown on a balance sheet?
 Assets; expenses; liabilities; sales; share capital; profit for the year
- 2 What is the difference between a non-current asset and a current asset?
- **3** Give examples of non-current (or 'fixed') assets. In what circumstances would some of the items you have listed be current assets?
- **4** Arrange the three main balance sheet items (assets, liabilities, equity) as an equation.
- **5** A balance sheet appears to show what a business is worth. What are the main problems with this statement?

Self-testing questions (continued)

6 You are given the following simplified balance sheet of the Sandin Castle Company:

	£	£
Non-current assets		50,000
Current assets		
Inventories (at cost)	24,000	
Receivables	12,000	
Cash	<u>9,000</u>	
		<u>45,000</u>
Total assets		<u>95,000</u>
Current liabilities		
Payables		22,000
Equity		
Share capital	50,000	
Retained earnings	<u>23,000</u>	
		<u>73,000</u>
		<u>95,000</u>

- **a** Calculate the current ratio.
- **b** Calculate the liquidity ratio.
- **c** After preparing the balance sheet, the company sells inventories, which had cost £4,000, for £8,000, which it immediately receives in cash. Show how the balance sheet would appear after this transaction.
- **d** How does the above transaction affect the current ratio and the liquidity ratio?
- 7 You are given the following simplified balance sheets of the Windysand Company as at 31 December:

Simplified¹⁷ balance sheet of the Windysand Company as at 31 December

	Year 1	Year 2
	£	£
Non-current assets	320,000	350,000
Current assets	5,000	45,000
Total assets	<u>325,000</u>	<u>395,000</u>
Equity	100,000	183,000
Non-current liabilities	222,000	202,000
Current liabilities	3,000	_10,000
	<u>325,000</u>	<u>395,000</u>

- **a** How much profit does it at first seem that the company made during year 2?
- **b** How would your answer to (a) be affected if you found out that the company had paid £10,000 in dividends; that additional shares with a value of £20,000 had been issued; and that fixed assets had been revalued upwards by £30,000?

¹⁷ The order of items on this balance sheet follows the illustration given in IAS 1; it differs from the order given in Ted Baker's balance sheet. We have to be prepared for balance sheets that show items in a different order.

Self-testing questions (continued)

8 You are given the following simplified balance sheets of two very similar companies; Domer Castle Company and Warmer Castle Company, as at 31 December year 1.

	Domer Castle Ltd £	Warmer Castle Ltd
Non-current assets	L	L
Tangible assets		
Freehold premises (at cost)	300,000	100,000
Furniture (at cost less depreciation)	4,000	80,000
Vehicles (at cost less depreciation)	_10,00 <u>0</u>	90,000
•	314,000	270,000
Investments		44,000
	<u>314,000</u>	<u>314,000</u>
Current assets		
Inventories	8,000	19,000
Receivables	12,000	10,000
Cash	<u> 14,000</u>	<u>5,000</u>
	<u>34,000</u>	34,000
Total assets	<u>348,000</u>	<u>348,000</u>
Equity		
Share capital	100,000	100,000
Retained earnings	<u>131,000</u>	31,000
	<u>231,000</u>	<u>131,000</u>
Non-current liabilities		
10% Debentures	100,000	200,000
Current liabilities		
Trade payables	17,000	17,000
Total equity and liabilities	<u>348,000</u>	<u>348,000</u>

During year 1 the operating profit (earnings before interest and taxation) of the Domer Castle Company amounted to £31,000. The operating profit of the Warmer Castle Company amounted to £32,000.

Which of the two companies appears to be financially weakest, and why? You should calculate the current ratio, the liquidity ratio, the capital gearing ratio and the number of times interest is covered by operating profit.

Self-testing questions (continued)

9 You are given the following simplified balance sheet of the Stonefolk Company as at 31 March year 4.

	£
Non-current assets	<u>158,000</u>
Current assets	
Inventories (at cost)	110,000
Receivables	120,000
Cash	20,000
	<u>250,000</u>
Total assets	<u>408,000</u>
Equity	
Share capital	250,000
Retained earnings	38,000
	288,000
Current liabilities	
Trade payables	120,000
Total equity and liabilities	408,000

- **a** The following transactions took place in April year 4. Show how each would affect the balance sheet. (Each transaction must affect two or more figures, and the balance sheet must continue to balance.)
 - i A building, which had cost £80,000, was sold for £100,000, which was immediately received in cash.
 - ii Inventories, which had cost £30,000, were sold to Mr Spliff for £80,000. Mr Spliff agreed to pay for the goods by the end of May year 4.
 - **iii** The company paid £40,000 of the amount that it owed to creditors, which are shown on the balance sheet as 'payables'.
- **b** Show how the balance sheet would appear after these transactions have been recorded.

