



# How to illuminate your business

THE SECOND AND FINAL PART OF **WILL SPINNEY'S** FEATURE ON RATIO ANALYSIS.

The first part of this feature (see CMS Summer 2010) covered such key ratios as return on capital employed, operating profit margin and return on equity, as well as a variety of liquidity and solvency performance measures. This time around, we're looking at the gearing/leverage ratio and interest cover, as well as a range of shareholder measures such as earnings per share.

## GEARING/LEVERAGE

Gearing:  $\text{debt} \div \text{equity}$   
or

Leverage:  $\text{debt} \div (\text{debt} + \text{equity})$

Gearing and leverage measure how much of the company is financed by debt and represent very quick ways of assessing the credit risk of business. They are in common usage. Clearly some businesses can withstand higher ratios than others and so the ratio has to be taken in context with other factors.

The first formula listed above measures debt as a percentage of equity and is usually referred to as "gearing". The second formula takes debt as a proportion of the total external financing of the company (provided by shareholders and debt-holders); it is usually referred to as "leverage" and equals the proportion of the assets financed by debt.

When calculating these ratios the equity value may be taken as the book value or the market value. When the ratios are used for financial decision-making purposes (such as project evaluation) it is usual to take market values for both debt and equity when calculating these ratios. Thus, in this context, equity means market capitalisation rather than the shareholders' funds reported in the balance sheet. However, when used in start-up situations such as leveraged buyouts and when monitoring compliance with financial covenants<sup>1</sup> it is always the accounting (book) values of debt and equity that are used. This is because the ratio would be very volatile if market data was used and a fall in the share price alone could cause a default, which no treasurer would want.

Companies usually benefit from some debt in their capital structure (subject to availability and cost, for example, in the credit crunch). Debt is cheaper than equity (funds from shareholders) because it is less risky from the point of view of the lender, who therefore accepts a lower rate of return. Lenders may have some kind of security over the assets (so they can take control of and if need be sell them to repay borrowings), and, even if not, rank above shareholders in the



order of payment if the company collapses. Also, the interest on debt is tax-deductible. On the other hand, a company does not want too much debt, as the interest and capital repayments have to be made whatever the cash position of the company, and too much debt creates financial risk.

### Example 12: Gearing ratio, market-based (currency 000s)

	20X7	20X6
Non-current borrowings	12,331	17,251
Current borrowings	1,000	11,000
Less cash and cash equivalents	(954)	(1,091)
Net debt	12,377	27,160

Equity (market capitalisation)	336,225	267,216
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Gearing % = $\text{debt} \div \text{equity}$	<u>3.68%</u>	<u>10.16%</u>
Leverage % = $(\text{debt} \div (\text{debt} + \text{equity}))$	<u>3.55%</u>	<u>9.23%</u>

There is no such thing as an ideal ratio, and many companies, such as those financed by private equity, have deliberately high gearing, which would be out of place in a more conservatively financed business. Gearing is only part of the picture and, if interest and debt payments are made and other ratios are strong, there is no reason why high gearing is not appropriate. However, higher gearing is riskier than lower gearing. In the example shown here, levels of gearing and leverage are very low, and it is worth noting that the market value of equity has been used and not the book value (represented by shareholder's funds), which is much lower than the market value. This difference is discussed and quantified below (market/book ratio).



# cash management

## EDUCATION

### Interest cover

*Earnings (profit) before interest and tax (EBIT) ÷ interest charge*  
*Earnings (profit) before interest, tax depreciation and amortisation (EBITDA) ÷ interest charge*

This shows how easily a company was able to make its interest payments from the year's profits. An interest cover of three means that interest payments could have been three times higher and the company would still have been able to meet interest payments (assuming profit is not too far away from cashflow). The lowest acceptable figure is clearly a matter of judgement, not least as a view has to be taken about the volatility of profits, and also levels of interest rates. A ratio of less than two, however, is likely to raise the risk of difficulties for nearly all businesses, although some highly leveraged structures start off with an even lower cover. In the case of our model business ABC, we will assume that the whole of "finance costs" is interest<sup>2</sup>.

#### Example 13: Interest cover calculation

(currency 000s)	20X7	20X6
Finance costs	1,255	1,531
Operating profit	36,619	25,347
Interest cover (times)	29	17

The interest payable is very well covered.

### SHAREHOLDER MEASURES

#### Earnings per share (EPS)

*Profit attributable to ordinary shareholders ÷ weighted average number of shares in issue during the year*

The earnings per share measure represents the profit after tax divided by the weighted average number of ordinary shares in issue during the year, and so effectively shows the net profit the company made on each share during the year. It is the change in EPS that is important and which can be compared with the change for other companies; the absolute figure is not helpful on its own.

