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## EDITORIAL

The current issue of the journal contains 9 articles on various matters pertaining to accounting and finance. It begins with Gyan Chandra's article which explores the impact of recognising the pension plan prior service cost on the financial position of some of the leading industrial companies. This is followed by an article written jointly by Shifei Chung and Ramesh Narasimhan on the profile of the accountancy faculty in tertiary institutions in Hong Kong. The article contributed by A. K. Basu argues the case for awarding primacy to the balance sheet in corporate financial accounting and reporting. Ahmed Riahi-Belkaoui in his article presents the US evidence on the informational content of the disclosure of the net value-added components made concurrently with earnings. Ashit K. Sengupta's article discusses the justifiability of using profitability as an indicator of viability of public sector enterprises.

Som Dev and S. C. Jain in their article examine the problems of the Indian stock markets and suggest measures for dealing with them. Prithul Chakraborty analyses critically the prevailing accounting practices relating to corporate amalgamations, and points out some measures for enhancing their effectiveness. The article by Udaybahu Bhattacharyya argues the case for basing accounting reports of government entities on the accrual concept. Sujit Sikidar's article discusses the sophisticated tools of inventory control and focuses on the inventory management practices of some related Indian companies.

This issue also contains book reviews, international conference news and news relating to the activities of IAA branches.

I express my deep sense of gratitude to Professor B. Banerjee, Chief Editor, and to other members of the Editorial Board for their cooperation in bringing out this issue. My thanks are also due to Sri Pinaki Ranjan De, UGC Research Fellow, Department of Commerce, University of Calcutta, for the assistance rendered by him in connection with the publication of the journal.

The publication has been delayed by one and half months for some unavoidable reasons, for which the undersigned begs to be excused by the members of the Association.

February 15, 1997

**A.K. Basu**  
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## PENSION COST ACCOUNTING : AN INTERNATIONAL PROBLEM

*Gyan Chandra\**

This paper explores the impact of recognizing the pension plan prior service cost on the financial position of some of the largest industrial corporations. The analysis reveals that the recognition does affect the corporate financial position, the impact is not uniform on different corporations, and the passage of time has not eliminated the effect.

### I. Introduction

With the growing number of retirees and pension earners around the world, accounting for pension costs and retirement benefits has acquired an international dimension. Accounting for pension costs and retirement benefits involves both recognition and disclosure and thus ignites the old controversy of recognition and/or disclosure. The International Accounting Standards Committee (IASC), the Institute of Chartered Accountants of India (ICAI), the Financial Accounting Standards Board (FASB) of the United States, and other similar financial accounting standards setting organizations in other countries make a distinction between recognition and disclosure, but the distinction seems to be under constant pressure. Although there is no definitive answer to the question as to when disclosure can supplant recognition, there is little doubt that disclosure has not been accepted as a substitute for recognition by financial accounting standards setters. Interestingly enough, disclosure has also been relied upon as a way to get around recognition by the financial accounting standards setting organizations either out of political expediency or as an interim solution. Accounting standards on pension cost accounting offer a good example of the situation.

This paper attempts to examine the impact of full recognition of pension plan prior service costs on the financial position of large industrial corporations under a theoretically preferred approach. A related issue as to how the expiration of time has affected the impact of recognition on the financial position of those corporations is also examined. The study proceeds by examining the conceptual aspects of the problem and then examines the approaches taken by ICAI, IASC and FASB on pension

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\* Professor, School of Business Administration, Miami University (Ohio).

The author is grateful to the Department of Accountancy, Miami University (Ohio) for the financial assistance in the conduct of the study.

cost accounting. In the next part, the study inquires into the impact of unrecognized prior service pension cost on the financial position and profitability of the largest 20 U.S. industrial corporations. The final part draws some conclusions significant to the corporations that follow either the IASC or FASB standards on pension cost accounting. The study is limited to the impact of defined benefit pension plans—wherein an employer makes certain previously agreed upon benefit payments to the retired employees regardless of the employee contributions.

## II. Some Conceptual Issues

**Recognition** of an event in accounting generally implies a formal recording of revenue, expense, asset and/or liability both in words and numbers (SFAC 5, *Recognition and Measurement in Financial Statements of Business Enterprises* 1984, para. 9). **Disclosure**, on the other hand, means presentation of information that is useful to the investors, creditors and other users in making rational investment, credit, and similar decisions (SFAC 1, *Objectives of Financial Reporting by Business Enterprises* 1978, para. 34). Although disclosure has been the cornerstone of securities legislation in the free market economies, it cannot replace recognition where recognition of revenues, expenses, assets or liabilities is appropriate (SFAC 5, para 9). In a recent standard, FASB stated several major purposes of disclosure including that of describing both recognized and unrecognized items, providing a useful *measure of unrecognized items* and providing important *information in the interim* while other accounting issues are being studied in more depth ... (SFAS 105, *Disclosure of Information about Financial Instruments with Off-Balance-Sheet Risk and Financial Instruments with Concentrations of Credit Risk* 1990, paras, 77-78, emphasis added).

While it is difficult to lay specific criteria for disclosure, FASB set four criteria for recognition (SFAC 5, para 63) of an event : definition, measurability, relevance, and reliability. However, in its urgency to issue standards expeditiously and satisfy conflicting interest groups, FASB has often bypassed recognition in favor of disclosure. Can disclosure be a viable substitute for recognition (?) is a question being explored in this paper.

## III. Prior Studies

Most of the early studies on disclosure essentially concentrated on the satisfaction or lack thereof of different user groups about disclosure in the corporate annual reports (see, Roper 1948; Horngren 1957; Singhvi 1968; Chandra 1974). Through interviews and surveys of security analysts, public accountants and business executives they learnt the degree of

dissatisfaction about the then prevailing standards of disclosure and determined what information items should be included in the annual reports. However, not all studies found fault with management or public accountants in making adequate disclosure in the annual reports. In fact, some had even questioned the presumed benefits of required disclosure (see, Benston 1969).

Research on disclosure has gone into many directions. In a study on disclosure of accounting based debt covenants, Press and Weintrop found annual report disclosures to be less informative than Moody's and SEC filings and concluded that "debt covenant disclosure in annual reports is presently inadequate" (1991, 73). Likewise, Harper et al. (1991) surveyed a sample of commercial lenders to determine the impact of disclosing the obligation for unfunded postretirement benefits on the perceptions of this item as a form of debt. "The results of this survey reveal that commercial lenders were more likely to perceive this obligation as a form of debt when recognized as a balance sheet liability than when disclosed in the footnotes accompanying the financial statements" (Harper et al. 1991, 56). In another study, Miller and Redding (1992, hereafter, M & R) examined the effect of political compromises in setting accounting standard on defined benefit pension plans and its impact on financial statement items for a sample of 30 large *FORTUNE 500* corporations for 1987. They found wide diversity of results across the sample corporations for the effects of political compromises between the FASB's theoretically preferred approach and the required approach for pension accounting on items like pension expense, income before extraordinary items, total liabilities and assets, ratio of liabilities to equity, and return on stockholders' equity. Their conclusion : the effect of political compromises in accounting standards setting cannot always be predicted and politically derived accounting standards do not impact different companies uniformly (M & R 1992, 52-60).

#### IV. Accounting for Pension Plans

*Indian Accounting Standard No. 14 and International Accounting Standard No. 19 (IAS 19)*

The Institute of Chartered Accountants of India issued IAS 14 in September 1994, *Accounting for Retirement Benefits* requiring Indian companies to follow certain accounting methods to account for the cost of employee retirement benefits. The standard went into effect on April 1, 1995. Since this standard essentially follows the International Accounting Standard (*IAS 19*), the latter will be studied below in more detail.



To begin with both the Indian standard and *IAS 19* approach the pension accounting problem in a broad context and, appropriately so, as accounting for *retirement benefit costs*. Revised in 1993, the original *IAS 19* has been in effect since 1985. Conceptually *IAS 19* and the FASB standard in the United States, *Employers' Accounting For Pensions (SFAS 87)* are very comparable. *IAS 19* makes a distinction between accounting for periodic pension cost (a systematic allocation) and its funding (a financing procedure). It starts with the premise that under a defined benefit plan, the employer's cost can only be estimated and accepts the fact that there is considerable *diversity* of practices followed for accounting of retirement benefit costs. Consequently, *disclosure* of information acquires much significance. Since this paper focuses on defined benefit pension plans, this brief discussion is devoted only to that aspect of *IAS 19*.

*IAS 19* requires that the current service cost should be recognized as an expense of the current period. As the following paragraph indicates, the provisions for the other costs include :

Past service costs, experience adjustments, the effects of changes in actuarial assumptions and the effects of plan amendments in respect of existing employees in a defined benefit plan should be recognized as an expense or as income *systematically over the expected remaining working lives* of those employees except in the situations covered in paragraph 33 and except in the case of certain plan amendments when the use of a shorter time period is necessary to reflect the receipt of economic benefits by the enterprise. (*IAS 19*, para 28, emphasis added).

*IAS 19* has avoided the unpleasant immediate recognition of past service cost in both the income statement and balance sheet. It requires a systematic recognition (spreading) of such cost over the expected remaining working lives of covered employees. Finally, to apprise the users of financial statements of the full impact of pension costs, *IAS 19* requires detailed disclosures. They include the description of the retirement benefit plan, accounting policies followed, funding status, retirement expense or income recognized during the current period, amount of liability (as a result of underfunding) or asset (from overfunding), etc. (*IAS 19*, para 51). *IAS 19* does not permit offsetting of retirement benefit plan asset and liabilities in multiple plans as it can cause the loss of valuable information. Although *IAS 19* describes accounting for retirement benefits costs in detail, it very much lacks in implementation guidelines and the accounting very much depends on the discretion and judgement of management and public accountants. This makes comparison of the

financial statements prepared under the Indian standard or *IAS 19* very difficult. To make a meaningful comparison of the impact of recognizing prior service cost (PSC), the U.S. standard on pension cost accounting (*SFAS 87*) is reviewed below.

#### *Statement of Financial Accounting Standard (SFAS 87)*

Pension accounting has been a controversial subject for the U.S. accounting standards setters. Both the Committee on Accounting Procedure (CAP 1956) and the Accounting Principles Board (APB 1966) issued standards on pension accounting requiring a systematic recognition of pension plan costs in the employers' books. However, their efforts failed to narrow the diverse accounting practices for the pension plan costs (see, *SFAS 87*, Appendix C for a critique) and led the FASB to issue *SFAS 87*. In general, *SFAS 87* adopted the accrual accounting approach and the net periodic pension cost in a defined benefit plan could have the following components :

- a. Service cost
- b. Interest cost
- c. Actual return on plan assets, if any
- d. Amortization of unrecognized prior service cost, if any
- e. Gain or loss (including the effects of changes in assumptions) to the extent recognized
- f. Amortization of the unrecognized net obligation (and loss or cost) or unrecognized net asset (and gain) existing at the date of initial application of this Statement (*SFAS 87*, para. 20).

There are four components of a pension plan cost : the basic components (a, b, and c); plan amendment component including prior service cost (amortization component), (d); delayed recognition component (smoothing), (e); and transition component (f). FASB faced enormous opposition from industry when it issued the exposure draft of *SFAS 87*. The true nature of industry's resistance to FASB's efforts to arrive at a theoretically defensible approach comes to light from the detailed "Basis For Conclusions," appended to the standard. There was not much disagreement on the recognition of the basic components (a, b and c above) of pension cost. However, reaching agreement on the recognition of prior service cost (PSC) (component d, above) was a challenge. This part includes cost of both prior period services and any amendments in the pension plan. Although a theoretically preferred approach would have required an immediate recognition of PSC, the industry argued in favor of spreading it over the future service period as immediate recognition could have adversely affected the reported income of the corporations.

FASB neither recognized the plan amendment costs as a current period cost nor as an asset to be amortized over future periods. It set such unrecognized costs outside the financial statements due to its eagerness to find an uncontroversial solution of the problem (*SFAS 87*, para 159).

The next item in the periodic pension cost (component e) includes both gains and losses arising from experiences that are different from the assumptions made in the pension plan (*SFAS 87*, para 29). These gains and losses include unexpected excess or deficits in returns on plan assets, actuarial changes in the projected benefit obligation (PBO), and also accumulated deferred gain or loss. FASB adopted the use of a "corridor" approach (delayed recognition) over the theoretically preferred approach of immediate recognition.

Finally, FASB tackled the problem of the transition cost (component f) of changing from *APB Opinion 8* to *SFAS 87*. *SFAS 87* became effective for fiscal year beginning after December 15, 1986. *SFAS 87* mandates that in the year of the standard's first application the amounts of PBO and the fair value of plan assets should be compared and the difference between those two amounts, whether it is an unrecognized net obligation (and loss) or an unrecognized net asset (and gain), shall be amortized on a straight-line basis over the average remaining service period of employees (*SFAS 87*, para 77). FASB accepted a smoothing device "to minimize the cost and to mitigate the disruption involved" (*SFAS 87*, para, 256) in the transition.

## V. Expediency over Theoretical Justification

Although FASB's objective was to follow accrual accounting for pension costs, it departed from it in *SFAS 87* to a politically acceptable solution. FASB's theoretically preferred approach would have required current period recognition of the pension costs either through the net periodic pension cost or directly in the income statement. But such a recognition could have adversely affected the current period's income and also some of the popularly used financial ratios. During FASB's deliberations of the *SFAS 87* exposure draft the U.S. industrial corporations intensely objected to the current period recognition of all parts of the pension costs. FASB wanted a conceptual approach but found the political climate in the United States to be too hostile for it (*SFAS 87*, para. 107).

While *SFAS 87* requires the recognition of pension costs in the income statement, it requires recognition of only a minimum liability at each balance sheet date. A theoretically preferred approach would have required recognition of pension plan assets, liabilities and equity on the balance sheet of the employer firm as in a realistic sense they belong to the employer firm. Even though the employer is responsible for any

unfulfilled pension obligation, FASB accepted the expedient legal position of separation between the employer and pension plan. FASB acknowledged the fact that an employer bears the risk and reward associated with the pension plan assets and yet accepted a less than theoretically sound approach (*SFAS 87*, para. 112).

Finally, on the question of prior service cost (PSC) which includes cost arising from pension plan amendments, *SFAS 87* does not require the recognition of a liability for this amount. Had such a liability been recognized, there would have to be a debit either to income, stockholders' equity or an intangible asset. These options might have adversely affected the financial position of companies. FASB reached a practical compromise of recognizing PSC gradually through the pension cost and keeping the PSC outside the balance sheet.

The similarities between the processes through which the U.S. and the international accounting standards on pension cost accounting have gone through are not surprising. If the opposition of industry to a theoretically preferred approach was stiff in the U.S., it was only worse in setting the international standards. Whereas FASB had to satisfy only the interests of U.S. industry, IASC had to satisfy a variety of vested interests all over the world and accommodate differing socio-economic philosophies of many countries. Just like the FASB, IASC also adopted a politically expedient solution over a theoretically preferred approach to pension accounting. The IASC accepted either disclosure over recognition of pension related costs and assets and liabilities or spreading of prior service costs over their immediate recognition. Conceptually, the following analysis of the major U.S. corporations is relevant to foreign corporations that follow *IAS 19* for a very important reason. *SFAS 87* is a fairly detailed and structured standard whereas *IAS 19* leaves much for the interpretation by the management. Consequently, financial statements prepared following *SFAS 87* are, probably, more comparable than the ones prepared under the *IAS 19*.

#### **VI. Adjustments for the Unrecognized Prior Period Service Cost**

To examine the impact of a politically expedient solution of disclosure over the FASB's theoretically preferred approach of recognition to pension accounting, M&R (1992) adjusted and analyzed the financial statements of 30 **FORTUNE 500** corporations for 1987. They found the adjusted information to be significantly different from the reported results but it was difficult to generalize the effect of political compromises across industries as they were affected differently by *SFAS 87* (M&R 1992, 60). At the time of issuing *SFAS 87*, it was argued that the acceptance of the FASB's theoretically preferred approach would produce too radical a result and with the passage of time the results of the new standard will

start approximating the results of the theoretically preferred approach any way.

This author faced two questions with regard to the M&R study : (1) has the passage of time mellowed the effect of political compromises ? and (2) is the five year period long enough to normalize the impact of immediate recognition of prior period service cost for the largest U.S. corporations? In an attempt to answer these questions the author analyzed the financial statements of the 20 largest U.S. industrial corporations from the **FORTUNE 500** list for the fiscal year 1992. This sample included corporations in aerospace, chemical, food, automotive, petroleum and other industries. They ranged in asset size from \$10 billion (Conagra) to \$193 billion (General Electric) and in sales size from \$19 billion (Dow Chemical) to \$133 billion (General Motors). The data for these corporations was derived from the Disclosure Inc.'s CD ROM on *Industrials*. Since accounting of unrecognized prior service cost (PSC) has been the principal bone of contention between industry and FASB, its effects were examined in relation to stockholders' equity (S/E) and income before extraordinary items (IBEI).

The effect of unrecognized PSC and S/E varied among the 20 companies and ranged from a low of less than 1% (Dow Chemical) to a high of over 80% (General Motors). However, the effect of unrecognized PSC on IBEI varied much more widely—from a low of less than 4% (Philip Morris) to a high of over 668% (United Technology). Since three of the sample companies (General Motors, Ford and IBM) had reported losses for 1992, the impact of unrecognized PSC on such companies' IBEI is not fully revealed by the negative percentages given in Table 1. The amounts of their reported loss before extraordinary items will be substantially larger, had PSC been recognized during 1992. Overall, the unrecognized PSC was over 5% of S/E and over 80% of IBEI of the 20 corporations in the sample.

The analysis of the impact of unrecognized PSC on S/E and IBEI confirmed two propositions. First, if it had a theoretically preferred approach of recognizing PSC currently been followed by the sample companies, unrecognized PSC could have a significant effect on both S/E and IBEI. Second, the effect of unrecognized PSC is not uniform. Recognition of unrecognized PSC would have caused quite a variation in the reported data and one wonders whether *SFAS 87* has succeeded in its objective of making financial statements more understandable and comparable.

## VII. Conclusions

This study has several limitations. First, since only a very small nonrandomly drawn sample of companies was used, neither any statistical tests were conducted nor any weight was given to the size of sample

**Table 1**  
**Impact of Unrecognized Prior Service Cost on**

	Stockholders' Equity	Income Before Extraordinary Items
<b>INDUSTRY</b>		
Company Name		
<b>AEROSPACE</b>		
Boeing	5.09%	26.38%
United Technology	6.94%	668.57%
<b>CHEMICAL</b>		
DuPont	3.46%	41.74%
Dow Chemical	0.60%	17.39%
<b>FOOD</b>		
Philips Morris	1.41%	3.58%
Conagra	0.84%	5.19%
<b>AUTOMOTIVE</b>		
General Motors	80.42%	-191.06%
Ford	12.61%	-370.81%
Chrysler	13.65%	203.76%
<b>PETROLEUM</b>		
Exxon	1.27%	8.90%
Mobil	1.28%	16.13%
Chevron	0.62%	3.85%
Texaco	0.86%	8.50%
Amoco	0.97%	14.82%
Shell Oil	0.67%	22.02%
<b>OTHERS</b>		
Pepsi	0.97%	4.01%
IBM	7.66%	-30.81%
General Electric	2.21%	10.96%
Eastman Kodak	5.55%	36.62%
Procter & Gamble	1.13%	31.23%
<b>All Sample companies</b>	5.41%	80.42%

companies. Second, much of the data relating to pension plans had to be manually compiled from the footnotes which create their own limitations. Third, pension plans enjoy special tax exempt status which makes it difficult to determine the tax effect. Hence, the income tax effect was ignored.

Although IASC, ICAI, FASB and other financial accounting standards setting organizations make a distinction between recognition and disclosure, disclosure is not considered a substitute for recognition. Disclosure has often been used to get around recognition of unpopular and controversial items in various accounting areas. Accounting for the cost of defined benefit pension plans is one such area. Call it political expediency or practical difficulties of implementation, FASB departed from a theoretically preferred approach in *SFAS 87* and ignored much of the financial accounting conceptual framework. It avoided recognition when industry opposed. The adjustments made to compute the effect of unrecognized prior period service cost under a theoretically preferred approach indicate : (a) recognition does affect financial statements, (b) the effects must be perceived to be significant by industry, otherwise it would not have opposed, and (c) the impact of the standard is not uniform on different corporations. The five year period since the issuance of accounting standard has not eliminated the effect of unrecognized pension costs.

The lesson of the study goes beyond the U.S. accounting standards. Since the international or the Indian accounting standard on pension cost accounting is not significantly different from the U.S. standard, there is a high probability that what is observed about the largest U.S. corporations could be repeated with the corporations that follow the international or Indian accounting standard on pension cost accounting.

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### INDIAN ACCOUNTING REVIEW

**Indian Accounting Review (IAR)** is a bi-annual research journal sponsored by the Indian Accounting Association Research Foundation. The first issue of the journal is planned for June, 1997 containing articles from eminent academics from the U.S.A., Canada and India. It is a referred journal with the review process being double blind.

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**A PROFILE OF THE ACCOUNTANCY FACULTY IN A  
MALE-DOMINANT BUSINESS COMMUNITY :  
HONG KONG EVIDENCE**

*Shifei Chung\**  
*Ramesh Narasimhan<sup>†</sup>*

This paper analyses the profile of the accountancy faculty in tertiary institutions in Hong Kong. The analysis indicates that the proportion of male to female faculty members is much higher than the proportion of male to female students entering the university for an accountancy degree. The analysis also reveals that while there has been substantial recruitment in Hong Kong Institutions since 1985, the majority of the new recruits have been males.

**1. Introduction**

Blank (1984) observes that in entering the job market, the initial reference that occurs of accounting students to the accounting profession is from their instructors. This could be even more crucial for the female accounting students in Hong Kong given the general orientation towards traditional roles for women. Therefore, females are less likely to receive encouragement to pursue top accountancy careers from other sources such as family and friends. In addition, despite Hong Kong's tremendous economic growth and close contact with the Western worlds, a law governing equal-opportunity or anti-discrimination was not enacted until this year (1996).

Chan & Dunleavy (1995) report that the number of accounting male students and graduates in Hong Kong is approximately the same with that of accounting female students and graduates. Davis (1994) also notes that "virtually equal numbers of male and female recruits enter the (accounting) profession at the trainee stage (page 96)." However, it is well recognized that the senior ranks of the profession are dominated by males. It is thus interesting to study the profile of the accountancy faculty in the Hong Kong area to see if the glass ceiling for the upward mobility of women accountants in Hong Kong as observed by Davis (1994) and Chan & Dunleavy (1995) is also prevalent in Hong Kong accountancy faculty. We posit that the counsel these students receive from faculty will

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\* Assistant Professor, Department of Accountancy, City University of Hong Kong.

<sup>†</sup> Assistant Professor, Department of Accountancy, City University of Hong Kong

have more impact if received from members of their own gender. The results confirm the aforementioned pattern of male/female mix observed in the top business community.

## 2. Background

The economy of the Asia-Pacific Region of the world has been growing dramatically in the last decade. Four nations labelled the "Asian Tigers" : Hong Kong, Korea, Singapore and Taiwan, have led the region in economic growth. Of these four, Hong Kong and Singapore lead in the Finance Sector, representing the second and third largest financial centres in the world. Hong Kong, in particular, having benefited from the opening of the Chinese markets, has become the gateway to China. It is ranked second in the world among newly industrialized countries in the 1993 *World Competitiveness Report* (Genzberger et al. 1994, 1). Despite being a British territory, it has enjoyed the hands-off liberty maintained by Britain to allow it to function as the most extreme example of a market capitalist economy, with a minimum of interference from the local government.

