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Interpretation of Financial Statements

Readers will have noted that the IASB, International Accounting Standards Board has published an IFRS International Reporting Standard designed for use by small and medium sized enterprises (SME's) and it is planned for this overtime to replace the Accounting Standards Board FRSSE Financial Reporting Standards for Small Entities. This will involve a change in some terminology currently in use in the UK GAAP. Feedback to a recent ASB Consultation Paper "Future of the UK GAAP" shows that both the major professional bodies and the profession itself share mixed opinion on the introduction of the IFRS for SME's, in that some feel it should be introduced immediately, others favour a period of transition.

The article below looks at the interpretation of financial statements and uses the international terminology that one day, with the introduction of the IFRS for SME's, will become commonplace. The summaries of the financial statements used later in this paper are those based on the suggested layout shown in the IFRS for SME's.

A review of the terminology shows:

Existing	**Revised**
Profit and Loss Account	Statement of Comprehensive Income
Balance Sheet	Statement of Financial Position
Sales	Revenue
Fixed Assets	Non-Current Assets
Stocks	Inventories
Debtors	Trade Receivables
Cash and Bank	Cash and Cash Equivalents
Creditors	Trade Payables
Long Term Liabilities	Non-Current Liabilities

Note particularly the layout of the Statement of Financial Position, formerly the Balance Sheet.

Focus on the usefulness of published financial statements has been at the centre of public debate for over three decades. In the UK in 1975 the Corporate Report was published. This was the outcome from the Accounting Standards Steering Committee's wide ranging discussion paper and in part considered the usefulness of financial statements. The Report's conclusion as to the fundamental objective of published accounts included the following statement:

'The fundamental objective of corporate reports is to communicate economic measurements of and information about the resources and performance of the reporting entity useful to those having reasonable rights to such information'.

In more recent times the Accounting Standards Board (UK GAAP) published its Statement of Principles for Financial Reporting (December 1999). The concept of usefulness was a significant feature in this publication. As from the 1 January 2005 all listed companies in Europe have to comply with IAS/IFRS, International Standards, and the IASB's, (The International Accounting Standards Board), conceptual framework also stresses the importance of the usefulness of financial statements to a range of user groups.

The Statement of Principles and the IASB's Framework for the Preparation and Presentation of Financial Statements seeks to identify why financial statements are produced and whether they are meeting their objective. The reasons stated are as follows:

'to provide information about the financial position, performance and financial adaptability of an enterprise, that is useful to a wide range of users for assessing the stewardship of management and for making economic decisions'.

To meet their basic objective financial statements must be useful and the information relevant and reliable. Information will have relevance if it influences the decisions of the users. Irrelevant information has no use. Relevance and reliability are primary characteristics relating to content together with the threshold quality, materiality. The primary characteristics relating to presentation include comparability, clarity and understandability.

The Statement of Principles identifies the major user groups, as did the Corporate Report in the 1970s, the IASB's conceptual framework published in 1989 also covers the needs of these groups. The main user groups include:

- investors / shareholders
- employees
- lenders
- suppliers
- customers
- government
- the public

The user groups often apply a series of accounting ratios to interpret and appraise financial performance and such comparisons may include:

- The current year's results with previous year, to establish whether performance is more favourable or adverse than before.

- The current year's results with those of comparable companies in the same line of business, to establish whether the company is performing better or worse than its competitors.

- Current performance against a standard or benchmark of performance.

- Comparisons of one segment or division of a business with others to establish which parts of the business are achieving their objectives.

Financial performance indicators in the form of ratios cover a number of concepts and are grouped as:

- profitability
- liquidity
- utilisation
- financial structure
- investment – shareholder ratios

The case study which follows covers the issues of profitability, liquidity and utilisation.

Case Study: Crescent Sports Supplies Ltd

Crescent Sports Supplies Ltd manufacture a range of sports equipment.

The following summaries show the accounts for years 01, 02 and forecast 03.