#### Example 14: EPS calculation

	20X7	20X6
Number of shares in issue at year-end	224,150,000	222,680,000
Average number of shares over the year	223,415,000	222,680,000
Profits after tax (currency)	30,322,000	21,243,000
EPS (currency cents)	13.6	9.5

The company's EPS has increased substantially in 20X7, the result of increased profits. Unlike capital employed, which can be subject to fluctuations, the number of shares will generally remain reasonably static over time unless a company issues (or buys back) a substantial number of its shares.

### Dividend cover

*Profit attributable to ordinary shareholders ÷ dividends*

This indicates the extent to which dividends are covered by profits. Some companies will pay out little or nothing as dividends whereas others might pay out all their profits for the year. The dividend cover is important because it shows whether the company struggled to pay the dividend or did so without difficulty, and thus acts as a guide to the likelihood of a maintained or improved level of dividend in the future.

#### Example 15: Dividend cover calculation

(currency 000s)	20X7	20X6
Profit for the year	30,322	21,243
Dividends	4,089	10,100
Dividend cover (times)	7.42	2.1

For some reason, the dividend has been reduced in 20X7 and this would be unusual in the face of a rise in profits without further information. It is possible that a one-off share buyback is being considered or that cash is to be retained in the business so an investment programme can be started.

### Dividend yield

*Dividend per share ÷ current share price*

An actual or potential investor in a company will want to know what return on their investment they will receive. The dividend yield gives them part of this information (the other factor they are interested in is the movement in the share price).

#### Example 16: Dividend yield calculation

	20X7	20X6
Current share price (currency cents)	150	120
Dividend per share (CCY cents)		
4,089,000 x $\frac{100}{223,415,000}$	=1.83	
10,100,000 x $\frac{100}{222,680,000}$		=4.53
Dividend yield	1.2%	3.78%

To calculate EPS, an average of shares outstanding is normally used and this has been done for year 20X7, simply by averaging shares in issue at the year start and end. For 20X6 we assume that the number of shares in issue was static.

The dividend yield in 20X6 is about average for listed companies: it would appear that the strategy has been to pay out a fairly high proportion of profits as ordinary dividends to give support for the shares. The drop in 20X7 seems to reflect a change in this policy. It is likely that some event has promoted this, perhaps a major investment programme which prohibits such previous high payouts.



### Price to earnings ratio (P/E, PER)

*Current share price ÷ earnings per share*

A high P/E ratio (relative to the stock market average) indicates market expectations of relatively rapid growth in earnings from the company or that the company is considered lower risk.

#### Example 17: P/E ratio calculation

	20X7	20X6
Current share price (currency cents)	150	120
EPS (currency cents) (calculated above)	13.6	9.5
P/E ratio (times)	11.0	12.6

The P/E ratio has fallen. It is possible that the market expects the rapid growth of earlier periods to tail off in 20X8 and beyond, or that ABC's risk has decreased.

### Market/book ratio

*Market value of the company's equity ÷ total equity*

This compares the company's market capitalisation (the share price multiplied by the number of shares) with the book value of its equity, as shown by the value of total equity on the balance sheet. The ratio should be treated with caution because the balance sheet is a combination of assets and liabilities, some valued at cost or realisable value (for example, inventory and receivables) and some at market value (for example, investment property and derivative instruments).

A market/book ratio greater than one indicates that stock market investors consider there is more value in the company than just the book value of its net assets. This additional value might consist of factors such as expectations of future profitability and a highly skilled workforce.

#### Example 18: Market value/book ratio calculation

(currency 000s)	20X7	20X6
Market value of equity	336,225	267,216
Total equity	68,634	40,858
Market value/book ratio (times)	4.9	6.5

### UNDERSTANDING RATIOS

Simply performing a ratio analysis on a company does not provide a great deal of meaningful information in itself. The ratios calculated must be evaluated and compared with the ratios of other relevant companies and over time – choices which depend on the purpose of the exercise.

The key to the intelligent use of ratios is to shift the focus away from individual ratios towards a more consistent, interpretative picture of the company and to allow for trade-offs of one ratio against another. It is not usually possible to draw conclusions based on a single ratio, especially as there are no reliable rules about the appropriate ratio levels. For example:

- a drop in sales may well be compensated by better margins on those sales;
- high balance sheet gearing may be of no great concern because of excellent corporate profitability over a number of years; or
- a year of poor profitability may be redeemed by the generation of cash from tight control of working capital.

Remember that all ratios can be affected by accounting manipulation and subtleties in presentation.

A final point on ratio analysis is that there is a need to identify the reasons for changes. For instance, why are profit margins declining? Why is gearing increasing? Why have sales increased so much? Why are sales to fixed assets so low? Understanding the answers to such questions should address the most significant financial or non-financial issues about a company.

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*The first part of this feature can be found at:*  
[www.treasurers.org/node/5961](http://www.treasurers.org/node/5961)

<sup>1</sup> Loan documents commonly include performance measures known as financial covenants.

<sup>2</sup> Under international finance reporting standards (IFRS), finance costs may include items such as amortisation of upfront fees