The economy of Hong Kong has grown tremendously in the last few years, considerable foreign investment has been attracted into the territory as a result. Nevertheless, there are minimum laws governing labour relations in Hong Kong. For example, there is no social security system, and an equal-opportunity or anti-discriminatory law was only enacted in 1994, with enforcement delayed to 1996. The Sex Discrimination Bill has had a chequered past. It was first drafted in October 1994 in response to pressure from women and labor groups (Wu 1995). The bill has numerous exemptions, e.g., small businesses and religious organizations. Initially the bill was to be implemented on 1 January 1996, but this amendment was defeated in the Legislative Council of Hong Kong. The government subsequently stated that the enforcement of the bill would be postponed until an Equal Opportunities Commission (EOC) charged with the responsibility of enforcing the bill was formed. The EOC was formed in the middle of 1996 and has just begun advertising its role and responsibility to the public, inviting them to submit grievances for investigation. Until a few judgments are rendered by the EOC, the effectiveness of the Sex Discrimination Bill in attempting to balance opportunities for women in the workplace remains in question. The lack of any laws (other than the worker safety laws) governing the labour force, has resulted in male-dominance in most of the top jobs in this region.

Although being a world leading business centre, comparable to New York or London, the region holds steadfast to its traditional Chinese roots. Since 98 percent of the residents of Hong Kong are Chinese, the inhabitants possess many characteristics that are Confucianism in nature, including the stressing of traditional roles for women. Job advertisements

for various positions often emphasize the requirements for a particular gender ("Sales Manager Wanted, Male, above 30" ; "Receptionist Wanted, Female, below 25" ; "Wanted European Females to distribute flyers")<sup>1</sup>. The basic tenets of Confucian thought are obedience to and respect for superiors and parents, duty to family, loyalty to friends, humility, sincerity, and courtesy. The five types of relationships identified by Confucius are : ruler to people, husband to wife, parent to child, older to younger, and friend to friend (Genzberger et al. 1994, 128). Each of them has very clear duties. These traditional values are taught to children in their childhood and influence their thought processes quite dramatically.

Despite the growth in the entertainment industry and the availability of a wide variety of movies and TV programs from abroad, which portray women in all types of situations and roles, the general perception still emphasizes the traditional roles for women. An article in the local newspaper (*South China Morning Post*, 1995) reported a survey of 12-year-old students in a Public School about their thoughts on the roles of their mothers and fathers. An overwhelming majority of both *girls and boys* surveyed expressed the opinion that their mothers should stay home and take care of the house, while the fathers should be the breadwinners.

The phenomenon is particularly astonishing given the fact that enrolments in both the schools and universities of Hong Kong follow the same patterns around most industrialized nations in the world, i.e. there are about as many female students entering post-secondary schools and universities as male students. In accounting, the number of female students and graduates is about equal to that of male students and graduates (Chan & Dunleavy, 1995). However, the employment pattern shows that women only account for a small proportion of managerial and professional positions, and also in membership in the Hong Kong Society of Accountants at the Fellow level (Davis 1994, Chan & Dunleavy 1995). Chan & Dunleavy (1995) thus conclude that "there is a glass ceiling for the upward mobility of women accountants." Ng(1995) also contends that men's attitudes towards women as managers are less favourable than that of women's.

In entering the job market, the initial reference that occurs of accounting students to the accounting profession is from their instructors. In a survey of the upper-level students in a large American public university, Blank (1984) finds that the largest percentage of them got initial reference to a Big 8 career from their Instructors, who "serve as role models or advisors to these students who are considering career options (page 112)." This consideration could be even more crucial for the female accounting students in Hong Kong. This is because in Hong Kong society, females are less likely to receive encouragement to pursue

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<sup>1</sup>: This is true even after the passage of the Sex Discrimination Bill and the formation of the EOC.

a professional career from other sources such as family and friends. Given the general orientation of the Hong Kong culture towards traditional roles for women, we posit that the counsel these students receive from faculty will have more impact if received from members of their own gender. Therefore, the purpose of this paper is to investigate the profile of the accountancy faculty in the Hong Kong area. It is interesting to see if the glass ceiling for the upward mobility of women accountants in Hong Kong observed by Davis (1994) and Chan & Dunleavy (1995) is also prevalent in Hong Kong accountancy faculty.

### 3. Methodology

In Hong Kong, university-level education is limited to the seven tertiary government-funded institutions. All students after their secondary school education compete for entry into one of these institutions, indicating their preference for a particular course of study. All seven institutions offer programs in accountancy. Data on the accountancy faculty in these seven institutions are obtained for the 1994-95 academic year from the *Hong Kong Accounting Faculty Directory*. This publication gathers from the seven institutions a listing of all their accountancy faculty, including the gender, rank, area of teaching/research, terminal degree, professional qualifications, and year of joining the institution. The data collected are then analysed to acquire a profile of the accountancy faculty in tertiary institutions in Hong Kong. A Chi-square statistic is employed to test if there are significant differences between males and females among various positions, year of joining, and their terminal degrees.

### 4. Results

Table I presents the distribution of the accountancy faculty at the seven institutions. Of the 162 faculty who taught accounting courses at the start of the 1994-95 academic year, 72.84% were male and 27.16% were females. There were no females at the rank of Professor, while there were nine males in this rank, comprising 5.56% of the total faculty.<sup>2</sup> As to the rank of Associate Professor, there were fifteen males and six females, constituting 9.26% and 6% of the faculty, respectively. Whereas for the Assistant Professors, 77 were male (47.53%) and 31 were female (19.14%). To test if the proportion of males versus females is different among different ranks, the Chi-square statistic is employed. The result does not indicate a significant difference, with  $\chi^2$  equal to 3.556 and the degree of freedom is 3. This could be driven by the fact that seventy percent (31 out of 44) of the female faculty had the rank of Assistant Professor, which was similar to the case with males (77 out of 118, i.e. 65%).

<sup>2</sup> For comparative purposes, the ranks at the seven institutions were standardized to the American equivalent used by only one institution in 1994-95.

**Table 1**  
**Distribution of Accountancy Faculty by Gender**  
**for the 1994-1995 Academic Year**

Gender	Professor	Associate Professor	Assistant Professor	Other Ranks	Total
Male	9 (5.56%)	15 (9.26%)	77 (47.53%)	17 (10.49%)	118 (72.84%)
Female	0 (0.00%)	6 (3.70%)	31 (19.14%)	7 (4.32%)	44 (27.16%)
Total	9 (5.56%)	21 (12.96%)	108 (66.67%)	24 (14.81%)	162 (100%)

$$\chi^2 = 3.556, df = 3, p \text{ value} = 0.3136.$$

Since a majority of the faculty in Hong Kong institutions have junior ranks, an analysis is done by year of joining the individual faculties to examine the duration they stay with the respective institutions. This piece of information is missing for ten faculty members, however. Table 2 reports the results for the remaining 152 faculty (94% of total) teaching accountancy in Hong Kong as at December 1994. Based on the Chi-square test ( $\chi^2$  statistic = 10.62), the proportion of males versus females joining the institutions is significantly different at the 0.01 level over the various time periods examined. The results show that the majority of the accountancy faculty in Hong Kong institutions (111 of 162, representing 68.52% of the total faculty) have joined their respective institutions after 1985. However, only sixteen (9.88%) joined the institutions prior to 1980, comprising nine males (5.56%) and seven females (4.32%).

**Table 2**  
**Distribution of Accountancy Faculty by Year of Joining**

Gender	Pre-1980	1981-1985	1986-1990	1991-1994	Total
Male	9 (5.56%)	14 (8.64%)	36 (22.22%)	52 (32.10%)	111 (68.52%)
Female	7 (4.32%)	11 (6.79%)	14 (8.64%)	9 (5.56%)	41 (25.31%)
Total	16 (9.88%)	25 (15.43%)	50 (30.86%)	61 (37.66%)	152 (93.83%)*

\*The year of joining was missing for 10 faculty members (7 males , 3 females). The percentage is calculated based on the total number of faculty which is equal to 162.

$$\chi^2 = 10.616, df = 3, p \text{ value} = 0.014.$$

During the period 1981-1985, 25 (15.43%) faculty members joined their respective institutions, they were fourteen males (8.64%) and eleven females (15.43%). Fifty of the total faculty joined in the period 1986-1990 constituting 36 males (22.22%) and 14 females (8.64%). This also represents 31.51% of the total male faculty and 33.33% of the total female faculty, respectively, at the time. Whereas, in the period 1991-1994, there was a total of 61 faculty joining Hong Kong institutions : 52 males (32.10%) and 9 females (5.56%). The males that joined in this period represent 44.07% of the male faculty, while the females that joined in this period represent 20.45% of the total female faculty.

From the aforementioned discussion, after 1985, males that have joined the accountancy faculty represent 74.58% of the total male faculty, while only 23 females joined after 1985, representing 52.27% of the total female faculty. In terms of the proportion to the total faculty, the males that joined after 1985 represent 54.32%, while the females that joined then represent 14.20%. In sum, although there has been a substantial recruitment in Hong Kong institutions after 1985, the positions have been filled mostly by males. In fact the recruitment of female faculty in this region has actually declined. Given that Hong Kong has been exposed to the influence of the Western world where there is an emphasis of equal employment opportunity, and the enrolment proportion of male to female student is almost equal, the low percentage of female hires is alarming.

To examine the background of the faculty, we analyse their terminal degrees and professional qualifications. As shown in Panel A of Table 3, 45.20% of the total faculty have a Ph D degree or its equivalent. Of the 53 holding the doctoral degree, 51 (43.97%) are males, while only two (1.23%) are females. As to the 95 (58.64%) masters degree holders, 59 (36.42%) are males and 36 (22.22%) are females. The remaining eleven have other degrees (information is missing for three faculty members). The Chi-square test also confirms the significant difference (at a significance level of 0.00001) between male and female with respect to the terminal degrees held.

Aside from the terminal degree, professional qualification is also looked into and is presented in Panel B of Table 3. Of the 118 male faculty members, 65 have one or more professional qualifications, representing 55.08% of the male faculty and 40.12% of total faculty combined. Whereas, thirty of the female faculty members have one or more professional qualifications, representing 68.18% of the female faculty and 18.52% of the total faculty. Thus, a larger proportion of the female faculty has professional qualifications as compared to the male faculty, but the difference is not significant based on the Chi-square test. In contrast, the difference between the proportion of the male faculty



(43.22%) possessing a Ph D or equivalent degree as compared to the proportion of females holding this degree (4.55%) is highly significant.

**Table 3**

**Panel A : Distribution of Accountancy Faculty by Terminal Degrees**

Gender	Ph D	Masters	Others	Total
Male	51 (31.48%)	59 (36.42%)	6 (3.70%)	116 (71.60%)
Female	2 (1.23%)	36 (22.22%)	5 (3.09%)	43 (26.54%)
Total	53 (45.20%)	95 (58.64%)	11 (6.79%)	159 (98.15%)*

\*The degree information was missing for 3 faculty members (2 males, 1 female).

$$\chi^2 = 22.105, df = 2, p \text{ value} = 0.000$$

**Panel B : Distribution of Accountancy Faculty by Professional Qualification**

Gender	With Professional Qualification	Without Professional Qualification	Total
Male	65 (40.12%)	51 (31.48%)	116 (71.61%)
Female	30 (18.52%)	13 (8.03%)	43 (26.54%)
Total	95 (58.64%)	64 (39.51%)	159 (98.15%)*

\*The degree information was missing for 3 faculty members (2 males, 1 female).

$$\chi^2 = 2.46, df = 1, p \text{ value} = 0.117.$$

## 5. Summary and Conclusions

The analysis of the profile of the accountancy faculty in tertiary institutions in Hong Kong indicates the same pattern of male/female mix observed by Chan and Dunleavy (1995) in the business community. The proportion of male to female faculty members is much larger than the proportion of male to female students entering the university for an accountancy degree, which is approaching equality. While there has been substantial recruitment in Hong Kong institutions since 1985, the majority of the new hires have been males, most with Ph D degrees and no

professional qualifications. The impact of this mix of faculty on the recruitment of female students into the accounting profession remains to be seen. In a society where traditional roles are stressed for women, it may be more difficult for a female accounting student to aggressively pursue a professional career, especially as there is a paucity of role models and advisors within the faculty for the female student to consult. In the absence of equal opportunity laws, the need for positive role models within the faculty becomes even more imperative since the initial reference to a professional career often comes from the instructors. Hong Kong tertiary institutions may need to examine the issue of recruiting more female accountancy faculty members carefully in the future.

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## ON THE PRIMACY OF THE BALANCE SHEET

*A. K. Basu\**

The conventional profit and loss account-driven system of financial reporting has been heavily criticised in recent years for failing to provide a satisfactory basis for the resolution of conflicting and controversial issues. Arguments are now being put forward in favour of shifting the main focus of attention in financial reporting from the profit and loss account to the balance sheet. This paper examines the essential characteristics of the two approaches to financial reporting, and explains why it is considered necessary to promote the balance sheet as the key financial statement.

### 1. Introduction

For many years there has been a serious debate among accountants over the issue of whether the balance sheet or the profit and loss account should be regarded as the foundation of preparation and presentation of external financial reports of companies. Although the majority opinion now seems to be in favour of promoting the balance sheet as the key financial statement, the debate still remains unresolved. There are many accountants who are still not prepared to award any kind primacy to the balance sheet. The balance sheet versus the profit and loss account debate centres around the principal theme of whether profit measurement in accounting should be based on the measurement of wealth, or vice versa. Under the balance sheet approach, profit is measured in terms of accretion to net wealth (i.e., assets less liabilities) and, as such, emphasis is laid on the measurement of assets and liabilities, which are regarded as the two principal elements of financial statements. All other elements of financial statements in a balance sheet-driven system are derived from these two basic elements. The profit and loss account approach, on the other hand, requires profit to be measured through the process of matching revenues and expenses. Under this approach, the key elements of financial statements are revenues and expenses. The way in which revenues and expenses are recognised and measured in accounts determines the way in which the recognition and measurement of assets, liabilities and other elements of financial statements will take place. This approach often gives rise to some balance sheet measures that may not correspond to the definitions of assets and liabilities. The main function of the balance sheet

\* Reader, Department of Commerce, University of Calcutta

in a profit and loss account-driven system is to connect two successive profit and loss accounts. Thus in this system the balance sheet is relegated to a position of secondary importance. In some cases the two approaches may produce identical measures of profits and net wealth, but in other cases it may not be so.

The balance sheet approach appears to be superior in many respects to the profit and loss account approach. The principal merit of the balance sheet approach lies in its providing accounting policy-makers with a rational starting point for effectively dealing with the controversial accounting recognition and measurement issues. This is why the superiority of the balance sheet is being emphasised over the profit and loss account in the conceptual frameworks developed by many leading accounting standard-setting agencies with a view to providing themselves with a coherent set of principles for guiding their actions. The profit and loss account approach suffers from a number of conceptual limitations, but it is simple and easy to operate. Besides it provides the preparers of accounts with a great degree of latitude in the matter of allocation of transactions between the balance sheet and the profit and loss account. But the greatest shortcoming of the approach is that it often gives rise to certain balance sheet amounts which are difficult to interpret. The discussion below aims at examining why the profit and loss account approach often appears to be difficult to defend, and at explaining how the quality of corporate financial accounting and reporting can be improved by allowing the balance sheet to take precedence over the profit and loss account.

## **2. The Profit and Loss Account Approach : Features and Limitations**

The profit and loss account approach has a number of limitations. Some of these limitations are so serious in nature that the approach becomes difficult to defend. Those who are inclined to argue in favour of this approach often try to defend their position by saying that the approach is not only very simple but also saves work. There is possibly no dispute about the fact that the profit and loss account approach has the merit of simplicity, but this cannot be the sole criterion for its acceptance. In order to be acceptable, the approach must also be logically defensible. But what seems to be a matter of concern is that the approach is too poorly equipped to be able to provide a logical starting point for resolving disputes. In a profit and loss account-driven system, controversial issues are in most cases resolved purely on an ad hoc basis. Consequently, there often arise conflicts between the treatments that are adopted. The profit and loss account approach is guided by a basic principle which is known as *matching*. But the principle is so loosely constructed that considerable difficulty is encountered in using it as a

basis for development of a coherent set of rules for preparation and presentation of financial statements. Efforts have been made in the past from both academic and professional accounting circles to solidify the matching principle but these have not proved to be much successful. It is true that the matching principle is still used widely in current accounting practice, but it does not enjoy the same degree of acceptance as before. In order to obtain an understanding of why the principle is no longer taken seriously, it is at first necessary to know how it operates and what it really seeks to achieve.

The matching concept was first propounded as a fundamental concept of accounting in 1940 by Paton and Littleton in their classic publication entitled *An Introduction to Corporate Accounting Standards* (Paton and Littleton, 1940). These accounting writers abandoned the then prevailing belief that profit is an increment to net wealth and, instead, propagated the notion that profit is related to each and every event which forms part of enterprise earning activities. They put forward the argument that the most desirable course of action for the accountant would be to match all incurred costs with the results to which they are judged to relate. The arguments that they advanced in support of their claim were so convincing that they soon captured the imagination of a major section of the accounting community and the principle of matching came to be recognised as one of the most pervasive principles in accounting. D.P. Hylton in an article published in the mid-sixties described the popularity of the concept of matching thus :

In the minds of many accountants, this single convention outweighs all others; in other words, if a given procedure can be asserted to conform to the matching concept, nothing else need be said ; the matter is settled and the procedure is justified (Hylton, 1965, p. 824).

The supporters of the historical cost system of accounting still consider matching as one of the basic processes of measurement of periodic profits of continuing entities.

The matching approach is essentially a transactions-based approach. This is so because the approach seeks to compute periodic results by looking at the transactions that have actually taken place. The transactions that are related to the earning activities of the entity are divided into two categories : input transactions and output transactions. Periodic profits are computed by matching input transactions with output transactions. The process is also known as the matching of efforts and accomplishments. Revenues and costs are the financial representations of outputs from and inputs to the earning activities of the entity. The matching process begins with the recognition of the revenues that the entity has earned during a given period. After the revenues are recognised, efforts are then made to match the costs that have been consumed in

producing the outputs represented by such revenues. Revenue recognition normally takes place when goods are sold or services are rendered by the enterprise to an external party at a bargained price. This is referred to as the point of realisation. There are certain situations under which revenue recognition may take place both before and after the point of realisation. But these are the exceptions to the general rules.

Costs are said to be incurred by an entity when it acquires goods or services at a bargained price. In accounting there exists a distinction between cost incurrence and cost recognition. Cost recognition takes place when there is an expiration of a cost. An expired cost can be either an expense or a loss. An expired cost comes to be recognised as an expense if it is found that its benefits have been consumed in the process of generation of revenues. In some cases costs expire without rendering any benefits to the revenue earning process. Costs that expire in this way are treated as losses. All the expired costs are taken into consideration in measuring periodic profits.

There are many costs whose beneficial lives extend into several accounting periods (e.g., costs incurred in the acquisition of durable assets such as buildings, plant and equipment, and furniture). In respect of such a cost it is only the portion which expires during the current period that is to be matched against the current period's revenues. The unexpired cost is treated as a deferred cost and is transferred to the balance sheet as an asset. This is the cost which awaits further expiration. Thus the items that are shown in the balance sheet that are prepared in accordance with the principle of matching costs with revenues as assets are nothing but unexpired costs. It may not be reasonable to attribute any other meaning to such costs.

One of the most controversial aspects of matching is the allocation of costs. Costs are allocated both on an inter-period and an intra-period basis. When parts of the costs incurred in a period are shifted, either directly or through some reclassifications, to another period, the process is called inter-period allocation of costs. The costs that are applicable to a particular period may again have to be reallocated in the same period to the different segments or product groups of the entity. This is known as intra-period cost allocations. Intra-period cost allocations do not affect aggregate results but segmental or component results may be affected by how costs are assigned to different areas of the operations of the entity. However, most of the allocation-induced controversies in financial accounting are related to inter-period allocation of costs. If a cost renders benefits to several accounting periods, it has to be allocated to all these periods with a view to ensuring proper matching between costs and revenues. The matching concept is based on the assumption that there is a cause and effect relationship between costs and revenues. It is in

view of this that a committee of the American Accounting Association (AAA) once expressed the opinion that costs "should be related to revenues realised within a specific period on the basis of some discernible positive correlation of such costs with the recognized revenues" (AAA, 1964, p.369). But what creates problems is that in most cases it becomes difficult to identify any positive correlations between costs and realised revenues. According to Liao (1979, p. 230), the lack of any positive correlation between costs and revenues has been responsible for the emergence of a large variety of bases of allocation and reallocation of costs. Cost allocation, however carefully this might be done, is bound to be to some extent arbitrary in nature.

The critics of the matching approach have tended to argue that cost allocation is not defensible because it does not give due recognition to the vital fact that most of the inputs used in producing outputs interact with one another in several different ways. This interaction factor is of such crucial importance that it can by no means be ignored. Since inputs interact with one another, difficulties are often encountered in determining the contribution of a particular item of input in the process of generation of outputs. In this connection it has been pointed out by Thomas (1974) that costs cannot be allocated to revenues in any defensible way because inputs to a process interact with one another in generating outputs the value of which is different from what they would have yielded separately. This is indeed a very crucial observation. According to Sprouse (1971, p. 92) matching of costs and revenues in most cases is a practical impossibility and, because of this, premium has to be placed on judgement "as to whether a cost is significantly applicable or inapplicable to a revenue and whether a division of a cost into amounts to be deferred and amounts to be expended is appropriate or inappropriate". Sprouse has also pointed it out that the matching process does not even require a concept of profit or income to serve as a basis for making these judgements.

If the matching concept is strictly adhered to, it ultimately gives rise to a balance sheet which embraces many debit balances which are not real world assets and many credit balances which are not real world liabilities. In other words, the balance sheet that is generated by the matching process practically turns out to be a mere sheet of debit and credit balances. According to Sprouse (1971, p. 91) :

....The matching concept, based as it is on the pre-eminence of the income statement and relying heavily on subjective notions of correctness, applicability and propriety, is responsible for those unique accounting products that one so frequently finds in today's sheet of balances : deferred charges that are not assets and deferred credits that are not liabilities.

The revenue recognition principle followed by the accountant whose basic reasoning depends on the profit and loss account is also



characterised by some allocation-induced problems. The adherence to the market transactions test in the matter of recognition of revenues often results in shifting one period's wealth accretion to another period. If the goods that are produced in one period are sold in another period, the profits that are attributable to such goods are then entirely shifted to the period of sale. This practice is difficult to support because it creates distortions in periodic performance measurement. The process of earning revenues in most cases is a continuing one. So it may not always be proper to identify a single point as the moment of recognition of revenues. But this is what is actually being done in the conventional transactions-based system of accounting. Instead of allocating revenues over the entire earning cycle, the system chooses the point of sale as the moment of revenue recognition.

