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EDITORIAL

This issue contains seven articles on different areas of accounting, finance and auditing. In the first article, Ahmed Riahi-Belkaoui investigates the effects of experience and self-monitoring on attitudes to responsibility accounting. In their joint article, Matsumoto, Shivaswamy and Hoban examine the bankers' perceptions of the importance of financial statements in lending decisions. Sukumar Bhattacharya then sketches the role of accountants in the changing environments. This is followed by an article on corporate regulatory disclosure requirements in Bangladesh, India and Pakistan along with corporate reporting practices in these countries. C.M. Muniramappa and J. Made Gowda review the efficacy of existing long-run cost-output model and suggest a modified model. While Prithul Chakraborty makes an appraisal of the present Panchayat audit system in West Bengal, B.B. Pradhan deals with uniform Chart of Accounts in the context of computer-aided Accounting Information System relevant to India.

May I now draw attention of our members to the International Conference News ? Members may take necessary steps to attend these conferences to promote international accounting, education and research.

In spite of shortage of fund, we have opted for Laser-printing of our journal in keeping pace with the change in technology. We can continue to do so if our members help to raise funds through more and more advertisements and institutional membership to meet additional financial commitments.

At the end, I thank the Calcutta Branch of the Indian Accounting Association for partly funding, as usual, the publication of this volume.

January 17, 1993

B. Banerjee
Chief Editor

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ATTITUDES TO RESPONSIBILITY ACCOUNTING : THE EFFECTS OF EXPERIENCE AND SELF-MONITORING

*Ahmed Riahi-Belkaoui**

The author investigates the effects of experience and self-monitoring on attitudes to responsibility accounting. The results of an experiment showed that both experience and self-monitoring lead to a significant impact on the attitudes to responsibility accounting. Experienced high self-monitors assigned less responsibility than inexperienced high self-monitor individuals. Similarly experienced low self-monitors assigned higher responsibility than inexperienced high self-monitors.

1. Introduction

Responsibility accounting arises from the established belief that managerial and operational actions are best controlled when people are made responsible for carrying out these operations (Ferrara [1964]; Gordon [1963]). It relates directly the reporting of expenditures to the individuals in the company organization who are responsible for their control (Higgins, 1952, p. 281). This is a causal definition of controllability in the sense that if the manager can affect the statistical pattern of some particular variable, the manager controls that variable (Demski [1976]). An information content perspective of controllability implies that if the manager can affect the statistical pattern conditional on whatever else we know, the variable carries information content about the manager's behaviour (Antle and Demski [1988]; Choudhury, [1986]). One school of thought presumes that people would welcome responsibility and the challenges it represents (Siegel et al. [1985]), while another maintains that the use of a controllability filter in evaluating a manager's performance in a setting where uncertainty is recognized, may lead to the design of an inferior performance evaluation scheme (Demski [1976]). Both schools of thoughts agree with the importance of responsibility and the notion that evaluation of a manager's performance should be based on those aspects of performance controllable by the manager in question.

While we agree that with the importance of responsibility, management has still to be willing to accept the responsibility, there are definitively specific personal traits and situational variables that lead to favourable attitudes toward

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responsibility acceptance. More concerted research is needed to explore the issue. Accordingly, the present study addresses the issue of attitudes to responsibility accounting in a context of decision making. More specifically, the intent is to explore the extent to which experience and self-monitoring as individual characteristics provide a context conducive to specific attitudes toward responsibility accounting.

2. Impact of Self-Monitoring

Self-monitoring refers to the degree to which individuals attempt to control the images and impressions that others form of them during social interactions. High self-monitoring individuals out of concern for the situational and interpersonal appropriateness of their social behaviour, are particularly sensitive to the expression and self presentation of relevant others in social situations and use these cues as guidelines for monitoring their own verbal and non-verbal presentation (Snyder [1974], [1979]). Moreover, "they are sufficiently skilled actors that they can successfully translate their beliefs about what constitutes a situationally appropriate self presentation into a set of verbal and non-verbal expressive actions that convincingly portrays the 'right' person for the situation" (Snyder [1975, p.94]).

In a responsibility accounting system, items and responsibility are assigned to managers so that they are charged with the items over which they can exercise a degree of control. The information of significance to each area of responsibility is also highlighted in the performance report (Higgins [1952, p.1]). In addition, the assignment of responsibility is expected to make people feel competent and important and motivate them to improve their performance (Siegel and Ramanauskas-Marconi, [1989, p.103]). Responsibility accounting basically defines what the "right" person should be for the performance of a given task. High self-monitors are more inclined to portray "the right" person for the situation and accept the responsibility. Accordingly, one hypothesis may be stated as follows :

H1 : Self-monitoring is directly related to the responsibility accounting system.

3. Impact of Experience

Various studies have compared the responses of novices with those of experienced decision makers. The findings of such research suggests major differences betw^en experts and novices in (a) information acquisition behaviour, (b) information integration behaviour, and (c) decision performance (Chao, [1985]). Studies on materiality showed that consensus, reliability, the number of significant cues, and the percent of variation accounted for by the areas increased with experience (Colbert, [1985]). Finally, various student surrogation studies suggest that students are poor surrogates of practicing experts (Copeland et al., [1973]; Abdel-Khalik, [1974]; Dickaut et al,]1972]; Krogstand et al., [1984]). Although students were found to be good surrogates for experienced auditors in evaluating internal control, some studies (Ashton and Kramer, [1980]; Hamilton and Wright, [1982], Davis and Solomon, [1980]), suggested that tasks must be rich enough to differentiate performance and that "one could not expect the knowledge possessed by experts to differ greatly from that possessed by students in a task such as evaluating a payroll control system" (Davis and Solomon, [1980, p.161]).

Based upon the above literature review, one would anticipate the assignment of responsibility in a responsibility accounting system to differ with the level of experience. At least, three arguments may be presented in favour of the thesis. First, certain types of responsibility centers involve higher degrees of complexity and therefore individuals with greater experience will accept a system that evaluates their effectiveness in handling this complexity. Second, heads of responsibility units participate in the preparation of their budgets. They must feel that the budget is their budget rather than some unrealistic and unworkable budget forced upon them (Higgins, [1952, p.1]). Therefore, individuals with greater experience will accept the responsibility for their own stated standards of performance. Third, there is evidence of information management showing that inexperienced subordinates communicate information upward to experienced superiors that emphasized their success - singling out positive or favourable information - and minimized their problem - blocking negative or unfavourable information. (Caldwell & O'Reilly, [1982]; O'Reilly & Roberts, [1974]; O'Reilly, [1978]). Therefore, individuals with lower experience will not accept systems that control for information management. Accordingly, the second hypothesis is :

H2 : Experience effects are directly related to the responsibility accounting system.

4. Interactions between Self-Monitoring and Experience

The preceding discussion indicated that the specific situation of experience and the individual characteristic of self-monitoring will lead to acceptance of responsibility in a responsibility accounting system. The interaction effect is more complex. High self-monitors more often manipulated information to hide decision failure than low self-monitors (Caldwell and O'Reilly, [1982]). This opportunistic behaviour was found to be more pronounced under conditions of high accountability where accountability is the degree to which an individual is responsible for a particular outcome (Fandt and Ferris, [1990]). Following the previous hypothesis that more experience leads to more accountability and acceptance of resp ,nsibility, the opportunistic behaviour observed by Caldwell and O'Reilly [1982] may be then more pronounced with people with high than low experience. Accordingly, the following hypotheses are offered :

H3 : There will be an interaction between experience and self- monitoring such that high self-monitors with high experience will assign less responsibility than high self-monitors with low or no experience.

H4 : There will be an interaction between experience and self- monitoring such that low self-monitors with high experience will assign more responsibility than low self-monitors with low or no experience.

5. Method

5.1 *Subjects*

The subjects were 76 executives enrolled in a continuing education course at the University of ---------------, and 74 students drawn from the first graduate managerial accounting class at the University of --------------, who agreed to cooperate and participate in the experiment. They were guaranteed anonymity. The MBA students used in the experiment indicated that they had an average of 2.25 years of managerial experience in medium and large size corporations in the Metropolitan city of ------------. A debriefing of the students indicated that they had both textbook and experiential knowledge of responsibility accounting.

5.2 *Procedure and Experimental Task*

To evaluate their attitudes toward responsibility accounting, a purchasing decision task was developed. In short, the task outlined a situation in which a company receives an order for 500 special parts, which will require modification of stock part no. 1739. A penalty clause of \$ 200 a day, for every day delivery is late, is inserted in the contract. Mr. Smith, the purchasing agent responsible for purchasing the raw material in time to meet the schedule delivery date, insured that everything was fine. The delivery was, however, four days late due to a damage in packaging, resulting in \$ 800 penalty to be paid by the company. The question put to the subjects was to determine the proportion of the \$ 800 which should be borne by Mr. Smith in the framework of a responsibility accounting system. *The proportion provided by each subject was used as a data base expressing the attitudes of subjects toward responsibility accounting.* After the completion of the experimental task, the participants were asked to complete a self-monitoring instrument as well as background questions.

5.3 *Self-Monitoring Scale*

Participants completed Snyder's [1974] self-monitoring scale, a set of 25 true-false self-descriptive statements that measure individual responsiveness to social cues. The set included items which describe (a) concern with the social appropriateness of one's self-presentation; (b) attention to social comparison information as cues to appropriate self-presentation and expressive behaviour, (c) the use of this ability in particular situations, and (d) the extent to which the respondents' expressive behaviour and self presentation is cross-situationally consistent or variable. The instrument has been found to have a multifaceted dimensional scale that predicts social behaviour (Snyder, [1979]). Scores ranged from 1 to 20. The mean and standard deviation for the self-monitoring scale were 11.56 and 4.38 respectively. The coefficient alpha reliability estimate for this scale was 76. A median split procedure (median = 13.10) was used to transform self-monitoring into a dichotomous variable (low, high) for purposes of data analysis.

5.4 *Post-Experimental Questionnaire*

All participants completed a questionnaire testing the efficacy of the experimental manipulation as well as providing background information. The manipulation check question inquired about the number of years of managerial experience of the participants. Other questions inquired about how interesting and challenging they found the experiment and the task. Background variables included age, gender and number of years of managerial experience.

5.5 *Design and Analysis*

The two types of self-monitoring (low, high and experience [high, low]) resulted in a 2*2*N factorial design. All the subjects were required to complete the experimental task. They were classified as low or high on the individual characteristic of self-monitoring based upon whether their score fell below or above the median value. They were classified as low or high on experience based on whether they were executive or graduate students.

6. Results

6.1 *Manipulation Check*

The results showed that the executives reported greater number of years of managerial experience (M = 7.55) than the students (M = 2.25) ($F[1, 151] = 40.70$, $p < 0.001$, w = 87).

6.2 *Effects of Experience and Self-Monitoring*

Each subject's answer to the experimental task, namely the proportion of the $800 penalty that should be borne by Mr. Smith, was used as the data base for the analysis of variance. The results of the analysis of variance are shown in Table-1. The main effects are significant. The type of experience as well as the level of self-monitoring had a significant impact on the magnitude of the responsibility assigned at x = 0.10. The interaction effects as well as the control variables of age and gender were also significant at x = 0.05. The nature of the interaction effects is indicated by an inspection of all the means. These means are shown in Table-2 and portrayed in Figure 1. Low self- monitors with experience assigned higher responsibility than low self-monitors without experience. High self-monitors with experience assigned lower responsibility than high self-monitors without experience.

7. Discussion

This study challenges the usual presumption that people in general would welcome responsibility and the challenges it represents in the context of a responsibility accounting system. More specifically, it examines the relationship between the extent to which persons accept the responsibility in a responsibility accounting system and the personality traits and variables which may lead favourable attitudes to responsibility accounting systems. Because a responsibility accounting system requires an acknowledgement of the responsibility, experience and self- monitoring were hypothesized to be related to attitudes to responsibility accounting.

The attitude of a subject to responsibility in general was measured by the proportion of penalty to be borne by the purchasing manager as a result of late delivery and damage in packaging. One may argue that the proportion assigned by each subject reflects his/her attitude about solving the particular problem of the amount to be charged back and borne by the purchasing manager. But, the perceived amount to be charged back, which is effectively the controllable costs, is at the essence of a responsibility accounting system. In this particular context, given the obvious responsibility of the purchasing manager in the experimental task, one may assume that the higher the amount to be charged back decided by the subject, the higher his/her acceptance of the (spirit of a) responsibility accounting system.

The hypotheses that experience and self-monitoring were related to the attitudes of a subject to a responsibility accounting system were significant. In addition the interaction effects were more revealing in that (a) experienced high self-monitors assigned less responsibility than inexperienced high self-monitors, and (b) experienced low self-monitors assigned higher responsibility than inexperienced low self-monitors. The results showed that the known opportunistic behaviour of high self-monitors is more pronounced with experienced rather than with inexperienced managers. In other words, in the absence of personality traits conducive to opportunistic behaviour, high experience is positively related to favourable attitudes to responsibility accounting. The presence of personality traits like self-monitoring affect the impact of experience toward opportunistic behaviour. In the implementation of a responsibility accounting system the mere reliance on experience for a guarantee of the acceptance of the spirit of responsibility accounting may create a fertile ground for information management in general and opportunistic behaviour in particular.

References

Abdel-Khalik, A.R., "On the Efficiency of Subject Surrogation in Accounting Research," *The Accounting Review* (October 1974), pp. 743-50.

Antle, Rick and Joel S. Demski, "The Controllability Principle in Responsibility Accounting," *The Accounting Review* (October 1986), pp. 700-718.

Ashton, R. and S. Kramer, "Students as Surrogates in Behavioral Accounting Research : Some Evidence," *Journal of Accounting Research* (Spring 1980), pp. 1-15.

Caldwell, D. and C. O'Reilly, "Responses to Failure : The Effects of Choice and on Impression Management," *Academy of Management Journal* (25, 1982), pp. 121-136.

Chao, F., "Expert-Novice Differences in Judgment/Decision Making Research," *Journal of Accounting Research* (8, 1989, pp. 106-136).

Choudhury, Nandan, "Responsibility Accounting and Controllability," *Accounting and Business Research* (Summer 1986), pp. 189-198.

Colbert, J.L., "The Effects of Experience on Auditors' Judgments," *Journal of Accounting Literature* (8, 1989), pp. 137-145.

Copeland, R.M., Francia, A.J. and R.H. Strawser, "Students as Subjects in Behavioural Business Research," *The Accounting Review* (2, 1973), pp. 365-372.

Davis, J.S. and I. Solomon, "Experience, Expertise, and Expert-Performance Research in Public Accounting," *Journal of Accounting Literature* (8, 1989), pp. 150-164.

Demski, J.S., "Uncertainty and Evaluation Based on Controllable Performance," *Journal of Accounting Research* (Autumn 1976), pp. 230-245.

Fandt, P.M., and G.R. Ferris, "The Management of Information and Impressions : When Employees Behave Opportunistically," *Organizational Behaviour and Human Decision Processes* (45, 1990), pp. 140-158.

Ferrara, W.L., "Responsibility Accounting - A Basic Control Concept," *NAA Bulletin* (September 1964).

Gordon, M.J., "Toward a Theory of Responsibility Accounting Systems," *NAA Bulletin* (December 1963).

Hamilton, R. and W. Wright, "Internal Control Judgements and Effects of Experience : Replication and Extension," *Journal of Accounting Research* (Fall 1982), pp. 756-65.

Higgins, J.A., "Responsibility Accounting," *The Arthur Anderson Chronicle* (April 1952).

Krogstad, J., Ettenson, R. and J. Shanteau, "Context and Experience in Auditors' Materiality Judgements," *Auditing : A Journal of Practice and Theory* (Fall 1984), pp. 56-73.

O'Reilly, C., and K. Roberts, "Information Filtration in Organizations," *Organizational Behaviour and Human Performance* (11, 1974), pp. 253-265.

O'Reilly, C., "The Intentional Distortion of Information in Organizational Communication : A Laboratory and Field Investigation," *Human Relations* (31, 1978), pp. 173-193.

Siegel, F. and H. Ramanauskas-Marconi, *Behavioural Accounting* (Cincinatti, Ohio : South-Western Publishing Co., 1989).

Snydser, M., "Self-Monitoring Process," in L. Berkowitz (Ed.), *Advances in Experimental Social Psychology* (Vol 12) (New York : Academic Press, 1979).

______________., "The Self-Monitoring of Expressive Behaviour," *Journal of Personality and Social Psychology* (30, 1974), pp. 526-537.

Table 1

Summary Analysis

Source of Variation	DF	SS	MS	F Value
Model	5	6.8747	1.374	3.31***
A. Self-Monitoring	1	1.0109		8.83
B. Experience	1	1.3668		3.89
A.B.	1	1.6838		4.05**
Age	1	1.5726		3.78**
Gender	1	1.2403		9.98*
Error	144	59.9001	0.41557	
Total	145	66.7745		

*** Significant at X = 0.01, ** Significant at X = 0.05, * Significant at X = 0.10.

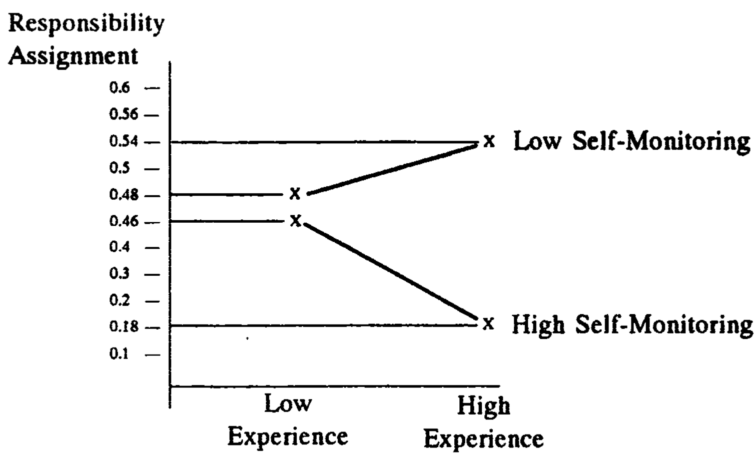
Table 2

Means of Cells Summary Table

Self-Monitoring	Experience	Mean Responsibility Assigned
Low	High	0.5461
Low	Low	0.4894
High	High	0.1880
High	Low	0.4666

Figure 1

Profile of Simple Effects of Self Monitoring and Experience



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BANKERS' PERCEPTIONS OF THE IMPORTANCE OF VARIOUS FINANCIAL REPORTS IN LENDING DECISIONS : A HIERARCHICAL CLUSTER ANALYSIS

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Melkote K. Shivaswamy +

James P. Hoban, Jr. Ø

This study examines bankers' perceptions of the importance of financial statements and their various sections. A hierarchical cluster analysis has been done to identify clusters of items perceived by bankers as of high, medium and low importance.

The bankers consider the income statement as the most useful statement followed by the balance sheet and the cash flow statement. The president's letter was considered the least important from the point of view of credit decisions. Despite arguments for "truth in accounting," conventional reporting seems to be held in higher esteem than current value or price level adjusted financial statements.

