

Investment basics — III

EARNINGS PER SHARE AND P/E RATIOS

Joel Stern is emphatic "Earnings per share don't count". This is, of course, a minority view and investors around the world still rely heavily on EPS as a basis for investment decisions. However, as a result of accounting evolution, there are currently so many versions of EPS that its value, and that of the P/E ratio, is being undermined. The current situation is rather like the manager who is promised a bonus equal to x% of net profit: unless net profit is unambiguously defined, his bonus could have little or no value. Similarly, without clearly defining all aspects of EPS, it can prove misleading or even meaningless as an investment aid.

Before delving more deeply into the prevailing complications, let us examine the method of calculation and the rationale behind EPS. The definition of earnings per share in Statement 1.004 of Generally Accepted Accounting Practice is as follows:

"Earnings per share means the income in cents attributable to each equity share, based on the consolidated net income for the period, after tax, and after deducting outside shareholders' interests and preference dividends, but before extraordinary items, divided by the weighted average number of equity shares in issue and ranking for dividend in respect of the period."

Although the definition in GAAP 1.004 is largely self-explanatory, the following example should help clarify any obscure points:

Company A

Issued capital at 30th June 1978:

500 000 10% preference shares of R1 each
2 000 000 ordinary shares of 50 cents each

On 31st December 1977 the company issued by way of a 1 for 3 rights issue, 500 000 ordinary shares.

Calculation of earnings per share	R000's
Consolidated net income	2 000
Taxation	800
Group taxed profit	1 200
Minority interests therein	150
Net recurrent income	1 050
Extraordinary items – loss	200
Net income	850
Preference dividends	50
Attributable to ordinaries	800
<i>Weighted average shares in issue:</i>	<i>Number</i>
1st July 1977	1 500 000
Issued 31st Dec 500 000 x 6/12	250 000
Weighted average	1 750 000
Earnings per share (1 050 – 50) ÷ 1 750	57,1c

So much for the calculation – now for the rationale. There are three main reasons for calculating EPS:

- By converting attributable income to a per share basis, shareholders are readily able to assess the extent to which their dividends per share are covered by earnings (dividend cover is calculated by dividing the earnings per share by the dividend per share).
- The EPS calculation reduces corporate profit growth to a comparable basis by adjusting for increases in income which are occasioned purely by additional issues of shares (such as growth in income resulting from a share exchange merger or additional income which is generated by funds raised through a rights issue).

This is illustrated in the following example. Three companies each earned taxed profits of R1m in 1976 and R1,5m in 1977 – on the face of it a thoroughly comparable performance. However, Company A increased its capital by a heavy rights issue at the start of 1977, Company B acquired a competitor earning R200 000 in exchange for 250 000 new shares also at the beginning of the year, while Company C's capital was unchanged. Once this is taken into account it will become obvious that Company C was the best performer of the three as its growth was achieved without the injection of new capital. This is reduced to quantifiable proportions by the EPS calculation:

	Company A	Company B	Company C
1976 taxed profit	R1,0m	R1,0m	R1,0m
Shares in issue	2,0m	2,0m	2,0m
EPS	50c	50c	50c
1977 taxed profit	R1,5m	R1,5m	R1,5m
Shares in issue	2,5m	2,25m	2,0m
Weighted average	2,5m	2,125m	2,0m
EPS	60c	70,6c	75c
Growth	+20%*	+41%	+50%

If profit growth alone was compared, a wholly misleading impression of the three companies would be obtained. The EPS calculation is thus vital – if growth means anything to investors.

*This growth figure takes no account of any possible bonus element arising from a rights issue at less than full market price. GAAP 1.004 has avoided this question, stating that "... reliable calculation of such an element is normally impracticable. It should therefore be assumed that all such issues have been made at full market price."

(c) Earnings per share can be related to a share price to establish a price earnings ratio which facilitates comparisons between the values attributed to the listed shares of different companies. Without an EPS figure it would be difficult to assess whether a particular company's shares are cheaper than those of another company. The use of the P/E ratio is now widely accepted as an important means of comparing the market rating of one share with another.

The P/E ratio is simply the price of the share dividend by the historical earnings per share. While this is often referred to as the company's 'multiple' of the number of years earnings which the current price represents, it must be clear that this relates solely to the earnings of the preceding financial year. It does not purport to indicate the number of years it will take for the company's earnings to recoup the price paid for the shares. Clearly, if the company is in a growth phase and future earnings are expected to rise then a P/E ratio of, say, 5 does not mean it will take 5 years to recover the price paid – the actual period will be lower. On the other hand, if earnings are expected to fall, it will take longer than 5 years for the price to be recovered.