The matching process gives rise to some additional problems during periods of continuing inflation. This happens so particularly when the inputs to be matched with the recognised revenues of a period are measured in terms of historical costs. There is a prevailing notion that the matching principle is applicable only in the context of historical cost system of accounting. But this is not correct. The principle is equally applicable to any other system of accounting which is founded on the notion of allocating the data generated by the accounting process to the periods to which they are judged to relate. For example, the current purchasing power (CPP) system of accounting, which aims to adjust historical cost amounts for changes in the level of prices, is dependent on the same allocation procedures which constitute the basis of historical cost accounts. In this system the inputs to be matched with outputs are simply restated based on an appropriate index number. The replacement cost system of accounting is another example in this context. This system is also basically an allocation-based system. Under this system of accounting, the inputs to be matched with outputs are evaluated not in terms of their past acquisition prices but in terms of their current replacement costs.

The emergence of the decision-usefulness approach to financial reporting has brought in its wake the need to shift the main focus of attention in financial accounting from the profit and loss account to the balance sheet. The profit and loss account approach has a preparers bias. It allows the preparers of accounts to exercise a great deal of freedom in determining what balances they will carry forward to the balance sheet and what they will extinguish through charging against current revenues. The techniques that are used for this purpose are known as deferrals and accruals. There is evidence which tends to suggest that the freedom afforded by the profit and loss account approach is widely utilised by company managements in reducing the variance of

their profit changes. Stated differently, the flexibility provided by the profit and loss account approach enables managements of companies to "smooth" their reported profits. When profit smoothing is practised on a large scale, its burden has mostly to be borne by the balance sheet and, consequent upon this, the statement ultimately reduces to a dumping ground for accommodating all sorts of wastes of the matching process. In a situation like this it becomes difficult for the users of financial statements to assess the financial health of the entity by interpreting the numbers contained in its balance sheet.

The decision-usefulness approach, which has received widespread support in recent years from both professional and academic accounting circles, seeks to maintain that the overriding objective of corporate financial reporting should be to provide users with information useful for making economic decisions. The economic decisions that are taken by the users of published company accounts (e.g., investment decisions, credit decisions etc.) require an evaluation of the ability of the entity to generate cash and the timing and certainty of their generation. The balance sheet has a key role to play in providing information useful for predicting the future cash flows of the entity. But it can play this role satisfactorily only when it is in a position to portray realistically the current financial position of the entity. According to the draft Statement of Principles of the Accounting Standards Board (ASB) in the UK, the financial position of an enterprise encompasses the economic resources it controls, its financial structure, its liquidity and solvency, and its capacity to adapt to changes in the environment in which it operates" (ASB, 1995, Paragraph 1.10). The balance sheet which is produced by the profit and loss account-based approach can hardly be effective in providing this kind of information.

William Baxter has in an article published very recently (Baxter, 1996) offered some valuable arguments as to why one should back the balance sheet as the key financial statement of the entity. One of the arguments he has advanced in favour of rejecting the profit and loss account approach is that it is heavily biased towards the preparers of accounts. According to him :

The transactions approach looks at accounts through the eyes of the book-keeper and not the users. The average reader of published reports knows little of book-keeping and cares less. He thinks (somewhat misguidedly) that the report is not a history but an up to date picture : and if asked about the nature of assets, is hardly likely to define them in terms of costs awaiting extinction.

Although it is admitted by Baxter that the profit and loss account approach is simple and saves work, yet he is not prepared to back it because of its inability to provide meaningful asset values.

### 3. The Balance Sheet Approach

The balance sheet approach, which is also known as the asset/liability approach, is founded on the principle of awarding primacy to the balance sheet. In a balance sheet-driven system of accounting the main focus of attention is on assets and liabilities. Items that do not represent real world assets or liabilities cannot occupy any place in the balance sheet if the asset/liability approach constitutes the basis of preparation and presentation of financial accounts. The net wealth of the entity in a balance sheet-oriented system is the difference between the entity's assets and liabilities. Under this system of accounting, periodic profit is measured by differentiating between the amounts of the net wealth of the entity at the beginning and at the end of the period. Changes in the entity net wealth which are caused by transactions with the owners have, of course, to be duly adjusted in order to arrive the profit of the period. In a balance sheet-oriented system profit tends to represent the amount by which the entity is better off at the end of the period than it was at the beginning. This concept of profit closely resembles to the income concept developed by the economist. The balance sheet approach usually requires the use of current values as the basis of measurement of assets and liabilities, but it can also be based on historical values. The operation of a balance sheet-driven system of accounting has been described by Robert S. Kay thus :

Under the asset/liability view, a cost that does not meet the definition of an asset cannot temporarily rest in the balance sheet and must be charged against current operations. This approach results in a balance sheet that usually contains harder rather than softer (e.g., exchangeable versus nonexchangeable) assets and liabilities and avoids deferral of soft costs for matching against future revenues (Kay, 1981, p.7-8).

This statement by Kay very nicely captures the essence of the balance sheet approach. It should be mentioned in this connection that the proponents of the balance sheet approach do not deny the importance of the profit and loss account. What they actually require is the ascendancy of the balance sheet over the profit and loss account. This means that the profit and loss account cannot dictate the contents of the balance sheet. The thing has to be just the reverse. The role of the profit and loss account in this system is to provide explanations of the phenomena that have caused changes in the balance sheet amounts.

#### **Balance Sheet Focus in the Conceptual Frameworks**

Accounting standard-setting bodies in many countries, including the International Accounting Standards Committee (IASC), have in recent years shown great interest in developing conceptual frameworks with a view to providing a basis for adoption of a coherent, consistent approach in the matter of formulation of accounting standards. It has occurred to

them that without the assistance of a coherent set of principles it is difficult for them to maintain consistency between the standards they formulate from time to time. Some of the standard-setting bodies have already been successful in constructing their conceptual frameworks and these are being referred to by them in the matter of formulation of new standards. A conceptual framework normally begins by setting the objectives of corporate financial accounting and reporting. This is followed by a step which involves setting out the qualities that financial information must have in order to meet the stated objectives. The next step is to offer a description of the structure and elements of financial statements. Finally, it sets out the principles of how financial information should be measured and presented.

With the exception of the one developed by the French accounting profession, all other conceptual frameworks have emphasised the balance sheet over the profit and loss account. The French conceptual framework has deviated from the rest by adopting a profit and loss account perspective. This has become so in view of the fact that the French accounting profession does not subscribe to the viewpoint being held by its Anglo-Saxon counterparts to the effect that a user perspective is possible. According to the French draft framework, there are too many users and too many conflicting or contradictory uses of published financial statements and, as such, it is not possible to provide information that in a true sense is user-oriented. The preparers of the document have taken the position that financial statements should basically be concerned with providing measures of wealth creation, for this is the only thing in which all those having an economic interest in the entity are equally interested. The profit and loss account is promoted in the French document as the key financial statement because it focuses on the process of wealth creation.<sup>1</sup>

The Financial Accounting Standards Board (FASB) in the USA is the pioneering accounting standard-setting agency in the world in the matter of development of a conceptual framework for financial accounting and reporting. It has spent millions of dollars in developing its conceptual framework which now appears in six separate statements under the title of *Statement of Financial Accounting Concepts (SFAC)*. Most of the other conceptual frameworks that have since been developed in other parts of the world are closely related to this FASB framework and, in fact, are derivatives of it. The UK Accounting Standards Board's (ASB) draft *Statement of Principles for Financial Reporting (SOP, hereafter)*, which has been published in complete form just one year ago (ASB, 1995), is

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1 Those who are interested in the details of the French conceptual framework are advised to read Walton, 1996).

the latest one in the series. In this document, like the other ones developed in the Anglo-Saxon accounting world, there is a clear preference for the balance sheet approach, though the same is not explicitly spelled out in it. Andrew Lennard of the ASB in a recently published article (Lennard, 1996) has tried to pacify the critics of the balance sheet approach by saying that the SOP does not place undue emphasis on the balance sheet to the detriment of the profit and loss account. But the opinion that he has expressed in this article is his personal opinion and is not necessarily shared by the ASB. If the underlying spirit of the document is examined carefully its balance sheet preference becomes clearly evident. The central message of the SOP is that the integrity of the balance sheet is to be maintained at all costs. If there arises a conflict between the balance sheet and the profit and loss account approaches then, according to SOP, it is the former approach which should prevail. Had the intention of the ASB been different, assets and liabilities would not have been recognised as the key elements of financial statements.

### **How Assets and Liabilities are Defined**

The question of whether or not an item should be recognised as an asset or a liability depends on how assets and liabilities are defined. The SOP defines assets and liabilities as follows :

Assets are rights or other access to future economic benefits controlled by an entity as a result of past transactions or events (Paragraph 3.5).

Liabilities are obligations of an entity to transfer economic benefits as a result of past transactions or events (Paragraph 3.21).

These definitions of assets and liabilities are similar in all significant respects to those contained in the FASB conceptual framework. For example, in its *SFAC 6* the FASB defines assets "as probable future economic benefits obtained or controlled by a particular entity as a result of past transactions or events" (FASB, 1985, Paragraph 25). In the same document, liabilities are defined "as probable future sacrifice of economic benefits arising from present obligations of a particular entity to transfer assets or provide services to other entities in the future as a result of past transactions or events" (Paragraph, 35).

In addition to assets and liabilities, the balance sheet also contains another element which is termed as "equity". But this equity is not any independent element of financial statements. The equity of an entity is obtained by deducting all of its liabilities from all of its assets.

Items which do not correspond to the definitions of assets or liabilities have naturally to be excluded from the balance sheet. David Solomons, who is a staunch supporter of the balance sheet approach, has in his publication entitled *Guidelines for Corporate Reporting* made the observation that the integrity of the balance sheet will be threatened if it

is required to incorporate items which do not have demonstrable real world existence as resources or obligations (Solomons, 1989). In this context there arises a question as to when something that satisfies the definition of an asset or a liability should be recognised in the balance sheet. The SOP has an answer to this question. It states that where a transaction results in an item that meets the definition of an asset or a liability, it should be recognised in the balance sheet if : (1) there is sufficient evidence of the existence of the item, and (2) the item can be measured at a monetary amount with sufficient reliability (Paragraph 4.6). The occurrence of a transaction is, therefore, a necessary condition for the recognition of an asset or a liability. But it is not a sufficient condition. The item must be in existence and capable of being expressed in monetary amount. The SOP also makes it clear as to when an asset or a liability should cease to be recognised. According to the document, an asset or a liability should cease to be recognised if there is no longer sufficient evidence that the entity has access to future economic benefits or an obligation to transfer economic benefits (Paragraph 4.8).

There still exists one more vital issue that has to be addressed in this connection. This relates to the valuation bases to be adopted in measuring assets and liabilities. The proponents of the balance sheet approach are usually inclined to believe that the balance sheet amounts should be based on current values. The SOP has also accepted the merits of current values, but it does not want to take any hasty decision in the matter. It has expressed the viewpoint that practice should develop by evolving in the direction of greater use of current values. According to the document, the reliability and cost factors have also to be taken into consideration in the matter of incorporation of current values.

The term "current value" has no unique meaning in accounting. Accountants have developed several concepts of current values that can form the basis of preparation of company accounts. The current value concepts that have been widely discussed in the literature include discounted present value or net present value (NPV), current replacement cost (CRC), and net realisable value (NRV). Ideally the balance sheet should use NPV, but the subjectivity and uncertainty involved in the calculation of present value of future cash flows often become so high that it is really difficult to develop an effective accounting system based on this method of valuation. A large section of those who are in favour of inclusion of current values in published company accounts are of the opinion that CRC can be a very useful basis of valuation of assets and liabilities. The replacement cost of an asset can in a great majority of cases be ascertained without much difficulty. The ascertainment of CRC is at least not as difficult as that of NPV. CRC can also easily pass the tests of relevance and reliability. But difficulties arise when the assets in



respect of which replacement costs are to be ascertained are partly used up ones. The suggested procedure in such a case is to use the replacement costs of equivalent new assets and reduce them proportionately for the portions that have been used up. This procedure is essentially an allocation-based procedure and, as such, its propriety can easily be questioned. The propriety of the application of replacement cost principle can also be questioned when the nature and composition of the assets of the entity change very rapidly as a result of technological and other changes in the environment of business.

Under the NRV method of valuation, assets are valued at their net realisable prices. There are many accounting theorists that have vigorously argued in favour of using NRV as the basis of valuation in company accounts. The list includes celebrities like Chambers (1966, 1975 and 1980)<sup>2</sup> and Sterling<sup>3</sup> (1970 ; 1971). A few years ago, the Research Committee of the Institute of Chartered Accountants of Scotland (ICAS) published a discussion document entitled *Making Corporate Reports Valuable* (ICAS, 1988) which also puts forward many convincing arguments in support of basing company accounts on NRV. According to this discussion document, the principal merits of the NRV method of valuation are follows :

- (1) Net realisable values can be observed in the market place ;
- (2) The value measures produced by the method are easily understood by the users of company accounts ;
- (3) There is no need to make any allocation of costs if assets are valued at their current realisable values ;
- (4) The additivity principle is strictly adhered to when assets are valued based on their current selling prices ;
- (5) The information that the NRV system is designed to provide can be very useful in evaluating the liquidity and adaptive ability of the entity ; and
- (6) The use of selling prices can ensure a greater degree of inter-firm as well as inter-year comparisons.

It has been argued from certain quarters that the appropriate current value of an asset should be determined using the "value to the business" concept of valuation.<sup>4</sup> According to this concept, an asset is to be valued

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2. The accounting system developed by Chambers has been described by him as "continuously contemporary accounting (CoCoA)".

3. Sterling is in favour of using an accounting system which is called exit price/constant purchasing power accounting.

4. The value-to-the-business method is also known as the "deprival value" method. The erstwhile British inflation accounting standard, SSAP 16, was based on this concept of valuation.

at its current replacement cost if this cost is less than the asset's recoverable amount. In the reverse case, the asset is to be valued not at its replacement cost but at its recoverable amount. The recoverable amount of an asset, it may be mentioned here, is the higher of NPV and NRV. In most of the cases, the replacement costs of assets do not exceed their recoverable amounts. So the value-to-the-business method of valuation can, for all practical purposes, be regarded as a modified version of the replacement cost method of valuation. The method, therefore, suffers from the same limitations as those of the current replacement cost method. Furthermore, as the method keeps provisions for inclusion of values derived from different bases of valuation, the additivity principle may get violated.

#### **4. Implications for Accounting Practice**

If the balance sheet is emphasised over the profit and loss account, this has several implications for accounting practice. Many of the prevailing financial accounting and reporting rules will have to be thoroughly recast or reoriented. The need for recasting is likely to appear to be very much pressing particularly with regard to the rules that require the use of matching-based amortisation techniques. At present there are many accounting rules that are heavily guided by the principle of realisation. These rules will have to be altered appropriately so as to enable them to be friendly towards unrealised gains resulting from market fluctuations. In some cases there may also arise a need to formulate new accounting rules for the recognition and measurement of items which correspond to the definitions of assets or liabilities but are not currently recognised in accounts. A few cases are discussed below in order to illustrate these points.

#### **Accounting for Goodwill**

Goodwill is an unidentifiable intangible asset which is also sometimes referred to as an accounting ufo. It is customary in accounting practice to divide goodwill into two categories : self-generated goodwill and purchased goodwill. Self-generated goodwill is not normally accounted for in published company accounts. So the goodwill with which accountants have to be concerned most of the time is the purchased goodwill. The accounting standards that are currently in force in many countries require purchased goodwill, which is the difference between the fair value of the consideration and the fair value of identifiable net assets, to be capitalised when acquired. The capitalised amount is then to be amortised over the asset's economic life. This is basically a matching-based approach and is not at all consistent with the asset/liability view. Purchased goodwill cannot be regarded as an asset on any date subsequent to the date of purchase because it then becomes simply an unexpired cost. Many are



inclined to argue that unamortised goodwill can be treated as an asset if the carrying value does not exceed the recoverable amount. The statement sounds very well but the principle inherent in it is difficult to implement in practice. The nature of goodwill is such that it cannot either be sold or acquired separately. Moreover, it seems not proper to treat purchased goodwill differently from self-generated goodwill.

### **Accounting for Provisions**

Provisions are a controversial topic in accounting. There are considerable differences of opinion among accountants as to how provisions should be identified, measured and reported in published company accounts. It is a common practice among companies to make provisions against profits for different categories of future costs and losses the amounts and timings of which are uncertain at the time accounts are finalised. According to Flower (1996, p. 77), provisions give rise to controversies in accounting for two major reasons. The first reason is that, since provisions relate to future events, it requires accountants to exercise a great deal of judgement in ascertaining the amounts at which they are to be reported. The other important reason is that the financial position and performance of an entity may be materially altered if large provisions are included in accounts. If the balance sheet approach is adopted, many of the prevailing controversies concerning the accounting treatments of provisions will automatically get eliminated. In a balance sheet-driven system of accounting, provisions will be recognised in accounts only if there exists a present obligation to incur future expenses. But the obligation should not be an imaginary one. It should be of such a nature that there is practically no way of avoiding it.

### **Deferred Taxation**

Deferred taxation is an issue of crucial significance to the accounting profession in those countries where financial accounting and tax accounting are guided by separate sets of principles and rules. If financial accounting profit and taxable profit are computed based on different schemes, the amount of tax payable by an entity during a period may bear little relationship to the profit reported in its financial accounting statements. Differences between taxable profit and accounting profit arise due to many reasons. Some of these reasons are differences in the timings of recognition of revenues, expenses and other components of periodic profits, differences in the valuation bases adopted, and exclusion and inclusion of items of revenues and expenses. Taxation rules often grant tax credits in respect of certain specific expenditures the government wishes to encourage. This is another factor responsible for bringing about differences between taxable profit and accounting profit.

Under the matching approach, a system of inter-period tax allocation is often employed in order to account for income taxes in published accounts. According to this system, income taxes applicable to a period are determined on the basis of all the revenue and expense transactions that are included in the measurement of pre-tax profit of that period. Tax differences which arise due to timing differences are first recognised by an originating entry in the period during which the differences originate and reversing entries are passed in the periods during which the differences reverse. In the intervening periods, the differences are reported in accounts as deferred credits or deferred debits. The term "deferred taxation" is used in the literature to refer to this system of inter-period allocation of income taxes. Deferred taxation may not always be compatible with the asset/liability view.

Controversies concerning inter-period tax allocation can be mitigated to a great extent if taxation is accounted for in company accounts in accordance with the liability method. In this method, tax recognition is guided by the probability of future tax payments. This method of tax accounting is consistent with the asset/liability view because the balance sheet figures that the method yields represent the amounts that are most likely to be received from or paid to the government. The FASB in its accounting standard *SFAS 96* has favoured this approach (FASB, 1987).

### **Accounting for Depreciation**

In the conventional profit and loss account-driven system of accounting, depreciation is regarded as the process of allocation of the original costs of tangible fixed assets (less scrap value, if any) over their expected useful lives. Accountants have developed several alternative methods (e.g., straight-line method, reducing balance method, output method etc.) for the purpose of determining how the depreciable cost of an asset is to be allocated to different periods. But this concept of depreciation, which is based on the principle of allocation of costs, is not consistent with the balance sheet approach. Under the balance sheet approach, depreciation computation has to be based on periodic revaluation of assets. The amount of depreciation applicable to an asset in a period should, in a balance sheet-driven approach, be equal to the difference between the value of the asset at the beginning and at the end of the period. For example, if NRV is used as the basis of asset valuation, depreciation will then be computed in terms of the amount by which the net realisable value of the asset has fallen during the period.

### **Research and Development Costs**

It has nowadays become customary for big companies to spend large sums of money every year on research and development (R&D) activities. While some of these moneys are spent on routine activities, others are

spent in connection with new development projects. Routine R&D expenditures are normally treated as expenses and are charged to the profit and loss account, but non-routine expenditures are often capitalised and transferred to the balance sheet as assets. Under the matching principle, R&D costs can be deferred if there is sufficient reason to believe that the entity incurring the costs will be able to derive benefits in the future from them. If R&D costs are deferred, there will then arise a need to amortise them over the future accounting periods that they are intended to benefit. The proponents of the balance sheet approach would, however, object to this practice of deferring the R&D costs on the ground that the future benefits of such costs cannot be identified and measured objectively at the time they are incurred. So in a balance sheet-driven system most of the R&D costs would have to be expensed when incurred.

### **Cash Flow Statement**

The cash flow statement has emerged in recent years as a very important component of published company accounts. In many countries (e.g., UK, USA, Australia and Canada) it is now obligatory for companies to include a cash flow statement in their annual financial reports. The objective of this statement is to provide information regarding the sources and uses of cash during the accounting period. Cash flow information is considered to be extremely useful to the users of published company accounts in evaluating the ability of the company to generate cash flows in the future. Historical cash flows are objectively determined measures in that these are not in any way affected by the judgements of those who prepare accounts. Cash inflows and outflows are independent of how transactions are allocated between the profit and loss account and the balance sheet. The historical cash flows of the entity are also not affected by how assets and liabilities are valued for financial reporting purposes. So if emphasis in financial reporting is shifted from the profit and loss account to the balance sheet, it will not alter the aggregate cash inflows and outflows of the entity. Such a shift may, however, change the cash-flow measures disclosed under different headings.<sup>5</sup> Thus if a certain cost in respect of which cash has been spent during the period is shifted from the balance sheet to the profit and loss account on the ground that it does not meet the definition of an asset, it will alter the amounts of both the operating and investment cash flows. The net effect will, of course, be zero since the decrease in operating cash flows will be accompanied by an equivalent increase in investment cash flows.

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<sup>5</sup> Cash flows are normally classified by activities. According to the international accounting standard, the cash flow statement should report cash flows during the period classified by operating, investing and financing activities (IASC, 1993).

### Off Balance Sheet Financing

In recent years there has arisen a tendency among many companies to use various off balance sheet schemes for financing their asset acquisitions. The principal motivation behind the adoption of the practice of getting finance off the balance sheet is to bring about an improvement in the character or quality of the balance sheet. In most cases companies are induced to adopt off balance sheet financing devices with a view to keeping their debt equity ratios in line with the expectations of the market.<sup>6</sup> If the balance sheet is used as the foundation of preparation and presentation of financial statements, it will be necessary to bring many of the off balance sheet assets and liabilities on to the balance sheet. In the UK, the ASB (1994) has recently promulgated an accounting standard, FRS 5, which aims at providing solutions to the problems being brought about by the large-scale use by companies of off balance sheet schemes of financing their asset acquisitions. When the standard will be implemented for the first time, it will be necessary to give recognition to many additional assets and liabilities. The principal message of the standard is that it is the economic substance of an entity's transactions rather than their legal forms which should be reflected in accounts. Its guiding principles are whether a transaction has given rise to new assets and liabilities and whether it has changed any existing assets or liabilities.

These are only a few instances of how the prevailing accounting practice would be affected if financial reporting is keyed to the balance sheet. Other areas where significant changes might have to be brought about include capitalisation of interests, accounting for intangibles other than goodwill, deferred revenue expenditures, and accounting for government grants and subsidies.