1. Introduction

At the turn of this century, the criticism that there was insufficient financial disclosure by business entities appeared to be widespread. Criticism was directed at the nature, quality and quantity of financial disclosure contained in financial statements [Brief, 1987]. The twentieth century, however, has seen a tremendous surge in financial disclosure by businesses. Regulation of business by governmental agencies such as the Securities and Exchange Commission, and the tax laws as enforced by the Internal Revenue Service have been among contributors to this development. The stock exchanges through their filing requirements for listing companies on exchanges have given an impetus to greater disclosure. Congressional hearings and fear of greater regulation by government, the fear of law suits in an excessively litigious environment, and attempts at self-regulation by private businesses and the accounting profession have been the other catalysts. The Committee on Accounting Procedure and the Accounting Principles Board, both organs of the American Institute of Certified Public Accountants, and, more recently, the Financial Accounting

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Standards Board, have issued a series of pronouncements that have widened the scope of disclosure. The academicians through their publications and through the American Accounting Association have had considerable influence on these pronouncements. Also active in this area are the National Association of Accountants and the Financial Executives Institute, among others.

In addition to the basic financial statements, the income statement, the balance sheet, the retained earnings statement and the statement of changes in financial position (now superseded by the statement of cash flows), there has been a push toward other kinds of disclosure. Arguments for "truth in accounting" provided considerable impetus for price-level-adjusted and current value financial statements [MacNeal, 1939; Sweeney, 1936; Fabricant, 1971; Edwards and Bell, 1965]. Another area that has received attention in recent times is future-directed or proforma financial statements that might provide additional help to users in assessing the future health of business entities [Imhoff, 1980]. Discernible in accounting literature is a subtle demand for greater analysis of financial data by reporting entities, modeled after the detailed rules set by the Accounting Principles Board for the computation of earnings per share [Gibson, 1982]. Further, a thrust toward more detailed disclosure, as exemplified by the Financial Accounting Standards Board's requirement of financial reporting for segments of businesses, is observable [FASB, 1977].

Whereas, in general, the trend has been toward greater disclosure, certain shifts in emphasis in financial reporting over time are also noticeable. For example, during the first two decades of the 20th century, the accounting profession considered the balance sheet as the financial statement of utmost importance. However, during the 1930s emphasis began to shift away from the balance sheet toward the income statement [Hendriksen, 1970]. The shift toward the income statement appeared complete by the fifties. Ever since then, the focus of financial reporting has been profitability. Referring to solvency evaluation as the forgotten half of financial reporting, Heath and Rosenfield point out that reporting information useful in evaluating solvency has either been ignored by the accounting profession or has been assigned a role clearly secondary to that of reporting profitability [Heath and Rosenfield, 1979].

How do creditors view information that is disclosed in financial statements ? Which financial reports are perceived as important ? Are they victims of information overload ? Should a trend toward summary annual reports be encouraged ? [Rezaee and Porter, 1988]. Some studies have been conducted to answer such questions [Chang, Most and Brain, 1983; Most and Chang, 1979]. The user groups covered in these studies are individual investors, institutional investors, and financial analysts. More studies of this type are needed to determine the future shape of financial reporting that would prove to be beneficial to creditors and other users of accounting information, and economical for business entities that disclose such information. Further, in addition to individual investors, institutional investors and financial analysts, studies should be conducted to include the viewpoint of credit grantors.

2. The Study

A study was conducted, during the spring of 1988 to determine bankers' perceptions of the importance of various financial statements and their sections. Specifically, the questions related to the income statement, the balance sheet, the cash flow statement, common size statements, price level-adjusted and current value financial statements, 3-year and 5-year trend analysis, financial statements on forms 10-K and 10-Q, product line information, comparison of ratios with those of other firms and industry norms, notes to financial statements, the auditors' opinion, and the president's letter. Proforma statements were also included in the study. Respondents were asked to rate the importance of various items on a five-point scale where one indicated the least important and five indicated the most important response.

A hierarchical cluster analysis was done to identify clusters of items perceived by bankers as of high, medium and low importance. A dendogram was constructed to highlight similarities and differences in their perceived importance.

3. Profile of Respondents

The respondents to this survey were participants at the 13th Commercial Loan Officers' Seminar jointly sponsored by the Ohio Valley Chapter of Robert Morris Associates and a medium-sized, midwestern university. The participants were drawn from a tri-state area consisting of Indiana, Ohio, and Kentucky. Sixty-one out of 77 participants were male. The median age of respondents was 27 years with a range of 22 to 55 years. Median years of service in banking was 3 and ranged from 1 to 33 years. Eighty-eight percent of participants had college degrees. Of those who had college degrees, eighteen percent had MBA or other graduate degrees. The median size of banks from which participants were drawn was $1.5 billion with assets ranging from $12 million to $22 billion.

4. Findings

The income statement, the balance sheet, notes to financial statements, the cash flow statement, comparative ratio analysis, 3-year financial ratio trend analysis, and the independent auditors' opinion, together formed a cluster of items perceived as *very important* by bankers in their lending decisions. The average rank scores, on a five-point scale, ranged between 4.9 for the income statement and 4.0 for the auditor's opinion (see Exhibit 1).

Forming a second cluster of items perceived by bankers as of *moderate importance* in their lending decisions were the proforma income statement, information by product line, 5-year ratio trend analysis, common size statements, proforma balance sheet and the proforma cash flow statement. They received ratings ranging from a rank score of 3.8 for proforma income statement to 3.4 for the proforma cash flow statement (see Exhibit 2).

Items that were perceived to be of *low importance* were the filings on forms 10-K and 10-Q, price level-adjusted and current value statements, and the president's letter. Rank scores ranged from an average of 2.9 for filings on form 10-K to 2.3 for the president's letter (see Exhibit 3).

Along with average rank scores, the three tables also present the standard deviation, the coefficient of variation, skewness and kurtosis. In general, distributions for items in Group I tend to be leptokurtic (high kurtosis) and are characterized by low coefficients of variation (see Exhibit 1). This indicates a great degree of agreement among respondents in regard to items that are considered to be very important for lending decisions. The comparatively high negative skewness associated with items with high average rank scores in this group is a further indication of a high degree of respondent consensus relative to these items. Variability in responses to the lowest ranked items, however, appeared to be relatively high, indicating a comparatively lower degree of respondent consensus with respect to these items (see Exhibit 3).

Further insights into the similarity and dissimilarity of various items within clusters is provided by a careful study of the dendogram (Exhibit 4). A dendogram represents a tree structure which indicates the degree of dissimilarity of items listed along the horizontal axis. Lines in the figures are referred to as arcs and circles are referred to as nodes. Arcs indicate branches and nodes the stems from which branches originate. A distance score is assigned to each node to indicate dissimilarity of the two items or nodes associated with subclusters (for a discussion of the computation of this distance score, see Exhibit 5). The greater the distance the greater the dissimilarity of the two items or nodes in their importance [Johnson and Wichern, 1982].

The node on the top of the dendogram (Exhibit 4) has two main arcs representing two major clusters and its label, 13.4, represents the distance score between these two major clusters. The first major cluster on the right corresponds to two groups : a group consisting of items perceived as very important and a second group consisting of items considered to be of moderate importance. The second major cluster comprises items with average rank scores below 3.0 and, hence, items of low importance in the decision making process.

Turning now to the first group in the first cluster on the extreme right hand side of the dendogram, the distance score for the node connecting the income statement and the balance sheet is 3.8. The two statements together form a subcluster since they are items closest in terms of this distance score. The item closest to this subcluster in terms of distance is notes to financial statements indicated by distance score of 5.9. As measured by distance scores, notes to financial statements is slightly more separated in terms of importance when compared with the subcluster comprising the income statement and the balance sheet.

Interfirm ratio analysis and three-year trend analysis together form a subcluster in the group consisting of the most important items. This subcluster is very close to the subcluster comprising the income statement, balance sheet and notes to financial statements in terms of importance. Other members of the group consisting of very important items in the first major cluster are the cash flow statement and the auditor's opinion.

A second group within the first major cluster consists of items that are considered to be of moderate importance to bankers in their lending decisions. The distance between the two groups within the first major cluster-groups consisting of very important and moderately important items is 10.5.

The smallest subcluster within the second group comprises the proforma financial statements. Another subcluster consists of product line information and common size statements. These two, together, can be combined to form a slightly larger subcluster. The last member in this group is the five-year trend analysis.

Swinging now to the left hand side of the dendogram and to the second major cluster, the cluster consisting of items considered to be of low importance, the smallest subcluster comprises 10-K and 10-Q statements. They are considered very similar in importance as measured by their distance score of 4.0. Another small subcluster consists of price-level adjusted and current value statements. These two items are separated by a short distance of 4.5 while the distance between the first subcluster and the second subcluster is 9.9. The president's letter, the last member in this group, is very much different from other items as reflected by a distance score of 10.4.

5. Summary and Conclusions

The dendogram neatly portrays the perceived importance of the eighteen items covered by the study. The conclusions of other studies that the income statement is the statement of pre-eminent importance is amply corroborated by this study. Despite some writers' concern for the greater need for solvency reporting, the balance sheet and the cash flow statement are considered to be of lower importance than the income statement.

At the other end of the scale of importance is the president's letter. By assigning the lowest average score to the president's letter, the bankers may be suggesting that such letters may serve as no more than ego trips for the chief executives.

Despite arguments for truth in accounting and fairness in financial reporting via price level adjusted and current value statements, such statements are considered to be of very low importance in lending decisions. The time-honored, conventional statements are held in higher esteem and are considered of greater importance in such decisions.

Whereas this study suggests that proforma financial statements are of importance to bankers, they do not cluster with items that are considered of highest importance. It is conceivable that bankers are somewhat skeptical about the ability of management to forecast the long term future in a volatile and uncertain world.

The five-year financial ratio trend analysis is considered of importance by the respondents. However, what is considered of higher importance is the three-year comparative financial ratio and trend analysis. Conceivably, bankers are more concerned about the recent rather than the distant past of a business entity.

Among other types of analyses, the common size statements are considered of importance by the bankers. But what is considered of great importance is ratio comparisons with other similar firms in the industry.

While accounting literature is replete with suggestions for greater and fairer disclosures in financial statements, and greater analyses of financial data by presentors, this study suggests that bankers attach greater importance to the traditional financial statements. Besides, they appear to want to prepare their own analyses of information rather than depend for such analyses on the presentors.

Has there been an overkill in the area of financial disclosure ? Is the pendulum beginning to swing in the direction of a demand for a more concise set of financial statements ? Or does this suggest that bankers need greater education and training in the more sophisticated tools and techniques of financial statement analysis ? Further research is suggested to answer these and similar questions.

References

Brief, Richard P., "Corporate Financial Reporting at the Turn of the Century," *The Journal of Accountancy* (May 1987), pp. 142-157.

Chang, L.S., K.S. Most and C.W. Brain, "The Utility of Annual Reports : An International Study," *Journal of International Business Studies* (Spring/Summer 1983), pp. 63-84.

Edwards, Edgar O. and Phillip W. Bell, *The Theory and Measurement of Business Income* (Berkeley and Los Angles, Ca : University of California Press, 1965).

Fabricant, Solomon, "Inflation and Current Accounting Practice : An Economist's View," *Journal of Accountancy* (December 1971), pp. 39-44.

Financial Accounting Standards Board, "Statement of Financial Accounting Standards No. 14 - Financial Reporting for Segments of a Business Enterprise," *The Journal of Accountancy* (February 1977), pp. 99-104.

Gibson, Charles H., "How Industry Perceives Financial Ratios," *Management Accounting* (April 1982), pp. 13-19.

Heath, Lloyd C., and Paul Rosenfield, "Solvency : The Forgotten Half of Financial Reporting," *The Journal of Accountancy* (January 1979), pp. 48-54.

Hendriksen, Eldon S., *Accounting Theory* (Homewood, Illinois : Richard D. Irwin, Inc., 1970), pp. 59.

Imhoff, Eugene A., "A Closer Look at Management Forecasts," *Management Accounting* (May 1980), pp. 18-23, 30.

Johnson, R.A. and D.W. Wichern, *Applied Multivariate Analysis* (Englewood Cliffs, New Jersey : Prentice Hall, 1982).

MacNeal, Kenneth, *Truth in Accounting* (Lawrence, Kansas : Scholars Book Co. Reprint, 1970, First published : 1939).

Most, Kenneth S. and Lucia S. Chang, "How Useful Are Annual Reports To Investors ?" *The Journal of Accountancy* (September, 1979), pp. 111-113.

Rezaee, Zabihollah, and Grover L. Porter, "Summary Annual Reports : Is Shorter Better ?" *The Journal of Accountancy* (May 1988), pp. 42-54.

Sweeney, Henry W., *Stabilized Accounting* (New York, Harper, 1936).

Exhibit 1

Items of Most Importance in Lending Decisions

Item	Ave.	Std. Dev.	Coeff. of Var.	Skew-ness	Kurt-osis
Income Statement	4.86	0.53	0.11	-1.83	9.47
Balance Sheet	4.73	0.42	0.09	-3.10	2.55
Notes to Statements	4.54	0.88	0.19	-0.99	2.00
Cash Flow Statement	4.14	0.96	0.23	-0.21	1.04
Inter-firm Comparisons	4.12	0.91	0.22	-0.36	0.06
3-Yr. Trend Analysis	4.07	1.02	0.25	-0.30	-0.15
Auditor's Opinion	4.01	1.06	0.26	-0.42	-0.29

Exhibit 2

Items of Moderate Importance in Lending Decisions

Item	Ave.	Std. Dev.	Coeff. of Var.	Skew-ness	Kurt-osis
Proforma Income Statement	3.75	0.84	0.22	-0.03	-0.06
Prod. Line Statement	3.66	0.86	0.24	0.36	-0.37
5-Yr. Trend Analysis	3.64	0.83	0.23	-0.66	-1.07
Common Size Statement	3.57	1.01	0.28	-0.11	-0.30
Proforma Balance Sheet	3.49	1.19	0.34	0.22	-0.08
Proforma Cash Flow Stmt.	3.35	1.12	0.33	0.29	-0.43

Exhibit 3

Items of Low Importance in Lending Decisions

Item	Ave.	Std. Dev.	Coeff. of Var.	Skew-ness	Kurt-osis
Statement on 10–K	2.94	0.91	0.31	-0.67	-0.77
Statement on 10–Q	2.80	0.66	0.24	-1.42	-0.51
Current Value Statement	2.76	0.96	0.35	0.56	-0.07
Price Level Adjusted Stmt.	2.68	0.55	0.21	-0.29	-0.62
President's Letter	2.34	0.68	0.29	-0.41	0.20

Exhibit 4 (see p. 17).

Exhibit 5

Computation of Distance Scores for Dendogram

Suppose that the dissimilarity is measured in terms of Euclidian distance score d_{ij} between items i and j below:

$$d_{ij} = [\Sigma(x_{ik} - x_{jk})^2]^{\frac{1}{2}}$$

where x_{ik} is the kth respondent's usefulness rank score assigned to item i, and x_{jk} the kth. respondent's usefulness rank score assigned to item j. Suppose further that respondents, 1, 2, and 3, assigned following rank scores to two items on the questionnaire :

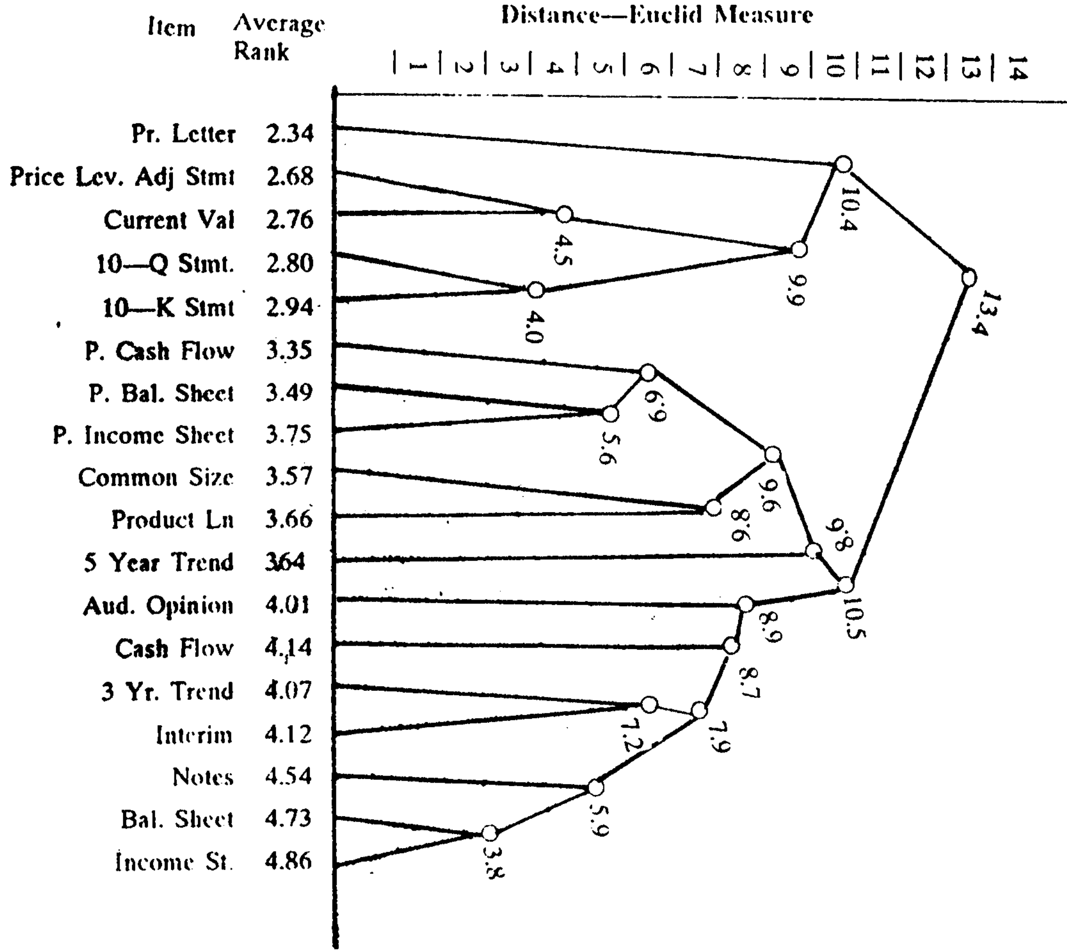
	Respondents 1	2	3
Question 1: Income Statement	$x_{11} = 4$	$x_{12} = 5$	$x_{13} = 5$
Question 2: Balance Sheet	$x_{21} = 5$	$x_{22} = 4$	$x_{23} = 5$

Then,

$$d_{12} = [(4\text{-}5)^2 + (5 - 4)^2 + (5 - 5)^2]^{1/2} = 1.414$$

The greater the distance score as computed above the more dissimilar the two items in their importance. The distance scores on the dendogram (Exhibit 4) are presented right next to the nodes.

Exhibit 4
Dendogram



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ROLE OF ACCOUNTANTS IN THE CHANGING ENVIRONMENTS

Sukumar Bhattacharya *

The author discusses the role of accountants, in the framework of time and environments, to satisfy the needs of business organisations and society at large. He also examines the credibility of the profession paticularly in the spate of corporate failures in India and abroad. The author concludes that the tools in the hands of the accountant to discharge his or her functions effectively are those of probity, purity, knowledge, independence and pure professional conduct.

