Business Studies Vol. XXIV. Nos. 1 & 2 January and July, 2001

# On the Efficacy of AS-20 : Earnings Per Share*

Sumana Sur (Ghosh) and Tanupa Chakraborty **

**Abstract** : AS-20, issued by the Institute of Chartered Accountants of India, became mandatory for listed public limited companies effective from 1.4.2001. Since EPS is single most measure widely used in financial analysis, this paper deals with the efficacy of the standard. Although the standard in question is not free from certain limitations, AS-20 and IAS-33, both on EPS, have greater compatibility than many other standards in other areas.

**Key Words** : EPS, Cash EPS, Diluted EPS, Quality of EPS.

## 1. Introduction

It is well known that accounting standards are meant for harmonizing the diverse accounting policies and practices adopted by companies and for ensuring consistency in the reported information of a company from year to year so that users of financial statements are in a position to comprehend them and use them for decision-making purposes. Since 1979, the Institute of Chartered Accountants of India (ICAI) have issued 23 accounting standards of which 22 standards (AS-1 to AS-22) have become mandatory[1] by 1.4.2001. AS-23 will become mandatory from 1.4.2002. AS-20 : Earnings Per Share is one *outof* the first category. The focus of this paper is on Earnings Per Share (EPS).

EPS is critical to financial analysis. It is single most widely used statistic in financial analysis today. It is used by the shareholders (present and potential) in evaluating the performance of the company for taking investment decisions[2]. In the U.S., the Financial Accounting Standard Board (FASB) issued SFAS - 128 on EPS (in replacement of APB opinion on the issue) — which became effective from accounting period ending after 15.12.1997. The International Accounting Standard Committee (IASC) issued IAS-33 on EPS in February, 1997. In the U.K., FRS-14 was

1. Sub-sections (3A) and (3B) to section 211 of the Companies Act, 1956 (amended in 1998) stipulate that "every profit and loss account and balance sheet of the company shall comply with the accounting standards". In case of any deviations, the reasons for such deviations and the financial effect thereof are also required to be given.

Sub-section 3(l)(d) of section 227 of the Act, dealing with powers and duties of auditors (introduced in 1999), requires an auditor to state "whether, in his opinion, the profit and loss account and balance sheet complied with the accounting standards referred to in sub-section (3C) of section 211."

2. EPS may be used in absolute form for the decision or may be used as a component of other key ratio-s used for the purpose. Price-earnings ratio (market price per share ÷ EPS) is an example on the point. P/E ratio is widely used for investment decisions. It reflects investors' assessments of a company's future earnings and their willingness to pay for the shares of the company. This is because the shareholders feel that the future growth in earnings will provide an adequate return on the investment.

* Guest Lecturer, SA Jaipuria College.

** UGC Junior Research Fellow, Dept. of Commerce, University of Calcutta.

issued on EPS in October, 1998 (effective from accounting period ending on or after 23.12.1998). Many other countries, namely, Australia, Canada, Mexico, New Zealand and some countries in the European Union followed suit. IAS-33 might have helped significantly in improving the reporting environment. The issuance of AS-20 is therefore a welcome step. It is in this context that the present paper examines the following issues :

- Is AS-20 in conformity with IAS-33?
- Has IAS-33 helped harmonization internationally in respect of EPS?
- How is a company required to disclose EPS in the annual statements? Is any part of existing financial statements required to be changed to make the EPS information user friendly? If so, what are the possibilities?
- Does AS-20 focus on the quality of EPS data?
- What are the corporate reporting practices in India, if any, in this context?

The remainder of the paper is organised as follows. Section 2 makes a comparison between IAS-33 (IASC) and AS-20 (India) to resolve the above mentioned first two issues. Disclosure of EPS in the financial statements and qualitative aspect of EPS are given in section 3 and 4 respectively. Section 5 shows the corporate practices in India. The last section gives concluding observations.

## 2. IAS-33 and AS-20 : a comparison

Founded in 1973, the International Accounting Standard Committee (IASC) has evolved, over the last several decades, as the signal force in international accounting standard setting. So far, it has issued 41 accounting standards in different areas. Current goals and objectives of IASC, most succinctly stated in its five-year plan (1991-95) are: (a) developing international accounting standards (IASs) that meet the needs of capital markets; (b) ensuring that the IASs meet the financial reporting needs of developing and newly industrialized countries; (c) developing other documents that meet other financial reporting needs that are important internationally; (d) working for greater compatibility between national accounting requirements and IASs and promotion of the use of the IASs. In short, IASs are used in different ways in different countries - the standards are adopted as national standards, (e.g. Kuwait, Malta, Oman, Pakistan etc.), national standards may be developed independently having broad agreement with IASs (India and many other countries fall in this group), national standards may be developed independently explaining where and how these standards differ from corresponding IASs (e.g. Australia, New Zealand, the U.K. etc.) or national standards are developed independently without any reference to corresponding IASs (e.g. Germany, Japan, the USA, etc.) (Basu, 2000).

