



The International Building
Materials Group

Financial measures of performance



Learning outcomes

- Financial statements
- Profitability and efficiency ratios
- Analysis of ratios

Introduction

CRH is a leading producer of cement, aggregates (stone chippings), asphalt, ready-mixed concrete, concrete blocks, pavers, roof tiles and clay bricks. CRH plc is one of the top six building materials groups in the world by market capitalisation. It is also one of Ireland's largest industrial companies.

With its headquarters in Ireland, CRH operates in 34 countries, employing approximately 92,000 people, focusing on three closely related core businesses:

- Primary materials
- Value-added building products
- Specialist building materials distribution.

CRH's strategic vision is clear - to be an international leader in building materials delivering superior performance and growth. In 2007, CRH's **revenue** was up 12%, and **operating profit** up 18%. This case study will explore some other financial measures of performance and how they can be applied to the CRH Group.

What is performance?

Performance of a company can be viewed in many ways. For example, a human resource manager might look at *staff*

retention or *productivity* measures. A marketing manager might be interested in *market share*. A sales manager might be interested in *sales volume*, while an accountant might look at **cost of sales** and **margins**. Cost of sales and margins are financial measures and can be derived from a company's financial statements

Financial Statements

Two widely used financial statements are the *Profit and Loss Account* (also known as the P&L Account) and the *Balance Sheet*.

- A **P&L Account** shows how a company has traded over a specific time period i.e. one year. It shows revenues and costs, and indicates whether the company has made a profit or a loss for that period.
- A **Balance Sheet** shows a financial snapshot at a given moment, usually the end of the financial year. The Balance Sheet shows what assets the company owns and what liabilities the company owes on a particular date. In money terms, these two amounts are equal, since the assets that the company owns are financed by what the company owes (to shareholders and other creditors).

The accounts used for calculations in this study are for CRH plc consolidated (including the accounts of all subsidiary companies). Simplified versions for 2007 are shown.

Ratio Analysis

Looking at numbers in financial statements is sometimes bewildering. Ratio Analysis is a way of making sense of the numbers by comparing quantities against each other.

A *ratio* expresses the relationship between two numbers by dividing one by the other. For example, if you learned that a company made €5m in profits in the last year, you might think the company was doing well. But if that company had a €100m of capital and had only achieved €5m in profits, it would seem much less favourable. This ratio (profit to capital) has become a standard way of measuring a company's performance, and is given the name **Return on Capital Employed**.

Financial ratios are used by many stakeholders including managers, analysts, and investors to assess the performance of a business. Ratios also make it easier to compare a company against its competitors, and to compare one industry against another.

Return on Investment (ROI)

If you have money in a bank deposit account you will get an additional amount each year in the form of **interest**. This additional amount is some percentage of your original **capital**. For example, if you invest €100 at an **interest rate** of 10%, your investment will be worth €110 at the end of the year. People who invest in a business also expect some return, they expect to make money on their investment, usually in the form of dividends. However, this can only happen if the company makes a profit.

People who invest in a company own the shares in that company and are called **shareholders**. The money they invest is called **equity capital**. When a company makes a profit it can keep that profit within the business for the purpose of future investment or distribute it to shareholders. These payments to shareholders are called **dividends**. If profit is kept in the business it is shown in the Balance Sheet under **reserves**. As well as their original equity, the



shareholders also own any reserves. The sum of the equity and the reserves is called **shareholders' funds**. We now look at two popular measures of return on investment.

• Return on Shareholders' Funds (ROSF)

Shareholders' Funds are the ordinary share capital plus the revenue reserves. 'Return', in this case, measures the net profit for the period. This resulting ratio represents the company's return to its ordinary shareholders considering the capital they have invested in that company.

$$\text{ROSF} = \frac{\text{Profit (after tax \& preference dividends)}}{\text{Shareholders' Funds}} = \frac{€1,438\text{m}}{€7,954\text{m}} = 18.1\%$$

• Return on Capital Employed (ROCE)

This is a measure of the return that a company is realising from all its long-term capital, including Shareholders' Funds, preference dividends, debenture, and long-term loan interest. This can be expressed as Total Assets minus Current Liabilities. 'Return', in this case, is the profit before interest and tax.

$$\text{ROCE} = \frac{\text{Profit (before interest \& tax)}}{\text{Total Assets - Current Liabilities}} = \frac{€1,904\text{m}}{€19,788\text{m} - €3,981\text{m}} = 12.0\%$$

Profitability

Profitability measures a company's ability to generate profits efficiently. If you sell an item for €100 and make a profit of €5, your profit margin is 5%. In business, we generally distinguish between two types of margin.