The role of the accountant has been the subject of much debate and of considerable literary efforts since the birth of accountancy as the principal medium ot expressing facts in figures. Yet, the author ventures to enter this field of contrary and controversial view points, not merely for polemics and engagement in a battle of words, but with the idea of reassertion of his faith in a noble profession in which he has the privilege to work and of which he is one of its humble votaries. Over the years, he has come across some sharp and derogatory criticism of both accountancy and accountants, and he has also heard and read about the lavish encomiums bestowed on the discipline and its followers. Having been a member of the accountancy profession for a considerable period, the author has a natural feeling of loyalty, sympathy and affection towards it, but in this article he tries to be as objective and unbiased as is humanly possible, and he expresses views which at times may be quite critical of some of the prevailing theories and practices presently operating in the field of accountancy.

A question which today is often raised by many, including even accountants, is whether the persons engaged in the profession, viz., the accountants, are themselves carrying out their allotted duties fairly and consciously and in a manner calculated to serve the interests of the public. The term 'accountants', in this context, includes the following categories of persons—

(i) Academicians, i.e., the teachers, researchers and authors who disseminate knowledge in the classrooms and/or through the medium of text books and articles.

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(ii) Guiding bodies, i.e., the formally established accounting Institutes, who regulate the practice of accountancy and exercise disciplinary jurisdiction over their members.

(iii) Practitioners (which expression includes also the accountants in industries) who put their acquired expertise in the field of accountancy into actual practice.

Accountants are trained to be experts in the field of economic activities measuring fairly and truly the profits and losses and the values of the assets and liabilities of particular organisations for a defined period and as at a particular date at the end of that period respectively. But is that measurement fully reflective of the results of the economic activities that they take into consideration ? The great drawback of accountancy is that it is mostly concerned with costs and prices and does not deal with values. John Galbraith in the Preface to his book *Economics, Peace and Laughter* says at page xi : "the test of economic achievement is not how much we produce but what we do to make life tolerable or pleasant." Is accountancy, or are the accountants, equipped to measure the results of the economic efforts of an organization in this view of the matter ? It is obvious that accountants do know how to account for the correct volume of production and output, the cost incurred and the profit or loss arising in terms of money, but apparently, the question of measurement of an abstract idea like contentment and happiness of the country's teeming millions does not enter into their reckoning at all. If Galbraith's views are indeed correct, which the author respectfully subscribes to, the accountants are engaged no doubt, in an exercise of great importance, but their efforts cannot produce results indicating the extent to which the people's happiness has been achieved by economic activities of the organization concerned. The author feels that accountants should engage themselves additionally in devising means by which the growth or fall in human happiness through economic activities may be effectively measured. While measurement of economic events and communication thereof are no doubt important functions of accountants, the author in this article deals with another important function— the certification of financial statements by the auditors.

A relevant issue was brought out in a speech delivered by the Union Finance Minister recently at a meeting held at Delhi at which meeting the author had the privilege to be present. In an assembly of businessmen coming from all parts of India, Dr. Manmohan Singh exhorted the participants to have an annual social audit made of the economic activities of their respective business organizations. The proposal is highly commendable and it is obvious that if any one can undertake such a responsible job of carrying out social audit, it is only a trained accountant who can do so. It may be mentioned here that the idea of social audits is by no means new. It has been talked about earlier also, but it is distressing to note that little has been done so far to give such an idea any practical shape. Today, no doubt, there appears in some company reports, an account touching on utilisation of social aspects like human resources, outlays on environmental activities, and a few other matters but that constitutes a very small part of the total picture and the sphere of enquiry needs to be widened considerably to be really meaningful. The author should like to sound a note of warning here. It appears to him that the suggestion of Dr. Singh is not a case of wishful thinking. He earnestly wants the introduction of a scheme of social audit. If the accountancy profession does not itself gear it to the task of prescribing the modality thereof, the bureaucrats will play a hand and the profession will have to abide by their direction. Certainly that would not be desirable.

It is sad to contemplate that the profession of accountancy is too conservative in its outlook. It is steeped in ossified tradition where entertainment of new ideas designed to break away from the established rules and regulations is generally viewed with suspicion and is normally looked down upon. The profession has to move out of the settled grooves created by it and keep pace with time and contemporary events in order that its products may be meaningful and of real value to the society.

It is a general complaint against the profession that it does not anticipate changes in the world in which they move and sticks to what it had considered expedient in the bygone days. Events however overwhelm the accountants and when their theories become incompatible with what happens in contemporary practical life, they start deliberations as to how to modify their established regulations to catch up with changed environments. This attitude has to change, but at the same time a word of caution is also necessary. While change is desirable, practical consideration must be paramount. Like Don Quixote one should not try to tilt windmills.

The author has considered so far the relevance aspect of the work of the accountants, i.e., in the framework of time and environments what useful purposes does the handiwork of accountants serve to satisfy the needs of particular business organisations and the society at large ? He now embarks on another aspect, the credibility of the profession.

It is often heard that there must be some serious defaults on the part of accountants when there are so many instances of business failure occurring shortly after certification by the auditors about the financial health of the organisation whose accounts were audited by them. In many cases the honesty, integrity and independence of the auditors have been questioned. Allegations have been made that in order to maintain the audit work the auditors become often too close to the managers.

The immediate cause for looking at the accountant's work with suspicion is obviously the spate of corporate failure in this country and abroad. In the United States, the Savings & Loans organisations failed miserably when there were no hints before the public of impending disaster. In Britain, the Bank of Credit and Commerce International closed its doors. More than 1,220 companies are going to the wall in Britain every week. Company failures rocketed by 40 per cent in the first nine months of 1992 when 46,000 companies collapsed compared with 47,777 in the whole of 1991. Big business represent about 33 per cent cases. The shock waves also reached the shores of India. Two hundred and thirty-five medium and large units, representing outstanding bank credit of Rs.258 crore, were in the portfolio of Industrial Development Bank of India alone as on 31st March, 1991. There have been many more like these all over the world. As most of the concerns had vaunted clear audit reports only shortly before they collapsed, people raised the question : "What were the auditors doing ?" Complaints were generally made that the auditors have been certifying dubious accounts as properly reflecting the company's health and that this happened as they (auditors) had surrendered their independence. There have been some snide comments and endless swipes and the auditors have been exposed to unrelenting criticism.

Explanations are offered quite often that the public, being unaware of the nature of the auditors' responsibilities, expect much more than what is practically possible. But such an explanation certainly cannot satisfy the critics. There is no doubt that there exists a large expectation gap, but have accountants seriously tried to reduce the gap substantially ?

In this short article the author poses only some of the problems. Due to constraints of time and space he is not in a position to consider all the issues arising as between the auditor's work, his credibility and the public expectation. He takes into account only one aspect of the matter, namely, the independence of the profession and of its members.

An idependent accounting profession is the bulwark of a country's economy. From the accounting results certified by the members of the profession, statistics are built up which serve as the bases on which the nation's economic activities are planned and undertaken. The accountancy profession has, therefore, a great responsibility which, if not properly discharged, is likely to result in incalculable damage to the entire community's well-being.

Every profession's reputation and eminence is built upon the perception of the community as to the function it discharges towards the achievement of the good life for which, as Aristotle said, the State comes into existence. That function in the case of the accountancy profession is the tone that it gives to the ideologies of the changing times, to that body of ideas or ideals which forms the objective of human efforts at any period of time, and which, in root analysis, is responsible for the good of mankind.

In every profession there are established rules and standards. But these are not to be looked at with the cold eye of the anatomist. They are to be treated as a living and breathing organism which contains within itself, as all life must, the seeds of future growth and development. These seeds are to be nurtured and the development has to be fashioned according to the needs of the changing times. The question is whether the accounting profession properly discharges this responsibility ?

Can the profession serve as a beacon of pure light piercing into the darkness and lurking doubts ? Obviously it is not serving in that manner presently as would be evident from the accusing finger of the general public pointed to many accounting statements certified by accountants to be true and fair.

Audacious suggestions coupled sometimes with threat try to dictate to accountants on occasions to prepare reports, not independently, but as desired by the persons making such suggestions. The author is aware of one case in recent times where the unwillingness of the auditor to carry out the orders given to him, resulted in his murder. The example set by this martyr to the cause of righteousness and independence should be emulated by every one who is a member of the profession of accountancy.

It is this spirit of wholesome intolerance of interested interference in the performance of his true function that should animate the upright professional accountant.

The accountant's field of activity today is dry and barren, yet fruitful to him, but it is covered with enough thorns, brambles and briars. He has to move there with utmost caution and circumspection, the goal being the discovery of truth. In this field the accountant must proceed in such a way as not to be caught between the Scylla of public disrespect and the Charybdis of professional misconduct. The high obligation of maintaining standards of probity and purity and correct professional conduct among the members of the accountancy profession are requirements which must be fulfilled by every accountant who joins the profession.

Coming to the case of the practising accountant in particular, it must be said that the Institute to which he or she bears allegiance is not a private guild like that of barbers, butchers and candlestick makers, but, by bold contrast, it is a public institution committed to public welfare and *pro bono publico* service. While being accepted as a member of the profession the applicant is granted a licence to practise accountancy on three conditions : (1) There is a socially useful function for him or her to perform; (2) he or she is a professional person who has to perform that function, and (3) his or her performance as a professional person is regulated by himself or herself and more formally, by the profession as a whole.

In the accountants there must be professional detachment, an unflinching integrity, a subordination of everything to the rule of truth and fairness and a conscientious regard for the rights of those who put value on their end products. Accountants are occupying a position of unique importance and the verdict of history will largely depend upon the independence, the ability and knowledge which they individually and collectively bring to bear upon their allotted tasks.

If today, public doubt, anger and frustration are increasing, it is for the accountant to demonstrate by his or her conduct and ultimate product that the allegations are unfounded. The author repeats that the tools in the hands of the accountant for discharging this useful, responsible but onerous task are those of probity, purity, knowledge, independence and correct professional conduct.

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CORPORATE REPORTING IN BANGLADESH, INDIA & PAKISTAN+

*Bhabatosh Banerjee**

This paper highlights regulatory disclosure requirements for corporate financial reporting and corporate reporting practices in Bangladesh, India and Pakistan with a view to forming an idea about the same in South-east Asian region. Of the three countries, Bangladesh has been lagging far behind others. While Pakistan has shown superiority in respect of certain aspects of corporate financial reporting, viz., segment reporting, half-yearly reporting and reporting of changes in financial position, India has demonstrated her leadership in respect of contents of Profit and Loss Account and formats and contents of Balance Sheet.

1. Introduction

Until the emergence of corporate form of business, the disclosure of accounting information was not so essential, as both the financing and the managerial functions were performed by the same group/s of persons. In corporate form of business there is separation of management from ownership. Hence, for obvious reason, the owners want to know from the managers whether their money is being properly utilised or not. In consequence, there has arisen a greater need for disclosure to meet the requirements of owners. Gradually, some new audience-of-interest have emerged, and accounting has to respond, naturally, to the demands of various user groups. Employees and workers want to know about continuity in employment and future prospect; administrators and managers, to judge their efficiency and performance; creditors, debentureholders and other credit financiers to judge the company's credit status and, government, as a tax receiver, simultaneously, to exercise control and to see how far the social objectives are being attained. There may be still others interested in the financial statements of corporate enterprises. Thus, accounting information partakes of the nature of social goods today, and accordingly the maximum possible disclosure about company's affairs has been in demand. But empirical studies and a review of the literature provide evidence

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that corporations are reluctant to increase the extent of financial disclosure without pressure from the accounting profession or the government. That is why, we see that in each country there are some regulatory disclosure requirements. There are arguments both in favour of and against the imposition of such disclosure requirements. It is not the intention of this paper to go into the details of such arguments. Our efforts would be to make a comparative analysis of regulatory disclosure requirements and reporting practices in a few south-east Asian countries. We have selected Bangladesh, Pakistan and India for the purpose.

2. The British Legacy : A Historical Background

An interesting feature to note, in this connection, is that most of the Asian countries, especially the ones forming the SAARC, were, till the forties of the present century, the colonies of the British empire. Therefore, for these countries the sources of corporate laws were the corporate legislation in the imperial country although some changes have been made subsequently to suit the specific socio-economic requirements of each country. As such, much commonness exists in the corporate laws for the regulation and control of corporate activities. At the level of professional institutes in each country, the same trend is noticeable. India, immediately after independence, established the Institute of Chartered Accountants of India in 1949 to regulate the profession of accounting. The Institute of Cost and Works Accountants of India came into being at a much later stage in 1959. While establishing these Institutes the British pattern was followed. The same thing happened in case of Bangladesh and P..kistan who gained much from the Indian experience since independence. They established their own professional institutions right from the sixties following the British as well as the Indian pattern. What is true about India, Pakistan and Bangladesh, has also been happening in other erstwhile British colonies. Hence, the reporting policies of these countries may be a pointer to the future reporting practices in many other countries in this sub-continent.

3. Statutory Disclosure Requirement in Bangladesh

Bangladesh was for long a part of a State in British India and was separated from India in 1947 as part of Pakistan (East Pakistan). Again in 1971, she separated herself from Pakistan and became an independent country in the name of Bangladesh. So, the history of development of the corporate sector in Bangladesh is not that old. Moreover, after independence, she has not framed any company legislation of her own, and has been following the British Act of 1913, as amended in 1936. Theoretically, the Securities Exchange Ordinance 1969, enacted by the Government of Pakistan, is also a valid law in Bangladesh, as it was then part of Pakistan and there has been no fresh development in this regard in Bangladesh. But the Government of Bangladesh is yet to establish a machinery for the registration of stock exchanges according to the said ordinance. Hence, the companies listed in Dhaka Stock Exchange (the only stock exchange of the country) are not, for all practical purposes, found by the ordinance. In view of this, the statutory disclosure requirements in Bangladesh refer, till now, to the requirements as prescribed by the Companies (Amendment) Act of 1936. According to that Act, the provisions as to disclosure are as follows.

(a) Section 132(3) states that each profit and loss account shall disclose the amount of gross income distinguishing the several sources from which it has been arrived; and the amount of gross expenditure distinguishing the expenses of establishment, salaries, transfer to reserve, depreciation, remuneration to directors and similar matters.

(b) Section 132(1) and 132(2) state that the balance sheet shall contain a summary of properties and liabilities along with the method of valuation of fixed assets; and this is to be presented in the form as given in Third Schedule (Form 'F') or as near thereto as the circumstances admit.

(c) Auditor's report should disclose whether or not (i) books of accounts have been kept properly, (ii) the balance sheet has been drawn in conformity with law, (iii) the balance sheet exhibits a "true and correct" view (Section 145).

(d) The balance sheet shall be accompanied by a report of the directors as to company's affairs and the amounts which they recommend to be paid as dividend and which they propose to carry to reserve funds (Sec. 131A).

It appears from the above that in Bangladesh there is no detailed provision as to the contents of profit and loss account in compliance with which the maximum possible break-up of the items of expenditure and income can be disclosed. Section 132(3) states that the total amount of expenditure should be shown distinguishing it as to establishment expenses, salaries and so on. But there should have been categorical requirement as to the distinct disclosure of some other vital items like consumption of raw materials, wages, financing expenses and so on. A specific provision stating what percentage of profit should be transferred each year to reserve is also absent. Because of the above, there may be wide diversity in the information disclosed in the profit and loss account from time to time. This may affect comparative analysis of financial statements produced by different firms. With the help of subjective clubbing of items, accounts may be prepared in such a way that may go against the interest of the owners or other user groups. Keeping these in view, a format of profit and loss account may be prescribed indicating detailed heads of classification instead of leaving the presentation of profit and loss account to the discretion of directors.

In Bangladesh, the balance sheet is to be prepared by the companies in form 'F' as annexed to Schedule Three of the Act. The form has provided for the inclusion of a large number of items, but the marshalling of the items leaves room for criticism. There is classification of loan into secured loan and unsecured loan but their identification with reference to period of time, namely, short-term and long-term loan, cannot be done by going through the balance sheet figures. Proper grouping of current assets is also lacking. This may obscure the determination of the amount of working capital. The vertical form of balance sheet is becoming increasingly popular all over the world. But Schedule Three does not provide for the same. Auditor's and directors' reports are required to be presented before the general meeting of shareholders. But in comparison with the emerging range of complexities, the provision as to the contents of these reports include relatively few items and the information required to be disclosed is also limited. There has in fact been a sea-change in the socio-economic environment in all countries today as compared with that in the 1930s. So, the provisions of the Act of 1913 as amended in 1936 cannot be expected to fulfill the needs of the users of modern times. It should be replaced by a new Act incorporating necessary changes in keeping with changing socio-economic objectives of accounting and reporting.

4. Statutory Disclosure Requirements in Pakistan

Till August 7, 1984 the companies in Pakistan were governed by the same Act of 1913 as discussed in Section 3 above. A Company Law Commission was set up in 1959, but a new Act, known as Companies Ordinance, 1984, came into force on August 8, 1984. In the meantime, the Securities Exchange Ordinance was passed in 1969 and its Rules were elaborated in 1971. In short, the position relating to regulatory disclosure requirements may be summed up as follows :

(a) The prescribed form of balance sheet as annexed to the Companies Act, 1936 has been omitted and a new Schedule has been introduced containing the "requirements as to balance sheet" and "requirements as to profit and loss account".

(b) Separate requirements have been prescribed as to balance sheet and profit and loss account of non-listed companies.

(c) Listed companies are required to include in their annual accounts the statement of changes in financial position and pattern of shareholders in the prescribed form (Form "A").

(d) The Ordinance of 1984 requires that half-yearly statements be prepared by each company, though they need not be audited.

(e) There is a prescribed form, based on the provisions of Section 255(3) of the Companies Ordinance 1984, relating to auditor's report to shareholders.

Provisions as stated above reveal that the disclosure requirements in Pakistan have incorporated some new areas which are yet to be touched upon by Bangladesh. Requirements for the preparation of profit and loss account have been prescribed in a separate Schedule. As a result, the users in Pakistan may get uniform data as to the profits or losses of individual firms. By requiring the disclosure of changes in financial position and also of the pattern of shareholders, the company legislation in Pakistan has practically done the job which accountants of many countries in the third world are still endeavouring to achieve. But it is not clear why the prescribed form of balance sheet has been replaced, and instead, only some requirements for the preparation of balance sheet have been provided. This may prevent uniform presentation of balance sheet, thereby affecting the understandability and comparability of the accounting information disclosed. Provision for half-yearly financial statements is welcomed.

5. Regulatory Disclosure Requirements in India

Both Pakistan and India were liberated in 1947. But, whereas Pakistan got its own Company Legislation as late as in 1984 India got its own Act passed in 1956. Till now, the Indian companies are governed by the said Act of 1956, though it has, in the meantime, undergone a large number of amendments. The latest amendment has been made in 1988. Thus, the regulatory disclosure requirements in India now refer to those disclosure requirements which have been prescribed in the Act of 1956, as amended upto 1988. We narrate the salient features of those disclosure requirements in the paragraphs that follow.

(a) Every profit and loss account should give a true and fair view of the profit or loss of the company and shall comply with the requirements of Part II, Schedule VI (Sec. 211). An exhaustive list for the items to be disclosed in profit and loss account has been prescribed in the said part.