### 5. A Compromising Approach

It is argued from some quarters that the balance sheet versus the profit and loss account debate can be resolved to a great extent if both the approaches are allowed to run parallel. Under this compromising approach, the matching principle would be retained for the profit and loss account and the balance sheet would keep the asset/liability focus. Those who are inclined to argue in this way possibly miss the point that the two approaches are not independent but are mutually exclusive. That is, if one is used the other cannot be used. The simultaneous use of the two approaches will, instead of solving the problems of financial reporting, give rise to further complications in accounting. However, the compromising approach may be adopted on a temporary basis during

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<sup>6</sup> For a detailed discussion of the schemes available for keeping finance off the balance sheet, see Basu (1996).

the transition phase. The matching process may be allowed to operate during this phase in certain limited spheres but it will have to be abolished gradually. In fact, both the FASB and the ASB are now following this course of action. This is reflected in some of their recently-pronounced accounting standards and discussion documents wherein both the valuation and matching approaches have been mixed in one way or another. The ASB discussion document on goodwill is a good example in this context. In this document the ASB has endeavoured to combine the matching-based amortisation methods with the valuation-based capitalisation and annual review methods.

If the balance sheet and the profit and loss account are prepared based on different conceptual approaches, the articulation between the two statements may be lost. There may, therefore, arise a need to introduce a new kind of statement for restoring the desired articulation. The main functions of this statement will be to accommodate those by products of the matching process which do not meet the definition of assets or liabilities and also to account for those changes in the entity's net worth from non-owner sources that are not reflected in the profit and loss account. The net amount of the debits and credits included in the statement will ultimately be transferred to the balance sheet as a separate component of ownership equity. The statement of total recognised gains and losses (STRG&L), the preparation of which is advocated in the UK accounting standard FRS 3 (ASB, 1993) happens to be a statement which comes somewhat nearer to the one being referred to here. The ASB's draft SOP (ASB, 1995) also contains provisions relating to the STRG&L. It is provided for in the SOP that the profit and loss account should concentrate mainly on the operating or trading items and the STRG&L should concern itself with other gains and losses. The document maintains it further that the gains and losses in respect of those assets and liabilities that are held by the entity on a continuing basis primarily in order to enable its operations to be carried out should be reported in the STRG&L (Paragraphs 6.27 and 6.28).

The notion of the STRG&L is almost a new one. So the accounting community in the UK has not yet been able to make itself familiar with it. The statement also appears to be to some extent confusing because it does not offer any clear explanations as to how it will be incorporated into the basic structure of the doubleentry system of accounting.

## **6. Concluding Comments**

The conventional historical cost-based profit and loss account approach has lost much of its relevance in recent years mainly because of its failure to provide satisfactory answers to the controversial issues currently facing the accounting profession. There is a growing realisation

that the quality of financial reporting can be improved significantly if financial statements are prepared based on the principle of emphasising the balance sheet over the profit and loss account. The profit and loss account-dominated system of financial reporting, which is linked with transactions, may not appear to be that irrelevant if the economic environment in which the entity operates remains more or less stable over time. But the relevance of the system is seriously questioned when the economic environment of the entity changes very rapidly. In such an environment past transactions often fail to serve as an adequate guide for providing reliable indications of the economic condition and performance of the entity. The economic status of the entity changes constantly in a rapidly changing environment because of the operation of factors such as changes in price levels, fluctuations in interest and discount rates, shifts in consumer tastes and preferences, and changes in technologies. The impact of these and similar other changes on the economic status of the entity cannot be realistically assessed merely by looking at past transactions. In fact, many of the changes in the economic status of the entity in a rapidly changing environment are brought about by events and phenomena that are outside the entity's control and are not attendant to any specific past transactions entered into by it. In a situation like this the adoption of a valuation-based balance sheet approach becomes an unavoidable necessity.

The pre-eminence of the balance sheet has already been recognised in the conceptual frameworks developed by the world's leading accounting standard-setting agencies. The balance sheet approach has also received strong support from the academic side. The accounting standards that have been formulated in recent years by the world's leading accounting standard-setters, such as the FASB, the ASB and the IASC, have much more of a balance sheet perspective than a profit and loss account. But what these standard-setting agencies have not yet been able to settle is the measurement base to be adopted in measuring assets and liabilities. The FASB still retains its historical cost focus. It allows exceptions only in respect of those assets which are highly liquid. The ASB has expressed its preference for current values but is still undecided as to the kind of current value it will ultimately promote. The IASC in its conceptual framework (IASC, 1989) has examined the merits and demerits of the alternative valuation bases but has not given any indication as to the base that should be adopted. The measurement issue needs serious consideration. The historical cost-based balance sheet approach may be a better substitute for the conventional profit and loss account approach but it can by no means be regarded as an ideal one. It is widely recognised that valuation information is more useful to the users of financial statements than historical cost information. Efforts have, therefore, to be made to develop a system of financial reporting that is not only keyed to the balance sheet but is also based on current values.



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## AN EMPIRICAL CASE FOR VALUE ADDED REPORTING IN THE US

*Ahmed Riahi-Belkaoui\**

This study presents US evidence on the informational content of the disclosure of net value added components made concurrently with earnings. As expected, earnings component of value added is viewed favorably by the market while the nonearnings components (interest, tax and wages) are negatively related to market return.

### 1. Introduction

A challenge to the role of earnings concerns the role of value added data when included in financial reports as suggested by the American Accounting Association Committee on Accounting and Auditing Measurement (1991) and most of the international accounting research literature (Riahi-Belkaoui, 1994). Value added represents the total return of the firm earned by all providers of capital, plus employees and the government.<sup>1</sup> It includes earnings as the return to shareholders plus other components as the return to other stakeholders : the government, the bondholders and the employees. The informational content of earnings is well established in the literature (see Riahi-Belkaoui, 1992). The purpose of this study is to extend the relevance findings by assessing the incremental information content of the disclosure of nonearnings components of value added released concurrently with annual earnings. We measure informational content in the form of a statistically significant association between disclosure of earnings and nonearnings components of net value added and annual stock returns. We find that annual stock returns for each year of the period 1973-1991 are positively related to earnings and negatively related to the nonearnings components of value added. The results are robust in a contextual setting, conditioned by different levels of inflation and GNP growth.

### 2. The Value Added Concept

Value added represents the total wealth generated by the efforts of all providers of capital, plus employees and the government. It can be obtained by the following rearrangement of the income statement :

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\* Professor of Accounting, University of Illinois at Chicago.



$$S-B = W+I+DP+E+T \quad (1)$$

$$S-B-DP = W+I+E+T \quad (2)$$

where E = earnings, S = sales revenue, B = purchases of material and services, W = wages, I = interest, T = taxes, and DP = depreciation.

Equation (1) expresses the gross value added; Equation (2) expresses the net value added. In both equations, the left side (the subtractive side) shows the value added (gross or net), and the right side (the additive side) shows the disposal value among the stakeholders.

Equation (2) can also be rearranged as follows :

$$S-B-DP = E+(W+I+T) \quad (3)$$

$$\text{or NVA} = E+NE \quad (4)$$

where

NVA = S-B-DP = net value added, and,

NE = W + I + T = nonearnings components of net value added.

### 3. Estimation Model

Equation (4) shows that the net value added, as a measure of wealth, is equal to earnings plus the nonearnings components. Most studies examining the market relevance of accounting data have focused on the informational content of earnings without regard to the other concurrent disclosures that allow the computation of the total wealth generated by the firm. Assuming that the market is uniquely composed of equity holders, the market return will be as expected positively related to earnings and negatively related to nonearnings components of net value added. The rationale for the negative sign is the fact that these nonearnings components reduce the amount of wealth to be allocated to equity holders. Accordingly, the return model may be stated as follows :

$$(AP_{jt} + D_{jt})/P_{jt-1} = a_0 + a_1 E_{jt}/N_{jt} - a_2 NE_{jt}/N_{jt} + e_{jt} \quad (5)$$

or

$$(AP_{jt} + D_{jt})/P_{jt-1} = a_0 + a_1 ECW_{jt} - a_2 NECW_{jt} + e_{jt} \quad (6)$$

where P = market price of the security, D = dividend, N = number of shares, ECW = earnings component of wealth, and NECW = nonearnings component of wealth.

The model depicted in equation (6) implies a linear relationship between the annual return of a security on one hand and the earnings and the nonearnings components of wealth. The relationship is expected to be positive with the earnings component and negative with the nonearnings components.

#### 4. Data and Sample Selection

The accounting return variables used were based on net value added, earnings and nonearnings components of net value added. More explicitly, these measures are defined from COMPUSTAT data items as follows:<sup>2</sup>

1. Net Value Added (NVA) = the sum of labor expenses, corporate taxes, dividends, interest expense, minority shareholders in subsidiaries, and earnings.

2. Earnings (E) = income available to common equity.

3. Nonearnings Components of Value Added (NE) = NVA-E.

The firms examined in this study represent all the NYSE and AMEX firms that have available NVA, E, P, N and D data over the period 1973-1991 on COMPUSTAT. The selection procedure resulted in a sample of observations ranging between 156 and 220 firms per year.<sup>3</sup>

#### 5. General Results

The regression model (6) is estimated for each of the years 1973-1991. The results are presented in Table 1. The F statistic shows that the regression is significant each year at least equal to 0.05. In addition both the earnings and nonearnings components are significant for each of the years examined and have the expected sign: positive for earnings and negative for nonearnings. In addition, the across year significance test, first suggested by Bernard (1987), indicates that both the earnings and the nonearnings components of wealth, as measured by NVA, are significant at  $\alpha=0.01$ .

#### 6. Impact of Inflation and Growth

Similarly to other studies on the value relevance of accounting data (Bernard and Stoher, 1989), this study extends the analyses to evaluate the impact of changes in the macroeconomic variables of inflation and GNP growth. The inflation and GNP growth levels were measured respectively by a) the annual change in the Consumers' Price Index, and b) the annual change in real GNP. The sample was divided into three categories of inflation rate and GNP growth rate. The classification is shown in Table 2. Table 3 shows the results of regression (6) for each of the three levels of inflation and GNP growth. The results show that the significance and the sign of earnings and nonearnings components are not affected by the levels of inflation and GNP growth.

#### 7. Concluding Remarks

This study presents evidence on the informational content of the disclosure of net value added components made concurrently with

earnings. As expected, the earnings component of net value added is viewed favourably by the market while nonearnings components of earnings are negatively related to annual market return. The market as a theatre for equity holders views the return to equity holders as positive while the returns to other stakeholders are viewed as a decrease in the net wealth allocated to equity holders, which explains the negative relationship. In any case, the valuation model relating accounting return to market return is more complete when relating the total return of the market to the total wealth generated, as measured by the net value added.

Taken as a whole, the results of this paper add to the growing empirical evidence on the market relevance of value added. Thus an important accounting policy issue is the desirability of disclosing the underlying data needed to compute value added variables. The current disclosure system does not mandate the disclosure of some of the information needed to compute the value added. At present, less than 15% of the firms listed on COMPUSTAT consistently disclose labor expenses, a key variable. The FASB's Statement of Financial Accounting Concepts No 5 (1984) notes that supplementary financial statements are a practical way for introducing and gaining experience with new kinds of information. Value added concepts are examples of the type of innovation in need of experimentation (AAA, 1991). More research on its relevance is also needed.

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Table 1

## Value Relevance of NVA Components

Year	Interest	ECW	NECW	F	R <sup>2</sup>	N
1973	-0.11842*	0.00541*	-0.00169**	3.428**	4.34%	180
1974	-0.18352*	0.10896*	-0.00058	7.499*	7.69%	182
1975	0.53347*	0.10307*	-0.00379*	3.833**	4.86%	195
1976	0.33786*	0.02186*	-0.00049	3.440**	3.22%	209
1977	0.11633*	0.12274*	-0.00573*	16.164*	13.34%	212
1978	0.19418*	0.06689*	-0.00350*	4.218*	3.74%	219
1979	0.26850*	0.06641*	-0.00280*	4.079*	3.61%	220
1980	0.27138*	0.24727**	-0.00079	3.289**	3.07%	210
1981	0.05949*	0.00808**	-0.00041*	3.429**	3.42%	201
1982	0.29458*	0.12004**	-0.00116*	2.719**	3.16%	194
1983	0.26669*	0.11078*	-0.00528*	6.158*	6.27%	186
1984	0.01461**	0.19006*	-0.00091**	8.544*	8.63%	183
1985	0.39838*	0.04152**	-0.00399*	6.715*	6.91%	183
1986	0.28429*	0.05207**	-0.00343**	3.407**	3.64%	171
1987	0.17877*	0.17435**	-0.00333**	3.437**	3.80%	176
1988	0.17800*	0.05640*	-0.00051*	4.516*	3.60%	174
1989	0.26623*	0.04465**	-0.00236**	9.918**	3.34%	171
1990	-0.01851*	0.02691**	-0.00159**	3.940**	4.43%	172
1991	0.29137*	0.06666*	-0.00116*	3.773**	4.63%	156
Across Year Means	0.18970*	0.08596*	-0.00288*			
t(Value)	23.939*	4.604*	-3.662*			

\* Significant at  $\alpha = 0.01$ \*\* Significant at  $\alpha = 0.05$

**Table 2****Classification of Firm into Categories of Inflation and Growth Levels**

Categories	Low	Medium	High
Inflation	1983 (7.2) <sup>1</sup> , 1985 (3.6) 1986 (1.9), 1987 (3.6) 1988 (4.1), 1991 (4.2)	1973 (6.7), 1976 (5.8) 1977 (6.5), 1982 (6.2) 1984 (4.3), 1989 (4.8) 1990 (5.4)	1974 (11.0), 1975 (9.1) 1978 (7.0), 1979 (11.3) 1980 (13.5), 1981 (10.3)
GNP Growth	1974 (-0.5) <sup>2</sup> , 1975 (-1.1) 1980 (-0.6), 1982 (-2.3) 1990 (1.3), 1991 (-0.9)	1979 (2.8), 1981 (1.6) 1983 (3.8), 1985 (8.9) 1986 (2.8), 1987 (3.0) 1989 (2.7)	1973 (5.4), 1976 (5.1) 1977 (4.6), 1978 (4.8) 1984 (6.0), 1988 (4.0)

<sup>1</sup> The number between parentheses is the change in consumer price index.

<sup>2</sup> The number between parentheses is the change in GNP.

**Table 3****Impact of Inflation and GNP Growth Levels in the Value Relevance of NVA Components**

	Inflation Ratio		GNP Growth			
	High Inflation	Medium Inflation	Low Inflation	High	Medium	Low
Intercept	0.19444*	0.11969*	0.26156*	0.14419*	0.23485*	0.21022*
EPW	0.00785**	0.02598*	0.03500*	0.01811*	0.01691*	0.05106*
NEPW	-0.00039**	-0.00067**	-0.00042	-0.00067*	-0.00088*	-0.00001**
F	2.958**	13.009*	4.407*	6.197*	7.888*	6.031*
R <sup>2</sup>	3.33%	3.93%	3.83%	3.90%	3.19%	3.07%

\* Significant at  $\alpha = 0.01$

\*\* Significant at  $\alpha = 0.05$

1. Studies examining the usefulness of value added include Cox (1978), Gray and Maunders (1980), Karpik and Belkaoui (1989), Maunders (1985), Mcleary (1983), Morley (1978, 1979), Renshall et al (1979), Rutherford (1972), Sinha (1983), Suojanen (1954), Riahi-Belkaoui (1993, 1994), Bannister et al. (1991) and Bao et al. (1989).
2. Each variable is defined using COMPUSTATs annual industrial data definitions as follows :  
$$NVA = (42_t + 6_t + 19_t + 21_t + 15_t + 49_t + 36_t - 36_{t-1})$$
$$E = 20_t$$
3. The sample for each year was trimmed of extreme outliers by 1% of each variable. The influential outliers were identified using an observations influence on a) predicted values of the dependent variable, b) residuals, c) the covariance matrix, and d) the regression fit [Belsey, Kuh and Welsh, 1980]. The regression run on the original data were less significant than those on the truncated sample.

### **Congratulations**

**Prof. Sukumar Bhattacharya**, President of the Indian Accounting Association Research Foundation and former President of the Indian Accounting Association, has been elected President, All India Federation of Tax Practitioners (1997-1999).

Direct Taxes Professionals' Association, Calcutta, at its 15th Anniversary Celebration felicitated Prof. Bhattacharya on Saturday, the 11th January, 1997, at Kalamandir, Calcutta, for his contributions to direct taxes and accounting. Hon'ble Mr. Justice V. N. Khare, Chief Justice, Calcutta High Court, and Mr. K. P. Singh, Chief Commissioner of Income Tax, were present as Chief Guest and Guest of Honour respectively.

**Our heartiest congratulations to Prof. Sukumar Bhattacharya.**

*Editor*

**PROFITABILITY OF PUBLIC SECTOR ENTERPRISES IN  
THE PERSPECTIVE OF NEW ECONOMIC ENVIRONMENT**

*Ashit Kumar Sengupta\**

In this paper a few questions have been raised regarding the justifiability of considering the profitability as an ideal indicator of viability of public enterprises. Public enterprises should be taken for the important instrument of public sector activities, while their economic implications should not be always judged in terms of private accounting philosophy.

I

Today one of the important limitations of the smooth functioning of the Indian economy is said to be the prevalence of a large number of non-viable public sector projects. Particularly, the enormity of losses and deficits in their operations have considerably abused the thinking of a large section of the people in such a proportion that they have even started questioning the justifiability of sustaining the public enterprise activities.

However, at the very outset it is worthwhile to note that the operations of the public sector units should be judged not in financial terms but in terms of allocation of resources, distribution of economic gains and stabilization of the economy as a whole [Sengupta, 1983].

At first, the dichotomy of the business activities in India into the public sector and the private sector can be analysed in terms of economic viability. The entire business sector today is beset with serious limitations resulting in widespread unemployment, inflation, foreign exchange deficits, and so on. In this connection, the profitability criterion is often assumed to be an ideal index for examining the challenging situation, since the fundamental disequilibrium of a large number of public enterprises is abundantly exposed in the persistent balance of deficits in their commercial activities. However, it should be borne in mind that while the same situation in the private business units leads to a 'backward shifting' of the burden, the public authority attempts at alleviating the problem by way of maintaining the interpersonal equity and work effort through revenue-expenditure process [Sengupta, 1983]. For example, the so-called sick units in the private sector may give rise to wage cuts, reduction

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\* Reader in Commerce, Vidyasagar Evening College & Guest Lecturer, Dept. of Commerce, University of Calcutta.



in workforce, increase in the tax burden because of the government subsidy, export incentives and financial assistance by the government for the modernisation drive, while the existence of non-viable public projects is supported by the government in an effort to maintain its overall planning system. Under the circumstances, the profitability of public enterprises may not offer such a big challenge to the economy that can merit an analysis in isolation with a meaningful result. Rather, the profitability problem should be judged in the light of macroeconomic considerations [Baumol, 1970].

## II

The entire public sector activities can be segregated conveniently into four categories, namely, (i) the basic function of a government along with the raising and disbursement of funds, (ii) the provision of social overhead capital, (iii) industrial operation, for the supply of some important producer's goods and services, and (iv) general commercial activities. Through all the above categories the public sector has reached a commanding height in the Indian business world. Considering the above performances as a whole, the question of commercial surplus seems to be an insignificant area for isolated analysis with regard to the challenge to the growth of Indian economy. It may be argued that it is the structure of property relationship in this economic system that has failed to fulfil the aspirations of the people by way of full utilisation of the minimum available inputs provided by the public sector [Baran, 1957].

It is the public sector that can somehow ameliorate the situation arising out of commercial deficits through tax-transfer process. Different tax handles are designed to favour one section of the people at the expense of the other. Here, the problem of tax-subsidy-trade off constitutes one of the basic areas of investigation for public activities. For example, from social welfare point of view, public transport fares are kept low through subsidy grants and thereby benefiting a particular section of the people, while new areas of public imposts, or the expansion of the base and/or rates of taxes are made available in pursuance of interpersonal equity. Irrigation and power projects, running at a deficit, may generate positive externalities in the form of higher output, employment opportunity, and suppressed inflation. Conversely, any increase in cess and charges on the primary sector may lead to cost escalation of the sector, and is thereby usually reflected in all sectoral cost structures. It may result in further inflation, and in the reduction in output and employment via decreased demand in the subsequent period. Furthermore, the prices fixed by the public sector for a large number of producer's goods and services merit attention for a similar analytical angle. [Tinbergen, 1972].

In the ultimate analysis all public sector projects are tax-financed. Even the burden of public activities that are debt-financed is ultimately borne by the tax-payers. So, the entirety of the macroeconomic adjustments through public sector may likely to devalue the importance of profitability analysed in a microlevel or piecemeal fashion. It does not follow that the minimum of efficiency of each of the public units should be left unrecognised in view of the overall macroeconomic considerations. It follows at the same time that many economic indicators other than only the profitability should attract considerable attention. The formation of physical assets as well as community's investment structure, the spread effect on the aggregate demand by publicly subsidised operations, the building of foreign exchange reserves even through an absolute drainage from the public exchequer, the disposal of a number of inputs at lower prices to the economy at large, and so on, are some of the significant developments in any less developed free enterprise economy. [Hansen, 1965; Bettelheim, 1958]

In the light of some extra-economic compulsions, some other issues may be analysed here. For example, the public enterprises as ideal employer are mostly labour absorbing although they are capital intensive. One should not ignore the fact that the enterprising hives are immensely hummed without the matching stock of honey. Or, to put it differently, the managerial decision for the exponential growth of the wage bill is hardly matched with the corresponding objective of productivity increase. Conversely, the numerical strength of the regiment under the command of the "managerial mansabdars" in public enterprises is sometimes commensurate with the utter demonstration of the ministerial prowess, let alone the problem of top heavy administration. It is a truism as such that the area of research of the financial accounting of public enterprises is beset with the wealth of stochastic, non-financial variables. The challenge emerges from without the enterprises. Perhaps this is why the fundamental project reports for the installation as well as expansion of public enterprises are not made public for the so called public interest [James, 1975; Arrow & Lind, 1970].

Pricing factors involved in public enterprises are also sometimes governed by political decisions instead of governing the efficiency of the financial management. The whole gamut of the socio-economic orderings in our community gives rise to some undesirable pricing techniques that fall outside the province of financial managers [Little & Scott, 1976].

The fundamental business activity of the public enterprises involves the disposal of producer's goods and services as well as consumer goods and services. Policies for the present cost structure and prices of some crucial inputs to the economy supplied by the public sector generally emanate from political decision, but they may virtually turn out to be

beneficial in macroeconomic perspectives if economically feasible order is maintained in the general public finance process [GOI, 1956].

In terms of profitability, what happens in case of defence production units is of special interest. Excepting for the defence enterprises that have marketable products, the defence undertakings have their products to be exhausted either in the military uses or in obsolescence. The entire financial burden falls heavily on the people as imposts. Profitability of these concerns may thus initiate lukewarm attention to the financial analysts. In this way, enterprises for social overhead, non-marketable defense product, and those supplying producers' goods may be characterised as an especially designed economic category that should be judged in the light of macroeconomic and social considerations instead of sheer profitability constraints. Thus, profitability can hardly pose a challenge to a planned development because of the prevalence of a conscious consideration for exigency of the economy as well as some extra-economic and partisan compulsions [Jones, et al (ed); 1982].

### III

Even if the pertinent question of possible increase in tax burden is raised, it can be argued that the operation of the public household as revealed in the Central Government Finance Accounts may pose much more serious problem of finance. Who knows where goes the several thousand crores of rupees under the head of "miscellaneous and unforeseen charges"! In addition, the aggregate expenditure for administration and internal security has already assumed a serious proportion of the public exchequer. There is very little doubt that the public operation for the increase in social and economic justice has an inverse relation with the expenditure involved in internal security.

