

The measurement of performance under IAS rules

The purpose of these notes is to illustrate the key aspects of the IAS rules that govern the construction of the income (and other) statements and relate them to the information about performance that investors need to value the enterprise. The standards involved are:

IAS 1	Presentation of financial statements
IAS 8	Net profit or loss for the period, fundamental errors and changes in accounting policies
IAS 16	Property, plant & equipment
IAS 21	The effects of changes in foreign exchange rates
IAS 25	Accounting for investments
IAS 33	Earnings per share
IAS 35	Discontinuing operations

The IASC's www site (www.iasc.org.uk) contains excellent summaries of the major standards. In addition, the annual text "International accounting standards 199X" published by IASC gives the full text of all extant International Accounting Standards (IAS) together with a history of IASC and the "Framework for the preparation and presentation of financial statements" published in 1989.

1. Sustainable performance

The Framework highlights (para 17) that "Information about performance is useful in predicting the capacity of the enterprise to generate cash flows from its existing resource base". Paragraph 72, mentions that it is common practice to distinguish between performance items that arise in the ordinary course of activities of the enterprise and those that do not. The rationale which is given for this is that the distinction has some bearing on whether the enterprise will be able to maintain the cash flow in the future.

2. Disclosure on the face of the income statement

The items which IAS 1 requires to be disclosed on the face of the income statement are those which are key to the understanding of the performance of the company. They include:

I - REVENUE AND THE RESULTS OF OPERATING ACTIVITIES

The disaggregation may be by the nature of expenditure method (raw materials, staff costs, depreciation) or the function of expenditure (cost of sales, distribution costs, administration costs). The latter is the more common.

II - EXTRAORDINARY ITEMS

IAS 8 considers that these transactions are those that are clearly distinct from the ordinary activities of the enterprise. Two examples are given: the expropriation of assets and earthquakes and other natural disasters. However, virtually all items will arise in the ordinary course of business.

This contrasts with FRS 3 in the UK in which normal activities are defined as including "the effects on the reporting entity of any event in the various environments in which it operates, including the political, regulatory, economic and geographical environments, irrespective of the frequency or unusual nature of the events" (para 2).

III - "EXCEPTIONAL ITEMS"

Some events, although they occur within the ordinary course of business, are so different from others (in size, nature or incidence) that they need to be disclosed separately in order to understand the performance of the enterprise. The separate disclosure on the face of the income statement is required by IAS 8. The standard has no special name for these items, but typically they are known as exceptional items.

IV - OTHER ITEMS REQUIRED TO BE DISCLOSED ON THE FACE OF THE INCOME STATEMENT

Finance costs

Share of profits and losses from associates and joint ventures

Minority interest

Basic and diluted earnings per share

Additional lines are required if they are necessary to fairly present the company's performance

3. Items recognised directly in equity

Some transactions are not recognised in the income statement, but directly in equity. Presumably, the rationale is that they are not part of the operations of the business. These include:

- correction of fundamental errors (IAS 8);
- switches of accounting policy to the benchmark treatment (IAS 8, para.49);
- revaluation surpluses and deficits on property plant & equipment (IAS 16);
- profits or losses arising from the translation of the financial statements of a foreign entity (IAS 21);
- revaluations of investments (IAS 25)

I - STATEMENTS OF EQUITY

In view of the items that can bypass the income statement, IAS 1 (para 86) requires enterprises to produce a separate statement which discloses the profit or loss associated with such items.

This is similar to:

FRS 3's Statement of Total Recognised Gains & Losses in the UK (STRGL) which is a separate primary statement; and

SFAS 130 Comprehensive Income (CI) in the USA, which can either be included as part of the income statement or a separate financial statement

However in IAS 1 the information may be disclosed either as:

- a traditional reserves note; or
- a separate statement as STRGL

One of the issues which arose in the light of this variation in practice was concerned with non realised gains/losses (for example a downward revaluation of fixed assets). Were they to be included directly in reserves because they were as yet unrealised, or because the loss was not part of operations? If the former, then when realisation takes place, the loss should be recycled to the income statement. In the UK recycling is not allowed.

In order to improve international uniformity, G4+1 (standard setters in Australia, Canada, UK and US + IASC, and recently New Zealand) have produced a discussion paper "Reporting financial performance: proposals for change". Perhaps to avoid the recycling issue, the DP envisages a single performance statement with 3 sections:

- operations
- financing & treasury
- other

A commentary by the American Accounting Association on this proposal is given in Accounting Horizons, September 2000, 365-379.

II - DOES IT MATTER WHERE & HOW INFORMATION IS DISCLOSED?

Maines & McDaniel, "Effects of comprehensive income characteristics on nonprofessional investors' judgments: the role of financial statement presentation format", Accounting Review, April 2000 investigated the impact of the format of information required under SFAS 130. SFAS 130 allows comprehensive income items to be shown:

- either in a statement of comprehensive income; or
- as part of a statement of changes in stockholders' equity.