(b) The forms of balance sheet have been provided in Part I of Schedule VI - one known as "T" form and other, "Vertical" form. Every balance sheet shall give a "true and fair" view of the state of affairs and shall be in either of the two aforesaid forms (Sec. 211) or as near thereto.

(c) The Schedules, accounting policies and explanatory notes which are intended to give the details thereof shall form an integral part of the disclosure.

(d) The figures in the balance sheet may be rounded off to the nearest "000" or "00" as may be required for the sake of simplicity.

(e) There shall be attached to every balance sheet a report by its Board of Directors as to the state of affairs, amounts which it proposes to carry to any reserve, amounts which it recommends should be paid by way of dividend, material changes and commitments, conservation of energy, technology absorption, foreign exchange earnings, whereabouts of highly salaried employees or of such employees who are relatives of directors etc., answer to auditors remark and such other particulars as may be necessary (Sec. 217).

(f) The auditor shall make a report to the members of the company stating whether or not (i) the accounts give a true and fair view; (ii) he has obtained all the information and explanations; (iii) proper books of accounts have been kept; (iv) the accounts of branch office have been audited; (v) the transactions are prejudicial to the interest of the company and so on (Sec. 227). Central

Government may also direct special audit in certain cases, and audit of cost accounts in cases where cost records have been directed to be maintained (Sec. 233A and 233B).

(g) A copy of the balance sheet so prepared along with other documents should be sent to, apart from every member of the Company, every trustee for the holders of any debentures issued by the Company. Further, as an alternative to sending detailed annual report, it has been provided by the Companies (Amendment) Act of 1988 that in case of listed companies, its financial highlights in the prescribed form should be sent. However, on demand a copy of the full annual report should be furnished free of cost (Sec. 219). These are, in fact, the most distinguishing features of the statutory disclosure requirements now prevailing in India.

What appears from the statutory disclosure requirements in India is that in many respects they are superior to their counterparts either in Bangladesh or in Pakistan. Requirements for profit and loss account as contained in Part II, Schedule VI, do not have their counterparts in the two other countries. One of the requirements state "any item under which the expenses exceed one per cent of the total revenue or Rs. 5000, whichever is higher, shall be shown as a separate and distinct item....". As a result, it is expected that break-up of all material items of expenditure and income will be disclosed. The "T" form of balance sheet as contained in Part I of Schedule VI is also a notable welcome to the user of accounts as its grouping, marshalling, break-up, and heading are unique. The vertical form of balance sheet is more purposeful to the users for its brevity and clarity. Due to its informational content and other relative advantages, this form is gradually gaining popularity in India.

Auditors in India have been given power to enquire into both accounting and administrative matters. At the same time, they owe a duty to protect the interest of shareholders. Possibility of unholy alliance between the directors and auditors has been reduced by introducing the provision for special audit. In this age of massive industrialization, the provision giving power to Central Government to order cost audit has also been timely.

Detailed provision with regard to Directors Report as prevailing in India is another distinguishing feature. It has provided means for detecting bias in the activities of directors, and by this, all financial, physical, and technical features about company's affairs are expected to be disclosed.

However, it would have been better if a format, preferably a vertical multi-step format, for profit and loss account could be provided and instead of two forms of balance sheet, only the vertical form could be prescribed. "T" form contains much information no doubt, but while doing so, it becomes too clumsy. On the ground of maintaining uniformity as far as possible in presenting accounting information, prescription of two alternative forms is not desirable. Hence, only the vertical form should be retained for use and the other should be omitted. Moreover, suitable provisions should be made in the Act requiring disclosure of half-yearly accounts, changes in financial position and segment reporting. Pakistan has already done it and it shows a better picture for disclosing accounting information compared with that in two other countries. The provisions for cost audit in India leave much room for improvement. The statutory cost audit has so far been only selective. Provision should be made so that the continuous cost audit becomes obligatory on the part of at least manufacturing companies.

6. Accounting Standards and their Impact on Disclosure

Disclosure of financial data becomes meaningful to the users only if the data are true, fair and comparable. Companies Acts of all countries do intend to enhance these qualitative criteria of accounting information. But due to existence of different types of industries and different business interests, the provisions of the said Acts have to specify only the minimum requirements applicable to all, instead of drawing an objective standard suitable for each firm and each interested party. As a result, the Acts contain provisions permitting alternative practices for the accountants in preparing accounts for their respective companies. These differences in accounting practices became the subject matter for much criticism particularly in 1960s, responding to which the accounting profession of several countries started to form standard setting bodies asking them to review the existing accounting policies and to codify standards. India, Pakistan and Bangladesh were not the exception to this general trend. Since it is not the intention of this paper to delve on the development in this respect the world over, we examine in brief their achievements as to the standardization process in these three countries only in the paragraphs that follow.

The Institute of Chartered Accountants of India (ICAI) constituted the Accounting Standards Board (ASB) in 1977 to harmonise the diverse accounting policies and practices in the country. The ASB has hitherto (between November 1970 and August 1991) formulated twelve accounting standards (ASs) for preparation of accounts and reporting thereof. Of them, eight have been made mandatory — AS-4 and AS-5 with effect from 1st January, 1987 and the remaining six, AS-7, AS-8, AS-9, AS-10 and AS-11, with effect from 1.4.91. The ICAI, being the member of the International Accounting Standards Committee (IASC), has also agreed to persuade the accounting units to follow the International Accounting Standards (IASs), specially for the issues on which India does not have any national level standard as yet. On the other hand, all the IASs, with the exception of IAS Nos. 3, 6 and 15, have been adopted in Pakistan and have been gazetted for implementation in the preparation of annual financial reports. In Bangladesh the Institute of Chartered Accountants of Bangladesh (ICAB) has been working on the adoption of International Standards since 1983. The Technical and Research Committee of the ICAB is entrusted with this task. It has so far adopted twelve IASs after taking into consideration its own laws and regulations.

Table 1

International Accounting Standards and Standards in India, Pakistan and Bangladesh

International Accounting Standards		Standards adopted in		
		India	Pakistan	Bangladesh
1.	Disclosure of Accounting Policies	*	*	*
2.	Valuation and Presentation of Inventories in the context of the Historical Cost System	*	*	*
3.	(Superseded by IAS 27)	–	–	–
4.	Depreciation Accounting	*	*	*
5.	Information to be disclosed in Financial Statements	–	*	*
6.	(Superseded by IAS 15)	–	–	–
7.	Statements of Changes in Financial Position	*	*	*
8.	Unusual and Prior Period Items and Changes in Accounting Policies	*	*	*
9.	Accounting for R & D Activities	*	*	–
10.	Contingencies and Events Occurring after Balance Sheet Date	*	*	*
11.	Accounting for Construction Cost	*	*	*
12.	Accounting for Taxes on Income	–	*	*
13.	Presentation of Current Assets and Current Liabilities	–	*	–
14.	Reporting Financial Information by Segment	–	*	–
15.	Information Reflecting the Effects of Changing Prices	–	–	–
16.	Accounting for Property, Plant and Equipment	*	*	*
17.	Accounting for Leases	–	*	–
18.	Revenue Recognition	*	*	–
19.	Accounting for Retirement Benefits in the Financial Statement of Employers	–	*	–

Table 1 *(contd.)*

International Accounting Standards	Standards adopted in		
	India	Pakistan	Bangladesh
20. Accounting for Government Grants and Disclosure of Government Assistance	*	*	–
21. Accounting for the Effects of Changes in Foreign Exchange Rates	*	*	*
22. Accounting for Business Combinations	–	*	–
23. Capitalisation of Borrowing Costs	–	*	*
24. Related Party Disclosures	–	*	–
25. Accounting for Investments	–	*	–
26. Accounting and Reporting by Retirement Benefit Plans	–	*	–
27. Consolidated Financial Statements and Accounting for Investments in Subsidiaries	–	–	–
28. Accounting for Investments in Associates	–	*	–
29. Financial Reporting in Hyper-Inflationary Economies	–	–	–
30. Disclosures in the Financial Statements of Banks and Similar Financial Institutions	–	–	–
31. Financial Reporting of Interests in Joint Ventures	–	–	–

Source : IASC News, London, U.K. : 20, No. 1, p. 15.

N.B. International Standards against which asterisk marks are given have been adopted in respective countries.

While Pakistan and Bangladesh use IASs themselves as national standards, India uses them as the basis for formulating national standards. Thus, it appears that all of the three countries under study have actually taken the IASs as a basis while designing the accounting standards for their own. Table I depicts the total number of IASs issued so far and those among them adopted in Bangladesh, Pakistan and India.

Accounting standards adopted in Bangladesh are, in fact, recommendatory in nature. The ICA of Bangladesh has recommended its members to try to secure compliance of the standards, but it has not framed any disciplinary action for violation of its instructions. In India, all of the standards were initially formulated on a recommendatory basis but eight of them (AS-4 and 5 in 1987, and AS-1 and AS-7 to 11 in 1991) were subsequently made mandatory. But these are mandatory on members of ICAI. It implies that while discharging their attest function, it will be the duty of the auditors, who are members of ICAI, to examine whether the standards have been complied with in the presentation of financial statements. An auditor will qualify his report only when the effect of deviation of an accounting treatment from standard is 'material' and, in case of deviation of disclosure from standard, it leads to violation of legal requirements. So, much depends on the judgment of the auditors. Secondly, non-compliance does not attract any penal measures on corporate enterprises. Hence, as in Bangladesh, the impact of accounting standards in India also depends mainly on the 'voluntary compliance' of the standards by corporate enterprises. But it is not easy to ensure voluntary compliance as the standards normally tend to impose certain restrictions and, therefore, are not favourably disposed of to the management. The position in Pakistan is better in this respect. Section 234(3)(i) of the Companies Ordinance, 1984, provides that the listed companies shall follow such IAS and other standards with regard to the accounts and preparation of profit and loss account and balance sheet as are notified for the purpose in the official gazette by the authority. Thus, the standards are not gentle guides in Pakistan. Rather, they are statutory. Of late, Indian accounting standards have also got some regulatory effect in that the Bureau of Public Enterprises (BPE) has issued a circular for compulsory adoption of all the national standards, and international standards, in areas where national standards are absent, by Central Public Enterprises in India. So, the position in case of Central Public Enterprises is quite different. But so far as the State Public Enterprises and the private enterprises are concerned, there is no governmental intervention as yet as to the enforcement of accounting standards on them.

7. Corporate Reporting Practices

In the above perspective, we have analyzed the reporting practices in these countries. We selected annual accounts of six companies from Bangladesh, 100 companies from India and 5 companies from Pakistan for the accounting year 1990-91. Out of 100 companies in India, 75 were selected from the private sector and 25 from the public sector. Included in the private sector companies were 10 multi-national corporations operating in India. The selection of our samples in each country was conditioned by availability of annual reports and therefore on consideration of 'convenience' only. This method of sample selection has its own limitations.

Table 2 presents "extent of corporate disclosure" in three countries under consideration with respect to eight assumed characteristics. Table 3 provides "compliance with Accounting Standards" while making corporate disclosure. Table 4 relates to entirely Indian environment relating to disclosure in annual accounts.

Table 2

Extent of Corporate Disclosure

		Bangladesh		India		Pakistan	
		No.	%	No.	%	No.	%
	Companies Surveyed	6	100	100	100	5	100
1.	Profit and Loss Account and Balance Sheet along with Supporting Notes and Schedules	6	100	100	100	5	100
2.	Changes in Financial Position	4	67	16	16	5	100
3.	Inflation-adjusted Accounts	0	0	4	4	0	0
4.	Value Added Statements	0	0	9	9	1	20
5.	Cash Flow Statement	0	0	0	0	0	0
6.	Human Resource Accounting	0	0	2	2	0	0
7.	Social Accounts	0	0	2	2	0	0
8.	Highlights (for a number of years)	2	33	21	21	1	20

Source : Annual Accounts (1990-91), Results computed.

Table 3

Compliance with Accounting Standards

Sl. No.	Description	Bangladesh		India		Pakistan	
		No.	%	No.	%	No.	%
	Companies Surveyed	6	100	100	100	5	100
AS-1	Disclosure of Accounting Policies	5	83	28	28	4	80
AS-2	Valuation of Inventories	6	100	100	100	5	100
AS-3	Changes in Financial Position	4	67	40	40	5	100
AS-4	Contingencies and Events after the Balance Sheet Date	0	0	100	100	3	60
AS-5	Prior Period Adjustments	0	0	100	100	2	40
AS-6	Depreciation Accounting	6	100	100	100	5	100

Source : Annual Accounts (1990-91), Results computed.

Table 4

Extent of information disclosed in Annual Accounts of 100 Sample Companies in India

Particulars	Companies in the Private Sector				Companies in the Public Sector		Total	
	MNCs No.	Others No.	Total No.	%	No.	%	No.	%
Companies Surveyed	10	65	75	100	25	100	100	100
1. Profit and Loss Account and Balance Sheet along with supporting Schedules and Notes	10	65	75	100	25	100	100	100
2. Changes in Financial Position	2	8	10	13.3	6	24	16	16
3. Inflation-adjusted Accounts (Supplementary)	0	0	0	0	4	16	4	4
4. Value Added Statement	2	2	4	5.3	5	20	9	9
5. Cash Flow Statement	0	0	0	0	0	0	0	0
6. Human Resource Accounting	0	0	0	0	2	8	2	2
7. Social Accounts	0	0	0	0	2	8	2	2
8. Highlights (for a number of years)	4	11	15	20	6	24	21	21

Source : Annual Accounts (1990-91). Results computed.

From the analysis of the information in the aforesaid four tables and annual accounts, it is clear that of the three countries, Bangladesh has been lagging far behind others. While Pakistan has shown superiority in respect of certain aspects of corporate financial reporting, viz. segment reporting, half-yearly reporting and reporting of changes in financial position, India has demonstrated her leadership in respect of contents of profit and loss account and format and contents of balance sheet. In the matter of accounting standards, India has again shown her superiority in formulating twelve accounting standards so far. The public enterprises in India are ahead of their counterparts in the private sector both with respect to disclosure of additional information and compliance with accounting standards in the annual accounts.

8. Concluding Remarks

Bangladesh, India and Pakistan have, along with four other neighbouring countries, formed SAARC for regional economic development. Accounting as an information system serves very useful role in such a situation in providing economic data which may be utilised not only for framing economic policies at the national level but also for suggesting measures for economic development of the member countries. The formation of South Asian Federation of Accountants (SAFA) in 1984 is another welcome step keeping in view the forward-looking objectives of developing a harmonised accounting profession in the region in the interest of economic development. Although SAFA is still in its infancy, these three countries may come forward to help each other in establishing a sound corporate accounting system and in designing a cohesive set of accounting standards for greater harmonisation of accounting policies and practices in this sub-continent.

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References

Alhasim, D.D. & Arpan, J.S., *International Dimensions of Accounting*, PWS-KENT Publishing Company, Boston, 2nd Edition.

Banerjee, B., "Corporate Financial Reporting in India" in *Silver Jubilee Commemorative Volume* (ed. J.B. Sarker), Burdwan University, 1988.

——— "Development of Accounting in India : In Retrospect and Prospect", *Research Bulletin*, ICWAI, July 1987.

——— "Economic Unification of Asia and Corporate Financial Reporting in India", *A Conference on Implications for Accounting Education, Standard Setting and Practice*, August 12-14, 1990, Montreal, Canada.

——— "Harmónization of Accounting Standards in Some SAARC Countries - A Study with special reference to India", *Contemporary Issues in Accounting Research*, IAA Research Foundation, 1991.

Bedford, N.M., *Extension in Accounting Disclosure*, New Jersey, Prentice-Hall Inc., 1973.

Benson, H., "The Story of International Accounting Standards", *Accountancy*, July 1976.

Chakravorty, D.K., *Corporate Accounting in India : A Critical Estimate of the Existing System and its Possible Improvement*, An unpublished Ph.D. thesis of the University of Calcutta, 1991.

Choi, F.D.S. & Mueller, G.G., *International Accounting*, Prentice-Hall, New Jersey, 1992.

Dasgupta, N., *Financial Reporting in India*, Sultan Chand & Sons, New Delhi, 1st Ed.

Gupta, Kamal, *Contemporary Auditing*. Tata McGraw-Hill, 1991.

Mattessich, R., *Accounting and Analytical Methods*, Richard D. Irwin, Homewood, 1984.

Saudagaran, Shahrokh M., "Worldwide Regulatory Disclosure Requirements" in *Handbook of International Accounting* (ed. F.D.S. Choi), Wiley & Sons, 1991.

Taylor, P. & Turley, S., *The Regulation of Accounting*, Basil Blackwell, 1986.

Warren, P., *How to understand and use Company Accounts*, Business Books, London, 1983.

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LONG-RUN COST-OUTPUT MODEL REVISITED

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The authors examine the efficacy of existing long-run cost-output model in the context of its assumptions and suggest a modified model on the basis of 'realistic assumptions' for its practical applicability and social relevance.

1. Introduction

Over the years, a number of models have been developed for analysing and tackling the problems of manufacturing companies. The base for these models is, invariably, the nature of the problem which differs from company to company, industry to industry, country to country and also from one period to another. As it is almost an impossible task to develop models which can, exclusively be used to tackle the problems of a particular industrial undertaking, unless an undertaking deserves such an exclusive treatment, we see many models which are general in nature and which can be applied to the problems of any manufacturing company. As a result, the assumptions relating to the nature of the problems, the circumstances and the nature of the influencing factors or the determinants etc., become the bases or the foundations for development of these models. At this stage, one must be very careful about the efficacy as otherwise the models become irrelevant and, therefore, useless as they would be based on unrealistic assumptions. Prior to the generalization of the influencing factors and the nature of problems, it is necessary to study the relevant 'problem area' thoroughly. Then only, one can make some assumptions regarding the existing conditions. On the basis of these assumptions, as is known, a suitable model can be constructed.

Many experts appear to have failed to give proper attention to this vital aspect while developing the 'Long-Run Cost-Output Relationship' model. This paper, therefore, tries to analyse this aspect together with the other related aspects to suggest a modified model on the basis of realistic assumptions which are based on the empirical studies.

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2. Misconceptions about the 'Fixed Cost' Concept

On the basis of the behaviour of the costs of business undertakings (as to how these costs respond to the changes in the level of activities), we can classify total costs into two broad categories viz., variable and fixed. At the time of defining what is fixed cost, the authors of this model appear to have misinterpreted the concept of 'fixed costs'. Before delineating this aspect further, let us have a look at the following extracts relating to variable and fixed costs.

i) "Fixed costs do not depend on the output level at which the plant is operated. We can say, therefore, that a firm's short-run total fixed costs are constant for all possible levels of output" [Richard H. Leftwich, 1979].

ii) "Total variable costs are those costs incurred by the use of variable inputs in the production process. In other words, variable costs, by definition, are the result of the function of the rate of output. Variable costs would then include the wage bill, the raw materials bill and so on". [Roger LeRoy Miller, 1978].

iii) "Fixed costs are often defined as those costs which are 'sunk' i.e., cannot be reduced no matter what the rate of output. In other words, fixed costs are those costs that are invariant to the rate of production" [Roger LeRoy Miller, 1978].

iv) "Some costs vary more or less proportionately with the output, while others are fixed and do not vary with the output in the same way. The former are known as prime costs and the latter as supplementary costs of production or overheads costs. The supplementary or fixed costs must be paid even though production has been stopped temporarily" [Kewal Krishnan Dewett, 1983].

