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Management decisions based on the measurement of enterprise performance through "Earnings per share" indicator

Earnings per share indicator does not provide though the possibility to compare all the enterprises which compute it due to the difficulties in interpreting the differences noticed from one enterprise to another, differences which can result from the different number of shares issued by each of them and from the different categories of shares issued. The accounting policy of IASB regarding the determination and interpretation of earnings per share of the enterprise is implemented through IAS 33. The main objective of our paper has in view the description and exemplification of the computing model of the Earnings per share indicator.

Keywords*: earnings per share, indicator, decision, management, performance*

1. Introduction

Earnings per share is one of the oldest and most used and mentioned indices in the financial analyses drawn up for the financial statements of the enterprises, mostly Anglo-Saxon. Until the end of the 60s, the use of this indicator had been already generalised and it had been agreed with a computation method of earnings per share which coped with the consistency and compatibility requirements, a method which has been taken over by all the accounting regulation and normalisation boards, including the IASB which, in January 1997 sanctioned and published IAS 33 "Earnings per share".

"Earnings per share" was drawn up by IAS 33 in collaboration with the IASB, the latter being the American board of accounting normalisation. FASB issued the FAS 128 standard „Earnings per share" which is applied to enterprises activating in the field of financial markets. The majority of the information regarding the computation, presentation and publication of the "earnings per share" indicator stipulated by the IAS 33 are comparable with those stipulated in the FAS 128 standard.

An enterprise can issue two types of shares: ordinary shares and preferential shares, both being issued and sold in order to attract capital, yet those who invest in the preferential shares have institutional objectives different from those investing in ordinary shares.

- ***Ordinary shares*** are capital instruments which *give the right to participate to the profit (dividends) only after the distribution of the net profit afferent to the other types of shares* (preferential) Due to the fact that usually only the ordinary shares *grant the right to vote*, they represent *a modality to control the enterprise*.
- ***Preferential shares*** *have priority* before the ordinary shares in many regards: *priority when dividends are paid, priority when the assets of the enterprise are distributed in case of winding up, convertibility and option of revocation* (pay off). The priority of the preferential shares as compared to the ordinary shares regarding the dividends payment can be explained as it follows: the holders of the preferential shares must cash in a certain amount as dividends before allocating the dividends to the ordinary shareholders. This amount is set up in monetary units on share or as a percentage of the nominal value of the preferential shares.

2. Main issues regarding the Earnings per share indicator

For the investors the earnings obtained as a result of the investment is important and this can be measured with the help of the price/earnings per share indicator which can operate as a base for comparison of the financial performance for the companies quoted which operate in the same field of activity.

The price/earnings per share indicator can be, thus, a useful complementary indicator in following the potential increases of the profit, so that a price/earning per share with a little value indicates a significant potential increase of the company's earnings:

Price/earnings per share = Current market price per share/ earnings per share

The companies not entering in the applicability area of the IAS 33, but wishing to present this indicator in their Profit and Loss Account will use the methodology regarding the determination of the earnings per share according to the standard regulations.

An enterprise whose ordinary shares are quoted on the Stock Exchange must publish two indices:

- **basic earnings per share**
- **diluted earnings per share**

IAS 33 uses the specific term of "ordinary shares" because when there are several classes of ordinary shares, the result must be divided to these classes, based on the rights to dividends, and the earnings per share must be calculated separately on each class. According to IAS 33, all ordinary shares will be included in the computation of the weighted average of the number of shares, the way in which the shares are qualified for the dividends allocation having an important impact on the computation.

3. Evaluation of Basic Earnings per Share

The basic earnings per share is calculated as being the ratio between the net result of the period afferent to ordinary shares and the weighted average number of the ordinary shares outstanding during the entire year. The net result of the period afferent to ordinary shares is determined as the difference between the net result of the period, out of which the minority interests, extraordinary elements and preference dividends have been excluded.

The average number of shares outstanding is computed by adding to the number of shares outstanding at the beginning of the period the new share issuing and the deduction of share repayment or the acquisitions of own shares. The weight is made varying with the time factor. When, during a period, there is a change in the number of ordinary shares outstanding, the company must publish, due to comparability reasons, the earnings per share recalculated for the previous period.