Crescent Sports Supplies Ltd
Statement of Comprehensive Income
Years Ended 31 December 01, 02 and Forecast 03

	Year 01 £m	02 £m	Forecast 03 £m
Revenue	2.50	2.75	3.20
Cost of Sales	1.95	2.07	2.40
Gross Profit	0.55	0.68	0.80
Admin and Distribution Costs	0.18	0.19	0.20
Finance Costs	0.01	0.01	0.01
Profit before tax	0.36	0.48	0.59
Income tax expense	0.07	0.09	0.12
Profit for year	0.29	0.39	0.47
Retained Earnings at start of year	2.18	2.41	2.72
Dividends	0.06	0.08	0.10
Retained Earnings at end of year	2.41	2.72	3.09

Statement of Financial Position
as at 31 December 01, 02 and Forecast 03

	£m	£m	£m
ASSETS			
Current Assets			
Cash	0.16	0.17	0.19
Trade and other receivables	0.26	0.30	0.29
Inventories	0.17	0.18	0.21
	0.59	0.65	0.69
Non Current Assets			
Property, plant and equipment	2.16	2.45	2.86
Total Assets	2.75	3.10	3.55
LIABILITIES AND EQUITY			
Current Liabilities			
Trade Payables	0.19	0.20	0.23
Current Tax Liability	0.07	0.09	0.12
	0.26	0.29	0.35
Non-Current Liabilities			
Bank Loan	0.07	0.08	0.10
Total Liabilities	0.33	0.37	0.45
Equity			
Share Capital	0.01	0.01	0.01
Retained Earnings	2.41	2.72	3.09
	2.42	2.73	3.10
Total Liabilities and Equity	2.75	3.10	3.55

Note: Year ‘0’ £m

Receivables 0.23, Inventories 0.16, Payables 0.17, Capital and Reserves plus Loans £2.20m

Let us now consider the following:

Ratios and Performance Indicators

Return on Capital Employed
Asset Turnover
Gross Profit as % of Revenue
Net Profit as % of Revenue
Current Ratio
Acid Test
Inventory Turnover
Receivables Collection Period
Payables Payment Period
Value Added per ‘£’ of Employee Costs
Gearing or Leverage

These ratios cover concepts as:

- profitability
- liquidity
- utilisation
- financial structure

In analysing a set of financial statements we can compare:

- The current year's results with those of the previous year or years to establish whether performance is more favourable or adverse than before.

- The current year's results with those of comparable companies in the same line of business, to establish whether the company is performing better or worse than its competitors.

- Current performance against a standard or benchmark of performance.

- **Return on Capital Employed**

This is also often referred to as ROI, Return on Investment.

This is the main measure of profitability and considered the primary ratio.

Capital employed is defined here as Total Assets less Current Liabilities or Share Capital and Reserves plus non-current liabilities.

The return is expressed as:

$$\frac{\text{Profit before Interest \& Tax}}{\text{Capital Employed}} \times 100 / 1$$

It represents the percentage of profit being earned on the total capital employed; and relates profit to capital invested in the business. Capital invested in a corporate entity is only available at a cost – corporate bonds or loan stock finance generate interest payments and finance from shareholders require payment of dividend in the short and longer term.

It is therefore good business strategy to maximise the profit per '£' of investment.

From the Crescent Sports Supplies accounts we find:

* **NB**: Average capital employed is used here (this is useful when 2 or more year's accounts are available)

	Year 01			02			Forecast 03		
	$\frac{0.37}{2.35}$	x	100 / 1	$\frac{0.49}{2.65}$	x	100 / 1	$\frac{0.60}{3.01}$	x	100 / 1
=	15.74%			18.49%			19.93%		

It is difficult to set a benchmark for this type of business because of the lack of inter-firm comparative information but it is interesting to note, for example, that the top '5' supermarkets in the UK have averaged returns of approximately 19% over the past five years.

Further comment on the three year analysis will be given in a summary at the end of the report.