In view of the above, we compare, IAS-33 and AS-20 to examine whether ICAI and IASC are "working for greater compatibility between national accounting requirements and IASs and promotion of the use of the IASs".

**Table 1**

**Earnings per share : IAS-33 & AS-20 - a comparison**

| Particulars | IAS 33 | AS 20 |
|---|---|---|
| 1. What should be shown | Basic EPS & Diluted EPS for each class of Equity Shares | Basic EPS & Diluted EPS for each class of Equity Shares |
| 2. Where it should be shown | On the face of the income statement | On the face of the statement of profit or loss |
| 3. Quality of Earnings | All items of income and expense including tax expenses & extra-ordinary items recognised in a period should be adjusted to arrive at net profit or loss (para. 3). | All items of income and expense which are recognised in a period, including tax expense and extraordinary items, are included in the determination of the net profit or loss for the period unless an accounting standard requires or permits otherwise (see AS-5) Net profit or loss for the period, prior period items and changes in accounting policies). (Para.12) |
| 4. Computation of denominator | Weighted average no. of ordinary shares outstanding during the period | Weighted average no. of equity shares outstanding during the period (Para. 15) |
| 5. Adjustment for computing Diluted EPS | i) Profit attributable to shareholders by the amount of, say, interest on convertible debentures and the tax savings<br>ii) Weighted average no. of shares to be adjusted by say, addition to shares resulting from conversion | Same as column 2 |
| 6. Date of implementation | 1.1.1998 | 1.4.2001 |
| 7. For whom applicable | Listed companies | Listed companies. Unlisted companies showing EPS must also follow the same principles |
| 8. Clarity | Concise | More comprehensive, elaborative and illustrative |

Source : IAS-33 & AS-20.

A comparison between IAS-33 and AS-20 having regard to a number of attributes shows that there is no fundamental difference among them and that AS-20 is in line with IAS-33. There are some differences between SFAS-128 and IAS-33 with respect to disclosure of EPS (Agarwal, 2000). But as far as, computation of EPS is concerned, there is no material difference. But in respect of many other standards, there are fundamental differences between FASB standards and IASC standards. Two examples on the point are : (I) SFAS-95 and IAS-7 on Cash Flow (Dhar, 1998), and (ii) SFAS-13 and IAS-14 on Segment Reporting (Sen, 2001). So, IAS-33 has been able to harmonize accounting standards in many other countries. Given the difficult task of harmonization (Basu, 1994) this is no doubt a significant achievement of the IASC and, surely, AS-20 of India is a result of the sustained efforts of IASC for harmonization.

## 3. Disclosure of EPS in the financial statements

Both IAS-33 and AS-20 state that EPS and Diluted EPS should be disclosed prominently on the face of Income statement (profit and loss account). AS-20 states that "the focus of this Statement is on the denominator of earnings per share calculation. Even though earnings per share data has limitations because of different accounting policies used for determining 'earnings', a consistently determined denominator enhances the quality of financial reporting". (Objective clause).

So we have to address the issue whether "quality of financial reporting" would enhance because of disclosure of EPS and Diluted EPS.

Research studies (Dasgupta, 1977; Chakravorty, 1994; Banerjee, 1999) have shown that there is lack of uniformity in the disclosure of information in the Income statement (profit and loss account). The ICAI in its earlier study, Trends in *Published Accounts* (1985), stated as follows :

"The contents of the profit and loss account and the order in which these were given differed widely from company to company, probably because the law merely prescribes the information to be given in the profit & loss account without prescribing a form for the purpose" (p-73). The Indian position has not materially changed since then.

