

Published accounts and ratios 2009

In 2005, the presentation of all plc accounts changed. The AQA business studies exams will be based on the new accounting standards. Are you ready for this? For those of you who have already been taught a few lessons on this subject, **Ian Marcouse** explains how to interpret published accounts

A balance sheet is based on a simple idea — that it is helpful to take stock once a year and ask: 'What are our assets and liabilities?' and therefore, 'Are we financially strong enough to keep going for at least another year?'

Unfortunately, published plc accounts make it hard to answer these questions because they are bogged down in terminology. And the way the accounts are set out make it hard to make simple calculations. The 2005 Accounting Standards set out a particular way of showing the structure of a balance sheet, but Figure 1 gives you a broad outline of what a balance sheet shows, that is total assets – total liabilities = net assets (which must equal total equity).

From this outline, it is possible to interpret some actual accounts. Table 1 shows the latest annual accounts for Tesco and Sainsbury (although please note that these are heavily simplified, in the way that can be expected in an AQA exam). Both are interesting because they give an idea of the pressure each business has been under. Tesco has been pursuing a bold growth strategy, largely based on growth overseas, including America and the Far East. Its accounts show a strained balance sheet, with huge extra borrowings (the near-doubling of non-current liabilities). Sainsbury's balance sheet tells the story of the hard road the company has been down. Its daily trading has improved hugely, but it has been struggling to make big profits, and still has costs lingering from closing down some businesses the company used to operate. So its balance sheet is smaller today than it used to be.

We will carry out some ratio analysis on these accounts, but before doing so a few conclusions can be drawn from just reading the data in Table 1:

- Tesco is roughly three times the size of Sainsbury.
- Both companies run their day-to-day business with negative working capital, i.e. they get enough credit from their suppliers to finance their day-to-day business — and then some.

In autumn 2008, Tesco demanded that its suppliers give longer credit periods — see how that has pushed the current liabilities up by nearly £8 billion (from £10,300 million to £18,000 million). It is this that has pushed Tesco's cash total up so much — Tesco has its suppliers' money in its own bank account.

In contrast with Tesco's fast-changing balance sheet, Sainsbury's seems very stable, even if the total equity has declined.

Profitability

The key ratio to measure profitability is return on capital employed (ROCE). For this, you must first work out the capital employed, which is total equity + non-current liabilities. Then the ROCE formula can be applied:

$$\text{ROCE} = \frac{\text{operating profit}}{\text{capital employed}} \times 100$$

As an example, this is the Tesco ROCE for 2009:

$$\frac{\pounds 3,200\text{m}}{\pounds 13,000\text{m} + \pounds 15,000\text{m}} \times 100 = 11.4\%$$

Now work out Sainsbury's ROCE for 2009 and those for 2008:

Tesco's ROCE: 11.4% (2009) ? (2008)

Sainsbury's ROCE: ? (2009) ? (2008)

(Answers on p.31.)

The conclusion is clear: Sainsbury's profitability was half that of Tesco's in 2008, but it improved in 2009 and came surprisingly close to Tesco's. Perhaps this helps to explain Tesco's decision in April/May 2009 to cut the prices it pays its suppliers but not pass the cuts on to its customers, i.e. to boost its profit margins. Tesco's management would hate to be caught up by Sainsbury.

Looking at the income and expenditure account items, you can see that although Tesco's sales were three times higher than Sainsbury's, its profits were six times higher.

Why use ratios?

It is hard to carry out much in-depth analysis of a set of accounts without using a calculator. Analysts and shareholders want to look in detail at trends, strengths and weaknesses, and ratios provide a useful way of making comparisons. In this case, they can allow an inter-firm comparison ('inter' means between, e.g. between Tesco and Sainsbury) and also a comparison over time (e.g. 2009 compared with 2008).

There are four main areas of analysis to consider:

- profitability
- financial health
- efficiency
- the position of shareholders

In this article, just the first two will be considered.

Table 1 Annual accounts for Tesco (year to February) and Sainsbury (year to March)

Balance sheet items	Tesco plc (£m)		Sainsbury plc (£m)	
	2009	2008	2009	2008
Non-current assets	32,000	24,000	8,400	8,400
Inventories (stocks)	3,100	2,700	700	800
Receivables (debtors)	3,700	1,300	200	200
Cash	7,200	2,300	700	700
Current liabilities	(18,000)	(10,300)	(2,900)	(2,600)
Net current assets	(4,000)	(4,000)	(1,300)	(900)
Non-current liabilities	(15,000)	(8,000)	(2,700)	(2,500)
Net assets	13,000	12,000	4,400	5,000
Share capital	5,000	4,900	2,100	2,100
Reserves (retained earnings)	8,000	7,100	2,300	2,900
Total equity	13,000	12,000	4,400	5,000
Income and expenditure account items				
Revenue	54,300	47,300	18,900	17,800
Cost of sales	(50,100)	(43,700)	(17,870)	(16,800)
Gross profit	4,200	3,600	1,030	1,000
Overheads	(1,000)	(800)	(360)	(470)
Operating profit	3,200	2,800	670	530

