

Chapter 5 revision notes

Business performance analysis

The performance review process

A performance review using financial statements may be undertaken for a number of reasons, for example:

- ◆ to assist investment decisions
- ◆ to identify possible take-over targets
- ◆ to evaluate the financial strength of potential or existing customers or suppliers

The main aim of a performance review is to provide an understanding of the business, and, together with an analysis of all the relevant information, provide an interpretation of the results. A performance review is generally undertaken using a standard format and methodology:

- ◆ SWOT analysis
- ◆ consideration of major features
- ◆ profitability
- ◆ efficiency
- ◆ liquidity
- ◆ finance
- ◆ management of financial risk
- ◆ investment
- ◆ conclusions

Limitations of the performance review process

Care must be taken in reviewing business performance, and in comparing performance against other companies (and sometimes within the company in comparing past periods), or looking at industrial data because:

- ◆ there may be a lack of uniformity in accounting definitions and techniques
- ◆ the balance sheet is only a snapshot in time, and only represents a single estimate of the company's position
- ◆ there may actually be no standards for comparison
- ◆ changes in the environment and changes in money values, together with short-term fluctuations may have a significant impact
- ◆ the past should really not be relied on as a good predictor of the future

Ratio analysis

An important area of business performance review is the use of ratio analysis looking at profitability; efficiency; liquidity; investment, and also growth and financial structure.

Generally, it is required to shed light on the extent to which the objectives of the company are being achieved, for example:

- ◆ to earn a satisfactory return on capital employed (ROCE)
- ◆ to maintain and enhance the financial position of the business with reference to the management of working capital, fixed assets and bank borrowings
- ◆ to achieve cost targets and other business targets such as improvements in labour productivity

Ratio analysis is far more useful than merely considering absolute numbers, which on their own may have little meaning. Ratios may be used:

- ◆ for a subjective assessment of the company or its constituent parts
- ◆ for a more objective way to aid decision-making
- ◆ to provide cross-sectional analysis and inter-firm comparison
- ◆ to establish models for loan and credit ratings

- ◆ to provide equity valuation models to value businesses
- ◆ to analyse and identify underpriced shares and take-over targets
- ◆ to predict company failure

Profitability ratios

The primary objective for the managers of a business is to maximise the wealth of the owners of the business. To this end there are a number of other objectives, subsidiary to the main objective. These include:

- ◆ survival
- ◆ stability
- ◆ growth
- ◆ maximisation of market share
- ◆ maximisation of sales
- ◆ maximisation of profit
- ◆ maximisation of return on capital

Each group of financial ratios is concerned to some extent with survival, stability, growth and maximisation of shareholder wealth.

$$\text{gross margin \%} = \frac{\text{gross margin}}{\text{sales}} = \frac{\text{sales} - \text{cost of sales (COS)}}{\text{sales}}$$

$$\text{operating profit \%} = \frac{\text{operating profit}}{\text{sales}} = \frac{\text{sales} - \text{COS} - \text{other operating expenses}}{\text{sales}}$$

or
profit before
interest and tax
(PBIT)

$$\text{profit before tax \% (PBT)} = \frac{\text{profit before tax}}{\text{sales}} = \frac{\text{operating profit} \pm \text{net interest}}{\text{sales}}$$

$$\text{net profit \%} = \frac{\text{net profit}}{\text{sales}} = \frac{\text{profit before tax (PBT)} - \text{corporation tax}}{\text{sales}}$$

or
return on
sales (ROS)

$$\text{return on investment (ROI)} = \frac{\text{operating profit}}{\text{total assets} - \text{current liabilities}}$$

or return on capital employed (ROCE)%
(usually averaged)

$$\text{return on equity (ROE)} = \frac{\text{profit after tax}}{\text{equity}}$$

$$\text{capital turnover} = \frac{\text{sales}}{\text{average capital employed in year}}$$

The profitability performance measures discussed above consider the general performance of organisations as a whole. It is important for managers to also be aware of particular areas of revenue or expenditure that may have a significant importance with regard to their own company and that have a critical impact on the net profit of the business.

Managers should also be aware of the general range of costs for which they may have no direct responsibility, but nevertheless may be able to significantly reduce.