Sheer profitability estimates of the public sector may not offer the right points to ponder. The issues of capital goods formation (that help generate further income), the opportunity of increased employment (that plays a positive role in distribution), along with widespread operations of the public household in apparently non-productive areas of food-for-work and many other social security measures, and the increasing proportion of tax-transfer process of the government activities are some of the momentous drives of the public sector that call for the analysis of the problem of profitability in a comparable manner.

There is every reason to doubt that the increased profitability of a handful of public enterprises may largely cushion the problem of social security measures that causes a cutback in the financial resources of the government. It may be argued, on the other hand, that there is a multiple of issues in macroeconomic perspectives that are likely to offer a far reaching challenge to the economy in general, and government revenues

in particular, relative to the problem of profitability of some public enterprises, even if such other contributions of public sector units as employment generation, distributional justice, social overhead and enterprise capital formation, foreign exchange reserves, are not considered with equal stress. A pertinent question may, doubtless, be raised as to the financial haemorrhage from the public exchequer for the different forms of subsidy and export incentives to a large number of private firms that are likely to manipulate the pricing factors only to demonstrate a convenient export bill. Examples of this sort that goes against the interest of the public economy are legion. Thus, the so-called challenge lies elsewhere.

#### IV

However, in view of the unsatisfactory financial performances imposing burden of taxation, and the tarnished image of a number of public firms, various constraints to the profitability of them should be properly explored in the light of the very nature of these undertakings as well as aggregate economic situation of a less-developed country like India. Analysts very often differ in the concepts of profit, income, return on capital etc. that are conveniently utilised for the measurement of efficiency in the form of some accounting ratios or in some economic dimensions [Sengupta & Fox, 1971]. However, setting this debate aside, it is considered desirable to offer a critique of the very essence of the "profitability paradigm". There is divergence of approaches towards the efficiency of the public sector enterprises. Profitability is generally advocated as a fairly good index of efficiency. By and large, this is borne out by the conventional efficiency analysis of the private enterprises. But it is worthwhile to admit that profitability is not the single yardstick to judge the efficiency. There are a number of approaches towards this goal namely fiscal, employment, development, stability and productivity approaches. On the contrary, the very essence of profit making as the fundamental object of private enterprises may be put into question, let alone the object of maximisation of profit [James, 1975].

Profit is never the single motivational force behind business promotion. It is the optimal allocation of fund that motivates the establishment of business. This is particularly true in case of public sector projects whereby the society's allocative efficiency and distributional justice are to be ensured. No doubt, the surplus creation contributes to the achievement of optimal allocation but it is never the sole parameter of the decision for allocation [RBI Bulletin, 1966]. The pressure to breakeven rather than make losses provide motivation for companies to promote rather not to drift away from efficient allocation. Government has to deal with the problem in what is known as a trade off between the objectives of equity and efficiency. The stress given on the role of profit as a prime mover

to the business behaviour is compatible with the property system. In the case of public enterprises, investment vehicles may be kept running through the process of reduction in the enormity of consumption of the people of a certain income scale and thereby attempting at the distributional justice. Profit making, not to speak of the maximisation of profit, offers little reason for business promotion to the public household as against the private entrepreneurs.

It is said that public enterprise is a hybrid organisation whose understanding requires a multi-disciplinary perspective. Public enterprises have to act largely as vehicles for implementing government policy, mostly by extra-economic processes, bureaucratic and political. On the other hand, they have to perform many functions, namely production, finance, and marketing. They are themselves a heterogeneous group.

Public and private enterprises alike very often fall under the pressure of non-commercial social objectives. The politico-economic aspirations of different classes of a society are also expected to be achieved through the performances of both of them. The responsibility of supporting this objective in favour of the vulnerable classes of people falls heavily on the public sector.

In India, as elsewhere, this sector is found to have a tilt towards these aspirations of the ruling class for obvious reasons. A general question is now-a-days raised as to how far "public" is the public sector activities in any free enterprise economy. Private enterprises are never averse to the establishment of public projects in so far as the formation of social overheads is concerned. It is only in the case of parallel public sector units to the private firms that the rationale of the public sector is vehemently contested.

## V

In Tinbergen term, there is a multiplicity of steps in the quest for the "optimum organisation of the economy". The specification of an interdependent set of desirable outcomes, (marginal condition of Pareto efficiency being one subset) and the choice of a set of institutions to attain the expected result are the two important steps [Tinbergen, 1972]. In public enterprises one is to mediate the two polar institutional possibilities for the desirable outcome, that is, a combination of centralised direction with decentralised market signals. It is very often seen that market failures in social welfare maximisation and organisation failures reflected in undesirable cost structure may inspire the public sector for an intended deviation from private behaviour (say, willingness to price at marginal cost rather than marginal revenue in a natural monopoly) or even towards an unintended deviation (say, cost inefficiency). Any way, efficiency in static (single period) terms is required to be extended to a



dynamic multi-period formulation in case of all the public firms. Large scale modern activities with long gestation and pay-back period and unknown production technology and marketing conditions shall always invite such a dynamic approach towards public enterprises. It is worthwhile to recall Schumpeter's "creative destruction" as an essential part of the development process in less developed countries.

Public sector enterprises should be considered as the symbol of performances of a sovereign authority. Operational efficiency is as such not necessarily equated with the profitability criterion. Rather, the so-called allocation-distribution-stabilisation cocktail is assumed to be of primary importance. The phenomenal growth of the public sector dates back to the period of Great Depression when macroeconomic problems rose to its peak. From the very beginning of the growth of public enterprises in a capitalist society, their activities are considered to be complementary and supplementary to the fundamental process of public finance. This is more so in case of LDCs. The greater part of the present volume of public sector projects would have never been registered, had the efficiency indicators borrowed from the philosophy of private enterprises been applied at the time of project installation. There is considerable argument in favour of the view, on the other hand, that the public enterprises fairly comparable with their private counterparts, after having passed through the process of so-called financial atonement, may only add to the number of enterprises of homogeneous objects. This situation may once again fall a prey to the pre-ordained destiny of the free enterprise economy. Then the public authority would have to lose the power of using its enterprises as the agents for checks and balances to the economy. It does not follow that public enterprises should always seek to depart from the normally accepted business and commercial principles. But these principles should, however, be distilled through the objective functions of the sovereign authority as outlined above.

It is maintained by a section of social scientists that the very economic system in which ambitious programmes of the public undertakings are designed can hardly attain its trumpeted goal [Caiden & Wildavsky, 1974]. The macroeconomic variables are likely to run counter to the economically desirable utilisation of the rated capacities of a large number of projects. Herein also lies an answer to the question of efficiency syndrome.

## VI

The appraisal of the public sector investment has always some social dimensions in the form of economic contribution to the nation as a whole—or the cost-benefit calculus within the broad definition of development. "In consequence, projects should not be considered in isolation but as part of an overall sectoral programme, and although the

use of shadow prices allows a considerable degree of separation to be maintained, the importance of a project (and in many cases the valuation of its output) depends upon its place in a sectoral development programme, which is why the topic of microplanning must be considered in conjunction with the project appraisal proper" [Little & Scott, 1976]. This is also why the processing need for 'sociological inputs' to the planning of public investment is increasingly felt. Furthermore, the efficiency of any project, be it private or public, is critically examined in terms of both social costs and social benefits, the former being the internalised costs together with the externalities, and the latter indicating the aggregate social benefits in terms of the distribution of gains and stabilisation of the economy. Any attempt to ameliorate the problem of disequilibrium in the socio economic setting without the consideration of costs and benefits from social point of view is bound to fail. Sometimes, microeconomic considerations are made subservient to the aggregate economic planning goals and achievement. This may result in cost escalation, cutback in output and modification of the investment pattern for a few public firms. Social and macroeconomic exigencies may give rise to such other public decisions against the rigid implementation of programmes in enterprise level. No doubt, this is likely to result in the depreciation of efficiency of some of the public enterprises in conventional accounting terms.

In the cost structure of any private firm externalities are left uncharted, and so, are never internalised. Exponents of the profitability criterion should have no reason to pontify for the surplus thus made. The recognition of the 'socio-eco-system' is more pronounced in the establishment of public firms than the private units. This would have partially caused the relatively high cost level of the public enterprises, and conversely, this is an important area which explains the so-called efficient private firms in comparison with their public counterparts. There is no reason to believe that the social costs of the public enterprises are abundantly explored and internalised, but the minimum of burden of costs that a government authority is to bear in consideration of some environmental effects is entirely denied by the private economic activities. On the other hand, it is the 'public good' that lends the only resort to the private firms in the midst of a widespread environmental degradation.

In the light of the above arguments it can be safely concluded that the profitability criterion (based on some economic and accounting terms) as an index of efficiency does not seem to be universally acceptable. The role of the public sector as an agent of change is so important that one or two indicators based on private accounting analysis can hardly explain the challenge to the economic community.

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## INDIAN STOCK MARKET : SUGGESTIONS FOR REFORM

*Som Dev\**

*Sugan C. Jain<sup>†</sup>*

The paper briefly describes some of the problems in Indian stock exchanges namely, non availability of scripless computer based trading, persistence of unofficial badla dealings, kerb trading, etc. In order to overcome the problems a few suggestions based on sound reasoning are given by the authors.

### Introduction

Over the years the Indian capital market has grown by leaps and bounds. In fact the Indian capital market has widened but depth has yet to be achieved in true sense. The equity cult has no doubt developed but it is not based on pure information, fundamentals and rational behaviour of investors in the case of the primary market and of brokers in the case of the secondary market. There is no doubt that both the segments of capital market (primary as well as secondary) do reinforce each other but they have not really reinforced albeit they have 'supported'. Sentiments in one market must have affected the potentials of the other. The fact remains that when the secondary market is bullish the investors are exploited in primary market and when the secondary market is dull the investors are exploited in the latter. Bullish tendency allows 'fly-by-night' operators to raise money in the primary market, thereafter leaving the investors high and dry. Had the market been based on fundamentals of investment this would not have happened at all. Besides, the policy pronouncements of the government or SEBI too have their impact on the market. In this paper emphasis is placed on certain reforms to be introduced in the secondary market. The primary market is beyond the scope of this paper. However, this does not mean that reforms are not needed there.

The agenda for reform can be considered issue-wise. But this all requires a whole set of policies so that things are done in an integrated fashion rather than in isolation. When isolated steps are taken, the effort to solve becomes a process of composite error. This composite error

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\* Associate Professor, Department of Economic Administration and Financial Management, University of Rajasthan, Jaipur.

† Associate Professor, Department of Accountancy and Business Statistics, University of Rajasthan, Jaipur.

compounds in the end and nothing comes out of it. However, the following issues can be taken up.

### **Management of Stock Exchanges**

In our country we do not have uniformity in the management of stock exchanges (SE). Some of the SEs are organised on the basis of associations and some are under the Companies Act. The Securities Contracts Regulations Act (SERA) 1956, however applies uniformly. The Securities and Exchange Board of India (SEBI) has been a good job by abolishing the proxy system (as it was available under section 176 of the Companies Act, 1956) in SEs and which had resulted in more harm than good. Still the number of directors elected on the board of directors varies from one SE to another. In fact the elected directors system has become the greatest evil. One can say that wherever there is election, lobbying becomes a part of the working of the SE. The system of elected directors must be abolished because decision making becomes biased in many contentious issues. The SEBI on the one hand issues guidelines or directives and expects the executive director of the stock exchange to implement them but the decision making is in the hands of board of directors. A person sitting outside simply cannot imagine the plight of a executive director. Why does it happen? The nominated directors from the SEBI/Government, generally do not find time to attend the board meetings and the executive director is appointed by the SE concerned (though approved by the SEBI) and he continues to be at the mercy of the elected board of directors. There are numerous examples of SEs where the executive directors have been and are being brow-beat on many vitally important issues. Why can we not think in terms of cadre-based posting of executive directors? These EDs should be directly accountable to the SEBI rather than to the board of directors of the SEs. The executive director should be the chief executive officer in true sense of the term. The executive director must have veto powers against the decisions taken by the board, though it may be reviewed by the SEBI if the need for doing this arises. Except in some big SEs, other sections of the SE are also not professionalised. The sections dealing with market operations need to be thoroughly reviewed and overhauled. Over the years it has been proved that SEs cannot be managed by mediocres.

### **Trading System in the Stock Exchanges**

Most of our bourses carry on security trading on an open cry system. This system has certain advantages which are not available in scripless computerised trading. However, this system lacks transparency and should, therefore, be converted into computer-based screen trading. Selling or buying on open cry basis is one area where there is a potential

for investors' exploitation in terms of not quoting the right price. We have accounting period of settlement and it has been an established fact that rolling settlement is a much easier and quicker system than the existing system. Despite our commitment to weekly system of settlement we have not been able to enforce the system strictly. Though the carry forward system in Badla form has been restricted, unofficial Badla is an open secret. Speculation continues unabated but for the present dull sentiment of the market. The market does not reflect the fundamentals of investment and trading. A very insignificant event makes the index jittery whereas very significant events pass off without any reaction. The market has become the place of dominance for large brokers or institutions. Most of the transactions are not backed by delivery ; they are either squared up or carried forward. The present system of imposing margin too could not make things better. Short selling and long buying are still the favourable postures for big brokers. Economic liberalisation has introduced the foreign institutional investors (FIIs) and private mutual funds which are taking the market for a ride. The participation of small investors in the public issues has been reduced. Kerb dealings have not been curbed, though they are negligible at this stage of dull market. But whenever the bullish trend sets in, it may surface again.

### **Suggestions for Reforms**

- (1) The weekly settlement system should be strictly followed and the SEBI must very closely watch and monitor this. It would be better to have the rolling settlement system. Securities which are subject to be dealt with in terms of carry over transactions should continue to remain separate and those which are not subject to carry-over transactions should be based on cent per cent delivery. Any failure to give delivery should result into debiting or crediting, as the case may be, in the respective brokers' account at the end of one trading cycle. Such transactions should not have anything to do with the next settlement.
- (2) Carry forward system must be allowed in certain securities (which may be specified) but not beyond a period of sixty days. The present system is not suitable. Carry forward is necessary to maintain liquidity in the market and the old Badla system was in a way much better. We have not been able to supplant the old Badla system because of the highly regulative and restrictive nature of the present system of carry forward trading. To check excessive speculation, a transaction tax on non delivery based transaction should be seriously considered. Short selling may be allowed only after creating stock lending agencies. This is not difficult now after clearing the decks for the establishment of depositories. Margin is too much restrictive in nature. The

market has to have sufficient liquidity to maintain vibrancy. The quantum of trading in such securities should be linked with capital adequacy norms which should be strictly adhered to. Margin should be sparingly used to check the excessive volatility of some specific scrips. But this would be possible when information relating to market is freely available.

- (3) Market surveillance has to be made more responsive in nature rather than restrictive. This includes ensuring the market information at large. We have formulated laws and regulation to check price rigging and insider trading but much remains to be done on this count. Delayed action generally results in legal battle and ultimately nothing comes out of it. A clear accountability has got to be fixed, whether it is the SEBI or stock exchange authorities or other intermediaries. Handling of every issue by adhoc committee would do more harm than good to the capital market. In fact timing of action in the stock market is most important. There must be a system to find out how a particular scrip suddenly shot up and plummeted immediately afterwards. A system should be evolved to monitor the securities which were not traded at all during last one or two months but traded suddenly with big range in their price. A computerised network can help in monitoring such securities. The software should be developed in such a manner that if a security has not been traded continuously for four trading cycles or more (this period may be more or may be less) it should be dropped from the software. If such securities come up for trading again after the lapse of such a period, there should be a re-entry in the software after being judged by the authority of the stock exchanges. This will keep a check on possible price rigging and potential insider trading.
- (4) A system has to be evolved by which small investors are not thrown out of the mark. In fact, it is the group of small investors who really provide a base to the market. Proportional allotment system has done more harm than good. Let there be small additional trading floors attached to regional stock exchanges. It needs attention so that holding is spread over the entire country and in mofussil areas. For investors in many such areas, marketability and liquidity is a day dream. In this age of high technology it is not difficult to connect the regional stock exchanges with additional trading floors. But it should be ensured that any trading on these floors should be strictly delivery based. Though the argument against this facility is of bad deliveries but scripless trading can overcome this problem.
- (5) Other stock exchanges must be allowed to expand on the pattern of the National Stock Exchange (NSE). One such example is Bombay On Line Trading (BOLT). One fails to understand that when the NSE

can give terminals to many cities out of Bombay, what is the harm if the BSE offers such facilities. Let there be competition among exchanges. One should be free to trade anywhere one likes. Why can these centers not become the counters for buying and selling? Of course, the question of bad deliveries has to be attended to. This will solve to a great extent the problem of bigger spread for arbitrage. However, this can be solved by the proposed computerised scripless trading all over the country. On this issue the SEBI has to have a pragmatic approach. We must shed the feeling of SEs being closed door clubs.

- (6) The dormant members of stock exchanges should be very strictly surveyed. Such members should be compelled either to trade or give up their membership. Some of the members claim that they are active in primary market. This is true to a certain extent. But they should be asked to trade in the secondary market also. Regulations and guidelines relating to active and inactive members should be streamlined.
- (7) In addition to equity shares, the debt market should also be developed. There is a potential trend that debt market may develop in the natural course on account of the fact that equity shares are not able to give as much return as they used to give earlier. But there should be a sincere and deliberate effort to develop it.
- (8) The scheme of national stock market system (NSMS) should be introduced. In fact the establishment of NSE was a part of the NSMS but the former started functioning earlier and became the centre of attraction. In fact, the establishment of NSE has only added to the existing list of stock exchanges with the only difference that it has the backup of required infrastructure which others do not have.
- (9) Efforts should be made to shorten the period taken for transfer of shares. This is an area in which the legislative machinery has failed miserably. An amendment should be made that if the transfer of shares is not effected within one month of lodgement the company involved will invite severe punishment. This will, to a certain extent, check the artificial demand and supply conditions of stock in the market. Also the long period taken in detection of bad deliveries can be effectively avoided. If this is done, small investors could avoid possible losses in trading arising out of delayed transfer of shares. One fails to understand why this cannot be done. At least a provision can be made that if delayed transfer causes any loss to the transferee the company involved will have to pay. Trivial reasons for not transferring shares (e.g. difference in signatures) must invite severe penalties.

- (10) The role of the SEBI has to be more pragmatic and prompt to any situation or development in the market. Simply framing rules and regulations for everything will not be of much help. It will only add pages to present statute books. Most of these regulations remain unimplemented. What we require is an effective machinery and accountability for implementation of the rules and regulations.
- (11) Stock exchanges in which proper infrastructure facilities are not available should not be allowed to carry on their operations until such facilities are developed. The viability question of stock exchanges must be re-assessed. And in the process if need arises, existing stock exchange(s) should be closed or new stock exchanges opened. The assessment should be completely on the basis of economic criteria. Some suggestive criteria may be (a) number of listing of companies, (b) weekly volume not less than Rs. 35 crore, (c) viability and capital adequacy of member brokers, (d) economic conditions and potentials of hinterland areas, etc.

The market has to be made investor friendly otherwise the depth of the market cannot be achieved. These reforms can, to a great extent, bring vibrance to the market.

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## ACCOUNTING FOR AMALGAMATION : A REVIEW OF CONTEMPORARY APPROACHES

*Prithul Chakraborty\**

The recent boom in corporate amalgamations all over the world has brought in its wake the need to develop sound systems and techniques of accounting for amalgamations. This paper evaluates the characteristic features and relative merits and demerits of the two most widely used amalgamation accounting methods, namely, the pooling of interest method and the acquisition method, and suggests measures for their improvement.

### 1. Introduction

Of late, a world-wide wave of change in business environment precipitated by the advancement of science and technology, revolution in communication network, dismantling of the hurdles on the path of investment flow across the world, penetration of the multinational giants into the corporate arenas of the developing countries etc. poses a threat to the existing corporate bodies in the matter of their survival and growth. In this critical juncture, the corporate entities are increasingly being induced to adopt the strategy of aligning with their fellows with a view to ensuring their survival and growth. The annals of corporate growth have registered various forms of such alliance. Corporate amalgamation is one of the widely used forms of such alliance under which two or more companies join together with their resources and go forward as one entity which may be either a new entity or an existing entity swallowing up the entities of other joining companies.

### 2. Role of Accounting in Corporate Amalgamation

If corporate amalgamation is considered as a marriage between two companies then it is accounting the role of which in this respect may be compared with that of an astrologer. This is because just before an amalgamation is planned and negotiated, an accountant is expected to foretell whether the post-marriage life of the combining companies would be happy and prosperous. It is true that in the present world of high risk and uncertainty no amount of precaution can provide full assurance in respect of the success of a corporate amalgamation; but it is also true that the chance of achieving the said success can be substantially

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\* Lecturer, Department of Commerce, University of Calcutta.



improved if the alliance takes place between the right entities in the right manner. Here underlies the importance of accounting that provides the match-makers of a corporate amalgamation with a lot of symbols like earnings, turnover, networth, liquidity ratio, financial leverage etc. which helps them in selecting the proper pair for and the proper manner of the amalgamation. The present and prospective shareholders, managements, creditors and all others who have or contemplate having a relationship with an amalgamation are likely to decide, on the basis of accounting information, whether to affiliate with or to modify the existing relationship with the companies. Therefore, before an amalgamation proposal is mooted, drawing up of the projected financial statements for the proposed amalgamated entity is very much imperative which helps the concerned people in predicting the financial effect of the amalgamation on their interests.

In addition to being used as a means of predicting the financial outcome of a proposed amalgamation, accounting is also used as a sensitive barometer of change in corporate economy during the post-amalgamation period. Financial accounting plays a crucial role in exhibiting and explaining the actual financial outcome of an amalgamation. Every amalgamation is usually announced with a promise of high profits and gains in efficiency which appears to be healthy not only for the concerned entities but also for the economy as a whole. Accounting may be used as an effective tool to ascertain whether such promise has actually been kept after the amalgamation is consummated.

### **3. Scope of the Present Article**

Such significant role of accounting together with the recent upturns in the amalgamation movement provides an impetus to the academicians and the professionals for profound pondering over various accounting issues pertaining to the corporate amalgamation. The present article makes a modest endeavor to highlight some of the far-reaching issues encompassing distinctive features of the contemporary methods of accounting for amalgamation, rationale behind their conflicting behaviour, controversies on such rationale and effectiveness of those accounting methods. Finally, this write-up draws its conclusion with a brief recipe to make the accounting methods for amalgamations more effective, realistic and prudent.

### **4. Distinctive Features of the Contemporary Methods of Accounting for Amalgamations**

The movement of corporate amalgamation took place for the first time in the USA in the last decade of the nineteenth century. But prior to 1950 no special consideration was given to the accounting for

amalgamation. Then an amalgamation was considered as a simple purchase of business of one company by another company and its accounting treatment was just like that of a purchase transaction which was known as "purchase method" of accounting for amalgamation. In 1950, the Committee on Accounting Procedures in the USA issued the Accounting Research Bulletin No. 40 which, in addition to recognising the traditional purchase method, brought under the limelight a new approach entitled the "pooling of interests method" of accounting (or the pooling method). Thereafter, the two methods have assumed a worldwide recognition.<sup>1</sup> The Accounting Principles Board Opinion No. 16 in USA<sup>2</sup>, the International Accounting Standard 22 on "Accounting for Business Combinations" (1983) issued by the International Accounting Standards Committee, Financial Reporting Standard-6 in UK<sup>3</sup>, the Accounting Standard-14 on "Accounting for Amalgamations" in India<sup>4</sup> and the authoritative literature issued by the professional bodies of many other countries find merit in these two methods and accept neither method to the exclusion of the other. The two methods are not alternatives in accounting for the same amalgamation. Rather, there is a contrast between them in respect of the nature of amalgamation to which they are appropriate for use.