The meaning attached to the term 'fixed costs' and its definition by other authors in their works is also similar to the above. In this definition, meaning and explanation, we can identify, at least, two misconceptions about the concept of fixed costs. They appear to relate to 'the meaning' and 'the composition' of fixed costs. These are analysed critically in the following paragraphs.

(1) *Composition of fixed costs*

With respect to the composition of fixed costs, some authors consider the salary payable to the administrative and office staff as fixed cost, and the salary payable to the workers (who are engaged, directly, in the process of converting raw-materials into finished goods) as variable cost.

But, it is neither rational nor logical to exclude the salary payable to the workers from the fixed costs as we find similarities between the salary to the administrative and office staff on the one hand, and the wages to the workers on the other hand. As is known, in the case of employees recruited on a permanent basis, there is a contractual responsibility on the part of the employer (i.e., the company) as to the payment of salary periodically (i.e., monthly) irrespective of the work extracted from them*. Hence, the amount of salary payable to either the workers or the administrative and office staff should be considered as fixed cost as it is unaffected by either the volume of output or the work extracted from them.

(2) *Meaning of fixed costs*

The second misconception is about the meaning of 'fixed costs' itself. Some authors consider all those costs remaining constant (which are unaffected by the changes in the volume of output), or all those costs which are unaltered, as fixed costs. Their contention is that, if a cost is fixed, it does not change. In other words, if an item of cost is to be termed as fixed cost, it should not change.

But, this meaning appears to be misconceived as the so called fixed costs are not necessarily unaffected costs (or non-variable costs or constant costs). Rather, they should be construed as fixed over a relevant range of output/activity. But, it does not mean that they behave like variable costs with respect to the rate of output. Therefore, there is a need for redefining the 'fixed cost' and 'variable cost' concepts.

(a) *Variable costs as product costs*

Taking a clue from the views expressed by some authors, as indicated above, and looking at the actual behaviour of the costs, costs can be classified into two categories.

One category of costs consists of the costs which are influenced by the volume of output. These are directly influenced by the production activities and go on varying as the volume of output varies, in the same direction and more or less in the same proportion. The rate of change in the amount of these costs depends upon the price level of the input factors (i.e., whose consumption depends upon production), their quality, quantity discounts, efficiency, wastage factors etc. For instance, the fuel cost is an item of expense and falls into the category of variable costs in the road transport operations. But the rate of change in the total fuel costs depends upon the driving habit, road condition, occupation ratio etc. It has been proved by empirical studies that–

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* Of course, there are organisations wherein the workers are paid on the basis of piece rate (i.e., the salary or wages payable is directly linked with the work). We can also find some workers working as *badlees*. Normally, wages payable to the *badlees* are linked with production. In these cases, the wages can, justifiably, be excluded from the fixed costs and included in the variable costs.

i) 'all factors taken together, the total variable costs per vehicle-mile can be reduced to about half by improving water-bound macadam to cement concrete' [ICSSR].

ii) 'between 65% and 80% load factor, there will not be any significant change in kilo-meters run per litre' [Raman].

Though the rate of change in these costs is not always proportional to the rate of changes in the volume of traffic operations, the direction of movement of total variable costs is the same as changes in the volume of traffic operations. Similar type of relationship exists in almost all the manufacturing companies between some input factors and the volume of output. The costs which are influenced by the volume of output can, therefore, be termed as 'product costs' instead of variable costs, as the 'variable costs' concept has been criticized on the ground of 'greater than or lesser than proportional changes'. It is, therefore, better to replace the 'variable costs' concept by the 'product costs' concept.

(b) *Fixed costs as period costs*

The second category of costs are those costs which are inescapable in nature and they, in total, go on accumulating as time passes. Of course, within the relevant range of activities, these are not influenced much by the volume or the rate of output. As a result, these have been termed as 'fixed costs'. Though they are unaffected by the volume of output, it doesn't mean that they are not affected by other factors. There are many factors other than the rate of output, which influence not only the variable costs but also the fixed costs. Consequently, we can observe the changes in, even, the so called 'fixed costs'. The following information based on an empirical study substantiates this view.

i) The number of employees on the pay-roll of K.S.R.T.C. as on 31st March 1987 was 45,420. They are all permanent employees, who are entitled to receive not only the monthly salary irrespective of the work but also the annual increments. Every month, a number of employees receive their annual increments because of appointments made at different points of time. Consequently, in every month there will be an increase in the total amount of salary and wages paid to employees.

ii) Employees are also entitled to receive dearness allowance on the basis of cost of living index. Government of India revises the D.A. rate once in six months based on the cost of living indices. The revised D.A. rate has an effect on the labour cost.

iii) Normally, the corporate sector makes some recruitments every year to fill up the vacancies caused by resignations, retirements, deaths etc. These vacancies are filled by new employees who are entitled to receive lower rates of salary compared with the rates of salary of the resigned or retired or expired employees. Hence, there is an impact on salary and wage bill.

Such changes can be observed in other items of fixed costs also. For instance, the amount of depreciation is influenced by both the management policy (as to the method of depreciation adopted) and the changes in the prices of new fixed assets which are to be installed in the place of the existing worn-out assets. K.S.R.T.C. can be a best example here also. For the purpose of calculating annual depreciation, the management classifies the fixed assets into two broad categories viz., 'Bus Fleet' and 'Other Fixed Assets'. It is the policy of the management to depreciate the latter category of assets on the basis of 'straight-line method' where the rates vary from 2.5% (i.e., applicable to pucca buildings) to 25% (i.e., applicable to domestic trucks, temporary buildings and sheds). But in case of the 'bus fleet', the Corporation has evolved a new procedure wherein it considers both the usage and time factors as the vehicles depreciate due to both. The Corporation calculates depreciation on the basis of both the time factor (i.e., straight-line method) and usage factor (i.e., production units method), and whichever is higher, is taken as the cost of operation and is charged against the traffic revenue.

This analysis throws light on an important factor viz., the amount of depreciation may be an item of fixed cost (i.e., in case of straight-line method) or of variable cost (i.e., if it is calculated on the basis of usage) depending upon the method of depreciation adopted. But the noteworthy fact is, whatever be the method of depreciation, the rise in the prices of fixed assets has an effect on the annual amount of depreciation. For instance, the depreciation charged by the Corporation has increased by Rs.215.67 lakhs during the year 1985-86 due to the replacement of existing but not road worthy vehicles by new vehicles at higher costs.

In brief, the 'fixed costs' are not necessarily unaffected costs but are inescapable costs. They are, therefore, committed costs which are influenced by the time factor and which accumulate as time passes. It is, therefore, appropriate to replace the 'fixed costs' concept by the concept of 'period costs'.

We can, therefore, conclude that costs can be classified into 'product costs' and 'period costs', the former being affected or influenced by the changes in the rate of output, whereas the latter (is not frequently influenced by the rate of output) by the time factor. Other factors also influence both types of costs in their own way.

3. Wrong Presentation of Long-Run Cost-Output Model

Consequent upon the misinterpretation of the 'fixed costs' concept, one can easily detect the wrong presentation of the 'Long-Run Cost-Output' model. As a basis of detailed analysis as to how the present model has been wrongly presented, it is better to have a look at the following excerpts.

i) "A planning period so short that the firm is unable to consider varying the quantities of some resources used is called the short-run" [Richard H. Leftwich].

ii) "The long-run is a planning period long enough for the firm to be able to vary the quantities per unit of time of all resources used. Thus all resources are variable" [Richard H. Leftwich].

iii) "In the long-run, all is variable" [Watson/Getz, 1986].

iv) "In the long-run, there is no fixed factor of production and hence there is no fixed cost" [V.L. Mote, Samuel Paul and G.S. Gupta, 1979].

v) "In the long-run, the firm has no fixed commitments and accordingly, no long-run fixed cost curve. In the long-run, all resources are variable" [James L. Pappas and Eugene F. Brigham, 1979].

vi) "The difference from the short-run will be that more costs will be variable and fewer fixed" [D.C. Hague, 1977].

vii) "For the purposes of long-run planning, the requisite of factor fixity can be dropped, as the firm is able to alter the use of all inputs in the long-run" [Julian Gough and Stephen Hill, 1979].

Other authors are also of the same opinion about the long-run cost-output relationship. But, in these interpretations, explanations etc., of long-run costs, we can identify at least two wrong notions. These are identified and analysed below.

(1) The usage of the word 'unable' by one of the authors (Richard H. Leftwich) like others, implies that the firm is not capable of altering, the quantities of all resources. But the amount of expenses is influenced not only by the quantum of resources used but also by other factors which are not within the control of the firm. Therefore, whether the firm is able or not, the changes, even in the so called fixed costs, are bound to take place and hence it is unavoidable. Such a change does not depend simply on the ability or the willingness of the firm.

(2) Another point to be noted here is the 'ability' of the firm to alter the usage of all input factors over a period of time. Over the years, many organizations will be in a position to strengthen their financial resources enabling them to step up their production activities. As a result, one can witness the changes in the usage of production factors and, therefore, the changes in the production costs. One can also observe the changes in both the variable and fixed costs. Unfortunately, some authors have considered some changes in the fixed costs as becoming variable costs. It should be noted here that neither the original fixed costs (prior to the changes in the rate of output) nor the new increased/decreased fixed costs (after the changes in the rate of output)

are escapable or avoidable. Further, due to some changes in the fixed costs, they are considered as variable costs, and thus some authors have come to the wrong conclusion that 'all costs are variable in the long-run'. But what has not been realized in this analysis is that the changes in the amount of fixed costs alter the totality of fixed costs, but they (i.e. the changes) do not convert the fixed costs into variable costs. Undoubtedly, the expansion programmes and diversification undertaken by the managements alter the fixed costs. Just because of the alterations or variations in the fixed costs, it is improper to conclude that they become variable costs.

This clears the conceptual inanities in the contention of the experts that the changes in the rate of output (say, considerably in the long-run) converts all the fixed costs into variable costs which results in the conclusion that 'all costs are variable in the long-run'. This has led some to the wrong presentation of long-run cost-output relationship as shown below (Figure-1).

Long-run Cost-output Relationship

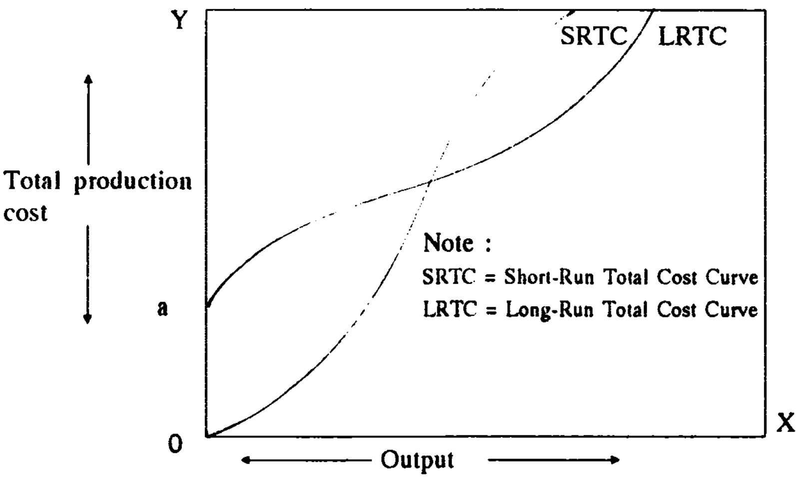

Figure – 1

A few others also present the total cost in the same manner except that they have assumed a linear relationship between cost and output. An observation of the above graphical presentation of cost-output relationship reveals that —

i) the starting point of short-run total cost curve (viz., point 'a' on Y-axis) represents the fixed element included in the short-run total cost.

ii) a substantial change in the rate of output necessitates changes in the utilization of all the input factors resulting in changes in all the cost factors including the fixed costs. The changes in the fixed cost have wrongly been conceived by the experts as the conversion of fixed cost into variable cost and this is the crux of the problem which leads them to draw the long-run total cost curve as originating from point of origin. The noteworthy point is the downward shift in the starting point of the total cost curve from point 'a' (i.e., in the short-run) to point '0' (i.e., in the long-run and point reads Y-axis at Rs.0) indicating the fact that in the long-run, total cost includes zero rupees of fixed cost. That means, total cost in the long-run consists of only the variable cost.

From the above explanatory analysis of the graphical presentation of the long-run cost-output relationship, it appears that some authors have failed to recognise the difference between the increase (or decrease) in the fixed cost (i.e., changes in fixed cost) and the conversion of an item of fixed cost into an item of variable cost. For instance, an increase in the fixed cost (due to alteration in the capacity of the firm) increases the fixed cost (i.e., what we call changes in fixed cost) and further it continues to retain its separate identity and it does not become an item of variable cost. Therefore, any changes in the activity or the capacity, has an effect on both the variable and the fixed costs, but it does not convert the fixed cost into variable cost. As a result, there will be an upward shift in the starting point of total cost line (i.e., in case of increase in fixed cost) and this starting point, invariably, represents the increased fixed costs. The total cost line should, therefore, originate at a

Long-run Cost-output Relationship

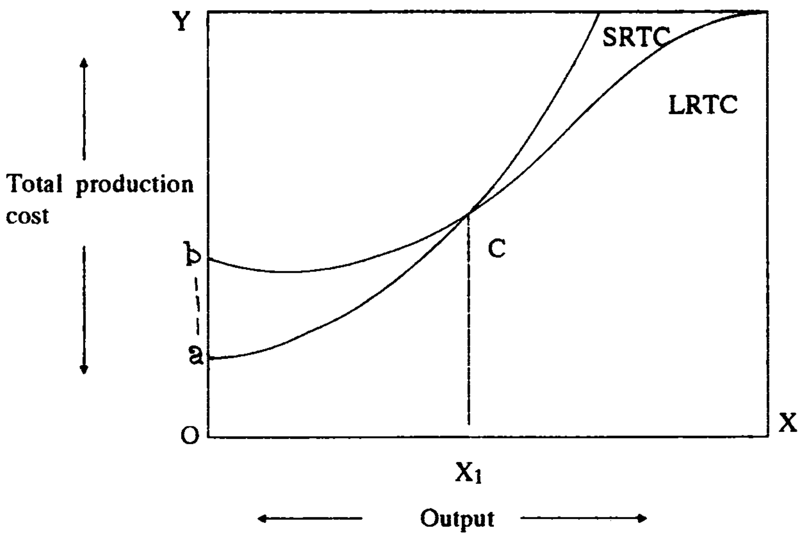

Figure – 2

point, above the zero cost, on the Y-axis. The shape of the long-run total cost curve should, therefore, be similar to one shown in Figure-2.

At this stage, the intersection of short-run and long-run total cost curves deserves some explanation. At 'x_1' units of output per period, both the plants are equally economical. This volume represents the minimum number of units to be produced per period to justify the increase in the size of the plant. If the periodical output falls below this volume, then it costs more as the increased fixed costs (due to increase in the size of the plant) are spread over less number of units. The range of output within which a small plant is more economical than the big plant and vice-versa, depends, mainly, upon the economies achieved in the production process. There may be a situation wherein a large sized plant is not at all economical upto the (installed) capacity of the small sized plant. Therefore, the intersection of these two curves (viz., short-run total cost curve and long-run total cost curve) may take place at any volume of output between zero (units) and the number of units of small plant's capacity depending upon the ability of the organization to achieve economies in the production costs.

Whatever may be the volume of output (at which the intersection of short-run and long-run total cost curves takes place), it is irrefutable that if there is an increase in fixed costs (either in the long-run or in the short-run), there will be an upward shift in the starting point of total cost curve (i.e., from 'a' to 'b').

4. Conclusion

The long-run cost-output models should, therefore, be constructed on the basis of realistic assumptions as otherwise they lose their practical applicability. Besides, such models also lose their social and industrial relevance and would only lead people to wrong conclusions.

References

Dewett, Kewal Krishna, *Micro Economics of Price Theory*, Shyamal Charitable Trust, 1983, p. 150.

Gough, Julian and Hill Stephen, *Fundamentals of Managerial Economics*, The Macmillan Press Ltd., 1979, p. 197.

Hague, D.C., Managerial Economics, Longman Group Ltd. 1977, p. 117.

I.C.S.S.R., *A Survey of Research in Economics*, Allied Publishers Pvt. Ltd., p. 90-91. The Committee appointed by the Council of Indian Roads Congress on the recommendation of the Transport Advisory Council came to this conclusion after a number of experiments on different types of roads for sufficiently long period.

Leftwich, Richard H , *Price System and Resource Allocation*, The Dryden Press, 1979, p. 198.

Miller, Roger LeRoy, *Intermediate Micro Economics*, McGraw Hill Inc., 1978, p. 192.

Mote, V.L., Paul, Sàmuel and Gupta, G.S., *Managerial Economics*, Tata McGraw-Hill Publishing Co. Ltd., 1979, p. 73.

Pappas, J.L. and Brigham, E.F., *Managerial Economics*, Holt, Rinehart and Winston, 1979, p. 317.

Raman, A.V., *Proceedings of Workshop on Cost Control and Cost Reduction in S.T.Us.*", Pune, CIRT, p. 20.

Watson/Gets, *Price Theory and Its Issues*, Khosla Publishing House, 1986, p. 218.

Congratulations

Professor M. Gopalakrishna Reddy, the Vice-Chancellor of Andhra University, was unanimously elected Chairman of the IAA Visakha Branch on 13th August, 1992.

Our heartiest congratulations to Professor Reddy.

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THE PRESENT PANCHAYAT AUDIT SYSTEM IN WEST BENGAL : AN APPRAISAL

Prithul Chakraborty *

In this article, the author, in the course of evaluation of the present Panchayat audit system in West Bengal, points out the important loopholes in the system and makes a few suggestions for its improvement. If these suggestions are implemented, the author argues, the effectiveness of Panchayat audit will increase and this will, in turn, promote the pace of rural development in West Bengal through Panchayat Raj.

1. Introduction

Since 1978 the Panchayati Raj system has been playing a vital role in the rural development efforts of the West Bengal Government. This system with three tiers (viz. 'Gram Panchayat' at Village level, 'Panchayat Samiti' at Block level and 'Zilla Parishad' at District level) is entrusted with the implementation of various programmes reflecting the long-felt need for development of the rural economy. The Gram Panchayats (G.Ps.). Panchayat Samitis (P.Ss.) and Zilla Parishads (Z.Ps.), (hereinafter referred to as Panchayat organisations) are expected to perform within their jurisdiction many functions, namely, provision of sanitation, conservancy and drainage, tackling natural calamities like flood, drought, etc., curative and preventive measures in respect of malaria, small pox, cholera or any other epidemic, supply of drinking water, maintenance and construction of public roads, spread of primary, social and vocational education, implementation of land reform measures, improving the standard of life and living of the rural people through self-employment programmes and so on.