Efficiency ratios

$$\text{debtor days} = \frac{\text{trade debtors} \times 365}{\text{sales}}$$

$$\text{creditor days} = \frac{\text{trade creditors} \times 365}{\text{cost of sales}} \quad (\text{or purchases})$$

$$\text{stock days} = \frac{\text{stock value}}{\text{average daily cost of sales in period}}$$

The weekly internal efficiency of stock utilisation is indicated by the following ratios:

<u>finished goods</u>	<u>raw materials</u>	<u>work in progress</u>
average weekly	average weekly raw	average weekly
despatches	material usage	production

These ratios are usually calculated using values but may also be calculated using quantities where appropriate.

$$\text{stock weeks} = \frac{\text{total stock value}}{\text{average weekly cost of sales}} \quad (\text{total COS for the year divided by 52})$$

$$\text{operating cycle (days)} = \text{stock days} + \text{debtor days} - \text{creditor days}$$

$$\text{operating cycle \%} = \frac{\text{working capital requirement}}{\text{sales}} \quad (\text{stocks} + \text{debtors} - \text{creditors})$$

$$\text{asset turnover (times)} = \frac{\text{sales}}{\text{total assets}}$$

Liquidity ratios

$$\text{current ratio (times)} = \frac{\text{current assets}}{\text{current liabilities}}$$

$$\text{acid test (times)} = \frac{\text{current assets} - \text{stocks}}{\text{current liabilities}}$$

$$\text{defensive interval (days)} = \frac{\text{quick assets}}{\text{average daily cash from operations}} \quad (\text{current assets} - \text{stocks})$$

Investment ratios

$$\text{earnings per share (eps)} = \frac{\text{profit after tax} - \text{preference share dividends}}{\text{number of ordinary shares in issue}}$$

$$\text{dividend per share} = \frac{\text{total dividends paid to ordinary shareholder}}{\text{number of ordinary shares in issue}}$$

$$\text{dividend cover} = \frac{\text{earnings per share}}{\text{dividend per share}}$$

$$\text{dividend yield \%} = \frac{\text{dividend per share}}{\text{share price}}$$

$$\text{price/earnings ratio (P/E)} = \frac{\text{current share price}}{\text{eps}}$$

$$\text{capital expenditure to sales \%} = \frac{\text{capital expenditure for year}}{\text{sales}}$$

$$\text{capital expenditure to gross fixed assets \%} = \frac{\text{capital expenditure for year}}{\text{gross value of tangible fixed assets}}$$

The best performance measure – cash or profit?

Cash flow and cash ratios are becoming increasingly as important as profit and profitability ratios in the measurement of business performance.

There is no best way of evaluating financial performance and there is a number of advantages and disadvantages in using earnings per share or cash flow as the basis of measurement.

Some of the financial ratios that we have already looked at may be considered in cash terms, for example:

$$\text{cash ROCE \%} = \frac{\text{net cash flow from operations}}{\text{average capital employed}}$$

Earnings before interest, tax, depreciation and amortisation, EBITDA is now commonly used as a close approximation of a cash flow performance measure.

The method of performance measurement is not a clear cut cash or profit choice. It is generally useful to use both. However, many analysts and the financial press in general continue to depend heavily on profit performance measures with a strong emphasis on earnings per share (eps) and the price/earnings ratio (P/E).

Non-financial performance indicators

The use of non-financial indicators is important in the evaluation of business performance.

Financial reporting does not tell us how well the company is, for example, meeting its delivery schedules or how satisfied its customers really are with its products and after sales service.

Non-financial performance measures may give a more timely indication of the levels of performance achieved than do financial ratios, and may be less susceptible to distortion by factors such as uncontrollable variations in the effect of market forces on operations.

Many non-financial performance indicators may be reported within the areas of:

- ◆ customer service quality
- ◆ manufacturing performance
- ◆ purchasing/logistic
- ◆ customer development
- ◆ marketing
- ◆ new product development
- ◆ human resources/communications/employee involvement
- ◆ information technology

The balanced scorecard

Both financial and non-financial measures are now incorporated into performance measurement systems such as the balanced scorecard.

The findings of a study in 1990 David Norton and Robert Kaplan were published in the *Harvard Business Review* in January 1992 and gave birth to an improved measurement system, the balanced scorecard.

The balanced scorecard includes headings covering the following four key elements:

- ◆ financial
- ◆ internal business processes
- ◆ learning and growth
- ◆ customer

The measures that are considered by the company in satisfying shareholders go much further than just financial measures:

- ◆ to satisfy our shareholders and customers, what business processes must we excel at
- ◆ to achieve our vision, how will we sustain our ability to change and improve
- ◆ to achieve our vision, how should we appear to our customers