Box 1 Glossary of balance sheet terms

- Inventories** — stocks, i.e. raw materials or finished goods held in store for use or immediate sale.
- Non-current assets** — fixed assets, i.e. items of value for use and re-use for more than one year.
- Non-current liabilities** — borrowings that will have to be repaid, but not for at least a year.
- Payables** — trade creditors, i.e. suppliers you owe money to.
- Receivables** — debtors, i.e. customers who have bought goods from you on credit.
- Total equity** — shareholders' funds, i.e. all the capital the business owes to its shareholders: share capital and reserves (accumulated, retained profit).

Source: Lines, D., Marcouse, I. and Martin, B. (2009) A-Z Business Studies Handbook (6th edn), Philip Allan Updates.

Financial health

When analysing a firm's financial health, there are two elements to consider. The first is the firm's short-term position. Quite simply, can it pay its bills? This is measured by liquidity ratios. Second, there is the longer-term solvency of the business, judged best by its gearing level, i.e. to what extent the business is dependent on cash.

Accountants like to see a surplus of current assets over current liabilities and therefore they view a ratio of around 1.5 as ideal. The formula is:

$$\text{current ratio} = \frac{\text{current assets (inventories, receivables and cash)}}{\text{current liabilities (overdraft, payables and tax due to be paid)}}$$

Tesco's current ratio for 2009 is:

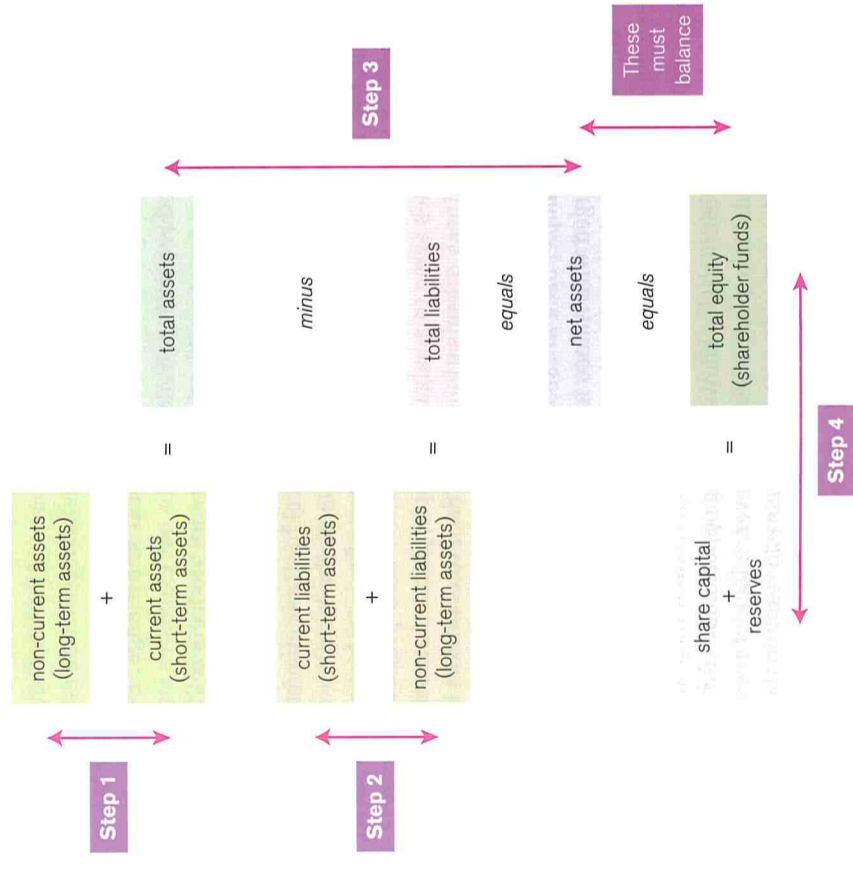
$$\frac{\pounds 14,000\text{m}}{\pounds 18,000\text{m}} = 0.78$$