Assessment questions

- 1 What are the main functions of a balance sheet?
- **2** You are given the following simplified balance sheet of the Hackin Company as at 30 June year 9.

Total equity and liabilities

Assessment questions	(continued)
	£
Non-current assets	250,000
Current assets	
Inventories (at cost)	60,000
Receivables	40,000
Cash	<u>120,000</u>
	<u>220,000</u>
Total assets	<u>470,000</u>
Current liabilities	
Payables	100,000
Equity	
Share capital	250,000
Retained earnings	120,000

- a Calculate the company's current ratio and liquidity ratio.
- **b** The following transactions take place during July year 9:
 - i New plant and equipment are bought for £80,000, and payment is made in cash.

370,000

<u>470,000</u>

ii Additional inventories of goods are bought for £15,000; it is agreed that they will be paid for in August.

Prepare a revised balance sheet after these transactions have been recorded.

- **c** How do these transactions affect the current ratio and the liquidity ratio?
- **3** You are given the following simplified balance sheets of the Fourpine Company as at 31 December.

	Year 1	Year 2
	£	£
Non-current assets	520,000	450,000
Current assets	<u>45,000</u>	<u>55,000</u>
Total assets	<u>565,000</u>	<u>505,000</u>
Equity		
Share capital	300,000	310,000
Retained earnings	<u>35,000</u>	60,000
	<u>335,000</u>	<u>370,000</u>
Non-current liabilities	200,000	100,000
Current liabilities	30,000	_35,000
Total equity and liabilities	<u>565,000</u>	<u>505,000</u>

- **a** How much profit does it at first seem that the company made during year 2?
- **b** How would your answer to (a) be affected if you found out that the company had paid £25,000 in dividends?
- **4** You are given the following simplified balance sheets of the Port Andrew Company and the Port Edward Company as at 31 December year 1.

Assessment questions (continued)				
	Port Andrew Ltd	Port Edward Ltd £		
Non-current assets				
Tangible assets				
Freehold premises (at cost)	100,000	200,000		
Plant (at cost less depreciation)	200.000	100.000		
Vehicles (at cost less depreciation)	100,000	100.000		
tomotos (at oost loss doplostation)	400,000	400,000		
Investments	200,000	30,000		
	600,000	430,000		
Current assets	<u>000/000</u>			
Inventories	70,000	40,000		
Receivables	50.000	90.000		
Cash	10.000	60,000		
0.001	130,000	190,000		
Total assets	730,000	620,000		
Equity	700,000	020,000		
Share capital	300,000	300,000		
Retained earnings	60,000	140,000		
netanica carinigs	360,000	440,000		
Non-current liabilities	000,000	110,000		
10% Debentures	300,000	100,000		
Current liabilities	<u>500,000</u>	100,000		
Trade payables	70.000	80,000		
• •				
Total equity and liabilities	<u>730,000</u>	<u>620,000</u>		

During year 1 the operating profit of the Port Andrew Company amounted to £61,000. The operating profit of the Port Edward Company amounted to £40,000. Which of the two companies appears to be the financially weaker, and why? You should calculate the current ratio, the liquidity ratio, the capital gearing ratio and the interest times cover.

5 You are given the following simplified balance sheet of the Whiting Company as at 31 August year 6:

	£	£
Non-current assets		350,000
Current assets		
Inventories (at cost)	90,000	
Trade receivables	80,000	
Cash	30,000	200,000
Total assets		<u>550,000</u>
Current liabilities		
Trade payables		130,000
Equity		
Share capital	380,000	
Retained earnings	40,000	<u>420,000</u>
		<u>550,000</u>

Assessment questions (continued)

- **a** The following transactions took place in September year 6. Show how each would affect the balance sheet. (Each transaction must affect two figures, and the balance sheet must continue to balance.)
 - i A new machine costing £10,000 was purchased and paid for in cash.
 - ii Inventories which had cost £50,000 were sold to Mrs Fish for £90,000 and paid for immediately in cash.
 - **iii** £30,000 was received from debtors, which were shown as 'receivables' on the balance sheet.
- **b** Show how the balance sheet would appear after these transactions have been recorded.