The primary ratio measuring overall return is analysed in more detail by using secondary ratios:

- Asset Turnover
- Profit margin – net profit before tax as a percentage of revenue

These two factors, or a combination of both, influence the return achieved by the business entity. The asset turnover is a measure of utilisation and management efficiency. It indicates how well the assets of the business are being used to generate sales or how effectively management have utilised the total investment in generating income.

As many business overheads are fixed costs, high production and sales volumes are needed to maximise overhead recovery and ultimately profit.

- **Asset Turnover**

It is expressed as:

$$\frac{\text{Revenue}}{\text{Capital Employed}}$$

Year 01	02	Forecast 03
$\frac{2.50}{*\ 2.35}$	$\frac{2.75}{2.65}$	$\frac{3.20}{3.01}$

* average capital employed

1.06	1.04	1.06

- **Net Profit % of Revenue**

The profit margin indicates how much of the total revenue remains to provide for taxation and to pay the providers of capital, both interest and dividends. This return to sales can be directly effected by the management's ability to control costs and determine the most profitable sales mix.

It is expressed as:

$$\frac{\text{Profit before Interest \& Tax}}{\text{Revenue}}$$

Year 01			**02**			**Forecast 03**		
$\frac{0.37}{2.50}$	x	100 / 1	$\frac{0.49}{2.75}$	x	100 / 1	$\frac{0.60}{3.20}$	x	100 / 1
= 14.8%			17.82%			18.75%		

- **Gross Profit % to Revenue**

Expressed as:

$$\frac{\text{Gross Profit}}{\text{Revenue}} \times 100 / 1$$

Year 01			**02**			**Forecast 03**		
$\frac{0.55}{2.50}$	x	100 / 1	$\frac{0.68}{2.75}$	x	100 / 1	$\frac{0.80}{3.20}$	x	100 / 1
= 22%			24.72%			25%		

It is interesting to note for example that:

Asset Turnover x Profit Margin = ROCE

For year 03 we find:

1.06 x 18.75 = 19.90

(does not reconcile to return shown for 03, because of rounding)

Management's objective is to increase return on capital. Therefore they may focus on one or a combination of these two factors which influence and drive performance.

Measures of liquidity include:

- Current Ratio
- Acid Test (Liquidity Ratio)

The current ratio is expressed as:

Current Assets : Current Liabilities

If current assets exceed current liabilities then the ratio will be greater than 1 and indicates that a business has sufficient current assets to cover demands from creditors. However the speed at which inventories can be converted into cash flow is such that it is not prudent to regard inventories as available to cover payables, (although this is not the case with all businesses). Thus a second ratio in terms of liquidity is considered – the quick ratio or acid test. This is expressed as Current Assets – Inventories : Current Liabilities. If this ratio is 1:1 or more, then clearly the company is unlikely to have liquidity problems. If the ratio is less than 1:1 we would need to analyse the structure of the current liabilities, to those falling due immediately and those due at a later date. The level of the current ratio and acid test vary considerably between business sectors.

- **Current Ratio**

Year		**Forecast**
01	**02**	**03**
0.59 : 0.26	0.65 : 0.29	0.69 : 0.35
2.27 : 1	2.24 : 1	1.97 : 1

- **Acid Test**

0.42 : 0.26	0.47 : 0.29	0.48 : 0.35
1.62 : 1	1.62 : 1	1.37 : 1

- **Inventory Turnover**

This is a further measure of working capital management and relates to the control of inventories; both raw materials and finished inventories. It measures the inventory holding in days.

It is expressed as:

$$\frac{\text{Inventories}}{\text{Cost of Sales}} \times 365 \text{ days}$$

Year 01	02	Forecast 03
$\frac{*0.165}{1.95} \times 365$	$\frac{0.175}{2.07} \times 365$	$\frac{0.195}{2.40} \times 365$

* Based on average inventories

= 30.88 days	30.86 days	29.65 days

- **Receivables Collection Period**

This is a measure of management's efficiency from a credit control perspective.