The Directive Principles of State Policy enshrined in Article 40 of the Constitution of India provide : "The State shall take steps to organise village Panchayats and endow them with such powers and authority as are necessary to enable them to function as units of self-government". So all the villages, blocks and districts are considered as independent republics which are governed by the Panchayat organisations. These organisations are constituted by a specified number of members who are elected by the people living in the areas under their jurisdictions. Those elected Panchayat members can directly participate in the functioning of the Panchayat organisations. Thus, participation of elected

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representatives of the grassroot people in the rural development activities has become a basic characteristic of Panchayati Raj which was called "Swaraj" or "Self Rule" by Mahatma Gandhi.

Since the Panchayat organisations are delegated with a high degree of authority to utilise public resources and take necessary actions in the matter of rural development, it creates an accountability (i.e. a responsibility to report on the exercise of delegated authority and discharge of assigned tasks) on their part. This accountability calls for an independent and effective audit of their performances. This is essential to guard against abuse of authority and to point out any malperformance or non-performance of their responsibilities.

Now-a-days a lot of complaints are very often made from various corners against the poor performances of the Panchayat organisations. It is alleged that the benefits of various projects undertaken by the Panchayat organisations do not go to the hands of the poorest of the poor. There are delays in the disbursement of subsidies. Again, misappropriation of public funds by the dishonest panchayat members is another feature which causes the beneficiaries being bereft of the benefit of the proper amount. That is why the Panchayati Raj system appears to be gradually losing its credibility to the rural people. Therefore, proper audit of the operations of the Panchayat organisations is a crying need for today to enhance the worthiness of the Panchayati Raj.

The purpose of this paper is to make an appraisal of the system of Panchayat audit now in force in West Bengal and to highlight a few measures for ameliorating the system in an effort to hasten the pace of rural development through the Panchayati Raj.

2. Present Legal Provisions Regarding Panchayat Audit

Keeping in view the importance of audit as an instrument of control of the financial activities of the Panchayat organisations, The West Bengal Panchayat Act, 1973 (as modified upto 1st January, 1988) contains a number of provisions relating to the following three types of audit of the accounts of the G.P., P.S. and Z.P. :—

2.1 *Annual Audit*

For conducting annual audit of the Panchayat organisations Extension Officers for Panchayat (in case of G.P.) and Examiners of Local Accounts (in cases of P.S. & Z.P.) are appointed by the State Government. Section 187 of the aforesaid Act requires the Pradhan of a G.P., the Sabhapati of a P.S. and the Sabhadhipati of a Z.P. to produce to their auditors all such accounts of the funds concerned as may be required by the auditors. Within two months from the date of completion of such audits, the auditors have to prepare their reports and send the reports to the Pradhan, the Sabhapati or the Sabhadhipati, as the case may be, and a copy thereof to the State Government [Sec.190(1)]. As per section 190(2), a statement showing the following matters are to be appended to every audit report :

a) the grants-in-aid received and the expenditure incurred therefrom;

b) any material impropriety or irregularity which an auditor may observe in the expenditure or in the recovery of money due to the G.P., P.S. and Z.P. or in the accounts of the G.P., P.S. and Z.P.;

c) any loss or waste of money or other property owned by or vested in the G.P., P.S. and Z.P.

Section 191 of the aforesaid Act also provides that every Panchayat organisation shall hold a meeting within two months from the date of receipt of the audit report to remedy any irregularity pointed out therein and shall inform the auditor concerned of the action taken by it. If any defect cannot be removed, reasons or explanations thereof should be given by the concerned organisation. In the event of non-compliance with the aforesaid requirement, the auditor shall refer the matter to the State Government which, in turn, shall pass necessary orders to the organisation concerned, as it may think fit. The orders of the State Government shall be final and the organisation concerned shall take action in accordance therewith. If the organisation concerned fails to comply with that order within the period specified therein, the State Government may appoint a person to carry out the order.

2.2 *Internal Audit*

As it is felt that the day to day management of accounts and a system of internal audit will help the Panchayat organisations come to grips with various aspects of financial management, Section 196A of the Act requires internal audit of the accounts of the organisations. The State Government has created the posts of Panchayat Accounts and Audit Officer, Samiti Accounts and Audit Officer and Parishad Accounts and Audit Officer for organisation of internal audit of G.P., P.S. and Z.P. respectively.

The internal auditor is required to examine all books of accounts, records and registers in possession of the organisation concerned. He has to regard himself as a part of management of the Panchayat organisation. He is required to detect the errors, irregularities and illegalities, if any, in the books of accounts and in the system of accounting, and render suggestions for correcting the defects and reconciliation of discrepancies. He has to prepare internal audit reports every three months ending 30th June, 30th September, 31st December, and 31st March of a financial year. The report must mention the specific defaults of the organisation concerned and the corrective measures suggested by him. During the next visit, he has to ensure that all errors and irregularities mentioned in the internal audit report for the previous quarter have been rectified by the organisation concerned.

2.3 *Special Audit*

Section 196B of the Act provides that in addition to annual audit and internal audit, as aforesaid, the State Government may appoint such authority as it may deem fit to conduct special audit of the accounts of a G.P., P.S. or Z.P.

3. Actual Position of Panchayat Audit in West Bengal : *A Critical Review*

From the foregoing discussion it seems that a number of legal provisions have been made by the State Government so that Panchayat audit would not only help the Panchayat organisations run efficiently and successfully but also reduce, to a large extent, the doubts arising in the minds of the people and the Government regarding the misuse of public funds and resources by the Panchayat organisations. But, whether all the legal requirements in connection with such audit are being duly adhered to at every level of the Panchayat Raj is another question. Again a critical reconsideration of the present Panchayat audit may unearth the fact that there still remain many loopholes in the existing system of Panchayat audit which, if not properly plugged, may drastically affect the credibility of the Panchayati Raj system.

Paramount among those loopholes are the following :

3.1 Although the Panchayat organisations should take steps to set right any defect or irregularity mentioned in the audit report as contemplated under section 191(1), the real situation is that in many cases these organisations have inertia to take any action in time on audit reports. As a result an idea tends to develop in the auditors' minds that the entire audit job is futile as their clients pay no heed to their opinions and thus the auditors feel lack of motivation in conducting effective audit.

3.2 Generally, it is found that the G.Ps. contravene the requirement of Section 191(1) according to which they are to hold a public meeting at which they are to remedy any defect or irregularity pointed out in the audit reports. Besides, the annual audit of many Panchayat organisations remain outstanding for several years. Therefore, the Department of Panchayat of the State Government becomes unable to discharge their answerability before the Public Accounts Committee.

3.3 Section 48(1) and section 48(2) require every G.P. to prepare a budget of its receipts and disbursements for the following year and to submit the same to the P.S. for its approval. But, in practice, many G.Ps. are very much irregular in getting their budgets approved by the P.Ss. concerned within proper time. Moreover, as is provided under section 48(2), if approval of the P.S. submitted by the G.P. is not obtained by the G.P. by the last date of the year, the budget shall be deemed to be approved by the P.S. From audit point of view this is not justified at all as it may lead to a high degree of uncertainty regarding the propriety or justness of expenditure incurred by the G.Ps.

3.4 Usually the elected members of the G.P. and P.S. take advances in cash or kind from the organisations concerned for implementation of various projects within their jurisdictions. But they are very irregular in submitting the accounts of the uses of these advances and the progress reports of the projects to the organisations. Again, the Panchayat organisations do not properly maintain the

Advance Register. The law also does not permit them to show these advances having been defrayed under a particular head of accounts till the completion of the projects. Consequently, a large sum of money lying in the hands of the Panchayat members as unutilized advances remains unaccounted for. This makes an awkward and unseemly environment for conducting proper audit.

3.5 Almost at every level of the three-tier Panchayat Raj, fund appropriation registers, stock registers and property registers are not maintained at all. So the Panchayat auditors have to face great difficulties. For instance, they cannot ascertain whether total expenditure incurred for any project exceeds the funds allotted for it and whether any diversion of fund is there. Again, it is impossible for the auditors to make physical verification of stocks and durable assets of the Panchayat organisations.

3.6 Little endeavour is made by the Panchayat organisations to collect revenue from local sources (e.g. tax, rates, fees, fines, penalties, etc.) and to earn income through the use of local resources like ponds, forests, land, etc. In consequence thereof, funds raised from internal sources of the organisations are very meagre. Almost in all cases they have to largely depend upon the government grant, subsidy and loans which may adversely affect their credit-worthiness and financial strength. So banks and other financial institutions feel reluctant in entering into any financial agreement with the Panchayat organisations. But the Panchayat audit, in the main, remains silent in respect of such matter.

3.7 The directions and instructions issued by the State Government relating to duties and functions of the internal auditors of the G.P., P.S. and Z.P. are not complied with in a regular manner. In many cases the internal auditors are not well-informed of their tasks and duties. The internal auditors send a copy of their reports to the Block Development Officer (in case of G.P.), the Sub-divisional Officer (in case of P.S.) and to the District Magistrate (in case of Z.P.) for their examination and necessary follow-up actions; but for some reason or other the aforesaid officers are not able to attend promptly to the qualifications made in the internal audit reports communicated to them. Moreover, a large number of posts of internal auditors remain vacant for a long time. In this way, the purposes of internal audit of the Panchayat organisations are being severely thwarted.

3.8 Proper system of accounting is one of the essential prerequisites of effective audit. But the present accounting system of the Panchayat organisations suffers from a number of drawbacks. For instance, no accounting policies regarding treatment of assets, capital receipts and expenditure, revenue receipts and expenditure, valuation of stocks and durable assets, compilation of accounts at Z.P. and P.S. levels, provision for bad and doubtful debts in respect of loans and advances, etc. have so far been designed by the State Government. So, in respect of these matters, the Panchayat organisations are found either to remain totally indifferent or to adopt arbitrary and unscientific approaches. Again, the accounts are maintained on cash basis and double entry principle is not consistently followed in many cases. As a result, no room is there for the auditors to report as to whether the statements of accounts of the Panchayat organisations exhibit a "true and fair view" of the financial position of the organisations.

3.9 Generally, the Secretary of every G.P. is entrusted with the task of maintaining accounts. Simultaneously, all receipts and disbursements of cash are made solely by him with his having also the responsibility of maintaining the cash book. So the internal check system is totally absent in the financial and accounting activities of the G.P. A collusion may grow among the Secretary, Pradhan and Upapradhan leading to fraudulent activities. On the other hand, since most of the Panchayat members are engaged in other wholetime occupations, they cannot adequately devote themselves to the control process of the Panchayat organisations in order to ensure the fulfilment of a number of important requirements, namely, an orderly and efficient running of the organisations, adherence to the government policies and legal requirements, safeguarding of assets, prevention and detection of fraud and error, accuracy and completeness of the accounting records and timely preparation of financial information. Thus, the poor and inadequate systems of internal check and internal control may significantly reduce the degree of reliance the auditor can place on the various accounting procedures and financial activities of the Panchayat organisations.

3.10 Section 196B of the West Bengal Panchayat Act, 1973 provides for a special audit of the accounts of any Panchayat organisation by such authority as the State Government may direct. But so far no rules have been made spelling out the nature, scope, and purposes of such special audit, appointment of the special auditor, rights and duties of the special auditor, contents of the special audit report, and, so on.

3.11 Generally, the Panchayat auditors have no professional qualification concerning audit and accounts, no audit-skills inculcated by specialized training, and no knowledge about the modern development in the sphere of audit. Again, there is no code of conduct to be followed by the Panchayat auditors. They cannot properly distinguish between what is wrong and what is right. Presently, they push pencils more than they push brains. They are not expected to show the same degree of care and diligence in respect of audit as is shown by a professional auditor. Therefore, they cannot gain public trust and confidence.

4. Improving Panchayat Audit - A few suggestions

Considering the aforesaid limitations of the Panchayat audit in West Bengal, it becomes necessary to find out a few solutions that may guarantee an efficacious system of audit for the Panchayat organisations. The following suggestions may be put forward with a view to improving the effectiveness of the Panchayat audit :

4.1 Statutory audit should be conducted by efficient auditors at every level of the Panchayati Raj at the end of each accounting period. There should be proper guidelines in respect of the contents of the statutory auditor's report issued after the completion of audit. These guidelines may require the auditor to set out the following matters in his report :

a) Whether the Panchayat organisation keeps such accounts and in such forms as may be prescribed by the law.

b) Where a Z.P. or a P.S. has raised loan in accordance with sections 183 and 135 of the Act, whether the loan is obtained with the prior approval of the State Government and for furtherance of the objectives of the organisation, whether the rate of interest and other terms and conditions are prima facie prejudicial to the interests of the organisation and local people and whether the Z.P. or P.S. has created a sinking fund for repayment of such loans and maintained reasonable records of such loans and sinking fund.

c) Whether all the requirements of The West Bengal Panchayat Act, 1973 pertaining to acquisition of land, allocation of properties, levy and tax, tolls, rates and fees, budget, holding of public meetings, etc. have been complied with by the Panchayat organisations.

d) Whether there are adequate internal control procedures with regard to stores and assets and effective internal check system in respect of receipts and disbursements of cash and bank balances.

e) If there be any redundant and obsolete stores, materials and assets, whether those have been auctioned in a proper manner and whether any Panchayat member or his relative has participated in the auction sale. Again, the auditor should state whether reasonable records have been maintained by the Panchayat organisations for such auction sales.

f) Whether all material information has been disclosed in the financial statements. In this respect the auditor should give importance to the disclosure of restrictions on the title to local assets, security given in respect of loans and other liabilities, amounts earmarked for future project expenditure, loans and advances given, cash in hand and balance with bank, unusual or extra-ordinary items of income and expenditure, etc.

4.2 The Panchayat organisations have a high degree of public accountability since they are authorised to deal with public funds and resources. So, it should be an indispensable part of the Panchayat audit to bring to light the propriety or justness of expenses incurred by the Panchayat organisations and the efficiency with which the public funds and resources are used in the accomplishment of the assigned goals. For that purpose, *an efficiency-cum- propriety* audit is very much essential for the Panchayat organisations. This audit should examine the following points and give report accordingly :

a) Whether the expenditure incurred is approved by an appropriate authority and whether the expenditure is relevant at all in the achievement of the targets of the Panchayat organisations.

b) Whether any authority has exercised its power of sanctioning expenditure directly or indirectly for its own advantages.

c) Whether the sanctioning authority has exercised the same degree of care and vigilance in respect of expenditure incurred from public funds as a man of ordinary prudence would exercise in respect any expenditure out of his own funds.

d) Whether public money has been utilized for the benefit of a particular person or persons.

e) Whether there is a detailed progress report for each project and if there be any deviation from the target, the reasons for such deviation and the measures adopted by the Panchayat organisations to remove the difficulties should be indicated.

f) Whether the available local resources (e.g. forests, ponds, lands, minor minerals, etc.) are utilized by the Panchayat organisations efficiently and economically to the best advantage of the community.

g) Whether the benefits generated from funds and resource-utilizations go to the deserving persons.

4.3 For the upliftment of socio-cultural and economic environment of the rural sector and improvement of the innate and acquired qualities, skills, talents, knowledge and energies of the rural people, the Central and State Governments have ushered in a number of schemes or programmes (e.g. Jawahar Rozgar Yojana, Integrated Rural Development Programme, Special Component Plan, Special Animal Husbandry Programme, TRYSEM, etc.) which are being executed through the Panchayat organisations in West Bengal for the last two decades. With a view to keeping the Government well informed about the promptness and effectiveness with which the programmes are being executed and for having an adequate control over the performance of the projects a *social audit* is advocated. In this connection, it may be expected to examine the following areas and give its observations and opinions :

a) Whether financial assistance, beneficial activities, location of the proposed infrastructure, etc., under each programme have been identified in consultation with the beneficiaries.

b) Total number of beneficiaries likely to be assisted, total cost of each project, per capita cost on the beneficiaries and the committed outlay and schemes for meeting the recurring cost of the infrastructure.

c) To what extent the programmes create additional employment and income opportunities for the poorer classes in the rural sector.

d) Whether the programmes are oriented towards physical capital accumulation, conservation and proper utilization of natural resources of the locality, technological progress and creation of infrastructural facilities.

e) Whether the Panchayat organisations provide adequate civic amenities like semi-pucca roads, supply of drinking water, marketing facilities, primary, social and vocational education, medicare, sanitation, etc., for "urbanisation" of the villages so that the surplus labour from agriculture and the additional people due to natural growth can be restrained from migration to urban areas.

5. Creating a Proper Environment for Effective Conduct of the Aforesaid Audits

It is true that the three types of audit, as suggested above, cannot be effectively done in the present accounting and administrative set up of the

Panchayat organisations. With a view to facilitating an efficient conduct of Panchayat audit, a few changes should be brought about particularly in respect of the following areas :

5.1 Rules are to be made by the Government specifying standard accounting policies and standard format to be followed at the time of preparation of final accounts.

5.2 Double entry principle of accounting and accrual basis of accounting should be compulsorily followed by the Panchayat accountants.

5.3 Proper guidelines are to be issued by the Government directing the areas to be examined by the internal auditor and specifying what the internal audit report should contain.

5.4 There should be at least one qualified accountant in every Panchayat organisation to ensure maintenance of proper and fair accounts on a scientific basis.

5.5 Measures should be taken so that the elected Panchayat members can devote sufficient time and attention in respect of internal control and internal check systems of the Panchayat organisations.

5.6 The Panchayat Act should be more strict and specific in providing rules regarding the holding of public meetings by the G.Ps. and publishing printed annual reports by the Panchayat organisations for the perusal of the general public.

5.7 Provisions should be made in the Act so that statutory audit of the Panchayat organisations is done by Chartered Accountants. This will enhance the credibility of the audit in the minds of the general public. Since the Chartered Accountants are independent professionals guided by strict professional ethics, they are expected to be straightforward, honest, sincere and free from any influence in their approaches to audit.

5.8 The efficiency-cum-propriety audit should be made by the A.G. Bengal (Accountant General, Bengal) in concurrence with the statutory auditors.

5.9 There should be a social audit cell in every district comprising professional accountants, engineers, economists, social scientists, etc., for undertaking social audit of the Panchayat organisations.

5.10 A Registrar of Panchayat (ROP) should be there in every district to monitor the Panchayat organisations in submitting their auditors' reports and holding necessary meetings. He should be empowered to take legal action against the Panchayat organisations which are irregular in respect of the aforesaid matters.

5.11 It should be an important task of the ROP to take necessary follow-up actions on the qualifications made in the audit reports. All the audit reports of all Panchayat organisations should be compiled by the ROP into a summary audit report for being presented to the Governor of the State who shall cause the report to be laid before the Legislature of the State.

5.12 Internal audit of the Panchayat organisations may be conducted by Government employees. But they should be well conversant with the procedures of internal audit in respect of various aspects of the Panchayats and, therefore, arrangement should be made by the government to provide adequate training to the internal auditors.

5.13 A code of conduct for internal auditors should be formulated by the Government which would ensure integrity, honesty, sincerity, objectivity, confidentiality, etc. in the work of the internal auditors.

6. Conclusion

In fine, it can be stated that since the Panchayat organisations act as stewards of the public property, they are expected to be trusted, prudent and rational in the use of such property. When some one is entrusted with property of other persons, a check on the fidelity and accountability of the former is very essential. It is true that without audit there can be no accountability and that without accountability no control is possible. So in order to secure accountability and fidelity of the Panchayat organisations, audit should be used as the main instrument. The paper has highlighted a few aspects which may be covered by Panchayat audits in order to enhance their effectiveness. However, in its attempt to accelerate the momentum of the development of the Panchayat Raj, the State Government should give due consideration to the need for improving the system of Panchayat audit in the overall interest of the rural economy.