Although the accounting standards and principles of different countries provide different sets of criteria regarding the nature of amalgamation for ascertaining the appropriate accounting method, there are some common elements in them. These include continuity of ownership interests and businesses of the amalgamating entities in the amalgamated entity and exchange of equity (or other voting) shares only to effect the amalgamation. If those criteria are fulfilled, pooling method should be used; otherwise, purchase method is to be applied. The contrast between the two methods would be clear if notice is drawn to their distinctive features in respect of the following :

*(i) Accounting treatment*

Under the pooling method, what happens is that assets and liabilities of the amalgamating companies are carried forward to the books of the amalgamated company at their book value and all pre-amalgamation reserves appear in the post-amalgamation books in the identical forms in which they appeared in the books of the amalgamating companies and profits of the amalgamated company include profits of the amalgamating companies for the whole year regardless of whether the amalgamation takes place at the start of the year or at mid-year or at year-end.

But under the purchase method, the assets and liabilities of the purchased company are recorded in the books of the purchasing company

at their fair value, the identity of the reserves of the purchased company (except statutory reserves) is not preserved in the books of the purchasing company and profits of the purchasing company do not include that part of the profits of the purchased company which is attributable to the pre-acquisition period.

*(ii) Creation of goodwill*

The pooling method creates no goodwill as a result of amalgamation because the assets and liabilities of the amalgamating companies are carried over to the books of the amalgamated company at their existing book value and the price for the amalgamation is generally determined by the book value of the net assets carried over. In contrast, under the purchase method, the price of acquisition is based on the bargained value of the net assets acquired and any excess of such price over the fair value of acquired net assets is acknowledged as goodwill.

## **5. Reasons behind the Conflicting Behaviour of the Two Methods**

The contrast between the two methods in respect of a number of aspects as stated above may raise a query as to whether there is any logic behind their conflicting behaviour. The entity concept and going concern concept may be used to explain such logic.

In Hendriksen's<sup>5</sup> words :

One approach to the definition of the accounting entity is to determine the economic unit which has control over the resources, accepts responsibilities for making and carrying out commitments, and conducts economic activity. Such an accounting entity may be either an individual, a partnership, or a legal corporation or consolidated group.

In the light of the view of Hendriksen on entity concept, one may ascertain the destiny of the entities of the companies involved in an amalgamation. When the amalgamation is in the nature of a purchase resulting in the acquisition of assets and liabilities of one company by another, it implies that the shareholders of the purchased company give up their ownership control over the assets in favour of the purchasing company. Therefore, it can be said that such type of amalgamation results in the termination of the entity of the purchased company and continuation of the entity of the purchasing company.

In contrast, when the amalgamation is in the nature of a merger resulting in a new company through pooling of ownership interests, assets, liabilities and businesses of two or more companies, it implies that the prior shareholders of the amalgamating companies retain approximately the same interest and control in the new set-up as they had held previously in their own companies. The amalgamated company is viewed as a "front"

of previously separate companies whose shareholders, assets, liabilities and businesses remain intact but combined therein. Therefore, it can be said that such type of amalgamation results in continuation of the entities of all the amalgamating companies.

It is generally accepted accounting principle that as long as a business entity survives as a going concern, its assets and liabilities should be carried forward at their historical book value and the shareholders' equity (i.e. retained earnings) should also be carried forward from period to period. On the other hand, if an entity goes into liquidation its assets and liabilities need a revaluation and the retained earnings need not be preserved.

In view of the above concepts and principle, one can easily understand the logic behind the conflicting behaviour of the two accounting methods. Under the purchase method of accounting, the assets and liabilities of the purchased company are recorded at fair value and the purchased company's retained earnings do not appear in the books of the purchasing company as the entity of the purchased company is terminated as a result of the acquisition. But the assets, liabilities and retained earnings of the purchasing company continue to remain in its books at their existing book value as the entity of such company survives after the acquisition is completed.

On the other hand, under the pooling method, the assets and liabilities of the amalgamating companies are carried over to the books of the amalgamated company at their book values, the reserves of the amalgamating companies also appear in the books of the amalgamated company in the same form as they had in the books of the amalgamating companies and the operating results of the amalgamating companies for the whole year are presented on a combined basis in the financial statements of the amalgamated company because of the fact that all the amalgamating companies are assumed to retain their entities intact in a federal form even after the amalgamation is consummated.

## **6. Some Conflicting Viewpoints**

The rationale established in favour of the two methods are purely theory-based. In fact, if we judge the validity of the implication of the two methods from practical point of view, a number of controversial issues may arise which would strongly attack the arguments drawn in favour of the methods<sup>6</sup>. Some paramount issues may be stated below :

(a) The pooling method assumes that the amalgamating or merging companies survive as distinct entities in the amalgamated or merged company. But is it acceptable in the eyes of law? When a company is merged with another company under the pooling method or two companies

merge together into a new company, the merging company or companies would lose its or their legal entity or entities through going into liquidation and only the merged company survives as a legal entity. But one should not be confused between legal entity and accounting entity. It is generally accepted that existence of legal entity is not an essential criterion for determining whether accounting entity survives or not.

(b) The pooling of interests or merger type of amalgamation assumes the perpetuation of the entities of the merging companies in the merged company. The merged company is considered as a federal arrangement among the shareholders of the merging companies. Indeed, there are very few mergers to support this assumption. Two companies may continue to exist as mutual partners with their distinct entities in a federal form as long as there is a parent-subsidiary relationship between the two. But when two or more widely held companies with different sizes combine together, it is not feasible to assume that such pooling is just an arrangement among shareholders. Rather, this pooling is planned and executed under the de facto control of the professional management of the concerned companies and the majority shareholders of the companies have de jure but very insignificant control over it.

(c) The existence or non-existence of an entity is evidenced by whether it has power and control over its own activities or not. A merger may take place between two companies with unequal size in which the equity voting right of one company is higher than the equity voting right of the other. In this case, the former company may subsequently emerge with effective dominating power and control over the post-merger business and other affairs relating to finance, disposal of profits etc. through its superior voting power and influence over the board of directors. Here the dominant company survives and the smaller company disappears. From this point of view, no proper demarcation can be drawn between the basic nature of merger and acquisition.

(d) In some cases, two companies with equal size and power may join together to form a new set up the ability of which in terms of capital, market, management and technology is more than the sum of the abilities of the two companies before amalgamation. This synergic effect of amalgamation may produce a new economic condition in the new set up. This new economic condition, which is characterised by a favourable change in cost structure, capital structure, asset composition, revenue pattern, market-share and earning pattern, gives the combined set up a new entity which is distinct and fully independent of the entities of the pre-merger companies. In essence, with the rise of the new economic entity the prior entities (i.e. the entities of the pre-merger companies) cease to survive. This is a peculiar type of amalgamation which can be designated neither as a merger nor as an acquisition because the

post-amalgamation entity is none of the pre-amalgamation entities but a new one.

The above issues are so intricate in nature as to invalidate the spirits of the two methods and create a doubt in the minds of the users of the financial statements, professional accountants and the academicians about the effectiveness and fairness of the two methods in dealing with various types of amalgamations.

## **7. Evaluation of the Effectiveness of the Two Methods**

Generally a merger or acquisition is planned, negotiated and executed not by those who own the majority shares but by a small group known as the management. There is a wide divergence between the interests of the shareholders and the management. But both of them are equally interested in one thing, that is, enhancement in earnings per share (EPS). A growth in earnings or EPS of the post-amalgamation company is also favoured by the managers as it would enable them to convince the shareholders that they were justified in planning and executing the amalgamation. That is why the management is found to emphasize the potentiality of each accounting method to exhibit higher earnings and produce higher EPS during the post-amalgamation period while evaluating the effectiveness of the two methods<sup>7</sup>. From this point of view, the pooling method seems to be more effective because of its undernoted merits :

(a) It has the effect of augmenting the post-amalgamation earnings as depreciation, which is based on historical book value rather than fair value, is lower and goodwill, which needs subsequent amortization, does not arise;

(b) the profits of the amalgamated company for the year in which the amalgamation takes place are more under the pooling method as the whole of the profits of the amalgamating companies for the entire year are included in the consolidated profit and loss account;

(c) the return on capital employed for the amalgamated company is greater under the pooling method as assets are stated at historical cost rather than their fair value; and

(d) the pooling method creates an opportunity for the amalgamated company to pay higher dividend as all free reserves of the amalgamating companies are carried over to the books of the amalgamated company.

Having considered the above merits, it can reasonably be said that the pooling method provides the post-amalgamation results in a more favourable light. But this method is not beyond criticisms. Many weaknesses may be identified with this method which need to be taken into consideration by the management before recognising it as the most



effective method. Some major weaknesses of the pooling method are spelt out below:

(a) This method cannot be a useful vehicle for producing and maintaining escalated EPS under all circumstances. The post-merger EPS may be lower than the pre-merger EPS of the merged company if the number of shares issued by the company to effect the merger multiplied by its pre-merger EPS is greater than the earnings of the merging company. The use of convertible securities instead of shares to effect a merger may prevent such dilution in post-merger EPS. But this is not permitted under the pooling method.<sup>8</sup>

(b) When a sick company is on the verge of bankruptcy with most of its assets being either overvalued or fictitious in nature, it is desirable to write down the value of such assets to their fair value or zero value. But if for the purpose of its rehabilitation the company is to merge with a healthy company under the conditions of the pooling method, no revaluation of overvalued assets and writing off of the fictitious assets could be made. These would have an adverse impact on the financial position of the merged company as the fictitious assets of the merging company (i.e. the sick company) would reduce the post-merger retained earnings and the post-merger profits will be deflated by over depreciation caused by over-valued assets.

(c) The requirement of carrying on of the business of the amalgamating company by the amalgamated company during the post-amalgamation period may set a significant barrier to the management of a dying company in its attempt to safeguard the interest of the shareholders through undertaking a programme of changing the nature of its business by pooling the interests of the company with a financially and technically sound company.

(d) In a situation where the shareholders owning ninety percent or more of the equity shares of the amalgamating company want to be cashed out, the pooling method may be applied through resorting to the scheme of "vendor placing". Under this scheme, the amalgamated company enters into an agreement with a vendor (i.e. a merchant banker or stock broker) by virtue of which the shareholders of the amalgamating company pass on to the vendor the shares received from the amalgamated company and readily get the value of those shares in cash. This technique is undesirable for it circumvents the spirit of the pooling method and may lead to insider trading which is detrimental to the interests of the minority group of shareholders<sup>9</sup>.

Such rigorous limitations of the pooling method have created a dilemma in the minds of the corporate managements and accountants regarding its effectiveness and appropriateness under all circumstances.



In this situation, attention may be drawn to the strengths and weaknesses of the purchase method. The important strengths of this method are cited below :

(a) In the case of an acquisition of an over-capitalised company by another company, this method would be more useful as it provides scope for writing down the over-valued assets to their fair value in the books of the purchasing company. This may reduce depreciation charge resulting in an escalation in post- acquisition earnings which may produce higher EPS for the purchasing company particularly when the acquisition does not involve any fresh issue of shares<sup>10</sup>.

(b) This method is also befitting for an acquisition of a sick company by a healthy company as it does not require continuity of the sick company's ownership interests and business. Therefore, the unprofitable out-dated business of the sick company can easily be sold, altered or modernised by its new owner, the purchasing company. Moreover, the risk-averting shareholders of the sick company get an opportunity to be bought out in cash or fixed-interest-bearing securities.

(c) Another worth-mentioning merit of the purchase method is less tax-burden for the purchasing company which is the effect of enhancement in the quantum of two expenditures admissible for computing taxable income : higher depreciation caused by revaluation of the acquired fixed assets at higher fair value and higher interest on borrowings caused by the use of debt instruments to settle the acquisition price.

Despite the significant merits possessed by the purchase method, it cannot be accepted as a prudent method for its many peculiar nature of flaws some of which are enumerated below :

(a) Goodwill is the most serious handicap of this method. In a true sense, goodwill represents the cost of acquiring super earning power from the purchased company. But if the excess of the acquisition price over the fair value of the acquired net assets is caused by improper undervaluation of the acquired assets, it is not justified to attribute such excess solely to goodwill. Moreover goodwill has an adverse effect on the post-acquisition earnings and tax-burden.

(b) The purchase method treats the excess of fair value of the acquired net assets over the cost of acquisition as "negative goodwill". The jargon "negative goodwill" is a misnomer as a firm either has goodwill (i.e. super earning power) or does not have goodwill, but it can never have negative goodwill.

(c) The present accounting standards provide no precise guidelines as to the basis of revaluation of the assets that are acquired from the purchased company. Generally, the accountants follow the convention of

revaluing such assets at their net realisable value on the date of acquisition. But from the logical point of view, net realisable value cannot be an appropriate basis as the assets are acquired not for resale but for future use by the purchasing company. Moreover, for the assets having no proper and accessible market, it is too difficult to arrive at a fair value (on net realisable value basis) agreeable to both parties to the acquisition. This may cause a lot of distresses in the negotiation process.

(d) Using different valuation bases for the two sets of assets of identical nature (i.e. taking fair value for the acquired assets and historical book value for the assets of the purchasing company) the purchase method makes the accounting data relating to depreciation, earnings, return on capital employed etc. less meaningful and less comparable to those of the fellow companies.

(e) Use of fixed income-bearing securities to settle the price of acquisition may register a growth in debt-equity ratio of the purchasing company during the post-acquisition period. This would seriously hamper the credit-worthiness of the purchasing company.

### **8. Recipe for Improving the Effectiveness of the Two Methods**

A glance over the annals of merger and acquisition movement in the corporate world reveals that it has produced a number of financial scandals leading to total collapse of the concerned corporate bodies and most of such scandals were the products of creative accounting grown vigorously due to the weaknesses of the present accounting methods<sup>11</sup>. With a view to eradicating the flaws of these accounting methods and improving their effectiveness and fairness, a recipe may be provided in respect of the following matters :

(I) In order to validate the controversial conditions of the pooling method relating to the continuity of ownership interests and businesses of the amalgamating entities in the amalgamated entity, a few measures can be taken :

(a) the accounting standards should specify the minimum period for which the pre-amalgamation business is to be carried on by the amalgamated entity; and

(b) a definite time limit should be set in the matter of restriction on offloading the shares in the amalgamated company by the shareholders. This would stave off vendor placing to safeguard the interests of the minority group of shareholders.

(II) For determining the basis of valuation to be used in recording the transferred assets in the books of the amalgamated or purchasing company, adequate consideration should be given to the following<sup>12</sup>:

(a) In the case of an amalgamation of a subsidiary company with its parent company, no revaluation of the assets is called for as there was a parent-subsidary relationship between the two companies before amalgamation and all possible economic benefits of the business combination have already been exploited.

(b) In the case of an amalgamation of a smaller company with a large dominant company, the assets of the smaller company should be taken at fair value and no revaluation is required for the assets of the larger company because such amalgamation produces economic benefits only for the smaller company.

(c) In the case of an amalgamation between two independent companies of similar size, the assets of the both companies should be taken at fair value as this amalgamation results in hefty economic benefits for the two companies and in essence, a new entity with a new economic condition is born.

III: Realising the information needs of a wide variety of people whose economic interests are likely to be affected by the events of merger and acquisition, the accounting standards should specifically require disclosure of certain information in the first post-amalgamation financial statements. For merger or pooling type of amalgamation, the information that appears to be of paramount importance include a break up of the post-merger operating results into those of the merging entities, book value of the net assets of each merging company on the merger date, a statement of accounting adjustments made to consolidated assets, liabilities and reserves arising out of merger and so on. For purchase or acquisition type of amalgamation, the material information required to be disclosed are the book values of the acquired assets and liabilities at the acquisition date, post-acquisition operating results of the acquired business, abnormal loss caused by increased depreciation and amortization of goodwill and so forth.

## 9. Conclusion

Although the authoritative accounting bodies, professional accountants and academicians across the world pondering over the issue of accounting for merger and acquisition have provided a lot of valuable recommendations towards improving the effectiveness of the present accounting methods, a number of areas are still there which either remain untraversed or in respect of which a significant dissonance exists among the views pronounced by them. A modest attempt has been made in this

article to pinpoint such grey areas and to suggest a few measures to make the accounting methods more effective, realistic and prudent. But there should have to be more serious concern over this issue; otherwise, it would provoke the corporate managers, the leading players in merger and acquisition activity, to resort to a wide variety of techniques of creative accounting in an urge to serve their own motives which may even be detrimental to the interests of other sections of people like the shareholders, creditors, employees etc. and of the economy at large.

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## **BASIS OF GOVERNMENT ACCOUNTING : AN ANALYTICAL STUDY**

*Udaybhanu Bhattacharyya\**

In recent years there has arisen a debate among accountants on the issue of whether governmental entities should retain the traditional cash basis of accounting or shift to the accrual basis of accounting. This paper examines the characteristic features of the two bases of accounting and argues why it is necessary for governmental entities to prepare and present their accounting reports based on the accrual concept.

### **1. Introduction**

Government accounting is a sub-system of accounting for not-for-profit entities. It deals with the identification, measurement and communication of information about the financial events and phenomena of governmental entities. Until recently, government accounting has been a neglected area in the discipline of accounting. But the situation is now changing rapidly. The importance of government accounting is now being recognized in both the professional and academic accounting circles all over the world. The growing involvement of governmental entities in the economic activities of nations and the increasing complexity of the transactions being effected by them have made it necessary to enhance the effectiveness of the tools and techniques used by governmental entities in the preparation and presentation of their accounting reports. There appears to be growing consensus that many of the prevailing tools and techniques of government accounting are no longer relevant in the context of the spectacular changes that have taken place in recent years in different spheres of governmental economic operations. Efforts are, therefore, being made to reformulate the conceptual foundation from which governmental accounting principles and rules are derived. In many countries (e.g., USA, UK, Canada and New Zealand), specialised agencies have already been set up to tackle the accounting problems facing the governmental entities. Government accounting has also started receiving special attention from the agencies operating at the international level. For example, the International Federation of Accountants (IFAC) has made the commitment that it will pay due consideration to the development of appropriate accounting standards for public sector entities. The UNO has also undertaken measures for improving the quality of government accounting.

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\* Research Fellow, Department of Commerce, University of Calcutta.

One of the key areas of government accounting that has received a great deal of attention from the reformers in recent years relates to the basis of accounting. It has been argued from various quarters that the traditional cash basis of accounting is incapable of generating information needed to measure the real economic performance of a governmental entity during a period. Many are inclined to believe that the usefulness of governmental accounting reports to the users will enhance significantly if the basis of recognition of the effects of transactions in government accounting is shifted from cash to accrual. In some countries, measures have already been initiated for replacing the cash basis of accounting by the accrual basis of accounting. There are other countries that are preparing plans to adopt a similar course of action in the coming years. In this paper an endeavour has been made to examine the characteristic features of the two bases of government accounting and to explain why the accrual basis of accounting is considered superior to the cash basis of accounting. The paper also focuses on how government accounting is practised in some selected foreign countries.

## **2. Basis of Accounting : Cash vs. Accrual**

It is mentioned in a document published recently by the Government Accounting Standard Board (GASB) in the USA that "the effects of transactions or events can be recognised on an accrual basis (that is, when the transactions or events take place) or a cash basis (that is, when cash is received or paid)" (GASB, 1990, para 3(b)). The basis of accounting is an essential aspect of measurement focus<sup>1</sup> because a particular timing of recognition is necessary to accomplish a particular measurement focus.

In accrual basis of accounting, in addition to recording transactions resulting from the receipts and disbursement of cash, the amounts the organization owes others and those that owe to the organization are recorded. Cash basis accounting, on the other hand, recognises transactions only when cash receipts and payments are involved. No attempt is made here to record unpaid bills owed by the organization or amounts due to the organization.

The principal advantage of the cash basis of accounting is its simplicity. It is so simple that even a person who has no formal education and training in accounting can understand and keep records on this basis. Under the cash basis of accounting, a transaction is recorded only when cash is received or paid. Since no adjustment is required for the accrued/outstanding incomes or expenses, it becomes simpler and less costly to record and keep the books of accounts under this basis.

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<sup>1</sup> It refers to what is being expressed in reporting an entity's financial performance and position.



Another reason why organizations often keep their records on a cash basis is that they are guided by the age-old adage of not counting their chickens before they are hatched. These organizations do not normally make any delay in paying their bills and at the end of the period have very little in the form of unpaid obligations. With respect to unrecorded income, they also point it out that because they consistently follow this method of accounting from year to year, the net effect on income in any one period is not material (Gross & Warshaver, 1983 p. 20). Last year's unrecorded income is collected this year and this tends to offset this year's unrecorded income. The advocates of the cash basis of accounting say that they take a conservative position by using this approach.

### 3. Historical Perspective of the Issue : The UK Example

There has been a prolonged debate over the issue of whether governmental entities should prepare and present their accounts on a cash basis or accrual basis. In the UK, though the Municipal Corporation Act, 1835 implied publication of a cash-based operating statement, it had long been a common practice of some municipalities to produce a three-column statement of receipts and payments showing cash flows in the first column, accruals in the second and income and expenditures in the third column (Jones, 1992, p. 96). The disputes on the issue continued till the early decades of this century. The 1907 Departmental Committee pointed out that the cash approach had the merit of simplicity (BPP. 1907, XXXVII, para, 27)<sup>2</sup>, while specific objection of a general character to the accruals approach included "the undesirability of admitting into account, as final records, items that may have to be estimated" thereby introducing "an element of uncertainty" as well as unavoidable "delay in closing the accounts" (para 35). It is interesting to mention that the permanent secretary to the Local Government Board observed in 1903 that the "advantage that has been felt in having actual cash accounts kept is that it shows what the ratepayers do actually pay during the particular year" (BPP. 1903, vii, p.78)<sup>3</sup>

But at the time when the British Government itself pleaded for and recommended exercising cash basis of accounting in the local government organizations, there had been some authoritative accounting bodies in the UK who were strongly in favour of accrual basis of accounting. In 1886, Bolton's borough treasurer, George Swainson, in his inaugural address as president to the newly created Corporate Treasurers' and Accountants' Institute (CTAI)<sup>4</sup> criticized the then prevailing system of

<sup>2</sup> Referred to in Coombs & Edwards (1995).

<sup>3</sup> Referred to Coombs and Edwards (1995).

<sup>4</sup> The CTAI, established in 1885, was renamed the Institute of Municipal Treasurers and Accountants (IMTA) in 1901 and the Chartered Institute of Public Finance and Accountancy (CIPFA) in 1973.



reporting practices and pointed out that there were no provision for exhibiting a clear statement of assets and liabilities of borough organizations in England (Proceedings, 1886, p.5). Indeed, up to the end of the 19th Century, leading writers in professional journals continued to perceive a need to advocate the adoption of accruals accounting<sup>5</sup>.