Group activities and discussion questions

- 1 Each individual in the group should attempt to answer the question 'How much am I worth?' There is no need to disclose actual figures or personal information. The objective is to determine and for members of the group to agree the way in which the question would be answered. What principles or rules would you use?
- 2 Each member of the group should choose two listed companies, and obtain their published balance sheet (from the companies' websites; or by using the *Financial Times* Annual Reports Service). Try to assess how financially strong each company is (or is it likely to collapse?). The group should rank each of the companies that members have examined from the strongest financially, to the weakest. The group should discuss, and try to agree, criteria to form the basis for this assessment.
- **3** Is it possible to calculate the value of a company? If not, why not? If so, how?
- **4** Which of the following should be included as assets on a company's balance sheet: money which is owed to the company; the cost of an advertising campaign; machinery that is over 20 years old but which is still used occasionally; key employees who have a high market value; money paid as 'commission' to a government minister in Wayawayaland that has helped to secure a lucrative contract; brand names; money receivable under a contract that was signed yesterday and that will be earned next year; machinery that the company does not own, but for which they have signed a 5-year lease.

Financial accounting in context

Eurotunnel secures 'Chapter 11' protection

By Tom Stevenson

Daily Telegraph, 3 August 2006

Discuss and comment on the following extract from the press with particular reference to how balance sheets can help to predict the bankruptcy of a company.

Source: Reproduced with permission by the Daily Telegraph.

EUROTUNNEL has won up to 18 months protection from its creditors after a French court appointed an administrator to help put together a rescue plan for the heavily indebted Channel Tunnel operator.

The 'safeguard procedure', which is similar to Chapter 11 protection in the US, follows 15 months of failed negotiations over the restructuring of a £6.2bn debt mountain, which has brought Eurotunnel to the brink of bankruptcy.

The protection will allow Eurostar trains, and the freight and vehicle-carrying shuttle trains that use the tunnel between Britain and France, to keep running while a deal is thrashed out.

Chairman Jacques Gounon has warned that Eurotunnel could collapse as early as next January unless two sets of warring creditors can agree on the terms of a debt-for-equity swap by September.

He said yesterday: "I am convinced that we now have the conditions necessary to achieve a financial restructuring for Eurotunnel within the time allowed."

Eurotunnel is due to begin repaying debt in January. If agreement is not reached in time, senior creditors – principally the banks that funded the construction of the tunnel 20 years ago – have the right to take control of the tunnel.

A spokesman for the senior creditors said: "We continue to work to try and achieve a consensual deal based on economic reality."

A proposal that would see senior bank creditors take up to 87pc of the company in exchange for writing off some of Eurotunnel's outstanding borrowings was blocked last month by a group of bondholders representing £1.9bn of lower ranking debt.

The deal, proposed by Mr Gounon with backing from Goldman Sachs and Australia's Macquarie, left open a slim chance of shareholders retaining control. They could do this if Eurotunnel were able to generate enough cash to buy back part of a new £1.2bn bond before its conversion into shares in three to five years' time.

Even if the bond was to convert in full, shareholders would be left with 13pc of the plan. the Gounon under company 800,000 around Eurotunnel has France. mainly in shareholders, Bondholders, led by Deutsche Bank have been pushing for a share of the proposed bond. They also believe that the 13pc minimum stake earmarked for existing shareholders is too generous. A spokesman for the bondholders said they would "actively co-operate in order to reach a balanced and satisfactory solution for all parties involved, and for Eurotunnels' future".

The French court delayed a decision on the protection order last week in order to give more time for agreement between the various groups of creditors.

Eurotunnel said it believed there had been "a convergence of views amongst the principal creditors who consider that [the Gounon] proposal constitutes the basis for pursuing negotiations that will lead to a reconciliation of their positions".

Eurotunnel, an engineering and operational success, has been a financial disaster ever since construction costs doubled to £10bn, the tunnel opened a year late in 1994 and traffic forecasts proved too optimistic after ferry operators responded to the new cross-Channel threat by launching a price war.

References and further reading

- International Accounting Standard 1 *Presentation of Financial Statements*. (December 2003, amended March 2004). IASB.
- Pendlebury, M. and R. Groves (2003) *Company Accounts: Analysis, Interpretation and Understanding* (6th edition). Thomson Learning.
- Wood, F. and A. Sangster (2005) *Business Accounting* vol. 1 (10th edition). FT Prentice Hall.
- www.frc.org.uk (gives details of the Financial Reporting Council and arrangements for accounting standards in the British Isles)
- www.iasb.org.uk (gives details of international accounting standards)
- www.tedbaker.co.uk (select: share info; click for full financial information; select financial reports or other information as required)