References

Basu, B.K., *An Insight into Auditing : A Multidimensional Approach*, Book Syndicate Pvt. Ltd., 1981.

Basu, D. *Shorter Constitution of India*, S.C. Sarkar & Sons.

Burdwan District Rural Development Agency, Burdwan, *Integrated Rural Development Programme*, 1986.

Comptroller and Auditor General of India, *Introduction to Indian Government Accounts & Audit* (5th Edition).

Government of India, Ministry of Agriculture, Department of Rural Development, New Delhi, *Jawahar Rozgar Yojana - Manual*, April 1989.

Government of West Bengal, *The Hand Book of the Gram Panchayat Members*, 1988.

——— *The Hand Book of the Panchayat Samiti Members*, 1989.

——— *The Hand Book of the Zilla Parishad Members*, 1988.

——— Department of Panchayat, Workshop under the auspices of Jalpaiguri Club - Recommendations (for Increasing the Effectiveness of Panchayat Audit) held on 14-15 September 1989, *Panchayat Raj Patrika*, September-October, 1990.

——— Directorate of Panchayats, *Compendium - Panchayati Raj in West Bengal*, 1984.

Gupta, Kamal, *Contemporary Auditing*, Tata McGraw Hill Publishing Company Ltd., 1991.

Mukherjee, R.N., "Urbanisation : The Indian Context", *Nagarlok,* July-September, 1979.

The West Bengal Panchayat Act, 1973 (as modified upto 1st January, 1988) The Constitution (Sixty-Fourth Amendment) Bill, 1989, on Panchayats.

West Bengal Legislative Assembly, *Second Report of the Subject Committee on Panchayat,* 1990-91 (presented to the Assembly on 20 April, 1990).

____________ *Third Report of the Subject Committee on Panchayat,* 1990-91 (presented to the Assembly on 26th March, 1991).

Dr. Shishtla P. Vijaya Saradhi died suddenly in Hyderabad on August 15, 1992, following a heart attack. A life-member of the Indian Accounting Association, Dr. Saradhi was Vice-President of the Indian Accounting Association and until his death was on the editorial board of the Indian Journal of Accounting. His articles, Economic Planning and Accounting Education in University, and Recent Economic Events in the New Europe and their Implications for Accounting, were published in June 1989 and June 1991 issues of the Indian Journal of Accounting respectively.

Born in Andhra Pradesh (1927), Dr. Vijaya Saradhi did his Bachelor of Commerce (Honours) and Master of Commerce degrees from Andhra University and obtained his Ph.D. from Osmania University, Hyderabad. He taught in Osmania University for about 32 years since 1949. He also served as Professor, Head and Dean of the Faculty of Commerce, Kakatiya University, Warangal, from 1976 to 1980. In the States, he served as Visiting Professor at the University of Illinois at Chicago, Pennsylvania State University at Harrisburg and Southern Massachusetts State University at New Bedford. He was Fellow of the International Centre for the Advancement of Management Education at Stanford University during 1966-67.

The members of the Indian Accounting Association convey their deepest condolences to the members of Dr. Saradhi's bereaved family for his sad and sudden demise.

Dr. Satyabrata Bhattacharya, Reader in Commerce and former Head of the Department, University of North Bengal, left for his heavenly abode on October 18, 1992. He had been suffering from cancer.

Dr. Bhattacharya, a life-member of our Association, always took active part in the academic activities of IAA and contributed significantly to the success of the Annual Conference of IAA held in the Department of Commerce, University of North Bengal, in 1982. In the 1986 Annual Conference held in Calcutta he presented, jointly with one of his colleagues, his paper entitled 'Lease Financing : Its Prospects and Problems'. Later, it was published in the July-December 1986 issue of the Indian Journal of Accounting.

The Indian Accouting Association offers its deepest condolences to his bereaved mother, wife and children.

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ACCOUNTING INFORMATION SYSTEM AND CHART OF ACCOUNTS

Bibhuti B. Pradhan *

In this article the author deals with uniform plan of accounts in the context of computer-aided Accounting Information System relevant to Indian organizations. He suggests that the business units and not-for-profit organizations should adopt the chart of accounts, preferably with the help of computer technology, to strengthen their accounting systems.

The modern age has a false sense of superiority because of the great mass of data at its disposal. The valid criterion of distinction is rather the extent to which man knows how to form and master the material at his command.

Goethe

1. Introduction

Essentially, accounting is an information system. More precisely it is an application of general theory of information to the problem of efficient economic operations. It constitutes a large part of the general information system of an operating entity which provides decision-making information expressed in quantitative terms and is also a part of the basic field bounded by the concept of information (AAA, 1966). An Accounting Information System (AIS), in general, includes five filtering processes in order to attain multidimensional objectives of business enterprise efficiently with the use of computer. These five filtering processes are (i) measurement of transactions observed and other external data, (ii) definition and measurement of financial accounting concepts, (iii) definition and measurement of management accounting information (iv) classification and communication of financial accounting information, and (v) classification and communication of management accounting information (Godfrey and Prince, 1971). In this way accounting systems can be able to link the real world with the decision maker. The role of accounting in relation to attest function, economic and third party reporting, provider of management control function, operating duties, and design and management of information system, become more dynamic and volatile to tailor-made managerial needs. Such needs are on the basis of

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functional areas, i.e. (i) marketing – sales analysis and forecasting, sales order filling system, (ii) production and inventory – job and process costing system, and inventory control system, (iii) credit management, accounts receivable system, (iv) personnel – employee information system, payroll system, human resources accounting system, (v) cash management, cash-receipt system, bank reconciliation system, (vi) purchase- purchasing and receiving system, accounts payable system, (vii) fixed assets accounting system and (viii) general – financial reporting system annual financial planning system and budgetary control system and social reporting system.

This strength of accounting information systems rests on sound accounting system and procedures to integrate both financial and management accounting. The object of integration is to provide a complete and comprehensive method of accounting designed to produce, on the one hand, periodical performance reports for internal management and, on the other, to prepare reports to satisfy legal and historical requirements (ICAI, 1973). It reduces to the minimum the time lag between the happening of business events and its recording and reporting. When integrated data processing is being considered, all the systems and procedures of the business have to be redesigned to decrease the clerical cost of keeping records, to improve the accounting control and internal check and finally to improve the quality of information. In an integrated system, procedures are so devised that data are written manually only once at the point of entry into the cycle, where the document is verified; hence the documents proceed speedily throughout the system, and are devoid of errors arising from human labour and also do not need repeated verification. Integration of the two conflicting aspects requires a certain accounting plan of classification and codification of accounts for uniform accounting practices necessary for harmonisation at national and international level.

This paper has made an attempt to draw a uniform plan of accounts, which is an integral part of accounting information system, with reference to developed countries and particularly to India.

2. Uniform plan of accounts

Uniform plan of accounts identify, collect, classify, measure, process and report data with a standardised framework with flexibility in the five-stage filter process. The classification and coding of data plays an important role in developing the uniform plan of accounts.

France, Belgium, Germany and the USA have developed their uniform accounting systems. Originated in the 1920s, the French Plan Compatible General was formulated in 1944, adopted in 1947, and revised in 1950 and 1957 by the National Accounting Council in response to national needs and has become mandatory for large firms since 1965 with the objectives of improvement in French fiscal control, systematic information for the social accounts and standardisation of company rules for financial statement presentation. Under this system accounts are classified on the basis of the decimal system, classifications having been set up in accordance with economic and legal requirements. There are ten classes or groups of interrelated accounts and each class except the last has ten main accounts. Classes 1-5 form the Balance Sheet or financial position accounts, Classes 6, 7 and 8 are the Operating and Profit and Loss Accounts, Class 9 consists of the Operating Analysis accounts with cost breakdowns, while Class 10 contains the Information or Special accounts covering non-financial information. Asset accounts are presented in order of liquidity, liabilities, by urgency of payment and expenses items, by direct and indirect operating costs. A great variety of sub-accounts can be reflected in such a codified system (Enthoven, 1975). Belgium was following the Chart of Accounts of Hector Blairon till early 1940s and afterwards General Belgian Accounts system was introduced to link micro units with macro accounts, which was largely similar to the French system. Germany introduced Schmalenbach's standard Chart of Accounts and flow chart, which takes care of both financial and cost accounting, but the war economy made it necessary for the industries to put this micro-oriented accounting into self designed Chart of Accounts. After the formation of European Economic Community (EEC) the efforts were made to unify the accounting practices of member nations.

On the other hand, the dominating United States of America focused uniform accounting on GAAP and auditing standards, presentation of accounts layout and uniform pattern of reporting and costing. The Securities and Exchanges Commission (SEC) provides a model for Balance Sheet and Profit and Loss Accounts. At international level the International Accounting Plan has been outlined by Academic Internationale de Compabilite in Brussels.

In India, the uniform Chart of Accounts is not available. The research committee of the Institute of Chartered Accountants of India on Integrated System of Cost and Financial Accounts put some effort in this regard. ICAI said that Chart of Accounts is nothing but a detailed listing of each and every item of asset, liability, expenses or income against which a numerical code will be assigned following a certain rigid pattern or procedure. A corporate Chart of Accounts serves to standardise data collection and classification among all the geographically remote branch locations. The uniformity in data collection and classification makes segment financial statements comparable and aids in the evaluation of the relative performance of segments and likewise facilitates the preparation of consolidated financial statements.

3. Classification of Accounts

Classification of accounts is a listing of accounts, systematically grouped, suitable for a particular organisation, with descriptions setting forth the meaning, function and content of each account and the relation of one to another, frequently accompanied by designs and descriptions of the records to be kept, the forms to be used in recording transactions, instructions covering their use and disposition and the maintenance of control (Cooper and Ijiri, 1984). To design the classification of accounts, one has to see the users of accounting information and their needs. Financial accounting is done with the objective of providing users with useful information for making economic decisions. Financial reporting is the end product of this branch of accounting, where Balance Sheet and Profit and Loss Account are the two major constituents. These financial statements should possess the specific qualities of relevance and reliability to derive more benefit of financial statement from its costs. Statement of Financial Accounting Concept (SFAC) No. 3 provides definition of ten elements of financial statements i.e. assets, liabilities, equity, investments, distribution to owners, comprehensive income, revenue, expenses, gains and losses. For sound classification of accounts, the financial statement elements to be considered as major headings and sub-heads should be evolved for detail identification.

The Indian Companies Act 1956 has identified different elements of financial statements including share capital, loans, current liabilities and provisions, fixed assets, investments, current assets, loans and advances, for the balance sheet, and different items for profit and loss account also. Government accounts have been classified into consolidated funds, contingency funds and public accounts. Consolidated fund account is again sub-divided into revenue, capital and debt, loans and advances etc. for effective financial control, which is purely based upon fund theory.

The management accounting information system, on the other hand, aims at generating information for the purpose of economic and financial decision making and also for control structure and control process. Management control structure rests on the concept of responsibility centre, i.e. revenue centre, expense centre, profit centre and investment centre, whereas management control process is activised through programming, budgeting, operating and measurement, reporting and analysis. The classification of accounts should thus rest on responsibility centres, which are to be based upon different types of cost elements. An integrated framework of financial and management accounting is inevitable for classification of accounts.

4. Code of Accounts

Code is a distinguishing reference number or symbol. In an accounting information system, codes are used frequently in both the manual and automated types. Coding is the assignment of numbers, letters or other symbols according to a systematic plan for distinguishing the classification to which each item belongs and for distinguishing items within a given classification from each other (NAA, 1959). In a machine age, coding is almost unavoidable and consistent. Coding is necessary to have mechanical (including computer) extraction of a particular category of data from among a wide range of accounts. In accounting systems, codes are frequently used in connection with the following classification (Gillespie, 1971) :

(i) Classification of accounts for financial statements i.e. Balance Sheet and Profit and Loss Account ;

(ii) Sales classification by product class, territory, customer or customer group, salesman and so forth ;

(iii) Expense classification by objects of expenses, by department or responsibility centre or both;

(iv) Material classification and product classification for purposes of the purchase order system and the production order system;

(v) Employee classification for payroll purposes;

(vi) Burden centre classification, production order classification, and others for use in the cost system.

Coding is essential to such data processing activities as sorting, summarizing, storage, reporting, and retrieval. In business houses, accounting codes are either alphabetic or numeric symbols or a combination thereof. An alphabetic code can be economic or suggestive of the name of the items it represents. The numeric codes are more amenable to machine processing, less error prone and can be more easily remembered.

Most commonly used accounting codes are sequence codes, block codes and group codes. Sequence codes are numbered consecutively and each new item is assigned a number, one higher than the last to ensure that there will be no gaps in the sequence. Application of this technique requires the numbering of cheques, invoices, purchase orders, job orders, and many other documents, to facilitate control.

Block coding consists of a block of numbers for each general type of accounts when assigning numbers, so that a specified series is reserved for one designated class of names. Block coding helps in memorising certain classes easily by identifying the type of items by code number alone. A few blank numbers are left in each series to provide for later additions to product lines, types of inventories, types of employees, types of customers, and several others.

Group coding involves two or more sub-groups of digits within the code number and each sub-group is used to code the items. The main characteristics of group classification codes are : (i) digit position has significance – the extreme left hand digits identify major classes and the right hand digits the sub-classes; (ii) a group classification code number is always limited to a predetermined number of digits; (iii) the same number of digits is used for any code number; and (iv) addition of main groups to the classification is provided by leaving gaps in the original assignment of left hand digits.

In general, all cost and expenses incurred by the organisation should be charged to an account which is coded to indicate the department for which the cost or expenses is controllable. All sales should be coded to reflect the regional department that effected the sale. Asset accounts such as inventories and fixed assets may be coded to indicate the department having custodial responsibility for the asset. Most other accounts are general or control accounts, such as cash, accounts payable or payroll and need not contain any departmental code.

The organisational codes facilitate several data processing activities, both manual and mechanical, related to responsibility accounting. Cost and expenses data may be sorted by department code and then summarized for each department to generate reports of controllable costs for all departments. Budgeted data would be similarly coded and processed to enable the preparation of performance reports, indicating budget variances. The codes are used to perform the function of filtration in preparing these reports which means that for each department uncontrollable costs are filtered out and not included in the performance summary. The organisation codes serve as a partial index to store cost and expense data, thus simplifying the retrieval of such data for purposes of comparing and analysing past trends with respect to several operational divisions, subsidiaries or branches. The design of the coding system should be based on the principle of uniformity, consistency, flexibility in expansion, cost effectiveness and integrated with the other functional areas.

5. A Sample Framework of Chart of Account

A Chart of Accounts is established by considering accounting code and classification. An ICAI study on Integrated System of Cost and Financial Accounts has adopted eight digit numerical code with the provision of adding numerical digits to the right hand side for further classification of cost. The basic coding schemes are as follows :

Location Code	Account Control Code	Deptt/Cost Centre
0	000 00	00

Location codes identify the geographic location of a multiplant unit. The account control code lists the major account heads under which information are accumulated in the general ledger. 2nd, 3rd and 4th digits denote an account, e.g. works overheads, office overheads in the account control code, whereas 5th and 6th digit indicate the source of expenses when associated with expenses control account, e.g. administrative expense control, factory expense control etc, or sub-account under the major account. The last two digits are associated with departmental or cost centre. In general, a chart of accounts should provide all or most of the following information :

(i) A code number for each geographical location;

(ii) A cost centre number for summarizing information at each sub-division within the location;

(iii) Control codes for accumulating information for the general ledger control accounts;

(iv) A sub-account number for each major sub-division of control account, if any;

(v) An expense item number for each major source of expenses for financial accounting, e.g. to comply with company law requirements;

(vi) An operation number for classifying information arising out of each group of activities within each cost centre.

A summarized chart of Balance Sheet accounts consistent with block coding scheme appears in Table 1, a corresponding simplified chart of Income Statement accounts is shown in Table 2 and a departmental code or source of expense code in Table 3 shows group code system vis-a-vis sequence code.

Table 1

Balance Sheet Chart of Accounts

Account Code	Account Name	Account Code	Account Name
300 - 399	Capital	100 - 199	Fixed Assets and Investment
400 - 499	Current Liabilities and Provisions	200 - 299	Current Assets, Loans and Advances

Table 2

Profit & Loss Account Chart of Accounts

Account Code	Account Name	Account Code	Account Name
500 - 599	Operating Income	800 - 899	Selling and Distribution Expenses
600 - 699	Cost of Goods Sold		
700 - 799	General Administrative Expenses	900 - 999	Non-operating Income and Expenses

Table 3

Departmental/Cost Centre Code Chart of Accounts

Account Code	Department/Cost Centre	Account Code	Department/Cost Centre
00	General Accounts	80 - 89	Personnel Department
01	Chairman's Office	90 - 95	Research and Development
10 - 29	Production Department	96 - 99	Corporate Planning
30 - 49	Market Department		
50 - 79	Finance Department		

The chart of accounts should always be accompanied by an explanatory memorandum explaining the nature of the expenses or income that should be recorded against each code. Sufficient scope should be provided in the classification and coding system to accommodate variance analysis, use of direct costing for decision making and use of costing procedure like job or process accounting system and others. The digit position can be increased on the right hand side for further details.

6. Need for Action

The chart of accounts serves as the basis of coding system for the accounting information system. The accounting information system assists the management in the control of organisation. Control shows the way to planning to achieve the organisational goal. Coding and classification of accounts for control and data processing systems reduce cost and time efficiently.

Planning for data processing system with proper uniform chart of accounts is an important and logical continuation in the financial decision making process. The business unit and not-for-profit organisation should adopt the chart of account without delay, pref'rably with the help of computer technology, to meet the new challenges of the society. The necessary changes in the existing accounting system and working system should be made with corresponding changes in the organisational structure, if necessary, and the existing staff should be trained from time to time. It is expected that these changes will bring about a revolution in the changing market economy and that business and non-profit- organisations will be able to strengthen their accounting systems more effectively and get more public appreciation. A pre-testing of chart of accounts in any organisation will certainly change the pattern of accounting systems for the future.

References

American Accounting Association (1966), Committee to prepare a Statement of Basic Accounting Theory, *A Statement of Basic Accounting Theory.*

Cooper and Ijiri (1984), *Kohler's Dictionary for Accountants,* 6th Edition, New Delhi, Prentice-Hall India.

Cushing, Barry E. (1982), *Accounting Information Systems and Business Organisation,* 3rd Ed, Phillipines : Addison Wesley Publishing Company.

Enthoven, A.I.F. (1975), *Accounting and Economic Development,* North Holland.

Gillespie, Cecil (1971), *Accounting Systems : Procedures and Method,* 3rd Ed, New Delhi : Prentice-Hall India.

Godfrey, James T. and Thomas R. Prince (1971), An Accounting Model from an Information Systems Perspective, *The Accounting Review,* January.

ICAI (1973), *Integral System of Cost and Financial Accounts.* Research Committee of the ICAI, New Delhi.

NAA (1959), Classification and Coding Technique to Facilitate Accounting Operations, *Research Report* 34.