However, the Departmental Committee on the Accounts of Local Authorities, 1907, while examining the relative merits and demerits of accrual and cash basis of accounting, pointed out the following advantages of accrual basis which are still relevant in the context of modern approaches to accrual accounting :

- (1) it records every step of a transaction, thereby providing protection against negligence and irregularity ;
- (2) it facilitates the preparation of an entity's performance statement and statement of financial position ;
- (3) it records values ; and
- (4) it provides a stable and homogeneous basis for statistics.

The demerits of the cash basis of accounting has been summed up as follows (BPP 1907, XXXVII, paras 26-39) :

- (i) it is an incomplete representation of events for reporting and control purpose ; and
- (ii) it provides scope for delaying payments in order to manipulate the accounts and influence the level of rates.

Some other supporters of accruals accounting, in the context of the local authorities, pointed out that it provides a better basis for the purpose of setting the rate (Cooke, 1887, p.167) and for demonstrating the extent to which actual results varied from the estimates (Guthrie, 1886, p.615).

### **Accrual Basis : A Contemporary Outlook**

In discussing the contemporary approaches to accrual accounting, it may be convenient to start with the definitions given by two authoritative accounting bodies, namely, the Accounting Standards Board (ASB) in the UK and the Government Accounting Standards Board (GASB) in the USA. The ASB has defined the accrual basis of accounting in SSAP 2 as follows :

Revenue and costs are accrued (that is, recognized as they are earned or incurred, not as money is received or paid), matched with one another so far as their relationship can be established or justifiably assumed, and dealt with in the profit and loss account of the period to which they relate; provided that where the accruals concept is inconsistent with the prudence concept, the latter prevails.

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<sup>5</sup> The Accountant, 13 February, 1887, p. 172.

The GASB has defined the accrual basis in the following manner :

A basis of accounting that recognizes the effects of transactions or events on the resources of an entity when they take place, regardless of when cash is received or paid.

It may be mentioned here that the objective of both cash and accrual basis of accounting is the same, that is, to measure the economic performance of an enterprise for a given period of time. When the entire life span of an entity is taken into account, both the approaches will yield identical results. The results are likely to differ when the time period chosen is shorter than the life of the entity. In such a case, the accrual approach is more relevant than the cash approach for measuring periodical performance. In the context of government accounting where the life span of the entity is infinite, the following two merits of accrual accounting may be considered most pertinent while examining the relevance of applying accrual basis to those organizations :

- (i) The cash basis of accounting provides measures only of cash inflows and cash outflows. The accrual basis of accounting provides measures of the economic goods and services consumed, transformed and earned. As a result, the real economic flow of funds in an organization can only be judged by applying accrual basis of accounting.
- (ii) The balance sheet of an organization based on accrual accounting tends to promote accountability for control over all resources because the system records all physical and monetary resources available to the organization.

The major criticism against the adoption of the accrual basis of accounting by the governmental entities is that it may create problems for the common people in understanding the system because of its complexity. But this is not a valid argument because, ".... governments are no longer simple, and their financial commitments to the future are so vast that cash-method accounting no longer fits. Under the circumstances, it is not fair to the electorates to perpetuate inaccuracies just because the systems that create them are simple to understand" (Egol, 1988, p. 181).

### **The Modified Accrual Basis of Accounting**

Another basis, called the modified accrual basis of accounting, has been developed and adopted by the local government organizations both in the UK and USA. In the UK another version of the method is "income and converted payments" approach (Jones & Pendlebury, 1992, p. 148). Under this system, all revenues are accrued when they are earned, but payments throughout the year are not continually accrued. However, at

the end of the financial year, all the invoices that had been received but not paid would be collected together for each department and a total entry would be put through the books accruing all the payments due to be made. When payments are made in the new year in respect of these accrued amounts, these would be debited against the individual expense account so as to make the net effect zero in the new year.

The AICPA (1974, pp. 14, 16) has described the modified accrual basis as follows :

Revenues are recorded as received in cash except for (a) revenues "susceptible to accrual"<sup>6</sup> and (b) revenues of a material amount that have not been received at the normal time of receipt.

Revenues generated on a self-assessed basis like income tax, sales tax, gross receipt tax are not considered susceptible to accrual. These are recorded on cash basis.

### *Recognition of Revenue*

Revenue is recognized when it can be measured and is available for expenditures. The following points are worth noting :

- (1) Property taxes are recorded when the taxes are levied provided they apply to and are collectible within the current fiscal period or within a short time after the end of the fiscal period.

Property taxes collected in advance should be recorded in "Deferred Property Tax Revenue Account". Revenue from another government unit should be recorded as revenue when it becomes billable.

- (2) Taxpayer—assessed income, gross receipts and sales taxes are recorded when taxpayers' liability, measurability and collectibility have been clearly established.
- (3) Miscellaneous revenue, such as licence fees, fines etc. are recorded when the cash is received because these cannot be predicted accurately.
- (4) Grants, entitlements and shared revenue are to be recorded when cash is received. Grants in the form of reimbursement of expenditures made in accordance with legal requirements, should be recognised only when the expenditure is made.
- (5) Proceeds from the sale of bonds are not revenue; unlike the other types of revenue, bonds must be repaid within a stipulated time period.

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<sup>6</sup> Revenues considered "Susceptible" to accrual are those revenues that are both measurable and available. "Available" means that the item is a resource that can be used to finance the governmental operation during the year (AICPA, 1974, p.14).

### *Recognition of Expenditures*

Expenditures are recorded in the period in which the related liability arises. Specific examples are :

- (i) Costs for personal services, such as wages and salaries, are generally recorded in the period in which payments are made because they are normal, recurring expenditures of a governmental organization.
- (ii) Goods and services obtained from outside the government entity are recorded as expenditures in the period in which the goods or services are received.
- (iii) Capital outlays for equipment, buildings and other long-term facilities are recorded as expenditures in the period of acquisition.
- (iv) Interest on long-term debt is recorded in the period in which it is legally payable.

The modified accrual basis of accounting has been practised in the USA over decades although the system is not beyond criticisms (Jones & Pendlebury, 1992, p. 148; Zimmerman, 1977, p. 112). However, in 1990 the GASB published an important guideline on "Measurement and Basis of Accounting—Governmental Fund Operating Statements", where the recognition points of revenue and expenditure have been dealt with in detail. In appendix A to the statement, which clarifies the position of the Board it is mentioned that :

This statement requires the use of an accrual basis of accounting to recognize the effects of transactions or events that affect financial resources in the period they take place (GASB, 1990, para 127).

Further, the Board believes that, "using an accrual basis of accounting will also improve comparability in governmental financial reporting ..... two governments should not report different operating results simply because of difference in the timing of cash receipts and disbursements" (para 128).

### **Basis of Government Accounting : International Practices**

So far as the basis of government accounting in practice is concerned, there is a general tendency among countries all over the world to switch over from cash or mixture of cash and accrual to the full accrual system of accounting. Accounting bodies in many countries have already put forward proposals for the adoption by governmental entities of accounting system based on full accruals. For example, in Canada, J. A. Macdonald, the then Comptroller General of Canada in an address to the International Federation of Accountants (IFAC) conference in Lisbon in 1990 admitted

that, "..... the full accrual basis of accounting provides information useful in assessing whether the entity is operating economically and efficiently. In fact, it is the only basis of accounting that provides sufficient information to assess performance in terms of service costs, efficiency and accomplishments".<sup>7</sup> Consequently, the Government of Canada in the year 1991-92, implemented two accounting policy changes regarding accounting for government transfer and loans receivable accounting which represent significant steps to full accrual accounting. In New Zealand also, there have been waves of reform in the area of government accounting, budgeting and reporting practices during the last few years (Gilling, 1994). The table on page 83 gives the position now prevailing in some selected countries with regard to the basis of government accounting.

It appears from the table that most of the developed countries have already changed or have proposals under consideration to change their basis of accounting from either cash or modified accruals to the accrual basis of accounting. In business accounting, the accrual basis has been unanimously accepted as the ideal method for evaluating stewardship and promoting accountability. In government accounting too, it should be accepted as the principal basis of preparation and presentation of accounts. According to Denis (1994, pp 78-9) : Accruals allow for better matching of program activity or outputs with costs incurred, an essential element of performance measurement. Accruals allow for a better comparison with amounts intended by legislators for specific activities. The accrual concept encourages better discipline by government managers in adhering to their budgets and appropriations and reduces flexibility for manipulation of financial results.

In India,, cash basis of accounting as stipulated in the Government Accounting Rules (1990, p. 26) is practised by all categories of governmental entities. Efforts have to be made to change the basis of accounting because we cannot remain indifferent when most of the countries around the world are keen on promoting measures for converting the accounting basis of governmental entities from cash to accrual. The United Nations (1984, p.57) in a study on the feasibility of introducing accrual accounting in government organizations of developing countries, has observed, ".... the cash and obligation bases, traditionally employed by developing countries in recording transactions of central government entities are considered in certain cases to be generally insufficient in providing the essential financial information" and therefore the introduction of accrual accounting in government sector should be given top priority

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<sup>7</sup> Referred to Denis (1994, p. 78).

**Table**  
**THE BASIS OF GOVERNMENT ACCOUNTING :**  
**A COMPARATIVE POSITION**

Name of the Country	Present basis of accounting	Proposals for change, if any	Documents containing the proposals
CANADA	Modified accrual basis	Yes; full accrual basis	Recommendations made by the Public Sector Accounting and Auditing Committee (PSAAC) of the Canadian Institute of Chartered Accountants (CICA)
CHINA	Cash basis	No	Not applicable (NA)
GERMANY	Cash basis	No	NA
ITALY	Cash basis	Yes; economic accounting (i.e., accrual accounting)	Law 23 Oct. 1992 n. 421
JAPAN	Partly cash basis and partly accrual basis	No	NA
NEWZEALAND	Cash basis	Yes; full accrual accounting	Statement of Public Sector Accounting Concepts (SPSAC) by the New Zealand Society of Accountants
SWITZERLAND	Mixture of Cash and accrual basis	Yes; full accrual accounting	Proposals submitted to the government by the Institute of Public Finance and Fiscal Law.
UK	Cash and Accrual	No	NA
USA	Accrual and Partly modified accrual	Yes; full accrual basis	Recommendations made by the GASB in Statement No. 11 (1990)
INDIA	Cash basis	No	NA



in the course of transformation of present accounting practices. There may be some constitutional blockade<sup>8</sup> in introducing accrual basis in government accounting but these obstacles should be removed in order to ensure a better degree of governments' accountability to the public. The century-old system of accounting practices is no longer useful in the changing perspective of socio-economic scenario of our country. Cash basis of accounting fails to demonstrate the stewardship obligations and accountability of governmental entities with the same degree of reliance as can be achieved if accounts are kept on accrual basis.

## Conclusion

Determination of the basis of accounting is associated with the fundamental issues in government accounting and making a choice between the two bases is entirely governed by the accounting rules and regulations of the country concerned. Though there are certain conceptual areas (e.g., fund system of accounting) in government accounting where some kind of a uniformity has been achieved globally, no unanimity has yet been arrived at in selecting a common basis to be followed. Serious efforts are now being made to introduce accrual accounting either by the national accounting bodies or by the international accounting organizations, like International Federation of Accountants (IFAC), International Accounting Standards Committee (IASC), International Consortium on Governmental Financial Management (ICGFM), International Organization of Supreme Audit Institutions (INTOSAI), the United Nations and the World Bank. Unification of basis of accounting will not only help to make an international comparison of governmental accounting practices but, at the same time, also provide a considerable progress towards the accounting harmonizations. Enthoven (1988, p.228), while dealing with the norms of future international standards in governmental accounting, clearly expressed his views that, "... major substantive reforms in governmental accounting should respond to new demands for public sector financial information" and "substantive reform issues would include, inter alia, the introduction of accrual account."

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<sup>8</sup> In a seminar held in Calcutta during 17-19 November, 1993, on "Parliamentary Practices and Procedure" organized by Department of Parliamentary Affairs, Government of West Bengal, Mr. B. Bhattacharyya, the then Principal Accountant General (A & E), West Bengal, in a paper titled "Financial Control by the Legislatures" expressed the opinion that the system of single entry accounting on cash basis in respect of government transactions stems from the provisions of Article 266 of the Indian Constitution.



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## INVENTORY MANAGEMENT : AN ACCOUNTING TOOLKIT

*Sujit Sikidar\**

In this paper the author discusses the nature and significance of some sophisticated tools of inventory control and examines the inventory management practices of some Indian companies.

### 1. Introduction

Globalisation and integration of Indian economy with the rest of the world has created a demand for increasing the effectiveness of cost management and cost control. Without this, manufacturing enterprises cannot achieve competitive edge over trade rivals which is indispensable in a climate of economic liberalisation of the Indian economy. Market-driven cost (MDC) model may be an ideal tool for cost management and cost control. MDC drivers are used to signify the relevant costs of each activity. For MDC there is imperative need for four parameters namely, activity-based costing (ABC), activity-based budgeting (ABB), activity-based accounting (ABA) and auditing. While Peter F. Drucker (1995) examined the applicability of activity-based costing (ABC) for service companies which are quite distinct from manufacturing enterprises, traditional cost accounting was based on a set of assumptions valid only for a given situation in a manufacturing enterprise; and traditional cost accounting carries its operation where it has been done. The ABC, on the other hand, questions the validity of doing that operation and tries to answer where it can be done in the best way and in the process it integrates into a cohesion centre of several activities such as value analysis, process analysis, quality management and costing. Peter F. Drucker argues that such operation ensures not only cost control but also result control. However, to testify this proposition an empirical study is conducted on inventory management in respect of some selected companies.

### 2. Purpose of the Study

The purpose of the study is to ascertain the impact of time lag involved between the placing of an order and the receipt of inventory so that it becomes available Just in time (JIT). The aim is to bring the time lag to zero. This is indispensable for efficient cost management by the enterprises operating in a stiff competitive environment. This study proposes to throw light on JIT and other cost control practices of some selected companies.

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\* Professor, Department of Commerce, Gauhati University

### 3. The Hypotheses

It is assumed that : (a) by and large the companies are benefitted by adopting cost-efficient JIT practice; (b) traditional inventory measurement and valuation has diluted the operating result of the sample company; and (c) there is an urgent need for introducing uniform valuation and accounting method for inventory in order to ensure transparency, full and fair disclosure of the same in financial statements.

### 4. Methodology Adopted

After having discussed the meaning and scope of application of sophisticated tools of inventory control, we then proceed to conduct an experimental analysis over certain selected corporate entities. Fifteen companies are selected at random after having assigned due weightage to the money value of inventory handled, its volume and its dependence on manufacturing operation.

Thereafter the methods of valuation followed by the selected companies are scrutinised and its bearing on profit measure has been brought out. Basing on the test, some inferences are drawn and pragmatic suggestions have been offered. The companies selected for the study are : Polar Latex Ltd, Mcleod Russel (India) Ltd, Tata Iron & Steel Co Ltd, Finolex Pipes Ltd, Modern Woollens Ltd, Western Paques (India) Ltd, Gujarat Apar Polymers Ltd, Nagarjuna Fertilizers and Chemicals Ltd, Bindal Agro Chem Ltd, Gujarat Industries Power Co Ltd, Chemplast Sanmar Ltd, Chemicals and Plastics India Ltd, Nestle India Ltd, Hindustan Lever Ltd, and Hindustan Copper Ltd. The data relate to 1994-95 and 1995-96.

### 5. Conceptual Framework of Market-Driven Cost (MDC)

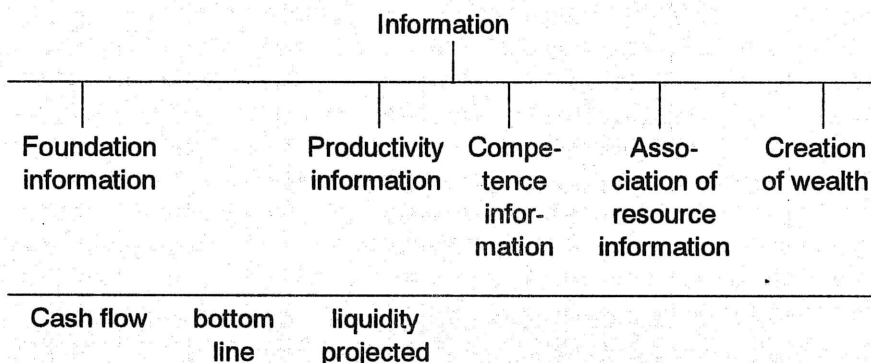
Reckoning with market-driven cost (MDC) becomes a part of cost control exercise to materialise corporate goals, as an organisation is viewed differently with several attributes. An organisation is viewed :

(a) as generators of resources by adopting manufacturing operation where cost is translated into returns; (b) as a linking agent of economic chain to reach production target by better cost management; (c) as a creator of wealth; and (d) as an entity satisfying material requirements of customers.

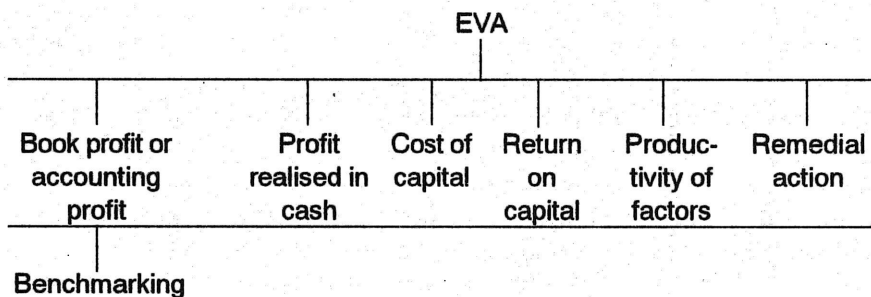
An area of cost hitherto not recorded and accounted for by traditional cost accounting, that is cost of not doing has been interalia presumed by ABC. JIT inventory management takes care of several elements as the cost of overhauling and machine down time, time lag in getting supply of materials, waiting time for receipt of spares and tools, and the cost of reworking or scrapping a defective or less efficient spares and tools.

Traditional costing used to place emphasis on cost-led pricing implying that price of the product would be determined after recovering the cost. But when the economy graduates from infancy to maturity it became over conscious about customers' willingness to pay the price fixed by the manufacturer. This forced the corporate entities to switch over to price-led-costing as was adopted by Sears and Marks & Spencer long ago, observes Peter F. Drucker (1995). Under price-led costing, the accountants ascertain the price the customer is willing to pay. Cost control, production schedule and design follow thereafter. In the context of global economy, parent-sister company nexus has been a common phenomena under which economic chain costing becomes essential although it is painful for business organisations to follow.

One of the pre-conditions for success of economic-chain costing is the sharing of information between parent and subsidiary as well as between subsidiary companies. Sharing of information is needed to arrive at rational, knowledgeable and informed judgements by the managers. The areas of information may be as follows :



MDC is basically based on market and other outside information. Information contents and flow including timing may not be adequate to form informed cost control decisions. However, in order to overcome this deficiency another cost model known as economic value added analysis (EVA) has been developed in the USA. The composition of EVA is as follows :



For efficient cost management, the cost accounting practice of benchmarking entails ascertaining the present status of the enterprise and this is to be compared with or weighted against the best performing company in the industry or in the country. Prahalad and Hamel (1990) have emphasised on core competence of the entity to show what an organisation can do which its competitors find difficult to compete with. MDC management coupled with innovation can instil competitive edge in an entity. Cost drivers are defined as the activities or transactions that are significant determinants of cost.

## **6. Inventory Control**

We now propose to analyse the MDC and JIT inventory control and cost management followed by the sample companies and how it help them achieve result control. Crown and Howthorn of USA have developed the ABC for identifying cost on the basis of volume of activity. Tomson and Robert S. Kaplan also advocated ABC for better cost management. Traditional costing focuses on cost centres as a means for aggregating costs for cost control purpose and, consequently, the superfluous activities that consume cost are not reckoned with. ABC has been found to be relevant for those manufacturing enterprises where overheads constitute a major portion of costs and the activity level is fairly stable over the accounting year. ABC may be suitable for carrying out activities which are associated with product, service, customer, cost centre or market segment. This would provide information for productivity and profitability analysis, where overheads can be absorbed basing on realistic hierarchy of cost drivers. The cost reduction stand has been recognised in the Companies Amendment Bill, 1993 under Sec. 233 (B). It is provided for in this Section that the cost auditor shall be appointed by the shareholders of the company while in co-operatives the Registrar shall continue to appoint the cost auditor. Further the annual report need to disclose the cost auditor's comments on the efficacy of cost management. Overhead allocation is to be done on the basis of operation.

The ABC technique may ably be supported by JIT in relation to inventory management. In a market-oriented economy, the degree of expectation from the management accountant and the cost auditor has widened. The functional managers are the users of their technical services. The National Management Accounting Standards Board of the ICWAI may develop new Generally Accepted Management Accounting Practices (GAMAPs) to match the relevance of ABC and JIT for the adoption of manufacturing enterprises. To the functional managers the cost accountant is not a passive historian nor an autocratic controller. This dynamic role has been embodied in the Companies Bill, 1993. Following the globalisation of economy, MDC, JIT and price-led costing would enable the manufacturing enterprises to meet trade competitors across the globe.

The finer point about the ABC is that fixed cost, which also varies within a short period of time and no more remains fixed, recognises the variability of this cost in relation to a given volume of activity. The ABC as such aims to ascertain and allocate activity-based cost instead of *period-based cost*. Thus the turning point of distinction emerges between period-based cost of conventional method of costing vs. activity-based cost under ABC technique. Cost and expenses are the measure of consumption of resources. Each activity is the measure or expression of resources consumed in this regard. Cost audit has been recommended by the ICWAI for small scale units with a turnover exceeding Rs. 10 crore. The Comptroller and Auditor General's (CAG) office and National Dairy Development Board have gone in for cost auditing on a regular basis. Cost auditing seeks to audit managerial decisions which often determines the health of the company.

JIT inventory technique embraces issues like quality, delivery, innovation and flexibility into one composite organism. Under this technique, the underlying assumptions are that (a) the suppliers are to hold on to supplies until they are required by manufacturing enterprise i.e. user (by adopting this Japanese car makers could enjoy 3.5 pc. cost advantage over American and British car manufacturers); (b) there is an absolute assurance that the spare parts, components, or sub-assemblies ordered from suppliers are of consistent quality and as per the other conditions incorporated in the purchase contract; (c) there is a reduction in the material movement cycle time and overheads for participating firms; (d) it renders 'lowest price' system inappropriate; (e) it focuses on 'quality' and 'immediate availability', and (f) performance measures lay emphasis on maximising production.

Certain other relevant points are as follows :

- (1) Traditionally, companies used to hold buffer stock of inventories to : (a) avoid out-of-stock situation, (b) get saving in cost in the form of valuable space, holding costs, insurance, risk of obsolescence, interest payment, other holding and carrying cost. Besides under EOQ they buy and hold in bulk to enjoy discount on large volume and large activities. Under JIT, these things would be avoided. It also overcomes the limitations of traditional costing.
- (2) Jit maxim differs from traditional costing in that it does not endorse lowest price system and rather emphasises on 'quality' supply and 'immediate availability' and hence termed JIT. This helps in maintaining quality and time schedule of delivery system.



- (3) Traditional costing reinforces the role of absorption costing which advocates maximisation of production even in case of accumulation of unsold stock so that greater amount of fixed overheads may be allocated over greater number of units. On the contrary, JIT philosophy goes against it.
- (4) In respect of performance measure, traditional costing stresses on utilisation of material, work force, machine tools while JIT attempts at reduction in lead time and time lag in transforming material into product. S. Ramesh (1992) had identified the variables mentioned in the following tables as qualitative performance indicators (QPI) as a measure of performance under JIT.