The British Companies Act, 1989, suggested two formats (horizontal and vertical) of profit & loss account. Profit and loss account can be prepared under each of these formats classifying the items of expenses either under functions (production, administration, distribution etc.) or under nature (e.g. staffing costs, depreciation, interest etc.). We refer to the British Companies Act because, historically, India has inherited a lot from the British system. The U.S. has developed a very good financial reporting system for the listed companies. A reference to the U.S. may not therefore be out of contest. The format for the income statement followed in the U.S. is more informative for understanding and decision-making. The first portion of the statement shows operating profit or loss [i.e. sales less cost of sales = Gross margin; Gross margin less selling, general and admn. expenses and operating expenses (including depreciation) to show operating profit or loss before interest, taxes, gains & losses]. The next portion gives information on peripheral or incidental activities, extraordinary items etc. Distinguishing between the financial effects of a company's major or central operations and those of other activities or events help users to analyse trends affecting the business without the potential distortive effects of peripheral or incidental activities. The last section shows effects of extra-ordinary items and changes in accounting policies to show, finally, the amount of net profit or loss for a period. Thus, distinguishing between the financial effects of a company's usual and recurring activities and those of other activities improves the analysis of understanding trends and relationships in a company's ongoing businesses.

The reason for presenting the income statement in three important sections is to enable reporting EPS section-wise rather than as a whole as shown below with hypothetical figures.

| | | EPS |
|---|---|---|
| | Rs. | Rs. |
| Weighted average no. of ordinary shares outstanding during the year : 1,00,000 | | |
| Income from continued operation | 5,60,000 | 5.60 |
| Less : Loss from discontinued operations | 2,10,000 | (–) 2.10 |
| Income before extraordinary item and effect of change in accounting policy | 3,50,000 | 3.50 |
| (–) Extraordinary loss from fire net of income-tax savings (Loss 1,00,000 and tax rate 30%) | 70,000 | 0.70 |
| (–) Effect of change in accounting policy | 20,000 | 0.20 |
| | 90,000 | 0.90 |
| Net Income | Rs. 2,60,000 | 2.60 |

The above disclosures would enable decision makers to recognize the effects on EPS of income from continuing operations, as distinguished from income or loss from material items not typical of regular operations. EPS from continuing operations is generally the most useful per share amount as it provides the best basis for predicting future operating results.

## 4. Quality of EPS

The quality of EPS is the most important question because reliability and decision-usefulness of EPS depends on its quality. If the measure is true, fair and sustainable, then it serves the purpose whether it is used as a single measure or used as a component of a ratio (e.g. P/E ratio).

The quality of net profits after tax depends on the quality of matching of expenses with revenues for a period. Profits are influenced by accounting policies concerning valuation of inventories, basis of charging depreciation, treatment of pre-project expenditure, amortization of goodwill and deferred revenue expenses, capitalization of interest on borrowings, accounting for grants and other liabilities, to give a few examples. So, quality of EPS depends how objectively profits have been arrived at. AS-20 remains silent on the qualitative aspect of EPS.

It may be argued that there are checks and balances in the accounting process that ensure quality of accounting information. Although there is considerable force in this argument, in reality the reliability of accounting information is put to question. What is then necessary is to strengthen the enforcement machinery for ensuring compliance with accounting principles and standards. Excepting a very few countries (e.g. U.S.A.), the enforcement of standards is not at all satisfactory (Choi, 1998). The problem of enforcement of IASs is of greater dimension in the absence of any internationally acceptable enforcement agency.

We therefore suggest that the concern of the ICAI to uphold the quality of EPS should be expressly recorded in the standard. Second, the idea of having an independent agency to monitor compliance of accounting standards may be given a trial (Banerjee, 2001). This will have a further check on the system to monitor non-compliance by the statutory auditor. The quality of accounting information will then improve with consequential qualitative change in EPS.

## 5. Present Indian Practices

It is true that AS-20 has been mandatory for listed companies w.e.f. 01.04.2001. So, reporting practices in compliance with AS-20 can be ascertained by examining annual accounts of these companies for the financial year 2001-2002. Further, companies whose shares are not listed on the stock exchanges may also publish information on EPS but in such cases the same principles as mentioned in AS-20 have to be followed.

The international scenario is nevertheless different. IAS-33 on EPS became effective from 1.1.98. In the U.S.A. publication of elaborate information on EPS became mandatory even earlier i.e. from 1.1.1997. So, it can be presumed that this international reporting scenario might have made a favourable impact on the reporting practices of leading Indian companies. To what extent this is a reality may therefore be tested from scanning the annual reports of selected public limited companies for the financial year 2000-2001.

Our sample comprises 30 companies which are divided into 2 groups. Companies enlisted on BSE and Nifty Sensex (21 representing 70% of the sample) whereas the second group comprises 9 companies which are not listed on either of the two stock-exchanges. 10 out of the 30 companies do not disclose EPS information in their Annual Accounts. The position is shown in table-2.