It is expressed as:

$$\frac{\text{Receivables}}{\text{Revenue}} \times 365 \text{ days}$$

* based on average receivables

Year 01	02	Forecast 03
$\frac{0.245}{2.50} \times 365$	$\frac{0.28}{2.75} \times 365$	$\frac{0.295}{3.20} \times 365$
= 35.77 days	37.16 days	33.65 days

- **Payables Payment Period**

The balance between receivables and payables days is influenced by the working capital cycle. The payables days is a measure of how much credit, on average is taken from suppliers. It is expressed as:

$$\frac{\text{Payables (Trade)}}{\text{Cost of Sales *}}$$

* In this case we have detail of bought out items

The ratio is an aid to assessing company liquidity, as an increase in payable days is often a sign of inadequate working capital control.

Year 01	02	Forecast 03
* average payables		
$\frac{*\ 0.18}{1.14} \times 365$	$\frac{0.195}{1.19} \times 365$	$\frac{0.215}{1.29} \times 365$
= 57.63 days	59.81 days	60.83 days

The following is a breakdown of the cost of sales figures for the three year period:

	01 £m	02 £m	Forecast 03 £m
Cost of Sales	1.95	2.07	2.40
Admin and Distribution	0.18	0.19	0.20
	2.13	2.26	2.60
Bought Out Items	1.14	1.19	1.29
Employee Costs	0.75	0.80	1.00
Depreciation	0.24	0.27	0.31

- **Value added – a measure of productivity**

Value added per '£' of employee costs is a true measure of employee productivity. It can also be perceived as a measure of the way in which management have utilised the human capital resource.

It considers the company's ability to mobilise its human assets.

Value added is defined as turnover less all bought in materials and services.

Value added:

	01 £m	02 £m	Forecast 03 £m
Turnover	2.50	2.75	3.20
Bought in materials and services	1.14	1.19	1.29
	1.36	1.56	1.91

Value added per '£' of employee costs:

Year 01	02	03
1.36	1.56	1.91
0.75	0.80	1.00
= 1.81	1.95	1.91

Gearing / Leverage

This is a measure of the reliance an entity has on fixed interest capital.

It is expressed as:

$$\frac{\text{Fixed Interest Capital}}{\text{Total Assets less Current Liabilities}}$$

Year 01	02	Forecast 03
0.07	0.08	0.10
2.49	2.81	3.20
= 2.8%	2.8%	3.1%

The company is very low geared and has a low reliance on fixed interest capital in the form of loans (40-45% is considered to be on the high side).

Crescent Sports Supplies
Summary of Ratios 01, 02 and 03

	Year 01	Year 02	Forecast 03
Return on Capital Employed	15.74%	18.49%	19.93%
Asset Turnover	1.06	1.04	1.06
Net Profit as % of Revenue	14.8%	17.82%	18.75%
Gross Profit % of Revenue	22%	24.72%	25%
Current Ratio	2.27 : 1	2.24 : 1	1.97 : 1
Acid Test	1.62 : 1	1.62 : 1	1.37 : 1
Inventory Turnover	31 days	31 days	30 days
Receivables Collection Period	36 days	37 days	34 days
Payables Payment Period	58 days	60 days	61 days
Value Added per '£' of Employee Costs	1.81	1.95	1.91
Gearing / Leverage	2.8%	2.8%	3.1%

The return on capital increased between years 01 and 02 and is forecast to increase in year 03. The asset turnover has remained fairly constant, whereas both the gross and net profit margins show an encouraging upward trend. The main factor which influences this is that the increased volume of revenue, approximately 30% over the three year period, results in a greater recovery of fixed costs and hence increased profitability.

Both the current ratio and the acid test show a sound level of liquidity although the liquidity in the forecast year 03, is set to fall marginally.

The inventories in terms of days suggests strict control and both the receivables and payable days indicate sound working capital policies.

Value added per '£' of employee costs shows an upward trend in productivity between years 01 and 02 set to be maintained in the forecasted period.

The company is very low geared and does not have a heavy reliance upon fixed interest capital. Although its gearing has increased in the forecast for year 03, there has been further investment in non-current assets, part of which has been funded by additional borrowing that has resulted in further expansion in revenue.