The basic earnings per share is computed by reporting the net profit of the financial year, according to the ordinary shares (PnAC), to the weight average of the circulating ordinary shares in that particular financial year (MpACc) :

$$\text{EPS-basic} = \text{PnAC} / \text{MpAC}$$

The net profit of the financial year corresponding to the ordinary shares (PnAC) is determined by deducting from the net result of the financial year (RnEx) the value of the preferential dividends afferent to the financial year (Dpref):

$$\text{PnAC} = \text{RnEx} - \text{Dpref}$$

The value of the preferential dividends contains: the dividends afferent to the non-cumulative preferential shares declared in that particular financial year, the dividends owed in that financial year, afferent to the cumulative preferential shares, no matter if these dividends have been declared or not.

The value of the preferential dividends afferent to the financial year does not include the value of the dividends afferent to the cumulative preferential shares, paid or declared in the current financial year for the previous financial years.

The weight average of the circulating ordinary shares in that particular financial year (MpACc) is determined as follows:

$$MpACc = (Si + AE - AR) \times FP$$

Where: Si = number of circulating ordinary shares at the beginning of the financial year

AE = number of shares issued

AR = number of paid off shares

FP = ponderation factor: FP = NZc / NZt

NZc = number of days when the shares circulated

NZt = total number of days of the period

Example 1

At EPSILON Ltd.Co, we know the following information regarding the financial period concluded at 31.12.N:

Profit from the ordinary activities before taxation:.........100,000 m.u.

- Tax on profit from ordinary activities:..........................16,000 m.u.

= Profit from ordinary activities after taxation:............... 84,000 m.u.

- Minority interests..4,000 m.u.

= Profit attributable to the parent company shareholders:...................80,000 m.u.

Dividends worth 40,000 m.u. have been assigned as follows:

- for ordinary shares 25.000 m.u.;
- for preference shares 15.000 m.u.

At the beginning of the financial year N, there were 9,000 ordinary shares outstanding. At 30.09.N, there have been issued more 4,000 ordinary shares.

Net earnings of the financial year afferent to ordinary shares = 80,000 m.u. – 15,000 m.u. = 65,000 m.u.

Weighted average number of ordinary shares outstanding during N = 9,000 + 4,000 x 3/12 = 10,000 shares

Basic earnings per share = 65,000/10,000 = 6.5 m.u.

4. Evaluation of Diluted Earnings per Share

Diluted earnings per share is calculated by adjusting the basic earnings per share with the effect of all the diluted potential common shares which have been outstanding during the year. Therefore, the net earnings of the financial year are increased with the following taxation net elements:

- dividends for preference shares when these are converted into ordinary shares;
- interests afferent to bonds convertible into ordinary shares; and

- all the other elements which could not be included in the earnings if the issue of potential shares had not taken place.

Also, the number of ordinary shares is increased as a result of the increase in the number of ordinary shares which can be put into circulation when all the diluted potential common shares are converted.

IAS 33 stipulates that for the computation of the diluted earnings per share only the ordinary potential shares which have a diluted effect will be retained. The potential ordinary shares must be considered dilutive if their conversion into ordinary shares had as effect the reduction of the net earnings per share of the ordinary continuous activity.

The effects of the anti-dilutive ordinary shares are not taken into consideration when computing the dilutive earnings per share. When analysing whether the potential ordinary shares are dilutive or anti-dilutive, each series of shares is followed separately. Moreover, each series of potential ordinary shares is taken in order, starting with the dilutive ones and ending with the least dilutive.

Relation of calculus:

$$EPS\text{ - diluted} = (PnAC+Dob+Div\pm En) / (MpACc + MpACs)$$

To compute the result per share-diluted, the net profit corresponding to the ordinary shares will be majored with the net interests:

Dob - Interest – the gross value corrected with the tax on profit afferent to the potential ordinary shares (such as, for example, the shares convertible into ordinary shares)

Div – the dividends to be due on the preferential shares

Adjusted with ±:

En = other net elements (revenues or expenditure consisting in fees, discounts, bonuses etc.) which would have not affected the result of the financial year afferent to the ordinary shares if potential ordinary shares had not been issued, thus establishing the *diluted result.*

The weight average of the circulating ordinary shares will be majored with the weight average of the supplementary ordinary shares which would result from the conversion of all the potential ordinary shares.

We state that the potential ordinary shares which have been transformed into ordinary shares during the financial year are taken into consideration for the result per share – diluted from the beginning of the financial year to the date of conversion. It is obvious that, from this date on to the end of the financial year, the shares obtained through conversion being ordinary shares are taken into consideration both for the result per share – basic indicator as well as for the result per share – diluted indicator.