International Conference News

Report on 7th International Conference on Accounting Education Held in Marriott Crystal Gateway Hotel Arlington, Virginia, U.S.A., from October 8-10, 1992

The **theme** of the Conference was "**Accounting Education for the 21st Century : The Global Challenges**". The purpose of the Conference was to provide accounting educators with an opportunity to exchange knowledge, ideas, and opinions regarding the issues facing accounting today throughout the world. With the rapid social, political, technological, economic and sometimes startling changes that are taking place in the world economy in this last decade of the 20th century and the important role that accounting must play in its future development, it is timely that accounting educators came together to share their views on how accounting education in their country and/or region of the world is or should be addressing this change.

The conference programme was designed to address the issues and developments in accounting education throughout the world and to foster maximum interaction and discussion among participants. To accomplish these objectives, the programme included :

a) Outstanding plenary speakers;

b) Six concurrent panels on issues and recent developments in the world regions;

c) Six concurrent panels on broad issues of accounting education;

d) Sixty referred papers representing authors from more than forty-eight countries in concurrent sessions with discussants, and

e) Nine Table Topic sessions on Friday (October 9) afternoon at which participants interacted on timely issues in small group settings.

About 450 delegates from more than 48 countries attended the conference. From India seven delegates, viz., Prof. B. Banerjee (Calcutta University), Prof. N.M. Khandelwal (Saurashtra University), Dr. Chhote Lal (Banaras Hindu University), Mrs. Rama Kashinath, Mr. P.D. Phadke and Mr. K.G. Dutta (Institute of Cost and Works Accountants of India) and Mr. Amal Chakraborty (Institute of Chartered Accountants of India) were in attendance.

In short, the Plenary sessions and many of the concurrent sessions were excellent in terms of academic input, high level of discussion and active participation by the delegates. Many distinguished accounting educators and professional accountants the world over were seen discussing the challenges concerning accounting education in the coming years. Anybody who was interested in the development of accounting education, research and practice, globally, with particular reference to the developing countries, definitely found the 7th International Conference a rewarding and stimulating one. In many respects, it was a successful conference.

In addition to the technical part of the programme, there were ample opportunities for informal meetings among accounting educators and practitioners.

Report on the Fourth Asian-Pacific Conference on International Accounting Issues held in Dunedin, New Zealand, from November 22 to 25, 1992

The Fourth Asian-Pacific Conference on International Accounting Issues was held at the University of Otago, Dunedin, New Zealand from November 22 to 25, 1992. The Conference was jointly sponsored by California State University, Fresno, and University of Otago, Dunedin. The main theme of the conference was "**Cultural Dimensions of Information**". The conference provided an important forum for the interaction of different ideas and information between academics and practitioners of different countries in order to enhance the understanding of international accounting issues in various Asian-Pacific countries.

In the opening ceremony (8.30 a.m. - 9.00 a.m. on November 23, 1992) Professor Jack Huggins of University of Otago was in Chair. Sir Robin Irvine, Vice-Chancellor of University of Otago, Luis Ma. R. Calingo, Dean, School of Business and Administrative Sciences, California State University, Fresno, Lyall McLean, Assistant Vice-Chancellor, Commerce Division, University of Otago, spoke on the role of the University of Otago and that of California State University in organising the Fourth Asian Conference in Dunedin. Professor Ali Peyvandi and Professor Benjamin Tai, Conference Co-Chairmen, respectively, welcomed the delegates and extended a hearty vote of thanks.

The Plenary Session entitled "Cultural Dimensions of Information" was chaired by Professor A. Rashad Abdel-Khalik, Editor, Accounting Review. Professor Sidney J. Gray, President, International Association for Accounting Education and Research, was the main speaker. Professor Rong-Ruey Duh of National Taiwan University, Taiwan, and Professor Wai Fong Chua of University of South Wales, Australia, were the other speakers. Professor Gray spoke in detail on the "Cultural Dimensions of Information : a Comparative International Financial Reporting Perspective".

The Plenary Session was followed by 37 concurrent sessions (including panel discussion) and one workshop on "Accounting Research" on November 23 and 24. Distinguished academics and professionals from 125 universities over 25 countries presented 88 papers in these sessions. There were 250 delegates including accompanying persons. There were lively discussions on a variety of national and international topics.

A Banquet Reception for the delegates and accompanying persons was arranged at the City's Convention Centre on November 23. It included a cultural function to entertain the attendees.

At the meeting of the Programme Committee held on November 22, it was decided that the 5th Asian Pacific Conference would be held at Mexico City from November 3 to 6, 1993. Later, during Banquet Reception, an announcement was made for the Fifth Asian Pacific Conference. The members of the Programme Committee were also informed that out of 153 papers received for the fourth conference only 88 were accepted, rejection rate being about 42.5%.

Among the distinguished academics and professionals who attended the conference were : Professor Gary L. Sundem, President, American Accounting Association, Mr. Peter Agars, President, IFAC, Professor Sidney J. Gray and Professor Belverd E. Needles, Jr., respectively, President and Secretary of IAAER, Professor Gerhard Mueller, Past President, AAA, Professor Murray C. Wells, Past President, IAAER, and Professor Ken J. Moores, Secretary, AAANZ. The Conference was a grand success in all respects.

Dr. Bhabatosh Banerjee of the University of Calcutta and a member of the Programme Committee was the lone participant from India. He presented a paper entitled "Regulatory Disclosure Requirements for Corporate Reporting : A Study with Reference to Bangladesh, Pakistan and India". He also chaired two sessions – Accounting Education and Issues in International Accounting Standards, respectively.

Fifth Annual
Accounting Academic Conference
Hong Kong, April 7-8, 1993

The Fifth Annual Conference of Accounting Academics organised by the Education Interest Group of the Hong Kong Society of Accountants will be held on April 7-8, 1993, in Hong Kong. The overall theme of the conference is Accounting Issues in the Asia-Pacific Region.

Last date of submission of paper was December 18, 1992.

For further details, contact :

Barry Graham, or Victor Haines

Conference Co-Chairmen, Department of Accountancy

City Polytechnic of Hong Kong

83, Tat Chee Avenue, Kowloon, Hong Kong

Fax : 852 788 7944.

Fifth Asian-Pacific Conference on International Accounting Issues November 3-6, 1993 Mexico City, Mexico

1. Background

The Fifth Asian-Pacific Conference on International Accounting Issues will be held from November 3 to 6, 1993, in Mexico City, Mexico. The main theme of the conference is *International Accounting Standards and Regional Economic Integration.* The Conference will provide an important forum for the interaction of different ideas and information between academicians and practitioners, in order to enhance the understanding of international accounting issues in various Asian-Pacific countries.

Research paper presentation and special workshops will be held by well-known international accounting scholars and practitioners to discuss issues on international accounting research, education, and practice, impact of advanced technology on international accounting, comparative ethics in international auditing and business, and related international accounting topics. Prominent scholars and practitioners from many countries the world over are expected to attend the conference.

2. Topics

Paper presentations, panel discussions, and workshops on international accounting and other related international business topics are invited. Major topics of interest include, but are not limited to :

* International accounting research, education, and practice.
* Accounting standards, auditing standards, and taxation issues among the North American Free Trade Agreement (NAFTA) countries.
* Comparative analysis of financial accounting, managerial accounting public sector accounting, auditing and taxation among Asian-Pacific countries.
* Contemporary issues of advanced technology in international accounting.
* Information and control systems for multinational corporations.
* Interrelationship between accounting and other disciplines (such as management, marketing, finance, economics, human resource management and information management).
* Accounting in specific country or economy.
* Comparative ethics in international auditing and business.

* Cross cultural studies in international accounting.
* Accounting history in Asian-Pacific countries.
* Impact of international mergers and acquisitions on accounting practice.
* Other related international business topics.

3. **Conference Registration Fee**

It is US $ 200 per delegate and includes Reception, 2 Breakfasts, 2 Luncheons, 1 Dinner (Banquet and Entertainment), copy of Conference Proceedings and One-Day Tour.

4. **Instructions for Contributors**

1. Each contributor is required to submit three (3) typed, double-spaced copies of the full paper, detailed abstract, panel discussion, or workshop proposal. The submission may be in either **English or Spanish.**

2. Each submission should include a separate title page on each copy, listing author (s), affiliation (s), address (es), telephone number (s), and fax number (s). Also, include a self- addressed post card with the title of submission. The main body of the paper, abstract, workshop or panel discussion proposal should have a title, but no author identification.

3. All papers will be subject to a blind review process. The submission of a paper for review means the author certifies that the manuscript is not copyrighted, and has not been published elsewhere. Further, accepted papers will be published in the Conference Proceedings only if their authors register and attend the conference.

4. All submissions must be received by **May 15, 1993.** Notification about the decision will be made by **June 30, 1993.**

5. Mail all papers, abstracts, panel discussion and workshop proposals to :

   Professor Ali Peyvandi or Professor Benjamin Tai, Conference Co-Chairmen, Asian-Pacific Conference on International Accounting Issues.

   The Sid Craig School of Business and Administrative Sciences
   California State University, Fresno
   Fresno, California 93740-0007, U.S.A.
   Telephone Number (209) 278-2921
   Fax Number (209) 278-4911

5. **Registration of Interest**

The following form duly filled in should be sent to Conference Co-Chairmen immediately.

Registration of Interest

I would like to participate in the Fifth Asian-Pacific Conference on International Accounting Issues in the area (s) marked below :

* Submit paper
* Review papers
* Chair a session
* Discussant in a session
* Prepare workshop proposal
* Attend only
* Exhibit

Name ____

Address ____

____

____

ENDEC World Conference on Entrepreneurship IV Singapore, July 14-16, 1993

The ENDEC World Conference on Entrepreneurship IV will be held in Singapore from July 14-16, 1993. For further details contact :

Mr. Tan Wee Liang
Chairman, Conference Organising Committee
NTU-PEAT Marwick
Entrepreneurship Development Centre
C/o School of Accountancy and Business
Nanyang Technological University
Nanyang Avenue
Singapore - 2263.

Branch News

Visakha Branch

A Seminar on Stock Scam in India was held at Seminar Hall, Dept. of Parapsychology, Andhra University, on 13th August, 1992. The Seminar was chaired by Shri K. Parvathi Kumar, the Chairman of IAA Vishakha Branch. In his opening remarks Sri Kumar emphasized the need for comprehensive legislative framework to prevent crimes in the stock market. He appropriately referred to the role of SEBI, Stock Exchanges and other relevant bodies in improving the operations of capital market network in India. He also referred to the role of Indian Accounting Association, in providing education and training in the Financial Services Sector.

The Chief Guest of the Seminar, Prof. M. Gopalakrishna Reddy, the Vice-Chancellor of Andhra University, delivered a provocative address on various aspects of controlling large scale mis- appropriation of bank funds and called upon different segments of the society to play a timely and creative role to protect the interests of common investor. He referred to the recent developments in capital markets of several countries including the USA, UK, Japan etc., and strongly advocated the need for full-fledged computerisation with on-line and network facilities on a national basis for all the stock exchanges, including the fund movement pattern of the country's banking system. This kind of MIS would help preventing/detecting misappropriation of funds at the early stages, he added.

Dr. D. Prabhakara Rao, the Secretary of the IAA Visakha Branch, while presenting his paper, referred to Markowitz's (1990 Nobel Prize winner) model of Portfolio diversification and highlighted some of the portfolio strategies in the Indian context. He identified the inconsistencies in the pattern in macro-economic variables like money supply bank deposits and capital formation as compared with the stock price indices and volume of stock trading and established a strong theoretical case for the recent stock scam and appropriately referred to the Chief Guest's suggestion of computerisation for strengthening stock market operations. Mr. G.V.N. Hari, Chartered Accountant of Vizag, while presenting his paper, explained the mechanics of Bond Trade among the banking companies and the illegal transfer of funds from the banking system to the stock market by some of the brokers.

Around 150 delegates participated in the seminar. The delegates included faculty members from Andhra University, members of the Vizag Investors Association, Chartered Accountants, local stock brokers, students of the Post-graduate Diploma in Accounting Software and students doing chartered accountancy course and corporate delegates from some of the local industrial units.

The Seminar was followed by business session of the Branch's Annual General Meeting (2nd) wherein Dr. M. Gopalakrishna Reddy, the Vice-Chancellor of AU, has been elected (unanimously) as the Chairman of the IAA Visakha branch for 1992-93. Afterwards Dr. Gopalakrishna Reddy, inaugurated the 2nd Branch of the Post- graduate Diploma in Accounting Software and addressed the students.

Gujarat Branch

All-Gujarat Seminar on 'Capital Markets in India' was organised on 11th October, 1992 by Gujarat University Area Accountancy Teachers' Association and Indian Accounting Association - Gujarat Branch at the School of Commerce, Gujarat University in which over 130 college teachers and professionals actively participated in all deliberations.

Dr. B. Bhatia, Dy. General Manager, IFCI, Ahmedabad, inaugurated the Seminar and expressed his views on 'Growth of Capital Markets in India'. He was optimistic about the future growth of capital market and getting of foreign capital because of recent changes in economic policy and the process of privatisation initiated by the Central Government.

The 1st technical session on 'SEBI guidelines' was conducted by Shri Bipin Acharya, Company Secretary and Shri M.L. Sobeji, Executive Director, ASE. They advocated increased restriction on unregistered companies and PSUs and also on the issue of bonus shares. The awareness amongst small investors is a must, since SEBI has given more liberties to the corporate sector.

In the 2nd technical session on "Investors' Protection" Prof. Manubhai Shah of CERC, Ahmedabad, advocated increasing protection for small investors, since they buy a promise rather than simply a tangible security. The stock exchanges in India are by and large private clubs of brokers for brokers and by brokers. According to him, SEBI should be a quasi-judicial body and merchant bankers should be considered responsible jointly and severally.

The welcome address was given by Principal C.B. Raval and details of the programme were presented by Principal R.H. Vyas. The Guest speaker was introduced by Prof. B.H. Desai and vote of thanks was accorded by Shri H.S. Oza.

Calcutta Branch

The Annual seminar of the Branch was held at Sri Chaitanya College of Commerce, Prafulla Nagar, Habra, 24 Parganas (North), West Bengal on 16 January, 1993 on the topic "How Reliable is our Accounting System". Prof. Dilip Kumar Sinha, Rash Behari Professor of Applied Mathematics, former Pro Vice-Chancellor for Business Affairs and Finance, University of Calcutta, and ex-President, Indian Science Congress, was the Chief Guest and Shri A.V. Iyengar, Vice-President (Finance and Personnel), Infar India Ltd. was present as Special Guest. Shri Sukumar Bhattacharya, Chairman of the Calcutta Branch and President, IAA Research Foundation, chaired the inaugural session, Dr. J.B. Sarker and Shri S.N. Chakraborty welcomed the delegates on behalf of the Calcutta Branch and the College respectively.

Prof. Sinha in his inaugural address stated that there is an important interforce between mathematics and accounting especially in the context of increasing the predictability of information from the accounting system. Risk analysis, therefore, should assume an important part of accounting to enhance its reliability. Accounting education should accordingly be reoriented. He also stressed the importance of improvements in technology and its impact on accounting education.

Shri Iyengar dealt upon the various aspects of preparation of annual accounts and how the professional accountants are guided by the provisions of the law and the standards set by the professional institutes. Shri Sukumar Bhattacharya in his concluding remarks highlighted the role of accountants to satisfy the needs of business organisations and society at large. He also examined the credibility of the profession.

The technical session of the seminar was divided into two parts – part one was presided over by Shri Sukumar Bhattacharya and part two, by Dr. N.G. Choudhury, former Chairman and Managing Director of Tribeni Tissues Ltd. Out of 12 papers, six were presented during the first part of the technical session and the rest, during the second part of the technical session after lunch. According to Prof. P. Chattopadhyay of the University of Burdwan, reliability, comparability and acceptability are some of the basic values of accounting. If, for whatever reasons, reliability comes under doubt, the fundamental virtues of accounting are lost. Among others who presented papers in this session were Shri Biswajit Bhadra, Shri P.C. Basu, Dr. Dipti Kumar Chakraborty, Shri Arup Chowdhury and Dr. Kartick Chandra Paul. Prof. I.K. Chatterjee of the University of Kalyani in his paper presented the cardinal features in accounting and failures thereof while preparing annual reports. He extensively referred to recent reports in the press. Others who presented paper after lunch were Shri I. Dhar, Shri T.C. Saha, Shri D.K. Bhattacharya, Shri S. Dhar and Dr. A.K. Sengupta. Shri P.R. Ramesh, Shri G.P. Agrawal, Shri Amalendu Bhattacharya, practicing chartered accountants, and Dr. Swapan K. Bhattacharyya, Cornel, also participated in the deliberations. Dr. N.G. Choudhury made critical comments on each of the papers presented during his session. The accounting system, a time-tested one, is not at fault it is those who are working within the system. Efforts should therefore be made to measure economic events of the firms objectively, he added.

The Seminar was concluded with a vote of thanks from Dr. A. Roy Chowdhury, Principal of Sri Chaitanya College of Commerce and Chairman of the Reception Committee.

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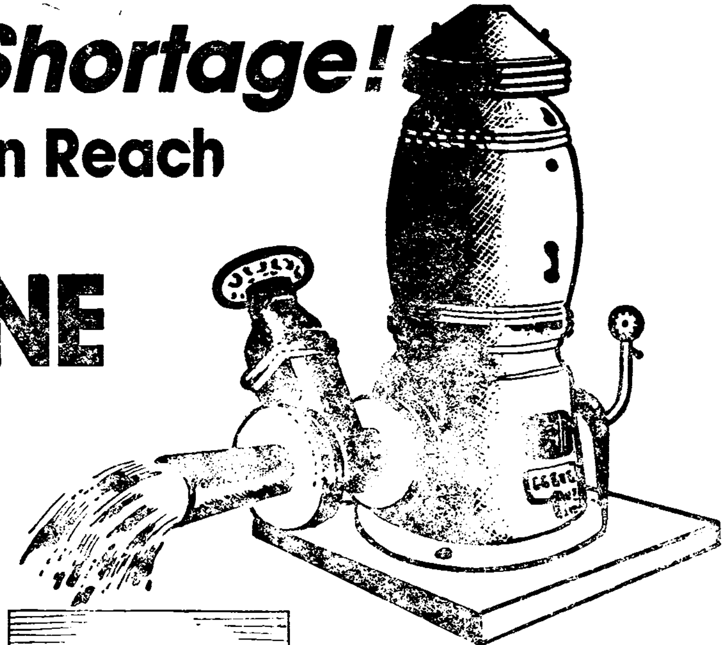

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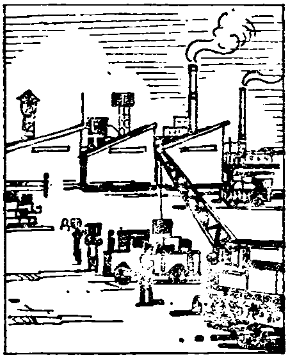

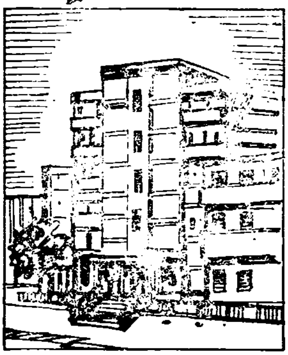

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