They asked 95 individuals, who had enrolled in an evening MBA programme, to answer two question sets. The experiment concentrated on unrealised gains and losses (UGL) from marketable securities.

They found that the differing formats did not affect the acquisition and evaluation of the information. However, only when presented in a comprehensive income format did the UGL receive a weighting in the investment decision. The rationale for the findings is based on earlier work in cognitive psychology. They suggest that when the items are disclosed in an income statement, it is clearer that they relate to performance; whereas when the information is located in a statement of equity, then the linkage with current performance is less clear.

Although the conclusions are limited to those without a professional interest in accounting, the results may also translate to professional analysts. Certainly in the UK, it is documented¹ that analysts have primitive understanding of accounting, presumably because equity valuation requires other skills.

This suggestion is borne out by in a paper by Hirst & Hopkins². They also investigate the effect of the comprehensive income (CI) format when the company holds marketable securities. They find that analysts are more aware of unrealised gains when the CI format is used. When the changes in stockholders' equity statement is used, analysts place more emphasis on realised gains than unrealised because they do not see the changes in stockholders' equity statement

¹ Barker, "FRS3 and analysts' use of earnings", Accounting & Business Research, Spring 2000, 95-109

² Hirst & Hopkins, "Comprehensive income reporting and analysts valuation judgments", Journal of Accounting Research, Supplement 1998, 47-75

as a statement of performance.

4. Discontinuing operations

The objective of IAS 35 is to enhance the ability of investors to make projections of an enterprise's cash flows and earnings generating capacity by segregating information about discontinuing operations.

A discontinuing operation arises when there is a plan to terminate a separate major line of business (that can be distinguished operationally). The information required to be disclosed includes:

- a description of the discontinuing operation;
- the amounts of revenue, pretax profit or loss from ordinary activities in the current period;
- when the discontinuation will be complete;

and should be made when the Board of Directors have approved the plan, or when the termination or sale agreement is binding (whichever is the earlier).

5. Earnings per share

EPS calculations enable investors to relate the performance of the company to the current share price.

I - BASIC EPS

In a straightforward world eps is the profits for shareholders divided by the number of shares outstanding during the year. However, complications are:

new issues during the year
new issues at a discount to the current price
rights issues
preference dividends

II - DILUTED EPS

As well as basic eps, companies need to disclose diluted eps which shows the effects of existing agreements by the company to issue shares in the future; for example, convertible loan stock, options held by directors and employees.

IAS 33 (para 38) says that future shares should be included in the calculation only if they will decrease net profit per share from continuing ordinary operations. The method used to calculate diluted eps is the Treasury Stock Method.

Example

A company has 5,000,000 shares in issue at the end of the year. Earnings during the year were £1,000,000. Basic eps is therefore 20 pence.

However, at the year end, there are 750,000 outstanding options given to directors to purchase shares at 85 pence in 2 years time. During the year the average price of each share was 100 pence, and therefore in effect the shares will be issued at discount of 15%. This means that 15% of the 750,000 shares (112,500) would be issued at no cost and the rest at the full market price. Since if the shares were issued at the full market price and they were invested at the

current rate of return obtained by the company, there would be no change to the basic eps. Therefore all that is needed is to adjust for the effect of the 112,500 no cost shares.

The number of shares used for fully diluted eps is:

Shares used for basic eps	5,000,000	
Notional shares issued at no cost (<i>Note</i>)	112,500	

Total	5,112,500	
Fully diluted earnings per share is therefore	£1,000,000	
	-----	= 19.56 pence
	5,112,500	

Because the eps has fallen, the options are dilutive and the diluted eps needs to be shown.

But what happens if there are a number of potential dilutions? First they are ranked according to their dilutive effect and then applied in turn to the basic eps, but will be included only if they dilute the prior eps figure.

Example

Profits are £1200 and the number of shares outstanding during the period is 15,000. Basic eps is therefore £1200/15,000 = 8 pence

The company has two issues of convertible loan stock (the tax rate is 30% and debt interest is tax deductible)

(a) £4000 of 10%, each £100 having the right to convert to 170 shares

(b) £2000 of 15%, each £100 having the right to convert to 150 shares

Both convertibles are dilutive with respect to basic eps, as follows.

(a) £4000 of 10%

increase in earnings	increase in shares	incremental eps
£4000*10%*70%	4000/100*170	£280/6800
=£280	=6800	4.1 pence

(b) £2000 of 15%

increase in earnings	increase in shares	incremental eps
£2000*15%*70%	2000/100*150	£210/3000
=£210	=3000	7 pence

However, (a) is more dilutive and should be treated first.

	Earnings £	Number of shares	EPS (pence)
Basic eps	1,200	15,000	8.00
Incremental effect of (a)	280	6,800	
Dilutive eps	1,480	21,800	6.79

Convertible (a) dilutes eps to 6.79. However, since the incremental effect of convertible (b) is 7.00, it is not considered as it will raise the diluted eps.