Table 2

Companies not reporting EPS

| Sl. No. | Name of the company | Listing on stock exchange | No. of Companies in the group | % |
|---|---|---|---|---|
| 1. | Prudential ICICI Technology Fund | | | |
| 2. | Nucent Finance Ltd. | | | |
| 3. | SAIL | Others | 9 | 55.6 |
| 4. | UTI | | | |
| 5. | IDBI | | | |
| 6. | Reliance Petroleum Ltd. | | | |
| 7. | Gujarat Ambuja Cement Ltd. | BSE Sensex & NIFTY | 21 | 23.8 |
| 8. | Nestle India Ltd. | | | |
| 9. | ACC | | | |
| 10. | Grasim Industries Ltd. | | | |

Source : Annual Reports of Companies (2000-2001).

Out of 10 companies that have not disclosed, 5 are listed on BSE Sensex or Nifty and the remaining 5 belong to the 'Other' category.

The remaining 20 companies are however disclosing EPS in some form or the other (table 3).

Table 3

Companies disclosing EPS figures in Annual Reports (2000-2001)

| Name | Overall picture | EPS* | Cash EPS & EPS** | Diluted EPS# | Basic & Diluted EPS@ |
|---|---|---|---|---|---|
| | No. % | No. % | No. % | No. % | No. % |
| 1. ITC Ltd. | ✓ | | | | ✓ |
| 2. ICICI | ✓ | | | ✓ | |
| 3. Tata Steel | ✓ | ✓ | | | |
| 4. Hindalco | ✓ | | ✓ | | |
| 5. BSES Ltd. | ✓ | | ✓ | | |
| 6. Reliance Industries Ltd. | ✓ | | ✓ | | |
| 7. Infosys Technologies Ltd. | ✓ | | | | ✓ |
| 8. Colgate Palmolive | ✓ | | | ✓ | |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 9. Indian Oil Corporation Ltd. | ✓ | | | | ✓ | | | | | |
| 10. Tata Chemicals | ✓ | | ✓ | | | | | | | |
| 11. Manindra & Mahindra Ltd. | ✓ | | ✓ | | | | | | | |
| 12. State Bank of India | ✓ | | ✓ | | | | | | | |
| 13. BHEL | ✓ | | ✓ | | | | | | | |
| 14. HLL | ✓ | | ✓ | | | | | | | |
| 15. HDFC Bank | ✓ | | ✓ | | | | | | | |
| 16. Reckilt & Bencham | ✓ | | ✓ | | | | | | | |
| 17. ICI | ✓ | | ✓ | | | | | | | |
| 18. Mirc Electronics Ltd. | ✓ | | | | ✓ | | | | | |
| 19. Videocon International | ✓ | | ✓ | | | | | | | |
| 20. Bata | ✓ | | ✓ | | | | | | | |
| Total | 20 | 100 | 11 | 55 | 5 | 25 | 2 | 10 | 2 | 10 |

Source : Annual Reports of companies (2000-2001)

**Notes :**

* $$\text{EPS} = \frac{\text{Earnings attributable to equity shareholders}}{\text{Number of equity shares outstanding as at the end of the period}}$$

Further, earnings attributable to equity shareholders is profit after tax reduced by preference dividend.

** $$\text{Cash EPS} = \frac{\text{Cash Earnings attributable to equity shareholders}}{\text{Number of outstanding equity shares}}$$

Here, cash earnings mean earnings adjusted for non-cash items of expenses like depreciation, amortization, etc.

\# $$\text{Basic EPS} = \frac{\text{Earnings attributable to equity shareholders}}{\text{Weighted Average number of outstanding equity shares}}$$

@ Diluted EPS is the ratio of diluted earnings to weighted average number of shares outstanding adjusted for potential dilutive securities. Dilutive securities are those which have the potential of diluting i.e., reducing the EPS figure. Some examples of such securities are convertible debt, convertible preference shares, share warrants and the like. Hence, the dilutive effect of such securities on earnings and number of shares outstanding is incorporated while determining diluted EPS.

## Findings

It may be stated that out of the 20 companies that have disclosed EPS, 16 of them are listed on BSE Sensex and Nifty. The rest 4 belong to the 'Other' category group.

Table 3 shows that the majority of the companies have reported only EPS in their annual reports. Out of the 20 companies, 11 (55%) have reported only EPS, 5 (25%) have reported both Cash EPS and EPS, 2(10%) have reported diluted EPS, balance 2(10%) have reported both diluted and basic EPS.