**Table**  
**Qualitative Performance Indicator**

Quality	Delivery	Process time	Flexibility
In coming quality, statistical process control, customer satisfaction	Vendor delivery performance, number of past due orders, on time schedule in factory	Machine process time, process time to lead time ratio, machine down time, set up time	No of different parts, percentage of standard parts, no. of different processes, no of new products per year

This table is not exhaustive.

The performance of management accountant of an entity may be compared and weighted against the best performance indicator of the industry or in the country. This is necessary for attaining global competitive ability of Indian enterprises under liberalisation phase.

- (5) Information revolution is the buzzer after industrial and commercial revolution. Management control process may be required to derive segmental information generated at periodic predetermined intervals, may it be on daily, weekly, monthly, quarterly basis as a real time information. The task of management accountant is to go beyond analysis of cost and profit data and to balance, reconcile external and internal issues often beyond the control of an entity.

We now proceed to explain the empirical analysis conducted over the selected companies as discussed below.

## 7. Empirical Case

Hindustan Lever Ltd valued inventory at the lower of cost and estimated net realisable value, after providing for cost of obsolescence



during 1995-96. Finished goods and work in progress include an appropriate proportion of overheads and, where applicable, excise duty. For excise and custom duty on goods lying in the bonded warehouses at the year end have not been provided for in the accounts and hence not included in the valuation of inventories.

Chemplast Sanmar Ltd and eight other companies have adopted elaborate method of inventory valuation during 1995-96. For instance, stores and spares at weighted average cost, raw materials at weighted average cost, and own manufactured at direct cost; work in progress at direct cost; finished goods at lower of cost or net realisable value. Excise duty payable on goods lying in the factory at the end of the year is not included in expenditure nor in valuation of inventories. This has no impact on profit. This inventory valuation method has been consistently followed by all the companies under our survey.

All the fifteen companies under our survey have adopted the same method of inventory valuation i.e. lower of cost and net realisable value, followed consistently. Slight variation has been observed in respect of valuation of intermediate and work in progress usually at weighted average cost. This variation may be attributed to the reason that AS-2 is not compulsory as yet in India. This, however, does not materially change the profit figure. Furnishing of information relating to the time lag involved in between placing an order and receipt of supply is not publicly available from the face of the annual report. We have to obtain this critical information from the management. For instance, DHL Express planned its Express Logistics Centre to reduce the material movement cycle time and overheads. All of them have not strictly adhered to the provisions of the accounting standards (AS)-2, mainly because AS-2 is not exhaustive in relation to different categories and types of inventories. Slight reference to AS-2 would bring the matter into focus as stated hereunder.

International Accounting Standards (IAS)-2 relating to valuation and presentation of inventories, requires that inventories should be valued at the lower of historical cost and net realisable value. Historical cost may be determined on the following bases :

(a) Specific identification method should be used for items that are not ordinarily interchangeable, and for goods manufactured and segregated for specific projects; (b) either FIFO or weighted average cost should be used for other inventory items ; (c) IAS-2, however, permits the use of LIFO and base stock methods with certain additional disclosures, although IASC desires to eliminate these alternatives gradually.

Difficulty is posed by net realisable value in ascertaining the value that the inventories are likely to fetch in future period. Subjectivity may also arise from the method of costing used for manufactured inventories, because cost of manufactured inventories may be computed on the basis

of either direct costing (where fixed overheads are not included in manufacturing cost) or absorption costing (which includes all manufacturing cost, whether fixed or variable).

### 8. Inferences and Suggestions

The internal control system of JIT has not been found satisfactory over the companies under our study. In case of unverified items reconciliation of Bin card balances with stores ledger balances becomes necessary. In absence of JIT and physical verification, procedure of determination of unserviceable and damaged stock and raw material all require further improvement. However, maintenance of cost records under Sec. 209(1) of the Companies Act 1956 and valuation of inventory was fair and proper and done as per generally accepted accounting principles, and followed consistently over the years. Technical details about the inventory are not usually furnished in the annual report and there has been inter-company variation. This is so because AS-2 is not mandatory.

For manufacturing enterprise several activity ratios (AR) may be adopted for empirical analysis which depict the effectiveness in utilisation of assets and resources. There are several ARs as : (a) inventory turnover ratio i.e. cost of goods sold divided by average inventory; (b) average value of materials consumed during the year divided by average inventory; (c) debtors turnover ratio computed as credit sales divided by average debtors; (d) capital turnover ratio i.e. net sales divided by capital employed and ; (e) fixed assets turnover ratio i.e. net sales divided by fixed assets.

The valuation method adopted was more or less uniform in respect of all the companies under our study, still reporting of inventory was comparatively transparent in case of public sector Hindustan Copper Ltd.

Period of consumption of material could have been brought down substantially by adopting JIT. As against a public sector, a private sector manufacturing enterprise could not have ventured to have 17.13 or 13.08 months consumption level and JIT is an appropriate answer for this. JIT management would help overcome the menace of low turnover ratio.

To conclude in the words of Henry Ford "It is not the employer who pays wages — he only handles the money. It is the product that pays wages". This emphasises the need for cost efficiency in product and inventory management. Activity-based management (ABM) accounting methods may be adopted at the same time to improve cost management.

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## **BOOK REVIEW**

### **Contemporary Issues in Accounting : Zero Base Budgeting**

Edited by Ramkant and Sugan C.Jain

Pointer Publishers, Jaipur 302003 (India)-1996

PP 209, Price : Rs.450.00/\$45.00

In broad spectrum the book under reference has been written under a complex and a dynamic environment wherein top level executives are faced with the difficult tasks of management and decision making. The articles contributed in this treatise have covered a wide range of area on zero base budgeting (ZBB) highlighting the fact that the traditional planning and budgeting procedures often create several typical problems and the zero base management approach is a significant tool enabling top management to focus on key problems, alternatives and priorities throughout the organisation. The contributors include academicians, finance executives, company directors and administrators. The publication contains as many as 23 articles on the same theme of zero base budgeting and they include issues such as (1) definition, concept and philosophy, (2) objectives, relevance and procedures, (3) problems and implementation, (4) application in Indian scenario for the government, private and public sector, banks and educational institutions, (5) review of ZBB and (6) management and social scientists' views on ZBB.

In defining the term ZBB the authors have quoted and integrated the views of the eminent writers like Peter A. Phyrre, Peter Sarat and Gaerne E. Taylor and others.

The writers have correctly said that this concept has emerged when the shortcomings of earlier management techniques have been identified and recognised.

Almost all the authors, in their articles, have dealt with the objectives, relevance and procedures of ZBB in details both theoretically and from their own experiences. Identification of decision units, development of decision packages, review and ranking of decision packages are well explained step by step first theoretically and then with practical examples. They are also exhibited with diagrams and tables. This has not only academic value but it also guides the management as to how to apply the technique in practical field.

The relevance and significance of such a budgeting system has been justified by the authors. They think it is a very healthy process that promotes self searching among themselves.

The articles are very much details in the discussion on the origin of ZBB which can be traced back to 1924. They have also shown how this

concept has been developed in later years and how the importance and relevance of ZBB have been greatly felt in USA and other countries during the last two decades as a management tool and as a method of more efficient and effective use of limited resources.

Though the authors have said nothing new on the subject, their approach, analysis and interpretation deserve appreciation.

The articles are very much informative as to the need for application and implementation of the system in Indian organisational structure as we get references of Central and State Governments' circulars for the implementation of ZBB, planning for introducing it in public enterprises, private sector's revived interest in ZBB, its success and failure in different units, etc.

Two interesting areas of this book are; (i) ZBB in educational institutions and banks; and (ii) management and social scientist's views on ZBB. The authors (in articles 8 and 13) have rightly stated that the present situation in regard to Indian education and in the context of new education policy is such that it can gain a great deal by adopting ZBB. ZBB at college level shown in a diagram and evaluation of decision packages presented in a table have projected a new dimension of the technique.

Article 14, *ZBB in Banks*, reflects a new approach which, the author has opined, if adopted would help the management to remove "shockles of incrementalism" in budgeting, to review each activity critically and the cost involved in performing that activity and the priority of the activity in the larger set up of the objective of the banking system.

In article 15, *ZBB : A Management View*, the author has rightly emphasised that before implementation of ZBB, if the government is really serious about going ahead with ZBB, the people at the top should first be educated to make them understand ZBB and they should also be convinced that it would really deliver the results.

The article titled, *Zero Base Budgeting—A Social Scientist's Viewpoint*, though brief, is a nice piece of contribution in this treatise. The social scientist's observation is very much pragmatic when he writes that ZBB by itself is neither good nor bad. It is the people i.e., the ruling elite and politico - administrative elite which will practise this, on whom the success of the experiment would depend and they in turn should know the pressure of society and culture and should try to modify them to the best of their capacity.

The article on performance budgeting (Article-22) is an appropriate addition to the existing literature.

The last article is a case study on ZBB. The author has studied five units in India and his view is that in the context of lack of efficient and proper planning, poor and inefficient management in India ZBB offers a new method of overcoming them.

A critical review of the zero base budgeting system has been provided by all the authors so as to make everyone cautious about the introduction and implementation of ZBB.

The presentation of the book is lucid. The readers may find all the information on ZBB at one place. The book contains a list of references at the end of almost all the articles which would help the readers greatly.

**P.R.Choudhuri**

Reader-in-Commerce  
University of Calcutta

### **Identification and Rehabilitation of Industrial Sickness**

Edited by Ramakant and Sugan C. Jain  
Pointer Publishers, Jaipur-302 003 (India)  
Pages 231 + Rs. 450/-

In a developing economy like India, efficient allocation and utilisation of resources are essential for achieving the goal of economic self-reliance. Industrial sickness is an overt indication of resources misallocation and is undesirable both from social and business points of view. The seriousness of the problem has not, however, evoked much response from the management. Neither has the problem been treated as a central theme in evolving suitable policy framework for dealing with the related issues, symptoms and cure, as also prevention. The sickness in industry has been indirectly handled in a quite different way. The spurt in research activities are predominantly prediction oriented and little research has been done to develop a testable theory on corporate sickness. This book is a welcome departure from the above direction of the contemporary research works. There are twenty-four articles presented in the book, contributed by different authors drawn mainly from academicians. The articles appear randomly and no definite sequence is discernible. However, the articles can be broadly divided into two distinct categories. In the first category, the articles present an analysis of causes of sickness and models for prediction of corporate sickness. In the second category, the articles deal with diverse subjects like, government policies, role of rehabilitation agencies and other related issues. Noteworthy contributions are made by Panda and Tripathy, Desai, Chudasma and others in the domain of prediction of sickness by the use of MDA and other statistical

models. These models will prove to be very helpful tool for corporate managers and researchers alike. Likewise, the causes of sickness are analysed quite aptly in the articles and important contributions in this regard are by Murthy, Rao, Sarma, Ramakant, Jain, Mathur, Sayulu and others. The methodologies presented in these articles are immensely helpful guide for the corporate managers to explore the causes of sickness in their own companies.

It may be noted that in prediction of sickness, treatments are restricted to old models, when more recent and effective statistical models are available and their reliability are well tested. For instance, the MDA model mentioned in all the articles and particularly as shown on p.136 and p.192 is Altman's original model for bankruptcy prediction, reported in 1968. Several important studies were made thereafter and the focus of the research was mainly on stability of ratios over time so that the model's accuracy could be enhanced. None of the prediction oriented studies reported the important works of Dambolena and Khoury (*Journal of Finance*, Sept. '80), Altman and others (*Journal of Banking and Finance*, Spring '77), R. C. Moyer and Aharony, Jones, Swary (*Journal of Finance*, Sept. '80). Also, except Gupta's work, no mention has been made of some important researches in Indian context on industrial sickness.

In their attempt to analyse the causes of sickness, the authors have identified general causes and have refrained from making any in-depth analysis. For instance, on p.149, causes of sickness (internal) are identified as, wrong strategies, wrong financial planning, wrong marketing policies and wrong product-mix. It has not been explored why the company embarked on so many wrong directions. The concept of 'going concern' is subjected to intense discussion by Vasal and Ghosh. It has been advocated to be the main criterion for monitoring of corporate sickness on micro basis. Ghosh also summarised the role of auditor for sickness monitoring. The editors have done their jobs quite efficiently, presenting a diverse collection of articles on industrial sickness. There are a number of printing errors, for instance, on p.6, tree should be three and in p.140 September, 1986 should be September, 1968. The list is only indicative and not exhaustive. The book is recommended for policy framers, researchers, corporate managers, industrialists and others. It provides an interesting and useful indication, although incomplete, on the focus and the path of research in respect of industrial sickness in India.

**Dr. Debasis Bagchi**  
Assistant Manager  
New India Insurance Co.  
Calcutta



# INTERNATIONAL CONFERENCE NEWS

## **Ninth Asian-Pacific Conference on International Accounting Issues**

**November 23-26, 1997  
Bangkok, Thailand**

*Co-sponsored by*  
**Faculty of Commerce and Accountancy, Chulalongkorn University  
Bangkok, Thailand**  
and  
**The Sid Craig School of Business, California State University  
Fresno**

### **BACKGROUND**

The Ninth Asian-Pacific Conference on International Accounting Issues will be held on November 23-26, 1997, in Bangkok, Thailand. The main theme of the conference is **"The Role of Advanced Technology on Accounting : A Time for Radical Change."** 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 the United States, Canada, Europe, Taiwan, Hong Kong, Japan, Korea, China, Philippines, Thailand, Malaysia, Singapore, Indonesia, India, Australia, New Zealand, Mexico, Brazil, Argentina, Peru and other countries are expected to attend the conference.

Over 300 participants from 167 universities and 22 professional organizations in 32 countries attended the Eighth Conference in Vancouver, Canada, in October 1996, and presented 118 papers. One research workshop, one plenary session, and six panel discussions were conducted.



## **CONTINUING PROFESSIONAL EDUCATION CREDITS**

Participants in our past conferences have earned up to 16 CPE credits.

## **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
- Comparative analysis of financial accounting, managerial accounting, auditing, taxation and finance, 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 for derivatives and other financial instruments
- Social and environmental accounting
- Comparative ethics in international auditing and business
- Cross-cultural studies in international accounting
- Impact of international mergers and acquisitions on accounting practice
- Comparative study of financial markets and their impact on accounting among Asian-Pacific countries
- Privatization of governmental functions and government enterprises and their impact on accounting
- Other related international business topics.

## **CONFERENCE REGISTRATION FEE**

\$250 (U.S. Dollars)

Registration fee includes :

- Reception
- 2 Breakfasts
- 2 Luncheons
- 1 Dinner (Banquet and Entertainment)
- Copy of Conference Proceedings
- One-Day Tour (Lunch Included)

## CONFERENCE VENUE

It will be held at the Shangri-la Hotel, a five-star hotel in Bangkok. Rate for Single/Double Occupancy is U.S. \$110 per night (plus 10% service and 7.7% tax).

## BEST PAPER AWARD

The best four papers will each be awarded U.S. \$500, to be selected by a panel of distinguished reviewers.

## INSTRUCTIONS FOR CONTRIBUTORS

1. Each contributor is required to submit three (3) typed, double-spaced copies of the full paper, panel discussion, or workshop proposal. Abstracts will not be accepted.
2. Each submission should include a separate title page on each copy, listing author(s), affiliation(s), address(es), telephone numbers(s), fax number(s), e-mail address, and topic (for example, Auditing, Education, Managerial, Financial, International, etc). Also include a self-addressed postcard with the title of submission. The main body of the paper, 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, abstract of accepted papers will be published in the Conference Proceedings only if at least one of their authors register and attend the conference.
4. **All submissions must be received by May 15, 1997. Fax or electronic submission is not acceptable. Notification about the decision will be made by June 30, 1997.**
5. Mail registration of interest, papers, panel discussion and workshop proposals to :

**Professor Ali Peyvandi or Professor Benjamin Tai**  
Asian-Pacific Conference on International Accounting Issues  
The Sid Craig School of Business  
California State University, Fresno  
Fresno, California 93740-0007, U.S.A.

Telephone : (209) 278-2921

FAX : (209) 278-7336

E-Mail [ali-peyvandi@csufresno.edu](mailto:ali-peyvandi@csufresno.edu)  
or [benjamin-tai@csufresno.edu](mailto:benjamin-tai@csufresno.edu)

**REGISTRATION OF INTEREST**

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

- ☐ Submit Paper
- ☐ Review Papers
- ☐ Chair a Session
- ☐ Discussant In a Session, in the following areas :  
\_\_\_\_\_  
\_\_\_\_\_

- ☐ Prepare Workshop Proposal
- ☐ Attend Only
- ☐ Exhibit

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**The Fifth Conference on  
Pacific Basin Business, Economics and Finance**

**July 10-11, 1997**

**Call for Papers and Participation**

Rutgers University, USA, and the Nanyang Business School of the Nanyang Technological University, Singapore, are pleased to announce that the Fifth Annual Conference on Pacific Basin Business, Economics, and Finance will be held in Singapore on July 10-11, 1997. Academicians and practitioners are cordially invited to participate. Competitive papers and detailed abstracts on Pacific Basin Finance, Economics, Accounting, Insurance, and Real Estate issues are particularly welcome. Submitted papers will be double-blind reviewed by members of the programme

committee and/or other qualified individuals. Completed papers accepted for and presented at the conference will be conditionally accepted for publication, if the authors so desire, in either the *Review of Quantitative Finance and Accounting*, the *Review of Pacific Basin Financial Markets and Policies*, or *Advances in Pacific Basin Business, Economics, and Finance*.

The topics of interest include, but are not limited to :

- Corporate Finance and Restructuring
- Derivative Securities
- Market Microstructure
- Executive Compensation Schemes
- Contract Design and Financial Intermediation
- Asian Derivative Markets and Financial Engineering
- Risk Management in Banks
- Real Estate Finance and Mortgage-backed Securities
- Asia Pacific Equity Markets
- Mutual Fund Performance and Evaluation
- Financial Management in Insurance Companies
- Chinese Financial Market and Economic Development

In addition to the above, there will be two very exciting invited panel sessions on the Pacific Basin Financial Centers, and the Economic Relationships Among Asian-Pacific Countries. The deadline for submitting papers is **January 31, 1997**. Authors will be notified of the review committee's decision by March 31, 1997. Persons interested in participating as a chairperson or discussant should also write indicating their interest. Please submit two copies of your paper to each of the following program chairs (total of four copies) :

**Professor Cheng-few Lee**  
School of Business  
Department of Finance  
Rutgers University  
New Brunswick, NJ 08903, USA  
Phone : (908) 445-3530  
Fax : (908) 445-5927

**Dr. Gillian Yeo**  
Nanyang Business School  
Division of Banking and Finance  
Nanyang Technological University  
Singapore 639798, Singapore  
Phone : (65) 799-5622  
Fax : (65) 791-3697

**KEYNOTE SPEAKER : Mark Rubinstein, University of California at Berkeley.**

## **Third International Conference on Management of Finance and International Accounting Issues**

**September 11-13, 1998**

*Organised by*  
**Research Development Association**  
**Jaipur, India**

### **CONFERENCE TOPICS**

1. Social and Environmental Accounting
2. Investment Opportunities in Developing Countries, World Trade Barriers
3. Accounting Standards and Harmonization of International Accounting
4. Management of Finance in Business and Industry
5. New Dimensions in Taxation
6. Public Sector Accounting
7. Productivity, Performance and Work Culture.

### **CONFERENCE PAPERS**

Papers on conference topics are invited. The text, neatly typed in double space, along with an abstract not exceeding 300 words should be submitted in duplicate **latest by 31 March 1998**. All papers will be subjected to review by Technical Programme Committee and information about their acceptance or otherwise will be sent **latest by 30 June 1998**.

### **DELEGATE FEE**

Early Registration (Received by 31 July, 1998)	U.S. Dollars 300 each
Late Registration (Received after 31 July, 1998)	U.S. Dollars 400 each
Spot Registration	U.S. Dollars 500 each

Accompanying persons will be charged U.S. Dollars 300 each.

Delegate fee includes

- \* 2 Lunches, \* 1 Dinner \* Copy of Conference Proceedings.
- \* One day Tour (Lunch included)

All payments should be made through account payee bank draft in the name of "**Research Development Association, Jaipur.**"

### **VENUE**

**Hotel Clarks Amer**  
**Jaipur**

### **CONTACT PERSON :**

**Dr. Sugan C. Jain**  
**Hony. Secretary General**  
**Research Development Association**  
**4-Ma-22, Jawahar Nagar, Jaipur (India) 302004**  
**Telephone : (91) (141) 652107**  
**Fax : (91) (141) 653224**

## **IAA BRANCH NEWS**

### **Calcutta Branch**

IAA Calcutta Branch held its Annual General Meeting for the year 1995-96 on December 7, 1996 in the auditorium of Institute of Social Welfare and Business Management, College Square West, Calcutta.

The Meeting was preceded by a seminar in which Mr. Anjan Mondal, Vice-President NICCO-UCO Financial Services Ltd., Calcutta presented a paper on "Mutual Funds and the Indian Capital Market".

Skipping over the preliminaries Professor Sukumar Bhattacharya, the Chairman of the Branch who presided over the seminar, introduced the speaker to the participants at the seminar.

Mr. Anjan Mondal beginning from the preliminaries dealt at length on the workings of the mutual funds in India. In his opinion mutual funds as investment companies cannot be beyond the forces operating in the capital market in any country. Whatever may be the expectations of the people, units of mutual funds are nothing beyond the 'shares' of such investment companies held by the investors. It is therefore no wonder that the prices of units, in the depressed capital market at times fall beyond the face values of such units:

After the presentation of the paper, a lively discussion ensued. Prof. P.Chattopadhyay, Sri Manipadma Datta, Dr. J.B.Sarker, Mr.G.P.Agarwal sought clarification on some of the issues raised by Mr. Mondal in his submission. The whole discussion was summarised by Prof. Sukumar Bhattacharya with his concluding remarks.

The seminar ended with a vote of thanks by Prof. I.K.Chatterjee, the Vice-Chairman of the Branch.

The Seminar was followed by the Annual General Meeting of the Branch in which members present unanimously decided to maintain the status quo of the Executive Council of the Branch for the next three years.

## THE INDIAN ACCOUNTING ASSOCIATION

The Indian Accounting Association is an organisation of persons willing to assist in the advancement of accounting education and research. The registered office of the Association is at the College of Commerce and Management Studies, M. L. Sukhadia University, Udaipur-313001, India. Membership of the Association is open to academics and professionals who are willing to assist in achieving the objectives of the Association.

The membership fees for individuals are as under :

	India	Abroad
Life	Rs. 750	US \$ 100
Annual	Rs. 100	\$ 25

Members are entitled to participate in the activities of the Association and receive a free copy of the Indian Journal of Accounting and selected research publications.

### INDIAN JOURNAL OF ACCOUNTING

Indian Journal of Accounting is an official publication of the Indian Accounting Association. It is published twice a year, in June and December, respectively.

The subscription rates are :

Individual	India (Rs.)	Abroad (US \$)
Annual	100	25
Life	750	100
Institutional		
Annual	500	100
Permanent	1,500	250

Other particulars of the journal are :

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Language : English	Printed area : 20 cm. × 11½ cm.

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(Sd/-) Dr. D. Prabhakara Rao  
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