• Gross Profit Margin

This ratio measures the company's mark-up on sales.

$$\text{Gross Profit Margin} = \frac{\text{Gross Profit}}{\text{Revenue}} = \frac{€6,277\text{m}}{€20,922\text{m}} = 29.9\%$$





• Net Profit Margin

This ratio measures the company's profitability before interest and tax relative to sales.

$$\text{Net Profit Margin} = \frac{\text{Profit before interest \& tax (PBIT)}}{\text{Revenue}} = \frac{€1,904\text{m}}{€20,922\text{m}} = 9.1\%$$

Liquidity

Liquidity ratios measure the ability of the company to pay its bills as they fall due. Cash, money in a bank current account, debtors and stock are **liquid assets**. Cash is the most liquid and stock is generally considered the least liquid. Buildings and vehicles are considered to be **fixed assets** and cannot be converted to cash easily since a business needs these assets to function.

Two measures of liquidity are commonly used:

• Current Ratio

This ratio measures the relationship between current assets and current liabilities. Current assets consist of money or items which can be turned into money within one year including cash and bank, debtors, and stock. Current liabilities are amounts which are due within one year including bills due, bank overdrafts and trade creditors. If the Current Ratio is greater than 1:1, the company's current assets are larger than its current liabilities. The recommendation for the current ratio is 2:1.

$$\begin{aligned} \text{Current Ratio} &= \text{Current Assets} : \text{Current Liabilities} \\ &= €6,758\text{m} : €3,981\text{m} \\ &= 1.7 : 1 \end{aligned}$$

• Quick Ratio (Acid Test/Liquid Ratio)

This is a more severe test because it excludes stock from the equation. Analysts might expect to see a ratio of approximately 1:1. The value of this ratio for the Group at the end of 2007 was 1.14:1.

$$\begin{aligned} \text{Quick Ratio} &= (\text{Current Assets} - \text{Inventory}) : \text{Current Liabilities} \\ &= (€6,758\text{m} - €2,226\text{m}) : €3,981\text{m} \\ &= 1.14 : 1 \end{aligned}$$

• Stock Turnover

Stock Turnover measures the number of times per year a company sells its stock. It is calculated as the total sales value divided by the average value of goods held in stock. Low stock turnover means that goods are held in stock for a long time, accruing storage costs and losing value.

$$\text{Stock Turnover} = \frac{\text{Revenue}}{\text{Average Value of Inventory}} = \frac{€20,992\text{m}}{€2,131\text{m}} = 9.43$$

Financial Strength

Measures in this category indicate the ability of the company to meet certain commitments. Two widely-used measures are:

• Debt Equity Ratio (Gearing)

This ratio examines the capital structure (funds) of the company. A business has two types of long-term funds at its disposal – money invested by shareholders (shareholders' funds or equity capital) and any money borrowed in the form of the long-term loans (debt capital).

$$\begin{aligned} \text{Gearing} &= \text{Debt Capital} : \text{Equity Capital} \\ &= €7,787\text{m} : €7,953\text{m} \\ &= 0.98 : 1 \end{aligned}$$

Gearing refers to the ratio between these two types of funds. A business with a ratio of 1:1 is said to be *neutrally geared*. If it has a ratio greater than 1:1 it is *highly geared* and if it has a ratio less than 1:1 it is *lowly geared*. By these definitions CRH is more or less neutrally geared.