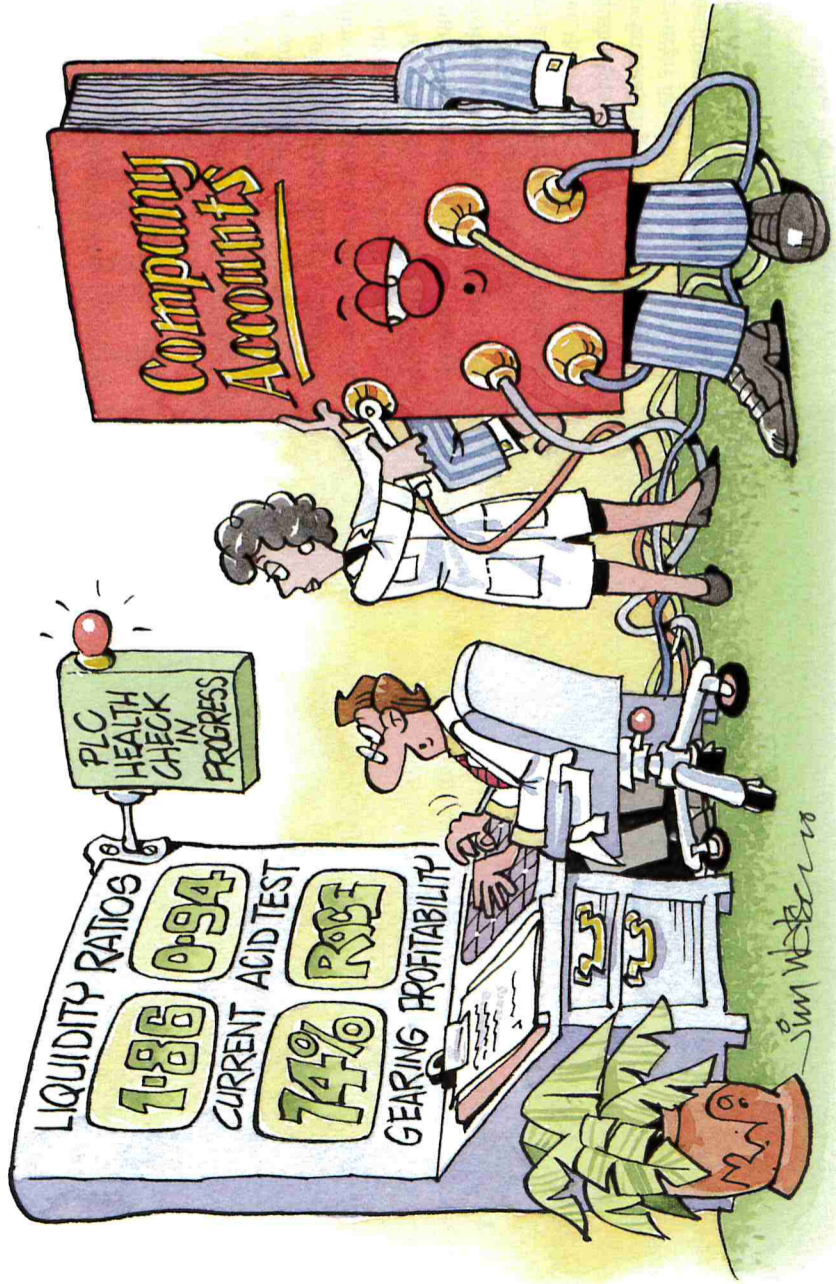
That figure looks a bit worrying, but because Tesco's suppliers (who were owed £8.5 billion on the day the balance sheet was drawn up) are unlikely to press hard for payment, banks feel confident

Liquidity ratios

Liquidity is the extent to which a business is able to generate the cash to pay its bills. The **current ratio** measures whether the firm's current (short-term) assets are sufficient to cover the short-term liabilities.

Figure 1 The layout of balance sheets for plcs, in accordance with the International Financial Reporting Standards 2005 (and used in AQA business studies exams)





that Tesco will have no problems paying its bills. A smaller business might find life a lot tougher if its current ratio was around half the recommended level.

Now work out Sainsbury's current ratio for 2009 and those for 2008:

Tesco's current ratio:
 11.4% (2009) ? (2008)
 Sainsbury's current ratio:
 ? (2009) ? (2008)
(Answers on p.31.)

Both Tesco and Sainsbury have current ratios that seem worryingly low. Yet they have both run their business in this way for years, and it clearly works. Usually, when a firm's current ratio is low, it is wise to check its **acid test ratio** and also its gearing (discussed below).