Companies with above-average growth potential will generally command higher P/E ratios than those with low growth prospects but many other factors also influence the share's multiple, such as its financial status, the marketability of the shares, stability of the industry, calibre of management, etc. The P/E ratio must, therefore, be understood for what it is. It should not be used mechanically, but purely as a reference point against which judgement can be made as to a share's value – either in absolute or relative terms.

In spite of their limitations, it is clear that both earnings per share and P/E ratios form a vital function in the investment process.

However, while the rationale behind EPS and P/E ratios is sound there are (as mentioned at the start of this article) a number of problems which have arisen and which are beginning to undermine their validity. About the price there can, of course, be no doubt and the principal area of uncertainty is the figure on which earnings per share is calculated. It is, paradoxically, the introduction of Generally Accepted Accounting Standards which is causing the confusion. During this important stage in the evolution of accounting, those responsible appear to favour a degree of flexibility which was certainly **not generally accepted before the standards were released**. This is having the effect of condoning a proliferation of different earnings per share almost to the point where (as one UK journal put it) companies are allowed to choose their own earnings per share figure.

There are two main areas of weakness. The first arises from GAAP 1.003 "Taxation in the Financial Statements of Companies". This South African Standard followed the example of UK Standard and required a charge to be raised in respect of deferred tax. This encountered a great deal of opposition from companies to the point where the UK accountants have now totally reversed their earlier recommendations. UK companies are now no longer required to provide for deferred tax if they can show that it is reasonably probable that they would not have to pay it in the foreseeable future. This is, of

course, very subjective as it relates to forecast capital expenditure in future years – a forecast made solely by the directors and subject to change from year to year. The EPS figure, thus, becomes largely a matter of choice and South Africa will surely follow the British example:

Another serious deficiency arises from the weak and imprecise definitions contained in GAAP 1.003 "Extraordinary Items and Prior Year Adjustments". In this standard, abnormal items and extraordinary items are differentiated. The former are included in earnings per share while the latter are excluded (see definition of earnings per share above). The definition of extraordinary items in 1.003 is:

"Extraordinary items, for the purposes of this statement, are those items of income and expense which derive from events or transactions outside the ordinary activities of the business and which are both material and expected not to occur frequently or regularly. They do not include items which, though abnormal in size and infrequent in occurrence (and which may, therefore, require separate disclosure), derive from the ordinary activities of the business."

Ordinary activities are not defined, and the examples of extraordinary items which are cited, in the Standard, are very limited:

- (i) The discontinuation of a significant part of a business.
- (ii) The expropriation of assets.
- (iii) Major losses for reasons such as earthquakes, hurricane, fire or flood.
- (iv) Writing-off intangibles including goodwill because of events or developments outside the ordinary activities of the business.

Abnormal items are not defined but three examples are provided:

- (i) Abnormal charges for bad debts and write-offs of stock and research and development expenditure.
- (ii) Abnormal provisions for losses on long term contracts.
- (iii) Most adjustments of prior year taxation provisions including adjustments of deferred taxation arising from changes in tax rates.

In practice it has become clear that both companies and their auditors are in a state of some confusion. There are examples of where the same item (profits/losses on the sale of subsidiaries have been treated **within the same audit firm** as extraordinary by one partner and abnormal by another – in both cases in respect of conglomerate companies. A sale of a factory is, in certain cases, treated as abnormal and in others as extraordinary. There are many similar examples and, without being too cynical, the debits are generally treated as extraordinary while the credits are considered abnormal.

Apart from the uncertainty caused by these two standards, the companies themselves have done much to reduce the comparability of earnings per share. There are those companies which provide special depreciation on the replacement value of assets or make other inflation accounting adjustments, there are those who have switched from a FIFO to a LIFO basis of stock valuation, there are those who have adopted a deferred

tax provision and there are those who have chosen to ignore it. There is the whole question of attributable earnings of associate companies and there is no consistency regarding the inclusion of earnings of overseas subsidiaries whether these are fully remittable or not.

Because of the great importance of EPS and P/E ratios to the investment decision, great care should be exercised in determining just what the correct and comparable earnings per share is for each company. The concept of EPS and the use of P/E ratios was never intended to be the whole answer and the dangers of

using one all embracing measurement of performance and price have been extensively canvassed elsewhere. Certainly, in future years increased attention will have to be paid by the investment community to other important considerations such as cash flow, current asset financing, fixed asset replacement provisions, gearing influences, etc. However, even when these are better understood and developed, the EPS concept will remain one of the most important of the various investment tools and it is critical that the accounting profession moves towards greater standardisation on this score.