Example 2

OMEGA Ltd Co in financial year N-1 issued 10,000 bonds convertible into ordinary shares. The nominal value of a share is of 1,000 m.u. and the nominal interest is 10%. When the shares were issued, it was settled that on 01.07.N+1 each 100 shares can be converted into 103 shares. At the beginning of the financial year N, the company had 100,000 ordinary shares outstanding. The net earnings of the financial year N afferent to ordinary shares was of 200,000,000 m.u. Tax rate is 16%.

Basic earnings per share = 200,000,000/100.000 = 2,000 m.u./share
Computation of diluted earnings per share
Financial year net earnings ....200,000,000 m.u.
+ Saved net interest (10,000 x 1,000 x 10%) – (1,000,000 x 16%)...840,000 m.u.
Diluted net earnings...200,840,000 m.u.
Ordinary shares outstanding...100,000
Potential shares 10,000 debentures x 103/100..........................10,300
Total number of potential shares 110,300
Diluted earnings per share for financial year N = 200,840,000/110,300 = 1,820.85 m.u.

When rights are issued (options, warrants, etc.) the exercising price is usually less than the real value of the shares. That is why such an issue of rights includes an element of gratuity. For such contracts the number of shares which would have been issued at their real value is calculated and the difference between the number of shares issued and the number of shares which would have been issued at their real value is treated as a free emission of ordinary shares (free of charge). Free ordinary shares are diluting and they are used in the computation of the diluted earnings per share.

Example 3

We know the following information regarding the company ALFA, in financial year N:

- net earnings of the financial year afferent to ordinary shares: 2,400,000 m.u.;
- weighted average number of ordinary shares outstanding: 500,000 shares;
- average real value of a share in N: 40 m.u.;

- in N-1 options for the repurchasing of 100,000 ordinary shares have been issued, at an unit price of 30 m.u. Duration of options exercising: 4 years. In N-1 and N there were not options to be financial yeard.

Afferent earnings per ordinary shares = 2,400,000 m.u./500,000 shares = 4.8 m.u./share.

Number of shares issued at real value = 100,000 x 30/40 = 75,000 shares

Number of free shares (dilutive) = 100,000 – 75,000 = 25,000

Total number of effective and potential ordinary shares = 500,000 + 25,000 = 525,000 shares

Diluted earnings per share = 2,400,000/525,000 = 4.57 m.u./share

5. Final remarks concerning the utility of earnigs per share indicator in management decisions

The stock exchange rate of the share represents the barometer of the global performance of an enterprise, officially recognised by the public on the capita market. But the variation of the stock exchange price is determined not only by the evolution of the economic – financial results of the enterprise, but also by the investors' expectations referring to its development possibilities, the evolution and the perspectives of the sector where the firm runs its activity, as well as the national and international economic tendencies. The most important factor setting up the price of a share is the ratio between the supply and demand on the capital market.

It has been noted that some stock exchange indices, regarding the level of action, have strongly influenced the stock exchange rate. This fact demonstrates the reduced relevance of the traditional financial rates when adopting the decisions to invest-disinvest as a result of the low quality of the financial-accounting information, the issuers' lack of transparency, the delay in providing information to the investors or simply, the existence of other strong motivations to purchase some apparently unprofitable firms by important investors.

The stock exchange indices had in view, listed at the Bucharest Stock Exchange are the following:

- PER = rate stock exchange price / to profit per share (it would represent how many years you have to wait to cover the price paid for a share from the afferent profit)
- P / BV = rate stock exchange price / accounting value per share (it shows what price the investors set for the company's assets)
- DIV = (dividend / price)x100 - the output of dividends (it shows what percentage of the price of a share the dividend that it brings represents and it is always compared to the term interests)
- P/S = rate stock exchange price / sales per share

- Stock exchange capitalization (it is the market value of a quoted company and it is obtained by multiplying the total number of shares issued with the stock exchange price of a share)
- EPS = net profit per share

The earnings per share, computed in the financial statements, arranged or not, can influence the exchange rate of the shares quoted on the Stock Exchange, but many times either they are more important in the investors' choice for the company's policy, the quality of the management, the company's assets, the policy of debts, cash, commercial fund, dividend policy, the quality of the shareholders, the development policy etc.

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