The acid test ratio acknowledges a truth that became evident in January–March 2009: inventories (stocks) can be very hard to shift. Companies such as Honda closed down their factories in a desperate attempt to cut stocks at a time when car sales were slow. So the acid test measures liquidity excluding stock, i.e. 'if we ignore stock, do we have enough in current assets to meet our current liabilities?' The formula is:

acid test ratio = $\frac{\text{current assets - stock (receivables and cash)}}{\text{current liabilities (overdraft, payables and tax due to be paid)}}$

Tesco's acid test ratio for 2009 is:

$\frac{\pounds 10,900\text{m}}{\pounds 18,000\text{m}} = 0.61$

With this ratio, accountants are said to recommend a figure of around 1. Therefore Tesco's immediate liquidity position is relatively weak. Fortunately, it has huge potential to borrow from any bank, and there is little of concern.

Now work out Sainsbury's acid test ratio for 2009 and those for 2008:

Tesco's acid test ratio:
 11.4% (2009) ? (2008)
 Sainsbury's acid test ratio:
 ? (2009) ? (2008)
(Answers on p.31.)

When inventories are excluded, the position of both companies looks even worse. Both are quite illiquid, i.e. their liquidity position is weak. As before, both have lived with this position for many years and their suppliers and bankers seem to accept it. The risk to both companies is that it might

prevent them from seizing a big opportunity because of insufficient ready capital. In 2009, for instance, public contempt for high-street banks could have meant that a new chain of Sainsbury Bank branches would have become a great success. But Sainsbury's low liquidity meant it needed all its cash to run its own business. There was no scope for growth.

Gearing

Gearing is what allows car wheels to run faster than the car engine, i.e. by moving up through the gears, the car can go faster. Gearing does the same for businesses. If a company with $\pounds 1$ million of capital borrows another million, it can grow twice as fast. That's great in boom times, the problem comes when things turn bad. The car (company) can be going too fast as the economy hits a bend in the road. A crash is the likely outcome. This is what happened to many firms in the winter of 2008/09.

Gearing is measured through this formula:

gearing = $\frac{\text{non-current liabilities}}{\text{capital employed}} \times 100$

In the above example, if a business with $\pounds 1$ million of its own borrowed another

$\pounds 1$ million, it would have $\pounds 2$ million of capital employed in the business and its gearing would be:

$\frac{\pounds 1\text{m} + \pounds 1\text{m}}{\pounds 1\text{m}} \times 100 = 50\%$

What is the right level of gearing? It depends, but certain things are clear. At zero gearing (nothing borrowed), a business is moving along in first gear — slowly but surely. If its needs to brake, it is easy to do because it is moving so slowly. However, an investor might think: 'If the management is so cautious, perhaps there's little future in this business.' At really high levels of gearing, say 75%, the business has borrowed $\pounds 3$ million for every $\pounds 1$ million of its own money. If times get tough, the business will have to find huge interest payments on all that debt. This might prove too much and the business may crash — suddenly and violently, like Woolworths in autumn 2008.

Most analysts think that gearing of around 33% is solid. You've borrowed $\pounds 0.5$ million for every $\pounds 1$ million you own, and the interest payments are much more likely to be manageable. 50% is considered high enough, and beyond 50% is high gearing, which means high risk.

In 2009, Tesco's gearing was:
 $\frac{\pounds 15,000\text{m}}{\pounds 28,000\text{m}} \times 100 = 53.6\%$

This figure is surprisingly high and came about because the company more than doubled its long-term borrowings in 2008. Nevertheless, it would only be a worry if Tesco stopped making good profits. Its interest payments are huge (nearly $\pounds 500$ million in 2009) but the business makes profits of $\pounds 3,000$ million, so it is not a concern. Now work out Sainsbury's gearing for 2009 and those for 2008:

Tesco's gearing:
 11.4% (2009) ? (2008)
 Sainsbury's gearing:
 ? (2009) ? (2008)
(Answers on p.31.)

These figures show the sharpness of Tesco's increase in its gearing in 2009. Clearly Sainsbury has also increased its gearing, but is still keeping it at a normal level. Taking Tesco's relatively high gearing with its relatively low liquidity, anyone thinking of buying Tesco shares would be wise to be a bit cautious. The mighty Tesco is under a bit of financial strain.

Conclusion

The new way of presenting accounts can make it relatively hard to dig out the data, especially the capital employed. But this is mainly a matter of practising in class. The conclusions that can be drawn from the ratio analysis are unchanged by this process. Ratio analysis remains a key way of gaining an understanding that is almost impossible to get by just looking at columns of figures. Therefore examiners will carry on seeing this topic as an ideal way to separate the hard-working student from the absentee. Which is why this article will be worth reading again before the Unit 3 examination.

Ian Marcoué is the *Founding Editor of BUSINESS REVIEW* and author of many books, including the new edition A-Z Business Studies Handbook published by Philip Allan Updates in August 2009.

Key words
 acid test ratio
 gearing
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 current ratio
 liquidity

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