The companies that reported 'EPS and cash EPS' or only 'EPS' have not defined the computation methods. The notable exception being Indian Oil Corporation Ltd. which reported that its EPS and cash EPS figures have been obtained after considering issue of bonus shares. ICICI and Colgate Palmolive disclosed that its EPS figures have been derived after adjusting for convertible debentures converted into equity shares and bonus/rights issue respectively. Of the two companies that reported 'basic' and 'diluted' EPS, the definition given by ITC Ltd. conforms to the one discussed in note above. In contrast, though Infosys Technologies Ltd. has not defined 'basic' and 'diluted' EPS, it has reported that such figures have been derived from ordinary activities. This is in keeping with the format suggested by the British Companies Act, 1989 for the preparation of the Profit and Loss A/c. Also, as highlighted in Section 3, companies may be advised to follow the format shown by Infosys Techologies Ltd. in disclosing EPS figures because EPS from continuing (main-line) operations is the best possible indicator of future operating results.

Interestingly, the EPS figures of all the companies surveyed are found to be contained in 'Financial Highlights' segment and not in 'Profit and Loss Statement' as prescribed by AS-20. The mode of computation of EPS and the factors influencing the computation are not also disclosed. Since the picture presented above pertains to the period before AS-20 became mandatory (as the annual reports that have been examined relate to the period 2000-2001), it is hoped that the compliance with the standard will definitely improve the quality, type and manner of reporting EPS amongst companies.

## 6. Concluding observations

The issuance of AS-20 is a welcome step. AS-20 provides a good example where ICAI and IASC are "working for greater compatibility between national accounting requirements and IASs and promotion of the use of the IASs." It is good sign for international accounting harmonization particularly when many leading Indian companies are accessing to foreign capital markets. For increasing the effectiveness of the disclosure of EPS information for decision making purposes, EPS from continuing operations is to be computed and disclosed separately. Difficulties in computing Diluted EPS are likely to persist for some time till good practices are developed by the profession. In theory, Diluted EPS serves as a warning to equity shareholders that the return on their investment may fall in future periods. Diluted EPS is only a past performance measure and is not intended to be forward-looking. Finally, while using EPS data for decision making purposes, one should keep in mind some of its inherent limitations :

- EPS is a measure of profitability. Profitability is only one aspect of performance and does not capture many other important aspects (Kaplan and Norton, 1995).
- Net profits attributable to the shareholders are affected by the choice of accounting policies of a firm. Hence, unless there is strict compliance of

accounting policies consistently, comparison of EPS will not serve any meaningful purpose.

- When inflation rate is high, apparent growth in earnings may not be true growth.
- EPS may not always provide predictive value. As for example, high earnings and growth of earnings may be achieved by undertaking new projects which may generate increased earnings.

## REFERENCES

Agarwal, Sanjib, *Manual of Accounting Standards*, Snow White, 2000.

Banerjee, B., "Regulation of Accounting in India : In Retrospect and Prospect", UGC Major Research Project Report (unpublished), 1999.

Banerjee, B., "Accounting Standard Setting in India — An Evaluation" in Banerjee, B. and Basu, A. K. (ed.), *Corporate Financial Reporting*, DSA in Commerce, Calcutta University, 2001.

Basu, A. K., *International Accounting Harmonization*, DSA in Commerce, Calcutta University, 1994.

——, "Towards Global Accounting Standards", *Indian Accounting Review*, June, 2000.

Chakravorty, D. K., *Development of Corporate Reporting in India*, Venus Publishing House, 1994.

Chandra, Gyan, "Accounting Standards in a Global Economy", *Indian Accounting Review*, December, 1999.

Choi, F.D.S., "Financial Reporting Dimensions of Asia's Financial Crisis", *Indian Accounting Review*, December, 1998.

Choi, F.D.S., *International Accounting and Finance Handbook*, John Wiley & Sons, Inc., 1997.

Choi, F.D.S. and Mueller, G.G., *International Accounting*, Prentice Hall, 1992.

Dasgupta, N., *Financial Reporting in India*, Sultan Chand & Sons, 1977.

Dhar, S., "Cash Flow Reporting in India — A Case Study", *Indian Accounting Review*, December, 1998.

ICAI, *Trends in Published Accounts*, 1985.

Kaplan, R. S. and Norton, D.P., *Translating Strategy into Action : The Balanced Scorecard*, Harvard Business School Press, 1996.

Nobes, Christopher and Parker, Robert, *Comparative International Accounting*, Prentice-Hall, Europe, 1998.

Sen, Swagata, "Segment Reporting : An Overview", Banerjee, B. & Basu, A. K. (ed.), *Corporate Financial Reporting*, DSA in Commerce, Calcutta University, 2001.

Weygandt. J.J., Kieso, D.E. and Kell, W.G., *Accounting Principles*, John Wiley & Sons, Inc., 1996.