• Interest Cover

This is a measure of the company's ability to pay interest it owes on loans. A high cover indicates that the company has no difficulty paying this interest. It is normally calculated by dividing PBIT by the amount of interest. At the end of 2007, the Group's Balance Sheet indicated a value of 6.3 times. This is considered a strong position.

$$\text{Interest Cover} = \frac{\text{Profit before interest \& tax (PBIT)}}{\text{Interest}} = \frac{€1,904\text{m}}{€303\text{m}} = 6.3$$

Shareholder Value

CRH has approximately 547m ordinary shares in issue. We have seen how shareholders are interested in profit because profit is an indicator of the return on their investment. They also pay attention to a related group of measures called *Investment Ratios*. These ratios measure the performance of the company's *ordinary* shares in the financial market.

The most common are:

- **Earnings per Share (EPS)**

This ratio measures the profit earned by each ordinary share.

$$\text{Earnings per Share} = \frac{\text{Profit (After tax)} \times 100}{\text{\# Ordinary Shares issued}} = \frac{€1,438\text{m}}{547\text{m}} = 262.7 \text{ cent}$$

It is not really a ratio but an actual value expressed in money terms (in cent). At the end of 2007, the Group's EPS was 262.7 cent.

- **Dividend per Share (DPS)**

This ratio measures the dividend paid on each ordinary share (measured in cent).

$$\text{Dividend per Share} = \frac{\text{Total Ordinary Dividends (Paid \& Proposed)}}{\text{Number of Ordinary Shares issued}} = \frac{€369\text{m}}{547\text{m}} = €0.674$$

- **Price Dividend Ratio**

The price of a stock divided by the annual dividend paid on a share. This ratio is used as a measure of a company's potential as an investment.

$$\text{Price Dividend Ratio} = \frac{\text{Share Price}}{\text{DPS}} = \frac{€23.85}{€0.674} = 35.4$$

- **Dividend Yield**

This ratio is calculated by taking the dividends per share divided by the stock's price. Mature, well-established companies tend to have higher dividend yields, while young, growth-oriented companies tend to have lower ones.

$$\text{Dividend Yield} = \frac{\text{DPS}}{\text{Share Price}} = \frac{€0.674}{€23.85} = 2.83\%$$

- **Dividend Cover**

This is the ratio of net earnings per share divided by net dividend per share. The purpose of the ratio is to identify how much of a company's profits are being distributed to shareholders and how much is being retained to finance business. Generally a ratio of 2 or higher is considered safe (in the sense that the company can well afford the dividend).

$$\text{Dividend Cover} = \frac{\text{EPS}}{\text{DPS}} = \frac{€2.63}{€0.674} = 3.897$$

- **Price Earnings Ratio (P/E)**

This ratio measures the number of years it would take a share to recover its share price if current profit performance is maintained into the future.

$$\text{Price Earnings Ratio} = \frac{\text{Share Price}}{\text{Earnings per Share}} = \frac{€23.85}{€2.63} = 9.07$$

At the end of 2007, the market price for the Group's shares was €23.85, so the P/E value as at that date was 9.07.

Conclusion

All of the information generated by the interpretation of CRH's accounts shows that it is in a very strong position in its sector. CRH management would be very pleased with the performance. Shareholders would be pleased with the return they are achieving. This would also encourage potential investors and banks and debenture holders. Comparisons with the excellent 2006 figures show that CRH is continuing to face a very positive future for CRH stakeholders.

Student activity

Under the following headings, compare and contrast CRH 2006 figures with 2007 figures for two different stakeholders: shareholder and bank. Profitability, Liquidity, Dividend, Gearing.

Group P&L Account (€m)	2007	2006
Revenue	20,992	18,737
Cost of Sales	- 14,715	- 13,123
Gross Profit	6,277	5,614
Operating Costs	- 4,191	- 3,847
Profit before Interest & Tax (PBIT)	1,904	1,602
Tax	- 466	- 378
Profit after Tax	1,438	1,224
Interest	-303	- 252
Dividends (Paid)	- 109	- 73
Dividends Proposed	- 260	- 209
No. of Ordinary Shares in issue: 547m		
Group Balance Sheet (€m)	2007	2006
Shareholders' Funds	7,954	7,063
Net debt	5,163	4,492
Total Assets	19,788	18,345
Current Assets	6,758	6,685
Inventories (Stock of Goods)	2,226	2,036
Non-Current Assets	13,030	11,660
Liabilities	11,768	11,241
Current Liabilities	3,981	3,828
Non-Current (Long Term) Liabilities	7,787	7,413

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